The Sharpless Observing Atlas

Reiner Vogel, Dezember 2009

http://www.deepsky.de.tc/



Original data are from **Stewart Sharpless** (1959) A catalogue of HII regions. Astrophys J Suppl. 4: 257

http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1959ApJS....4..257S

Data, descriptions, and POSS composite images (IR/red/blue) are from **Kevin Jardine** and his website http://galaxymap.org



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DSS finder images have all the same scale of 60'x60' and are derived mostly from POSS II red plates

Small images are from mostly POSS II blue and red plates

All images and charts are oriented with **north to the top**

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Finder charts are 20° (with 6° circle) and 5° and were prepared with Cartes du Ciel by Patrick Chevalley

http://www.ap-i.net/skychart/

The Sharpless Catalog

Coordinates 2000

Name	Other names	RA	Dec	Diameter	Form	Structure	Brightness
Sh 2-001		15 58 50.8	-26 07 14	150	3	2	3
Sh 2-002		17 04 06.5	-38 08 33	60	3	2	2
Sh 2-003		17 13 44.7	-38 30 11	12	2	3	3
Sh 2-004		17 19 48.5	-39 20 19	5	2	3	3
Sh 2-005		17 20 02.9	-38 27 17	100	3	2	2
Sh 2-006	Bug nebula	17 15 03.2	-37 06 60	4	3	2	3
Sh 2-007		16 00 19.1	-22 57 03	240	3	2	1
Sh 2-008	NGC6334, Cat's paw	17 21 24.5	-36 02 05	120	3	3	3
Sh 2-009		16 21 10.6	-25 35 22	80	3	2	2
Sh 2-010		17 18 59.1	-34 05 26	60	3	2	2
Sh 2-011	NGC6357:	17 26 30.6	-34 12 20	90	3	3	3
Sh 2-012	Contains NGC6383	17 35 55.2	-32 35 58	120	1	2	2
Sh 2-013		17 30 28.4	-31 33 46	40	2	2	2
Sh 2-014		17 30 18.3	-30 15 46	2	3	1	2
Sh 2-015		17 50 34.2	-31 15 50	30	2	2	2
Sh 2-016		17 47 52.1	-29 18 14	20	3	2	2
Sh 2-017		17 46 08.4	-28 51 28	25	3	2	2
Sh 2-018		17 48 45.1	-29 15 06	4	1	2	2
Sh 2-019		17 49 20.9	-29 07 01	12	1	1	2
Sh 2-020		17 49 14.2	-28 40 02	10	3	2	2
Sh 2-021		17 51 38.6	-28 53 40	5	3	2	2
Sh 2-022		17 55 02.9	-25 02 10	60	3	2	2
Sh 2-023		16 13 24.4	-08 22 20	50	3	2	1
Sh 2-024		16 11 03.0	-07 04 38	30	2	1	2
Sh 2-025	M8 = Lagoon	18 05 25.0	-24 23 39	90	3	3	3
Sh 2-026		17 58 58.5	-23 19 35	20	3	2	1
Sh 2-027		16 37 12.3	-10 34 11	480	3	2	2
Sh 2-028		18 02 40.9	-23 35 03	40	1	2	1
Sh 2-029		18 10 30.5	-23 59 55	40	3	2	2
Sh 2-030	M20 = Trifid	18 03 34.1	-23 00 55	20	3	3	3
Sh 2-031	IC 1275	18 11 18.2	-23 47 48	8	1	1	2
Sh 2-032	IC 1274	18 10 53.0	-23 38 51	8	1	2	2
Sh 2-033		15 59 52.3	-01 37 03	35	3	2	1
Sh 2-034		18 06 24.3	-21 39 31	90	3	2	2
Sh 2-035		18 15 50.3	-20 15 07	20	3	1	2
Sh 2-036		16 05 30.3	+00 23 40	45	1	2	1
Sh 2-037	IC 1283/1284	18 17 42.6	-19 39 51	20	3	2	2
Sh 2-038		18 08 44.8	-18 16 09	3	3	2	1
Sh 2-039		18 16 46.2	-18 38 59	3	3	1	2
Sh 2-040		18 12 02.1	-17 44 41	15	3	2	2
Sh 2-041		18 15 50.7	-18 14 07	90	3	2	2
Sh 2-042		18 10 16.9	-16 48 55	3	3	1	2

Sh 2-043		18 16 24.6	-17 24 02	15	2	1	2
Sh 2-044	IC 4701	18 16 28.8	-16 44 01	60	3	2	2
Sh 2-045	M17 = NGC6618 = Swan Nebula	18 20 46.0	-16 10 24	60	3	3	3
Sh 2-046		18 06 10.6	-14 09 31	25	2	2	2
Sh 2-047		18 17 44.4	-15 36 50	5	1	2	2
Sh 2-048		18 22 24.1	-14 35 09	10	3	2	2
Sh 2-049	M16 = NGC6611 = Eagle Nebula	18 18 40.3	-13 57 42	90	3	3	3
Sh 2-050		18 25 30.2	-14 42 42	35	3	2	2
Sh 2-051		18 40 46.3	-16 33 30	35	3	1	1
Sh 2-052	PN Abell 65	19 47 46.3	-23 05 15	2	2	1	2
Sh 2-053		18 25 14.4	-13 13 44	15	3	2	2
Sh 2-054	Contains NGC6604	18 17 52.6	-11 43 48	140	3	3	3
Sh 2-055		18 32 10.5	-11 45 44	5	3	2	1
Sh 2-056		18 31 06.1	-09 42 52	7	1	2	1
Sh 2-057		18 30 32.8	-08 36 58	2	3	2	1
Sh 2-058		18 31 26.6	-08 27 50	8	3	2	2
Sh 2-059		18 37 00.6	-07 36 01	20	3	2	1
Sh 2-060		18 36 40.5	-06 42 04	20	3	2	2
Sh 2-061		18 32 54.5	-05 00 36	2	3	2	3
Sh 2-062		18 27 34.2	-03 51 22	4	3	1	1
Sh 2-063		19 57 42.5	-14 06 57	55	3	2	1
Sh 2-064		18 31 35.0	-01 54 47	25	3	2	2
Sh 2-065		18 46 58.0	-03 44 35	7	3	2	2
Sh 2-066		18 45 30.0	-01 59 47	8	3	2	2
Sh 2-067		18 49 24.4	-02 21 13	10	2	1	1
Sh 2-068	PN	18 25 10.8	+00 51 17	8	3	2	2
Sh 2-069		18 44 26.1	-00 16 55	20	2	2	2
Sh 2-070		18 14 38.5	+07 03 47	5	3	1	2
Sh 2-071	PN	19 02 02.3	+02 09 35	3	2	2	3
Sh 2-072		19 03 50.2	+02 18 50	25	3	2	2
Sh 2-073		16 11 06.9	+21 52 26	75	3	2	1
Sh 2-074		19 08 48.5	+05 36 32	3	3	2	2
Sh 2-075		18 59 14.7	+07 07 12	10	1	2	1
Sh 2-076		18 56 24.9	+07 48 48	7	1	2	1
Sh 2-077		19 48 16.6	+01 08 52	8	2	1	1
Sh 2-078	CTSS 3, PN	19 03 10.6	+14 07 46	12	1	1	1
Sh 2-079		19 23 18.2	+13 58 34	40	3	2	1
Sh 2-080	M1-67, WR shell	19 11 28.5	+16 51 57	2	3	2	3
Sh 2-081		20 01 12.7	+11 47 33	10	3	1	1
Sh 2-082		19 30 20.4	+18 16 31	9	3	1	2
Sh 2-083		19 24 32.1	+20 47 45	2	1	2	2
Sh 2-084		19 49 04.0	+18 24 01	15	3	2	3
Sh 2-085		19 03 16.6	+25 49 49	6	3	2	2
Sh 2-086	NGC6820	19 43 08.8	+23 17 15	40	1	2	2
Sh 2-087		19 46 24.4	+24 37 41	10	3	1	1
Sh 2-088		19 45 58.4	+25 20 38	25	3	2	2
Sh 2-089		19 50 02.2	+26 29 10	5	1	2	1
Sh 2-090		19 49 12.7	+26 52 04	6	3	2	2
Sh 2-091	part of SNR	19 35 34.0	+29 36 16	120	3	3	2
Sh 2-092		19 46 38.7	+28 14 44	50	1	1	1

Sh 2-093		19 55 00.6	+27 12 48	1	3	2	3
Sh 2-094	part of SNR	19 27 50.8	+31 28 14	25	3	3	1
Sh 2-095	NGC6842, PN	19 55 00.9	+29 17 49	1	1	2	2
Sh 2-096	part of SNR	19 28 42.0	+32 41 21	25	3	2	1
Sh 2-097		19 56 04.6	+30 15 57	10	1	2	1
Sh 2-098		19 58 44.3	+31 25 18	15	1	1	1
Sh 2-099		20 00 50.5	+33 29 34	5	3	2	3
Sh 2-100	NGC6857	20 01 50.6	+33 30 41	4	3	2	3
Sh 2-101		19 59 56.8	+35 17 27	20	3	2	2
Sh 2-102		20 31 46.6	+30 36 19	40	3	1	1
Sh 2-103	Veil Nebula	20 50 32.3	+30 55 25	210	3	3	3
Sh 2-104		20 17 44.6	+36 44 40	7	1	2	2
Sh 2-105	NGC<6888 = Crescent Nebula	20 12 02.4	+38 20 59	18	2	3	3
Sh 2-106		20 27 26.9	+37 23 49	3	3	2	3
Sh 2-107		20 42 46.4	+36 20 34	5	2	2	2
Sh 2-108	IC 1318	20 22 34.8	+40 15 15	180	3	3	3
Sh 2-109		20 33 38.3	+40 20 33	1080	2	3	2
Sh 2-110		21 20 48.5	+32 27 28	50	3	2	1
Sh 2-111	Veil Nebula	21 41 52.7	+30 06 20	90	3	1	1
Sh 2-112		20 33 50.2	+45 39 35	15	1	2	2
Sh 2-113		21 20 48.2	+38 05 29	15	3	1	1
Sh 2-114		21 21 10.5	+38 42 31	9	3	3	2
Sh 2-115		20 34 33.0	+46 52 40	50	3	2	2
Sh 2-116	Abell 71	20 32 18.6	+47 21 25	2	1	2	2
Sh 2-117	NGC7000 North American N.	20 58 46.3	+44 19 19	240	3	3	2
Sh 2-118		21 37 00.7	+40 12 57	480	3	2	1
Sh 2-119		21 18 25.0	+43 56 16	160	2	2	3
Sh 2-120		21 03 46.6	+49 52 51	1	1	1	1
Sh 2-121		21 05 12.4	+49 38 59	1	3	2	1
Sh 2-122		23 08 46.7	+14 55 30	40	3	2	1
Sh 2-123		21 42 22.5	+44 32 25	13	2	2	2
Sh 2-124		21 38 20.9	+50 21 05	70	1	2	2
Sh 2-125	IC 5146 = Cocoon Nebula	21 53 32.7	+47 16 18	9	2	2	3
Sh 2-126		22 33 26.9	+38 34 56	160	3	2	2
Sh 2-127		21 28 41.0	+54 37 14	2	3	2	2
Sh 2-128		21 32 08.4	+55 51 34	1	3	2	3
Sh 2-129		21 11 44.4	+59 57 40	140	3	2	2
Sh 2-130		20 42 59.6	+63 13 43	3	3	2	2
Sh 2-131	IC 1396	21 39 00.2	+57 29 10	170	1	2	2
Sh 2-132		22 18 47.0	+56 08 05	90	3	3	2
Sh 2-133		21 28 59.8	+64 18 19	80	3	1	1
Sh 2-134		22 11 29.1	+59 24 37	160	3	2	2
Sh 2-135		22 22 11.0	+58 44 18	15	3	2	2
Sh 2-136		21 16 29.5	+68 15 12	5	3	2	3
Sh 2-137		21 57 06.6	+64 41 37	90	3	2	1
Sh 2-138		22 32 39.0	+58 28 55	1	3	2	2
Sh 2-139		22 34 59.4	+58 13 02	10	3	2	1
Sh 2-140		22 19 07.0	+63 17 07	30	2	2	3
Sh 2-141		22 28 30.4	+61 38 41	5	1	1	2
Sh 2-142	Contains NGC7380	22 47 35.1	+58 03 39	30	3	3	3

Sh 2-143		22 50 14.8	+57 42 47	4	3	1	1
Sh 2-144		22 44 51.4	+59 53 32	4	3	2	1
Sh 2-145		22 25 33.0	+64 18 31	90	2	2	1
Sh 2-146		22 49 25.5	+59 55 45	2	3	2	2
Sh 2-147		22 55 29.2	+58 28 01	2	1	1	1
Sh 2-148		22 56 11.4	+58 31 02	2	3	2	3
Sh 2-149		22 56 23.5	+58 32 03	1	1	1	2
Sh 2-150		22 31 11.1	+65 06 51	40	3	2	2
Sh 2-151		23 03 03.0	+57 04 18	20	3	1	1
Sh 2-152		22 58 37.2	+58 47 08	2	3	2	3
Sh 2-153		22 59 13.6	+58 44 10	5	1	2	2
Sh 2-154		22 51 24.6	+61 10 50	60	3	2	2
Sh 2-155		22 56 43.2	+62 37 04	60	3	2	2
Sh 2-156	IC 1470	23 05 09.6	+60 15 23	2	1	2	3
Sh 2-157		23 16 03.2	+60 02 44	90	3	3	3
Sh 2-158	NGC7538	23 13 39.6	+61 30 40	10	2	3	3
Sh 2-159		23 15 43.0	+61 08 44	7	3	2	2
Sh 2-160		23 05 47.2	+64 40 24	80	3	2	1
Sh 2-161		23 15 29.2	+61 51 43	55	2	2	2
Sh 2-162	NGC7635 = Bubble Nebula	23 20 41.5	+61 11 52	40	3	3	3
Sh 2-163		23 33 19.3	+60 47 09	10	3	2	2
Sh 2-164		23 38 25.3	+59 58 13	3	3	2	2
Sh 2-165		23 39 48.1	+61 56 15	10	2	2	2
Sh 2-166		23 42 09.8	+60 58 17	10	1	1	1
Sh 2-167		23 35 21.8	+64 51 11	2	1	1	1
Sh 2-168		23 53 03.5	+60 28 23	7	2	2	2
Sh 2-169		23 53 58.0	+60 22 23	5	1	1	1
Sh 2-170		00 01 42.0	+64 37 24	20	1	2	2
Sh 2-171	NGC7822 + Ced214	00 04 40.0	+67 09 24	180	3	2	3
Sh 2-172		00 15 32.2	+61 15 21	1	2	1	1
Sh 2-173		00 21 51.8	+61 44 17	30	1	2	2
Sh 2-174		23 46 49.1	+80 56 20	10	3	2	1
Sh 2-175		00 27 18.6	+64 42 13	2	1	2	2
Sh 2-176		00 31 38.3	+57 17 09	10	3	2	1
Sh 2-177		00 31 32.4	+62 28 09	40	3	1	1
Sh 2-178		22 18 55.4	+87 45 41	420	3	2	1
Sh 2-179	BV 5-2	00 40 24.6	+62 51 58	1	1	1	1
Sh 2-180		00 48 46.3	+62 55 45	15	3	1	1
Sh 2-181		00 49 16.5	+65 12 44	15	3	1	1
Sh 2-182		00 50 16.4	+64 44 42	2	3	1	1
Sh 2-183		00 53 59.1	+65 42 35	35	3	2	1
Sh 2-184	NGC281	00 52 50.1	+56 36 37	40	3	2	3
Sh 2-185	IC 59/63	00 60 00.0	+60 59 23	120	3	2	2
Sh 2-186		01 08 50.7	+63 08 02	1	3	2	2
Sh 2-187		01 23 07.0	+61 51 24	10	3	3	2
Sh 2-188	Simeis 22	01 30 38.6	+58 22 01	9	3	3	2
Sh 2-189	Abell 3	02 12 07.6	+64 10 18	2	1	1	1
Sh 2-190	IC 1805	02 33 22.7	+61 26 32	150	3	3	3
Sh 2-191	Maffei I	02 36 38.7	+59 38 14	2	3	1	3
Sh 2-192		02 47 13.3	+61 59 17	1	2	1	1

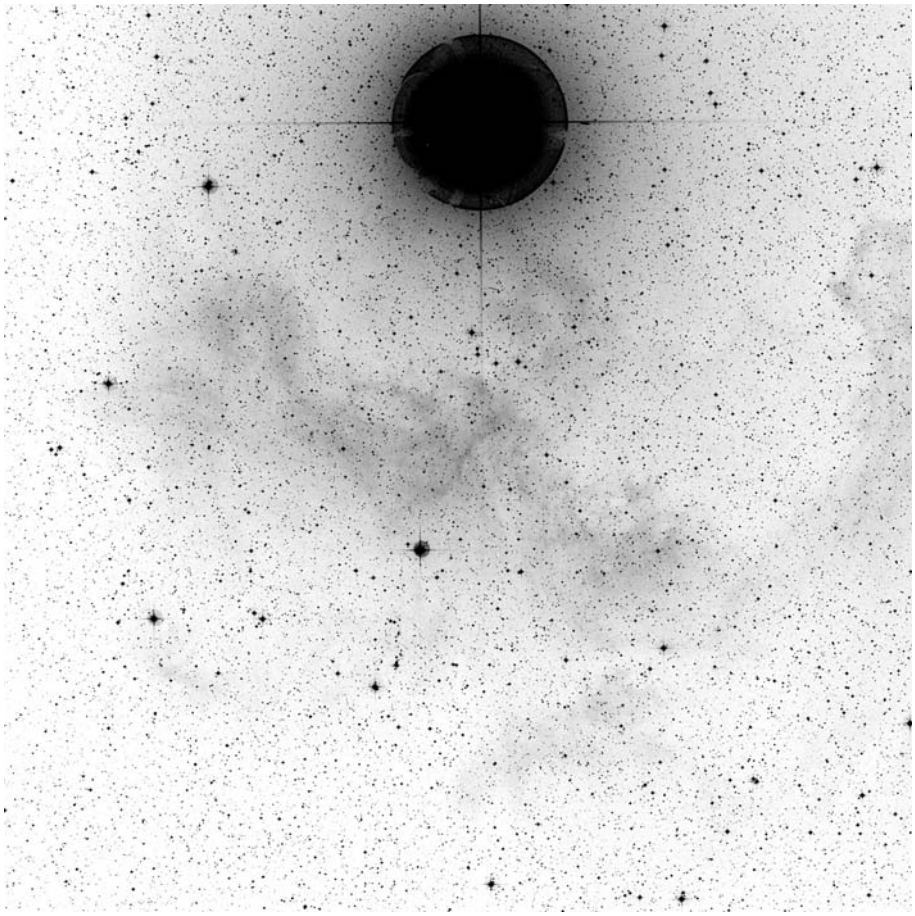
Sh 2-193		02 47 32.5	+62 00 15	2	2	1	1
Sh 2-194		02 47 19.1	+61 56 17	2	2	1	2
Sh 2-195		02 40 05.1	+59 38 56	3	3	1	1
Sh 2-196		02 51 18.8	+62 13 53	4	1	1	2
Sh 2-197	Maffei II	02 41 54.8	+59 38 46	5	3	2	1
Sh 2-198		02 50 01.0	+59 42 01	9	2	2	2
Sh 2-199	IC 1848	02 54 32.9	+60 24 34	120	3	2	3
Sh 2-200	PN HDW 2	03 10 44.7	+62 48 55	6	2	2	1
Sh 2-201		03 03 10.3	+60 28 42	5	3	2	3
Sh 2-202		03 18 50.8	+59 38 03	170	3	2	1
Sh 2-203		03 22 00.3	+54 52 40	45	1	2	1
Sh 2-204		03 55 45.6	+57 25 45	40	3	2	2
Sh 2-205		03 56 07.7	+53 11 40	120	3	2	2
Sh 2-206	NGC1491	04 03 13.1	+51 19 46	50	3	2	3
Sh 2-207		04 20 04.0	+53 08 37	4	1	2	2
Sh 2-208	PK 151+02.1	04 19 45.5	+52 58 39	1	1	2	3
Sh 2-209		04 11 03.0	+51 09 47	14	3	2	2
Sh 2-210		04 30 59.0	+52 33 10	20	3	1	2
Sh 2-211		04 36 57.3	+50 56 22	2	3	2	3
Sh 2-212	NGC1624	04 40 37.3	+50 22 52	5	1	2	3
Sh 2-213		04 20 42.9	+44 55 30	1	3	2	1
Sh 2-214		04 21 34.8	+44 22 22	4	1	1	1
Sh 2-215		04 17 32.8	+42 36 54	2	3	2	2
Sh 2-216	Simeiz 288	04 44 56.9	+46 49 15	80	3	2	2
Sh 2-217		04 58 47.1	+48 00 20	9	2	2	2
Sh 2-218		05 41 16.4	+52 11 18	70	2	1	1
Sh 2-219		04 56 07.3	+47 23 43	3	2	2	3
Sh 2-220	NGC1499	04 00 37.5	+36 37 02	320	3	2	3
Sh 2-221		05 01 39.3	+46 20 56	120	3	2	1
Sh 2-222	NGC1579	04 30 09.2	+35 16 13	6	3	2	3
Sh 2-223		05 17 11.1	+42 12 43	70	3	2	2
Sh 2-224		05 27 15.2	+42 58 16	30	3	3	2
Sh 2-225		05 27 00.3	+40 37 17	10	3	2	2
Sh 2-226		05 11 06.6	+37 59 33	3	3	2	3
Sh 2-227		05 19 52.8	+38 57 19	20	3	2	2
Sh 2-228		05 13 34.7	+37 27 12	8	3	2	3
Sh 2-229	IC 405, Flaming Star N., LBN 795	05 16 18.6	+34 27 48	65	3	2	3
Sh 2-230		05 22 30.3	+34 07 55	300	3	2	2
Sh 2-231		05 39 18.9	+35 55 30	12	3	1	2
Sh 2-232		05 42 26.4	+36 12 03	40	2	2	2
Sh 2-233		05 38 42.6	+35 47 35	2	3	2	2
Sh 2-234	IC 417	05 28 07.0	+34 26 06	12	3	2	3
Sh 2-235		05 41 00.8	+35 51 15	10	3	2	3
Sh 2-236	IC 410	05 22 33.0	+33 21 54	55	3	2	3
Sh 2-237	NGC1931	05 31 24.8	+34 16 38	7	3	2	3
Sh 2-238	NGC1554/1555	04 21 49.2	+19 32 16	1	3	2	3
Sh 2-239		04 31 16.9	+18 07 00	5	3	2	2
Sh 2-240	Simeiz 147 SNR	05 41 00.2	+28 06 14	180	1	3	2
Sh 2-241		06 04 06.7	+30 14 52	10	3	2	3
Sh 2-242		05 51 50.7	+27 00 38	7	1	2	2

Sh 2-243		05 39 22.3	+23 17 27	6	3	2	1
Sh 2-244	M1 = NGC1952 = Crab Nebula	05 34 30.4	+21 57 09	5	2	3	3
Sh 2-245		04 02 32.8	+04 07 42	720	3	2	2
Sh 2-246		05 02 08.9	+14 05 44	65	3	1	1
Sh 2-247		06 08 30.2	+21 37 12	9	1	1	2
Sh 2-248	IC 443:	06 16 38.4	+22 30 01	50	2	3	3
Sh 2-249		06 20 58.1	+23 05 23	80	3	2	2
Sh 2-250	near NGC1633/1634	04 40 10.8	+07 21 47	10	3	2	1
Sh 2-251		04 32 49.0	+05 51 46	35	3	3	1
Sh 2-252	NGC2174/2175/IC 2159	06 09 38.7	+20 30 01	40	3	2	3
Sh 2-253		06 25 43.0	+20 01 41	5	3	1	1
Sh 2-254		06 12 20.5	+18 02 37	11	2	2	2
Sh 2-255		06 13 08.4	+17 58 31	3	1	2	3
Sh 2-256		06 12 38.3	+17 56 35	1	3	2	2
Sh 2-257	IC 2162	06 12 50.4	+17 58 33	3	1	2	3
Sh 2-258		06 13 32.3	+17 55 27	1	3	2	2
Sh 2-259		06 11 36.7	+17 26 44	2	1	1	1
Sh 2-260		04 55 07.0	+05 39 43	22	3	3	1
Sh 2-261		06 08 56.6	+15 48 07	45	3	2	2
Sh 2-262		05 06 44.7	+06 10 04	20	3	2	1
Sh 2-263		05 21 44.4	+08 23 56	22	2	2	2
Sh 2-264		05 35 12.3	+09 56 00	390	1	1	2
Sh 2-265		05 18 36.3	+07 26 23	70	3	2	2
Sh 2-266		06 18 48.9	+15 16 40	1	2	2	3
Sh 2-267	LBN 875 = PK 196-01.1	06 15 52.7	+14 16 06	4	1	1	2
Sh 2-268		06 10 14.6	+13 19 55	60	3	1	1
Sh 2-269		06 14 34.1	+13 49 18	4	3	2	3
Sh 2-270		06 10 12.9	+12 48 55	1	3	2	3
Sh 2-271	PK 197-02.1	06 14 54.3	+12 21 14	2	1	2	3
Sh 2-272		06 15 00.3	+12 20 14	1	2	1	2
Sh 2-273	NGC2264 = Christmas Tree	06 40 48.3	+09 54 28	250	3	2	3
Sh 2-274	Abell 21	07 29 06.4	+13 15 43	8	3	3	3
Sh 2-275	NGC2246 = Rosette Nebula	06 31 42.5	+04 55 47	100	1	2	3
Sh 2-276	Barnard's Loop	05 27 28.1	-03 57 55	1200	2	2	2
Sh 2-277	IC 434 or NGC2024?	05 40 42.9	-02 26 49	120	3	2	3
Sh 2-278		05 19 48.2	-05 39 49	50	3	2	2
Sh 2-279	NGC1973/1975/1977	05 35 20.1	-04 48 03	20	3	2	3
Sh 2-280		06 34 18.7	+02 32 23	40	3	2	2
Sh 2-281	M42/43 = Orion Nebula	05 34 54.4	-05 28 00	60	3	2	3
Sh 2-282		06 37 58.5	+01 30 51	35	3	2	2
Sh 2-283		06 38 38.6	+00 42 45	3	3	1	1
Sh 2-284		06 45 02.0	+00 13 51	80	2	2	2
Sh 2-285		06 55 12.2	-00 30 37	1	1	2	3
Sh 2-286		06 54 32.6	-04 30 32	6	2	1	1
Sh 2-287		06 59 32.3	-04 48 14	12	3	2	2
Sh 2-288	IC 466	07 08 33.0	-04 18 30	1	3	2	3
Sh 2-289		06 45 56.3	-07 20 18	11	2	1	1
Sh 2-290	Abell 31	08 54 10.5	+08 55 16	17	2	2	2
Sh 2-291		06 55 24.6	-08 01 40	8	2	1	2
Sh 2-292	vdB 93 = Gum 1	07 04 24.9	-10 26 56	21	3	2	3

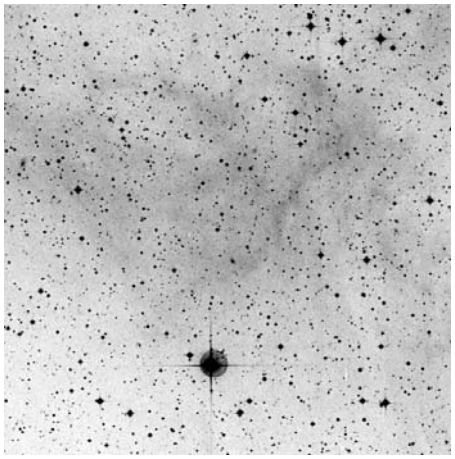
Sh 2-293		07 01 46.9	-11 18 34	11	1	1	2
Sh 2-294		07 16 34.3	-09 26 38	7	3	2	3
Sh 2-295		07 02 40.7	-11 27 42	8	1	1	1
Sh 2-296	IC 2177 = Seagull Nebula	07 05 48.0	-11 13 08	200	3	2	3
Sh 2-297		07 05 14.7	-12 20 04	7	3	2	3
Sh 2-298	NGC2359 = Thor's Helmet	07 18 38.0	-13 11 55	22	3	3	3
Sh 2-299		07 30 38.9	-15 17 34	1	3	1	1
Sh 2-300		07 31 02.8	-15 24 37	3	2	1	1
Sh 2-301		07 09 48.4	-18 28 43	9	2	2	3
Sh 2-302		07 31 41.0	-16 58 43	21	2	1	2
Sh 2-303		06 54 00.9	-22 25 31	90	2	2	2
Sh 2-304		06 43 26.3	-24 07 59	200	3	2	2
Sh 2-305		07 30 08.1	-18 31 31	4	3	2	3
Sh 2-306		07 30 36.4	-19 06 35	30	3	2	1
Sh 2-307		07 35 32.0	-18 45 13	6	3	2	3
Sh 2-308		06 54 08.9	-23 56 31	35	3	3	2
Sh 2-309		07 32 06.1	-19 25 47	12	2	1	2
Sh 2-310		07 13 02.7	-24 35 11	480	3	2	2
Sh 2-311	NGC2467	07 52 20.4	-26 26 28	45	3	2	3
Sh 2-312		08 59 08.9	-25 41 19	720	3	2	2
Sh 2-313	Abell 35	12 53 31.0	-22 51 35	12	1	2	2

Sh 2 - 1

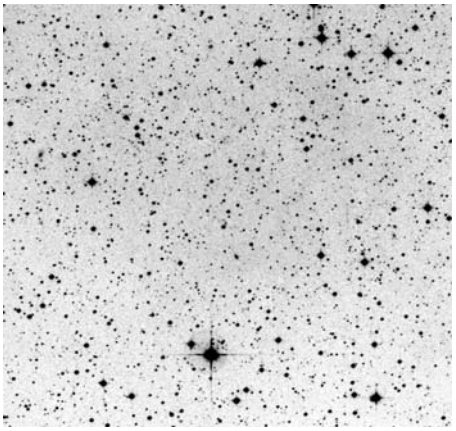
in Scorpius



60x60, blue



POSS blue



POSS red



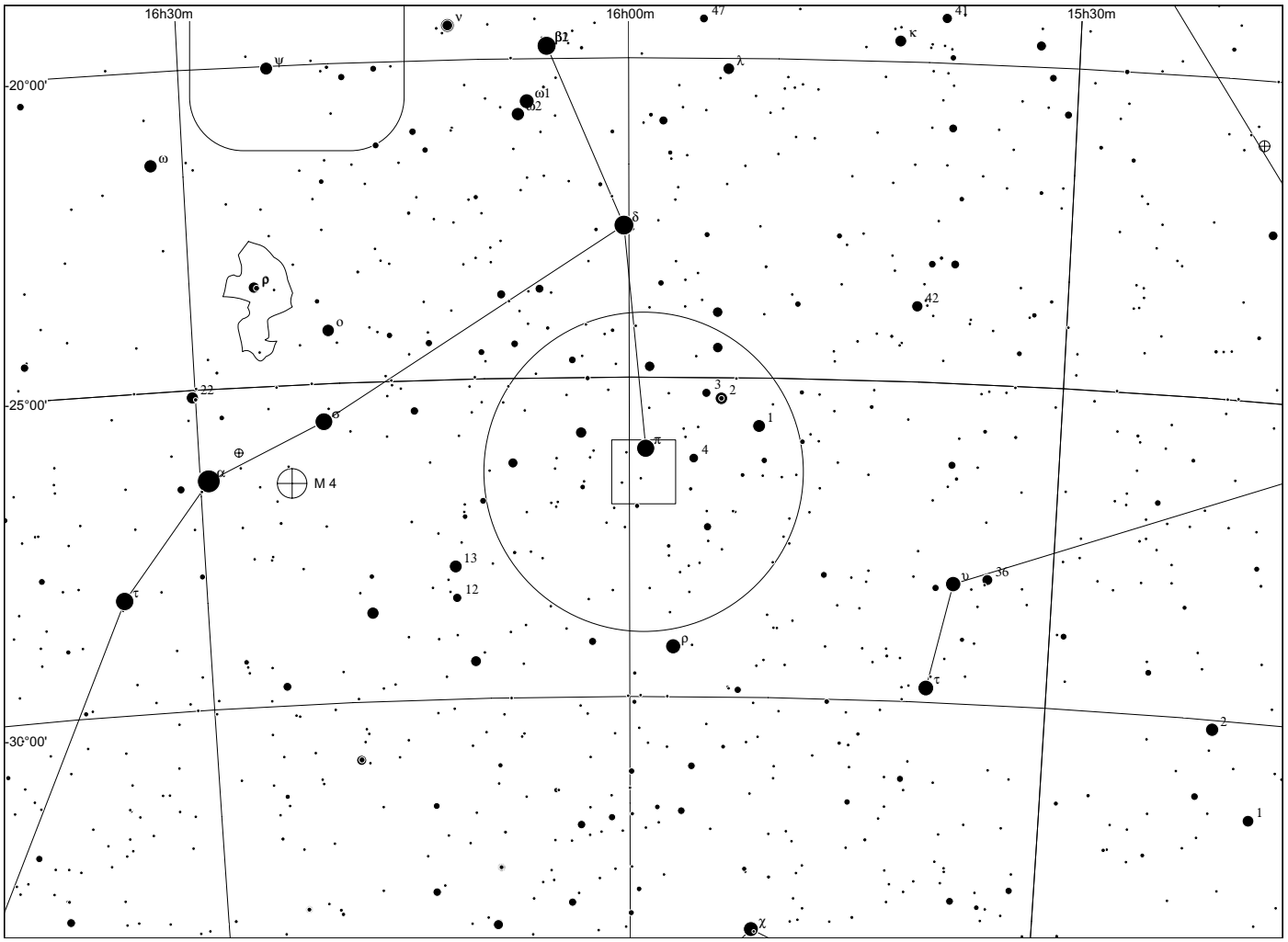
RGB Dean Salman

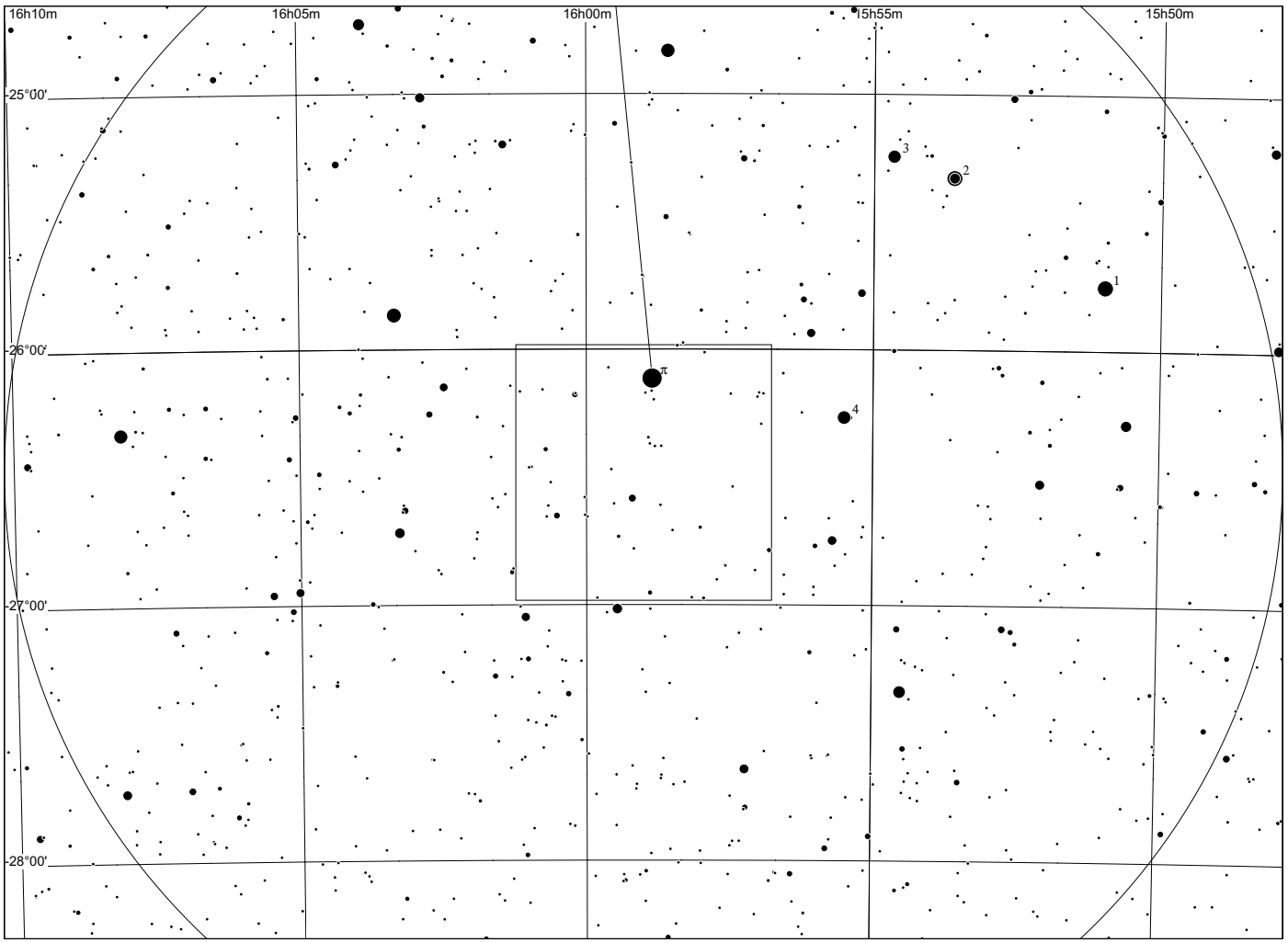
	other name	RA	dec	dia. '	F	S	B
Sh 2-001		15 58 50.8	-26 07 14	150	3	2	3

Distance: 200 pc, Size: 8.7 pc, Source: 2003A&A...397..133R

Associated with the star pi Scorpii in the nearby Upper Scorpius subgroup of the Scorpius OB2 association.

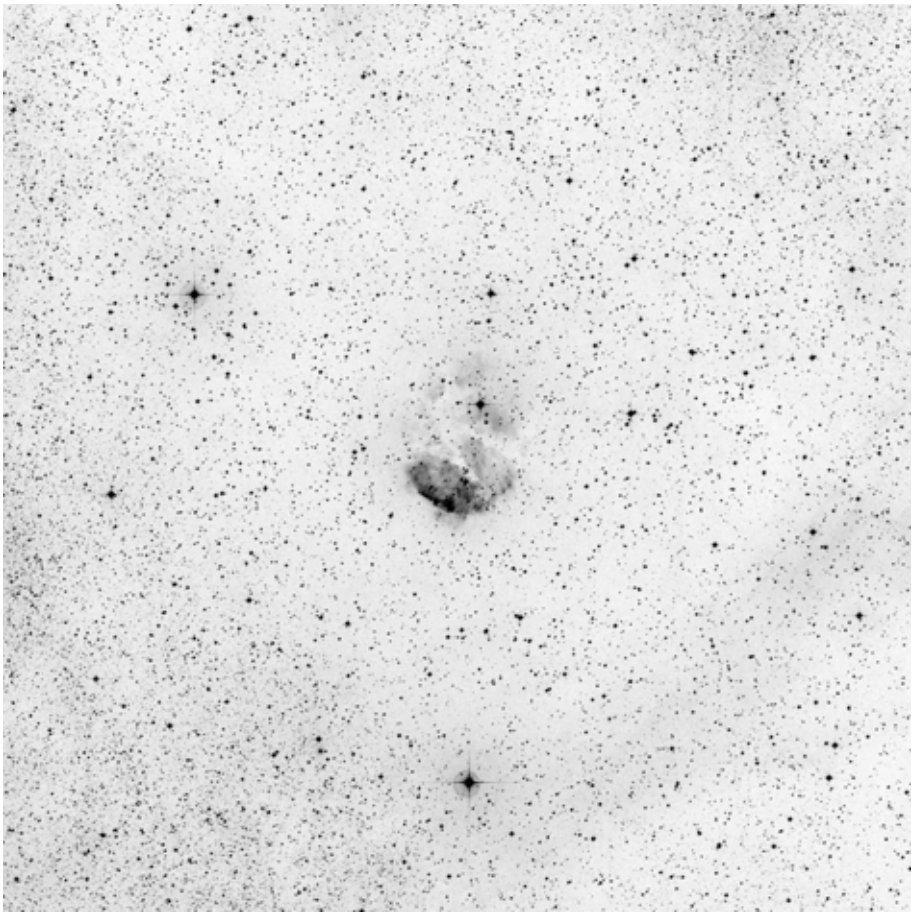
Observing notes:


16h30m
16h00m
15h30m
-20°00'
-25°00'
-30°00'
M 4

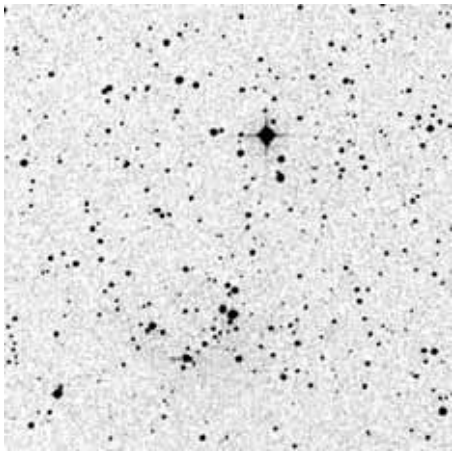

16h10m
16h05m
16h00m
15h55m
15h50m
-25°00'
-26°00'
-27°00'
-28°00'

Sh 2 - 3

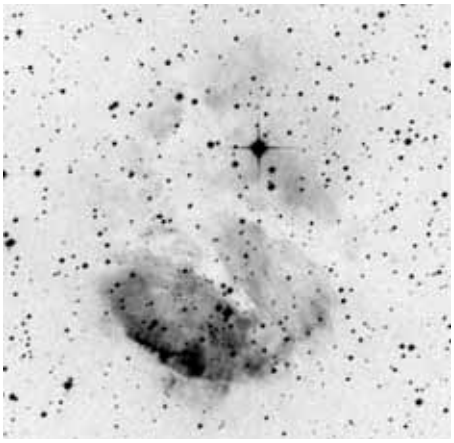
in Scorpius



60x60, red



POSS blue



POSS red



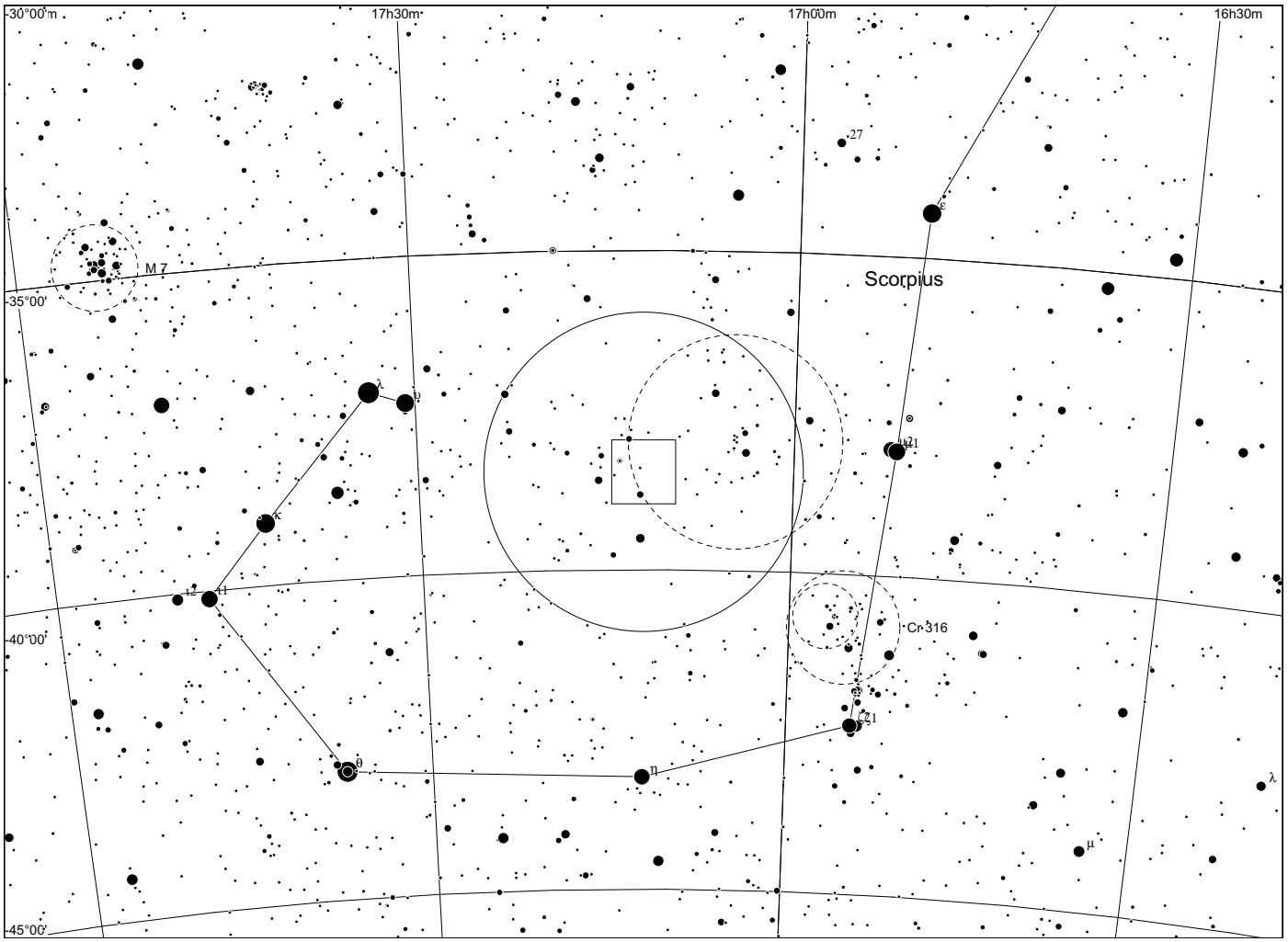
composite

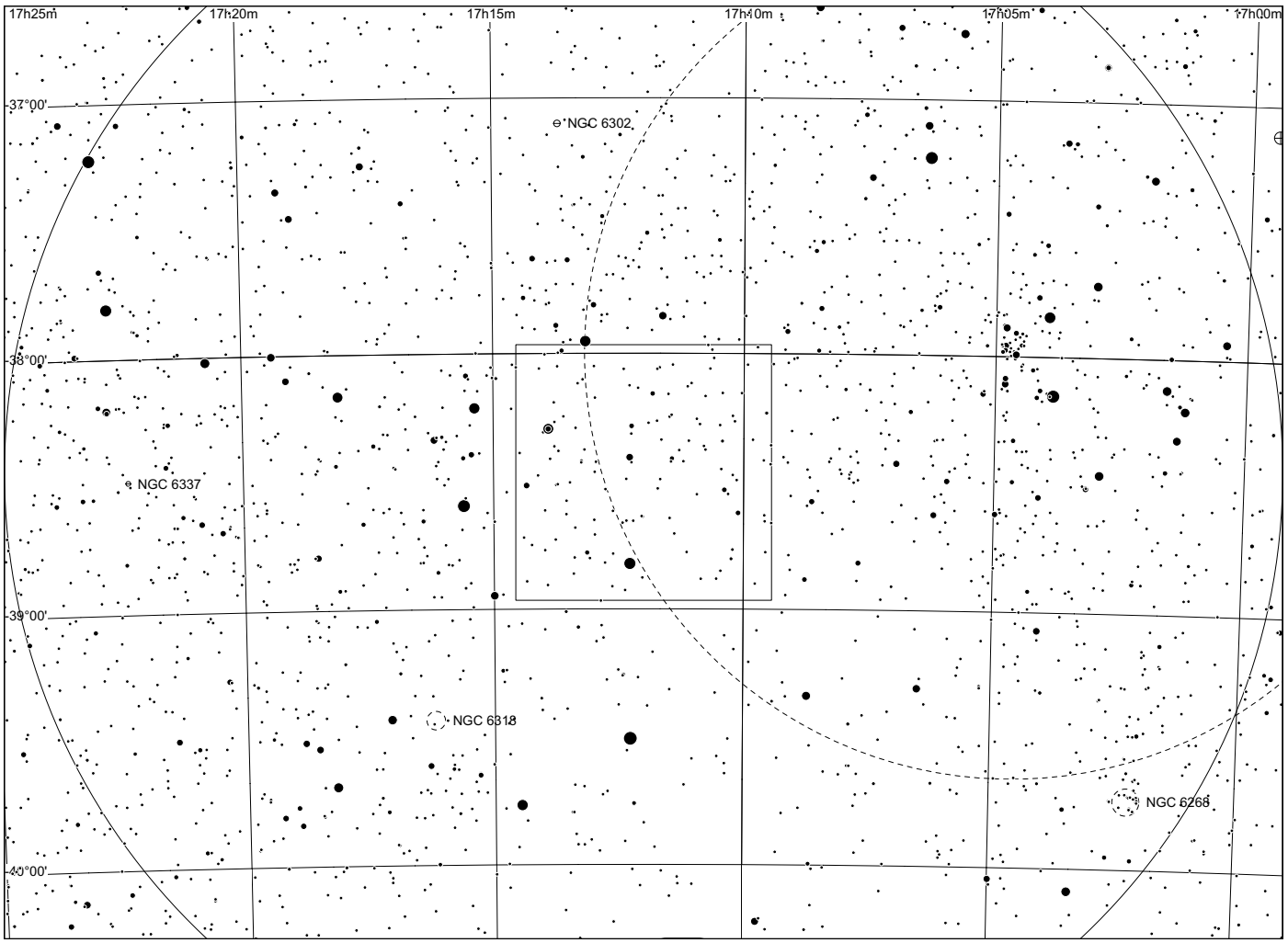
	other name	RA	dec	dia. '	F	S	B
Sh 2-003		17 13 44.7	-38 30 11	12	2	3	3

Distance: 1300 pc, Size: 4.5 pc, Source: 2005A&A...433..565D

Gum 58 is ionised by an O6 V star, most likely CGO 439.

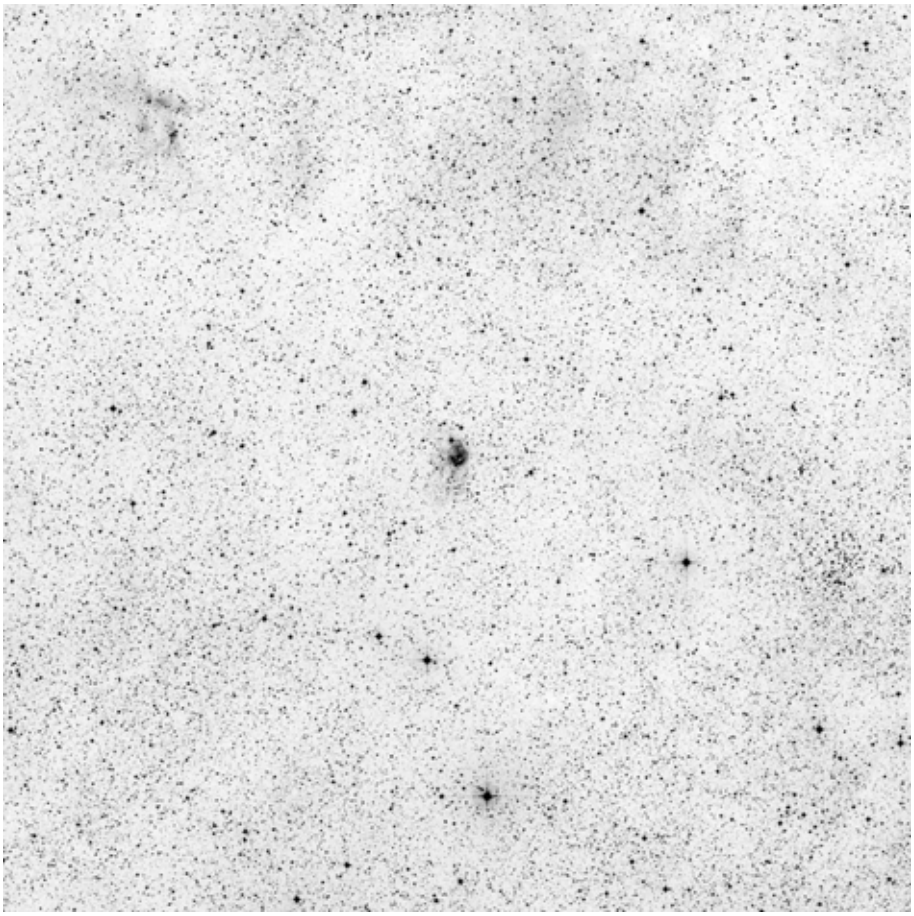
Observing notes:


-30°00'm
17h30m
17h00m
16h30m
-35°00'
-40°00'
-45°00'
M 7
Scorpius
Cr 316
27
ε
λ
ν
κ
ι2
ι1
θ
η
μ2
μ1
ζ1
λ
μ

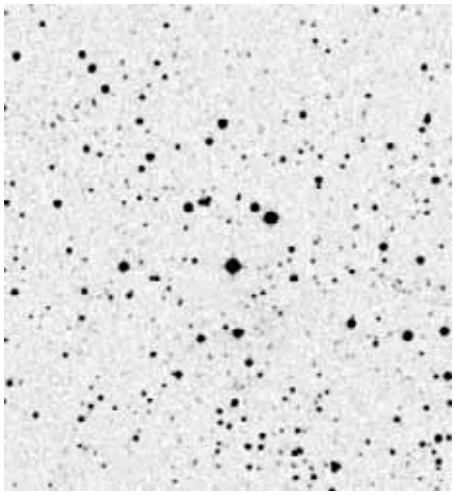

17h25m
17h20m
17h15m
17h10m
17h05m
17h00m
-37°00'
-38°00'
-39°00'
-40°00'
NGC 6302
NGC 6337
NGC 6318
NGC 6268

Sh 2 - 4

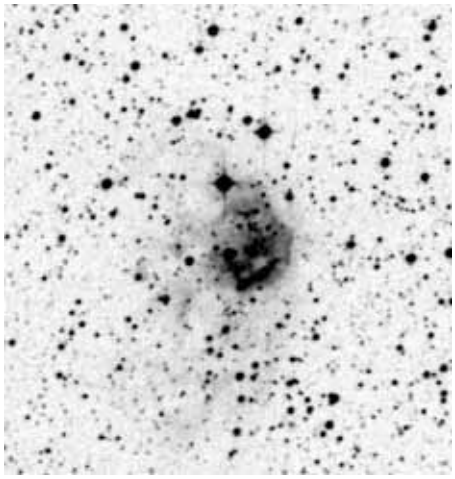
in Scorpius



60x60, red



POSS blue



POSS red



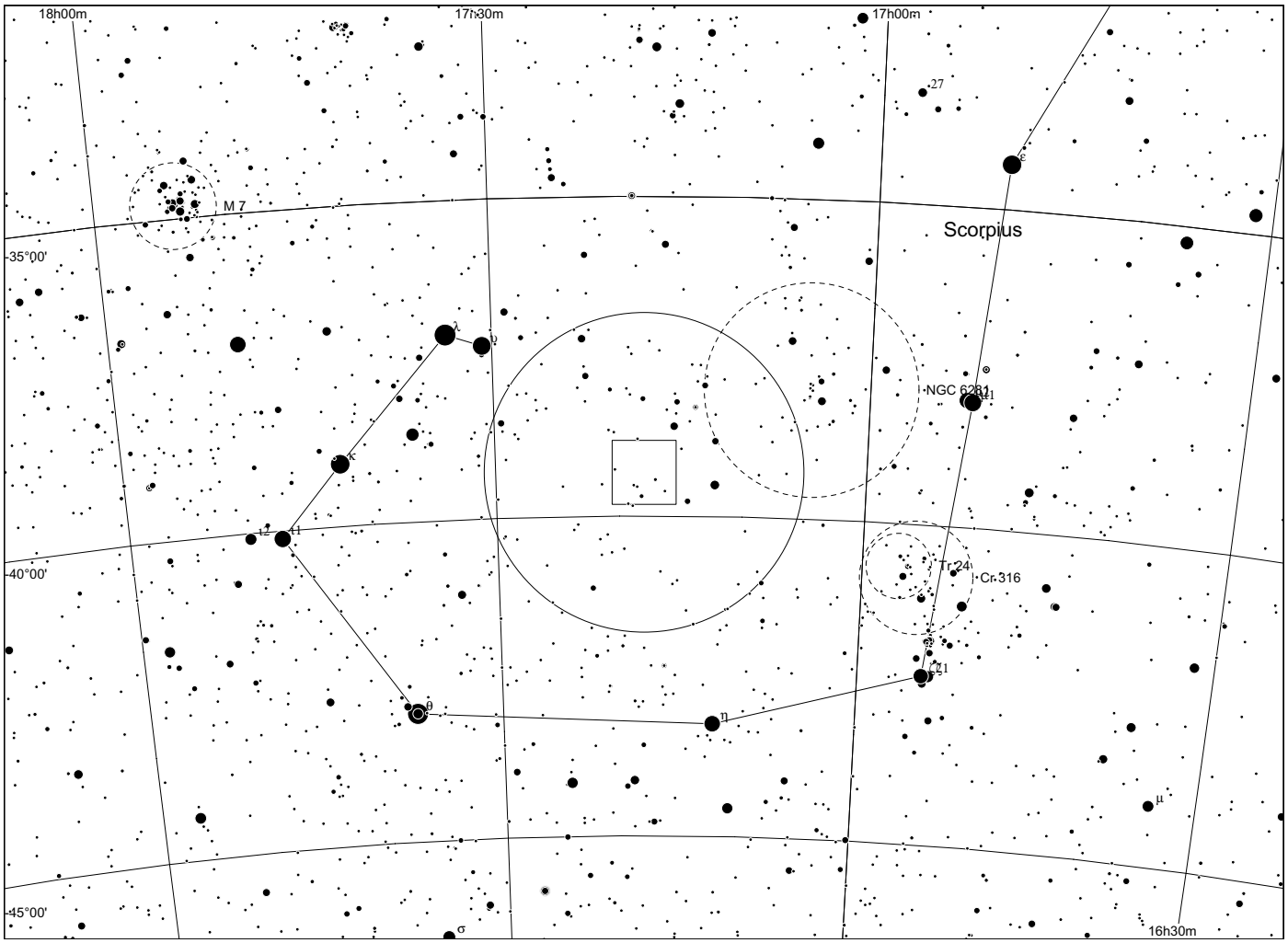
composite

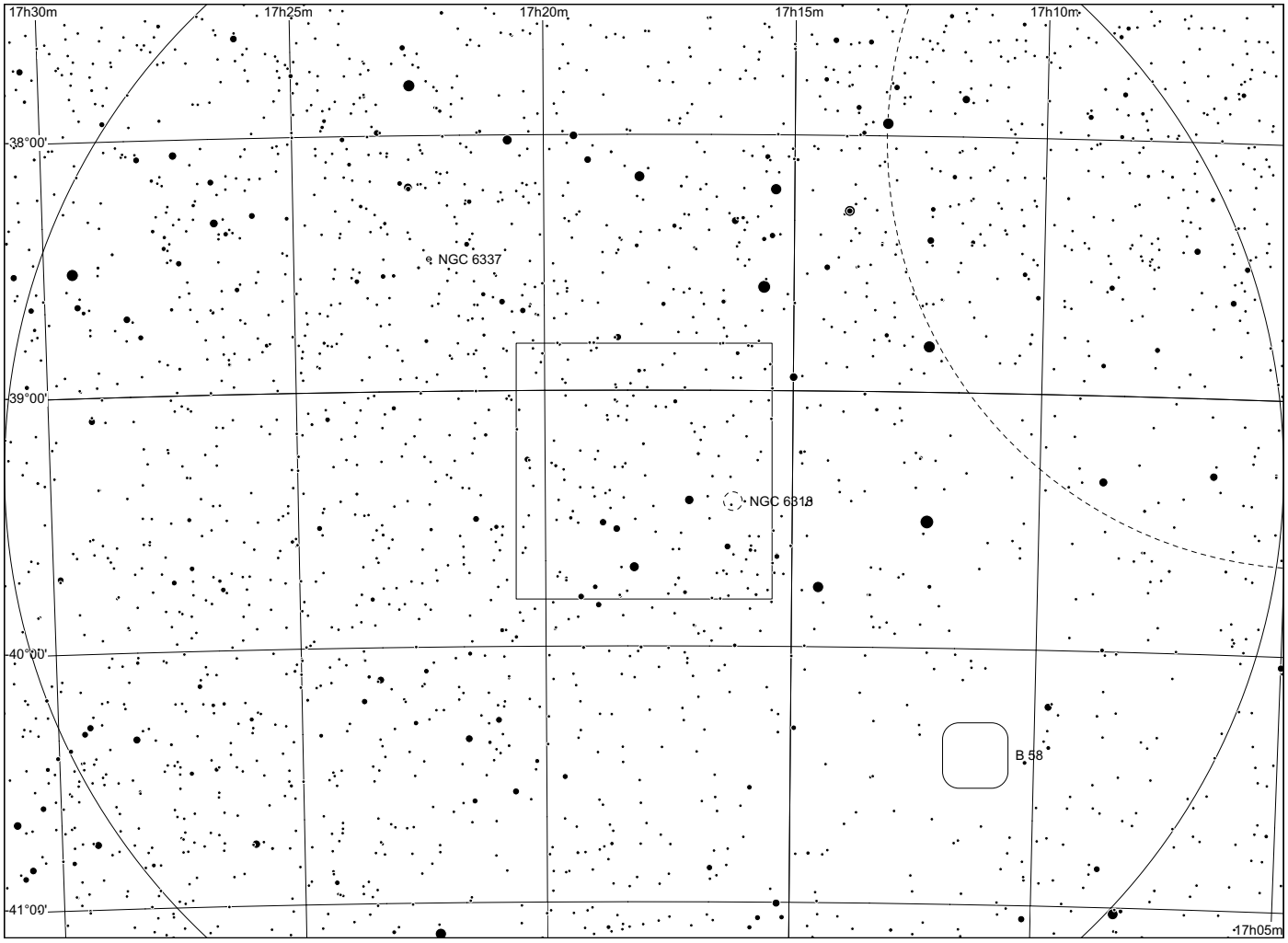
	other name	RA	dec	dia. '	F	S	B
Sh 2-004		17 19 48.5	-39 20 19	5	2	3	3

Distance: 2510 pc, Size: 0.9 pc, Source: 2003A&A...397..213P

This HII region may be associated with the star cluster Havlen-Moffat 1.

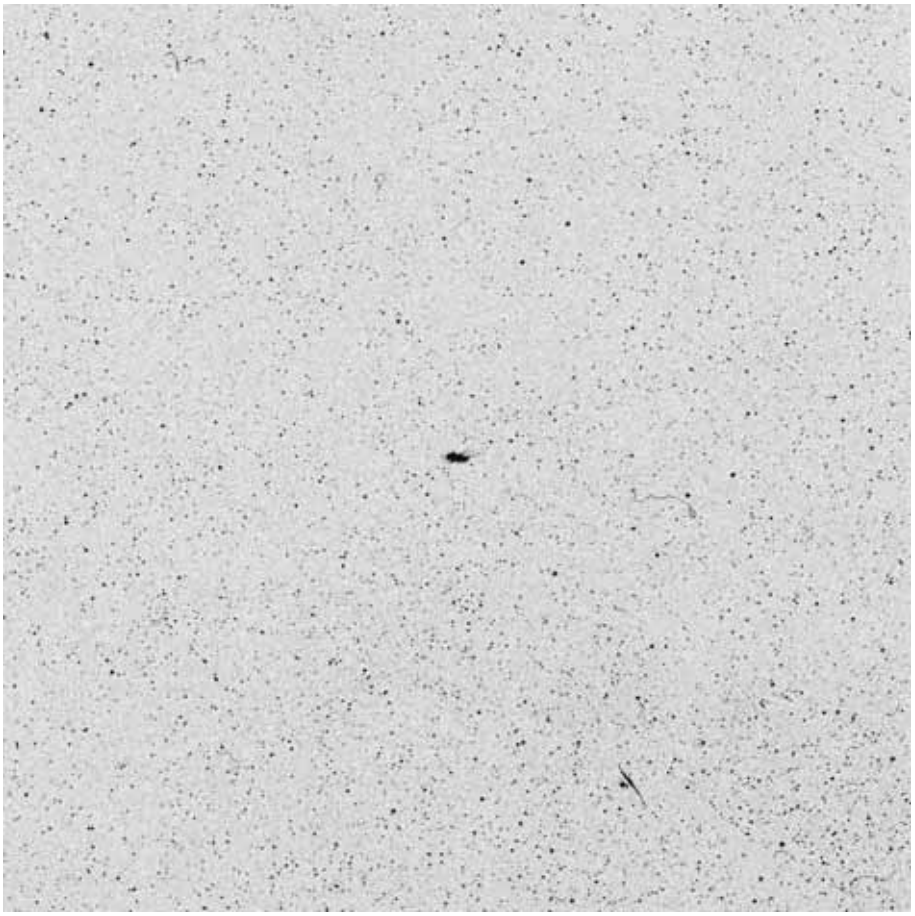
Observing notes:


18h00m
17h30m
17h00m
M 7
Scorpius
35°00'
NGC 6281
40°00'
Tr 24
Cr 316
45°00'
16h30m

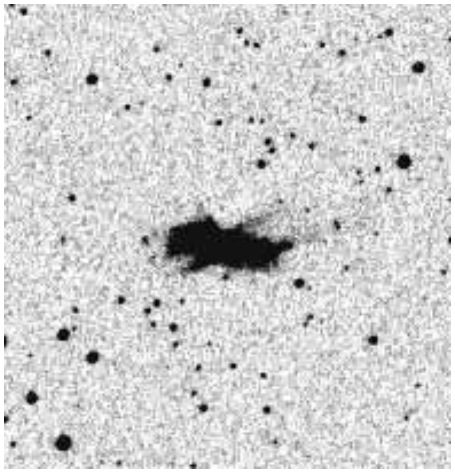

17h30m
17h25m
17h20m
17h15m
17h10m
38°00'
NGC 6337
39°00'
NGC 6318
40°00'
B 58
41°00'
17h05m

Sh 2 - 6

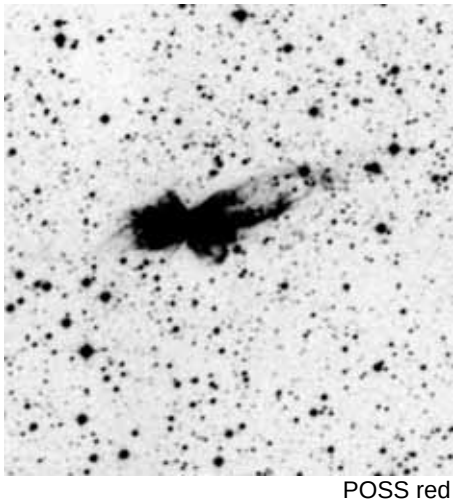
in Scorpius



60x60, blue



POSS blue



POSS red



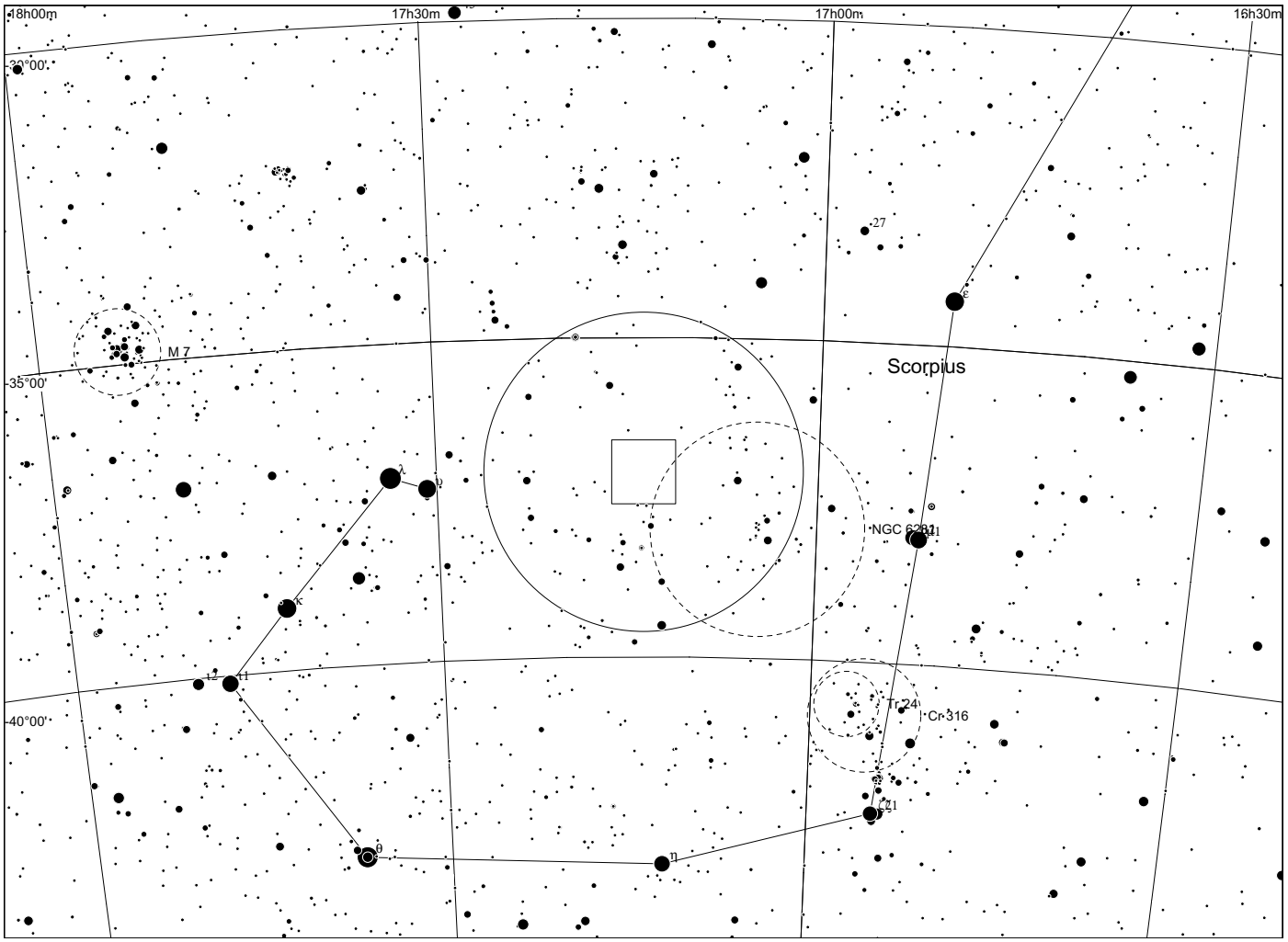
composite

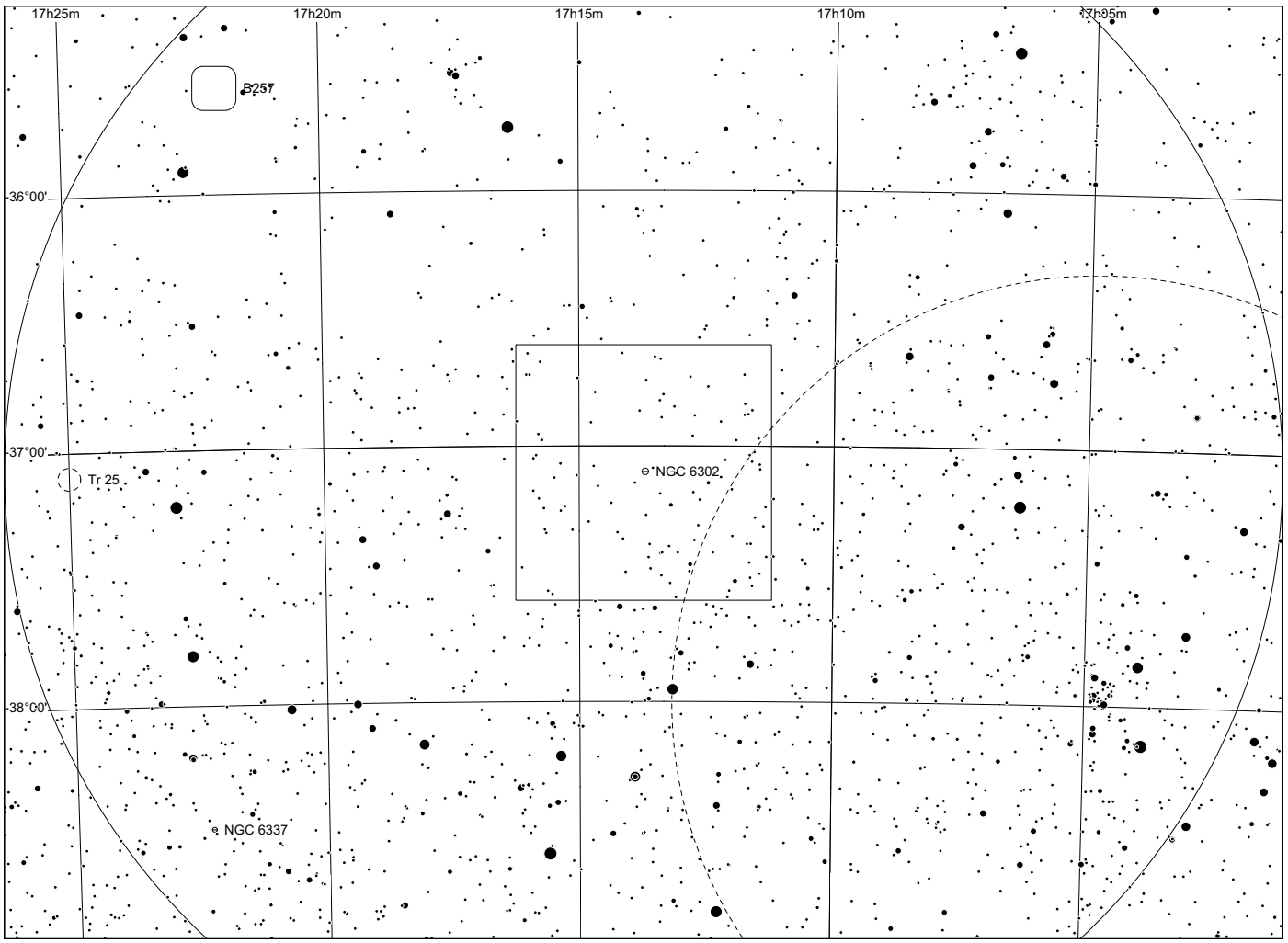
	other name	RA	dec	dia. '	F	S	B
Sh 2-006	Bug nebula	17 15 03.2	-37 06 60	4	3	2	3

Distance: 910 pc, Size: 1.1 pc, Source: 2002A&A...394..679K

This is the Bug nebula, a planetary nebula.

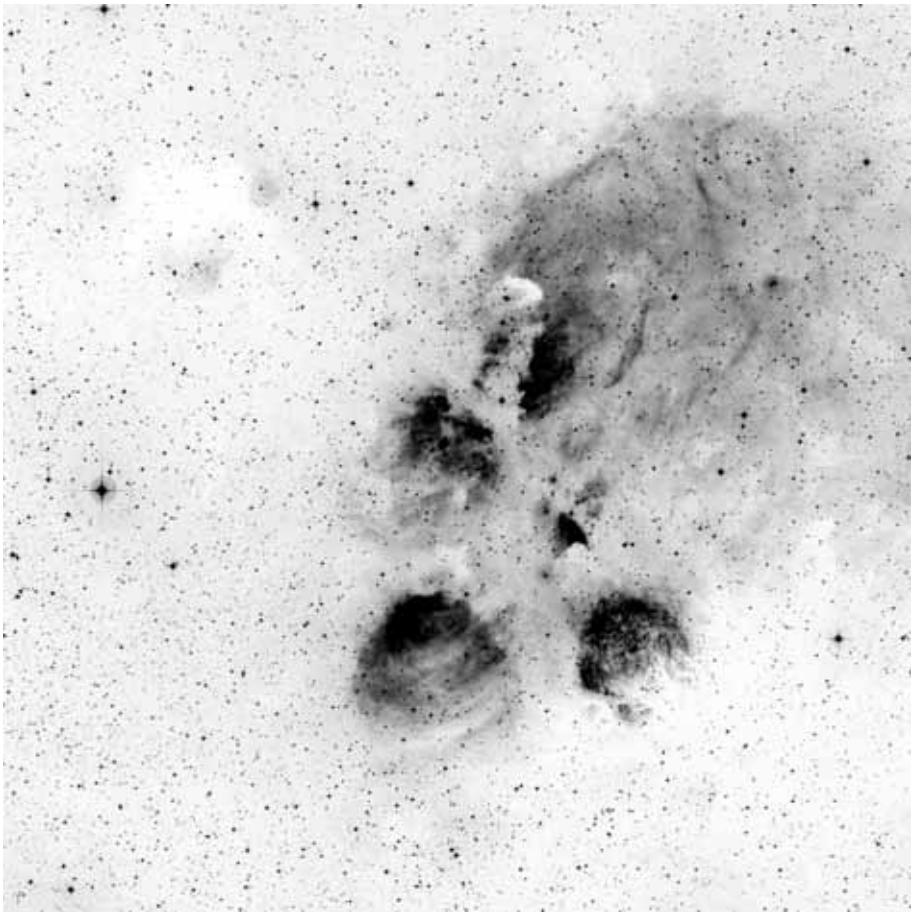
Observing notes:


18h00m
17h30m
17h00m
16h30m
30°00'
35°00'
40°00'
M 7
Scorpius
NGC 6281
Tr 24
Cr 316
27
ε
λ
υ
κ
ι2
ι1
θ
η

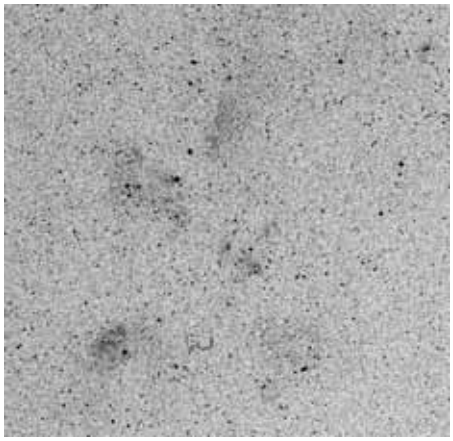

17h25m
17h20m
17h15m
17h10m
17h05m
36°00'
37°00'
38°00'
B257
Tr 25
NGC 6302
NGC 6337

Sh 2 - 8

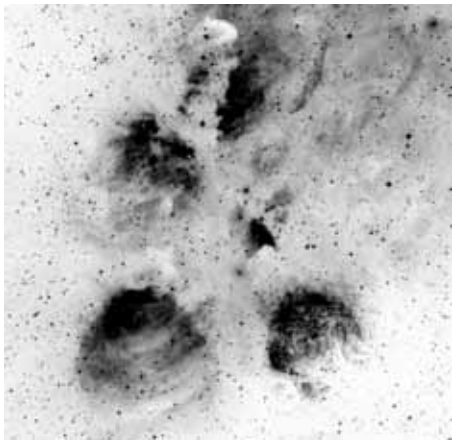
in Scorpius



60x60, red



POSS blue



POSS red



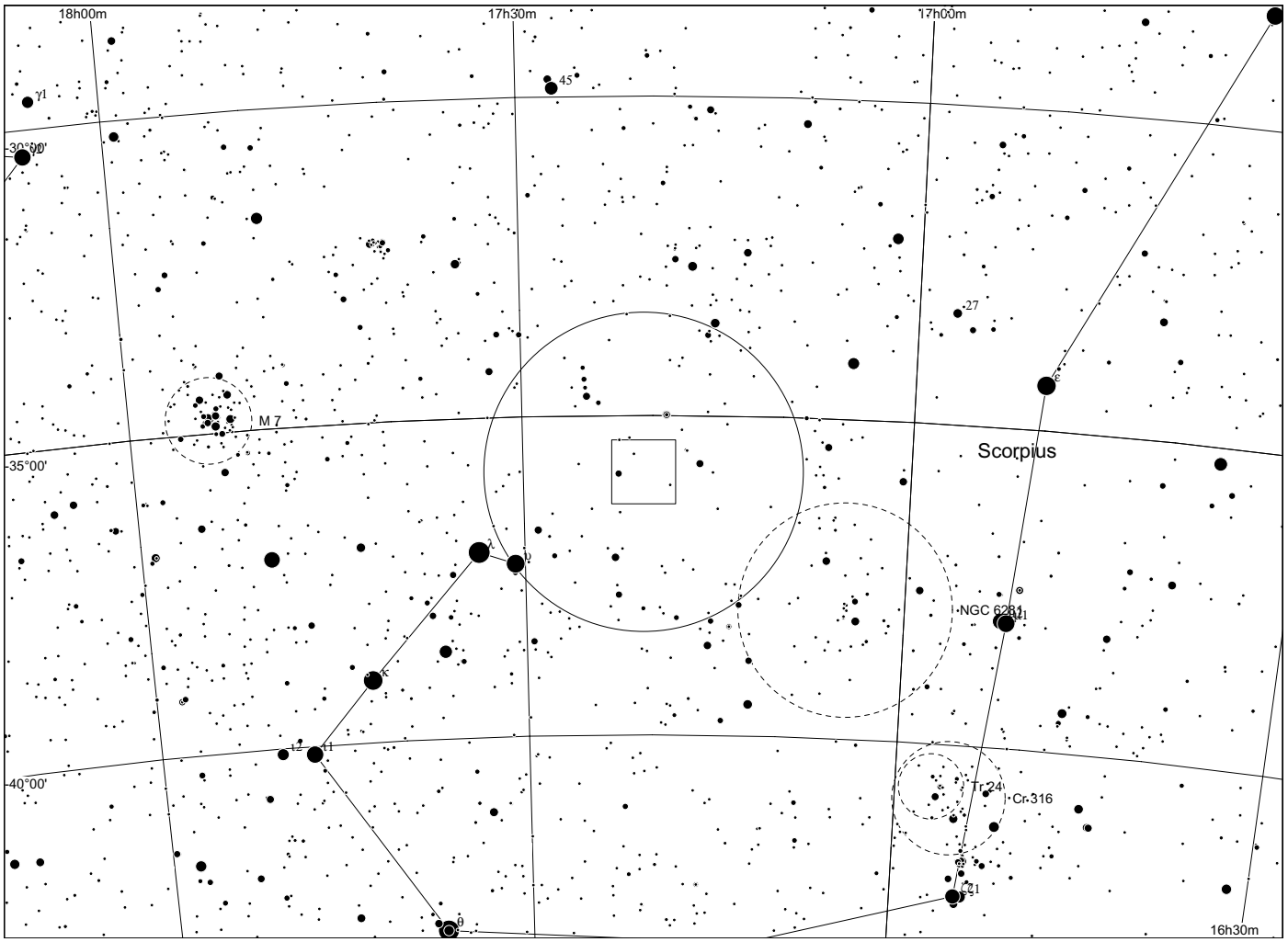
composite

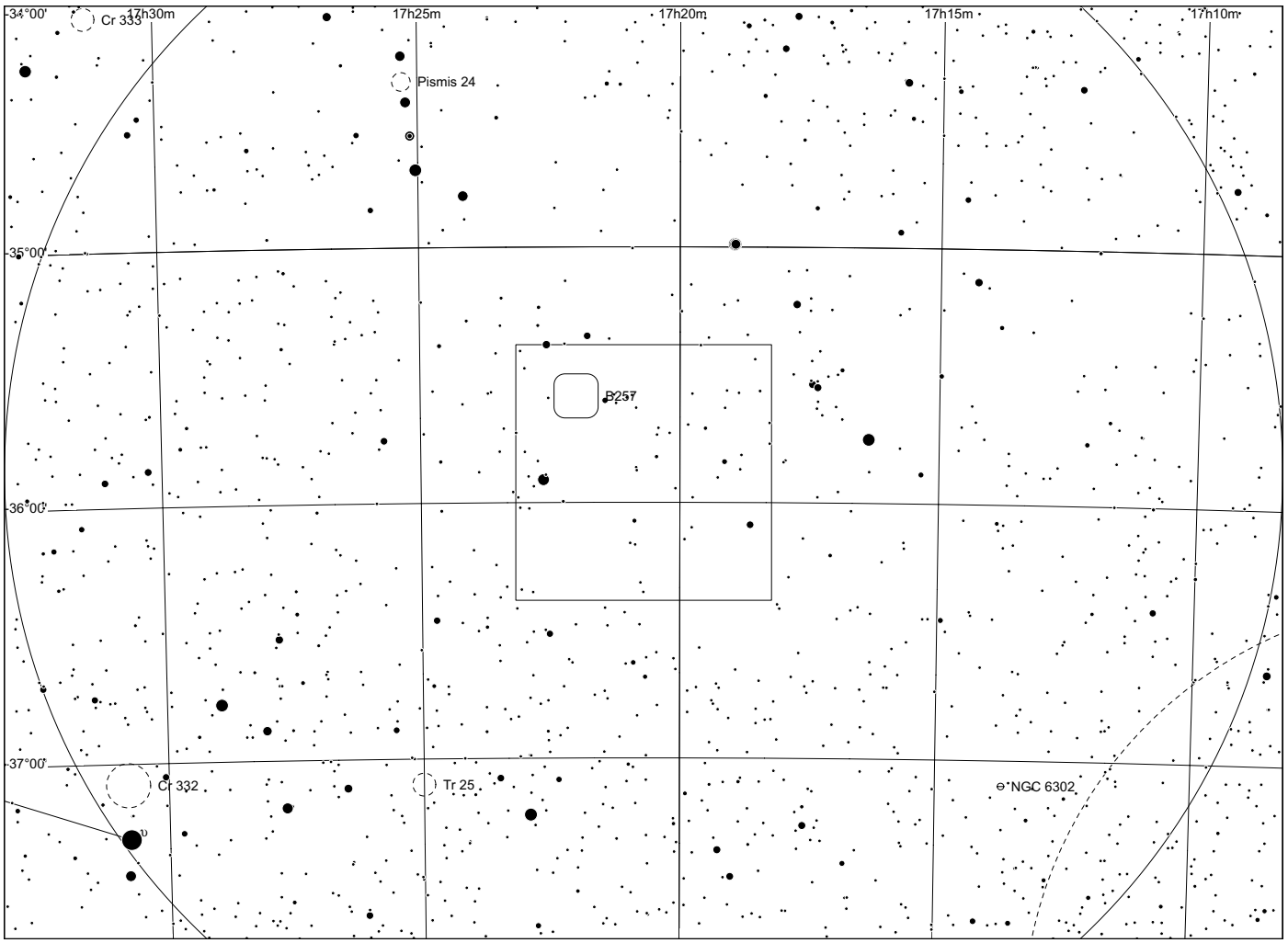
	other name	RA	dec	dia. '	F	S	B
Sh 2-008	NGC6334, Cat's paw	17 21 24.5	-36 02 05	120	3	3	3

Distance: 1700 pc, Size: 59.3 pc, Source: 1982ApJS...49..183B

This is NGC 6334, the Cat's Paw nebula. This nebula contains five cloud fragments and at least eleven major infrared sources that are probably mostly cooler B stars. It lies at the same distance as NGC 6357, the War and Peace nebula, and is separated from it by a dark cloud. You can see both nebula together in this image. The Gum catalog divides this nebula into six pieces (Gum 61, 62, 63, 64a, 64b and 64c).

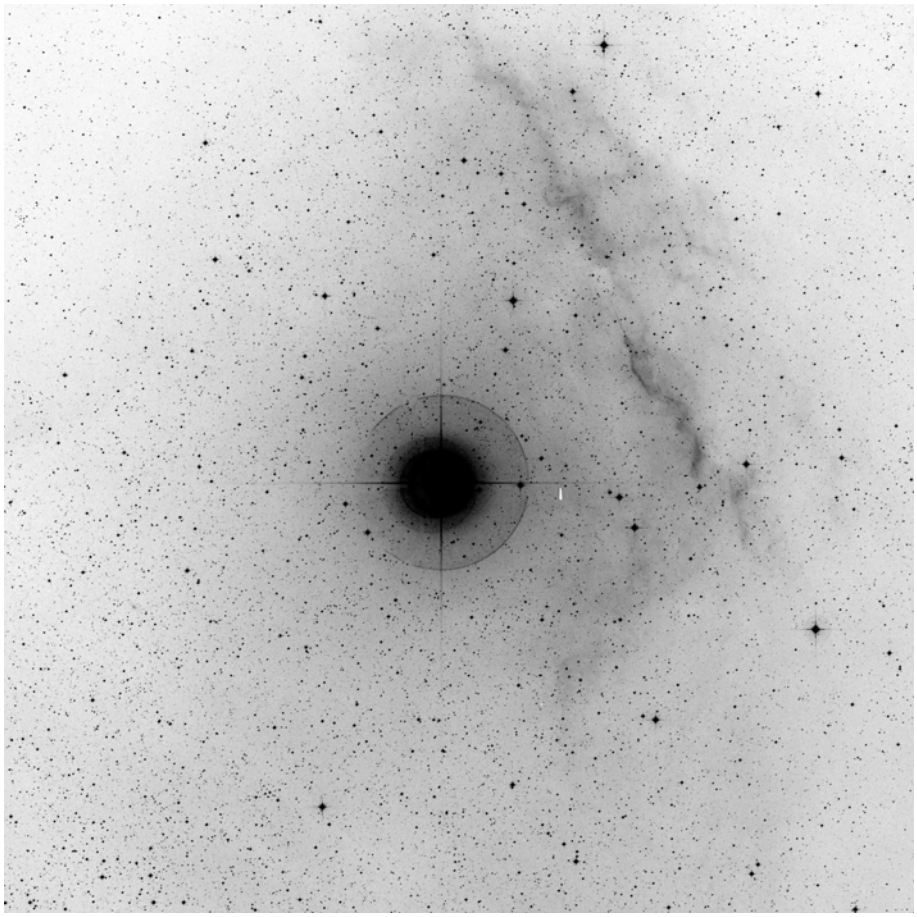
Observing notes:


18h00m
17h30m
17h00m
γ1
45
-30°00'
27
M 7
Scorpius
-35°00'
NGC 6281
-40°00'
Tr 24
Cr 316
16h30m

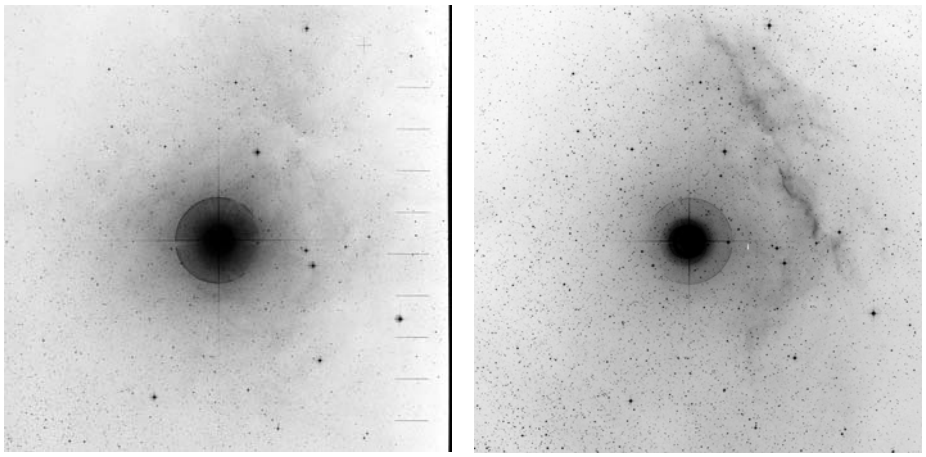

-34°00'
Cr 333
17h30m
17h25m
17h20m
17h15m
17h10m
Pismis 24
-35°00'
B257
-36°00'
-37°00'
Cr 332
Tr 25
NGC 6302

Sh 2 - 9

in Scorpius



60x60, red



POSS blue

POSS red



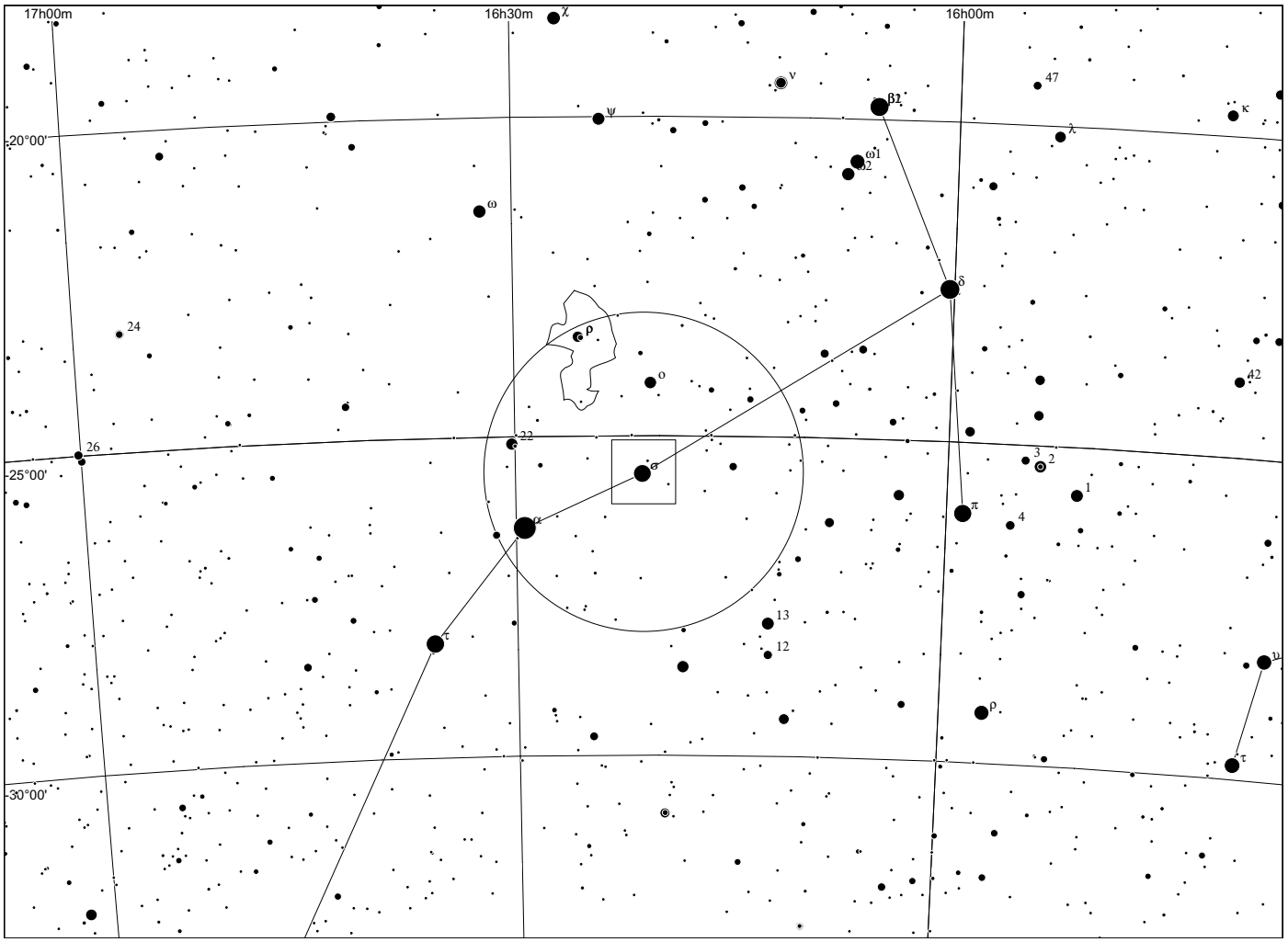
RGB Dean Salman

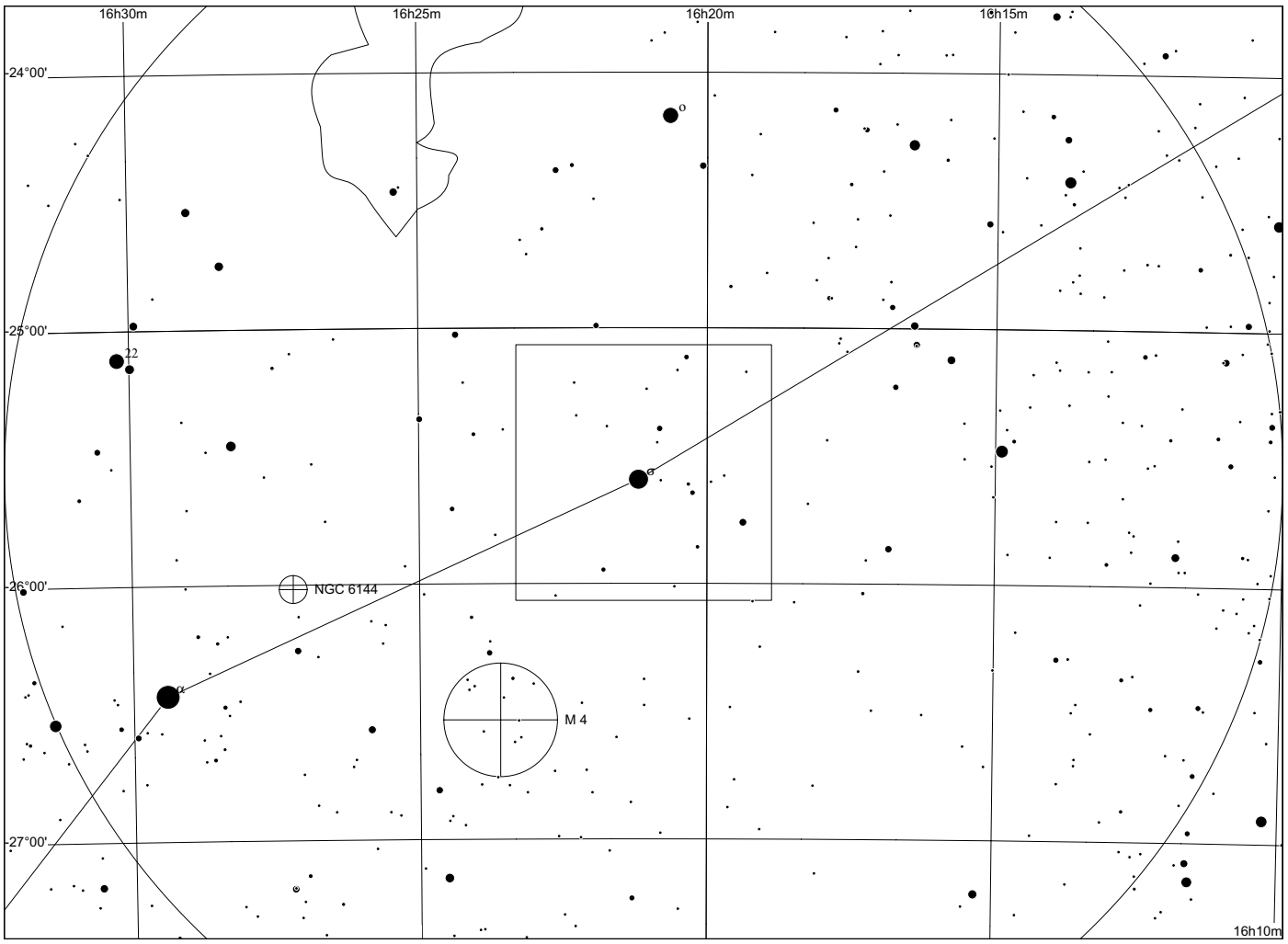
	other name	RA	dec	dia. '	F	S	B
Sh 2-009		16 21 10.6	-25 35 22	80	3	2	2

Distance: 200 pc, Size: 4.7 pc, Source: 2003A&A...397..133R

Associated with the star sigma Scorpii in the nearby Upper Scorpius subgroup of the Scorpius OB2 association.

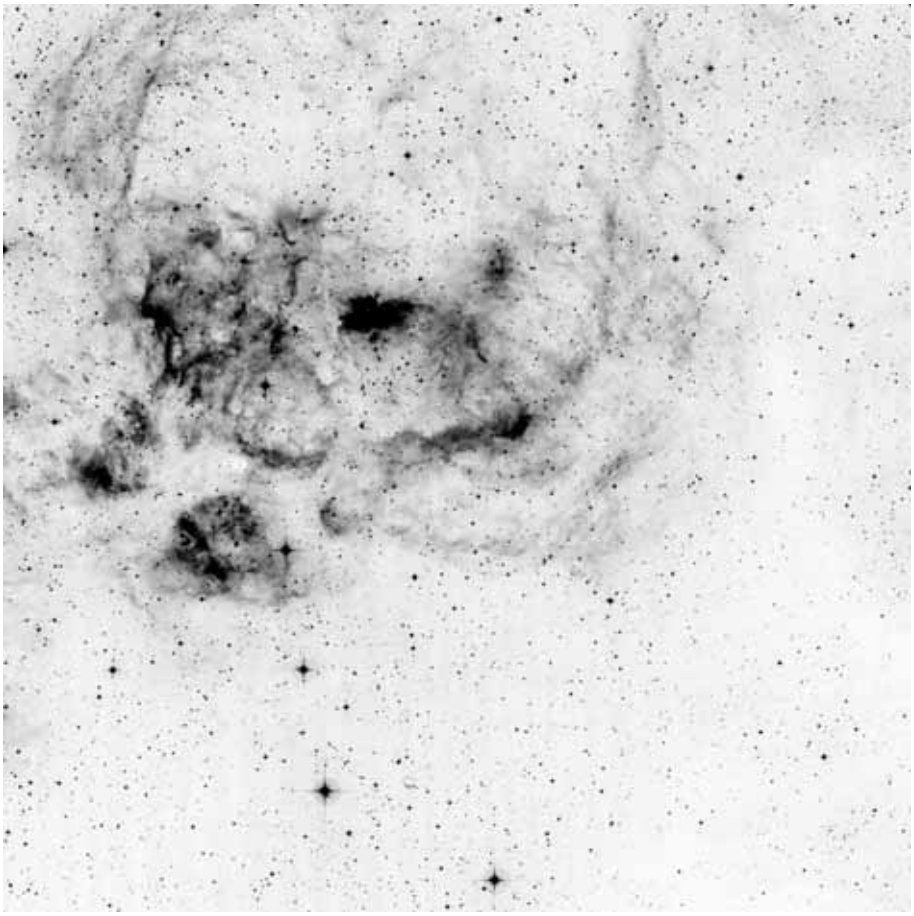
Observing notes:


17h00m
16h30m
16h00m
20°00'
25°00'
30°00'
χ
ν
ψ
β1
47
κ
λ
ω1
ω2
ω
δ
ρ
24
o
42
26
22
σ
3
2
1
π
4
α
13
12
τ
υ
ρ
τ

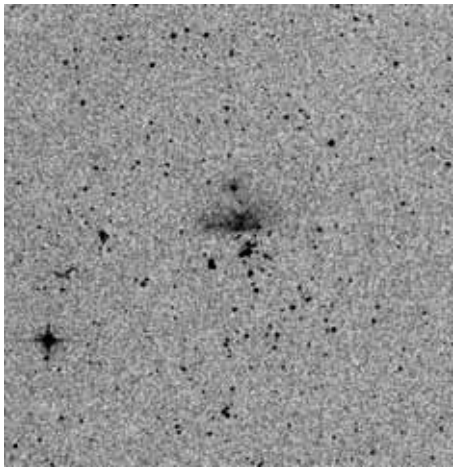

16h30m
16h25m
16h20m
16h15m
24°00'
25°00'
26°00'
27°00'
o
22
σ
NGC 6144
α
M 4
16h10m

Sh 2 - 11

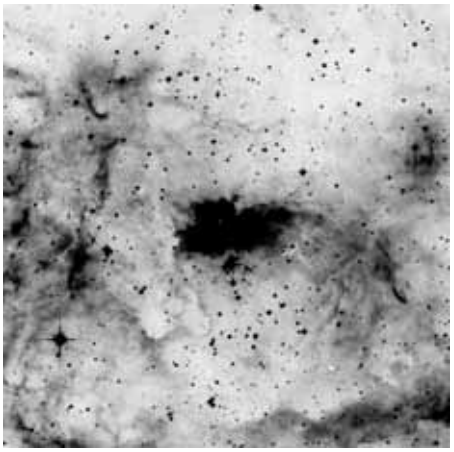
in Scorpius



60x60, red



POSS blue



POSS red



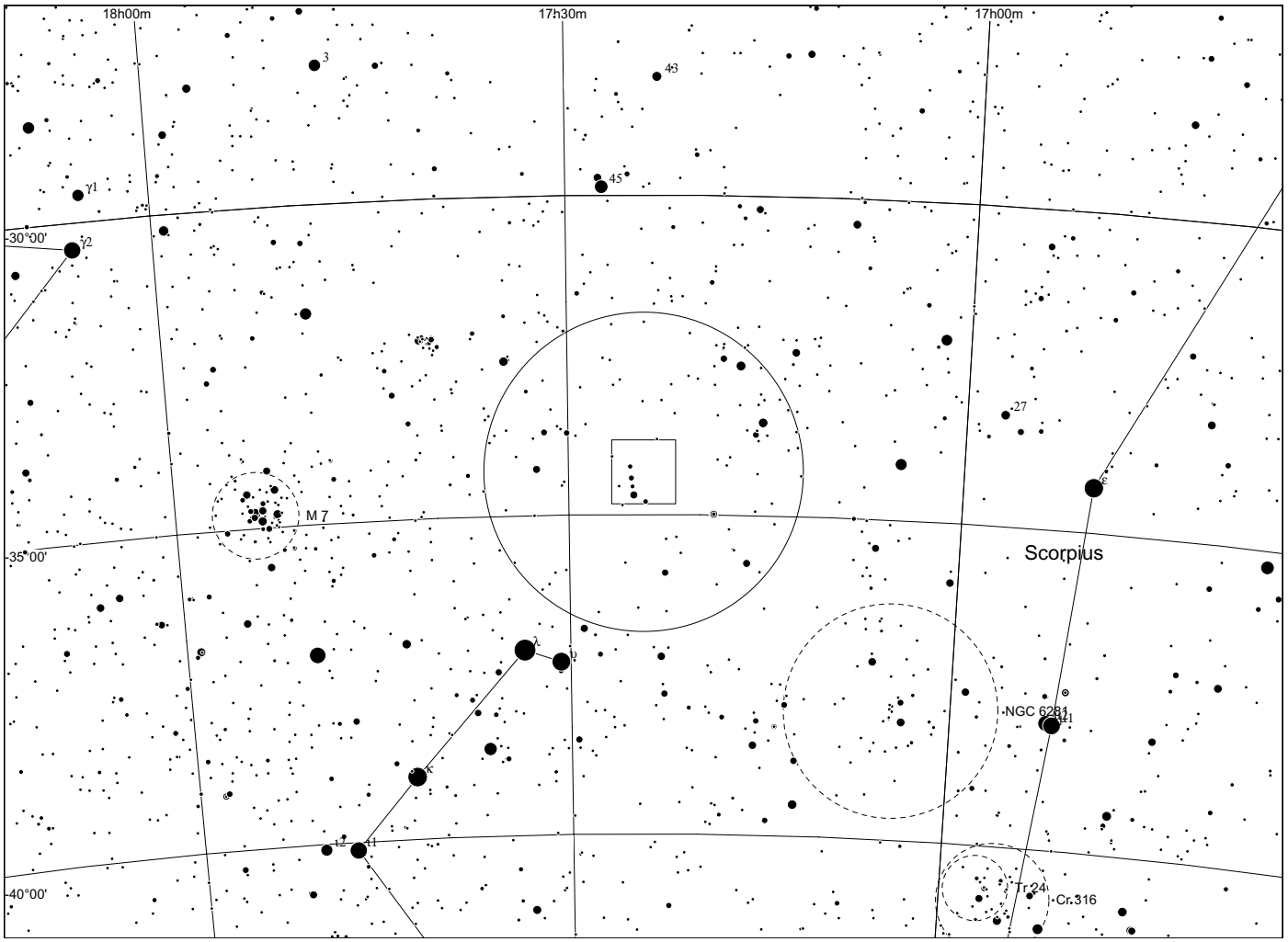
composite

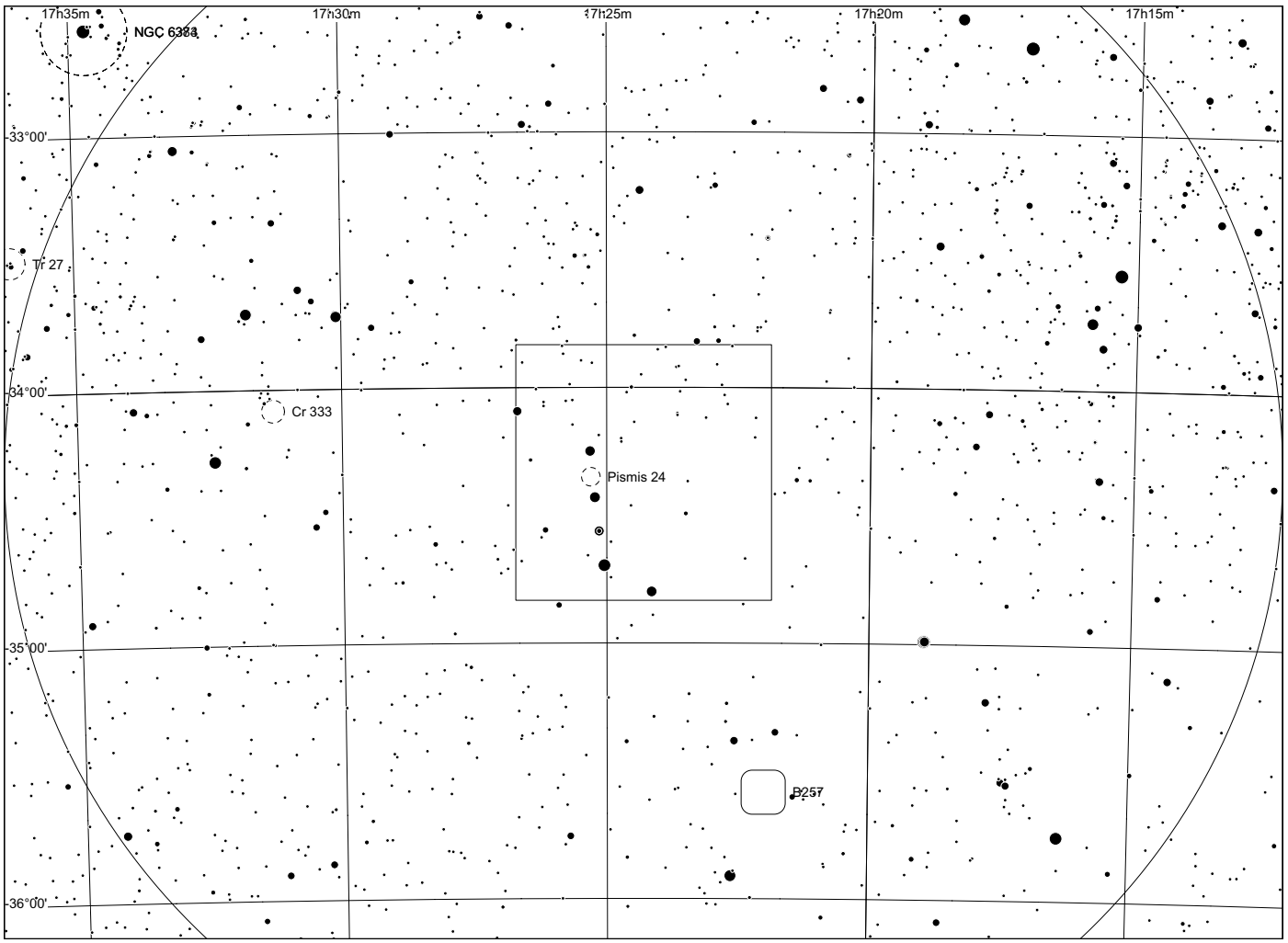
	other name	RA	dec	dia. '	F	S	B
Sh 2-011	N6357:	17 26 30.6	-34 12 20	90	3	3	3

Distance: 1740 pc, Size: 45.6 pc, Source: 1982ApJS...49..183B

This is the star formation region W22, also called the War and Peace Nebula or NGC 6357. Contains the star cluster Pismis 24 which includes a multiple O4 and O4-5 star system. Near by is the Wolf-Rayet star WR 93, which is also a multiple star system with a class O7-9 companion. At the same distance as the Cat's Paw nebula NGC 6334 and separated from it by a dark cloud.

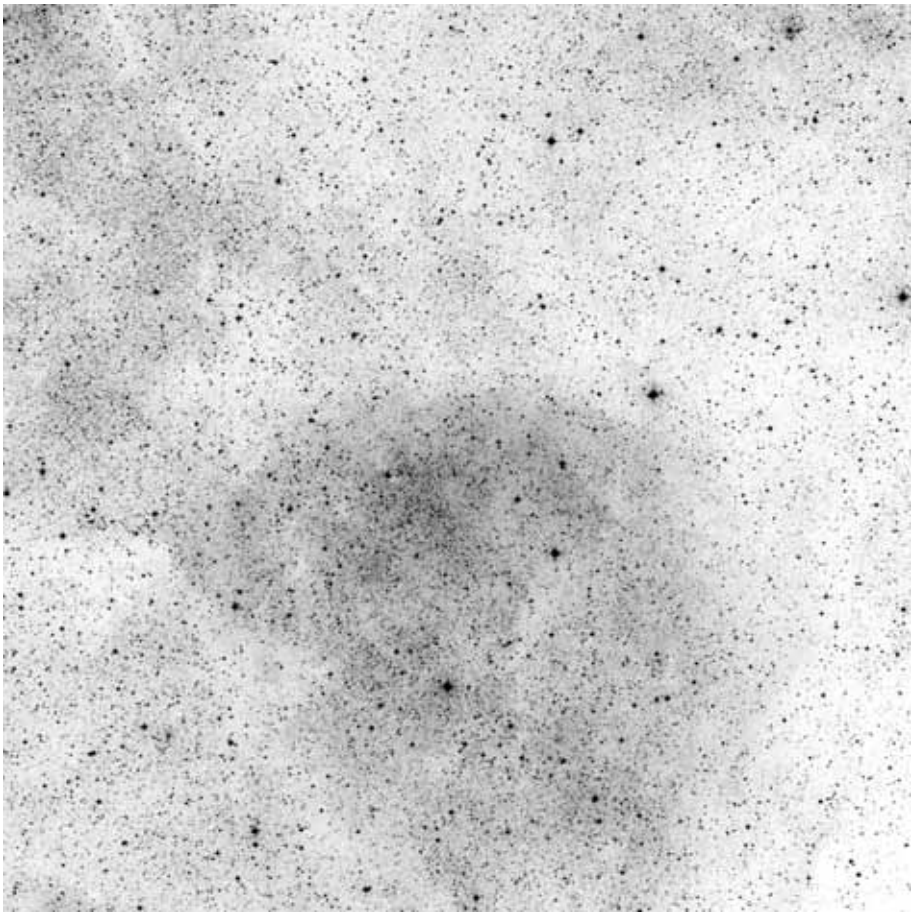
Observing notes:


18h00m
17h30m
17h00m
-30°00'
-35°00'
-40°00'
γ1
γ2
3
43
45
27
M 7
Scorpius
λ
υ
κ
12
11
NGC 6281
Tr 24
Cr 316

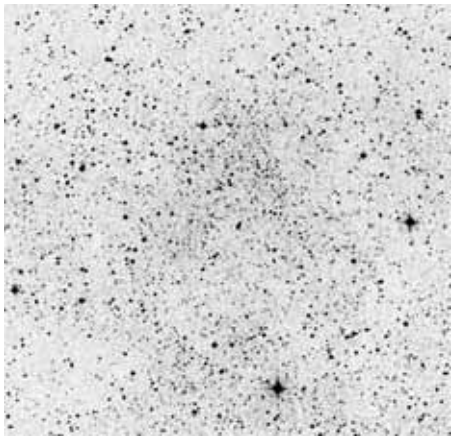

17h35m
17h30m
17h25m
17h20m
17h15m
NGC 6383
-33°00'
-34°00'
-35°00'
-36°00'
Tr 27
Cr 333
Pismis 24
P257

Sh 2 - 13

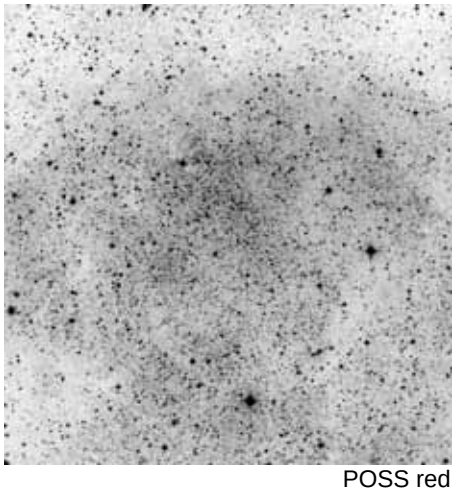
in Scorpius



60x60, red



POSS blue



POSS red



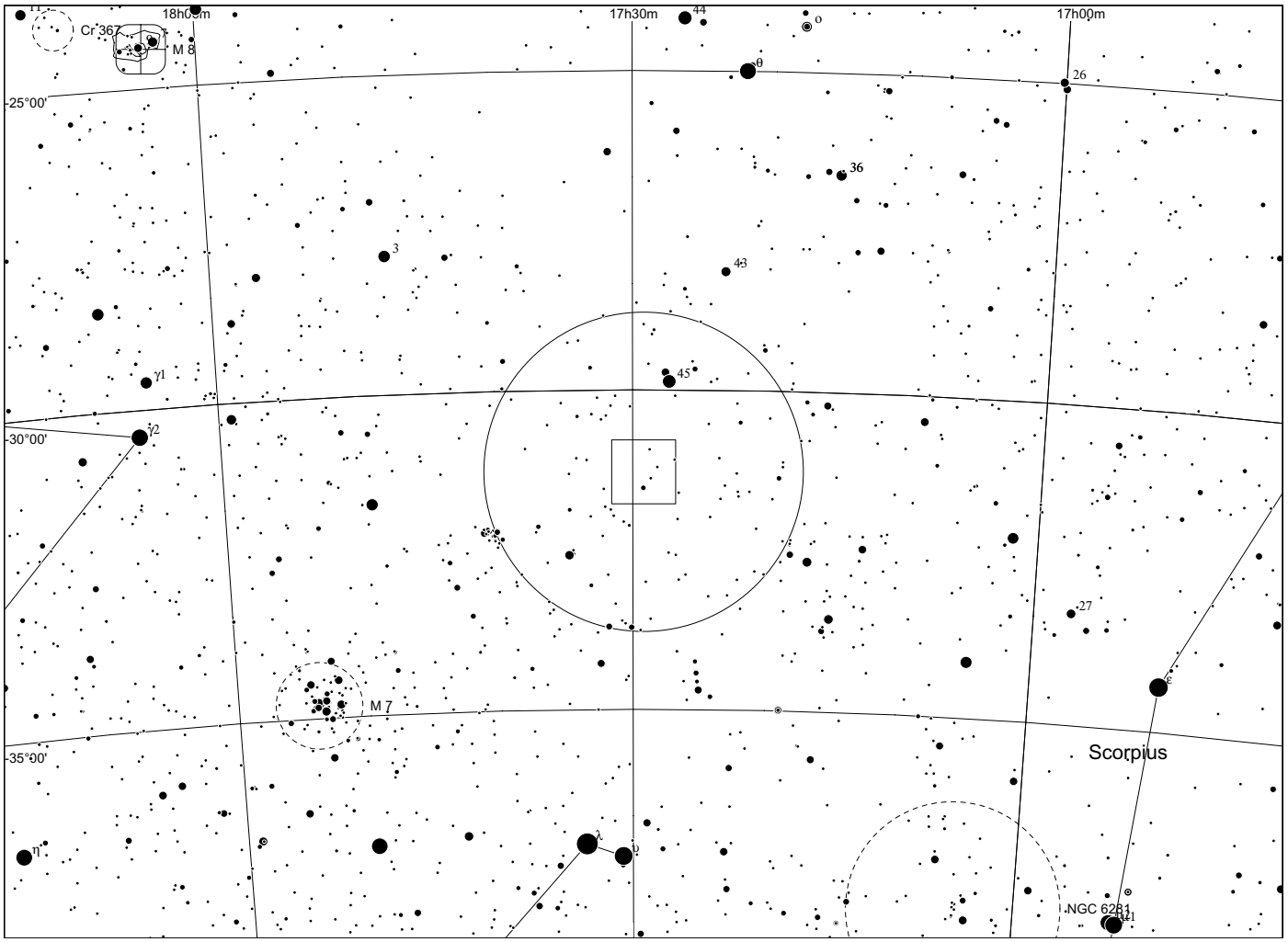
composite

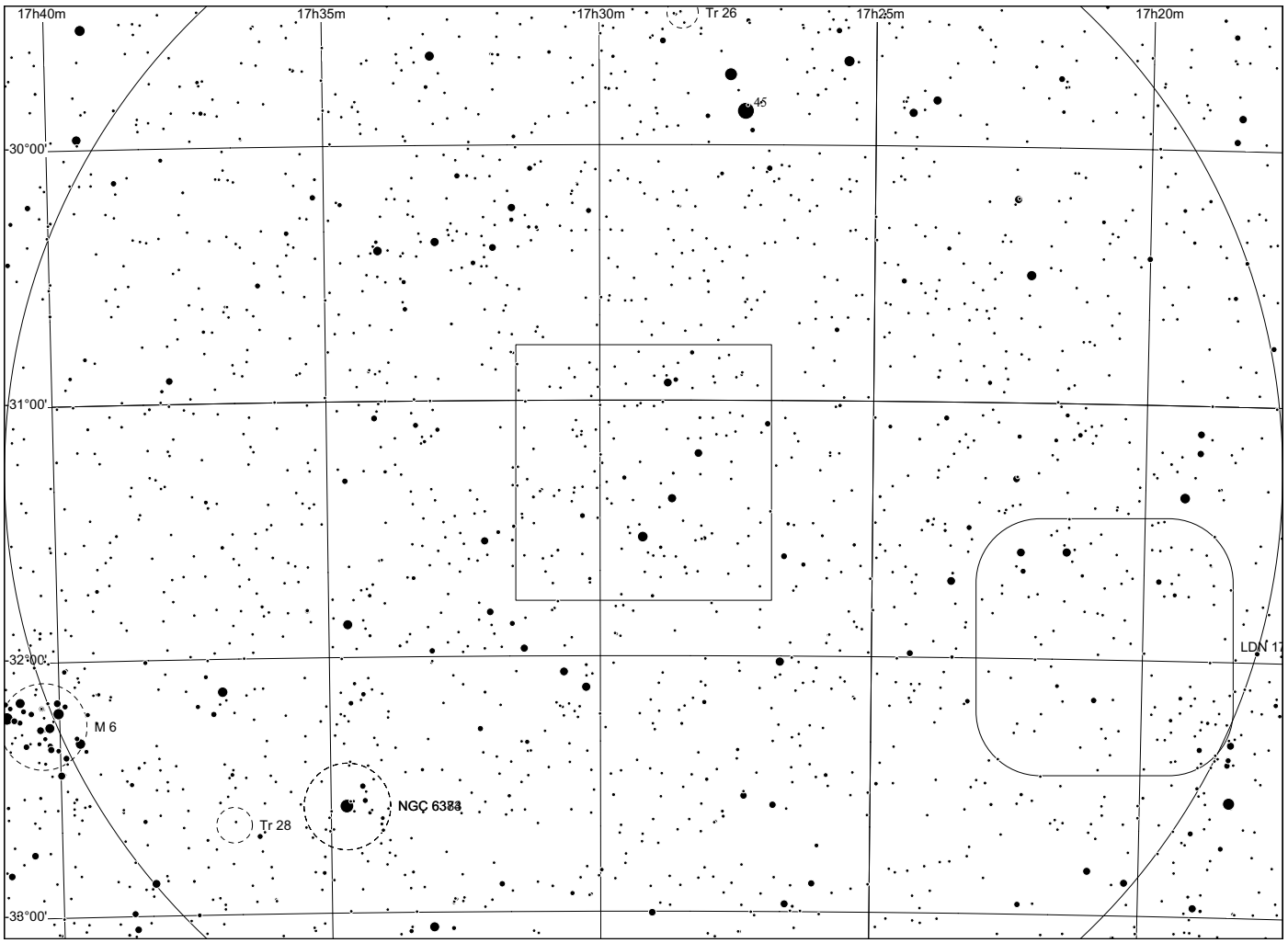
	other name	RA	dec	dia. '	F	S	B
Sh 2-013		17 30 28.4	-31 33 46	40	2	2	2

Distance: 1200 pc, Size: 15.7 pc, Source: 1989BAICz..40...42A

This nebula may be ionised by the O9.5V star HD 158186 and is next to Sh 2-12 (part of which is on the lower left of this image). HD 158186 may be a runaway star ejected from NGC 6383, the star cluster at the heart of Sh 2-12.

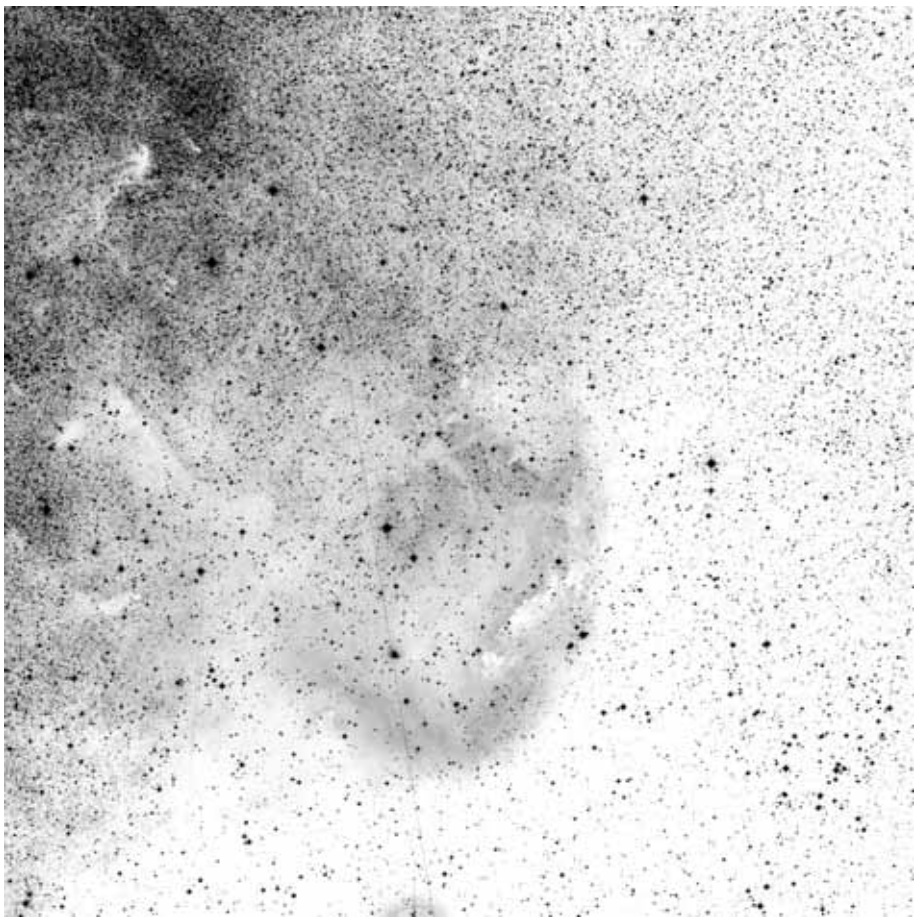
Observing notes:


18h00m
17h30m
17h00m
Cr 367
M 8
-25°00'
-30°00'
-35°00'
M 7
Scorpius
NGC 6281

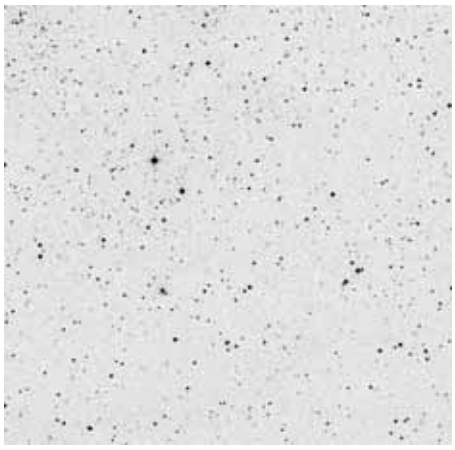

17h40m
17h35m
17h30m
Tr 26
17h25m
17h20m
-30°00'
-31°00'
-32°00'
-38°00'
M 6
Tr 28
NGC 6383
LDN 1

Sh 2 - 15

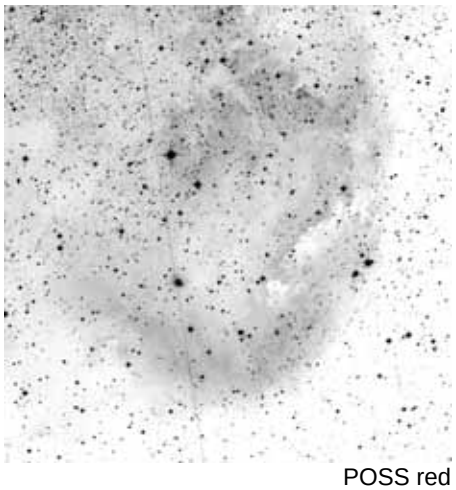
in Scorpius



60x60, red



POSS blue



POSS red



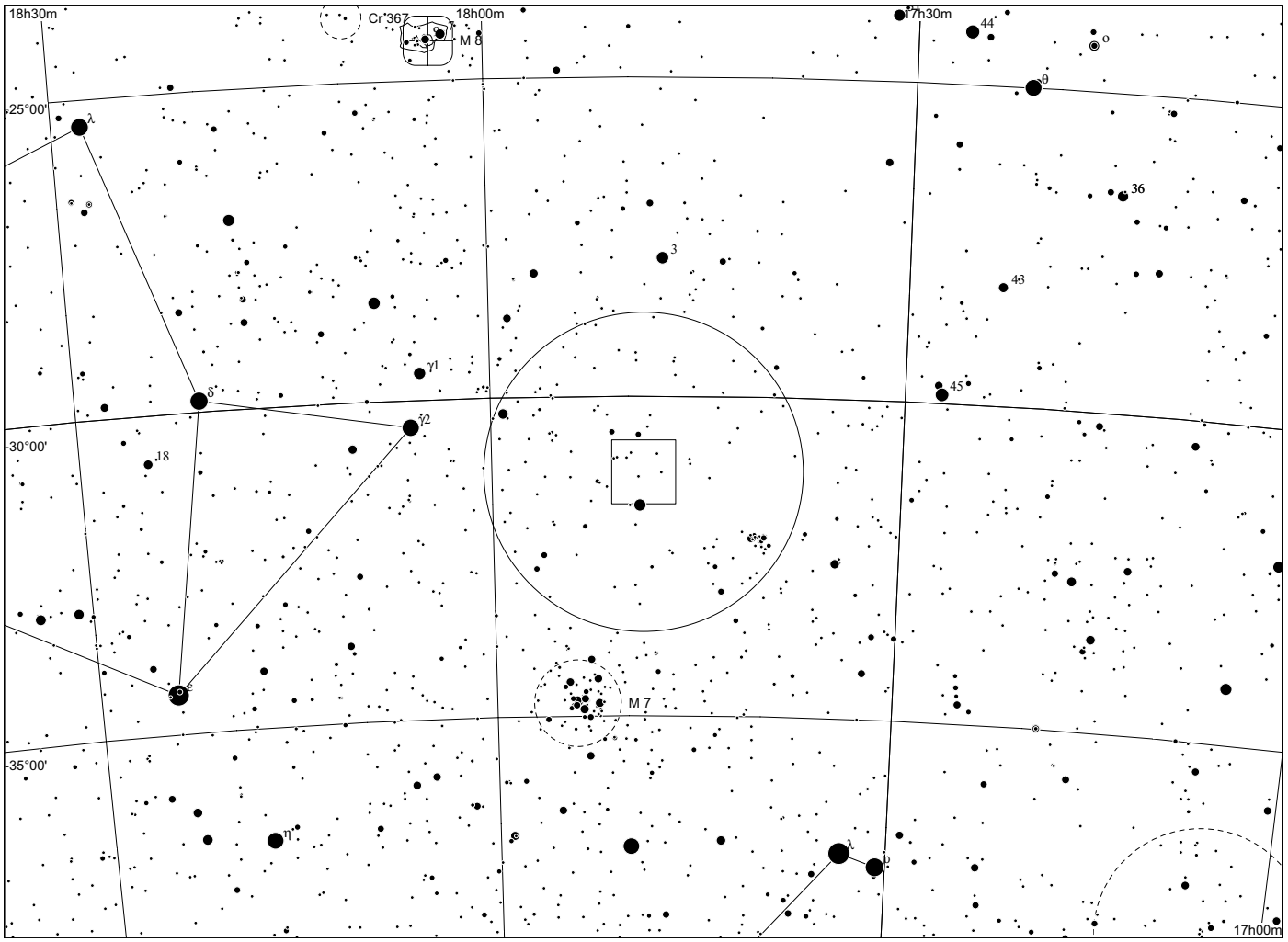
composite

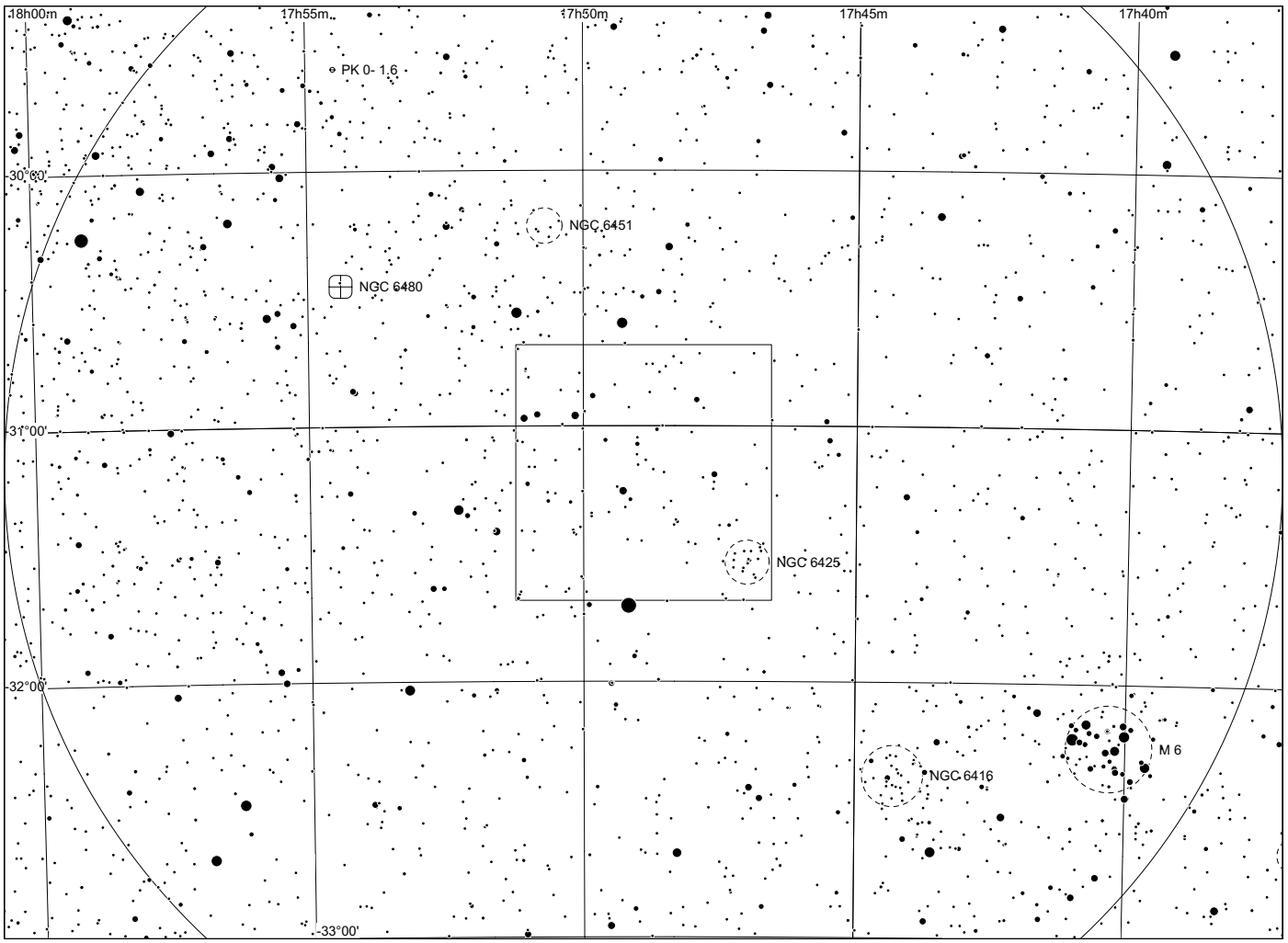
	other name	RA	dec	dia. '	F	S	B
Sh 2-015		17 50 34.2	-31 15 50	30	2	2	2

Distance: 1500 pc, Size: 13.1 pc, Source: 2003A&A...397..133R

This HII region is ionised by the O8 V star HD 161853 and is part of the S15-S20 complex of HII regions. This region is also called W25 or Gum 69.

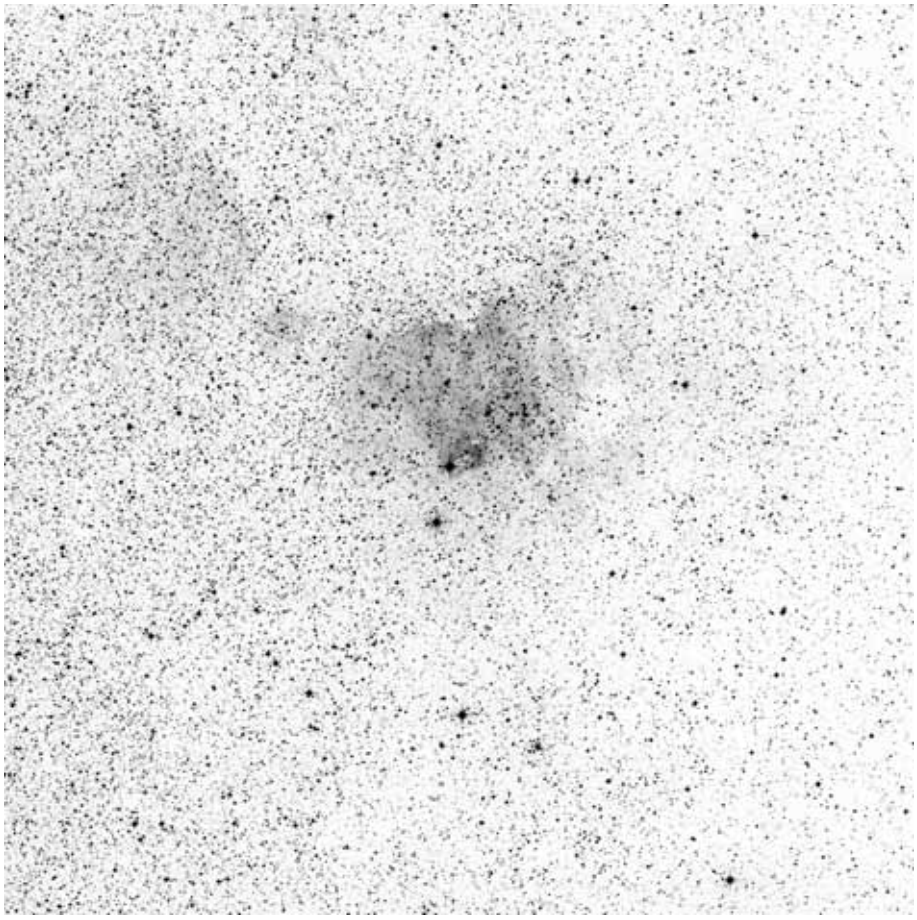
Observing notes:


18h30m
Cr 367
18h00m
M 8
17h30m
44
o
θ
25°00'
λ
36
3
43
γ1
45
δ
γ2
30°00'
18
M 7
35°00'
η
17h00m

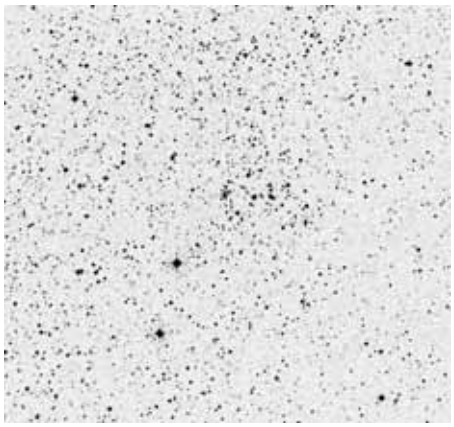

18h00m
17h55m
17h50m
17h45m
17h40m
PK 0- 1.6
30°00'
NGC 6451
NGC 6480
31°00'
NGC 6425
32°00'
M 6
NGC 6416
33°00'

Sh 2 - 16

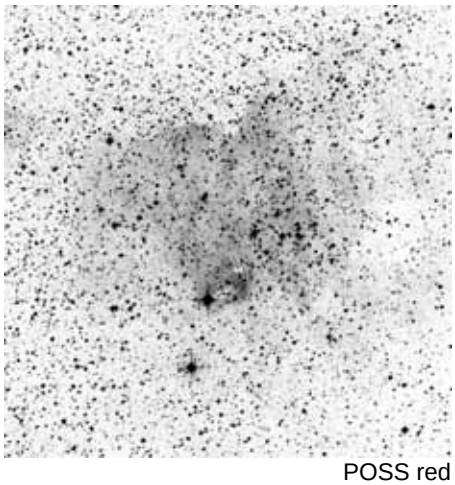
in Sagittarius



60x60, red



POSS blue



POSS red



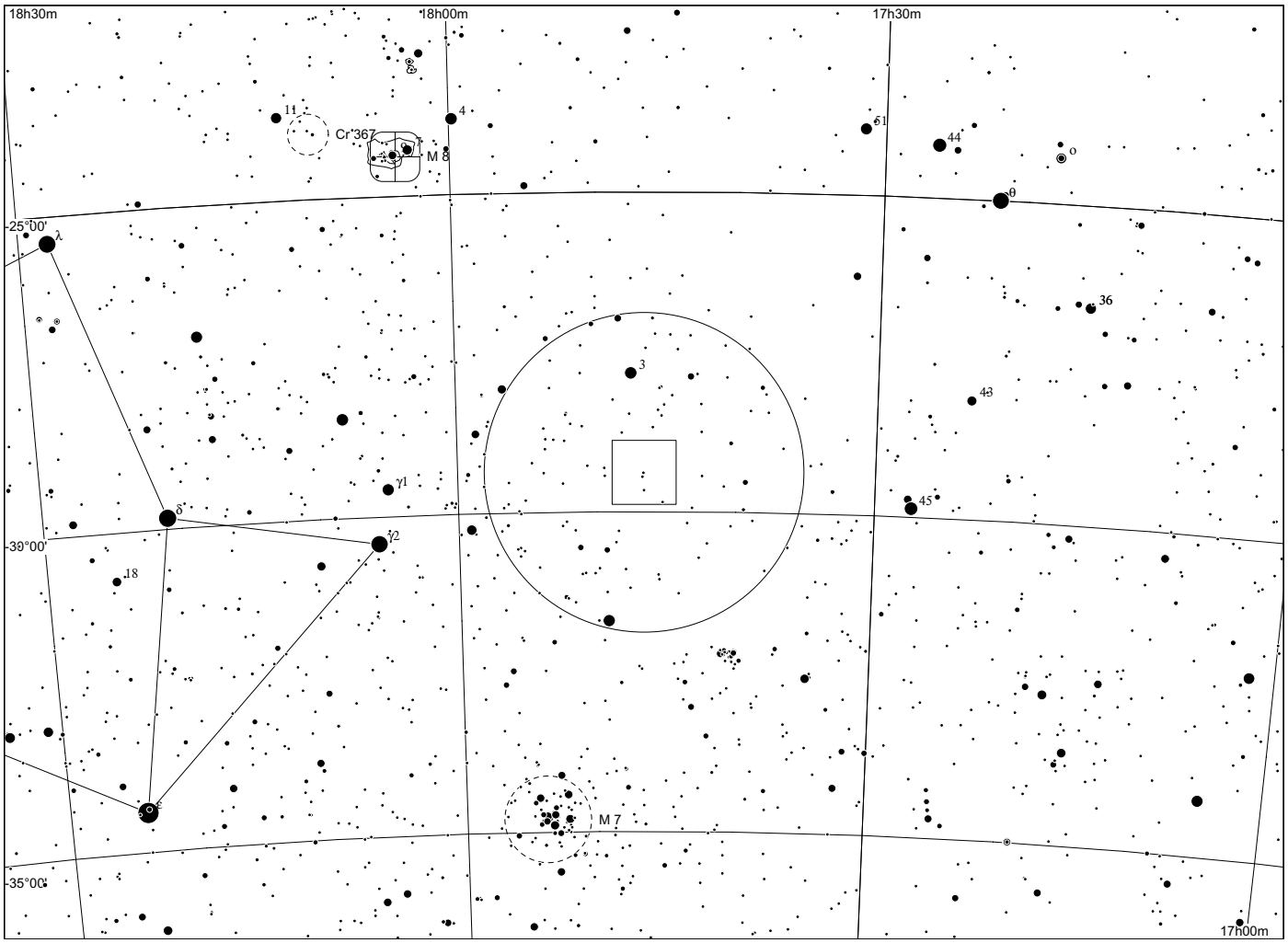
composite

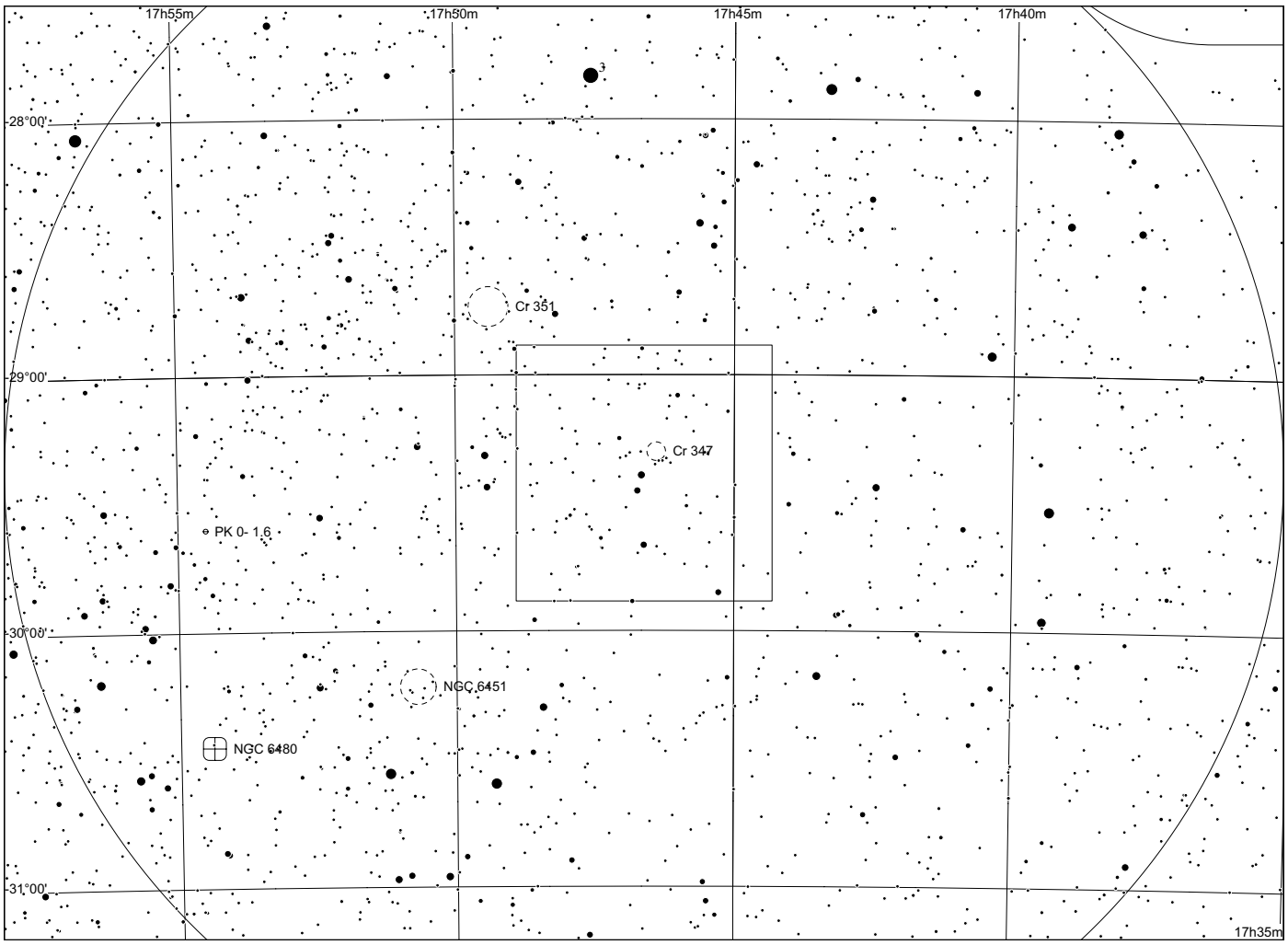
	other name	RA	dec	dia. '	F	S	B
Sh 2-016		17 47 52.1	-29 18 14	20	3	2	2

Distance: 1500 pc, Size: 8.7 pc, Source: 2003A&A...397..133R

Part of the S15-S20 complex of HII regions. The star cluster Collinder 347, and the [DB 2000] 56 infra-red cluster both appear to be embedded in Sh 2-16. The intense gamma ray source 2EG J1746-2852 appears to be embedded in Collinder 347, however, since this cluster is in the same direction as the centre of the galaxy, it is also possible that 2EG J1746-2852 is generated by a source in the Arches cluster near the galactic centre.

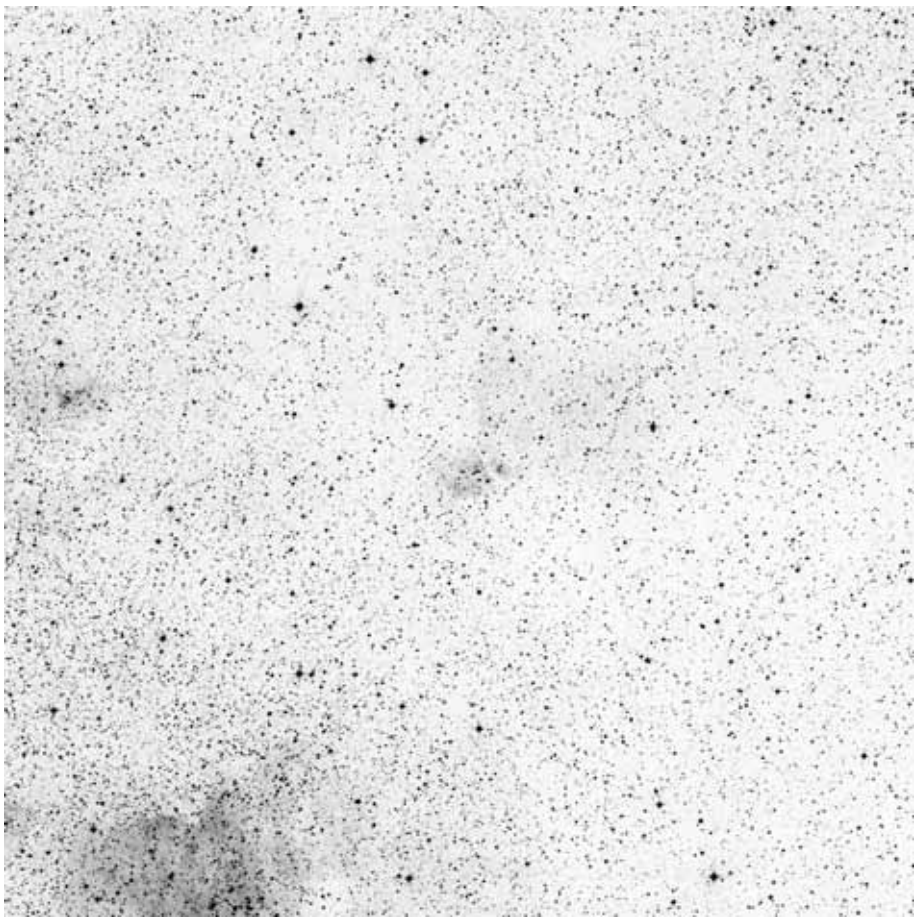
Observing notes:


18h30m
18h00m
17h30m
17h00m
-25°00'
-30°00'
-35°00'
Cr 367
M 8
M 7
λ
δ
γ1
γ2
ε
11
4
51
44
ο
θ
36
3
43
45
18

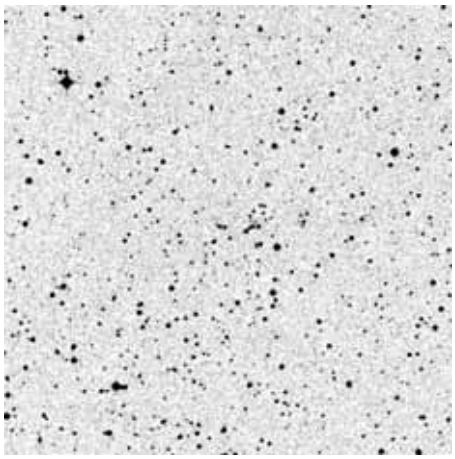

17h55m
17h50m
17h45m
17h40m
17h35m
-28°00'
-29°00'
-30°00'
-31°00'
3
Cr 351
Cr 347
PK 0- 1.6
NGC 6451
NGC 6480

Sh 2 - 17

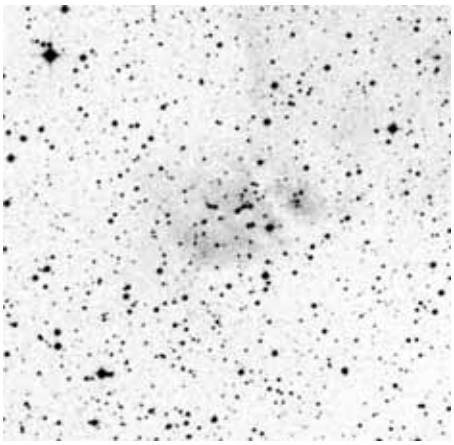
in Sagittarius



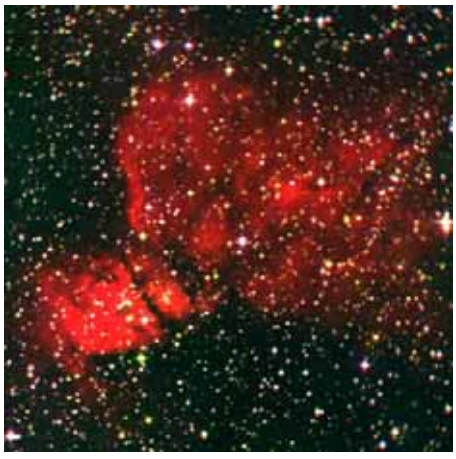
60x60, red



POSS blue



POSS red



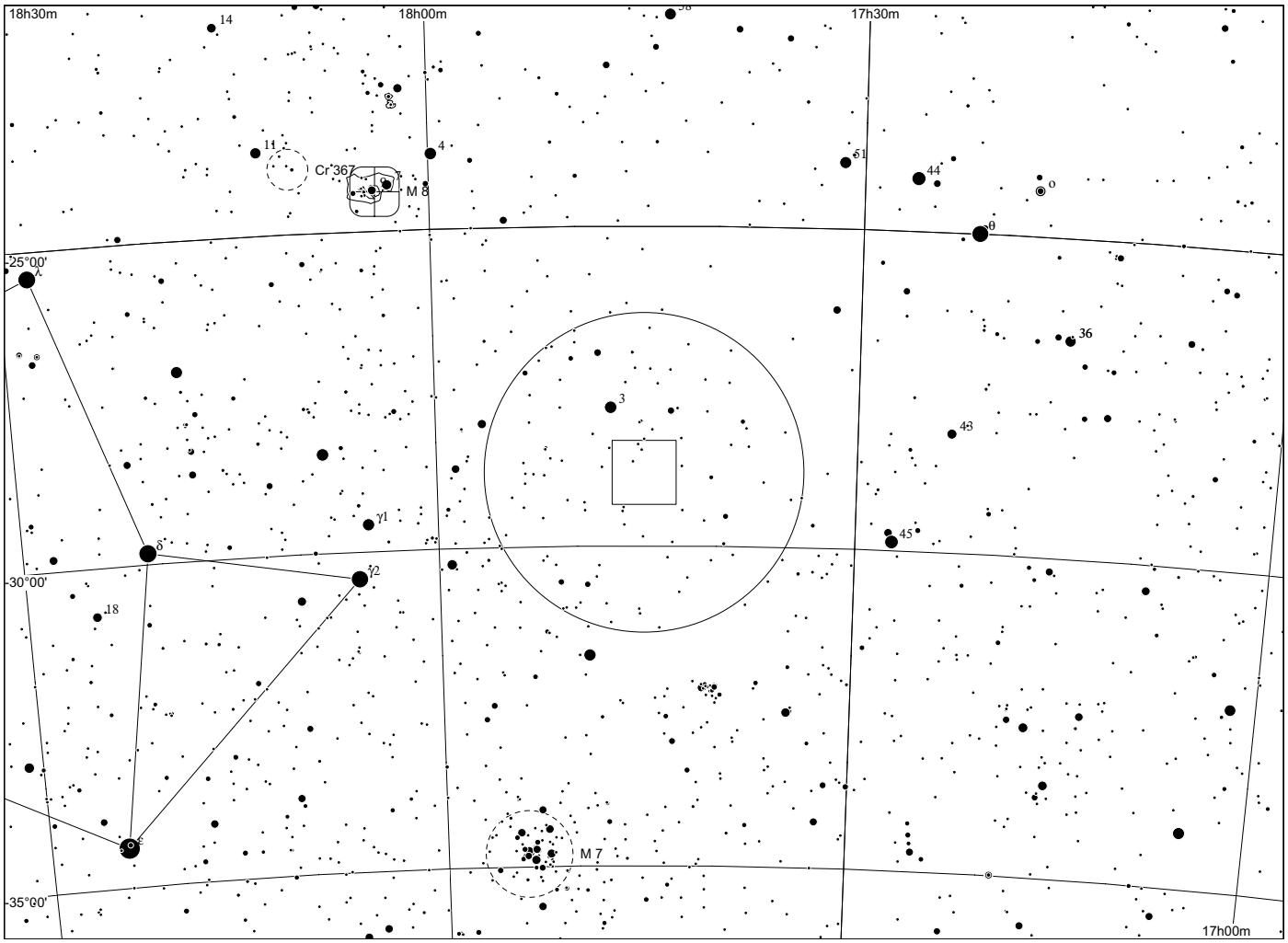
composite

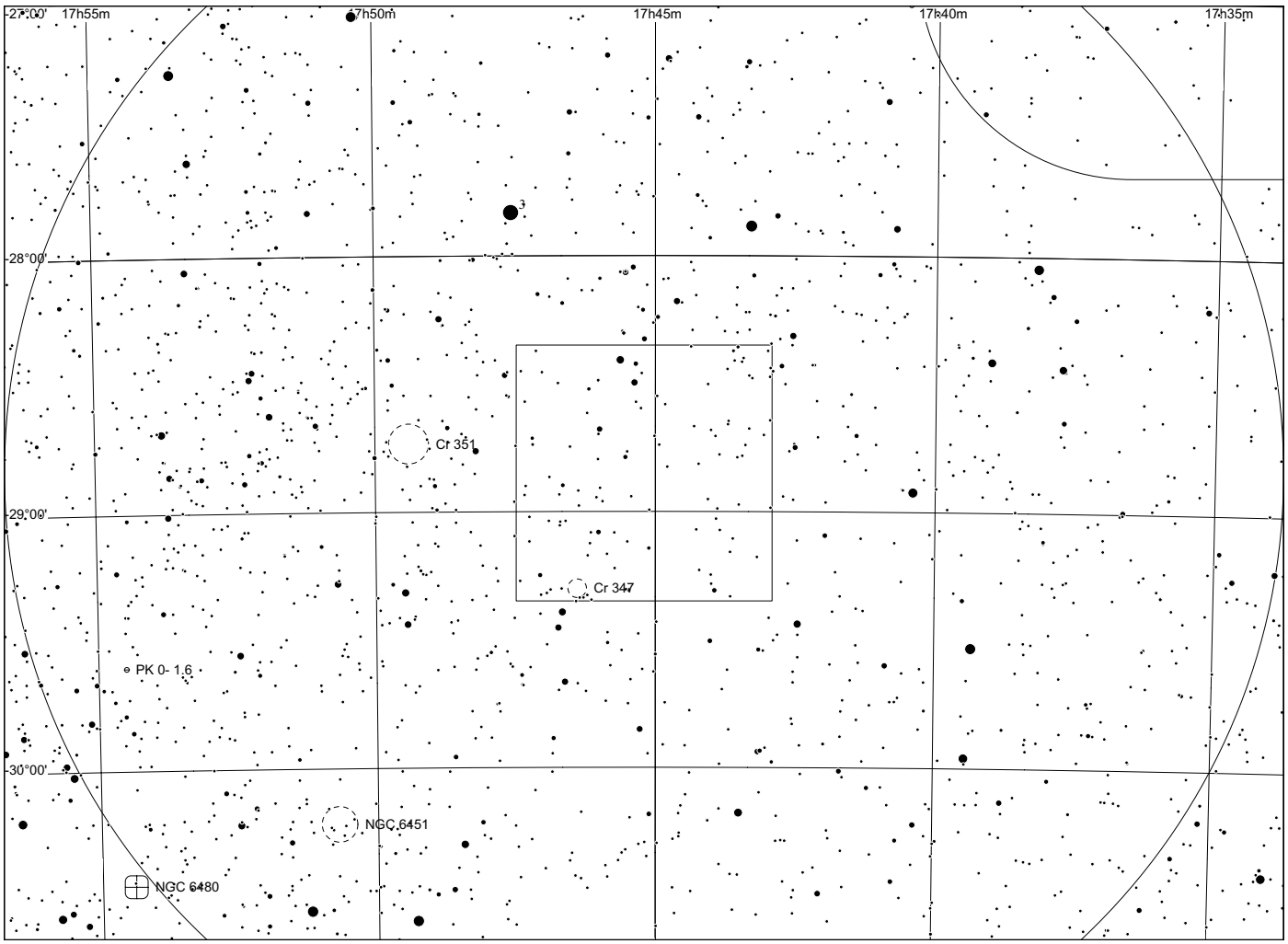
	other name	RA	dec	dia. '	F	S	B
Sh 2-017		17 46 08.4	-28 51 28	25	3	2	2

Distance: 1500 pc, Size: 10.9 pc, Source: 2003A&A...397..133R

Part of the S15-S20 complex of HII regions. About a dozen stars associated with this HII region may form the infrared star cluster [DB2000] 58

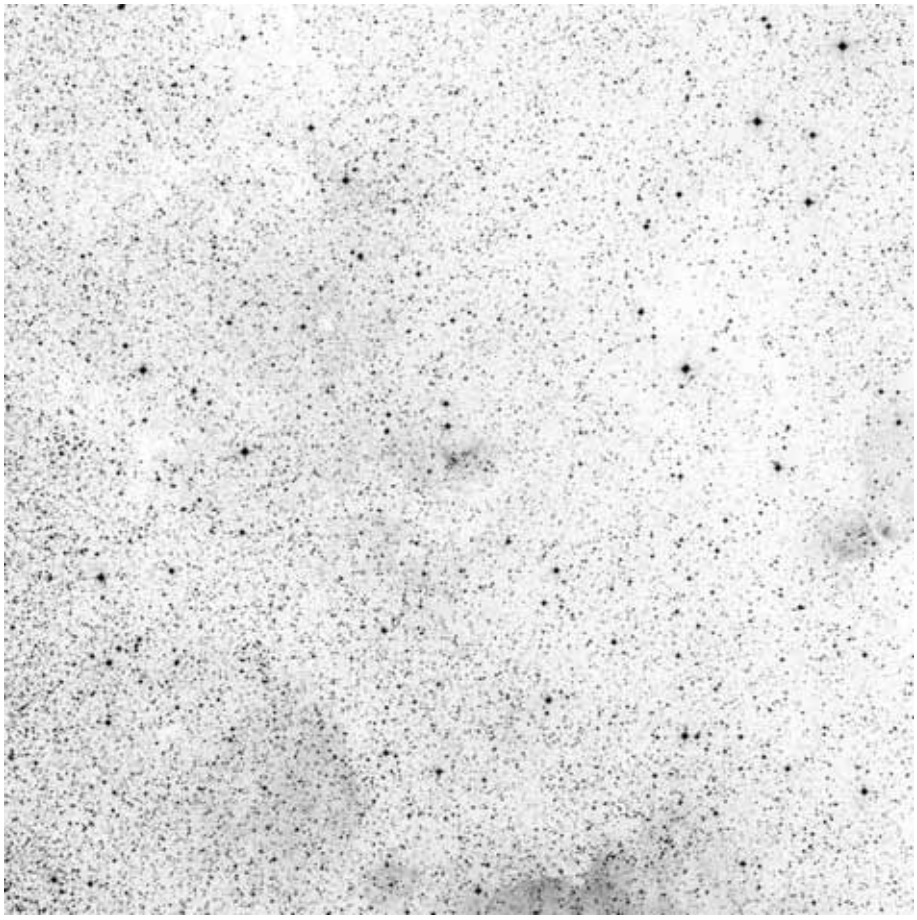
Observing notes:


18h30m
18h00m
17h30m
17h00m
25°00'
30°00'
35°00'
Cr 367
M 8
M 7
14
11
4
δ1
44
o
θ
36
3
43
γ1
δ
γ2
45
18

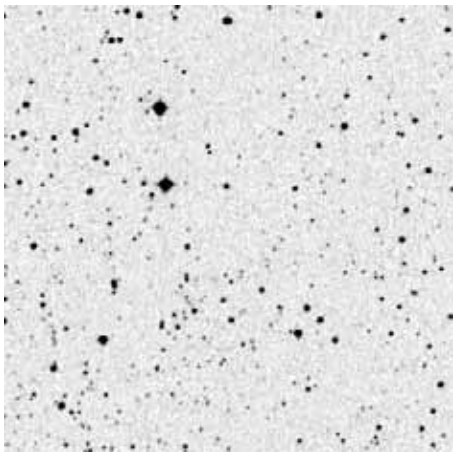

27°00'
17h55m
17h50m
17h45m
17h40m
17h35m
28°00'
29°00'
30°00'
Cr 351
Cr 347
PK 0- 1.6
NGC 6451
NGC 6480
3

Sh 2 - 20

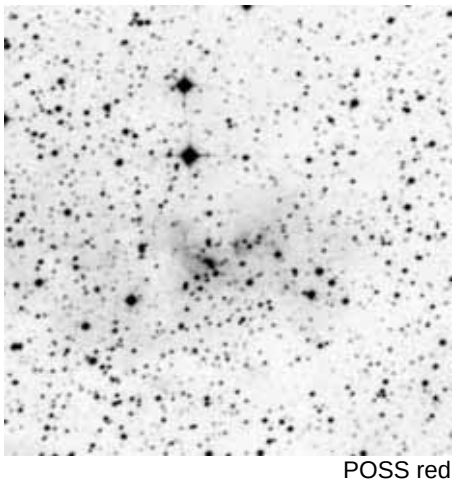
in Sagittarius



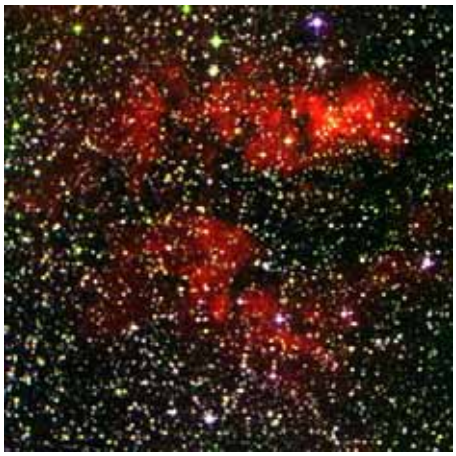
60x60, red



POSS blue



POSS red



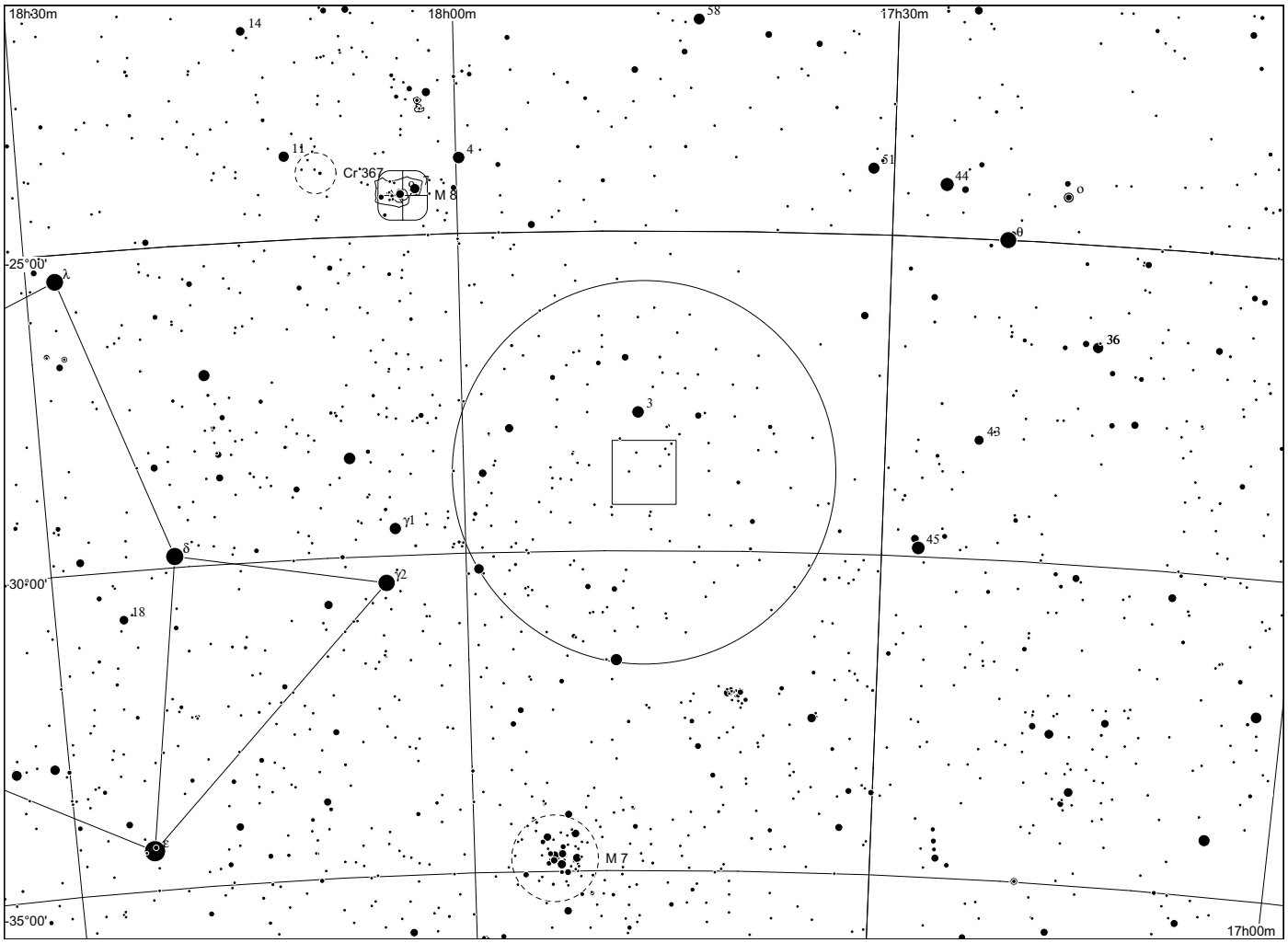
composite

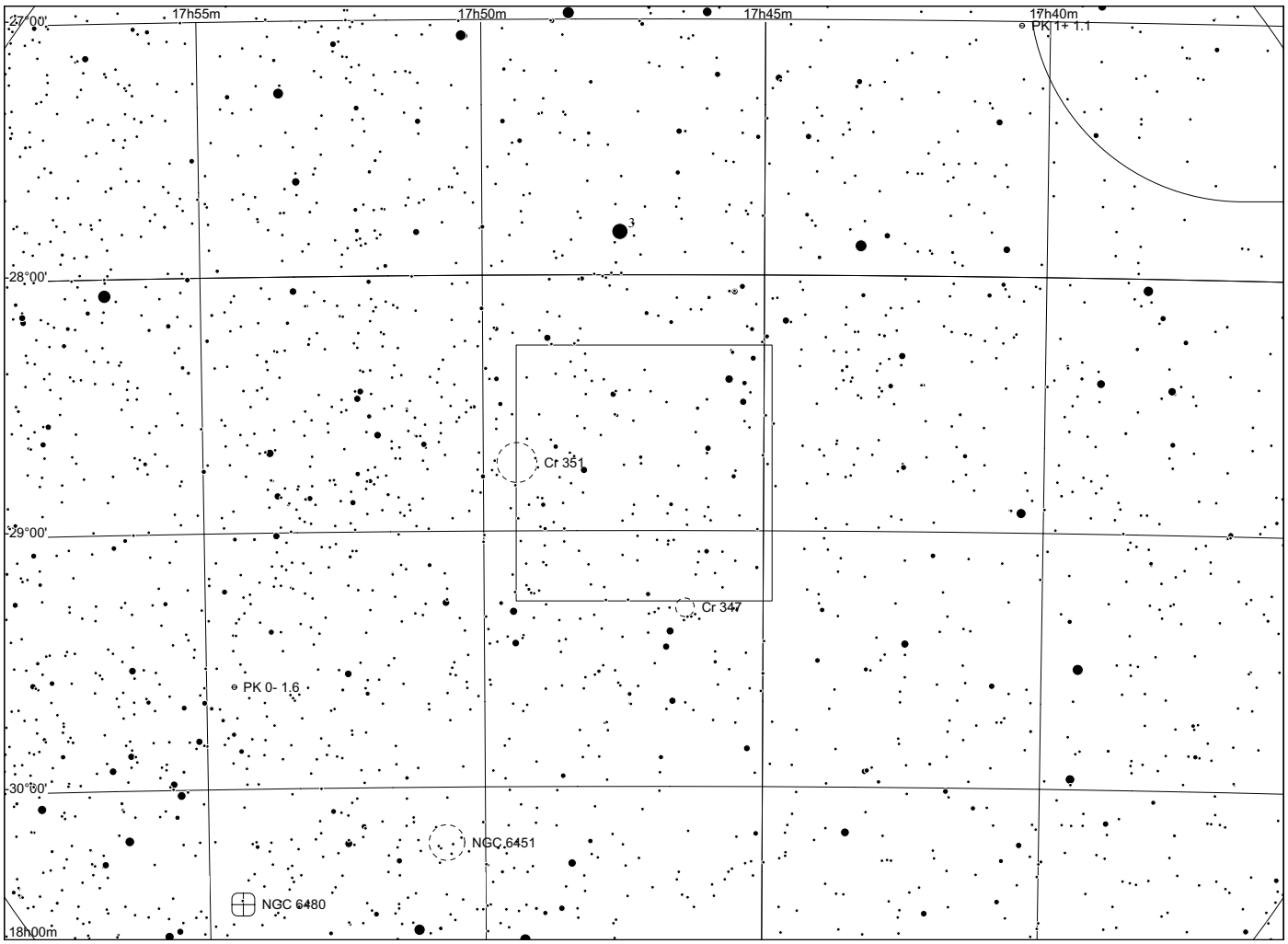
	other name	RA	dec	dia. '	F	S	B
Sh 2-020		17 49 14.2	-28 40 02	10	3	2	2

Distance: 1500 pc, Size: 4.4 pc, Source: 2003A&A...397..133R

Part of the S15-S20 complex of HII regions.

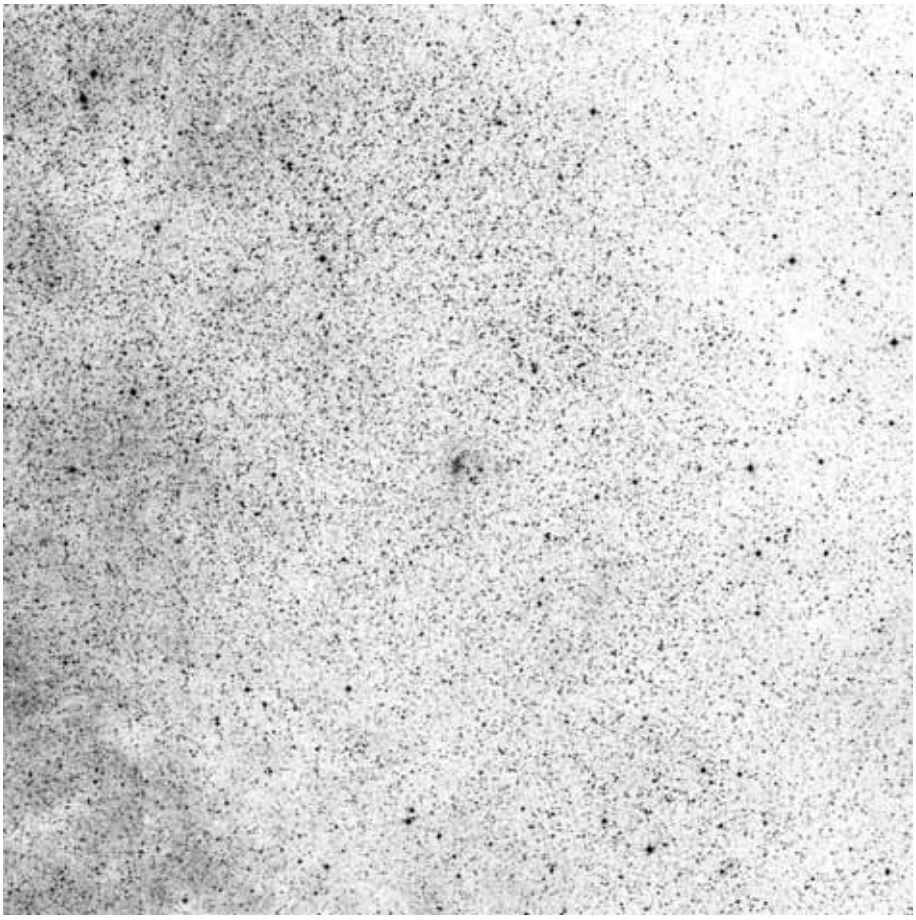
Observing notes:


18h30m
18h00m
17h30m
17h00m
25°00'
30°00'
35°00'
Cr 367
M 8
M 7
14
58
11
4
51
44
o
θ
λ
36
3
43
γ1
45
δ
γ2
18
ε

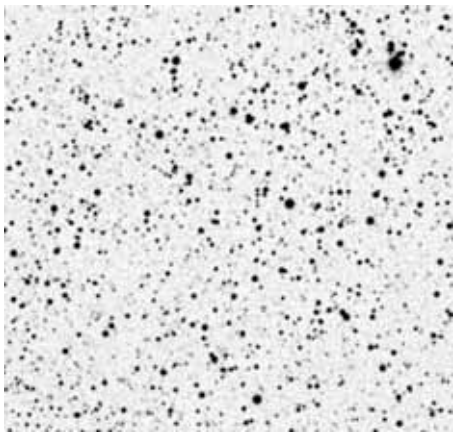

17h55m
17h50m
17h45m
17h40m
27°00'
28°00'
29°00'
30°00'
18h00m
PK 1+ 1.1
3
Cr 351
Cr 347
PK 0- 1.6
NGC 6451
NGC 6480

Sh 2 - 21

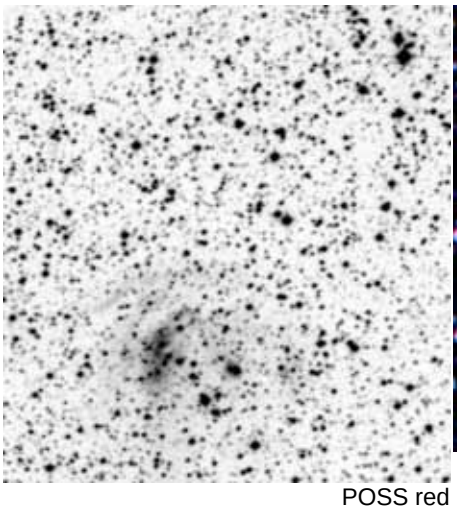
in Sagittarius



60x60, red



POSS blue



POSS red



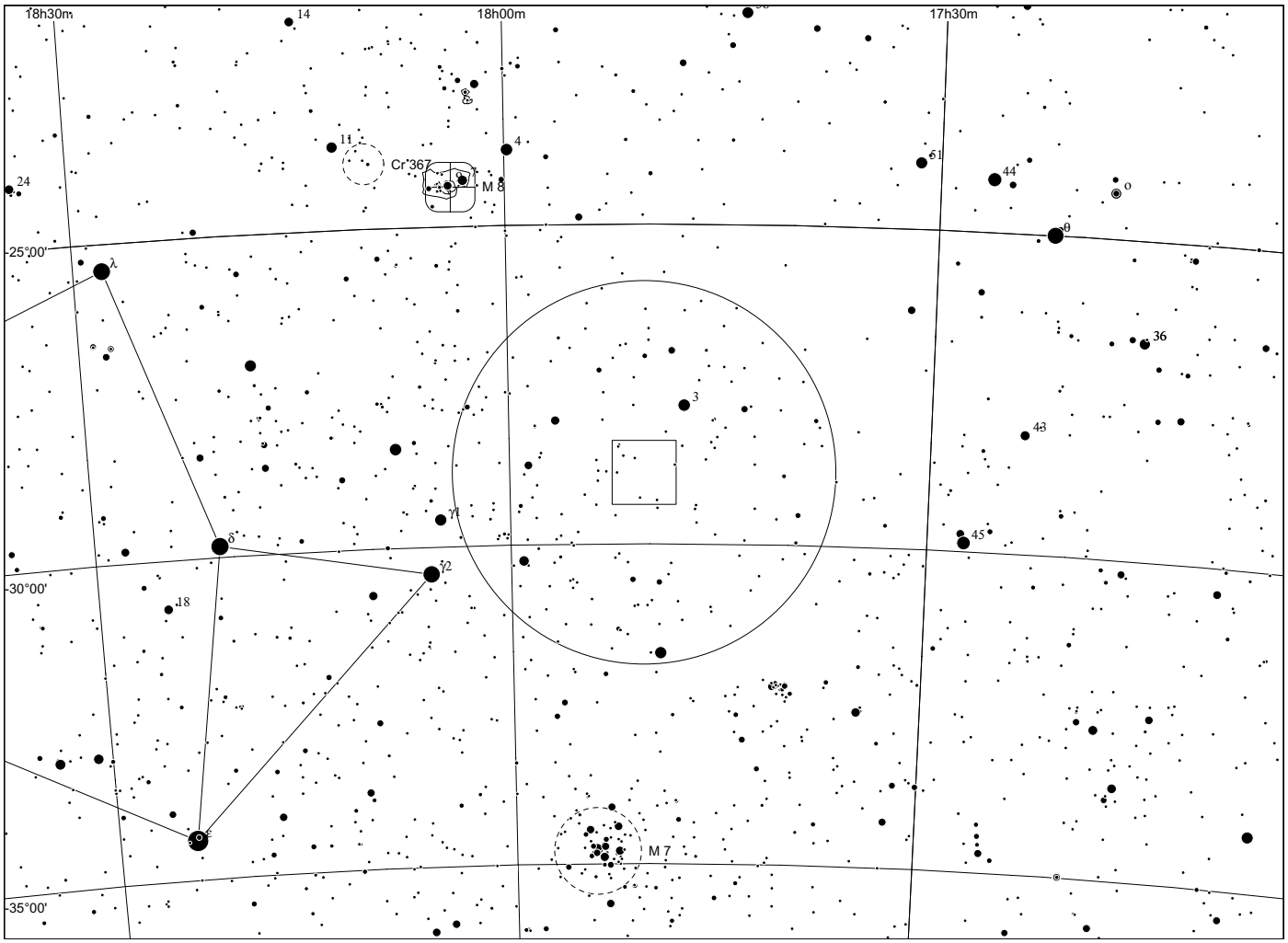
composite

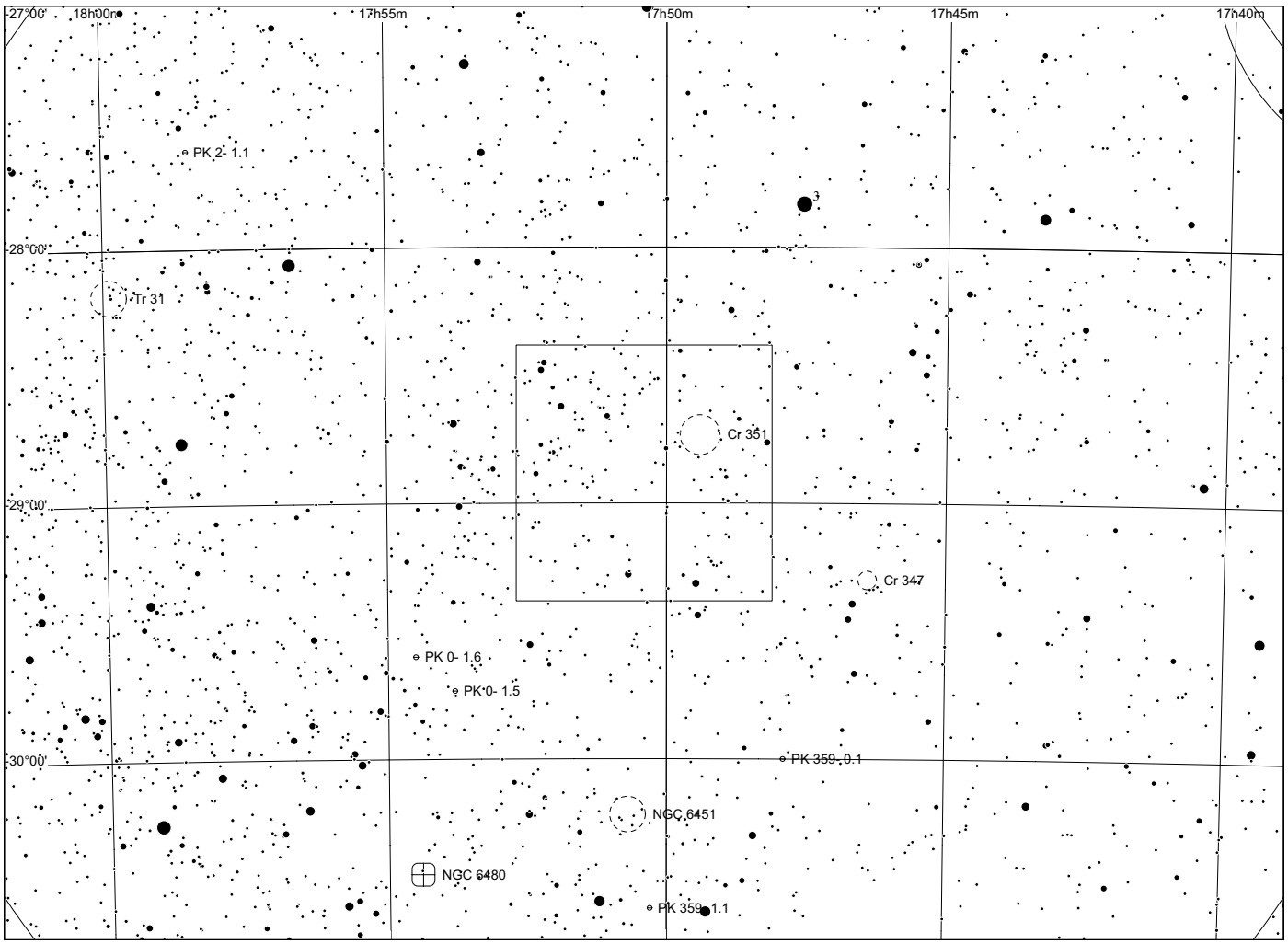
	other name	RA	dec	dia. '	F	S	B
Sh 2-021		17 51 38.6	-28 53 40	5	3	2	2

Distance: 8000 pc, Size: 11.6 pc, Source: 2003A&A...397..133R

This HII region is located near the galactic nucleus and is associated with a giant molecular cloud and two star clusters.

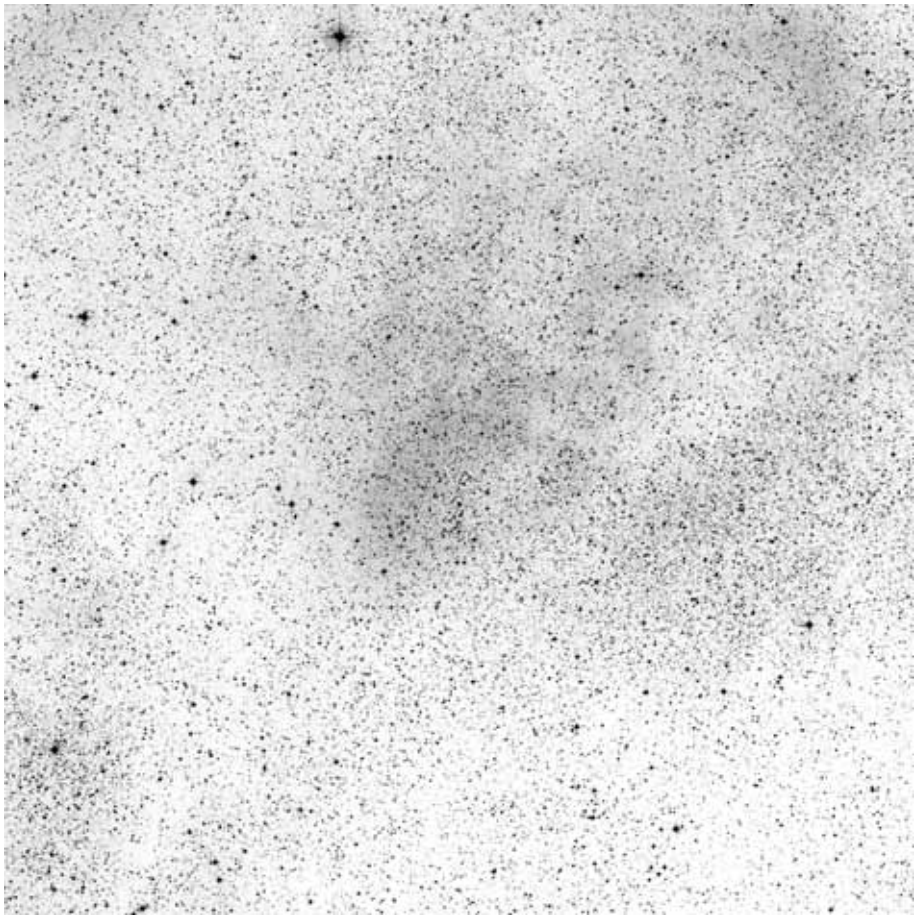
Observing notes:


18h30m
18h00m
17h30m
14
11
4
Cr 367
M 8
24
51
44
o
θ
-25°00'
λ
36
3
43
γ1
δ
45
γ2
-30°00'
18
M 7
-35°00'

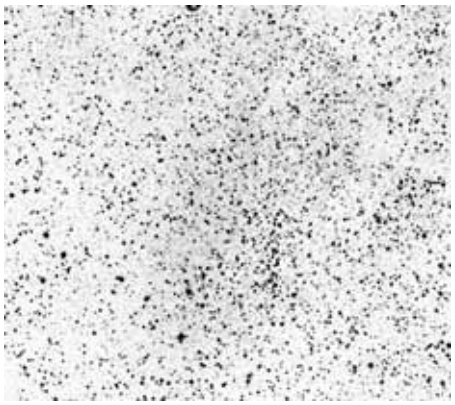

-27°00'
18h00m
17h55m
17h50m
17h45m
17h40m
PK 2- 1.1
3
-28°00'
Tr 31
Cr 351
-29°00'
Cr 347
PK 0- 1.6
PK 0- 1.5
-30°00'
PK 359- 0.1
NGC 6451
NGC 6480
PK 359- 1.1

Sh 2 - 22

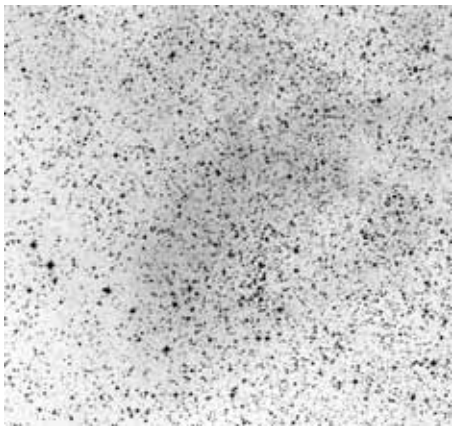
in Sagittarius



60x60, red



POSS blue



POSS red



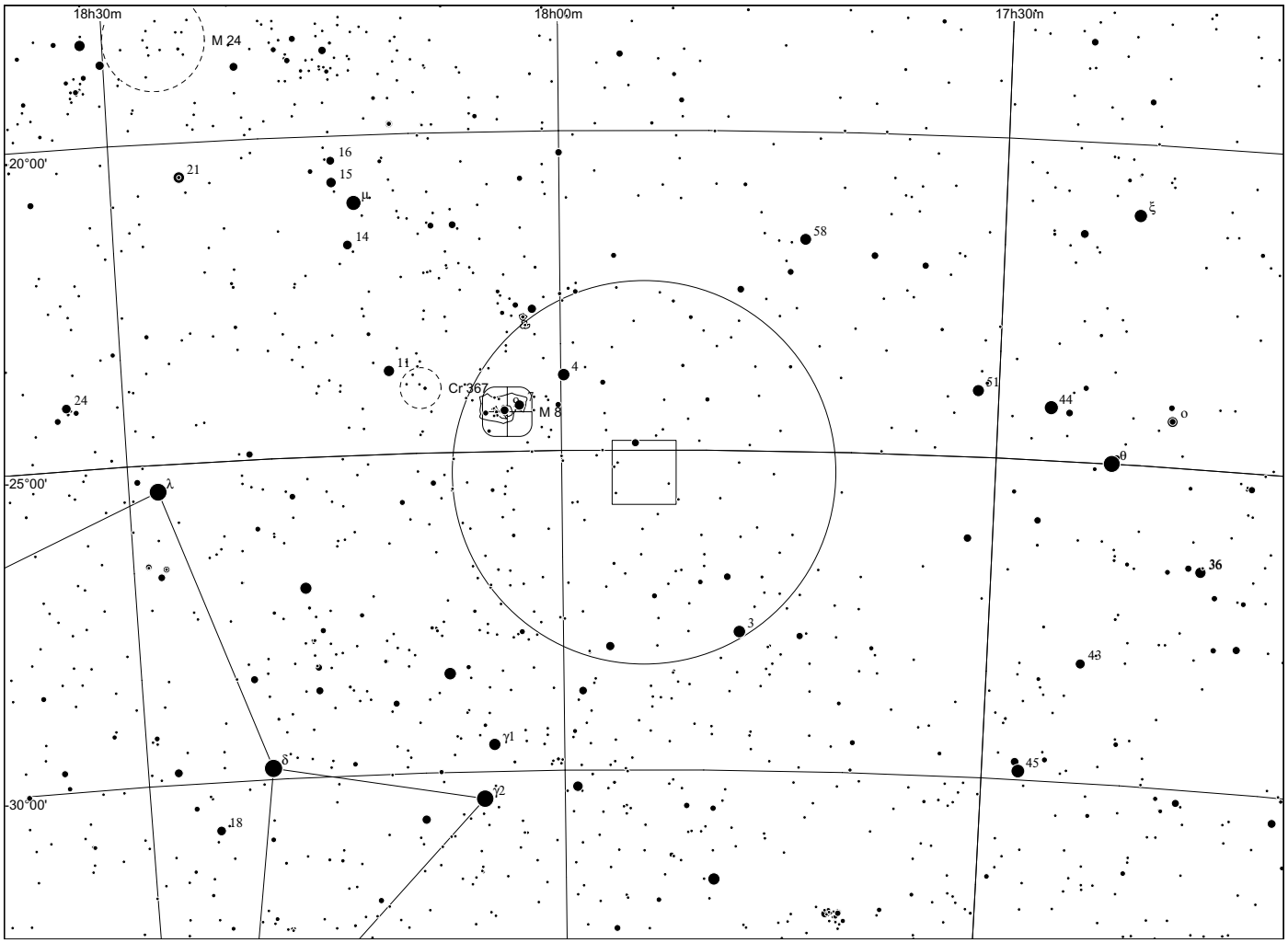
composite

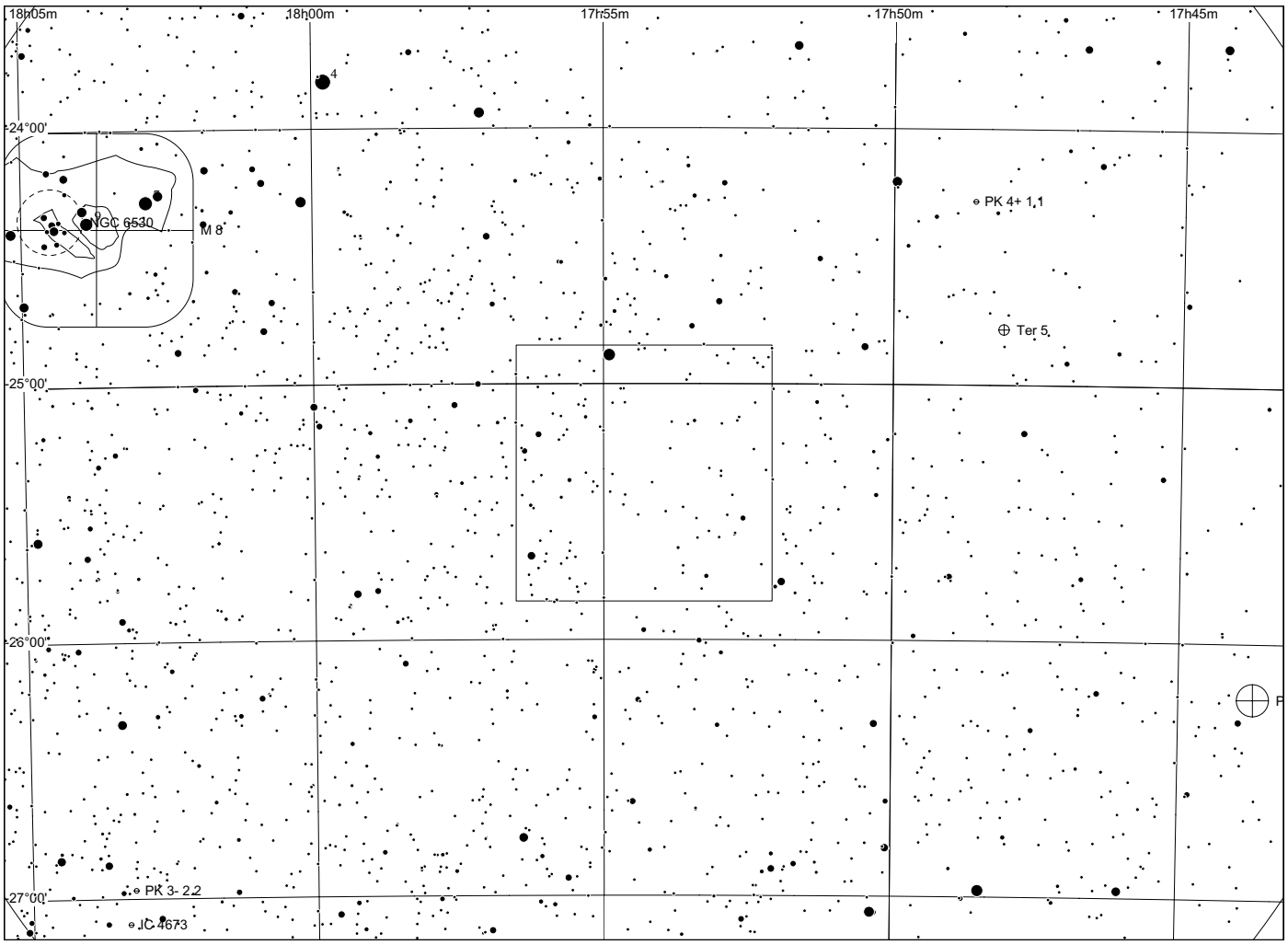
	other name	RA	dec	dia. '	F	S	B
Sh 2-022		17 55 02.9	-25 02 10	60	3	2	2

Distance: 1200 pc, Size: 20.9 pc, Source: 1982ApJS...49..183B

This is a ring nebula surrounding the O-star HD 162978.

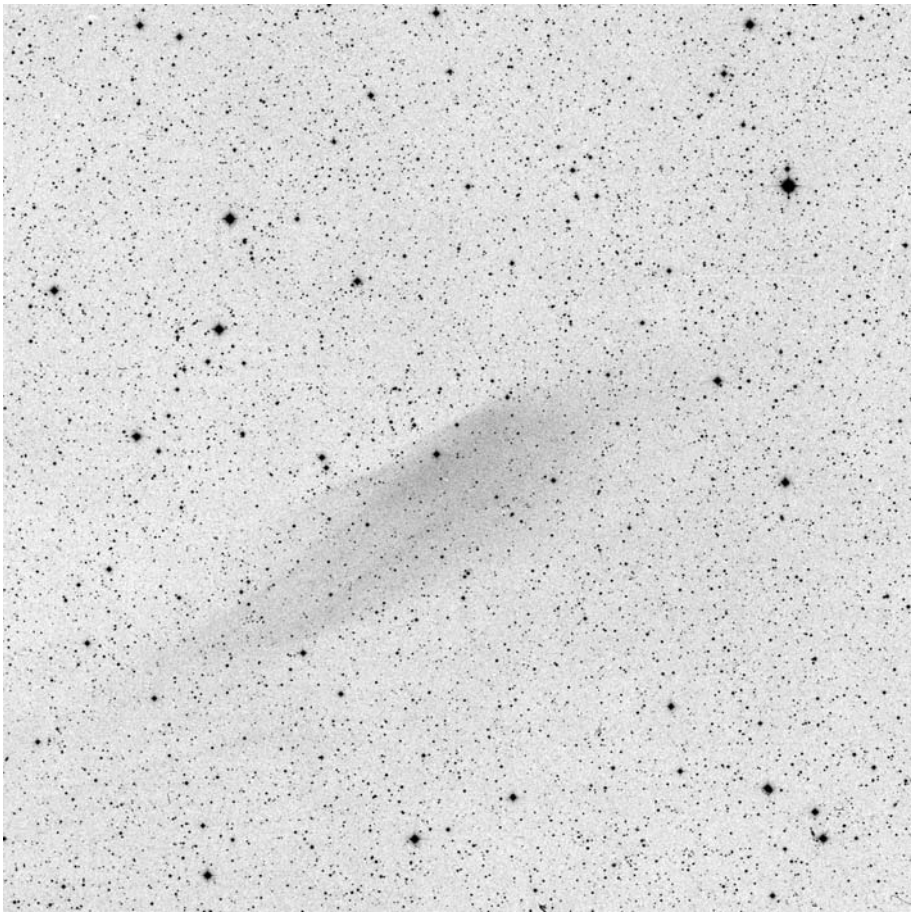
Observing notes:


18h30m
18h00m
17h30m
M 24
20°00'
25°00'
30°00'
21
16
15
μ
14
58
ξ
11
Cr 367
M 8
4
51
44
o
24
θ
λ
36
3
43
γ1
δ
45
γ2
18

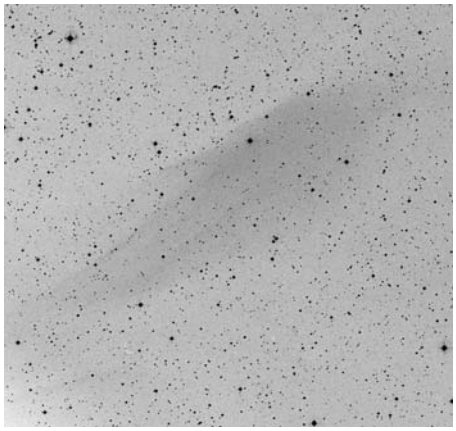

18h05m
18h00m
17h55m
17h50m
17h45m
4
24°00'
NGC 6530
M 8
PK 4+ 1,1
Ter 5
25°00'
26°00'
27°00'
PK 3- 2,2
IC 4673

Sh 2 - 24

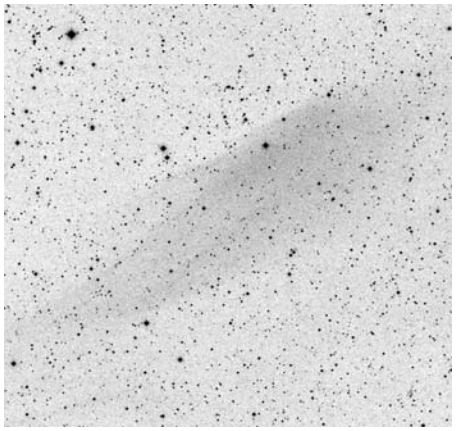
in Ophiuchus



60x60, red



POSS blue



POSS red



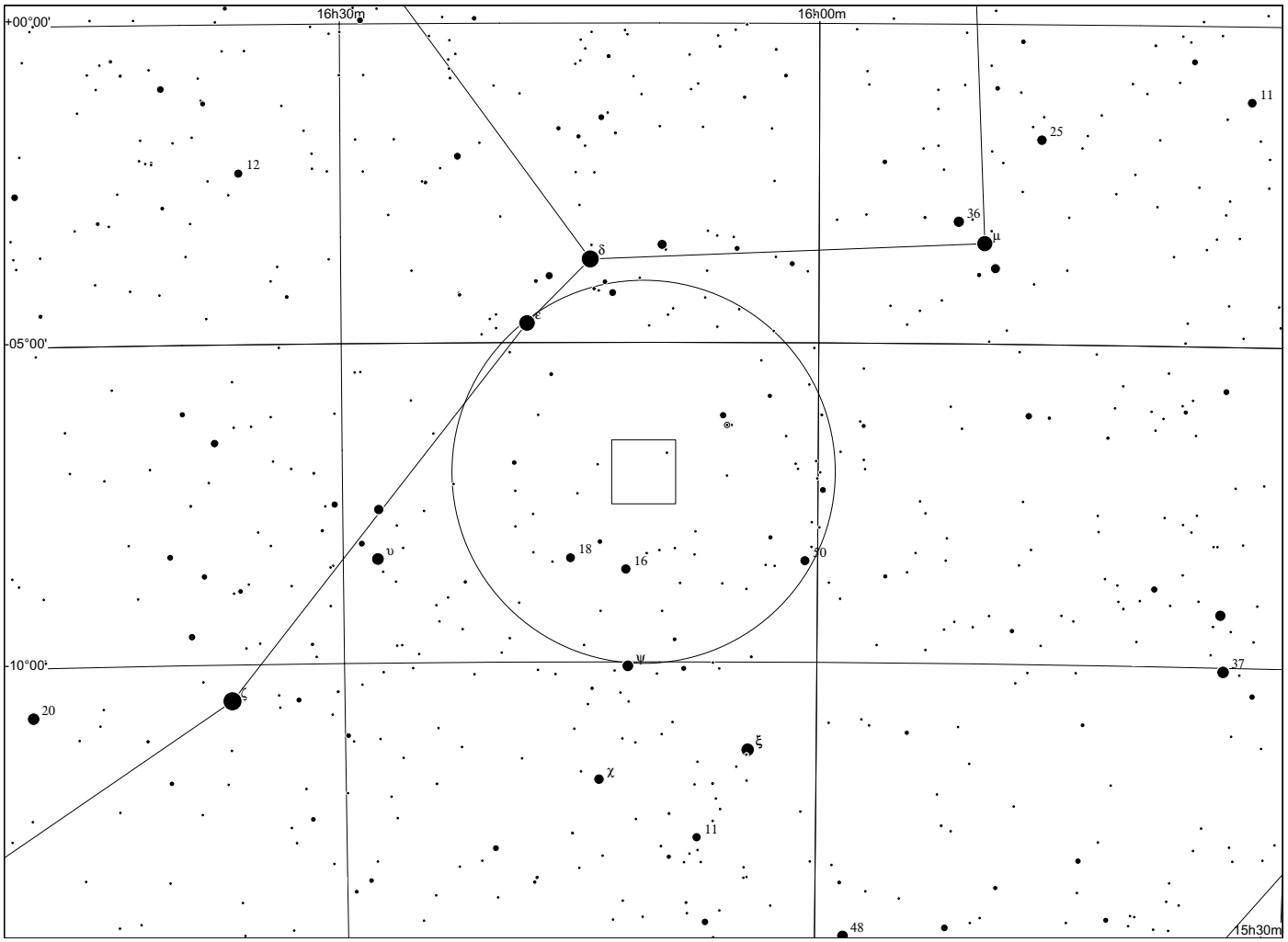
RGB Dean Salman

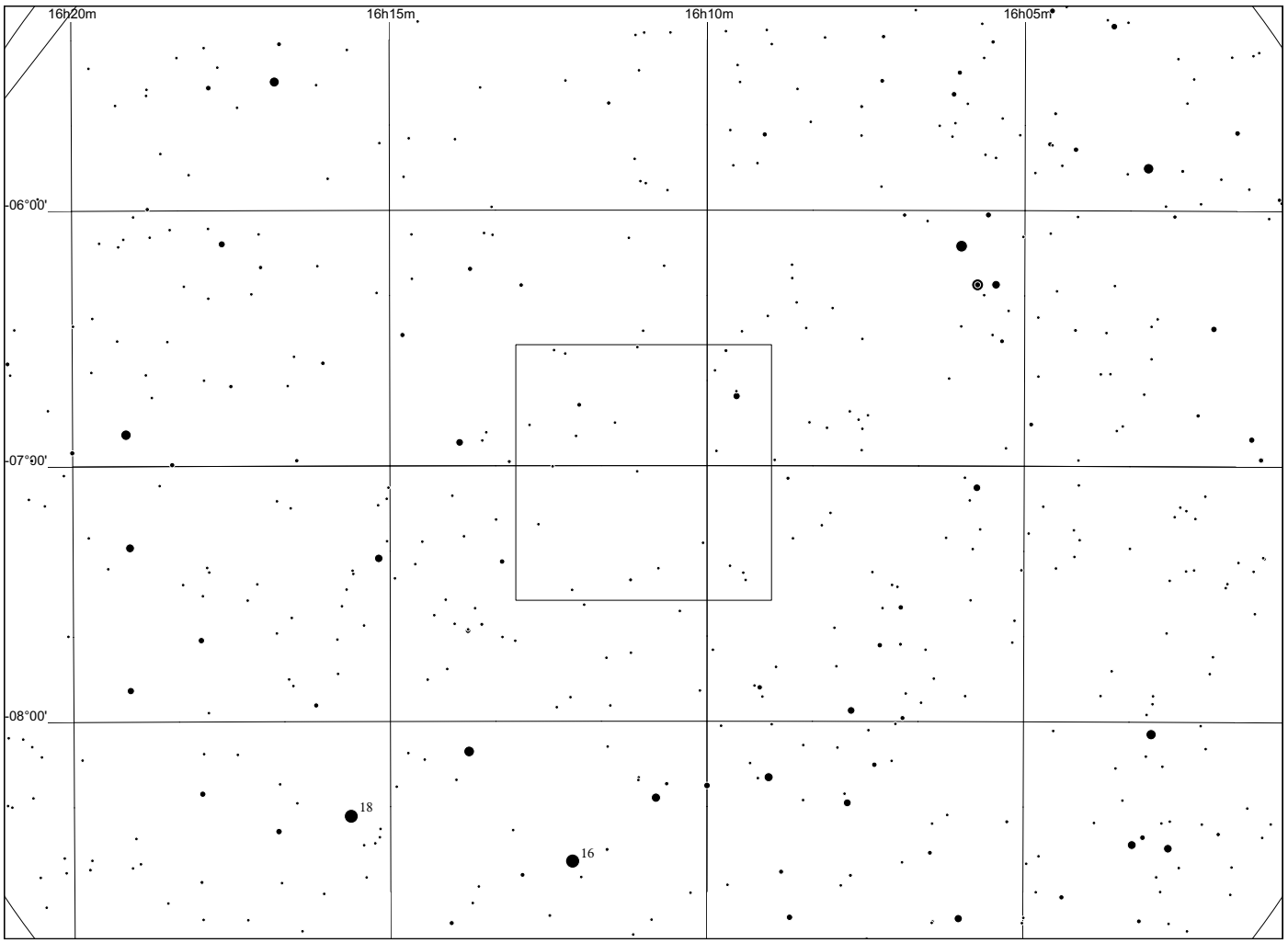
	other name	RA	dec	dia. '	F	S	B
Sh 2-024		16 11 03.0	-07 04 38	30	2	1	2

Distance: 145 pc, Size: 1.3 pc, Source: 1993ApJS...88..433P

The eerie blue glow of MBM 57 is at a distance stretching between 50 and 240 pc, making it one of the closest known molecular clouds.

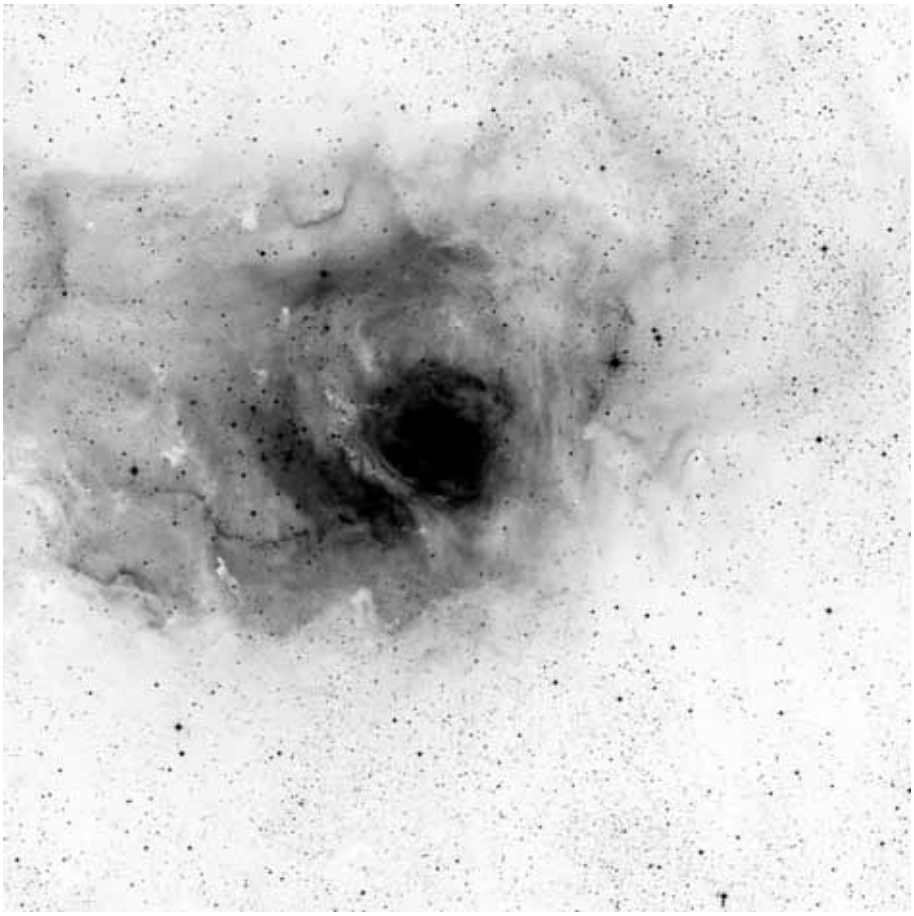
Observing notes:


16h30m
16h00m
+00°00'
-05°00'
-10°00'
15h30m
11
25
12
36
μ
δ
ε
υ
18
16
50
ψ
37
20
ζ
ξ
χ
11
48

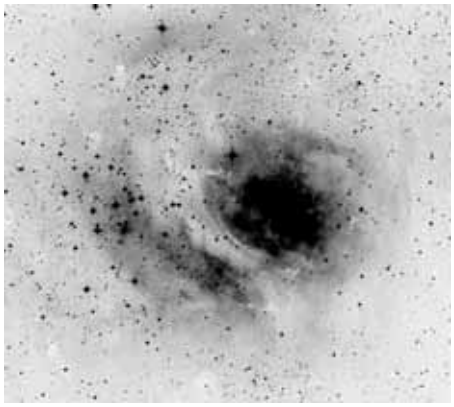

16h20m
16h15m
16h10m
16h05m
-06°00'
-07°00'
-08°00'
18
16

Sh 2 - 25

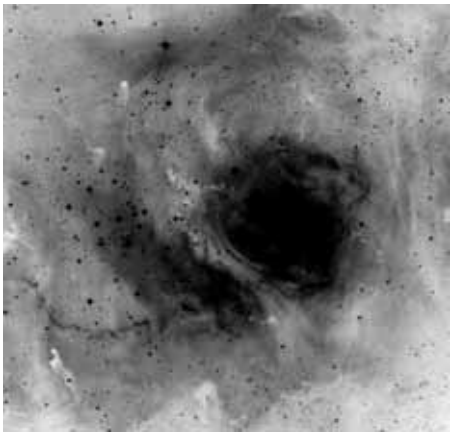
in Sagittarius



60x60, red



POSS blue



POSS red



composite

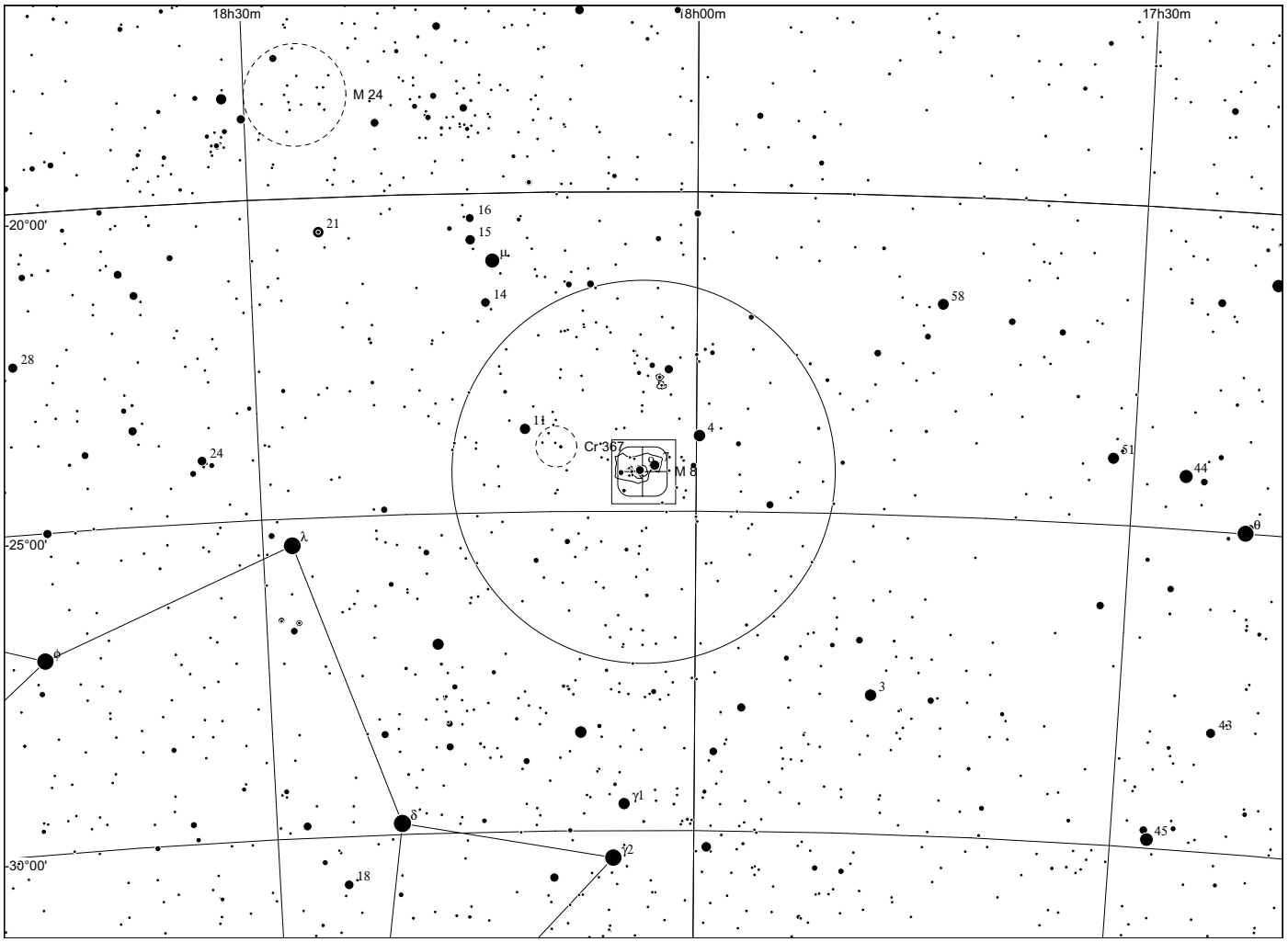
	other name	RA	dec	dia. '	F	S	B
Sh 2-025	M8 = Lagoon	18 05 25.0	-24 23 39	90	3	3	3

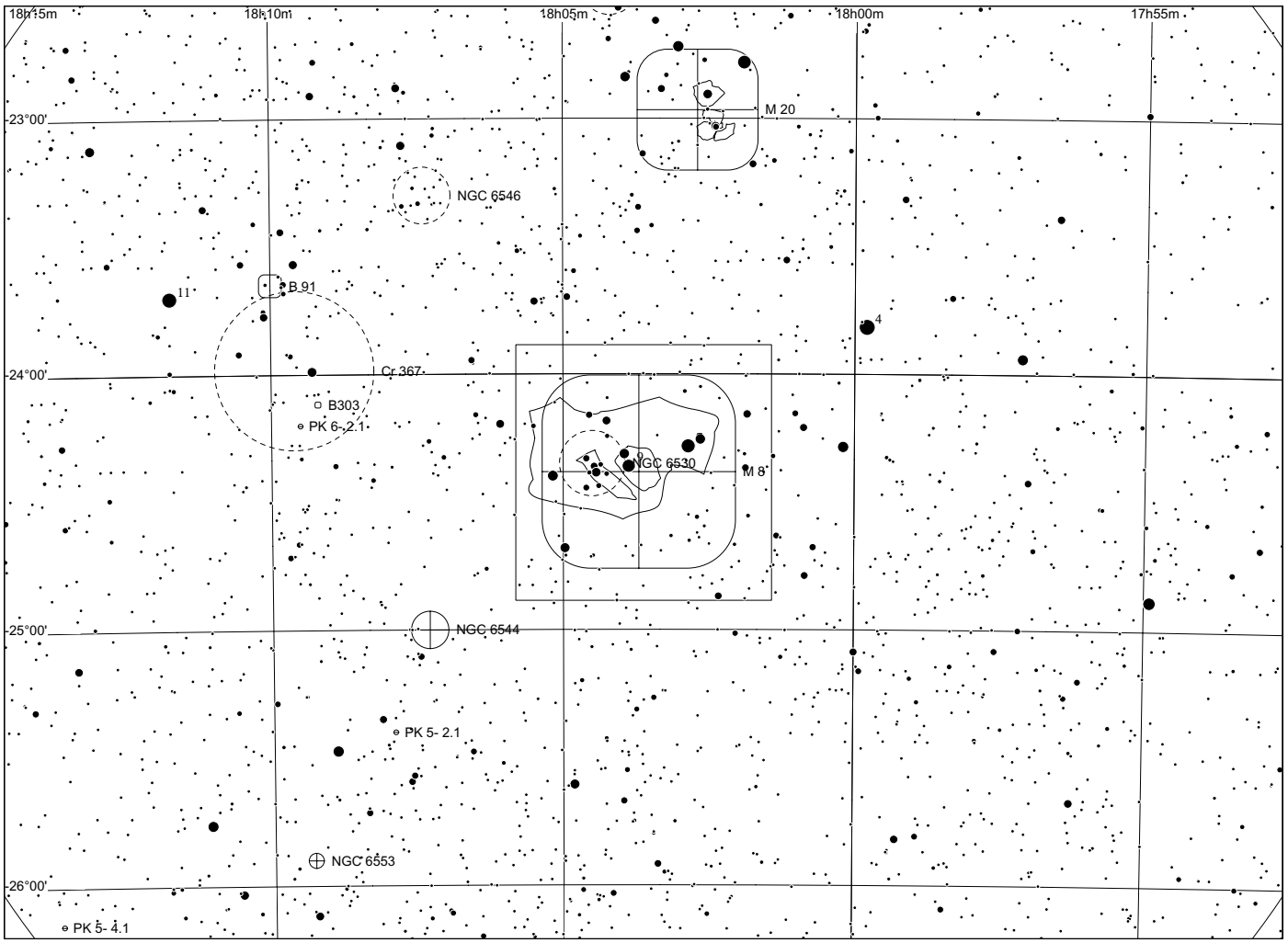
Distance: 1250 pc, Size: 32.7 pc, Source: 2005A&A...430..941P

The Lagoon nebula (M8 = NGC 6523-NGC 6530) is a large HII region mainly ionized by two O-class stars, 9 Sagitarii [O4V((f))] and HD 165052 (O6.5V + O7.5V). It is embedded within a molecular cloud which extends to the star cluster NGC 6530. Within M8's core lies a distinctive bipolar nebula called the Hourglass, a blister-type HII region which has been produced by the O7.5V star Herschel 36 (Her 36).

Note that RCW 146 also includes Gum 75 (Sh 2-29, Sh 2-31, and Sh 2-32), the nebula complex next to the Lagoon nebula.

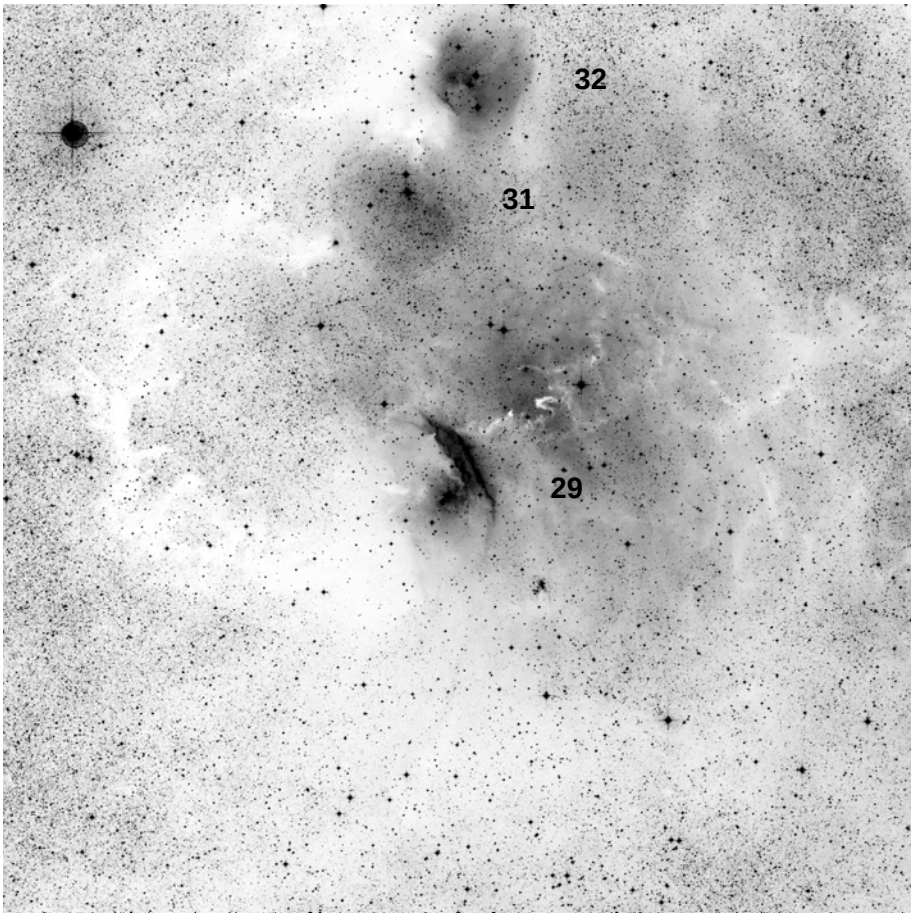
Observing notes:


18h30m
18h00m
17h30m
M 24
20°00'
21
16
15
μ
14
58
28
11
4
Cr 367
M 8
24
51
44
25°00'
λ
θ
φ
3
43
γ1
δ
γ2
45
30°00'
18

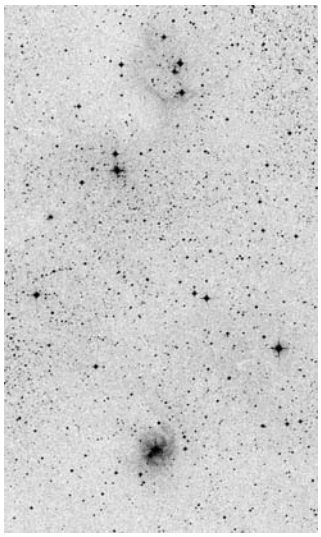

18h15m
18h10m
18h05m
18h00m
17h55m
23°00'
M 20
NGC 6546
11
B 91
4
24°00'
Cr 367
B303
PK 6- 2.1
NGC 6530
M 8
25°00'
NGC 6544
PK 5- 2.1
NGC 6553
26°00'
PK 5- 4.1

Sh 2 - 29/31/32

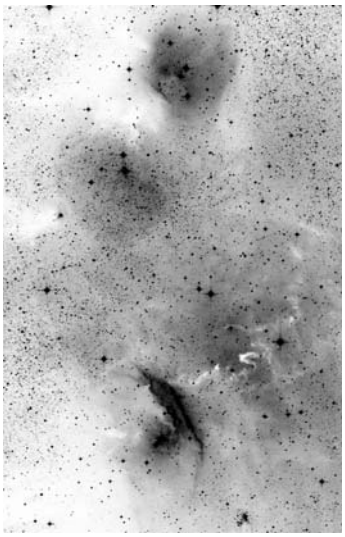
in Sagittarius



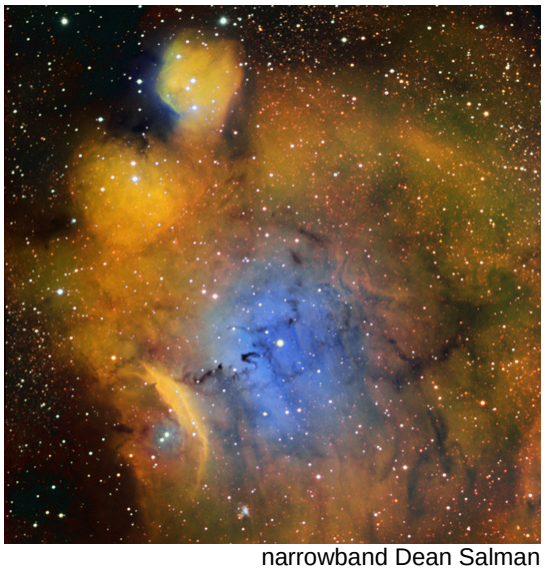
60x60, red



POSS blue



POSS red



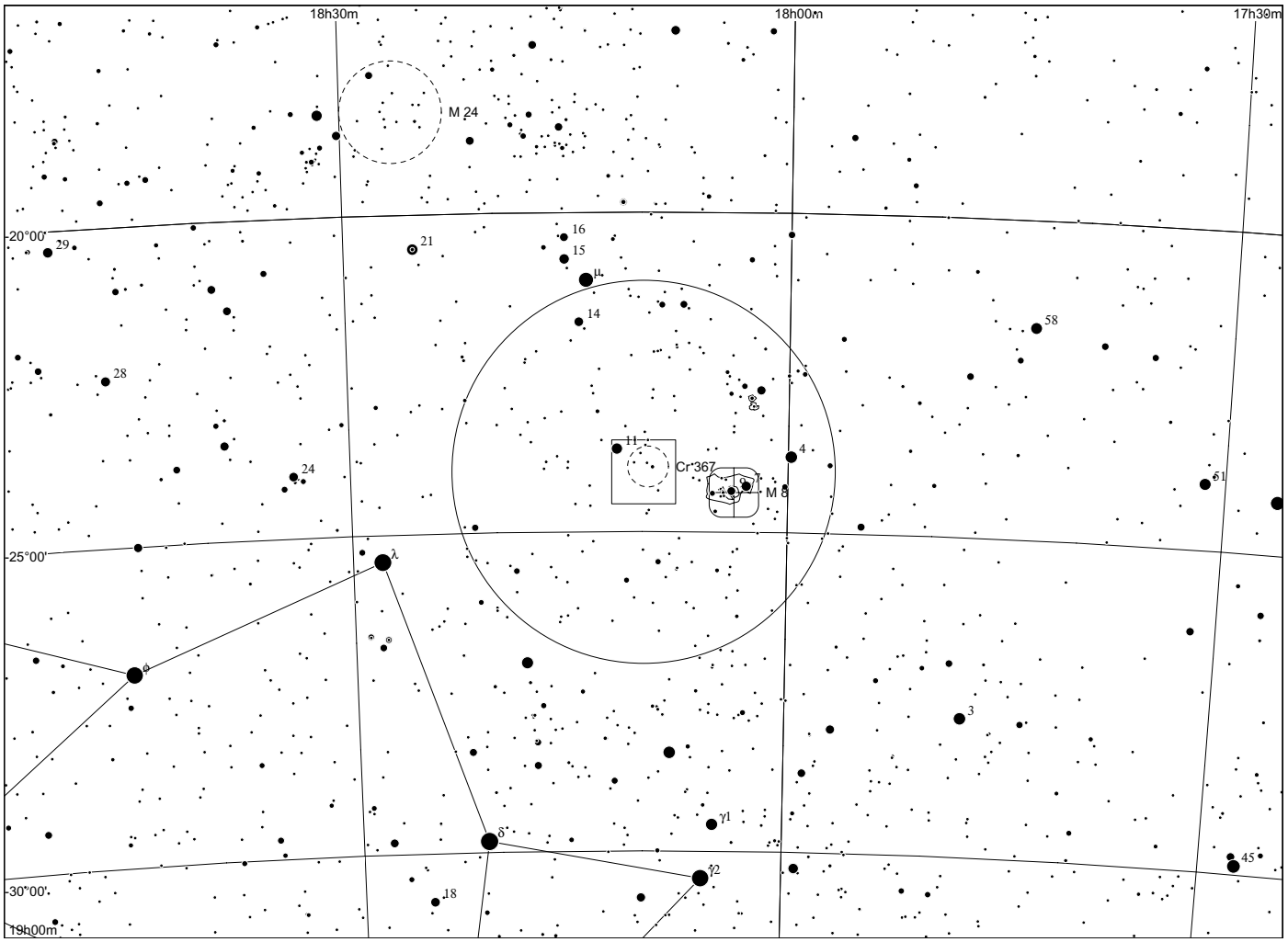
narrowband Dean Salman

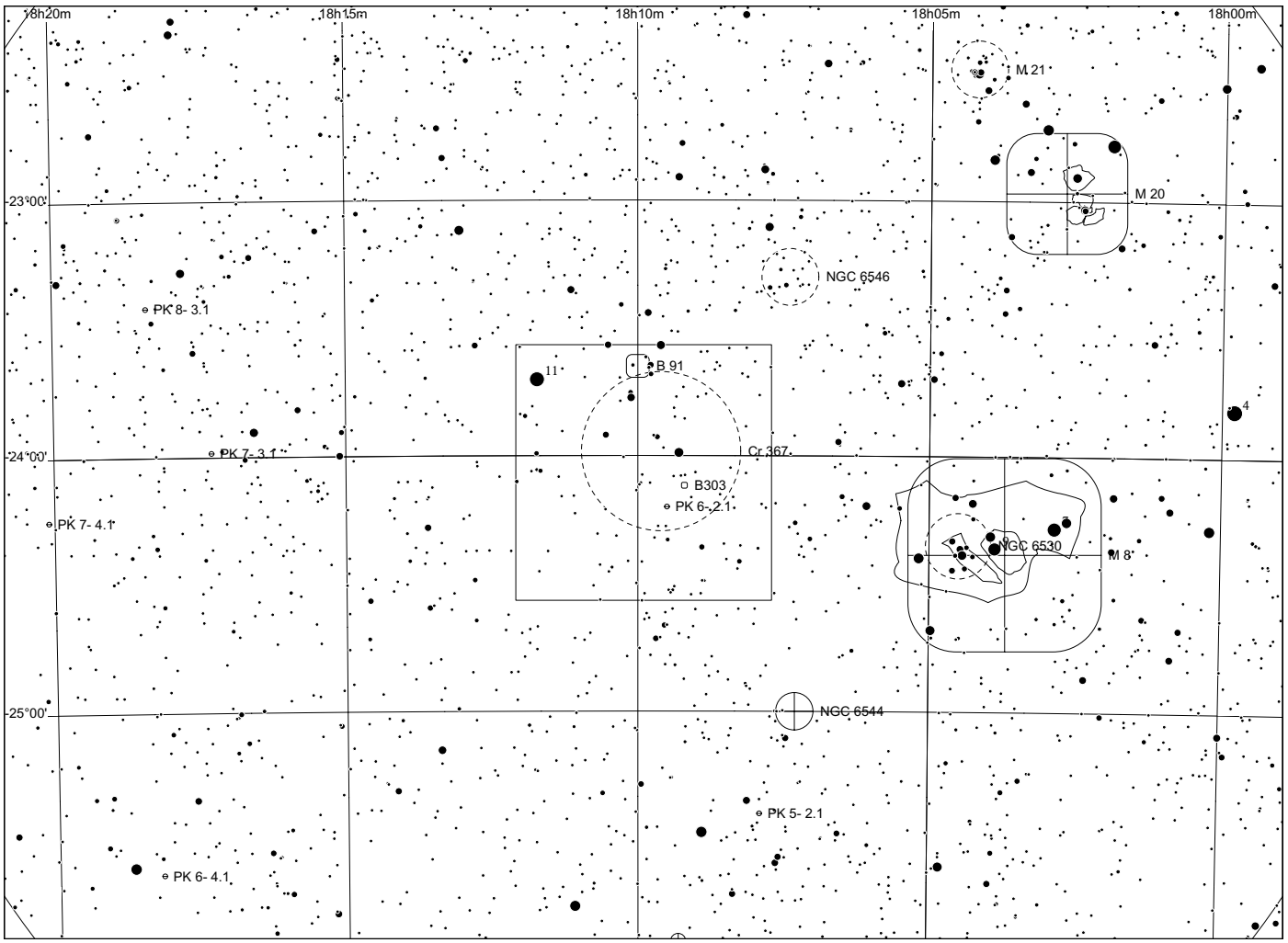
	other name	RA	dec	dia. '	F	S	B
Sh 2-029		18 10 30.5	-23 59 55	40	3	2	2
Sh 2-031	IC 1275	18 11 18.2	-23 47 48	8	1	1	2
Sh 2-032	IC 1274	18 10 53.0	-23 38 51	8	1	2	2

Distance: 1300 pc, Size: 15.1 pc, Source: 1982ApJS...49..183B

In 2003, an infrared cluster was reported in NGC 6559, which is part of Sh 2-29. Sh 2-29, Sh 2-31, and Sh 2-32 all appear to be part of the same nebula complex although the associated CO elocities suggest that these objects may have quite different distances.

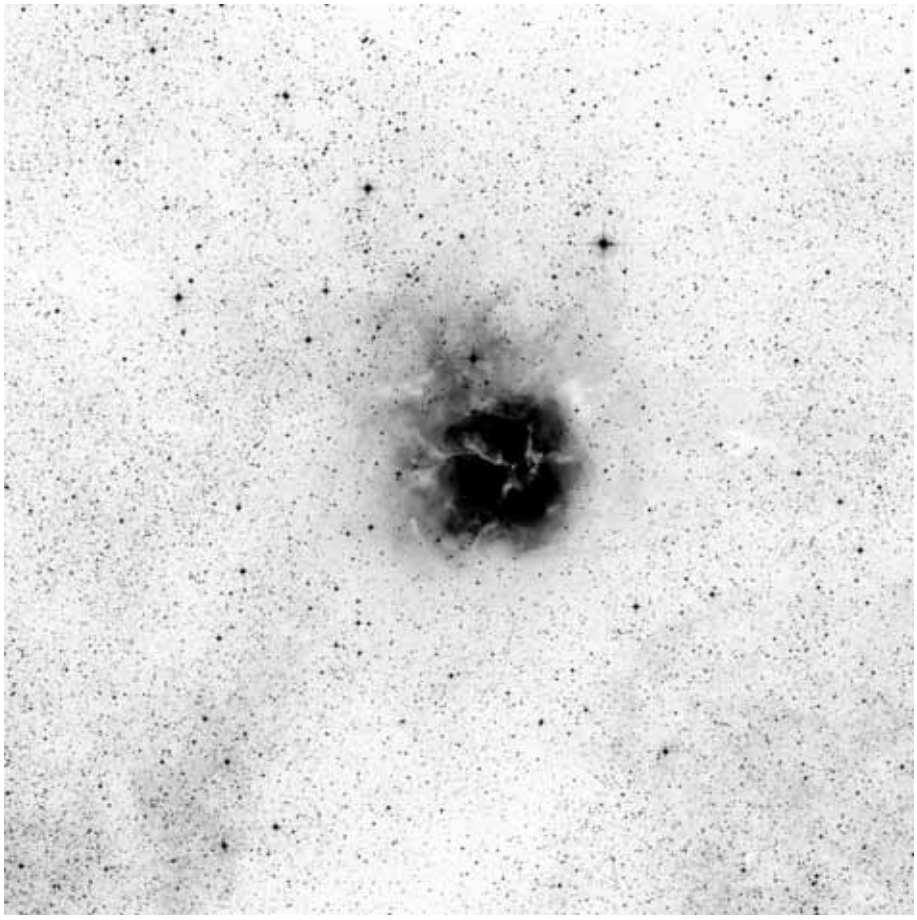
Observing notes:


18h30m
18h00m
17h30m
M 24
20°00'
29
21
16
15
μ
14
58
28
11
Cr 367
4
M 8
24
δ1
25°00'
λ
3
γ1
δ
γ2
45
30°00'
18
19h00m

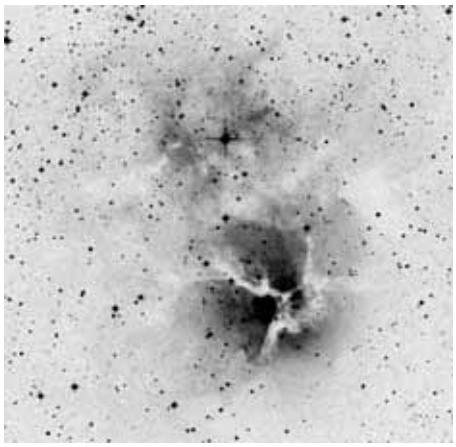

18h20m
18h15m
18h10m
18h05m
18h00m
M 21
M 20
23°00'
NGC 6546
PK 8- 3.1
11
B 91
4
24°00'
PK 7- 3.1
Cr 367
B303
PK 6- 2.1
PK 7- 4.1
NGC 6530
M 8
25°00'
NGC 6544
PK 5- 2.1
PK 6- 4.1

Sh 2 - 30

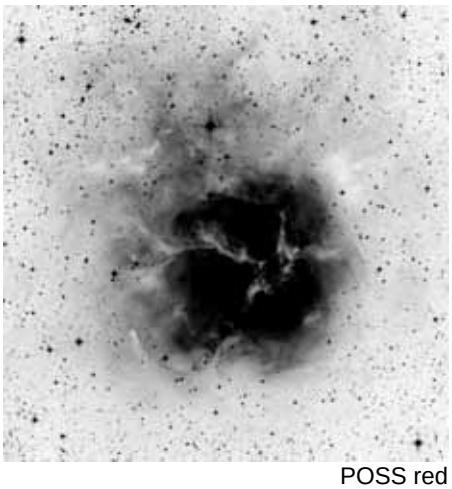
in Sagittarius



60x60, red



POSS blue



POSS red



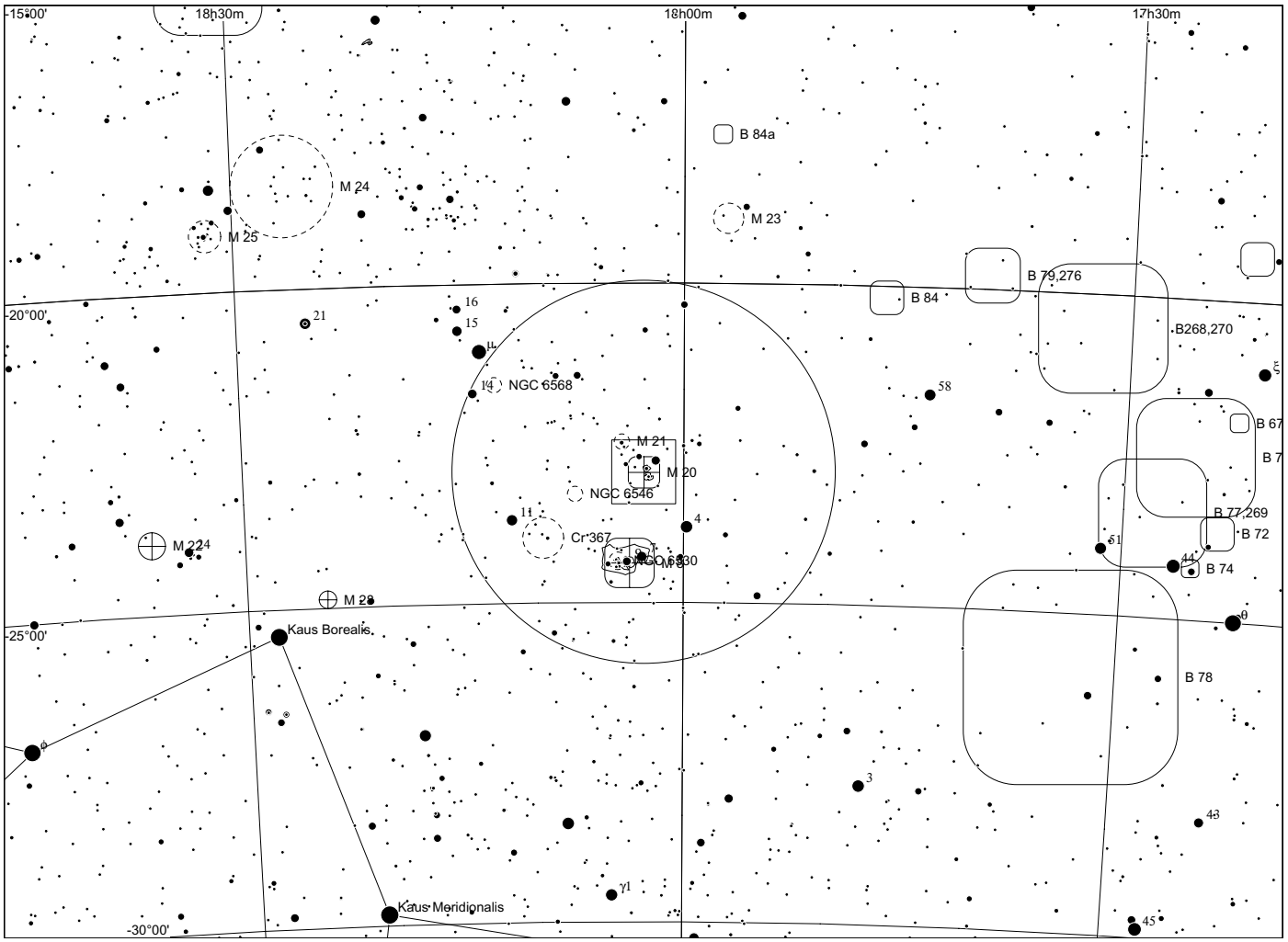
composite

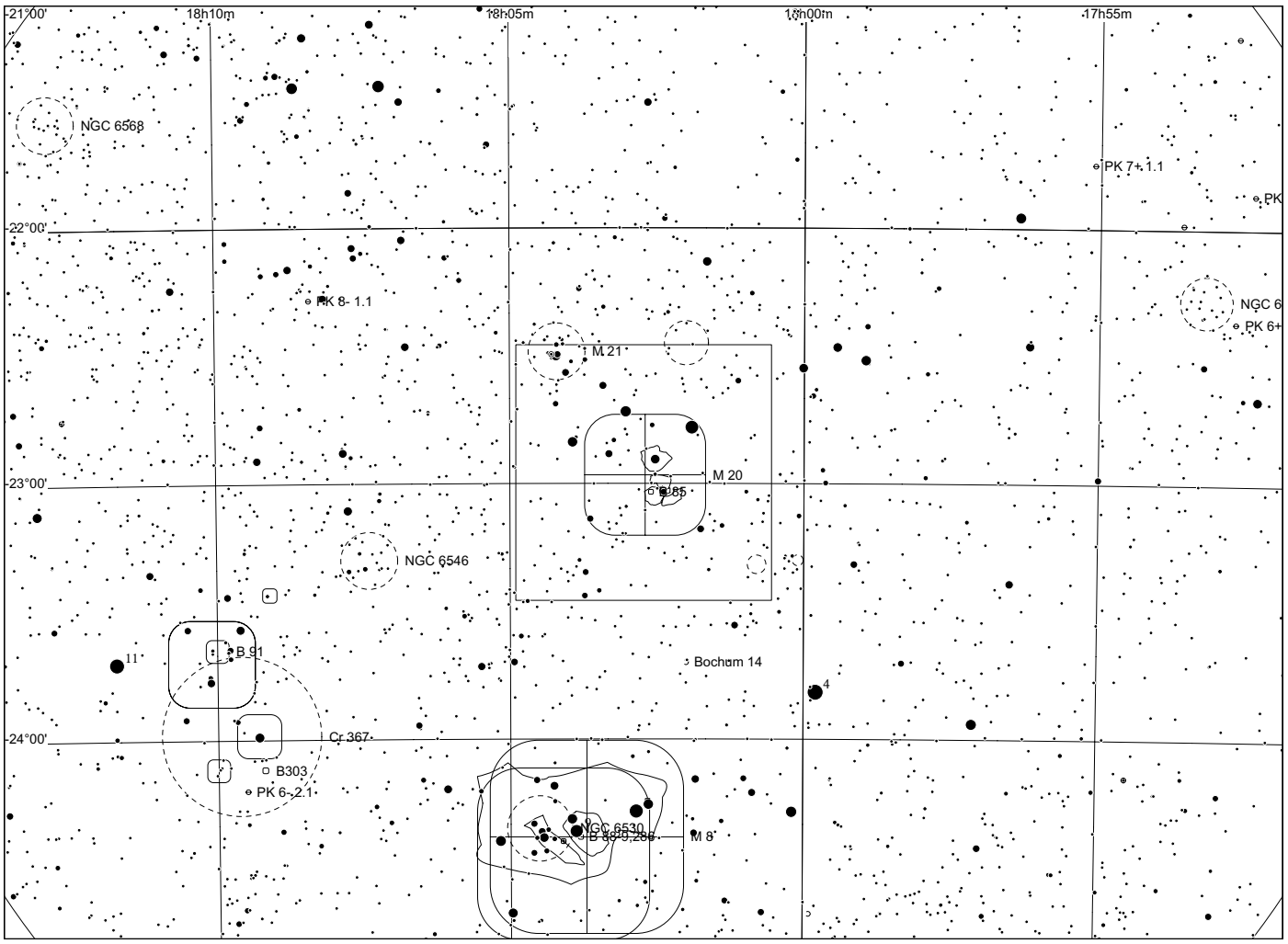
	other name	RA	dec	dia. '	F	S	B
Sh 2-030	M20 = Trifid	18 03 34.1	-23 00 55	20	3	3	3

Distance: 3010 pc, Size: 4.9 pc, Source: 2003A&A...397..213P

The Trifid nebula, M20, is an HII region ionised by the O7.5 star HD 164492A and is divided into three parts by dust lanes. A blue reflection nebula surrounds the HII region and also appears just to the north. It is only 300 thousand years old.

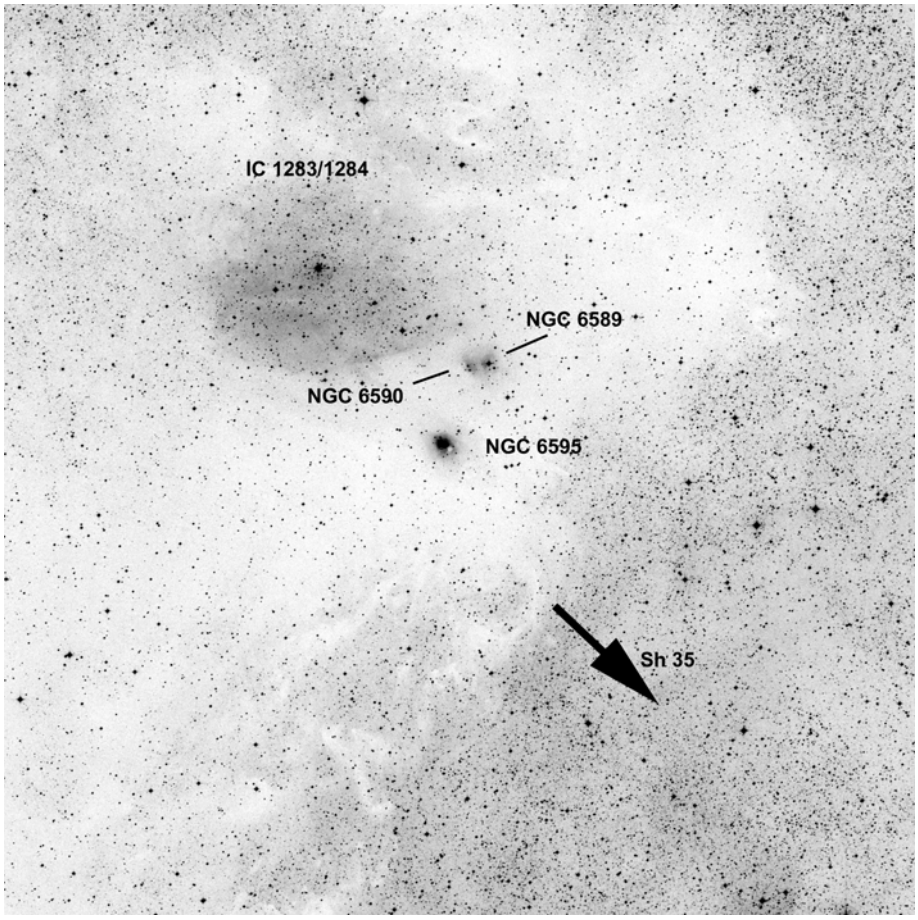
Observing notes:


-15°00'
18h30m
18h00m
17h30m
B 84a
M 24
M 25
M 23
B 79,276
B 84
B268,270
-20°00'
NGC 6568
M 21
M 20
NGC 6546
B 67
B 7
B 77,269
B 72
Cr 367
M 24
B 74
M 23
-25°00'
Kaus Borealis
B 78
Kaus Meridionalis
-30°00'

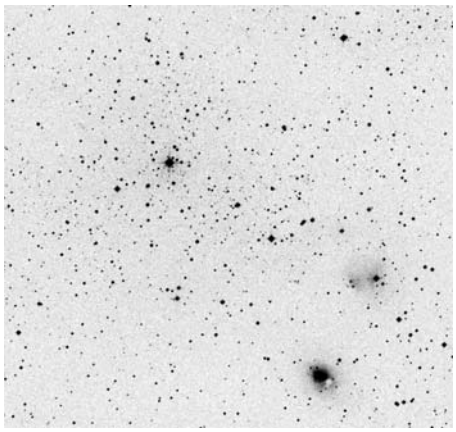

-21°00'
18h10m
18h05m
18h00m
17h55m
NGC 6568
PK 7+ 1.1
-22°00'
PK 8- 1.1
M 21
M 20
-23°00'
NGC 6546
B 91
Bochum 14
Cr 367
-24°00'
B303
PK 6- 2.1
NGC 6530
M 8

Sh 2 - 37

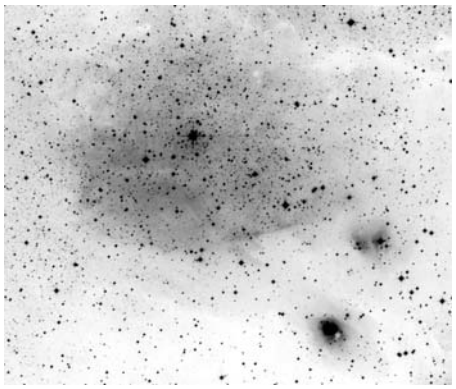
in Sagittarius



60x60, red



POSS blue



POSS red



RGB Dean Salman

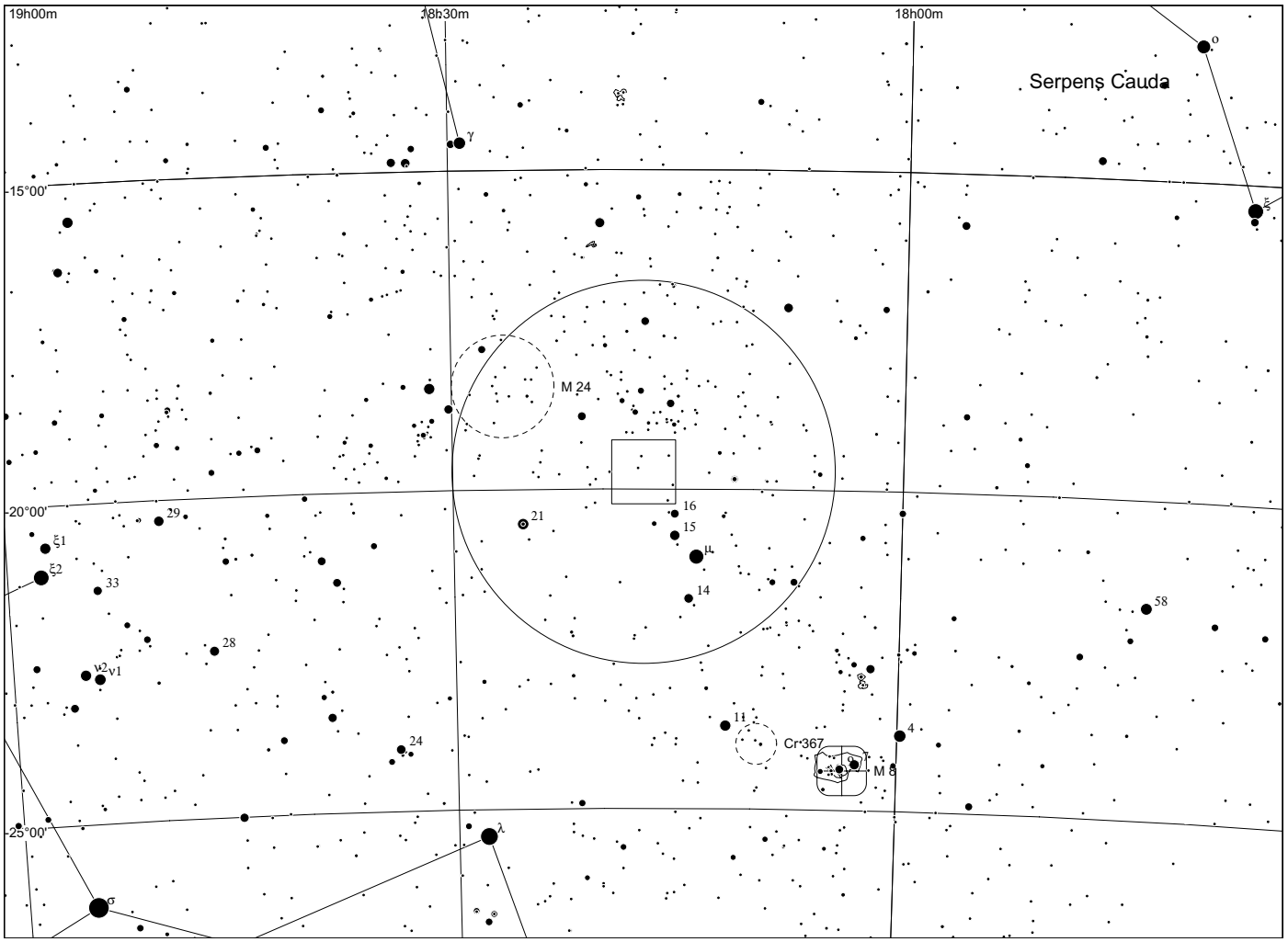
	other name	RA	dec	dia. '	F	S	B
Sh 2-037	IC 1283/1284	18 17 42.6	-19 39 51	20	3	2	2

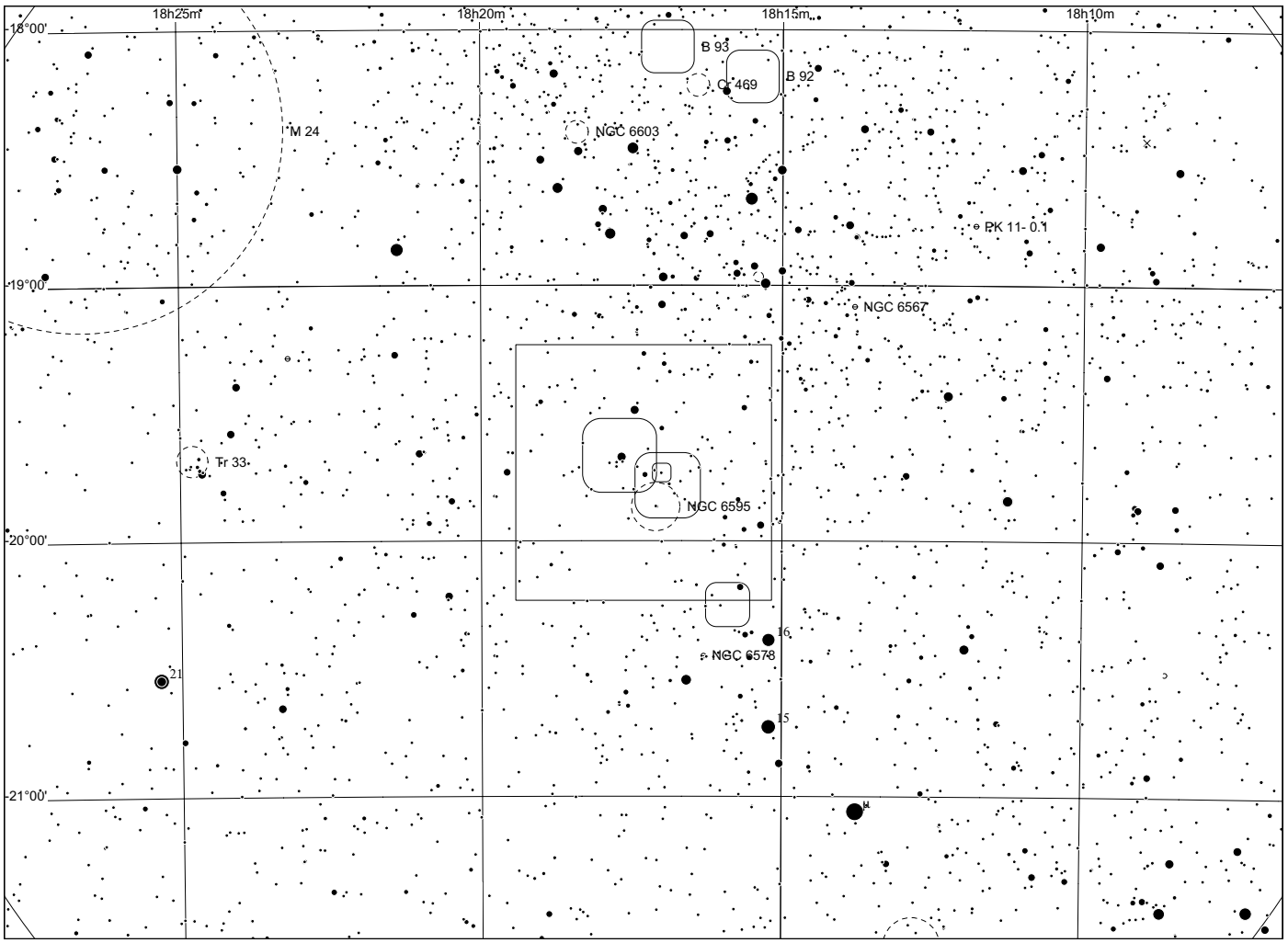
Distance: 1800 pc, Size: 10.5 pc, Source: 1999PASJ...51..819S

Sh 2-35 and Sh 2-37 are associated with a 130 thousand solar mass giant molecular cloud at a distance of 1800 pc and appear to be part of the Sagittarius OB7 association. Sh 2-37 is visible through a hole in this molecular cloud. This is a very active star formation region.

Sh 2-37 is also known as IC 1283/1284 and the powerful radio source W34. Sharpless notes that this HII region is associated with the bright stars HD 167722 (B5), HD 167815 (B2) and HD 313098 (B5).

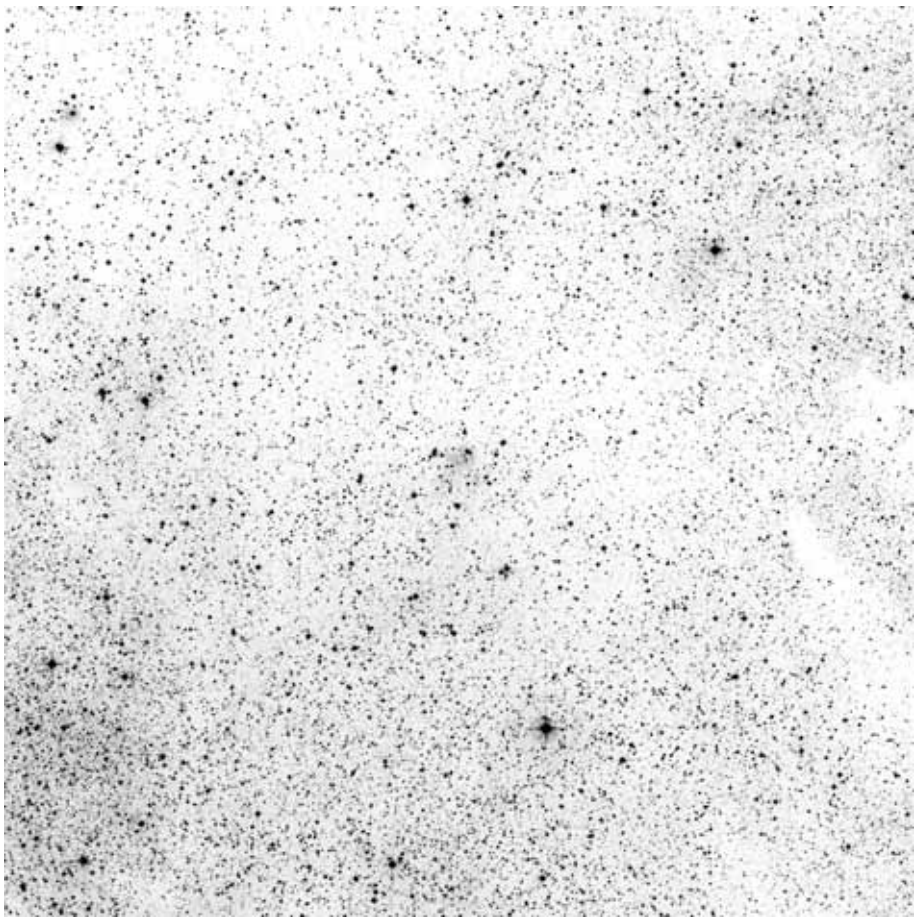
Observing notes:


19h00m
18h30m
18h00m
Serpens Cauda
15°00'
20°00'
25°00'
M 24
Cr 367
M 8
ξ1
ξ2
ν2
ν1
μ
λ
σ
γ
ξ
ο
29
33
28
24
21
16
15
14
11
4
58

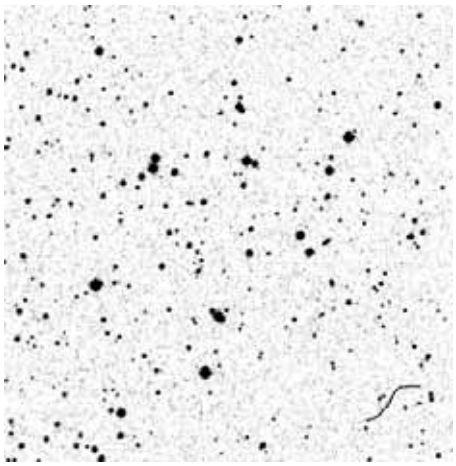

18h25m
18h20m
18h15m
18h10m
18°00'
19°00'
20°00'
21°00'
B 93
B 92
Cr 469
M 24
NGC 6603
PK 11- 0.1
NGC 6567
Tr 33
NGC 6595
NGC 6578
16
15
21
μ

Sh 2 - 38

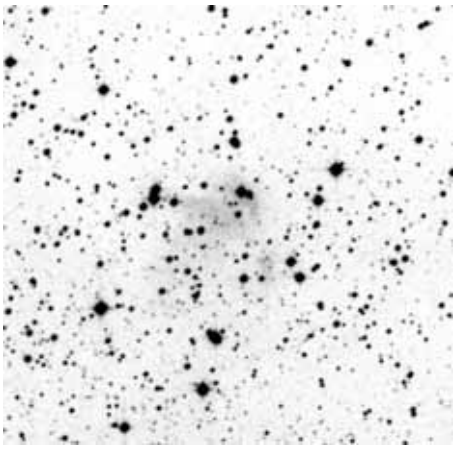
in Sagittarius



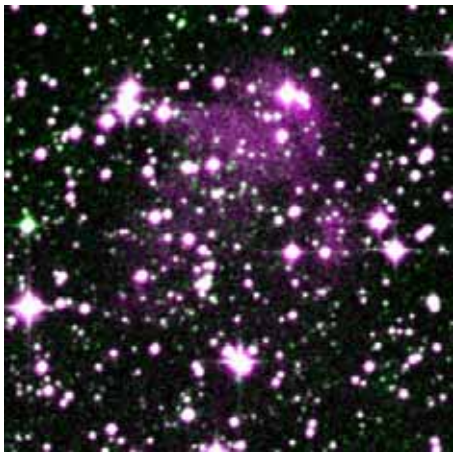
60x60, red



POSS blue



POSS red



composite

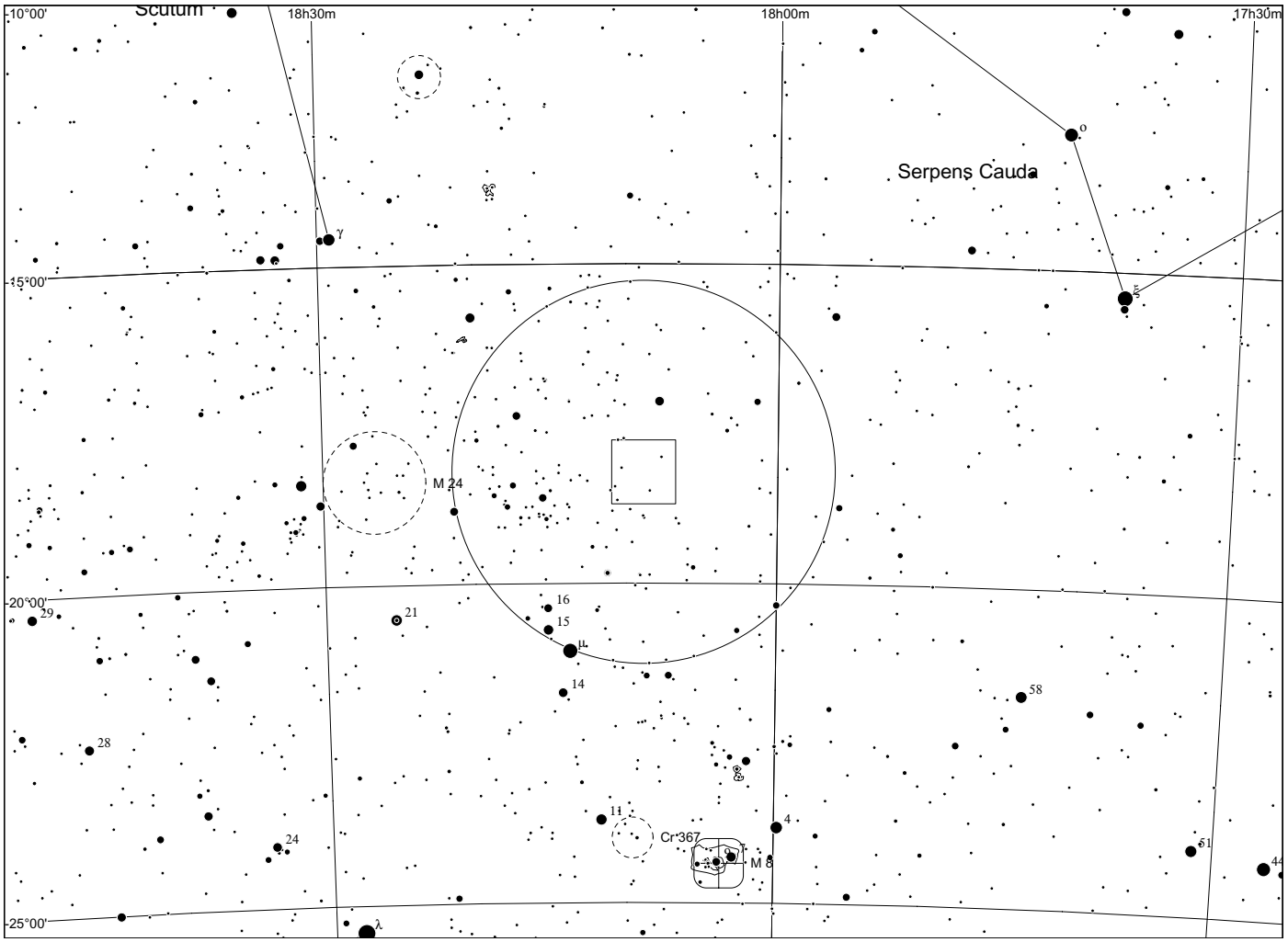
	other name	RA	dec	dia. '	F	S	B
Sh 2-038		18 08 44.8	-18 16 09	3	3	2	1

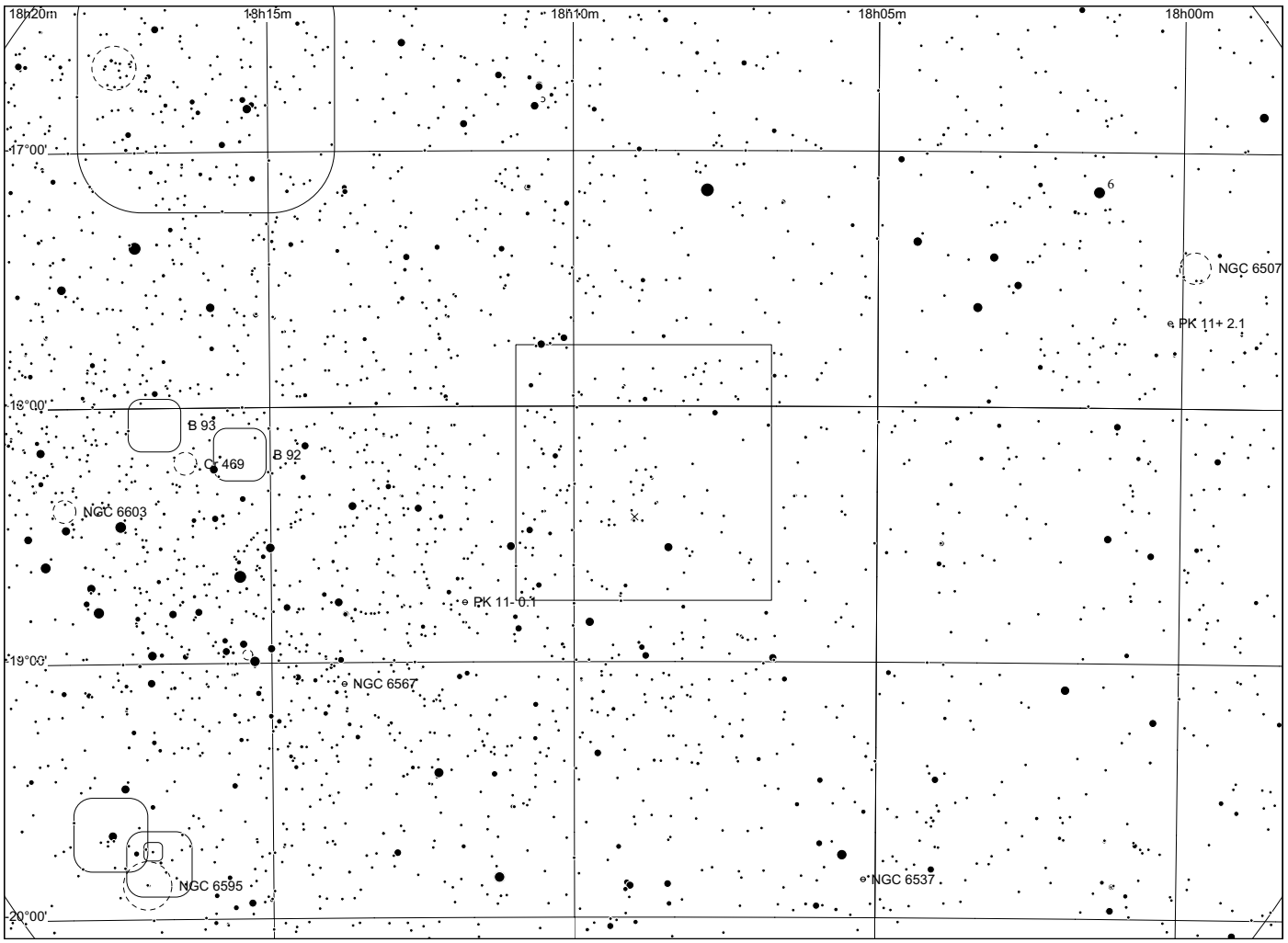
Distance: 2400 pc, Size: 2.1 pc, Source: 2003A&A...397..133R

This appears to be the same as the reflection nebula VdB 114 surrounding the B8/B9Ib star HD 165811. It shows a strong (if small) image in hydrogen-alpha, however, so perhaps there is both emission and reflection in this little nebula.

Sh 2-38, Sh 2-40, Sh-41 and Sh 2-42 all appear to be embedded in the Sagittarius OB4 association.

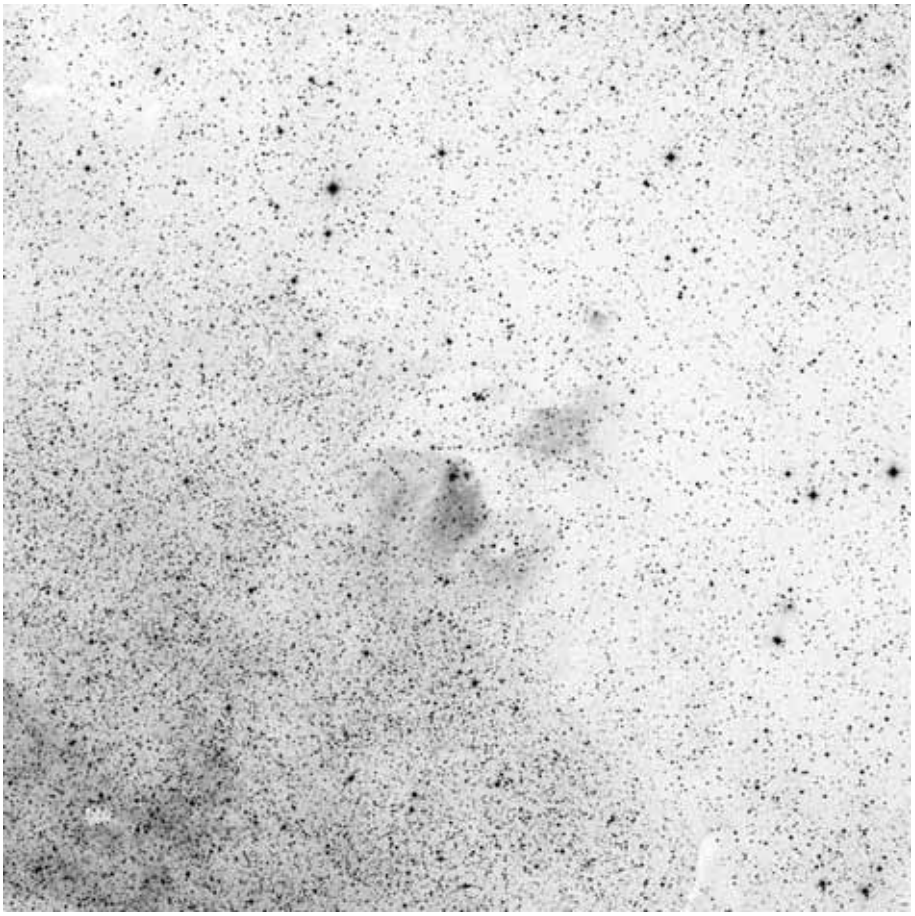
Observing notes:


Scutum
Serpens Cauda
10°00'
15°00'
20°00'
25°00'
18h30m
18h00m
17h30m
γ
ο
ξ
M 24
16
15
μ
14
21
29
28
24
11
Cr 367
M 8
4
58
δ1
44
λ

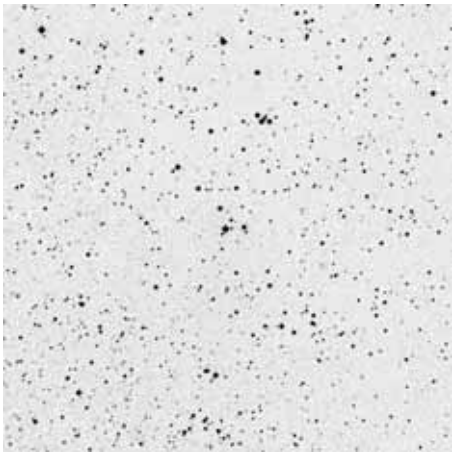

18h20m
18h15m
18h10m
18h05m
18h00m
17°00'
16°00'
19°00'
20°00'
B 93
Cr 469
B 92
NGC 6603
PK 11- 0.1
NGC 6567
NGC 6595
NGC 6537
NGC 6507
PK 11+ 2.1
6

Sh 2 - 40

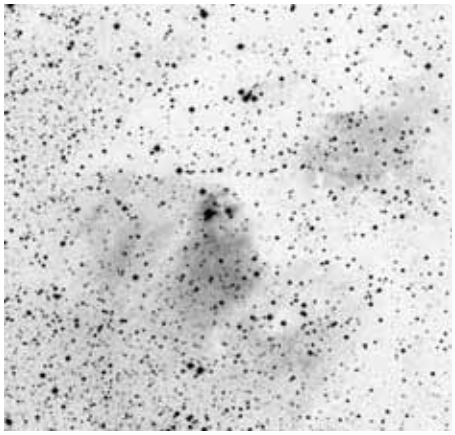
in Sagittarius



60x60, red



POSS blue



POSS red



composite

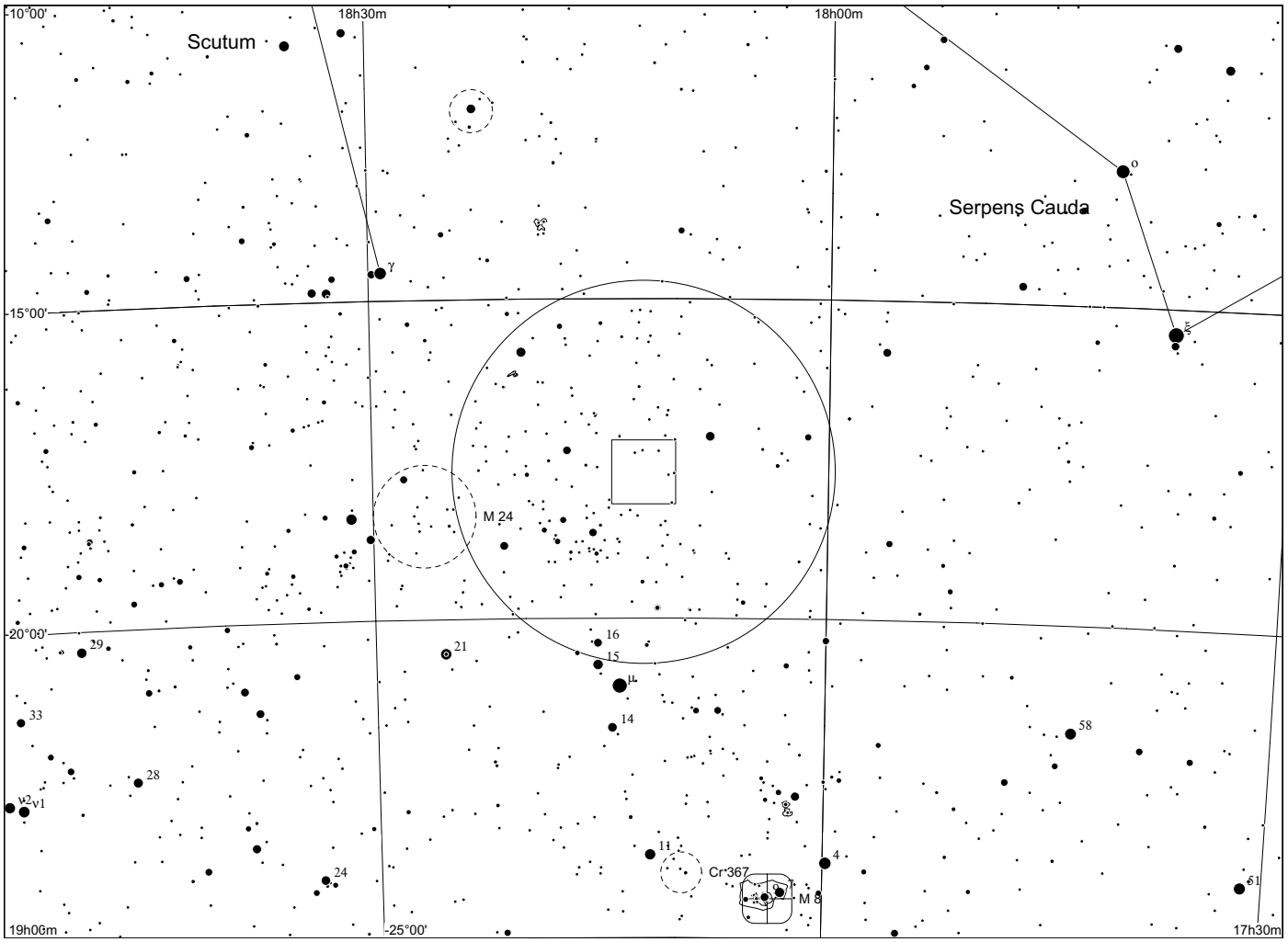
	other name	RA	dec	dia. '	F	S	B
Sh 2-040		18 12 02.1	-17 44 41	15	3	2	2

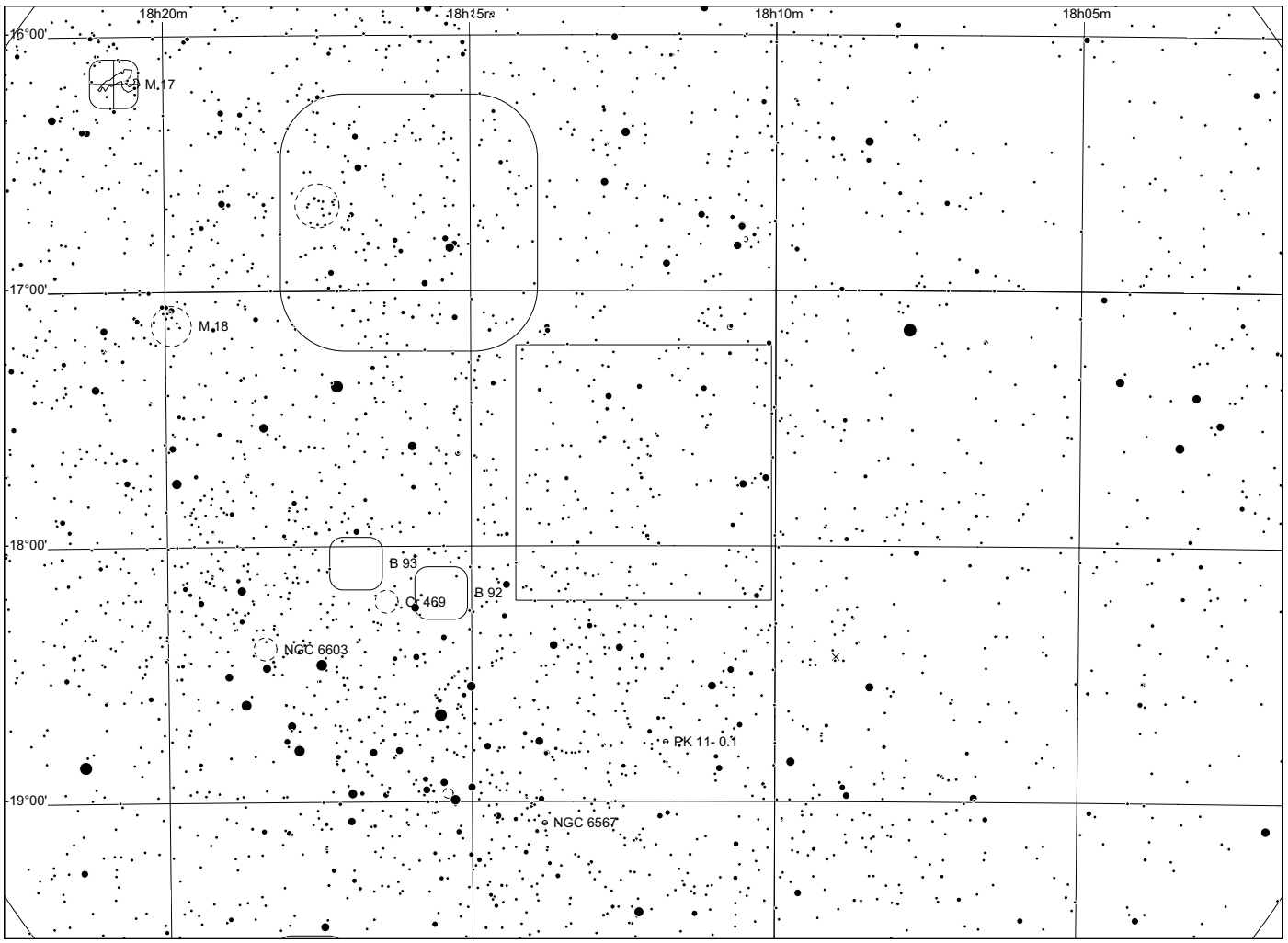
Distance: 2400 pc, Size: 10.5 pc, Source: 2003A&A...397..133R

A look at this region in hydrogen-alpha shows that Sh 2-40 appears to be several bright knots of nebulosity extending north from the much larger nebula Sh 2-41. Sh 2-40 lies in the same direction as the powerful radio source W33, but the distance estimate for W33 is about 4000 pc. So there seem to be two objects here in the same field of view, one visible only at radio frequencies.

Sh 2-38, Sh 2-40, Sh-41 and Sh 2-42 all appear to be embedded in the Sagittarius OB4 association. The massive protostellar object IRAS 18089-1732 is in the same area of sky but is located at a distance of 3600 pc.

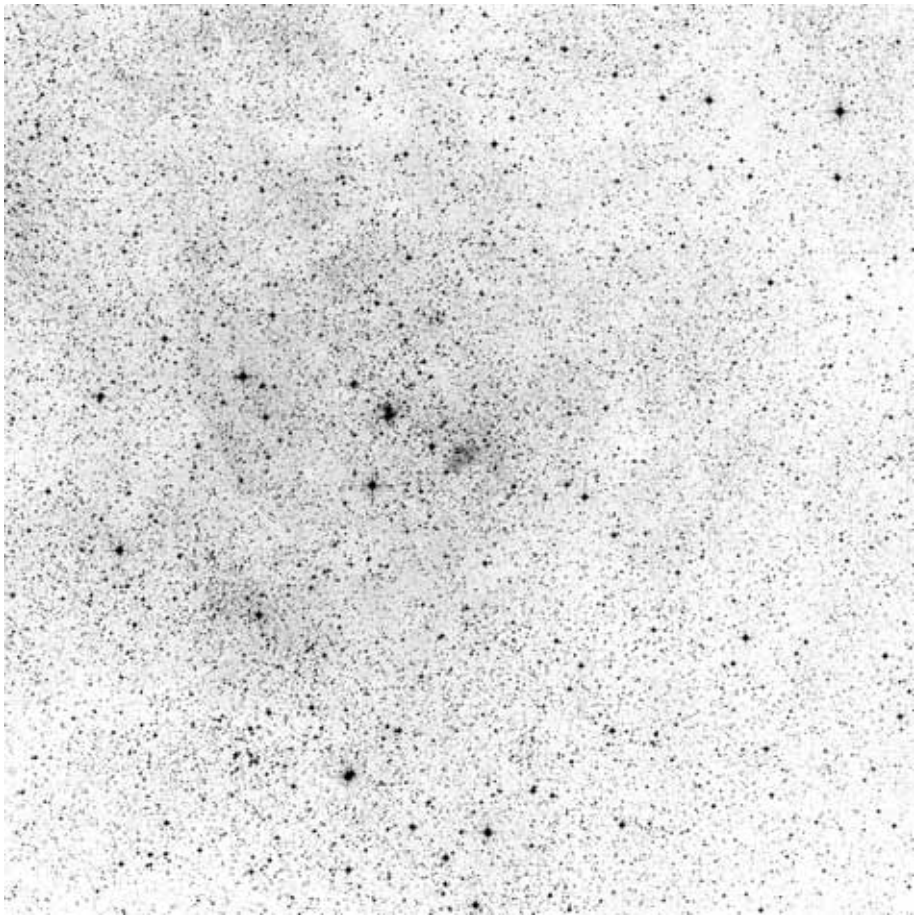
Observing notes:


10°00'
18h30m
18h00m
Scutum
Serpens Cauda
15°00'
M 24
20°00'
29
21
16
15
14
33
28
58
11
Cr 367
4
24
M 8
51
19h00m
-25°00'
17h30m

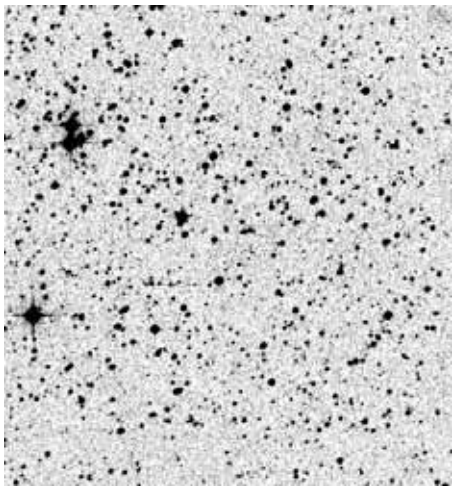

18h20m
18h15m
18h10m
18h05m
16°00'
M 17
17°00'
M 18
18°00'
B 93
Cr 469
B 92
NGC 6603
PK 11- 0.1
19°00'
NGC 6567

Sh 2 - 42

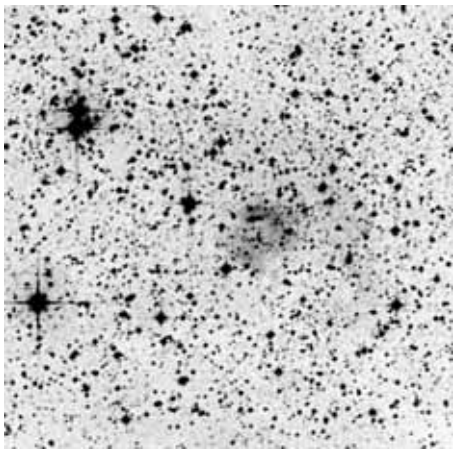
in Sagittarius



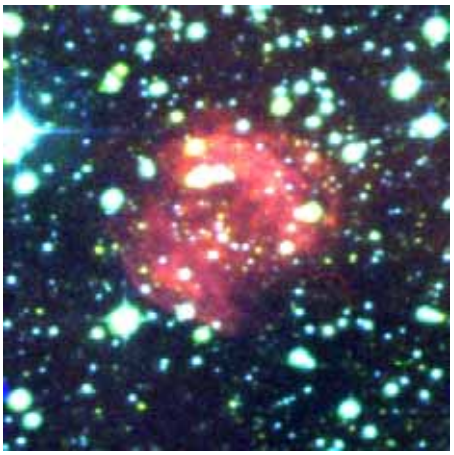
60x60, red



POSS blue



POSS red



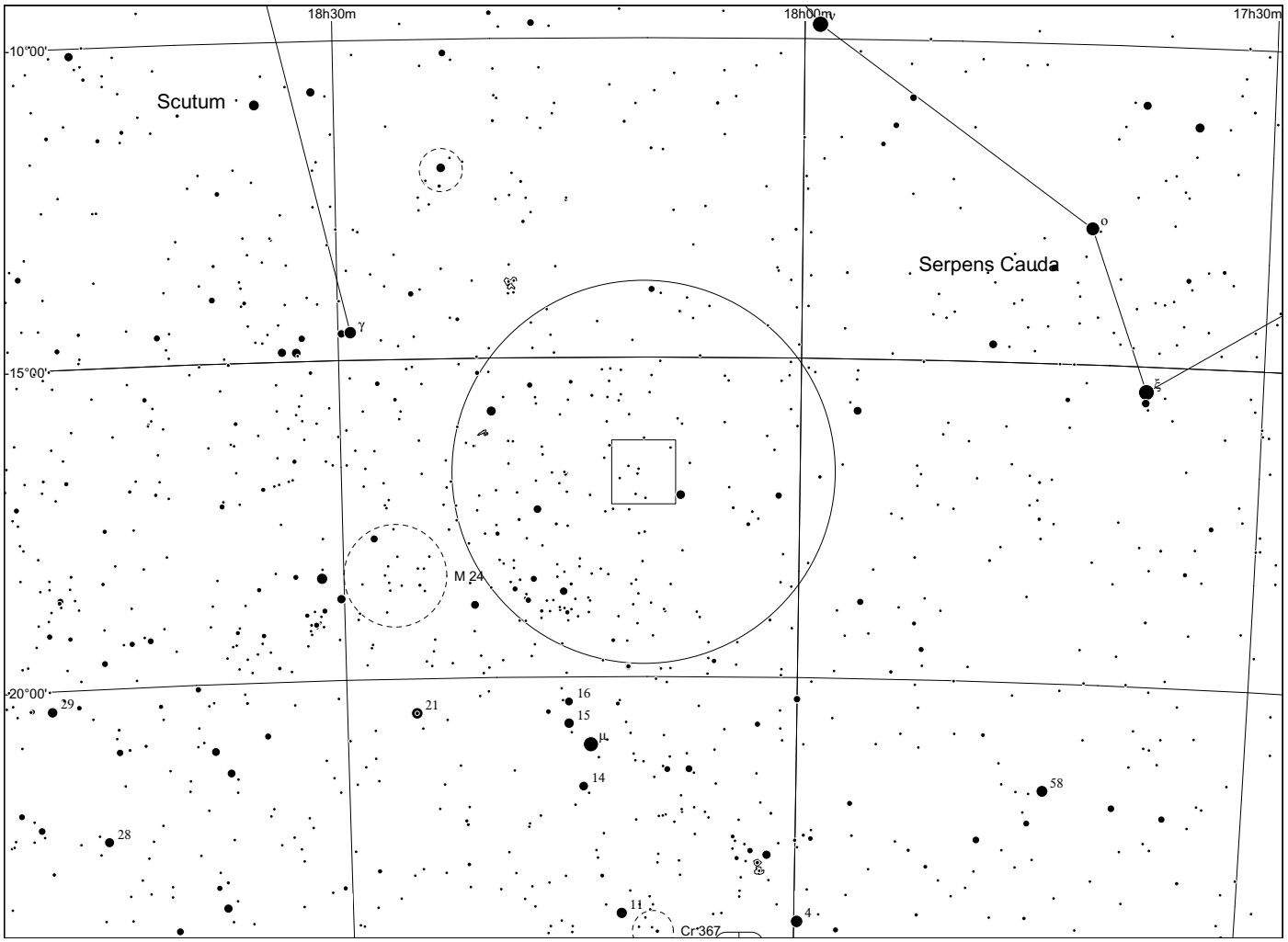
composite

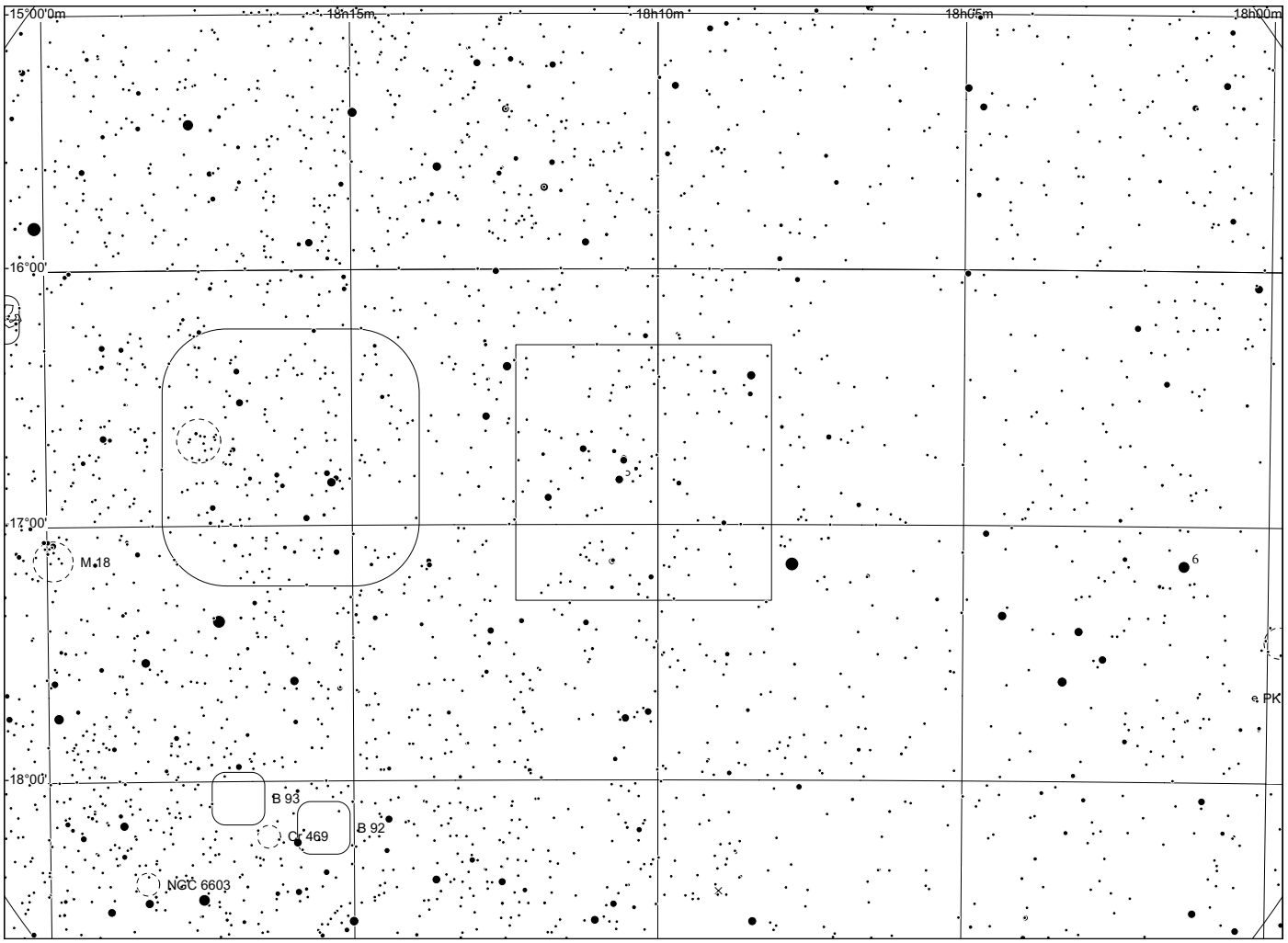
	other name	RA	dec	dia. '	F	S	B
Sh 2-042		18 10 16.9	-16 48 55	3	3	1	2

Distance: 2400 pc, Size: 2.1 pc, Source: 2003A&A...397..133R

Sh 2-42 is believed to be the planetary nebula PN G013.3+01.1.

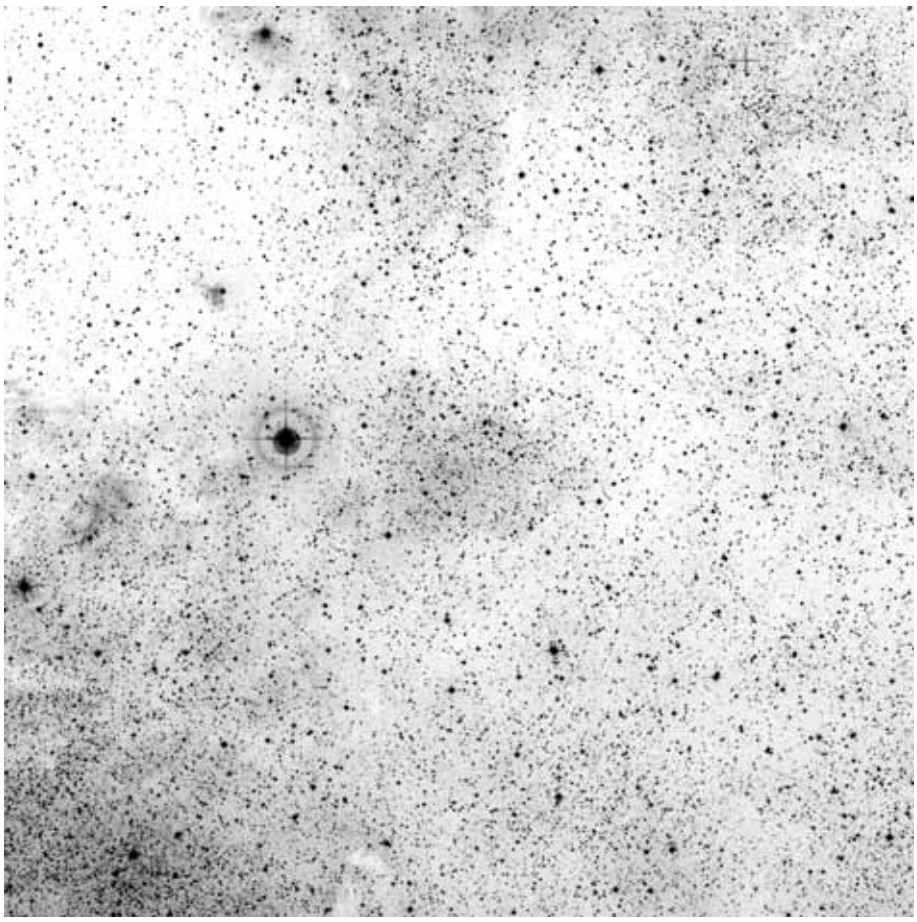
Observing notes:


18h30m
18h00m
17h30m
10°00'
15°00'
20°00'
Scutum
Serpens Cauda
γ
ο
ξ
M 24
29
21
16
15
μ
14
58
28
11
4
Cr 367

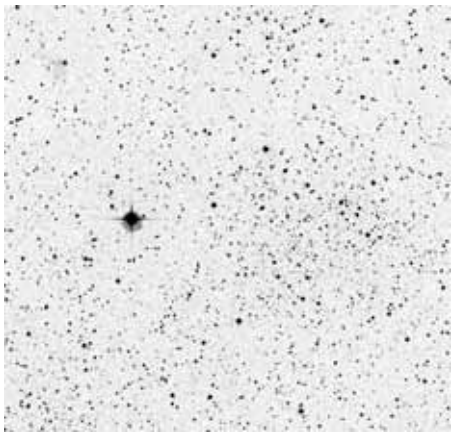

15°00'0m
18h15m
18h10m
18h05m
18h00m
16°00'
17°00'
18°00'
M 18
6
e PK
B 93
Cr 469
B 92
NGC 6603

Sh 2 - 43

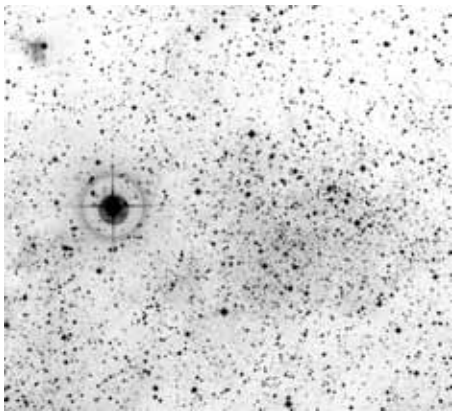
in Sagittarius



60x60, red



POSS blue



POSS red



composite

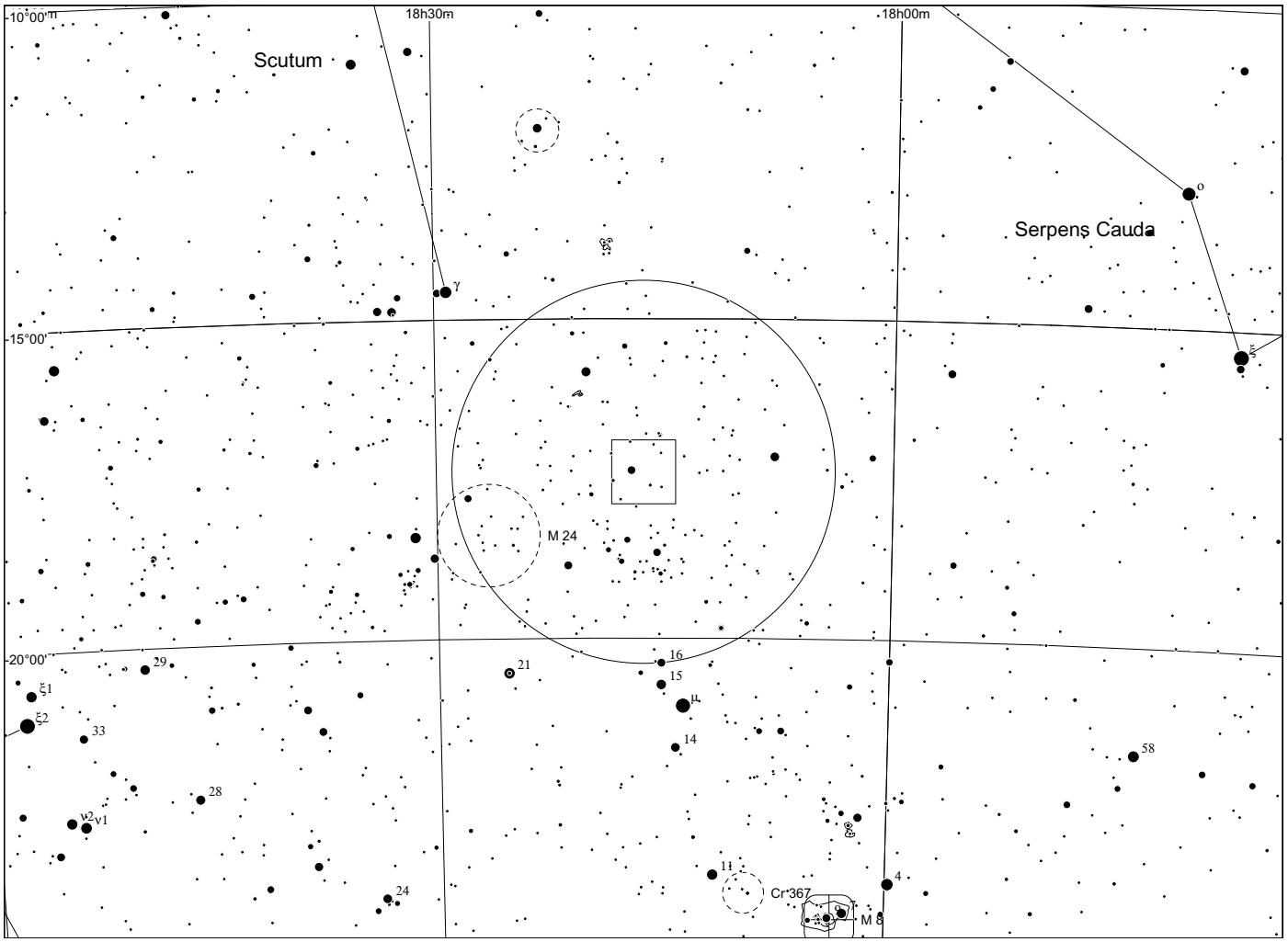
	other name	RA	dec	dia. '	F	S	B
Sh 2-043		18 16 24.6	-17 24 02	15	2	1	2

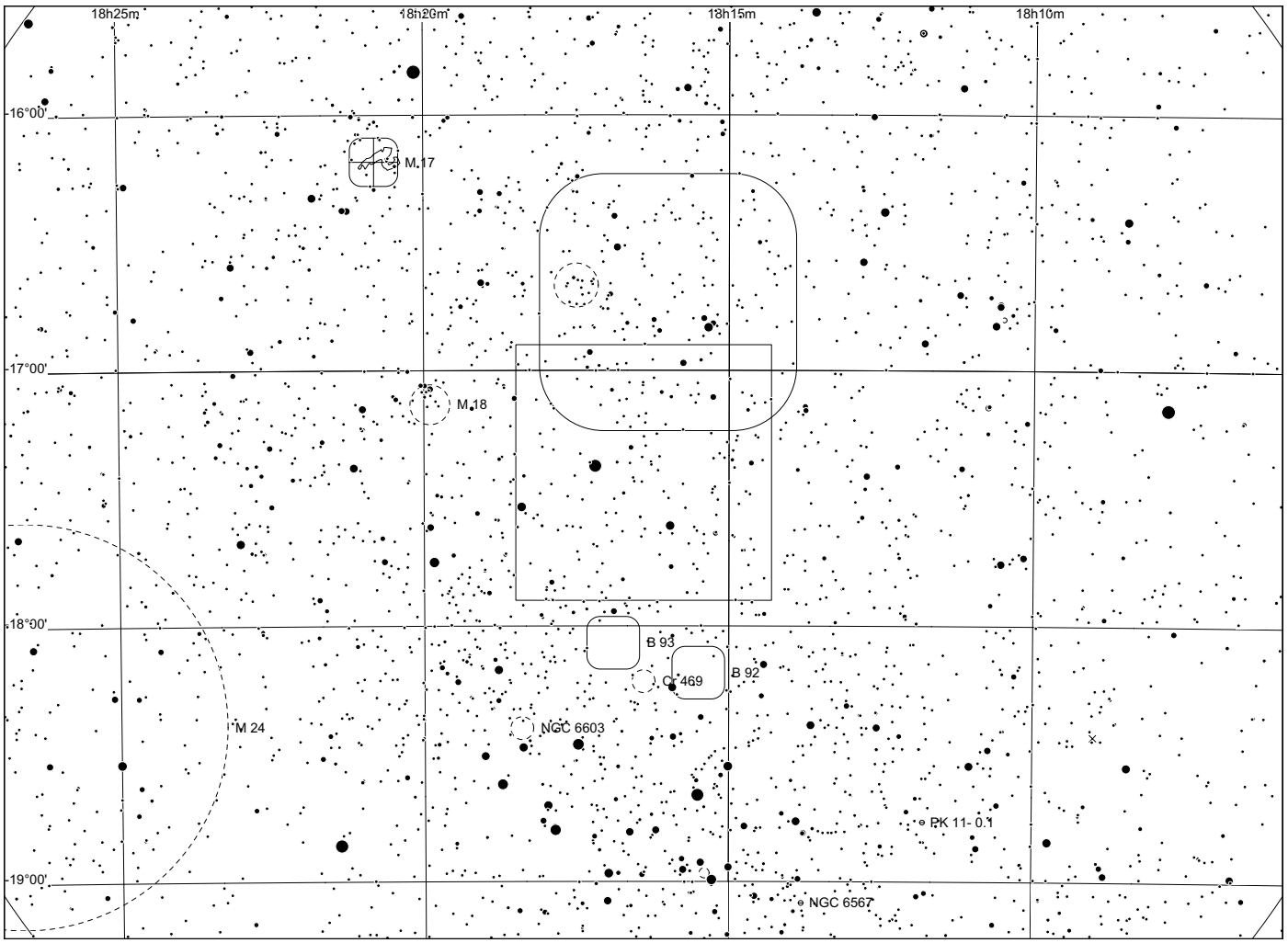
Distance: 1600 pc, Size: 7.0 pc, Source: 2003A&A...397..133R

This faint diffuse nebula is in the same location as the suspected supernova remnant GAL 013.1-00.5 and appears to be located in an empty region bordered by the OB regions SGR OB1, SGR OB7 and SCT OB3.

There is a 0.3 degree difference between the positions of RCW 156 and Sh 2-43. Sharpless gives the diameter of Sh 2-43 as 15 minutes = 0.25 degrees. RCW gives the diameter of RCW 156 as 50x50 minutes. These objects **may** not be part of the same nebula, but they are clearly very close in the sky.

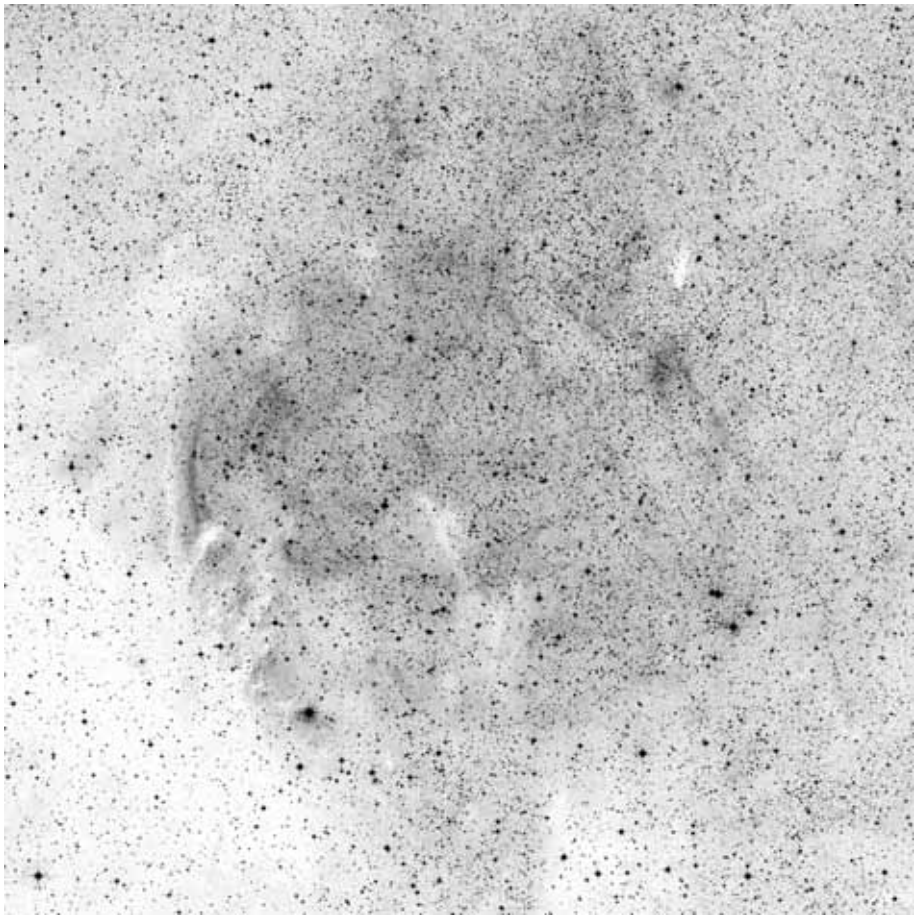
Observing notes:


10°00'
18h30m
18h00m
Scutum
Serpens Cauda
γ
ζ
15°00'
M 24
20°00'
29
21
16
15
μ
14
ξ1
ξ2
33
58
28
ν2
ν1
11
4
24
Cr 367
M 8


18h25m
18h20m
18h15m
18h10m
16°00'
M 17
17°00'
M 18
18°00'
B 93
B 92
Cr 469
M 24
NGC 6603
PK 11- 0.1
19°00'
NGC 6567

Sh 2 - 44

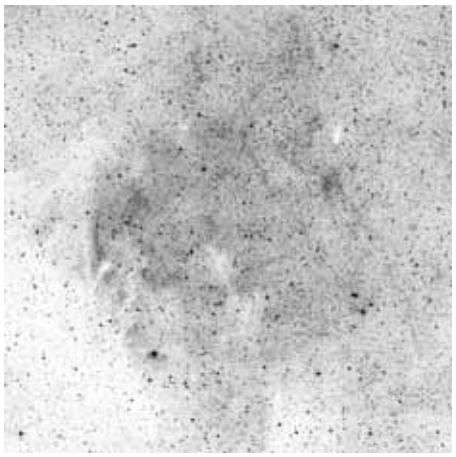
in Sagittarius



60x60, red



POSS blue



POSS red



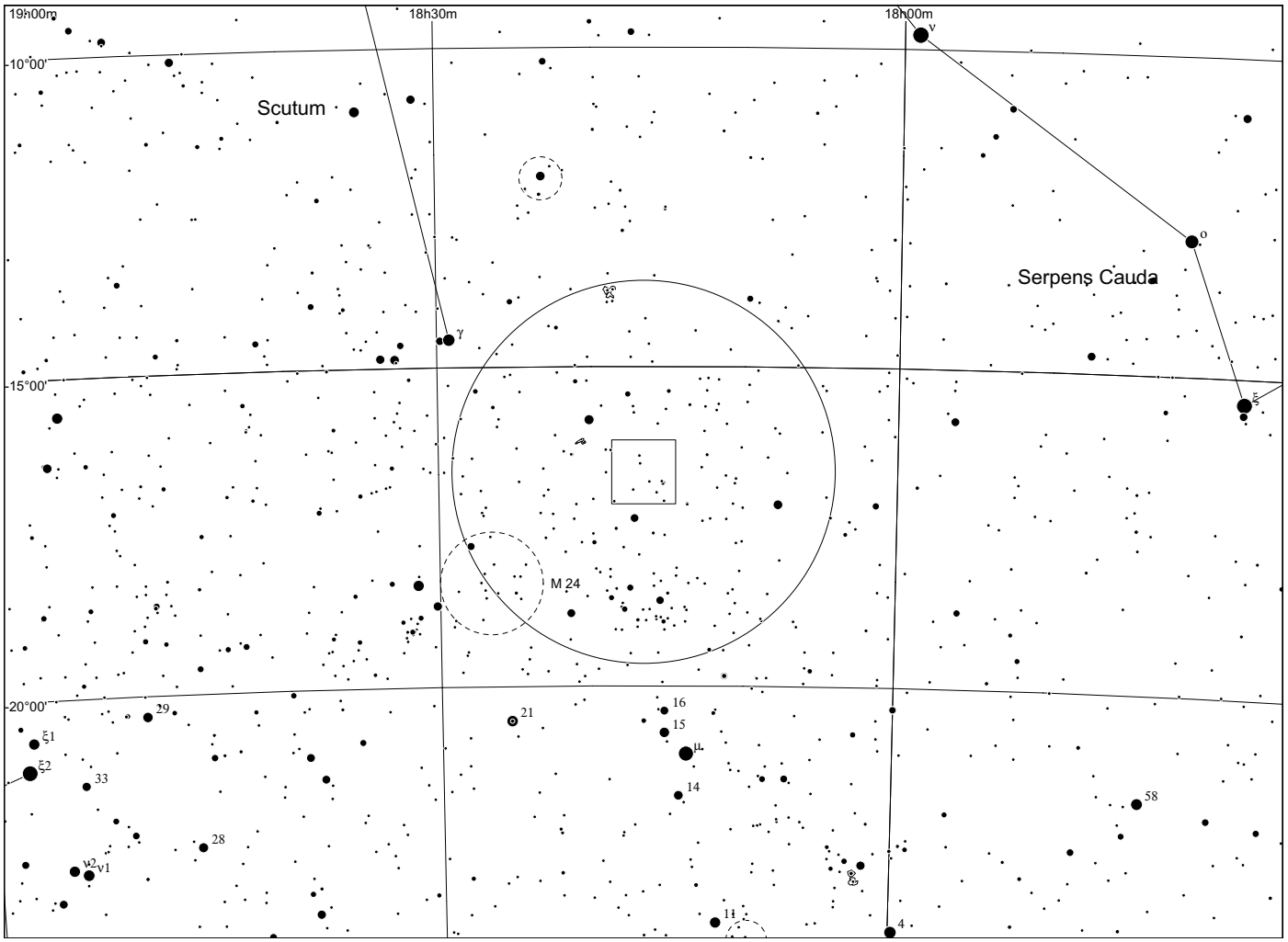
composite

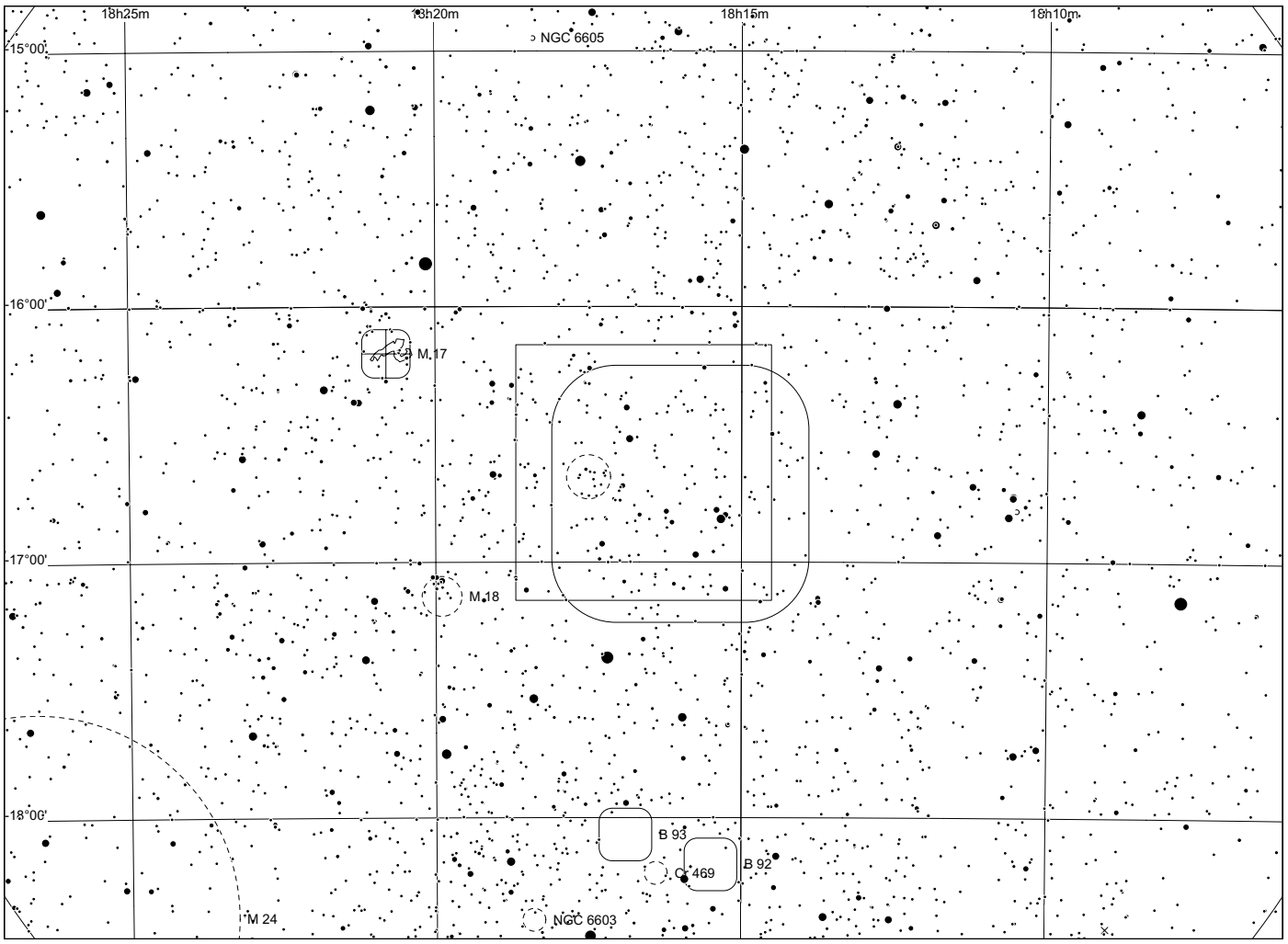
	other name	RA	dec	dia. '	F	S	B
Sh 2-044	IC 4701	18 16 28.8	-16 44 01	60	3	2	2

Distance: 3610 pc, Size: 4.7 pc, Source: 2003A&A...397..213P

This nebula is connected to the Oe star HD 167633 (which Humphreys connects to the Serpens OB1 association) and may be part of the Scutum supershell in the inner galaxy.

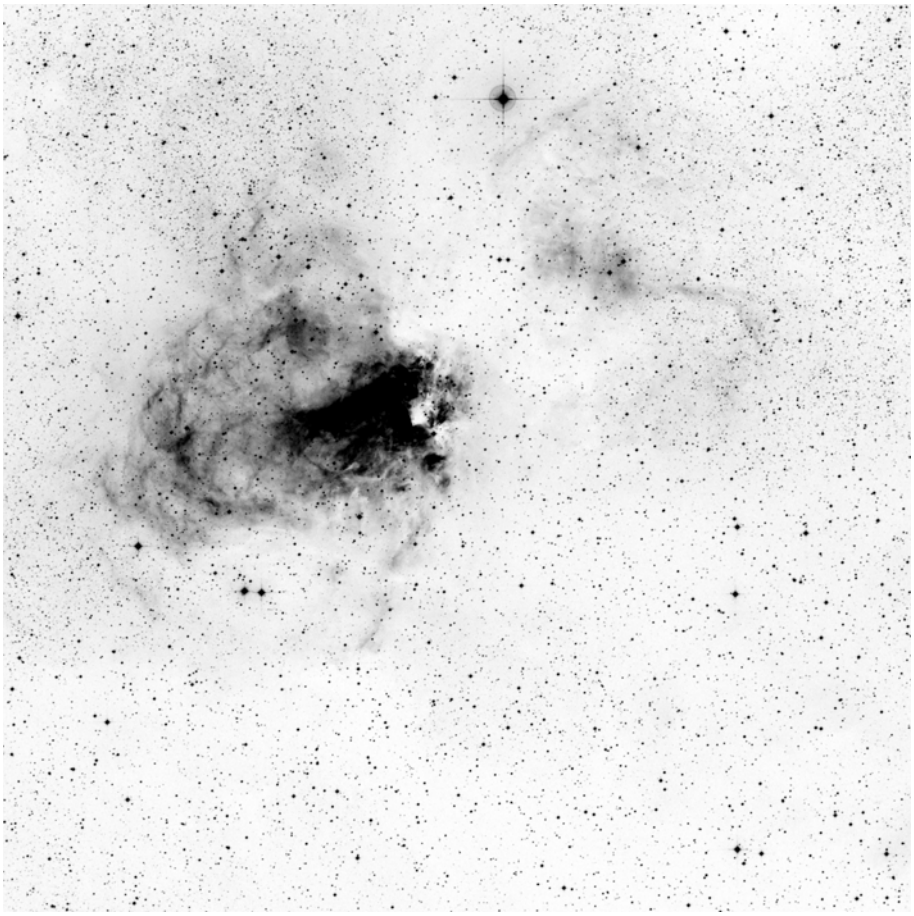
Observing notes:


19h00m
18h30m
18h00m
10°00'
15°00'
20°00'
Scutum
Serpens Cauda
ν
ο
γ
ξ
M 24
29
21
16
15
μ
ξ1
ξ2
33
14
58
28
ν2
ν1
11
4

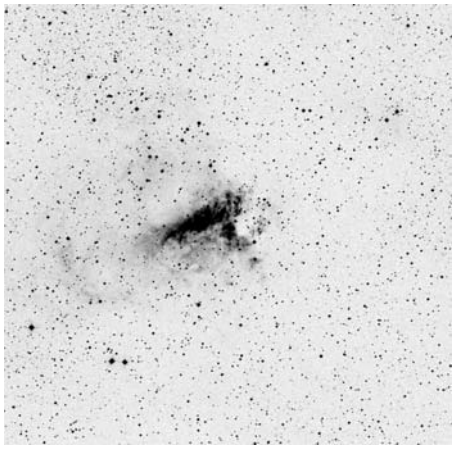

18h25m
18h20m
18h15m
18h10m
15°00'
16°00'
17°00'
18°00'
NGC 6605
M 17
M 18
B 93
C 469
B 92
M 24
NGC 6603

Sh 2 - 45

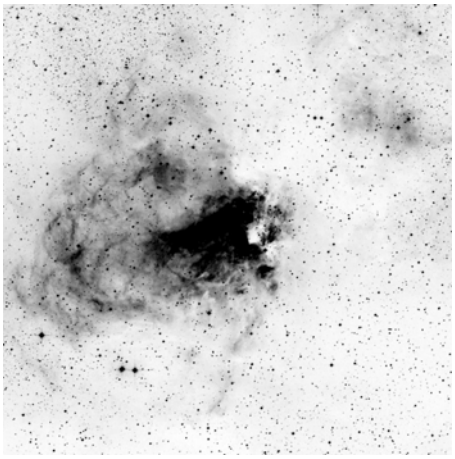
in Sagittarius



60x60, red



POSS blue



POSS red



narrowband Dean Salman

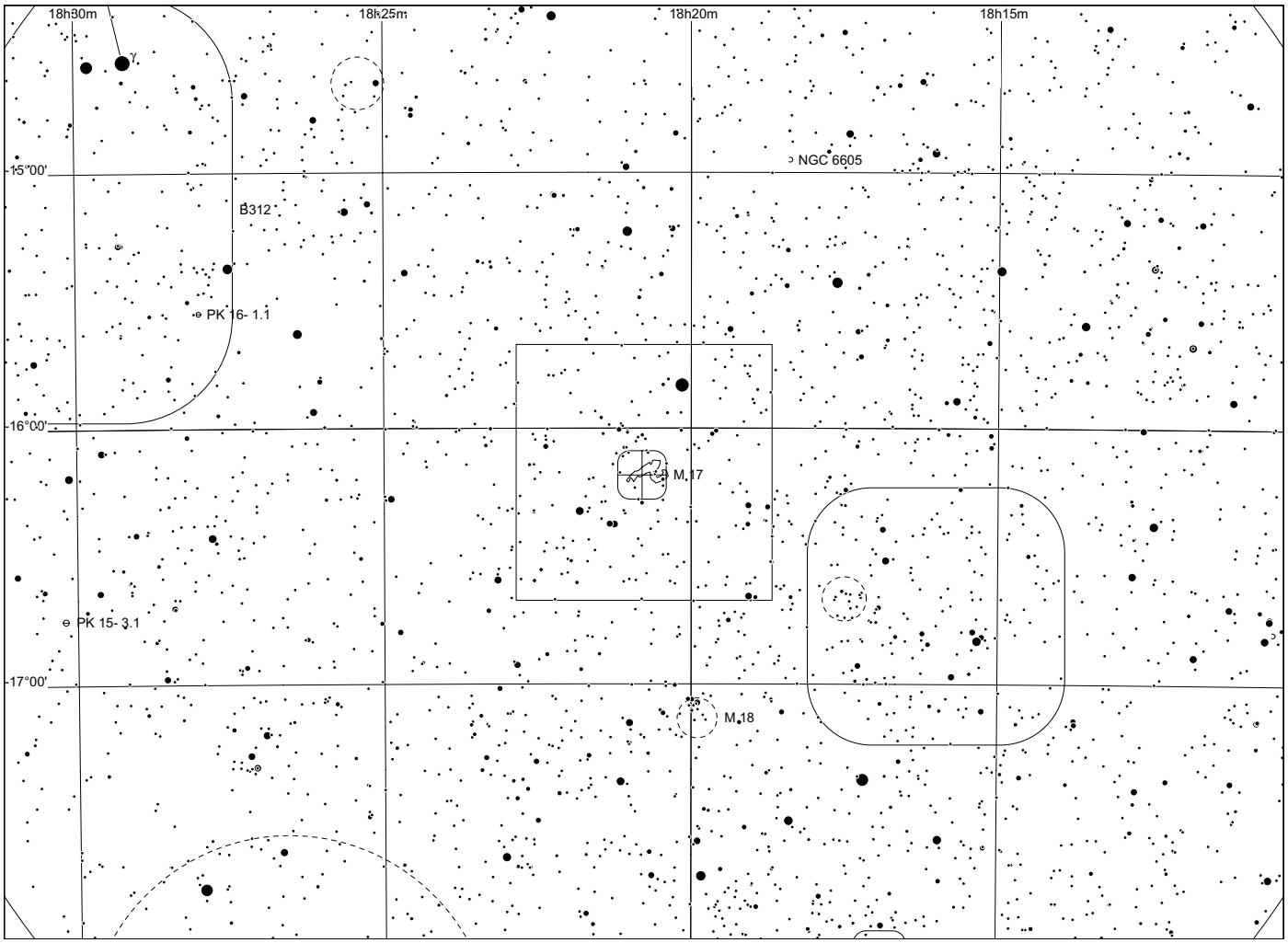
	other name	RA	dec	dia. '	F	S	B
Sh 2-045	M17 = NGC6618 = Swan Nebula	18 20 46.0	-16 10 24	60	3	3	3

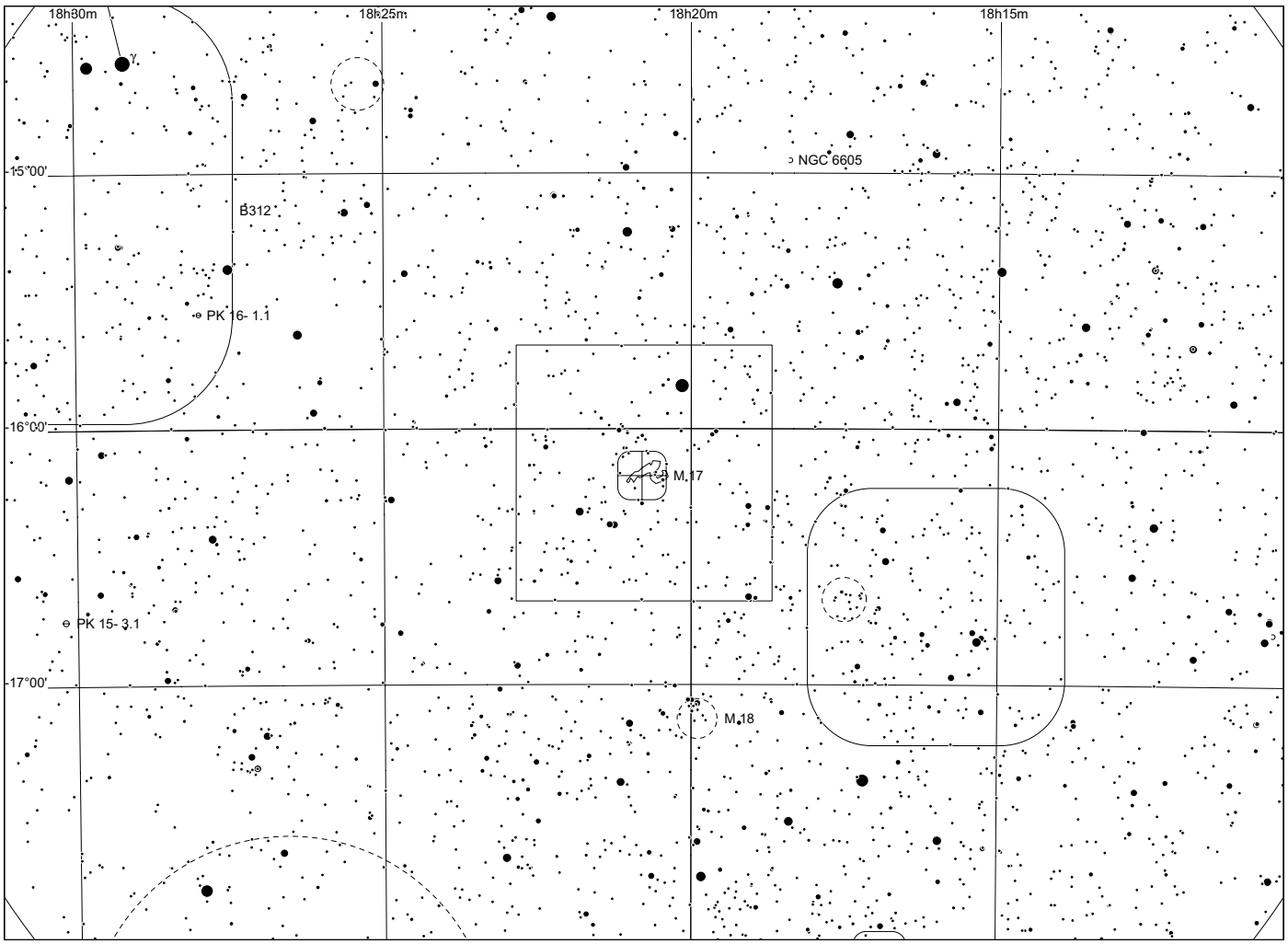
Distance: 2095 pc, Size: 3.7 pc, Source: 2003A&A...397..213P

This is M17, the Omega nebula, also called W38, the Swan nebula, and the Lobster nebula among other names. M17 is ionised by an O4V-O4V double star system (Kleinmann's star) at the core of the massive young cluster NGC 6618 (about one million years old), which contains over 800 stars, including 2 O5V star systems and 100 stars hotter than B9 (by comparison, Orion has 8 stars hotter than B9). The total ultraviolet flux is about 25 times higher than for Orion

A large part of the nebula is hidden by a dark dust lane the runs near the central cluster and splits the main visible nebula from two attached nebulae on the other side of the dust lane (IC 4706 and IC 4707). M17 is a blister on the side of a much larger giant molecular cloud and star formation region (M17SW) that contains 30 thousand solar masses of molecular hydrogen.

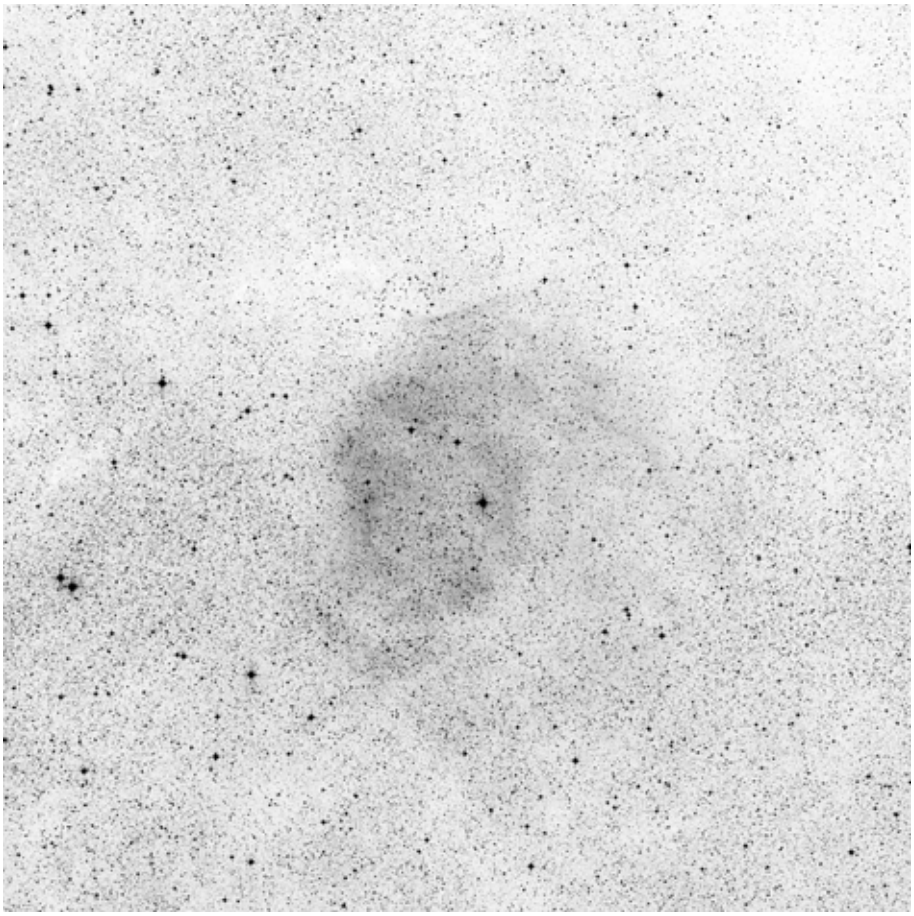
Observing notes:


18h30m
18h25m
18h20m
18h15m
γ
15°00'
NGC 6605
B312
PK 16- 1.1
16°00'
M 17
PK 15- 3.1
17°00'
M 18

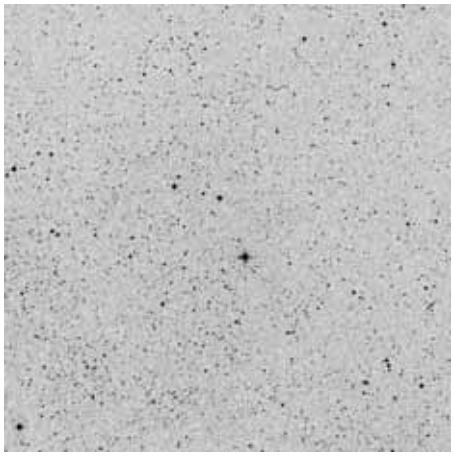

18h30m
18h25m
18h20m
18h15m
γ
15°00'
NGC 6605
B312
PK 16- 1.1
16°00'
M 17
PK 15- 3.1
17°00'
M 18

Sh 2 - 46

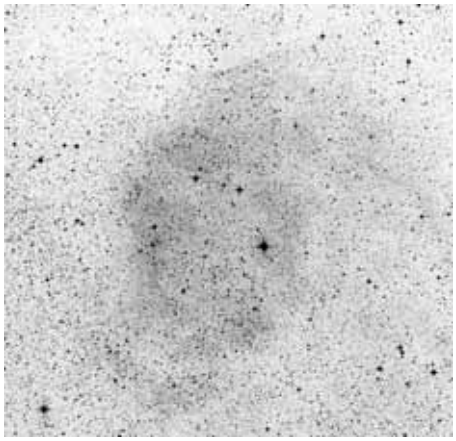
in Serpens



60x60, red



POSS blue



POSS red



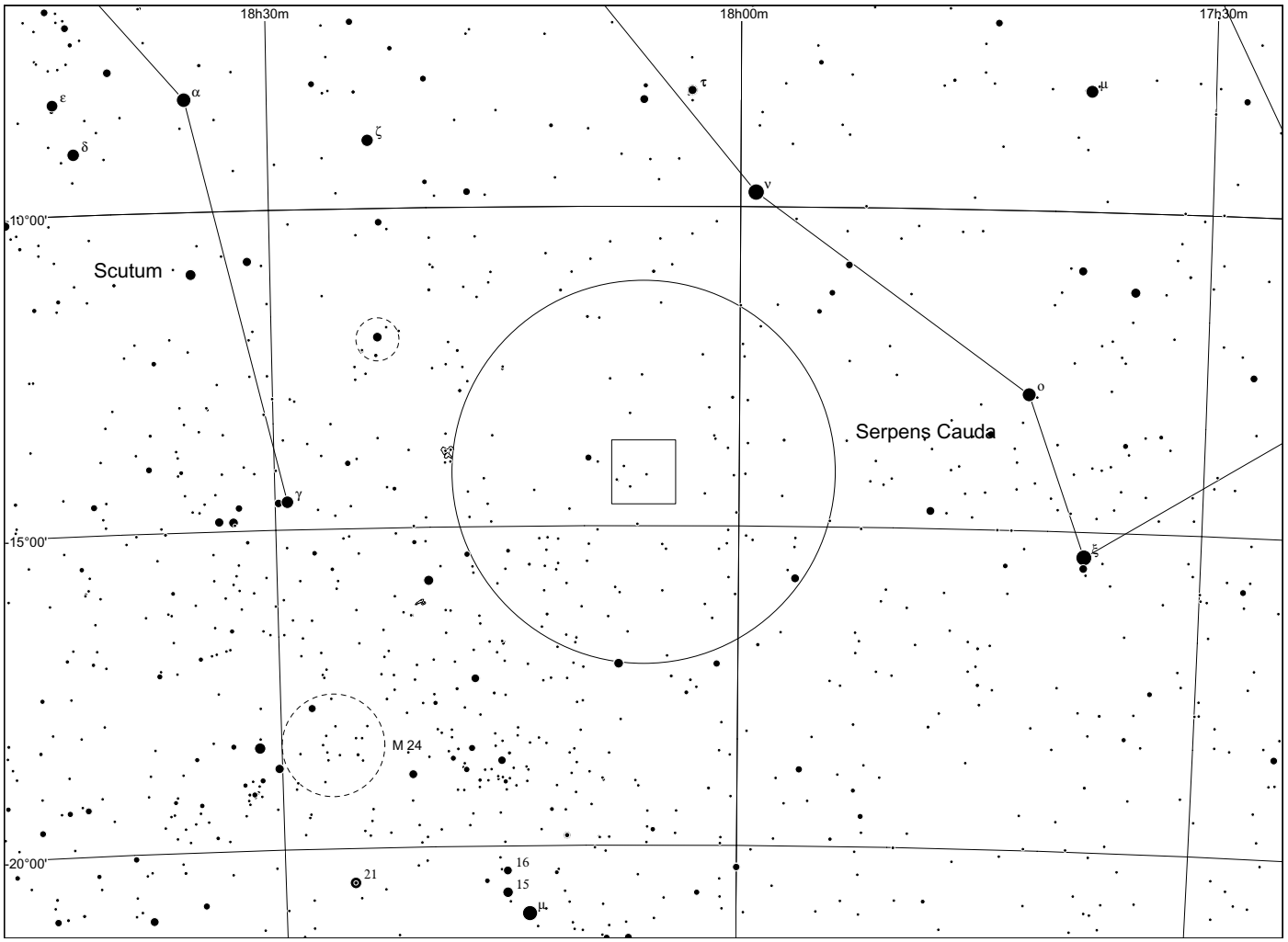
composite

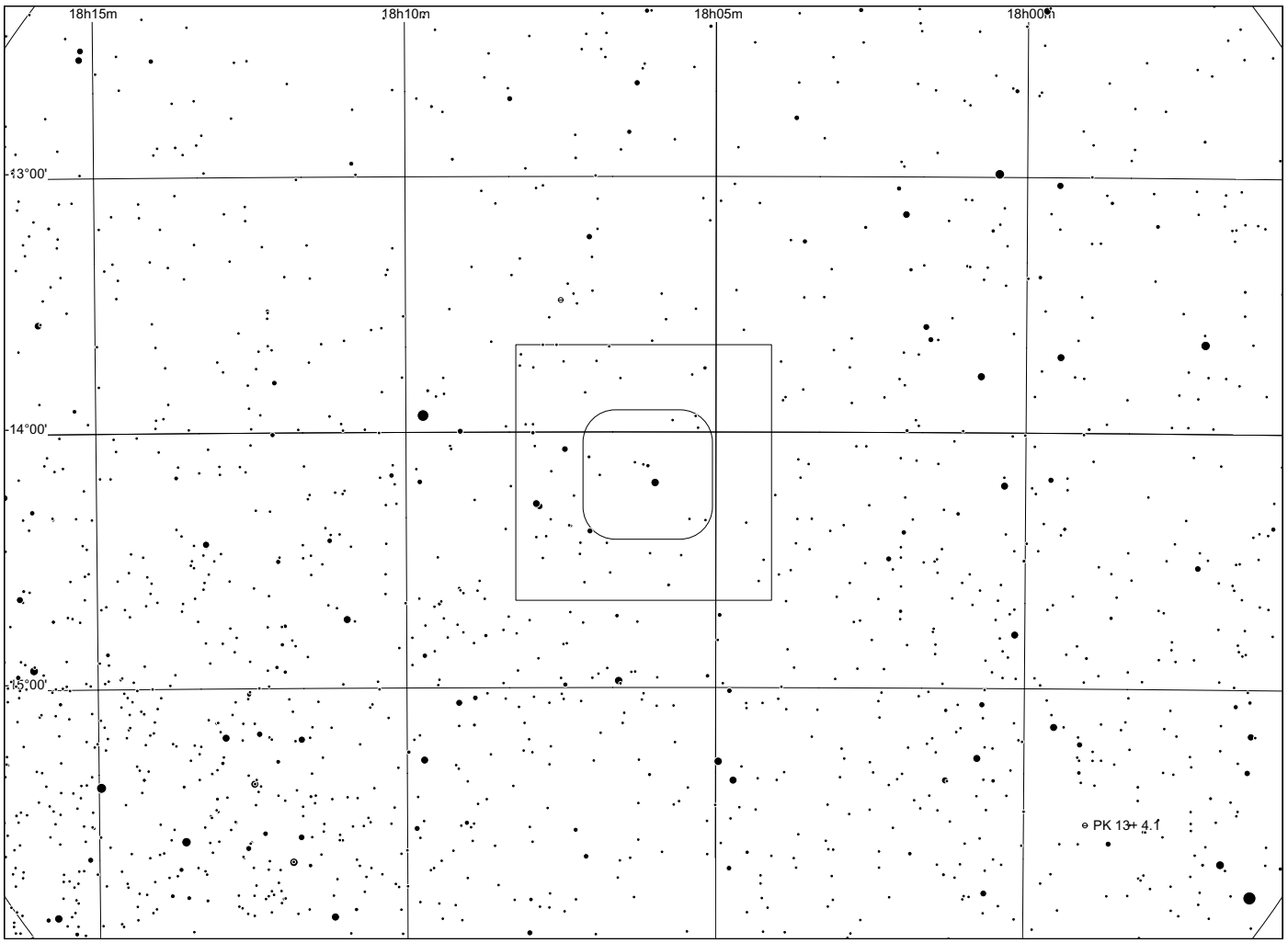
	other name	RA	dec	dia. '	F	S	B
Sh 2-046		18 06 10.6	-14 09 31	25	2	2	2

Distance: 2000 pc, Size: 14.5 pc, Source: 1982ApJS...49..183B

This nebula is located well above the galactic plane. The potential runaway O-star HD 165319 lies within or behind this nebula, which is nearest to the OB association Sagittarius OB6. Polycyclic aromatic hydrocarbons (PAHs) have been detected in this HII region.

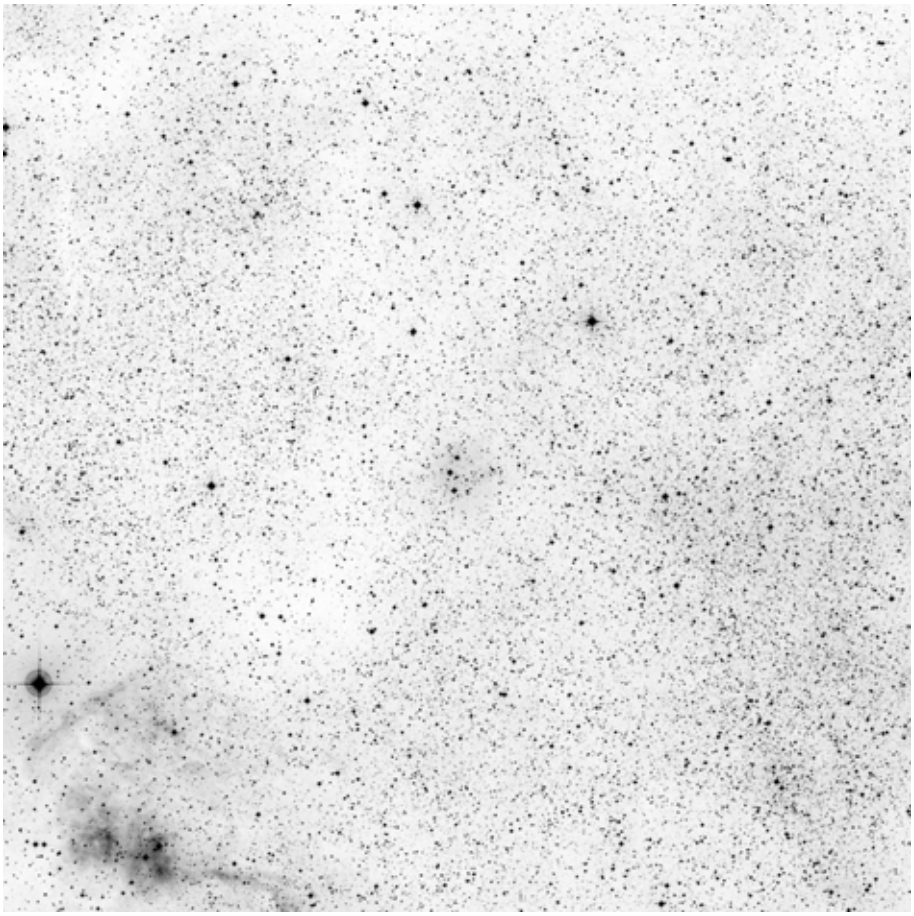
Observing notes:


18h30m
18h00m
17h30m
10°00'
15°00'
20°00'
Scutum
Serpens Cauda
M 24
α
ε
δ
ζ
τ
ν
μ
ο
γ
ξ
21
16
15
μ

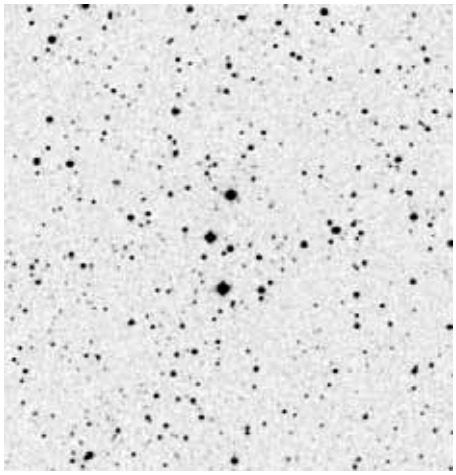

18h15m
18h10m
18h05m
18h00m
13°00'
14°00'
15°00'
PK 13+ 4.1

Sh 2 - 47

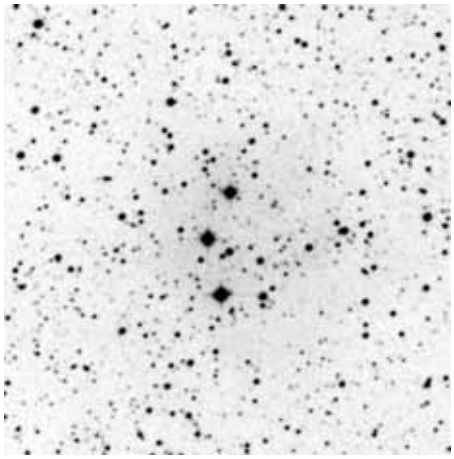
in Serpens



60x60, red



POSS blue



POSS red



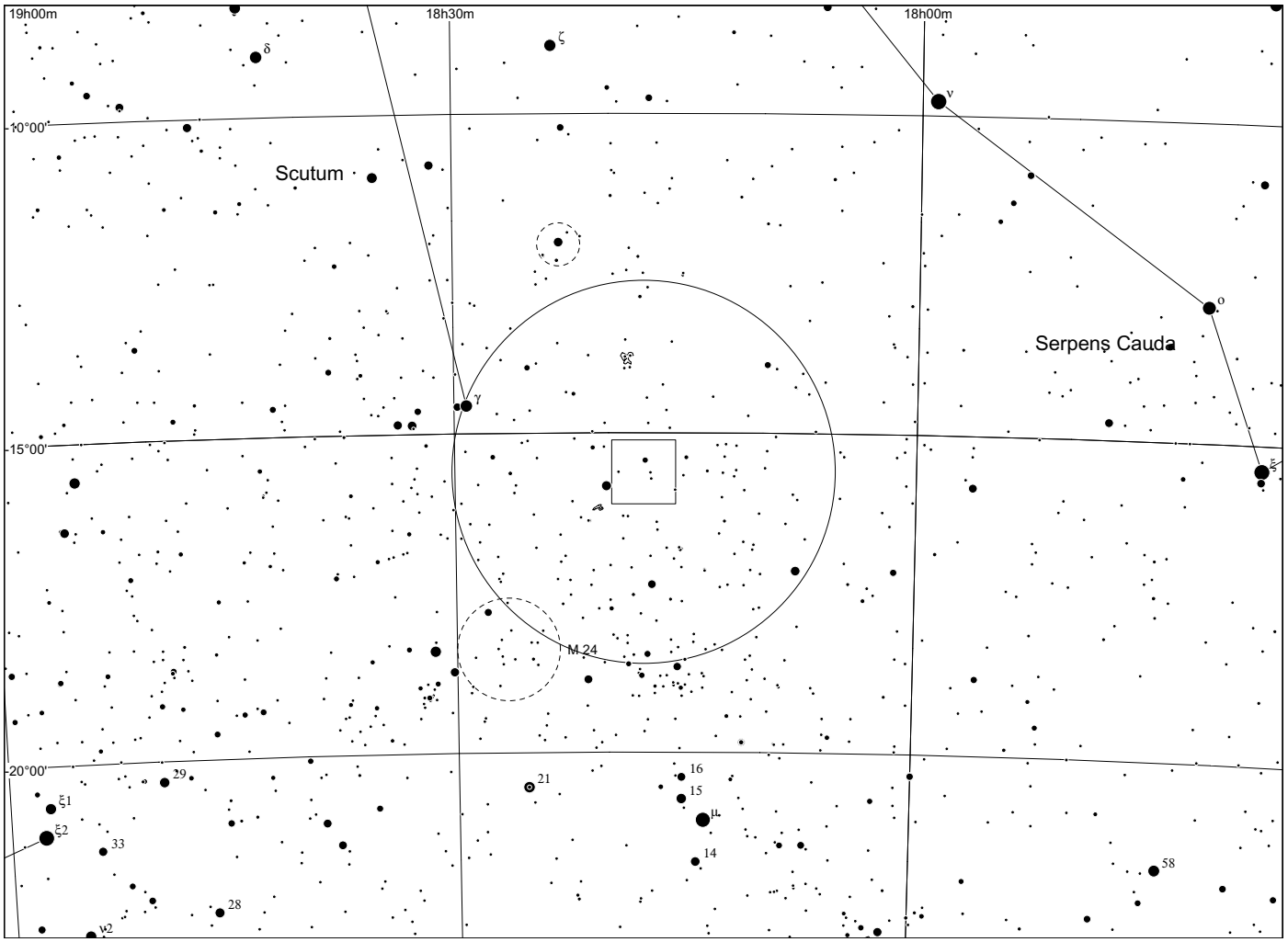
composite

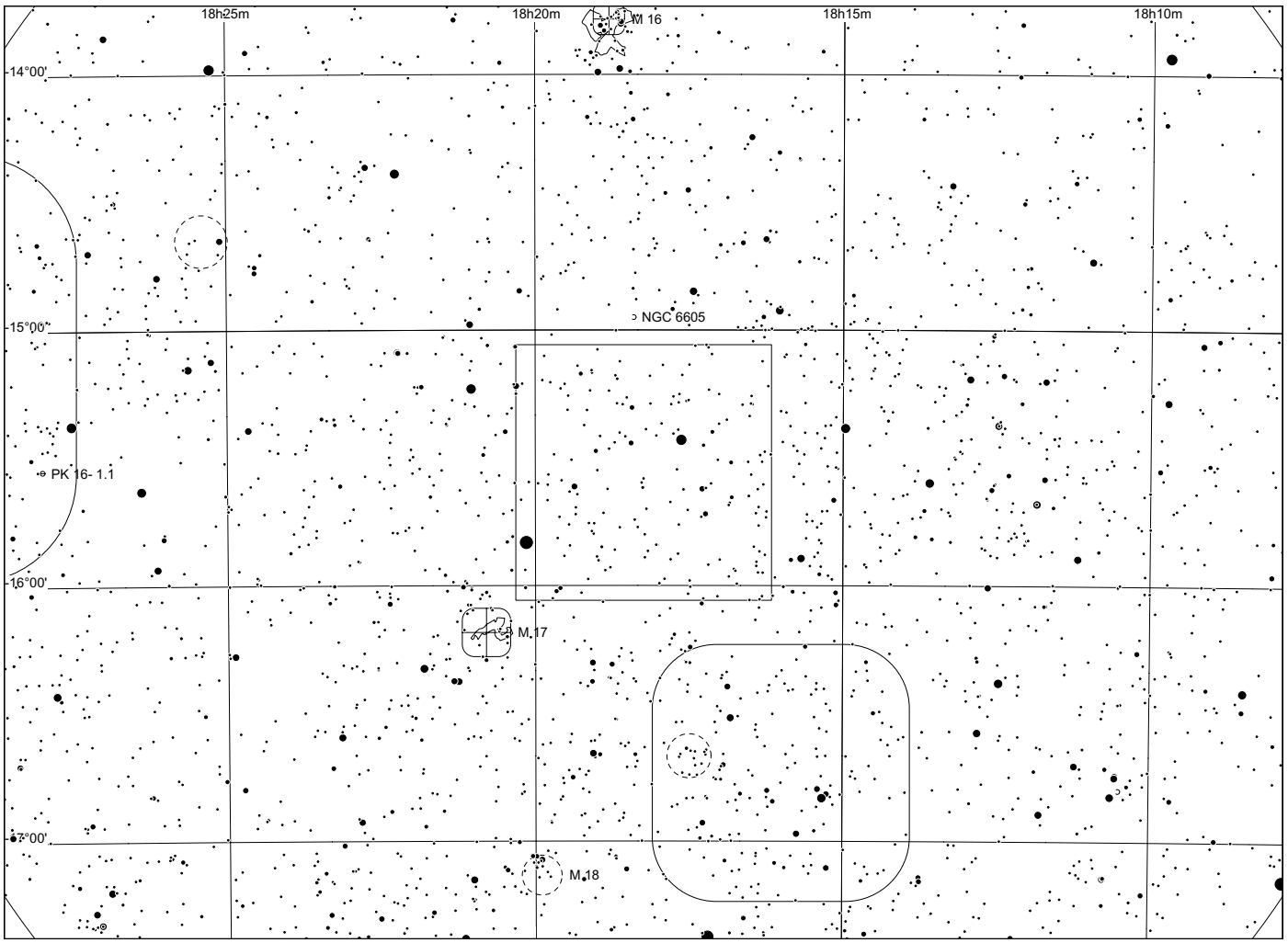
	other name	RA	dec	dia. '	F	S	B
Sh 2-047		18 17 44.4	-15 36 50	5	1	2	2

Distance: 3100 pc, Size: 4.5 pc, Source: 1985A&AS...61..537L

The ionising star for this small nebula is probably the B0.5 III giant star S-47/3, which is at a distance of about 3100 pc.

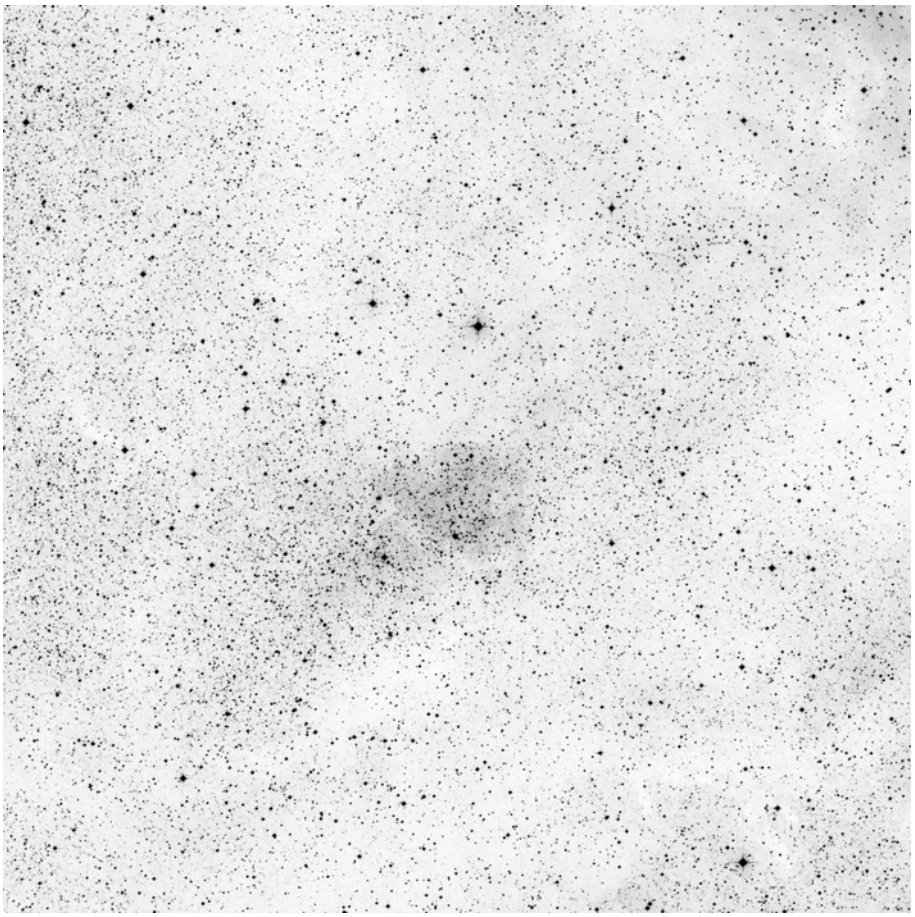
Observing notes:


19h00m
18h30m
18h00m
10°00'
15°00'
20°00'
Scutum
Serpens Cauda
M 24
δ
ζ
ν
ο
γ
ξ
ξ1
ξ2
29
33
28
21
16
15
μ
14
58

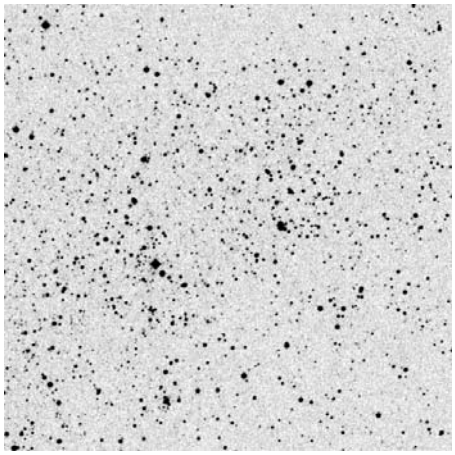

18h25m
18h20m
18h15m
18h10m
14°00'
15°00'
16°00'
17°00'
M 16
NGC 6605
PK 16- 1.1
M 17
M 18

Sh 2 - 48

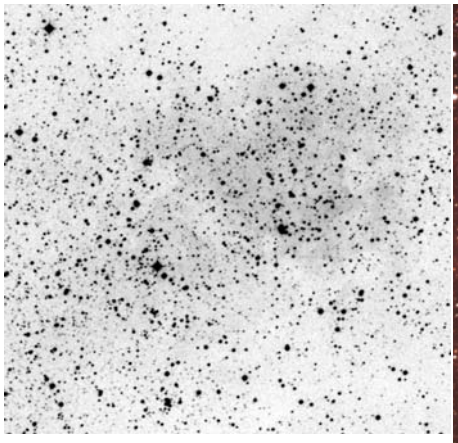
in Serpens



60x60, red



POSS blue



POSS red



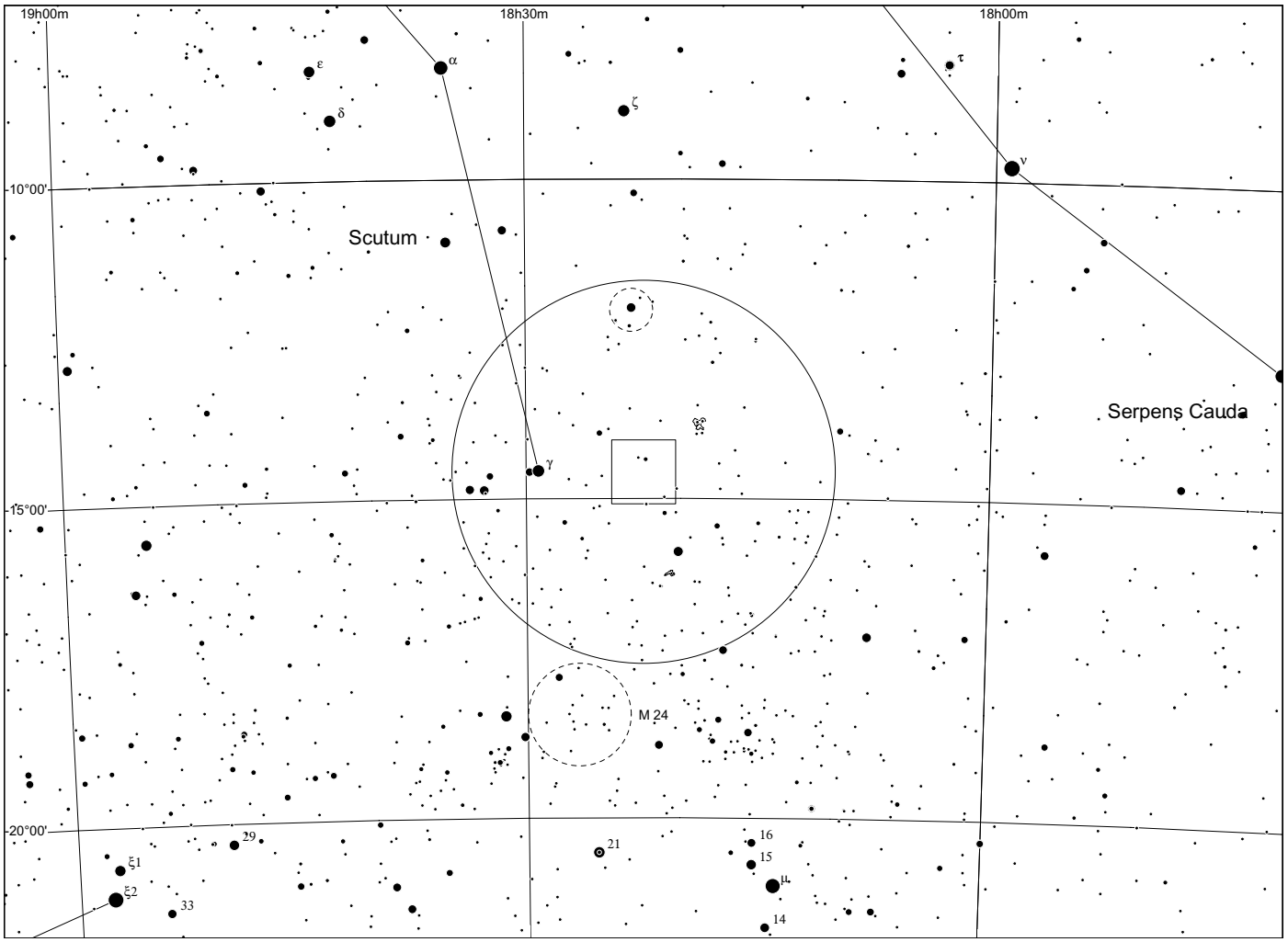
RGB Dean Salman

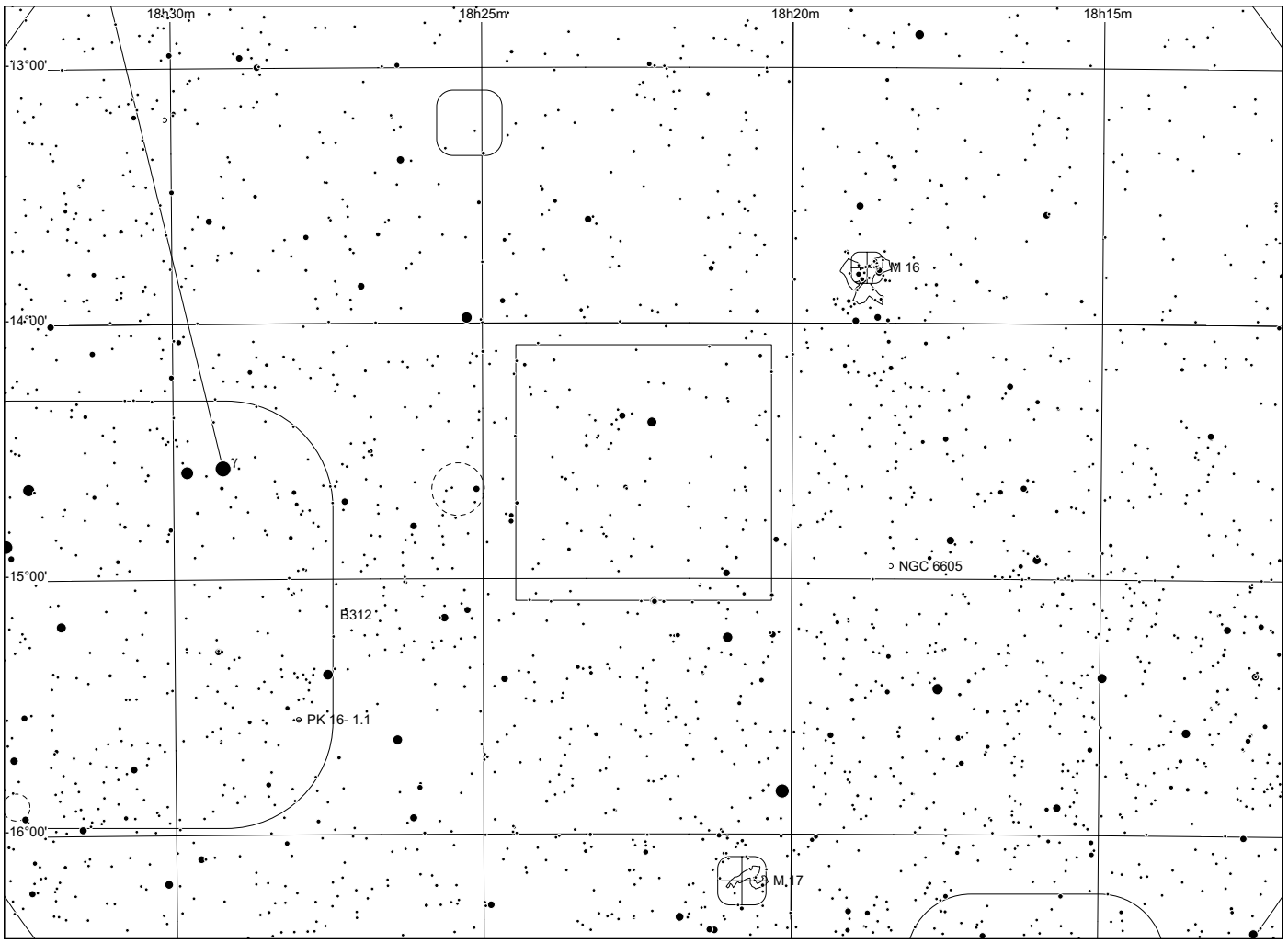
	other name	RA	dec	dia. '	F	S	B
Sh 2-048		18 22 24.1	-14 35 09	10	3	2	2

Distance: 3838 pc, Size: 12.3 pc, Source: 2003A&A...397..213P

This region may be associated with the Scutum supershell.

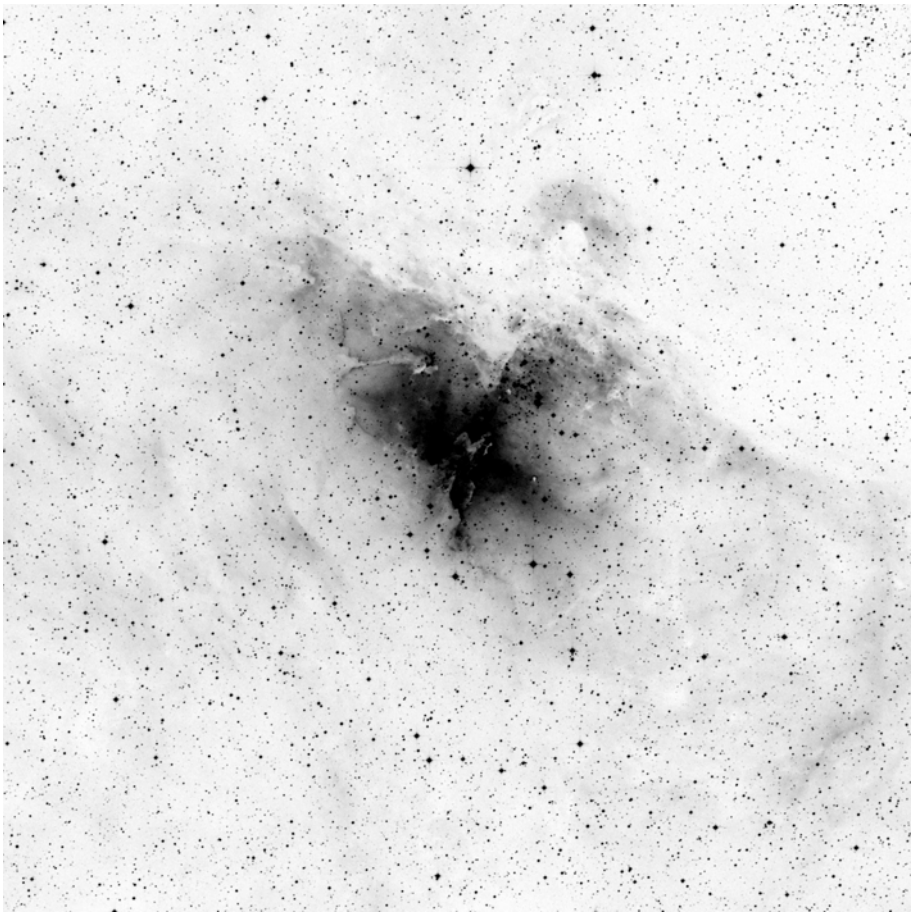
Observing notes:


19h00m
18h30m
18h00m
10°00'
15°00'
20°00'
Scutum
Serpens Cauda
M 24
ε
α
δ
ζ
τ
ν
γ
29
21
16
15
μ
14
ξ1
ξ2
33

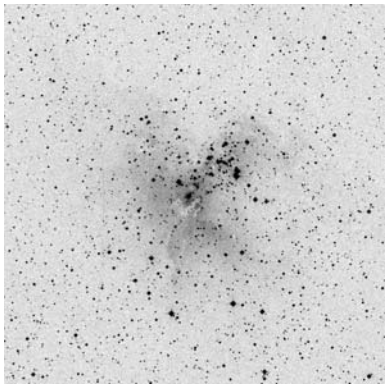

18h30m
18h25m
18h20m
18h15m
13°00'
14°00'
15°00'
16°00'
M 16
NGC 6605
B312
PK 16- 1.1
M 17
γ

Sh 2 - 49

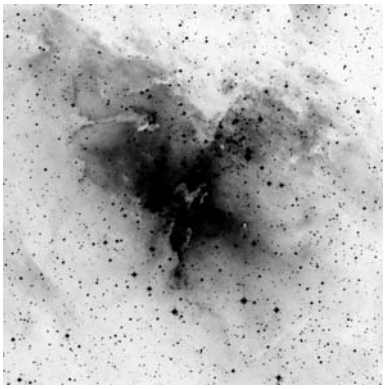
in Serpens



60x60, red



POSS blue



POSS red



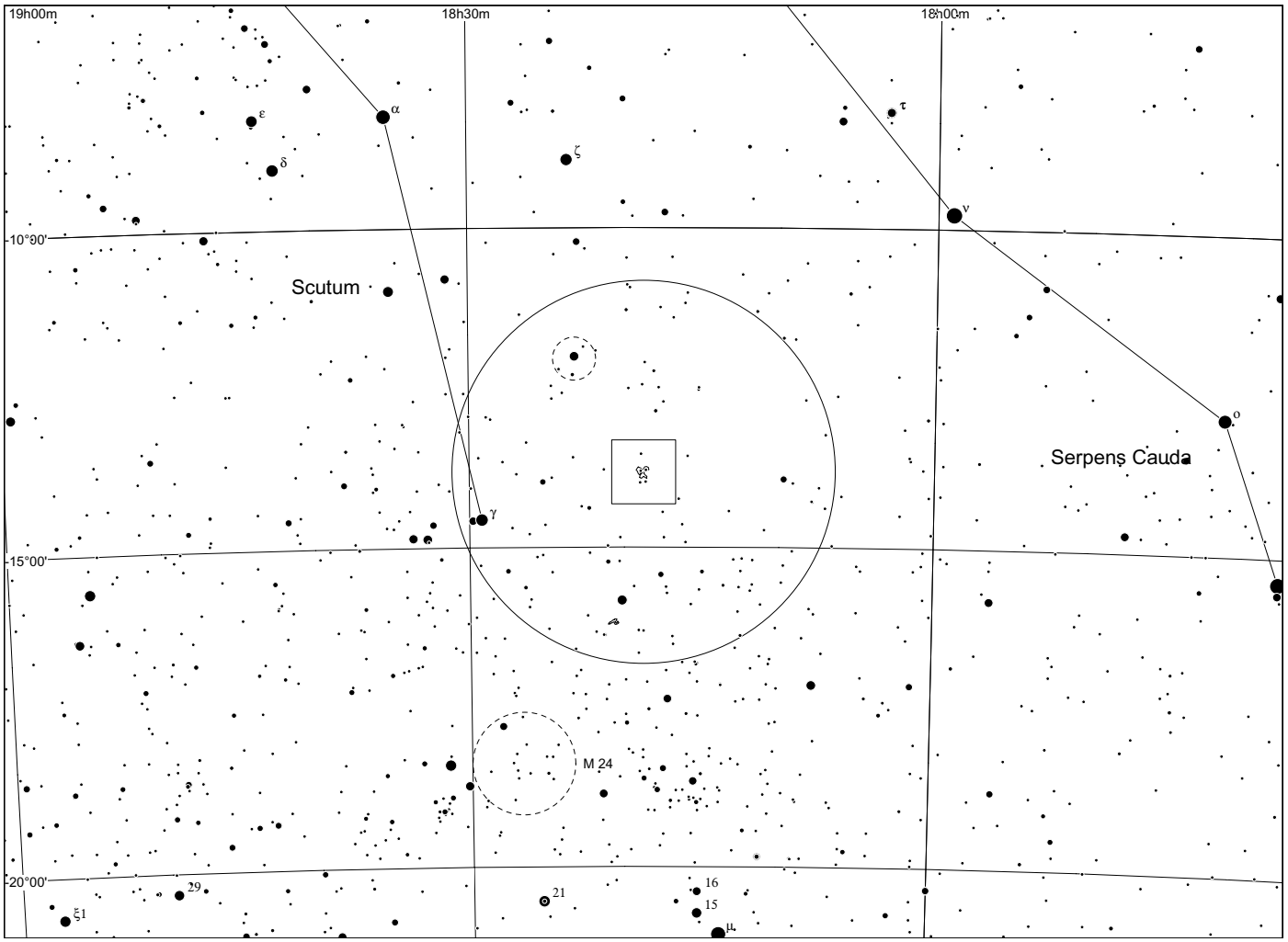
narrow band Dean Salman

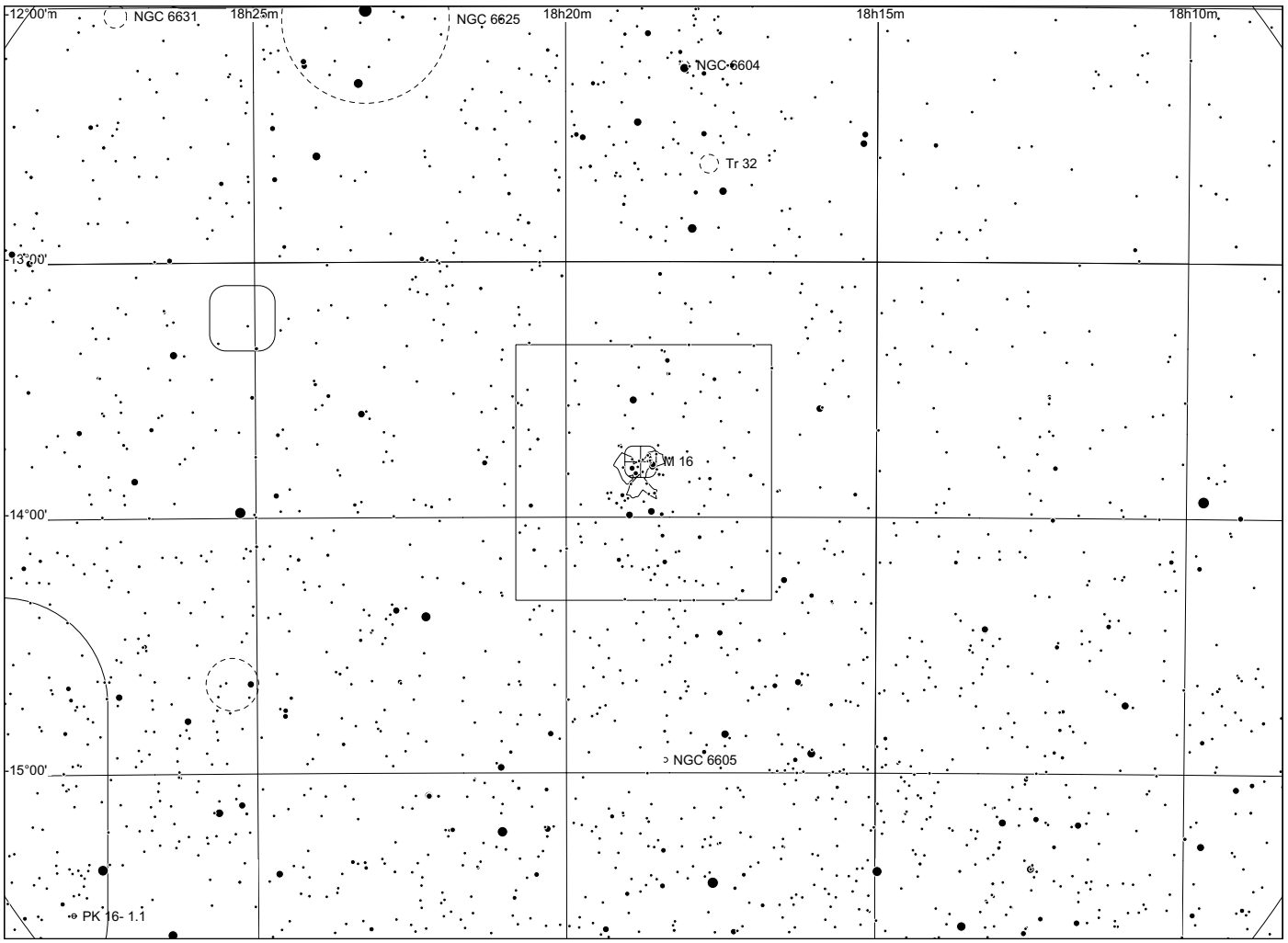
	other name	RA	dec	dia. '	F	S	B
Sh 2-049	M16 = NGC6611 = Eagle Nebula	18 18 40.3	-13 57 42	90	3	3	3

Distance: 1995 pc, Size: 51.8 pc, Source: 1993AJ....106.1906H

This is M16, the Eagle Nebula. It is part of the W37 molecular cloud and is ionized by the NGC 6611 star cluster, which is part of the Serpens OB1 association.

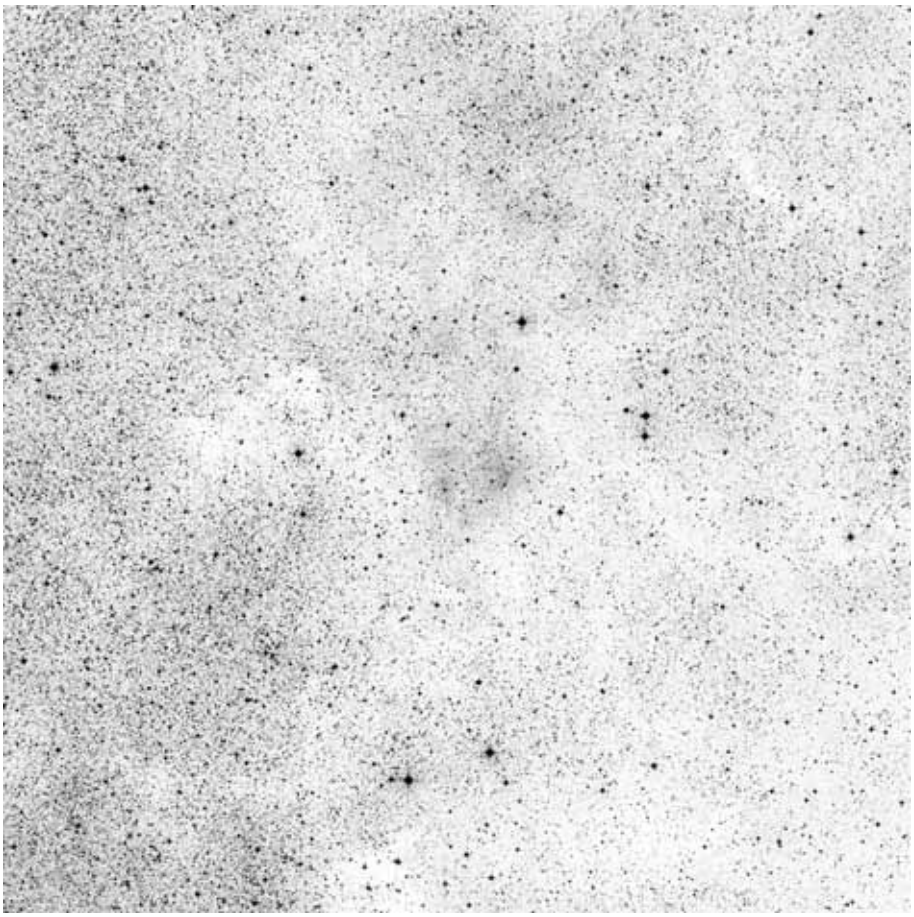
Observing notes:


19h00m
18h30m
18h00m
ε
α
τ
δ
ζ
ν
10°90'
Scutum
Serpens Cauda
ο
γ
15°00'
M 24
20°00'
29
21
16
15
ξ1
μ

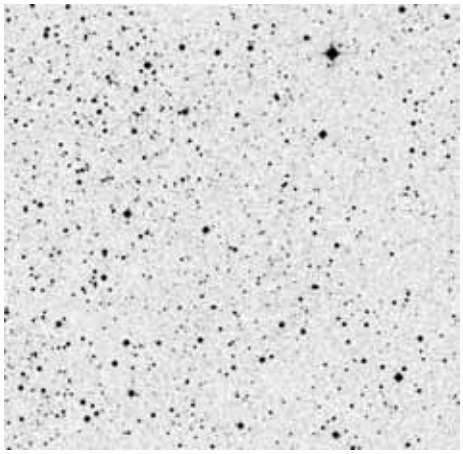

12°00'm
NGC 6631
18h25m
NGC 6625
18h20m
NGC 6604
18h15m
18h10m
Tr 32
3°00'
M 16
14°00'
15°00'
NGC 6605
PK 16- 1.1

Sh 2 - 50

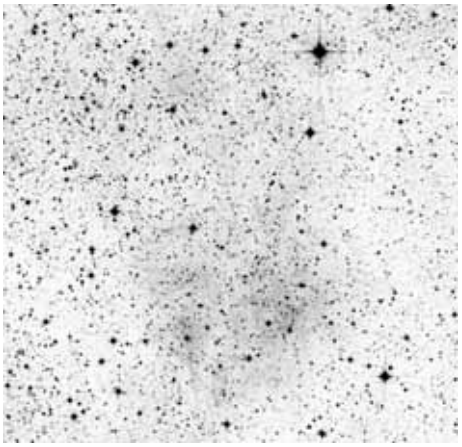
in Scutum



60x60, red



POSS blue



POSS red



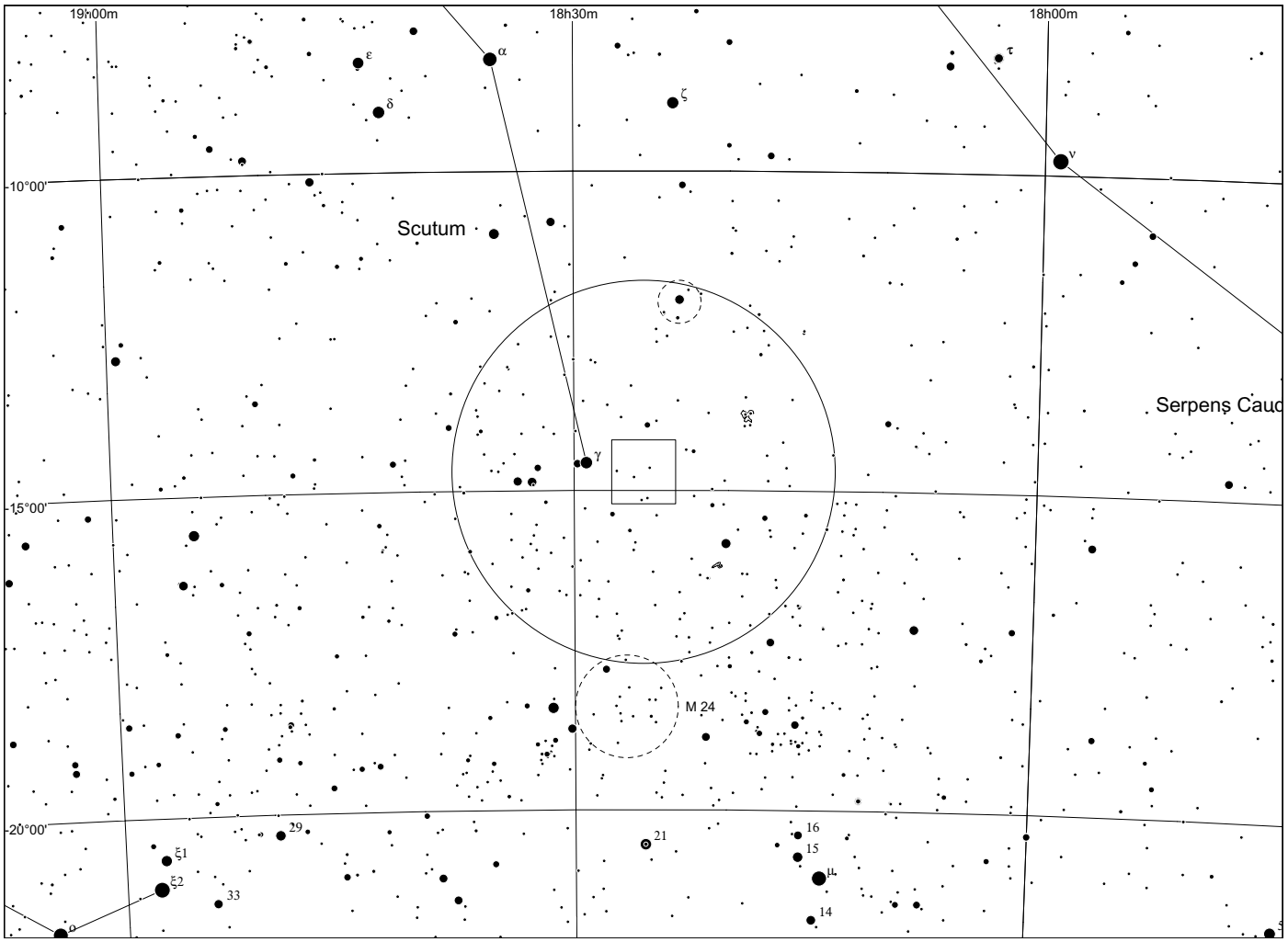
narrow band

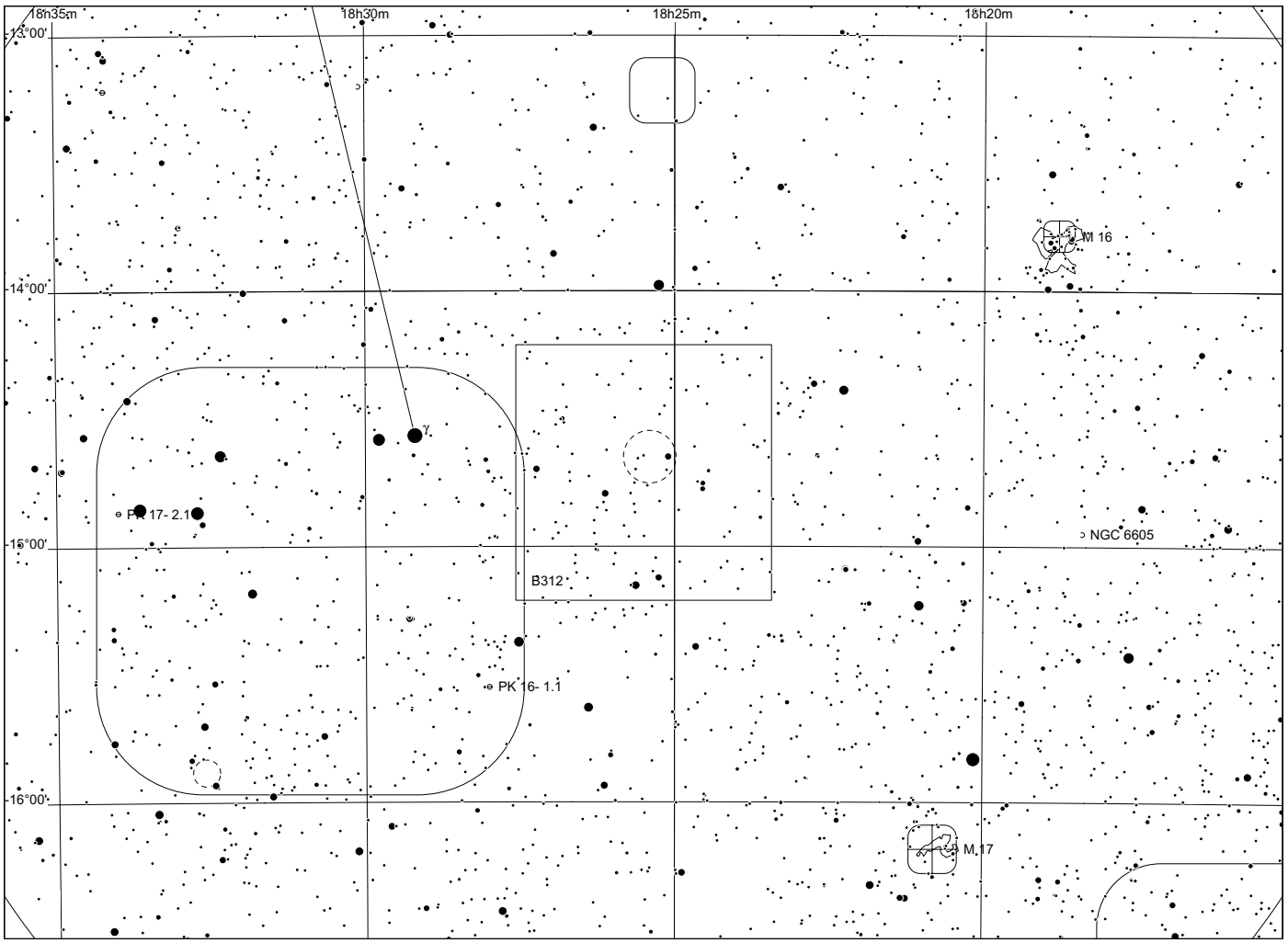
	other name	RA	dec	dia. '	F	S	B
Sh 2-050		18 25 30.2	-14 42 42	35	3	2	2

Distance: 1700 pc, Size: 17.3 pc, Source: 1982ApJS...49..183B

This may be associated with the Scutum supershell.

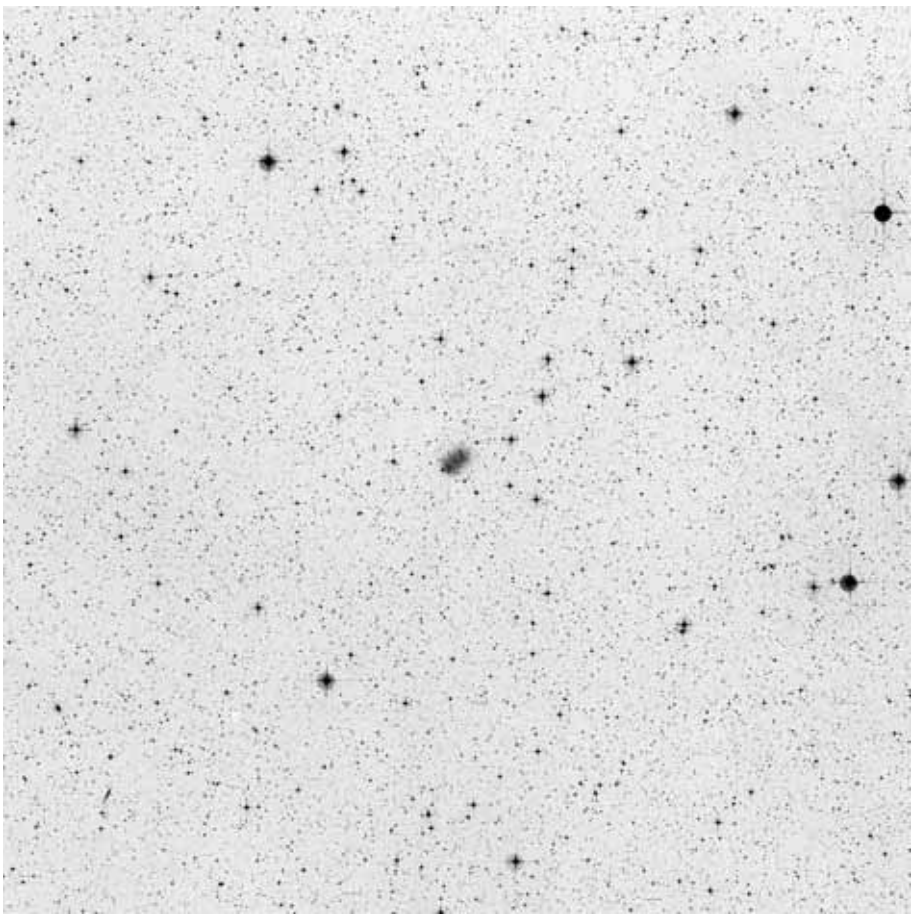
Observing notes:


19h00m
18h30m
18h00m
10°00'
15°00'
20°00'
Scutum
Serpens Cauc
M 24
α
ε
δ
ζ
τ
ν
γ
29
21
16
15
μ
14
ξ1
ξ2
33

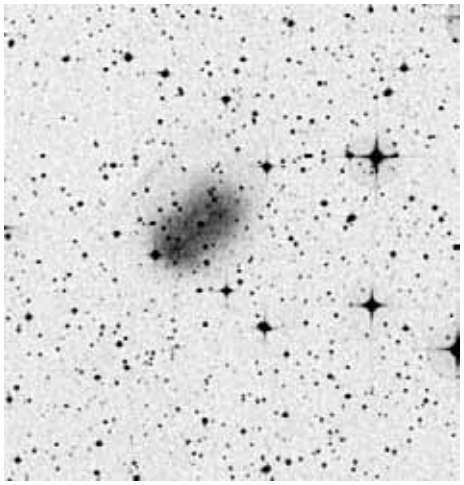

18h35m
18h30m
18h25m
18h20m
13°00'
14°00'
15°00'
16°00'
M 16
γ
PK 17- 2.1
B312
PK 16- 1.1
NGC 6605
M 17

Sh 2 - 52

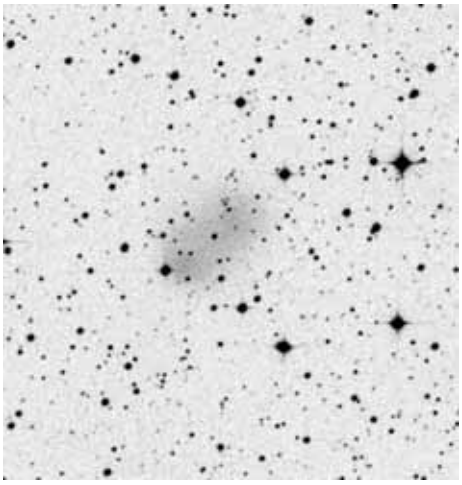
in Sagittarius



60x60, blue



POSS blue



POSS red



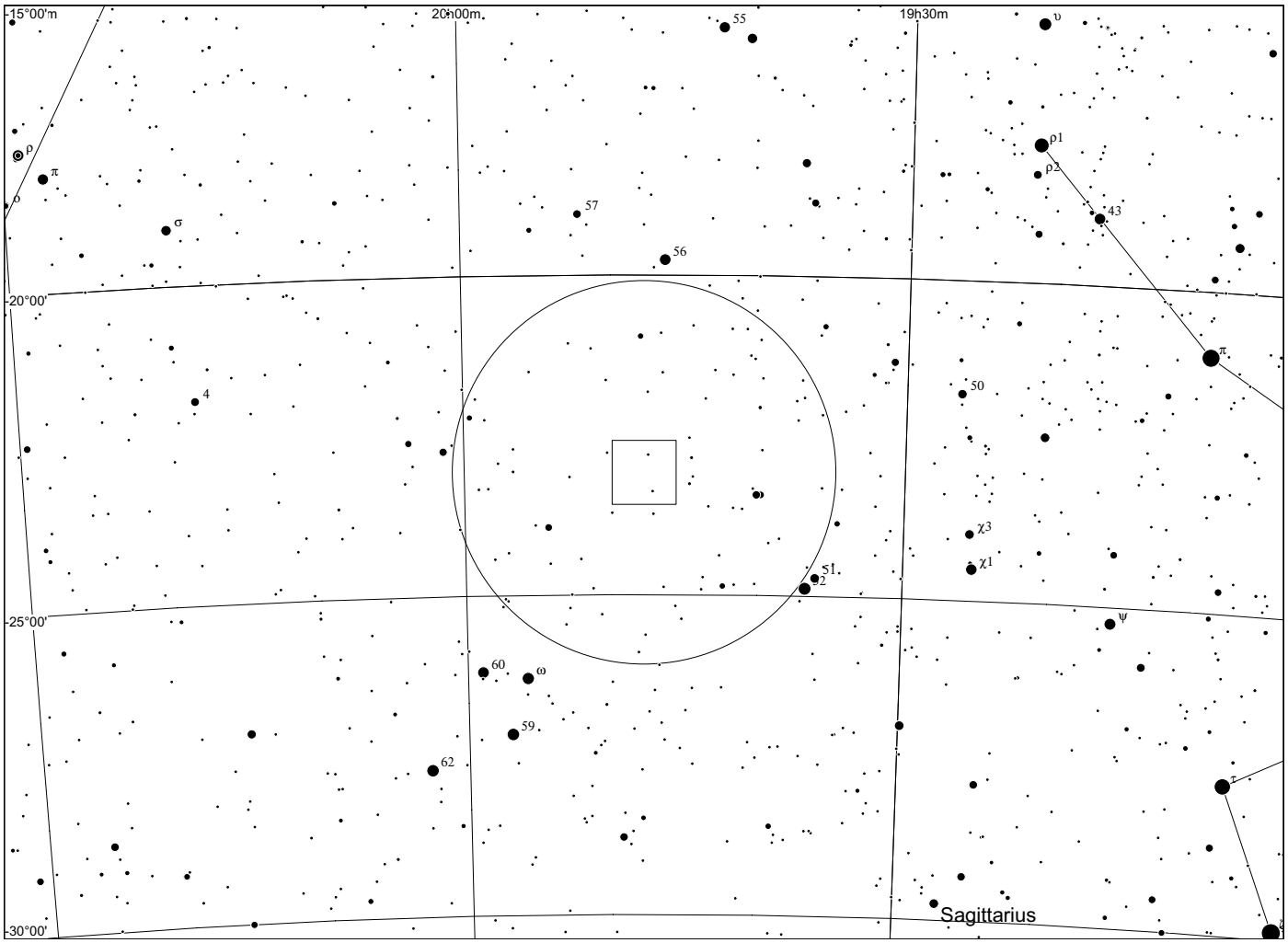
composite

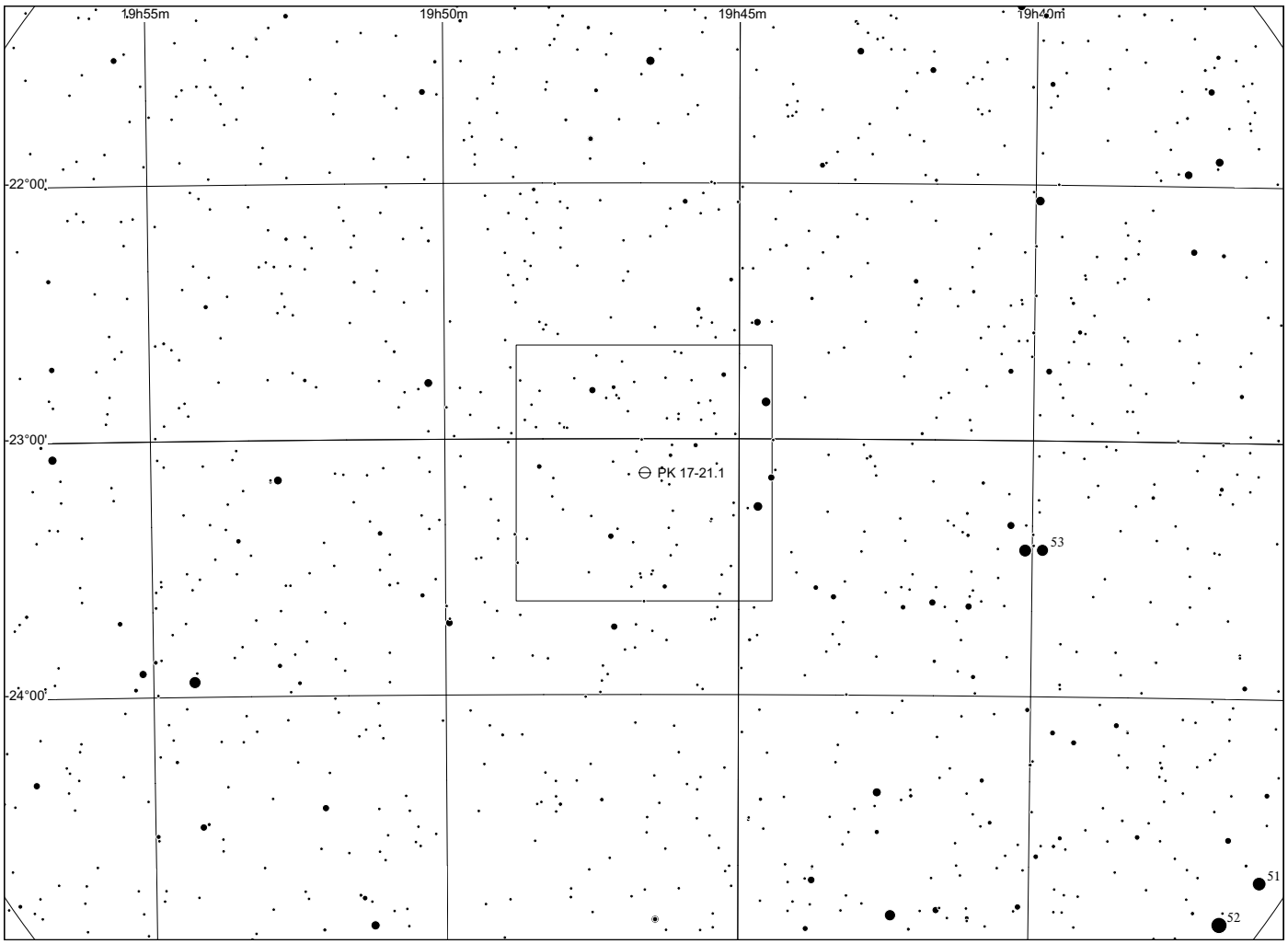
	other name	RA	dec	dia. '	F	S	B
Sh 2-052	PN Abell 65	19 47 46.3	-23 05 15	2	2	1	2

Distance: 1500 pc, Size: 0.9 pc, Source: 1996A&A...315..253W

The faint blue glow comes from the planetary nebula also known as Abell 65. It is highly unusual for a planetary nebula because it contains an eclipsing binary central star. See Sh 2-313 for another example of such a blue planetary nebula with a binary central star.

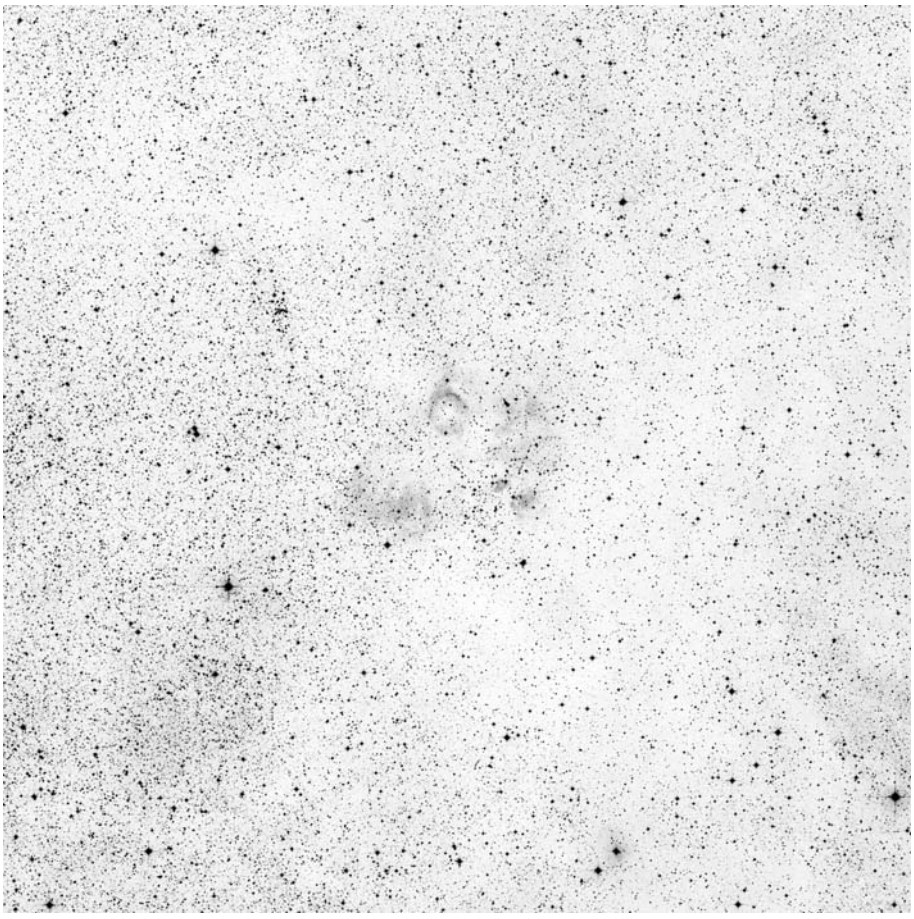
Observing notes:


15°00'm
20h00m
19h30m
55
υ
ρ
π
ρ1
ρ2
43
σ
57
56
20°00'
4
50
χ3
χ1
51
ψ
25°00'
60
ω
59
62
Sagittarius
30°00'

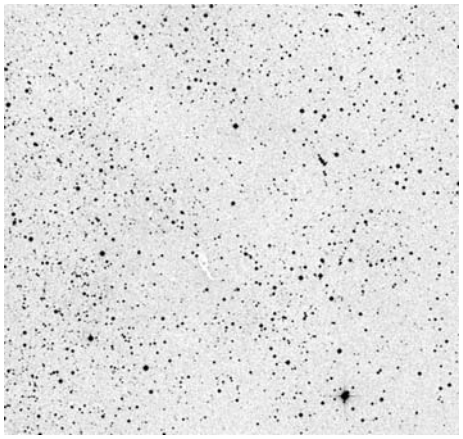

19h55m
19h50m
19h45m
19h40m
22°00'
PK 17-21.1
53
23°00'
24°00'
51
52

Sh 2 - 53

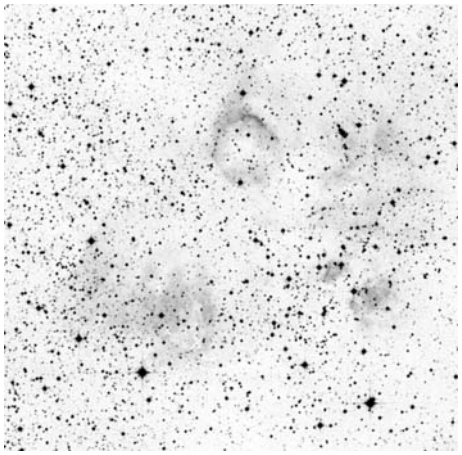
in Scutum



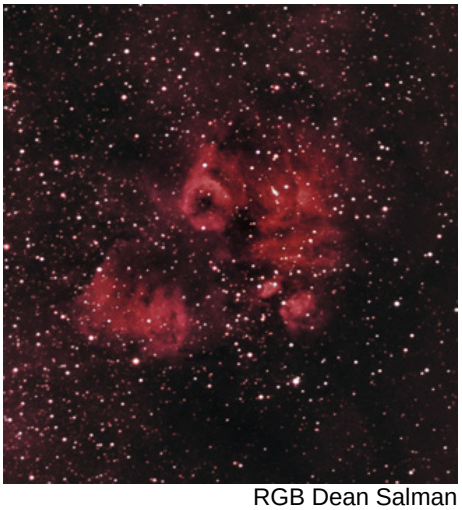
60x60, red



POSS blue



POSS red



RGB Dean Salman

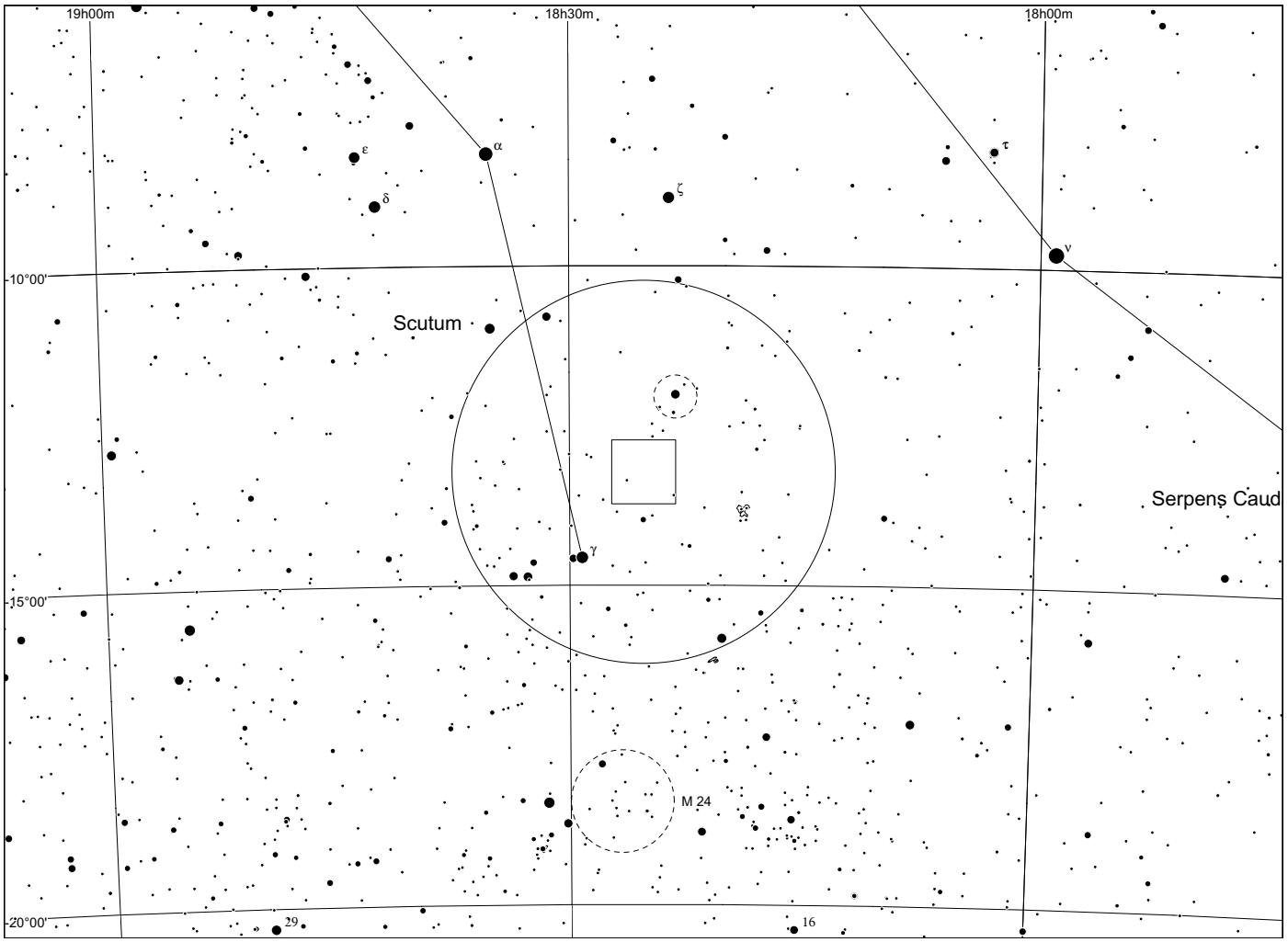
	other name	RA	dec	dia. '	F	S	B
Sh 2-053		18 25 14.4	-13 13 44	15	3	2	2

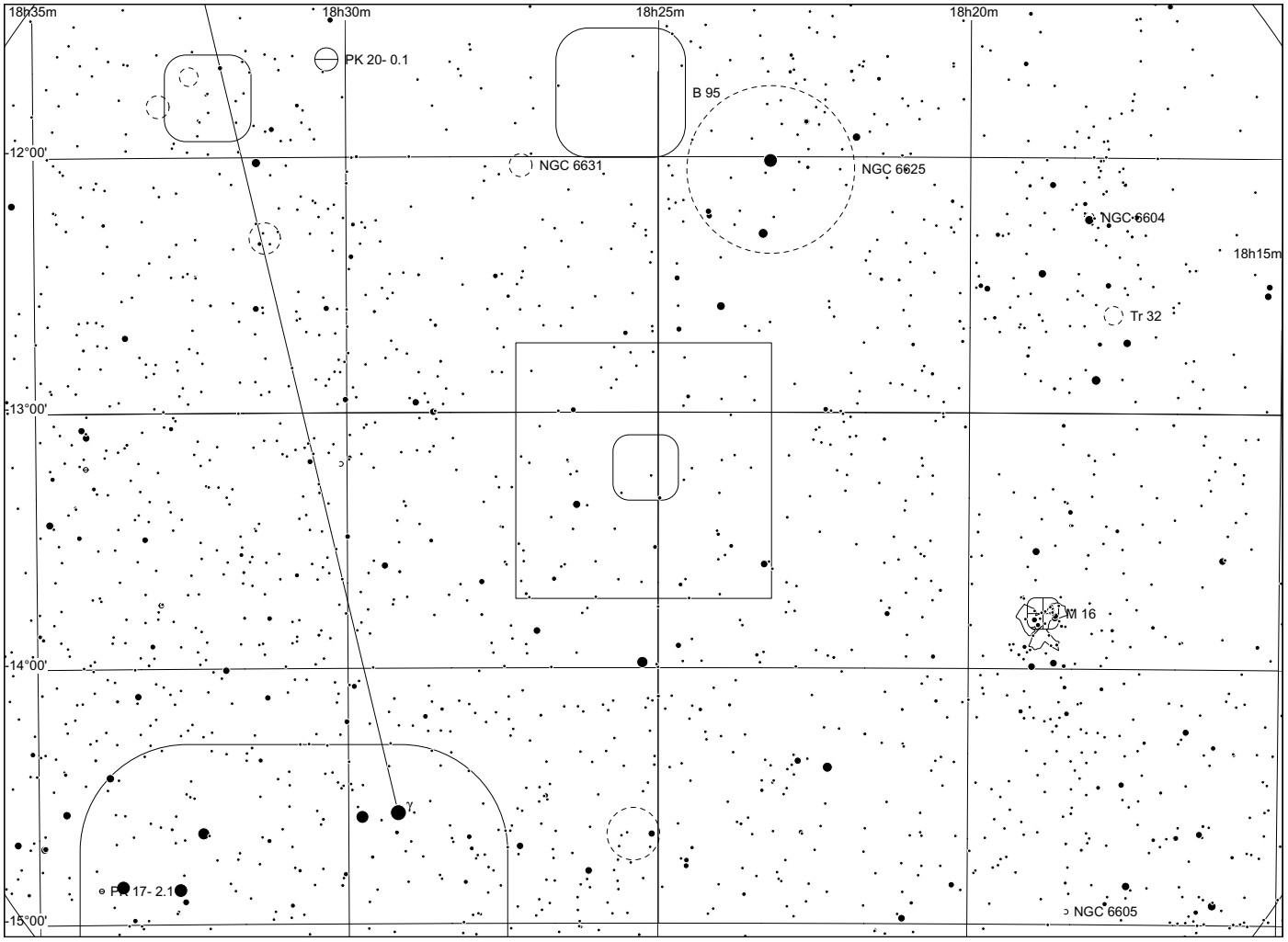
Also: RCW 166 (18.20°, -0.30°) Distance: 3798 pc, Size: 9.4 pc Source: 2003A&A...397..213P

This is in the same area of sky as the Scutum supershell.

This nebula is mentioned in connection to gamma ray source 2EG J1825-1307, which is assigned a distance estimate of 4300 parsecs. SIMBAD identifies this gamma ray source with the pulsar PWN G18.0-0.7 and the supernova remnant SNR 018.0-00.7.

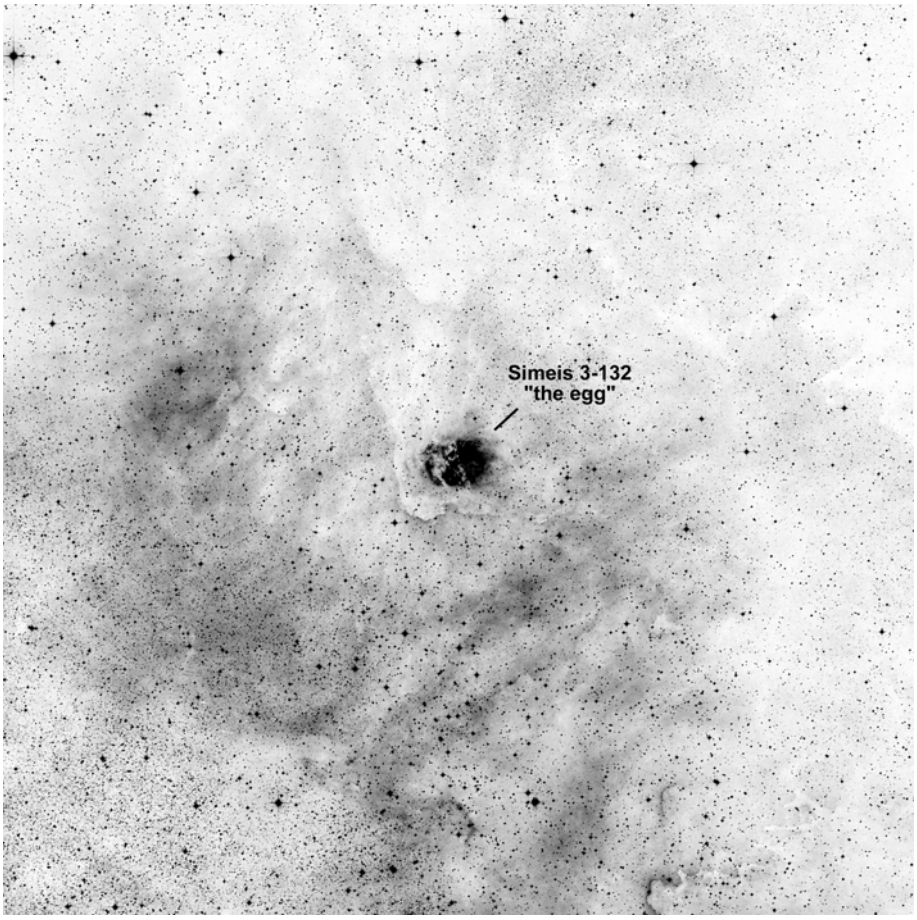
Observing notes:


19h00m
18h30m
18h00m
ε
α
τ
δ
ζ
ν
10°00'
Scutum
Serpens Caud
γ
15°00'
M 24
20°00'
29
16

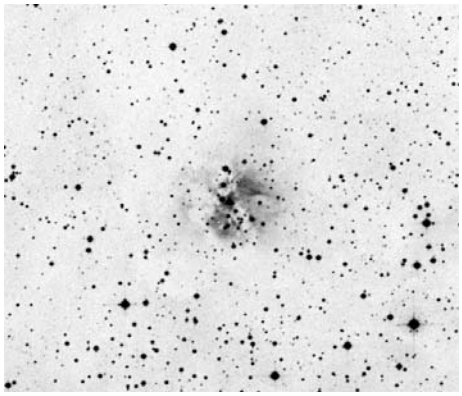

18h35m
18h30m
18h25m
18h20m
PK 20- 0.1
B 95
12°00'
NGC 6631
NGC 6625
NGC 6604
18h15m
Tr 32
13°00'
M 16
14°00'
γ
PK 17- 2.1
15°00'
NGC 6605

Sh 2 - 54

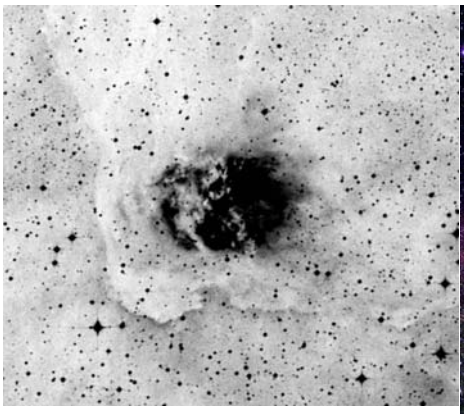
in Serpens



60x60, red



POSS blue



POSS red



composite

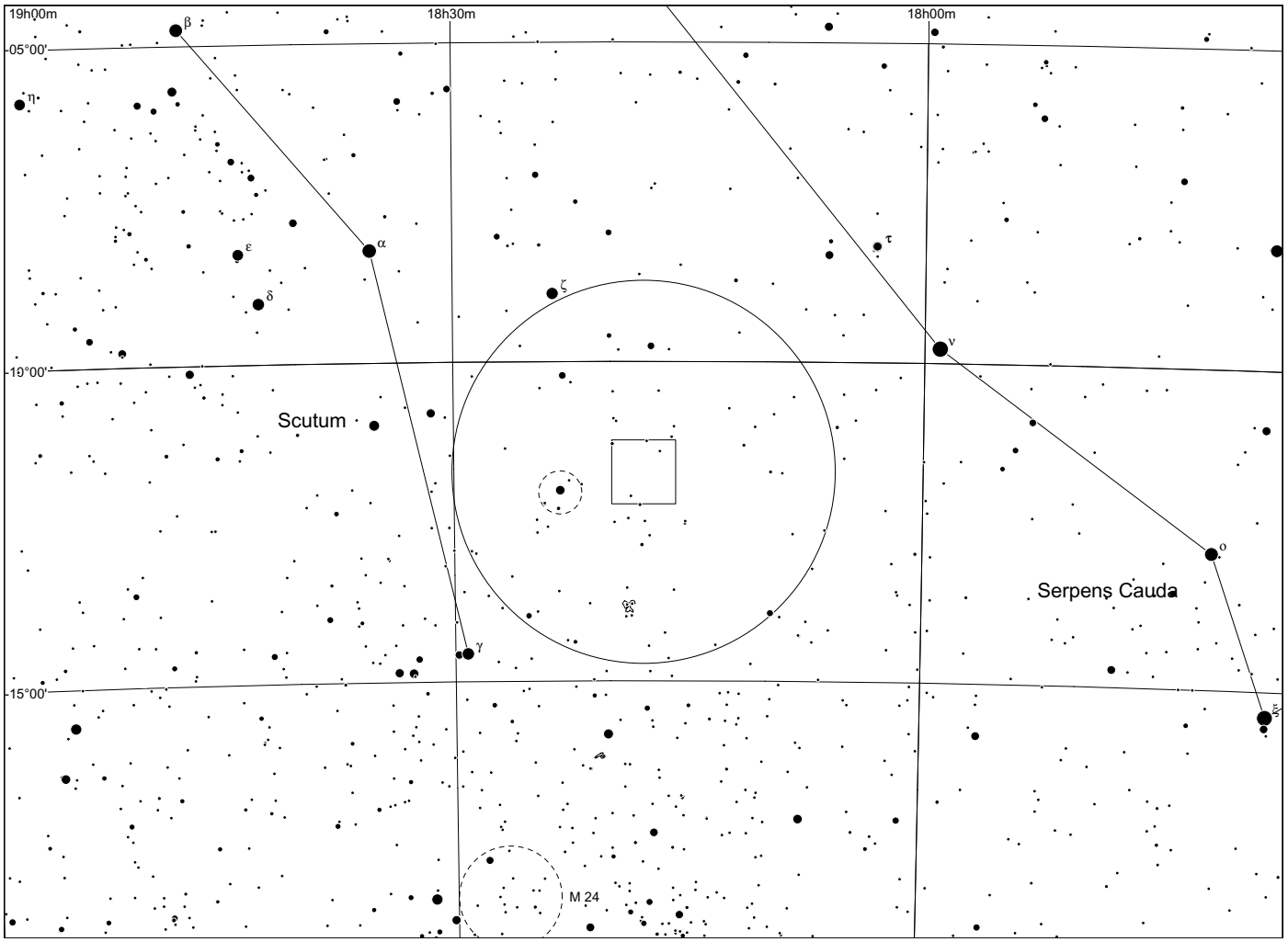
	other name	RA	dec	dia. '	F	S	B
Sh 2-054	Contains NGC6604	18 17 52.6	-11 43 48	140	3	3	3

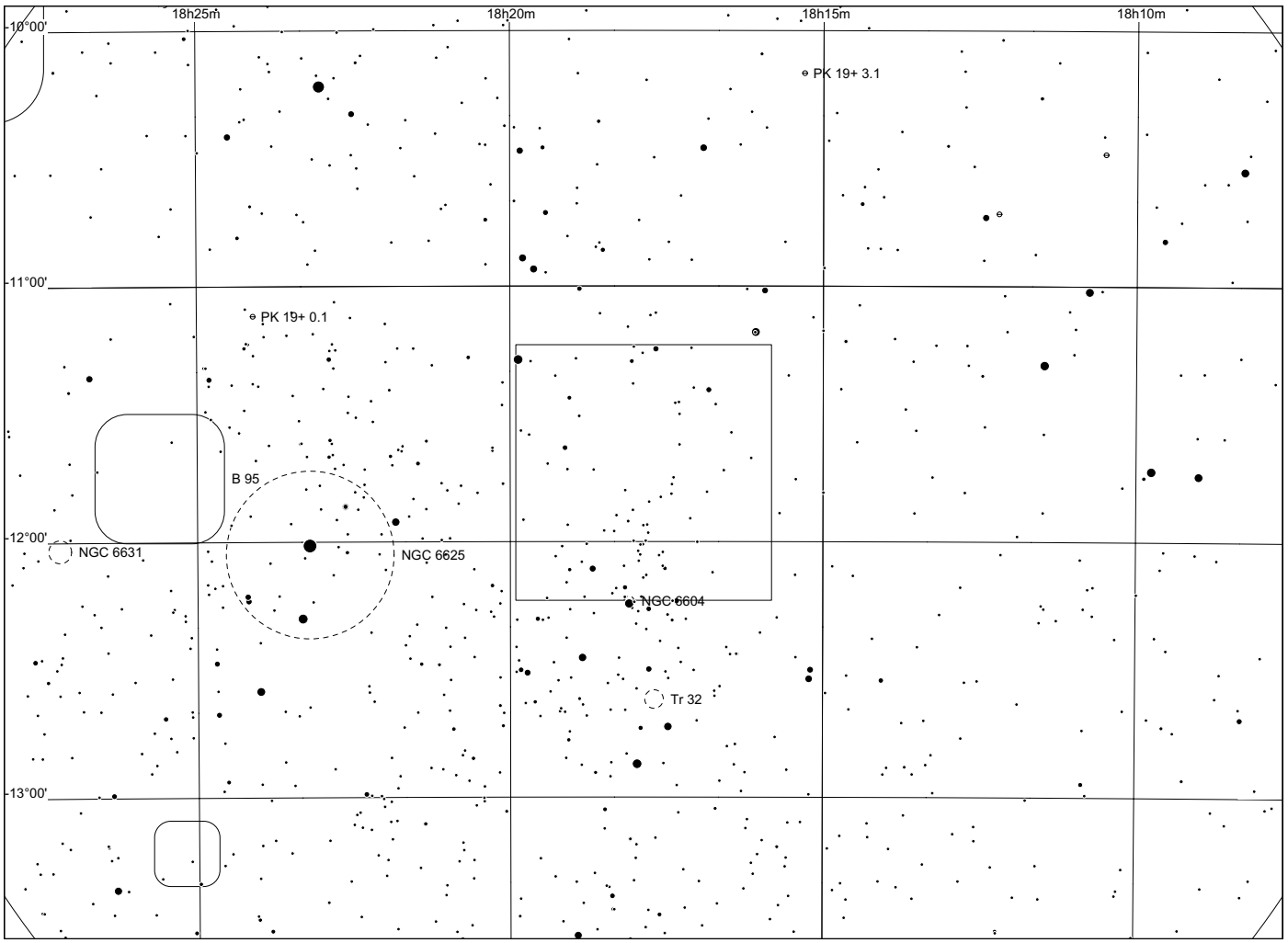
Also: Gum 85 (18.70°, 2.00°) Distance: 1900 pc, Size: 10.8 pc Source: 2000AJ....120.2594F

This HII region is associated with the Serpens OB2 association and the NGC 6604 star cluster and is the core of the W35 star formation region. It lies, unusually, about 70 parsecs above the galactic plane. Serpens OB2 contains over 100 OB stars with a common age of about 5 million years.

Sharpless describes a large region, so this nebula would be the large nebula, not just the small bright one within. A good image of this nebula, which looks like a nest carrying a tiny egg, can been seen here. NGC 6604 lies towards the bottom of Sh 2-54. It is not clear from the scientific literature what is causing the remarkably intense glow of the "egg".

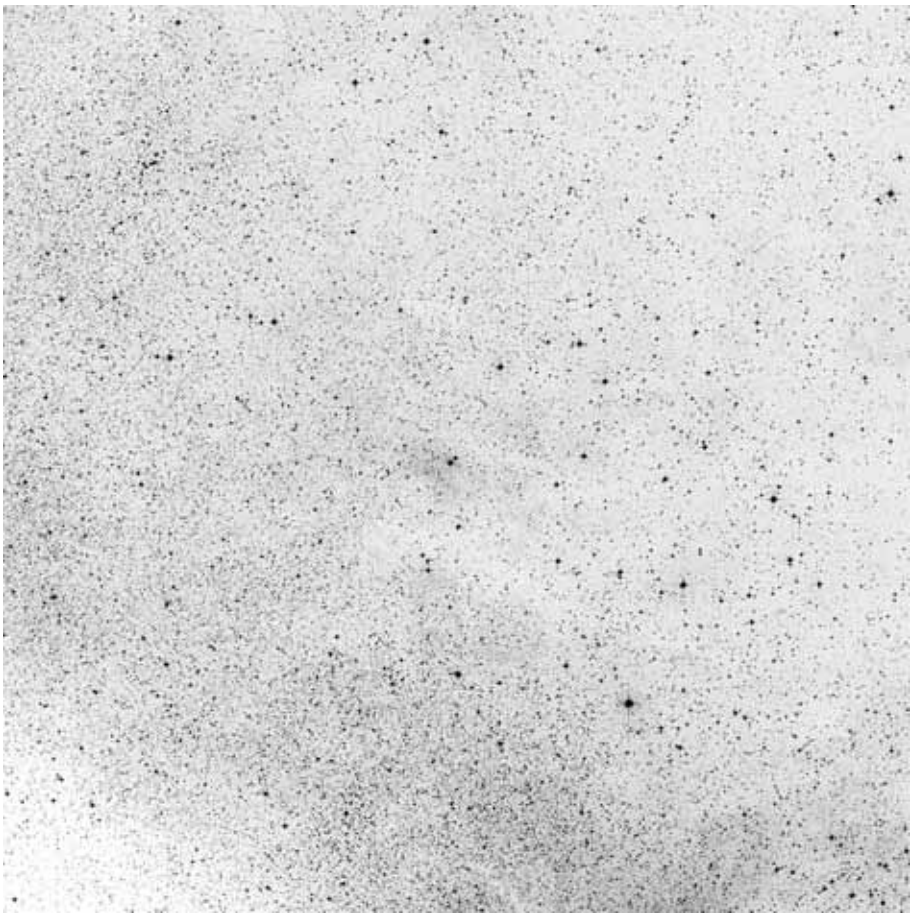
Observing notes:


19h00m
18h30m
18h00m
05°00'
15°00'
β
η
ε
α
δ
ζ
τ
ν
ο
γ
Scutum
Serpens Cauda
M 24

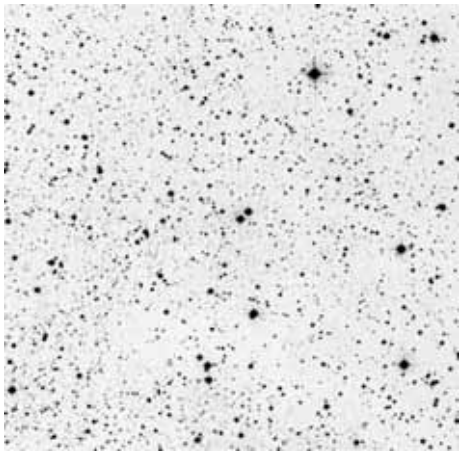

18h25m
18h20m
18h15m
18h10m
10°00'
11°00'
12°00'
13°00'
PK 19+ 3.1
PK 19+ 0.1
B 95
NGC 6631
NGC 6625
NGC 6604
Tr 32

Sh 2 - 55

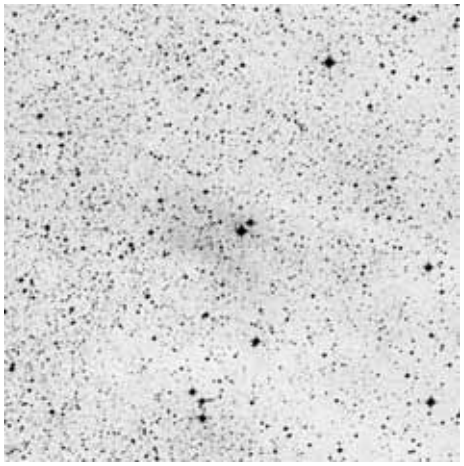
in Scutum



60x60, red



POSS blue



POSS red



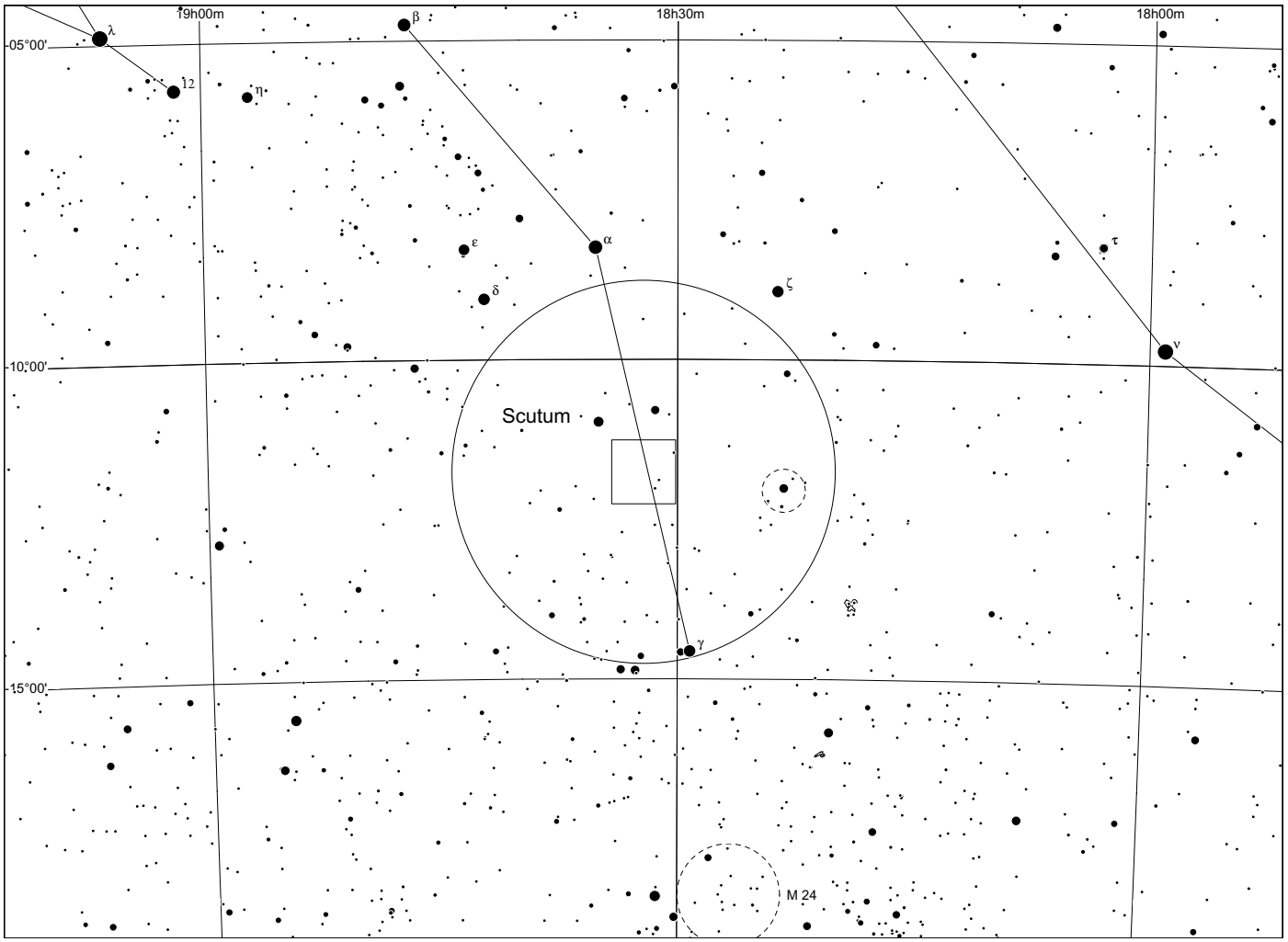
composite

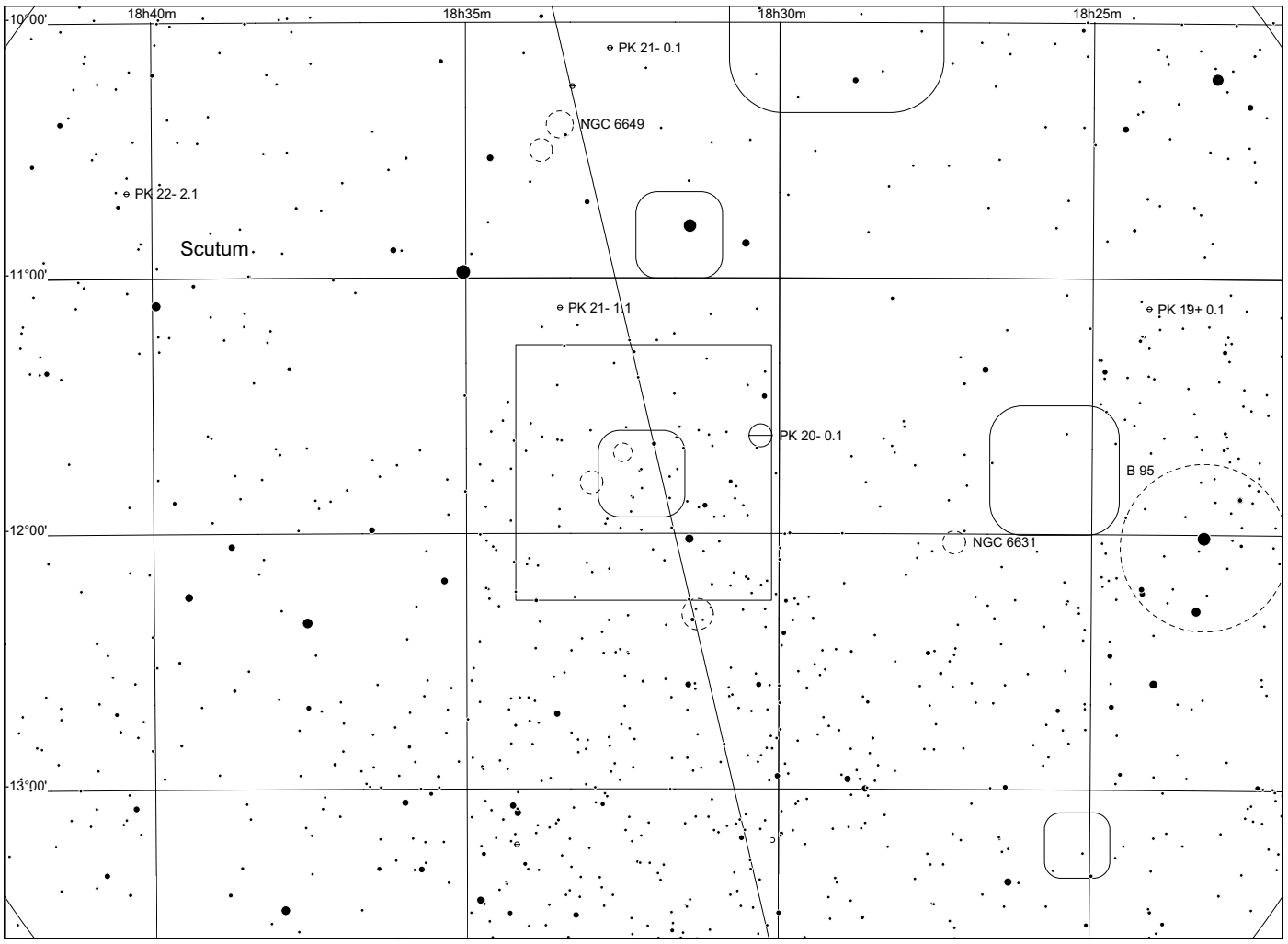
	other name	RA	dec	dia. '	F	S	B
Sh 2-055		18 32 10.5	-11 45 44	5	3	2	1

Distance: 3300 pc, Size: 4.8 pc Source: 2003A&A...397..133R

This HII region, also called LBN 73, may be part of the Scutum supershell. The dark nebula immediately below Sh 2-55 is LDN 412. Sh 2-55 is near a large nebular region in hydrogen-alpha that appears to mark the main boundary of the Scutum Supershell.

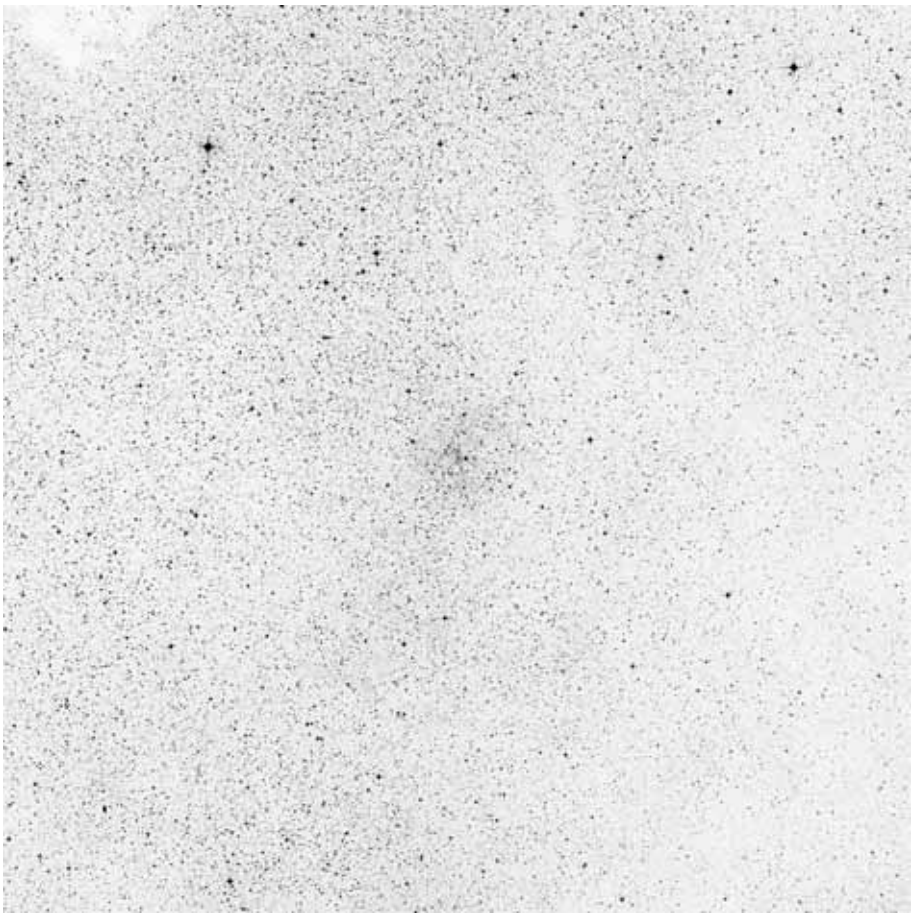
Observing notes:


19h00m
18h30m
18h00m
05°00'
10°00'
15°00'
λ
β
12
η
ε
α
δ
ζ
τ
ν
Scutum
γ
M 24

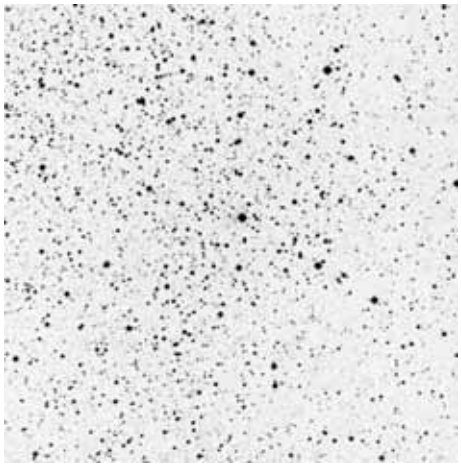

10°00'
18h40m
18h35m
18h30m
18h25m
PK 21- 0.1
NGC 6649
PK 22- 2.1
Scutum
11°00'
PK 21- 1.1
PK 19+ 0.1
PK 20- 0.1
B 95
12°00'
NGC 6631
13°00'

Sh 2 - 56

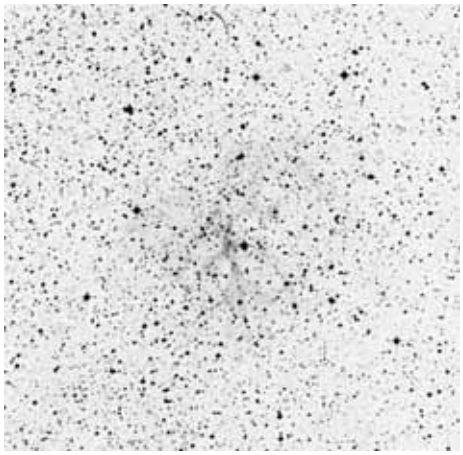
in Scutum



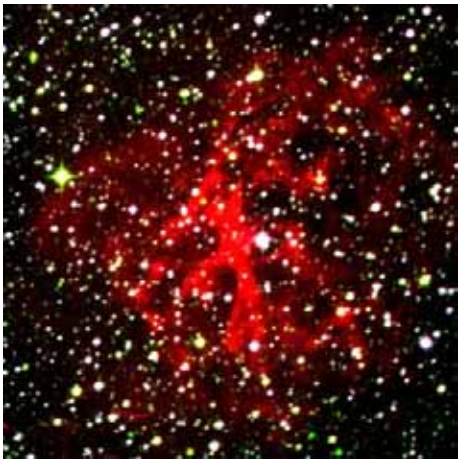
60x60, red



POSS blue



POSS red



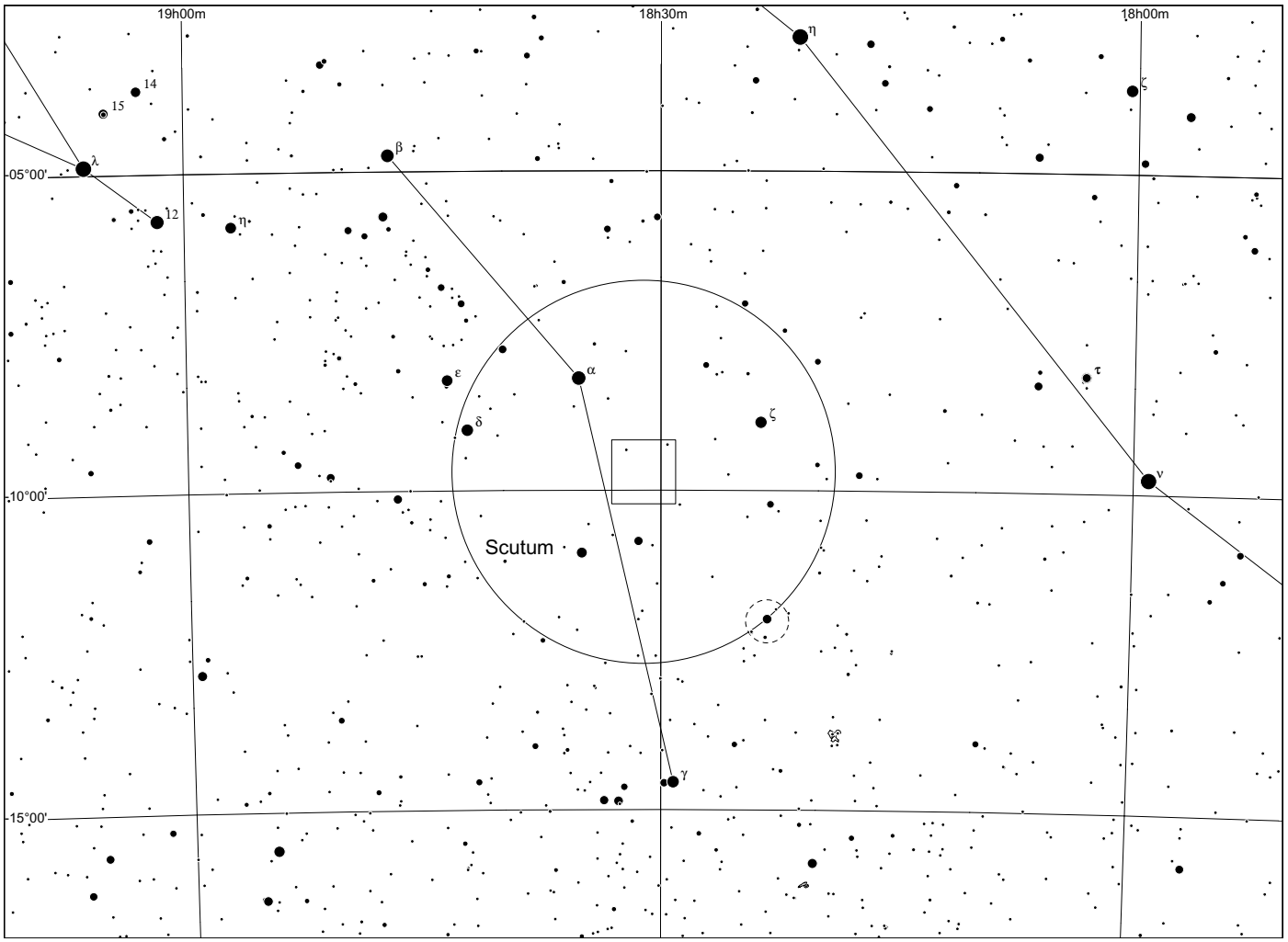
composite

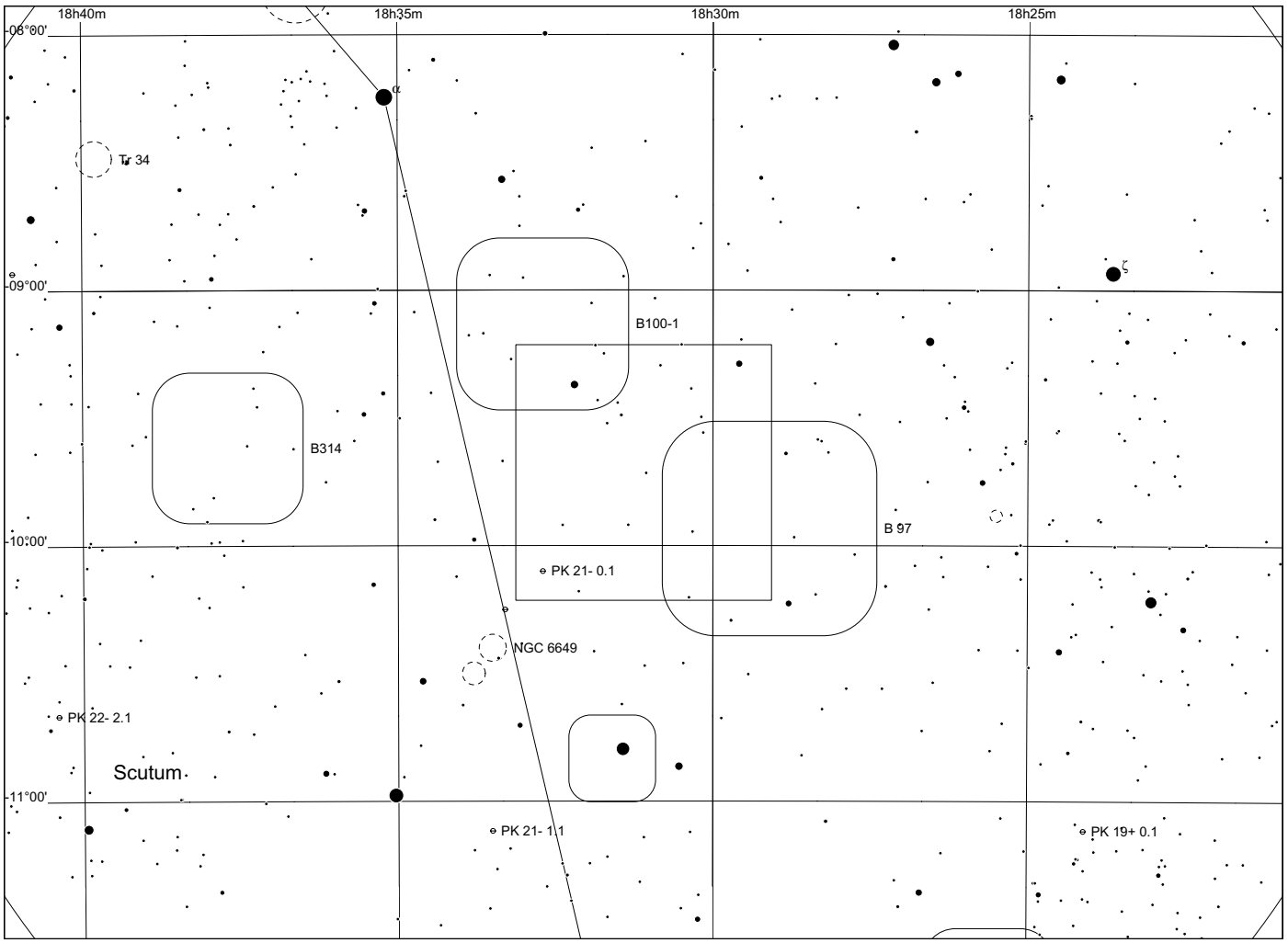
	other name	RA	dec	dia. '	F	S	B
Sh 2-056		18 31 06.1	-09 42 52	7	1	2	1

Also: RCW 169 (21.97°, 0.06°) Distance: 4800 pc, Size: 9.8 pc Source: 2003A&A...397..133R

This HII region is the luminous water maser GAL 021.88+00.02

Observing notes:


19h00m
18h30m
18h00m
-05°00'
-10°00'
-15°00'
14
15
λ
12
η
β
ε
α
δ
ζ
η
ζ
τ
ν
γ
Scutum

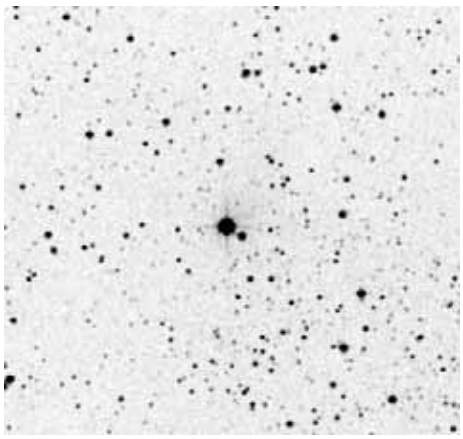

18h40m
18h35m
18h30m
18h25m
-08°00'
-09°00'
-10°00'
-11°00'
α
Tr 34
ζ
B100-1
B314
B 97
PK 21- 0.1
NGC 6649
PK 22- 2.1
Scutum
PK 21- 1.1
PK 19+ 0.1

Sh 2 - 57

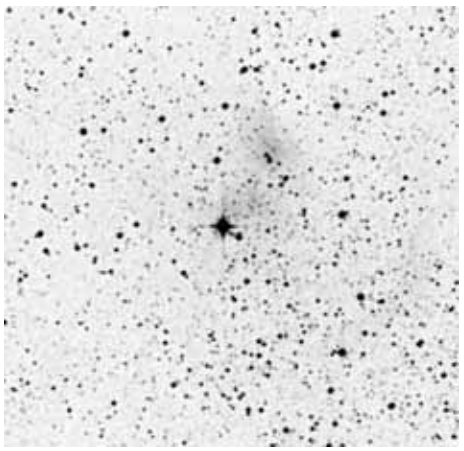
in Scutum



60x60, red



POSS blue



POSS red



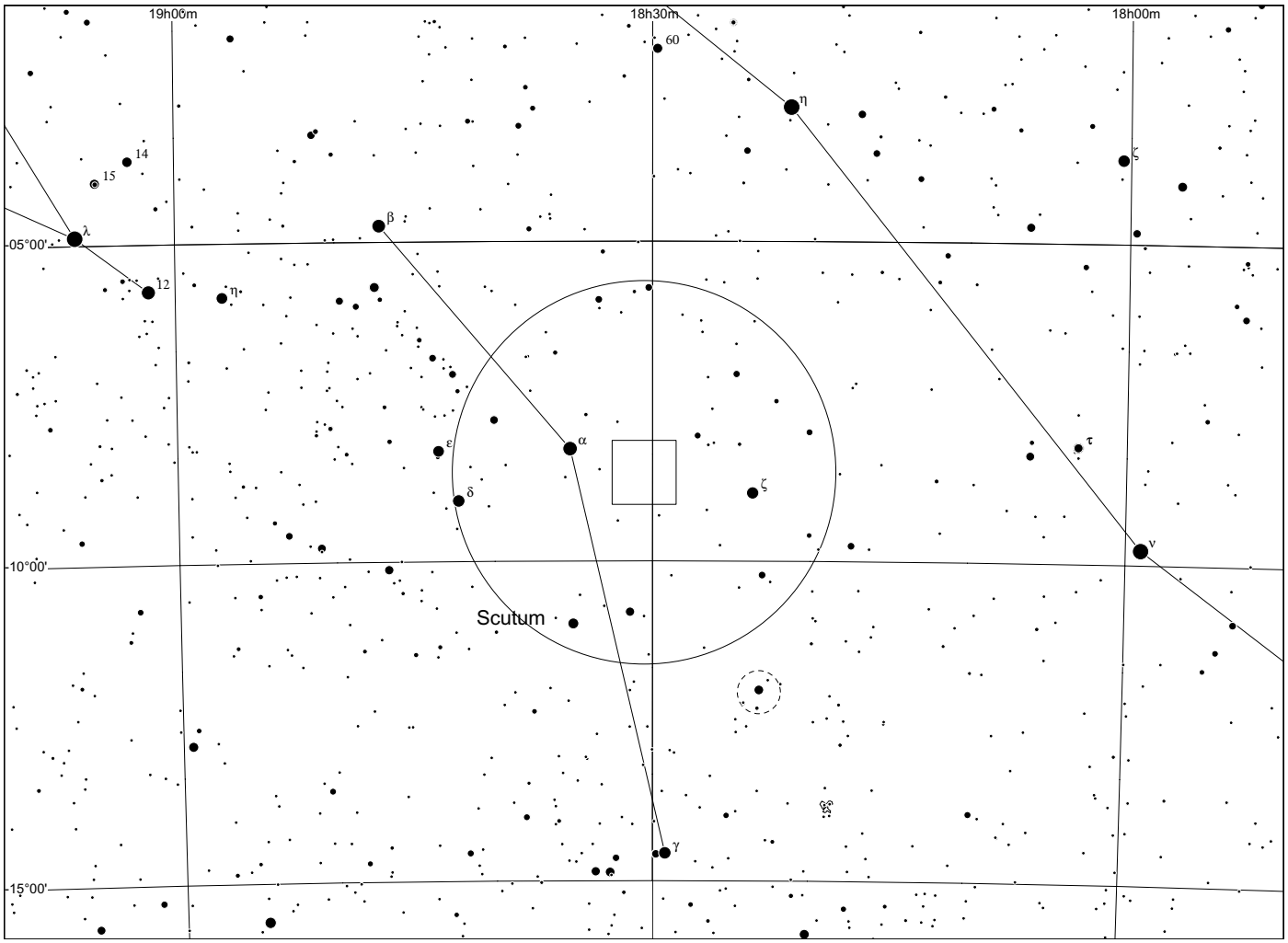
composite

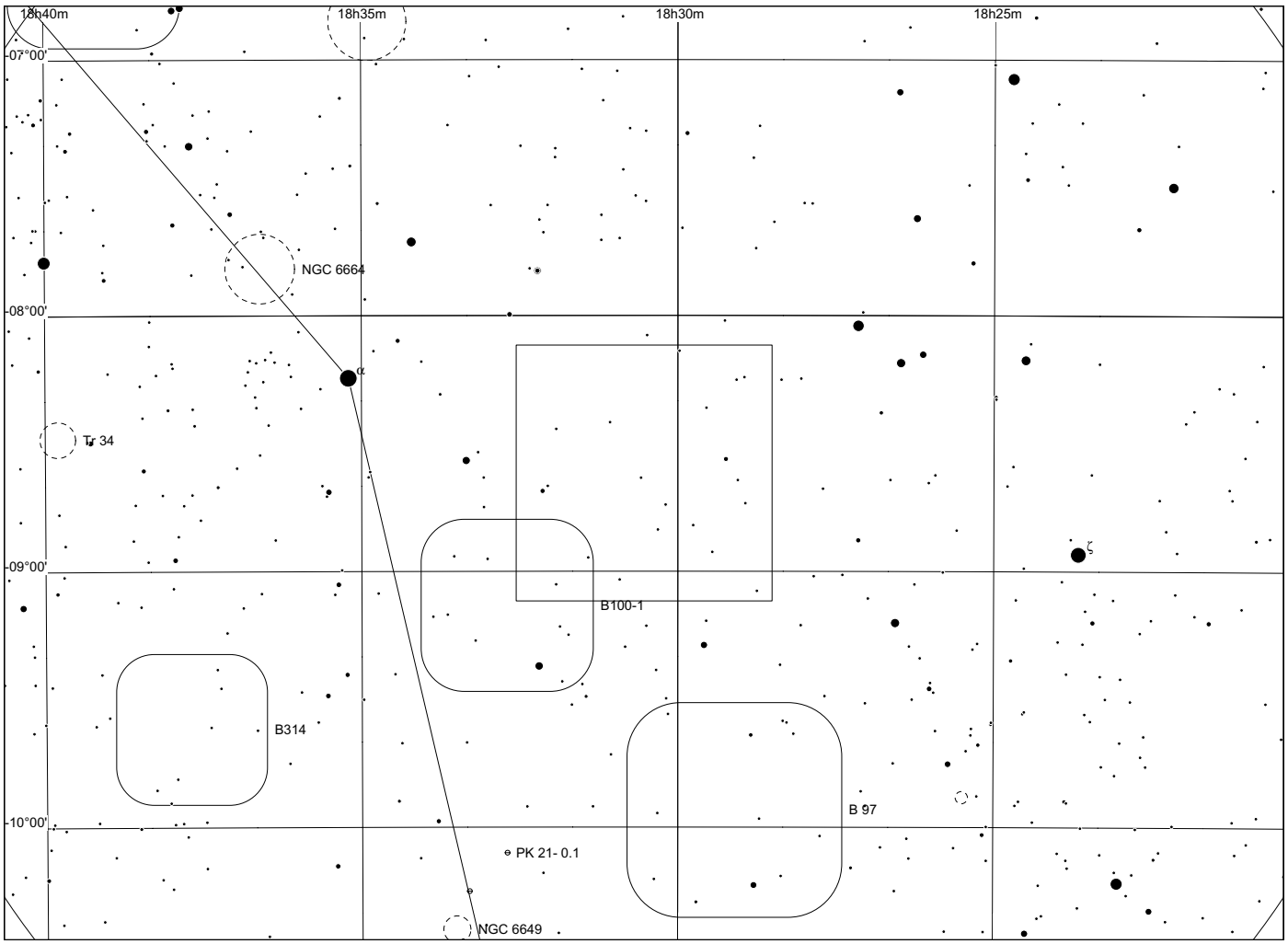
	other name	RA	dec	dia. '	F	S	B
Sh 2-057		18 30 32.8	-08 36 58	2	3	2	1

(22.89°, 0.68°) Distance: 1500 pc, Size: 0.9 pc Source: 1982ApJS...49..183B

Sh 2-57 and Sh 2-58 are visible together in the sky (as shown by this hydrogen-alpha image), divided by the dark nebula LDN 446 and just east of the Scutum Supershell. However, they seem to be located at quite different distances, with Sh 2-58 at about the same distance as the Supershell and Sh 2-57 in front of this region.

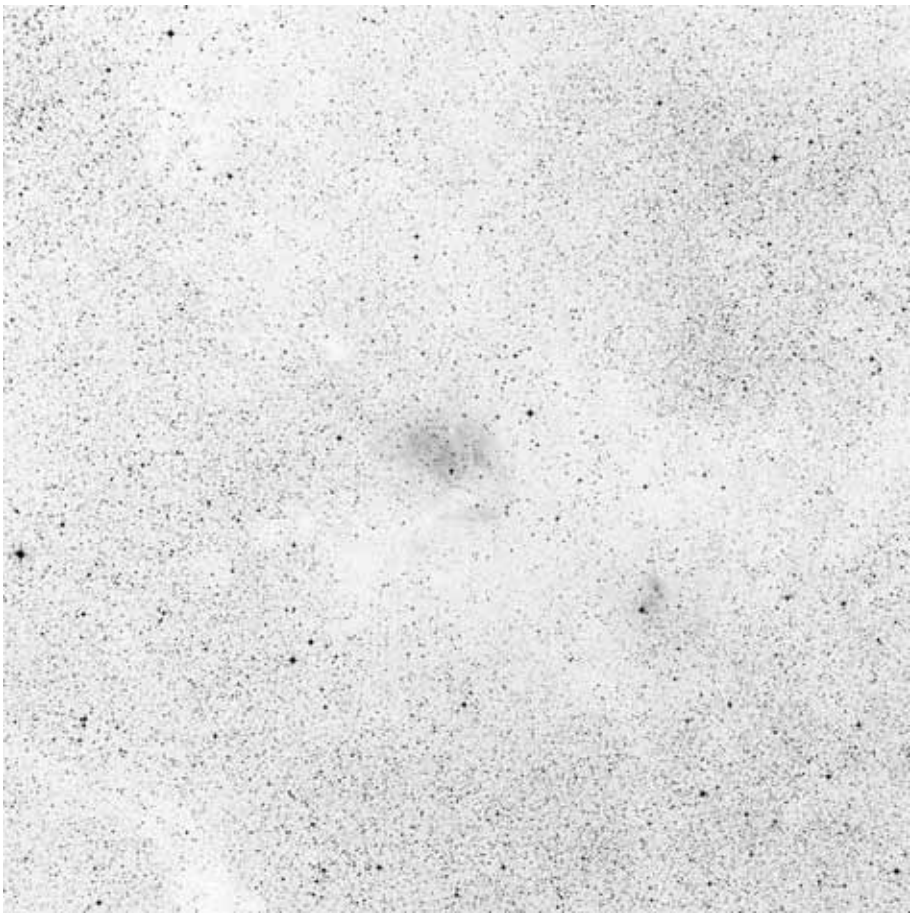
Observing notes:


19h00m
18h30m
18h00m
60
η
14
15
ζ
β
λ
05°00'
12
η
ε
α
τ
δ
ζ
ν
10°00'
Scutum
γ
15°00'

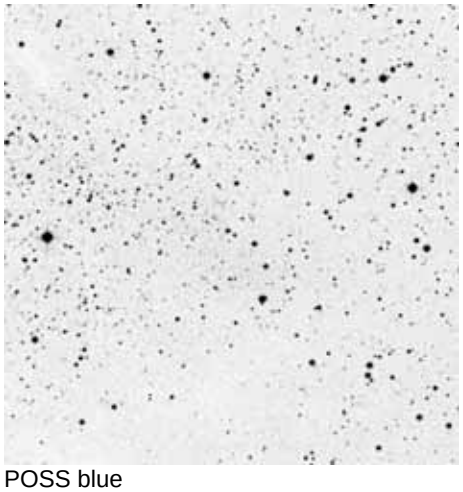

18h40m
18h35m
18h30m
18h25m
07°00'
NGC 6664
08°00'
α
Tr 34
ζ
09°00'
B100-1
B314
B 97
10°00'
PK 21- 0.1
NGC 6649

Sh 2 - 58

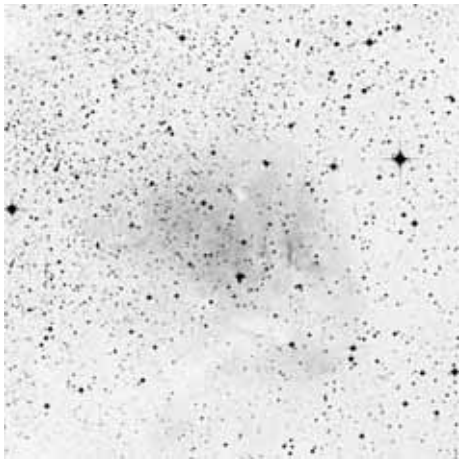
in Scutum



60x60, red



POSS blue



POSS red



composite

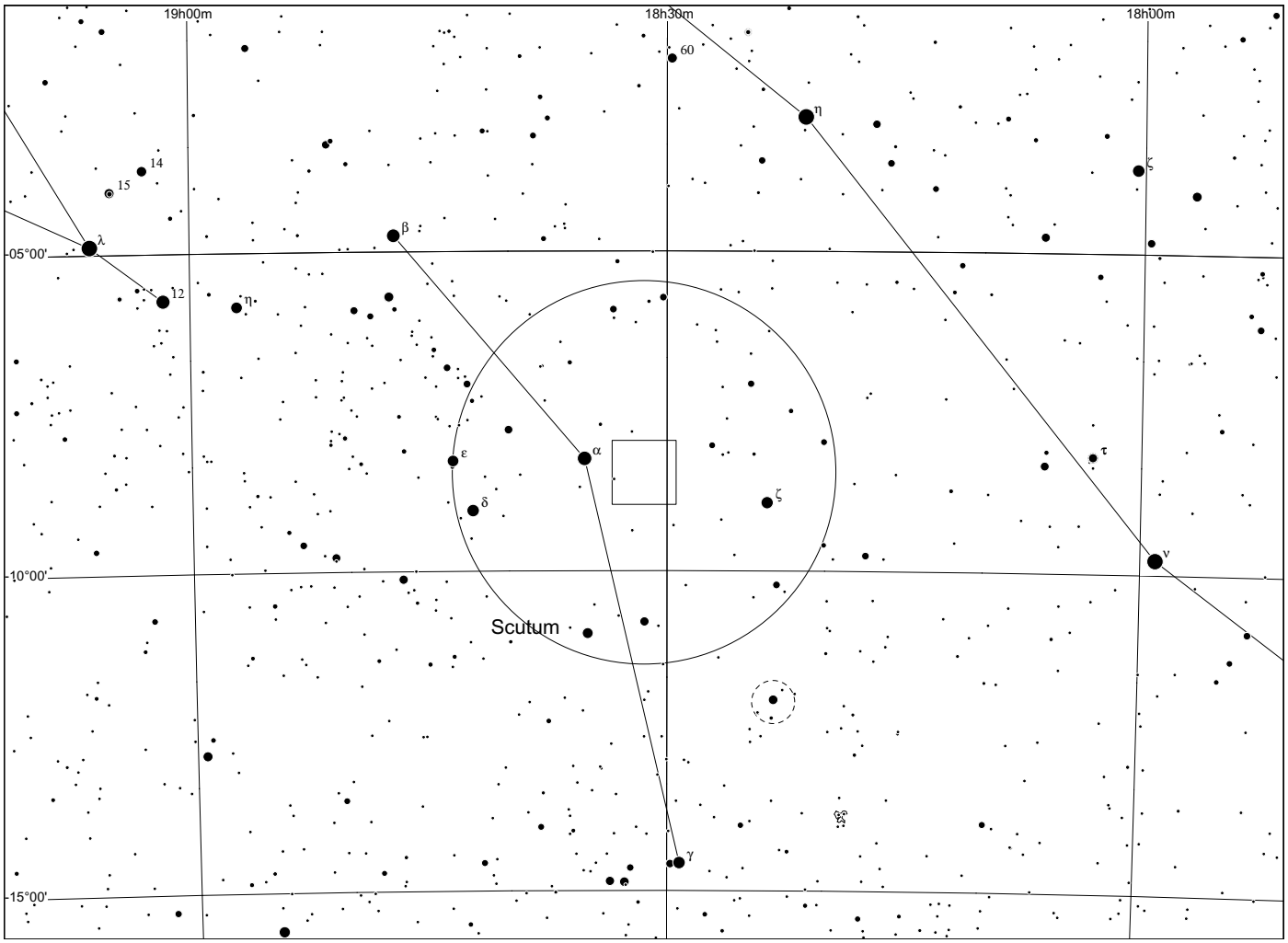
	other name	RA	dec	dia. '	F	S	B
Sh 2-058		18 31 26.6	-08 27 50	8	3	2	2

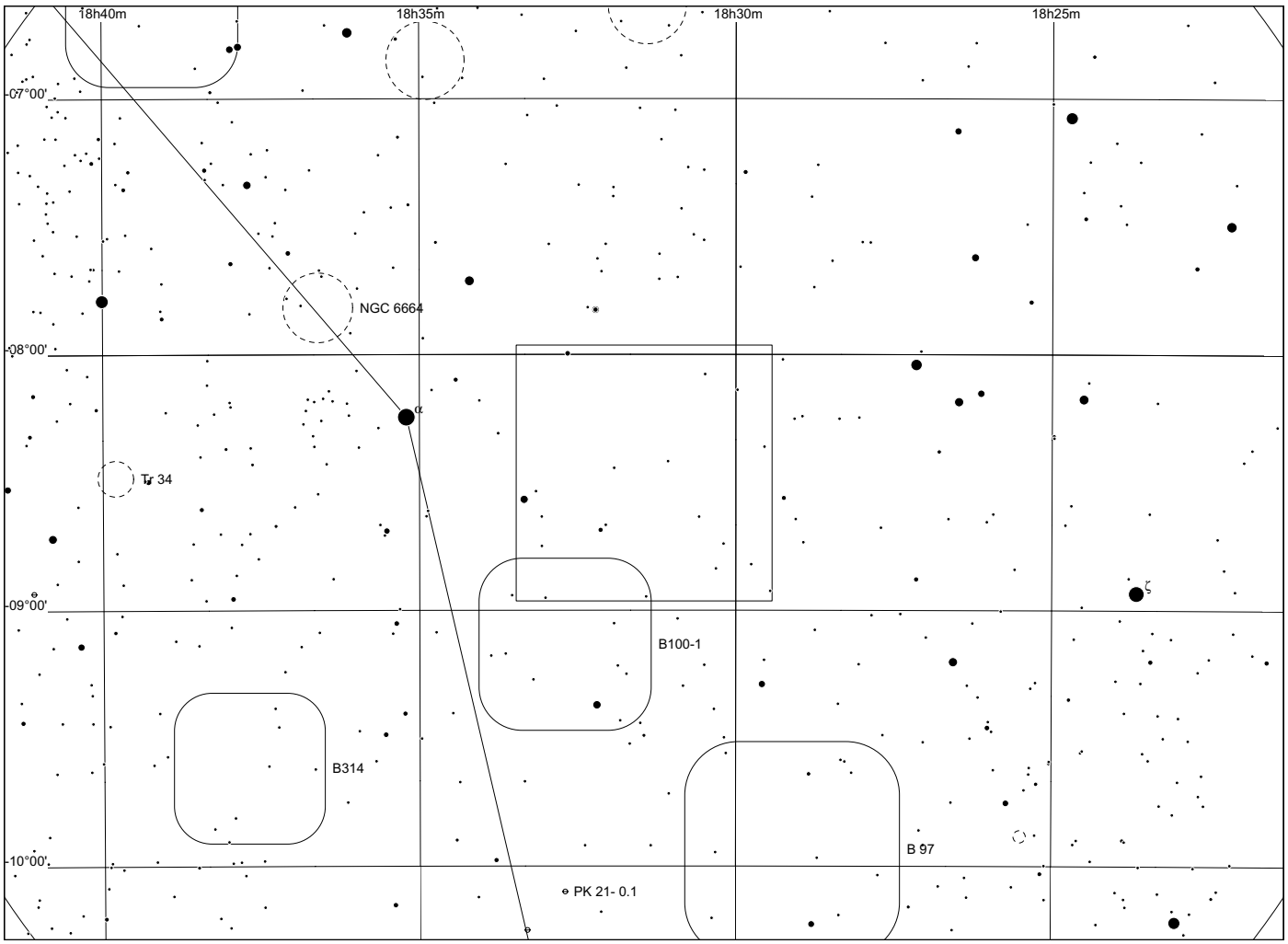
Also: RCW 171 (23.10°, 0.60°) Distance: 2472 pc, Size: 2.7 pc Source: 2003A&A...397..213P

Sh 2-57 and Sh 2-58 are visible together in the sky (as shown by this hydrogen-alpha image), divided by the dark nebula LDN 446 and just east of the Scutum Supershell. However, they seem to be located at quite different distances, with Sh 2-58 at about the same distance as the Supershell and Sh 2-57 in front of this region.

Sh 2-58 is close in the sky to the supernova remnant W41, which is estimated to have a distance of about 4000 pc.

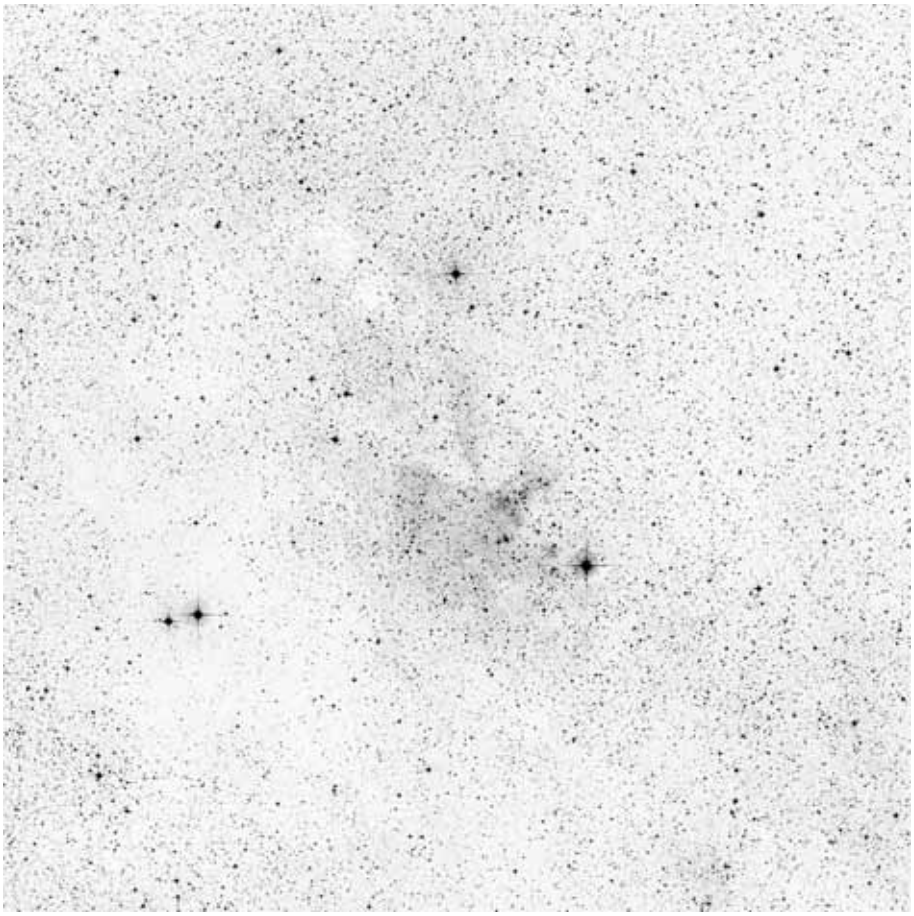
Observing notes:


19h00m
18h30m
18h00m
60
η
14
15
ζ
β
λ
05°00'
12
η
ε
α
τ
δ
ζ
ν
10°00'
Scutum
γ
15°00'

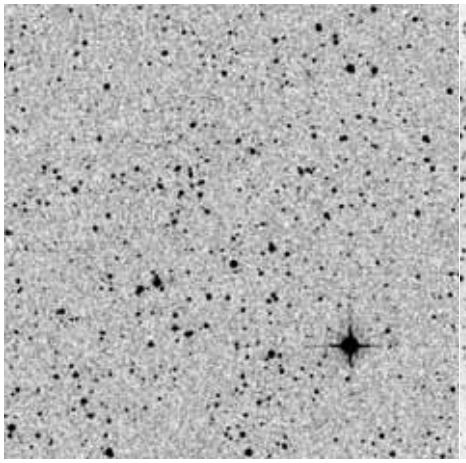

18h40m
18h35m
18h30m
18h25m
07°00'
NGC 6664
08°00'
α
Tr 34
ζ
09°00'
B100-1
B314
B 97
10°00'
PK 21- 0.1

Sh 2 - 60

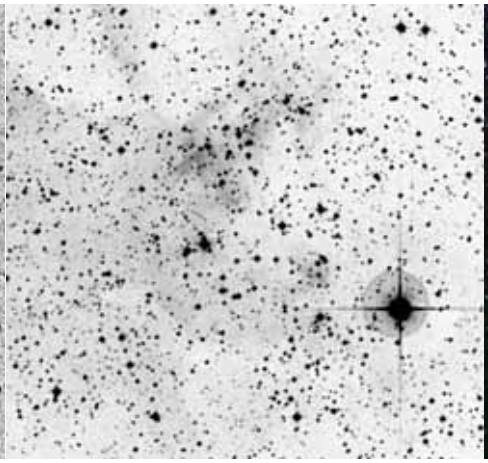
in Scutum



60x60, red



POSS blue



POSS red



composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-060		18 36 40.5	-06 42 04	20	3	2	2

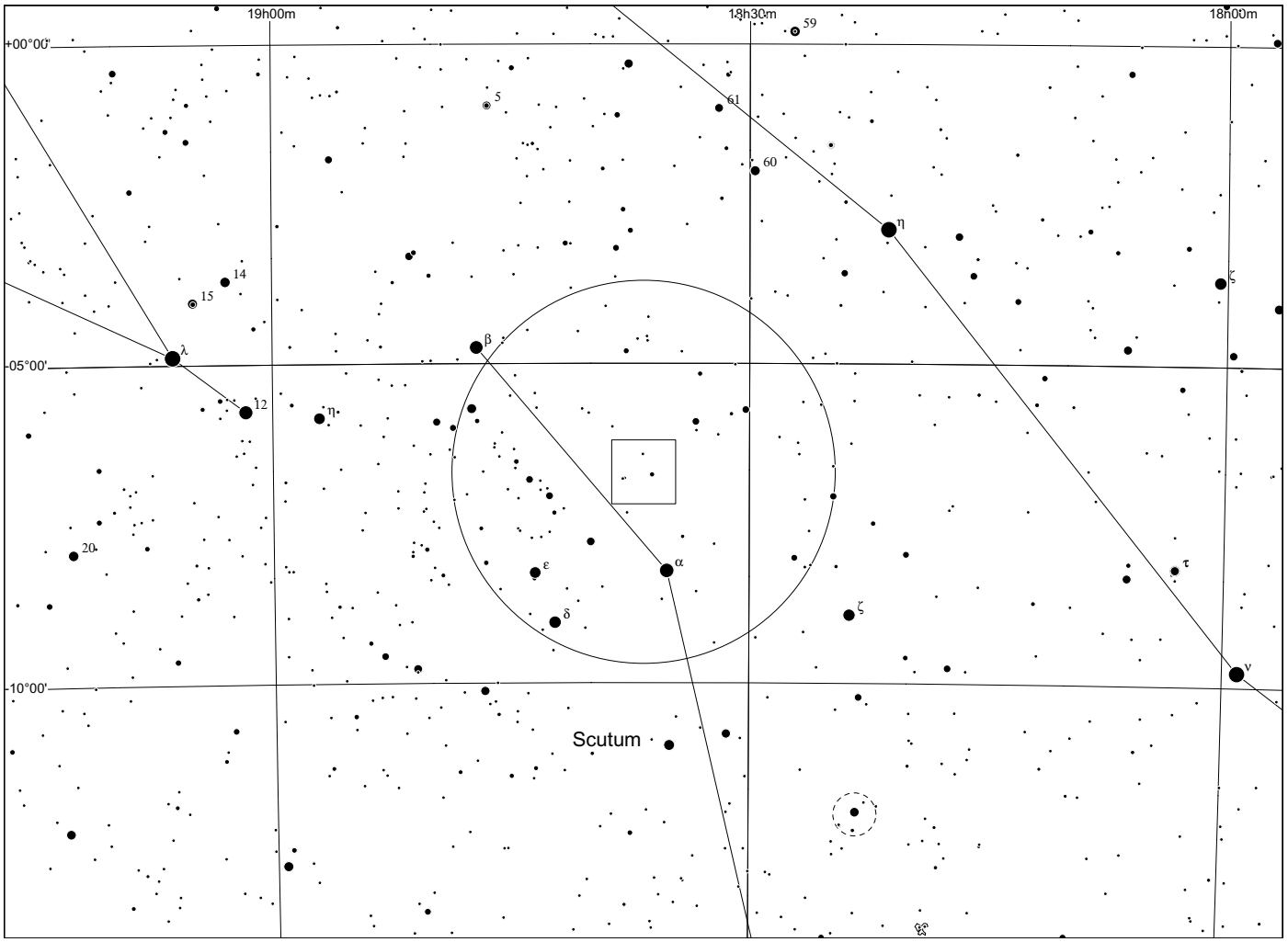
Also: RCW 173 (25.30°, 0.21°) Distance: 2200 pc, Size: 12.8 pc Source: 2003A&A...397..133R

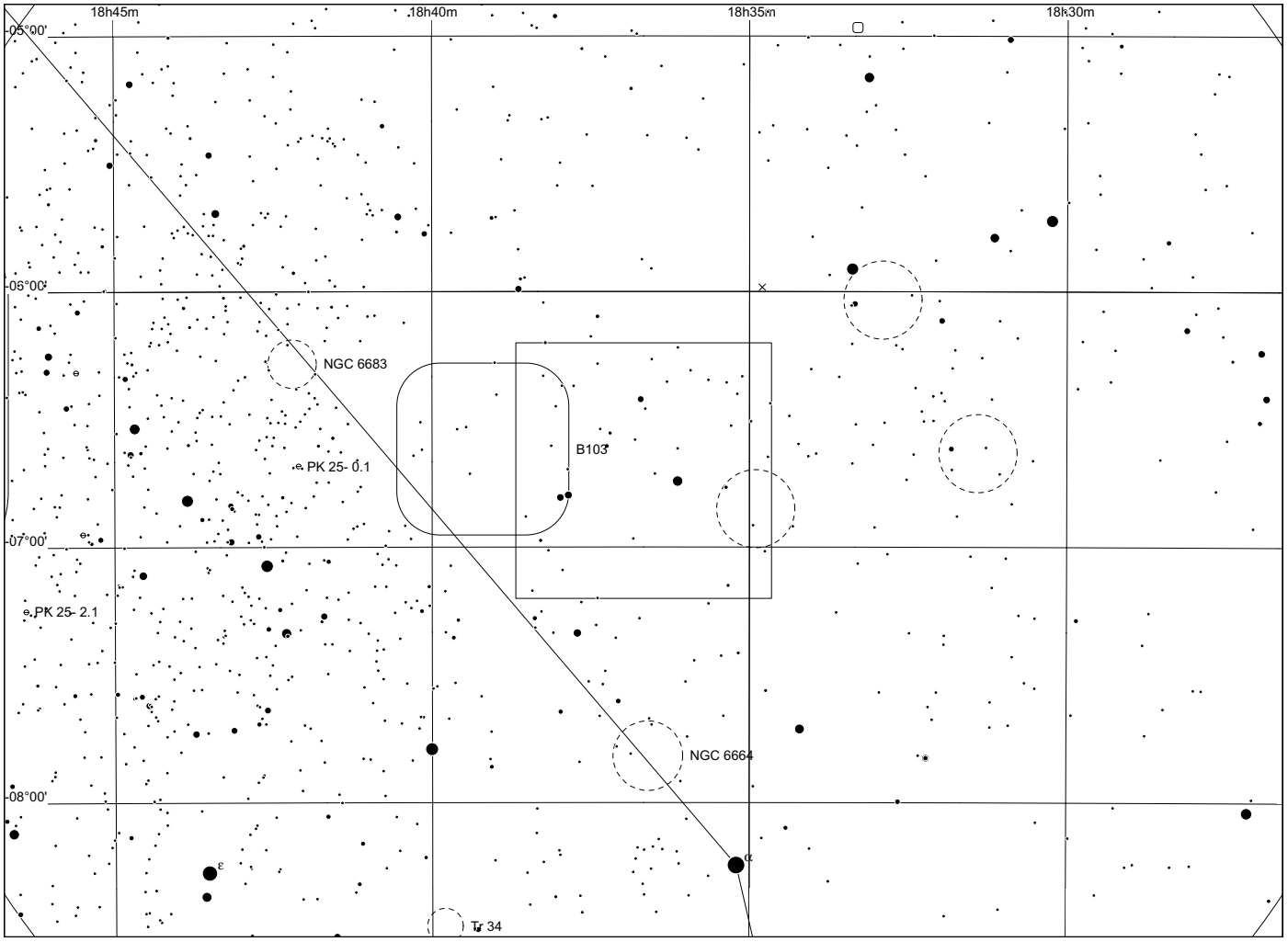
This large nebula, which is also called LBN 82 and W42, but is most often referenced as GAL 025.4-00.2 or GAL 025.38-00.18 in the scientific literature, has a bewildering number of different names in SIMBAD (not all cross-referenced).

The radio source W42 has wildly varying distance estimates (from 13400 parsecs to 2200 parsecs). If the near estimate of 2200 parsecs (which is from a recent paper published in 2000) is accepted, then W42 is likely part of the Sh 2-60 nebula. Infrared imagery in the same paper shows that W42 is energised by a massive, dense and young OB star cluster embedded in an obscuring dust cloud in the bottom left part of this image.

To compound the confusion, the nebulosity in this direction actually consists of several distinct HII regions, one (G25.4SE) that has a distance estimated at 4600 parsecs (although the above paper identifies this as W42 at 2200 parsecs) and another (G25.4NW) at a distance of about 12000 parsecs. The distant (14500 parsecs) radio source GAL 025.52+00.22, is also in this field and is believed to house a Luminous Blue Variable similar to Eta Carinae.

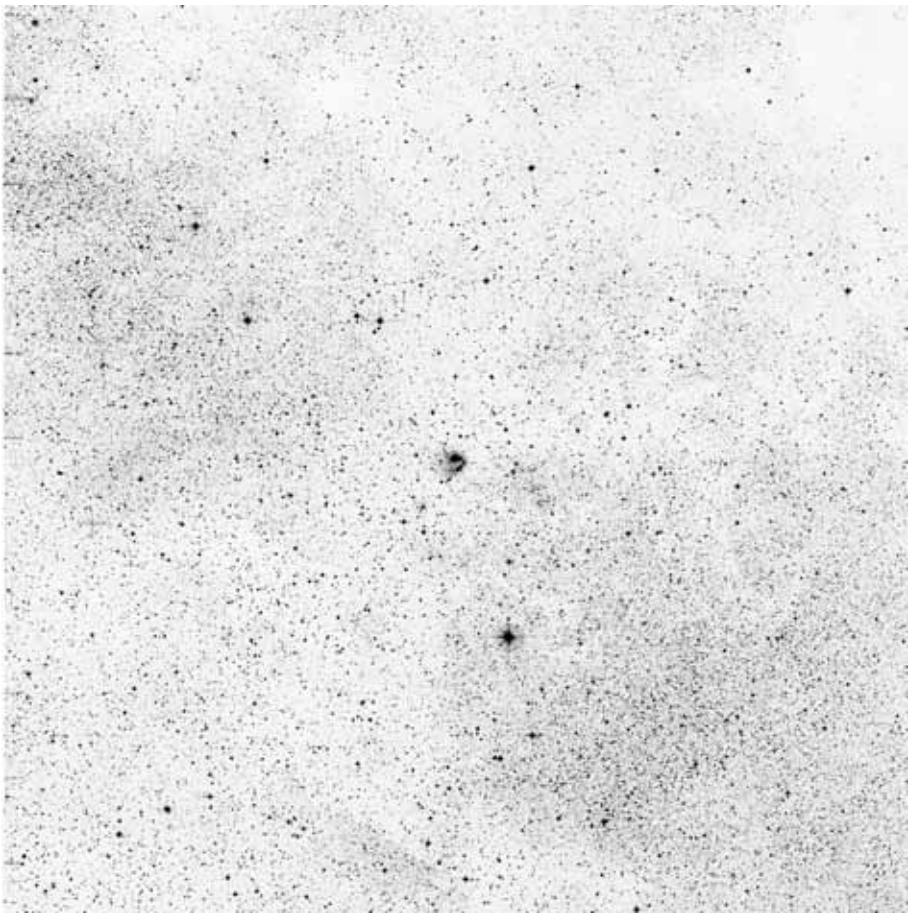
Observing notes:


19h00m
18h30m
18h00m
+00°00'
-05°00'
-10°00'
59
61
60
5
14
15
12
20
λ
β
η
ε
α
δ
ζ
τ
ν
Scutum

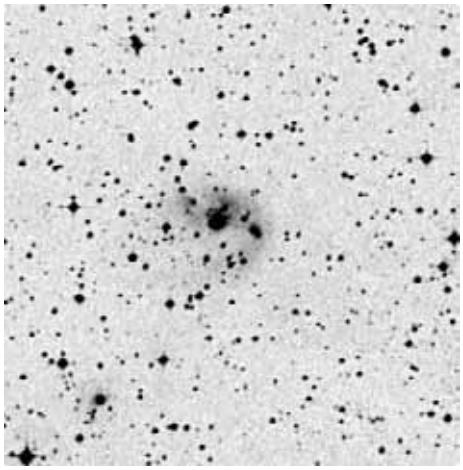

18h45m
18h40m
18h35m
18h30m
-05°00'
-06°00'
-07°00'
-08°00'
NGC 6683
PK 25- 0.1
B103
PK 25- 2.1
NGC 6664
Tr 34

Sh 2 - 61

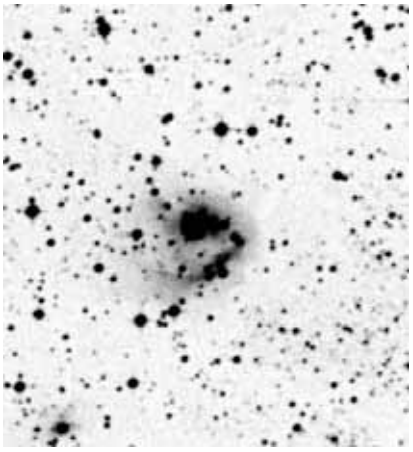
in Scutum



60x60, red



POSS blue



POSS red



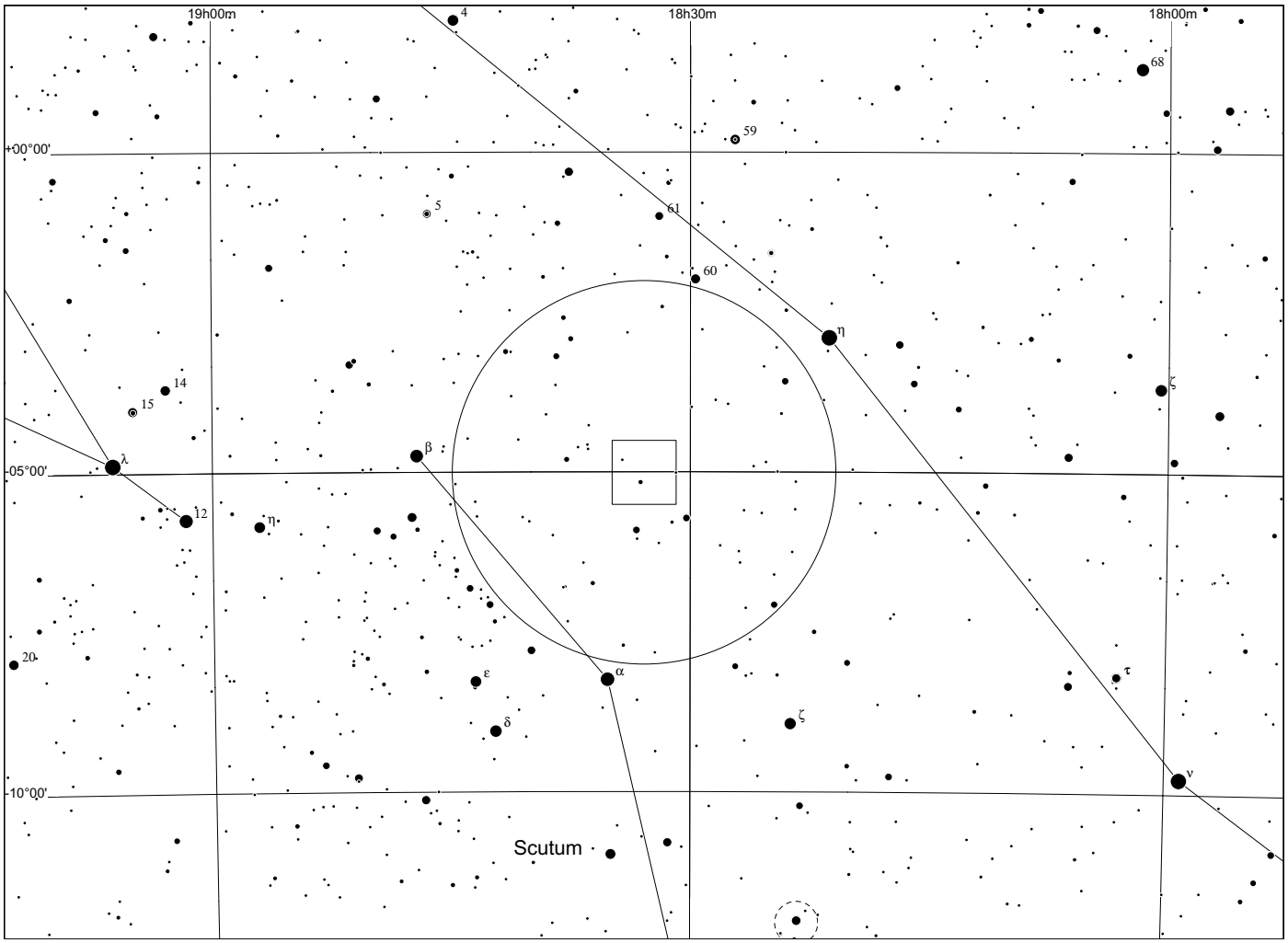
composite

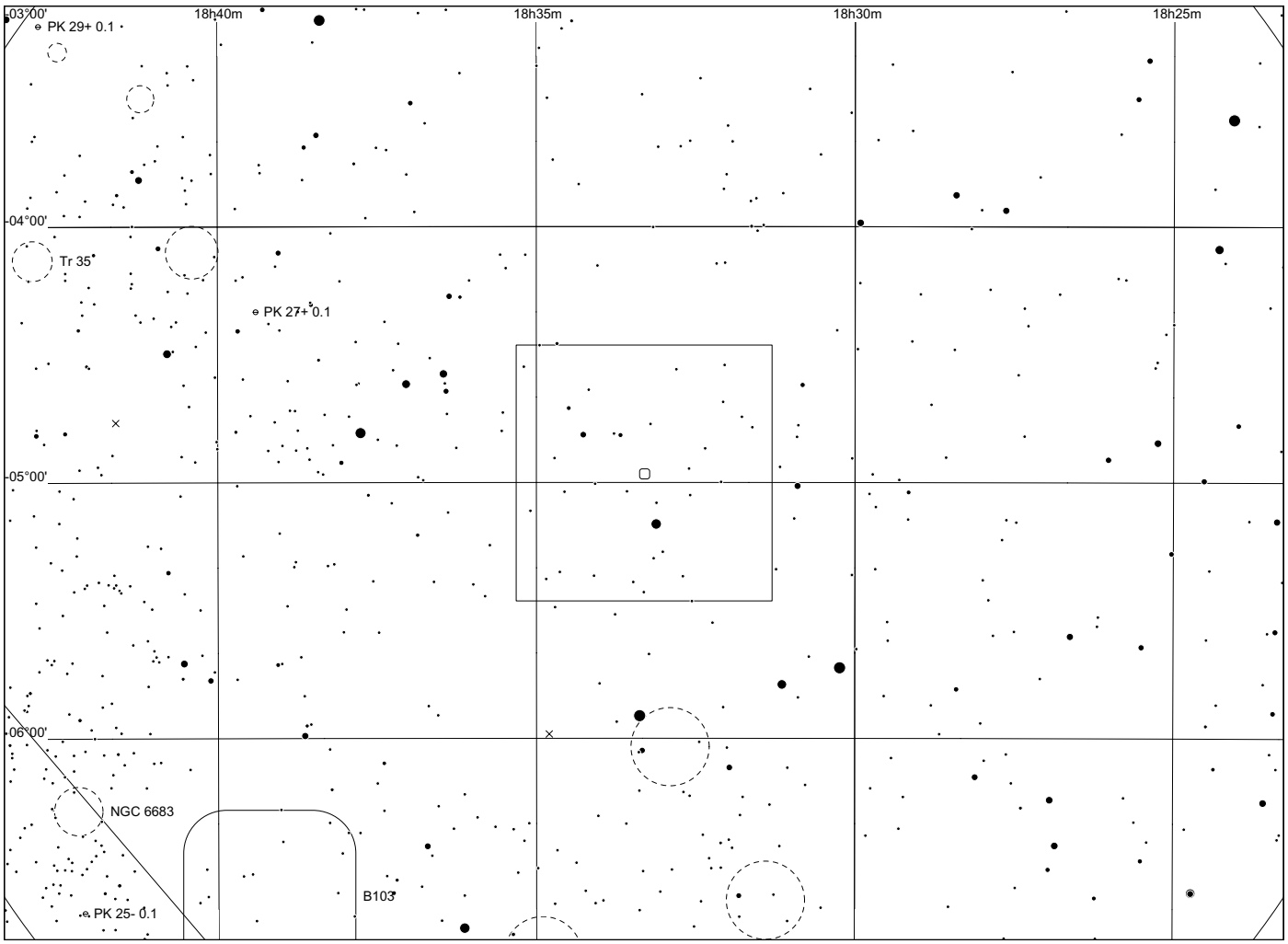
	other name	RA	dec	dia. '	F	S	B
Sh 2-061		18 32 54.5	-05 00 36	2	3	2	3

(26.44°, 1.74°) Distance: 2300 pc, Size: 1.3 pc Source: 2003A&A...397..133R

This object is sometimes mistaken for a planetary nebula but in fact is a compact HII region ionised by at least 3 B1 stars and embedded in a 23 thousand solar mass molecular cloud. There is a second distance estimate of 1700 parsecs.

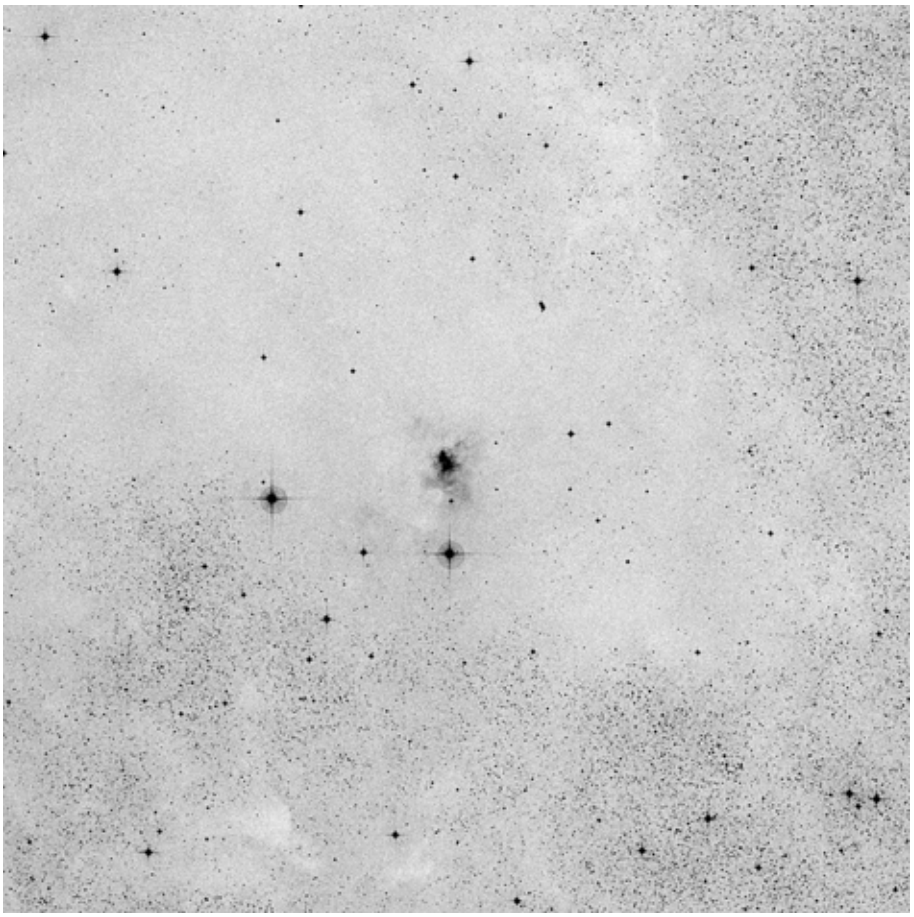
Observing notes:


19h00m
18h30m
18h00m
+00°00'
-05°00'
-10°00'
4
68
59
5
61
60
η
14
15
ζ
λ
β
12
η
20
ε
α
τ
δ
ζ
ν
Scutum

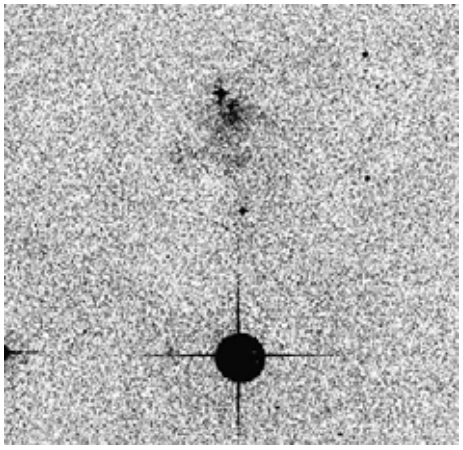

-03°00'
18h40m
18h35m
18h30m
18h25m
PK 29+ 0.1
-04°00'
Tr 35
PK 27+ 0.1
-05°00'
-06°00'
NGC 6683
B103
PK 25- 0.1

Sh 2 - 62

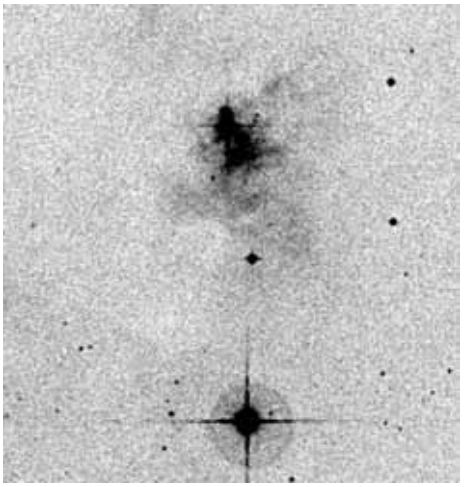
in Serpens



60x60, red



POSS blue



POSS red



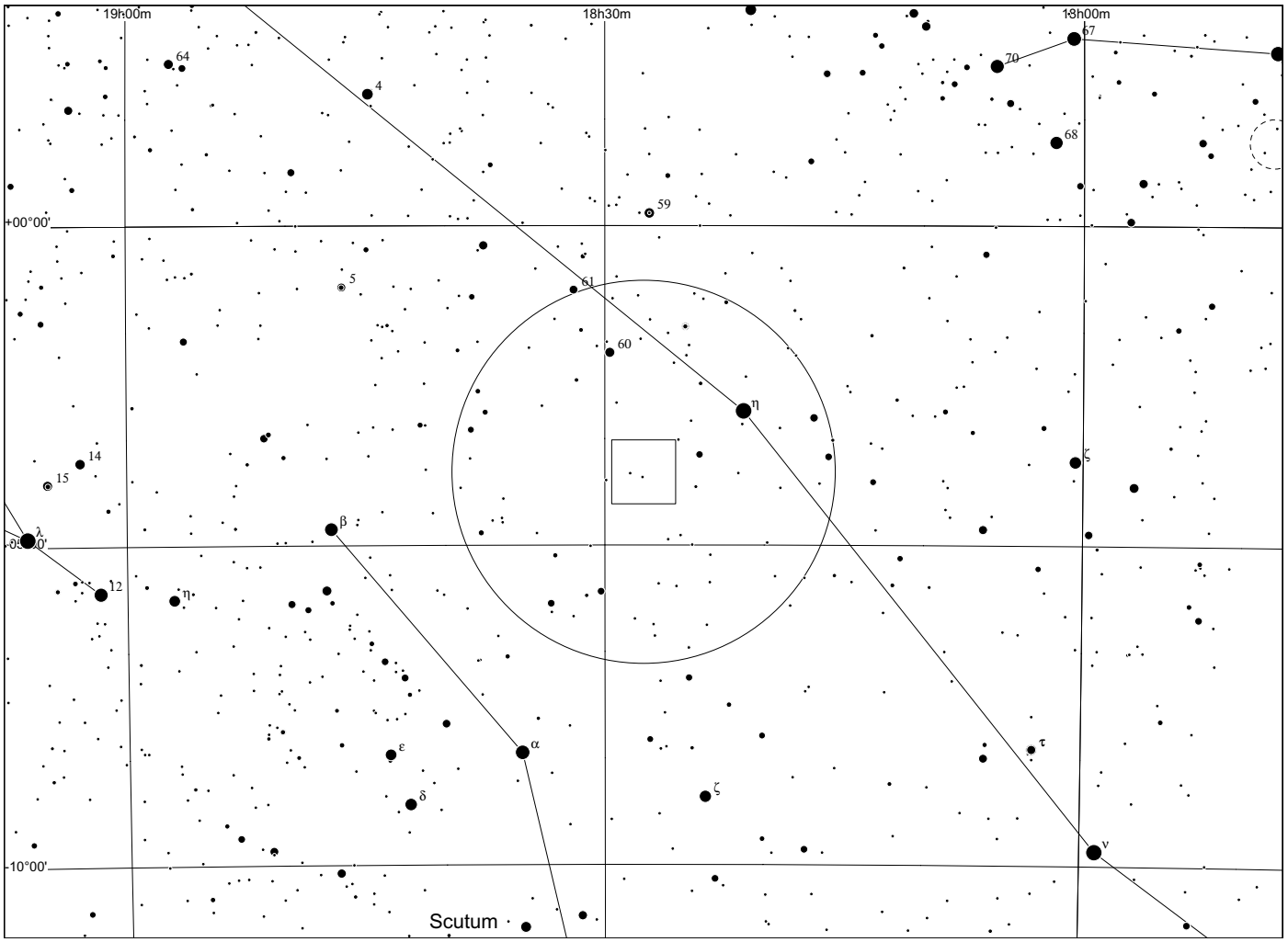
composite

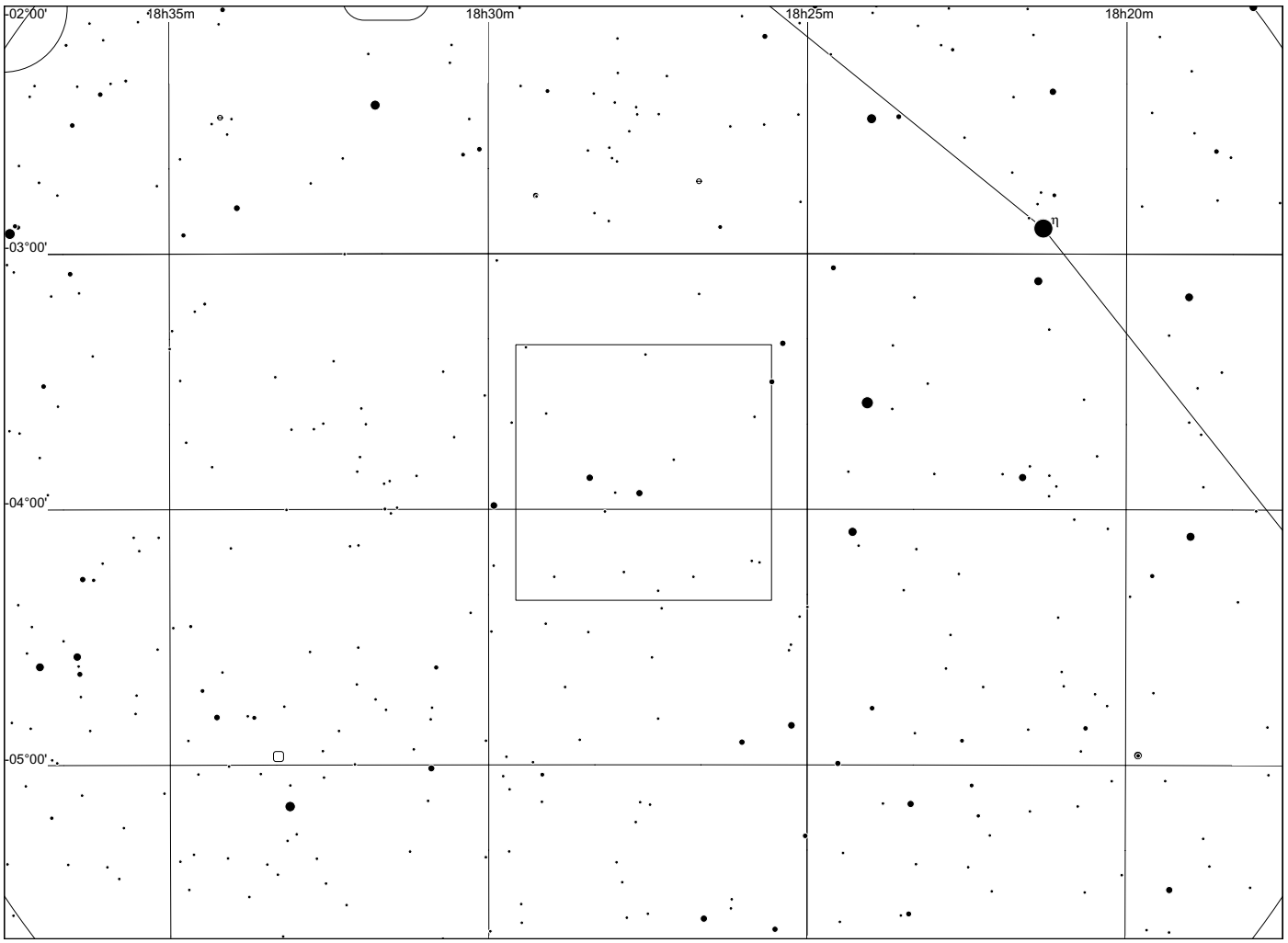
	other name	RA	dec	dia. '	F	S	B
Sh 2-062		18 27 34.2	-03 51 22	4	3	1	1

This tiny nebula is visible against and perhaps embedded in, the Aquila Rift complex of dark clouds.

Superimposed on this nebula is the B1.5e V Herbig Be star MWC 297.

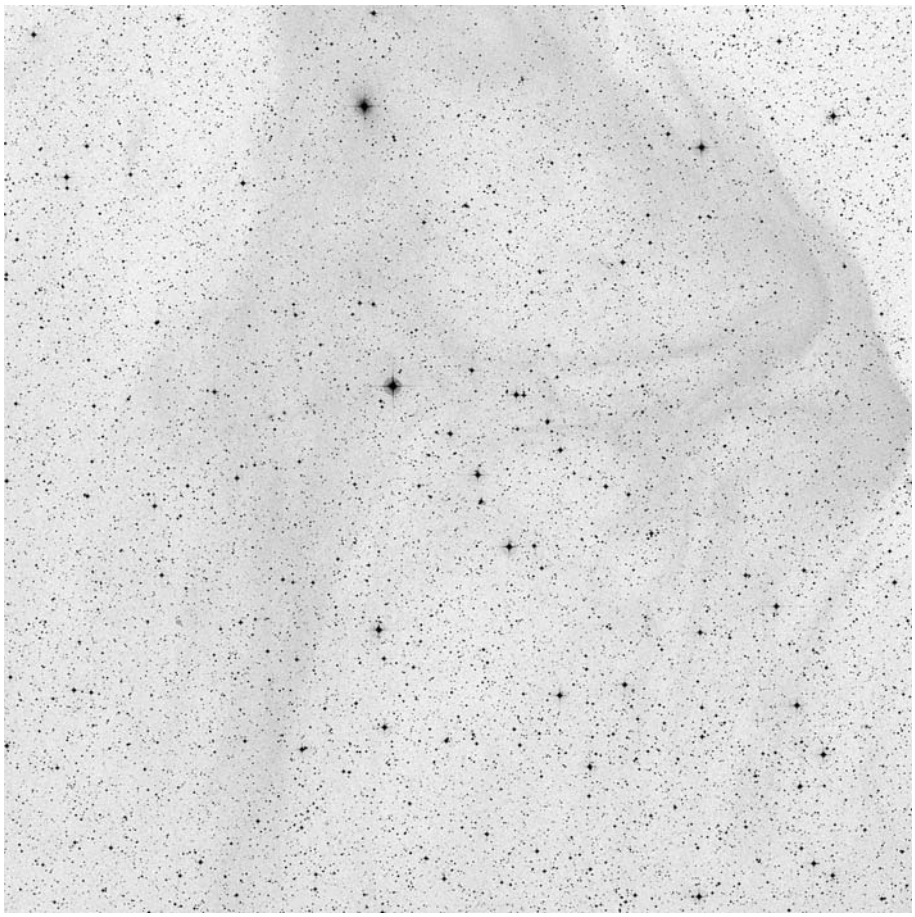
Observing notes:


19h00m
18h30m
18h00m
+00°00'
-10°00'
64
4
59
67
70
68
5
61
60
14
15
λ
β
12
η
ε
α
δ
ζ
τ
ν
ζ
Scutum

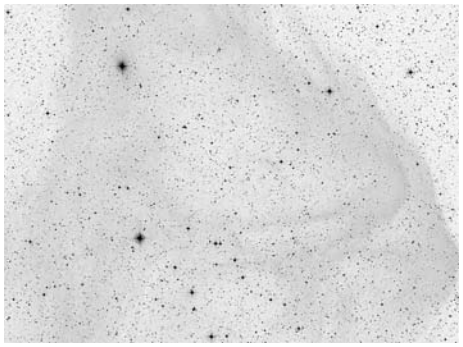

-02°00'
18h35m
18h30m
18h25m
18h20m
-03°00'
-04°00'
-05°00'
η

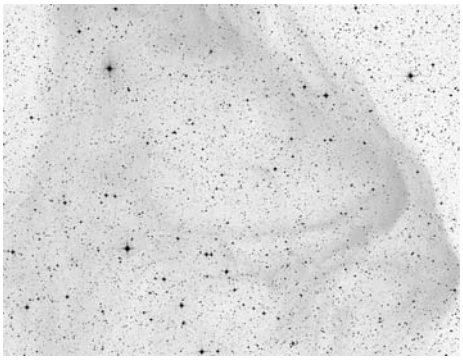
Sh 2 - 63

in Sagittarius



60x60, blue







POSS blue

POSS red

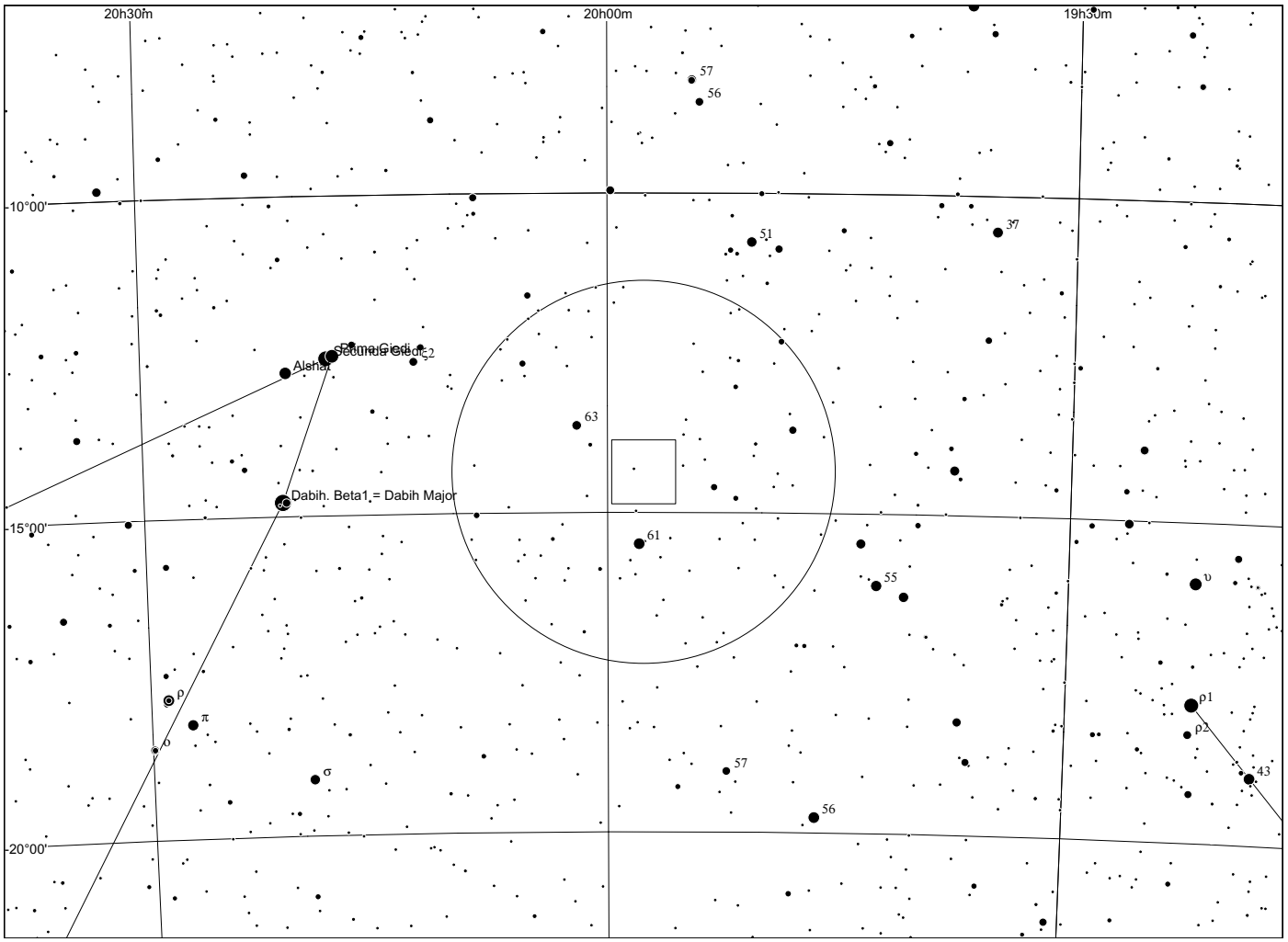
RGB Dean Salman

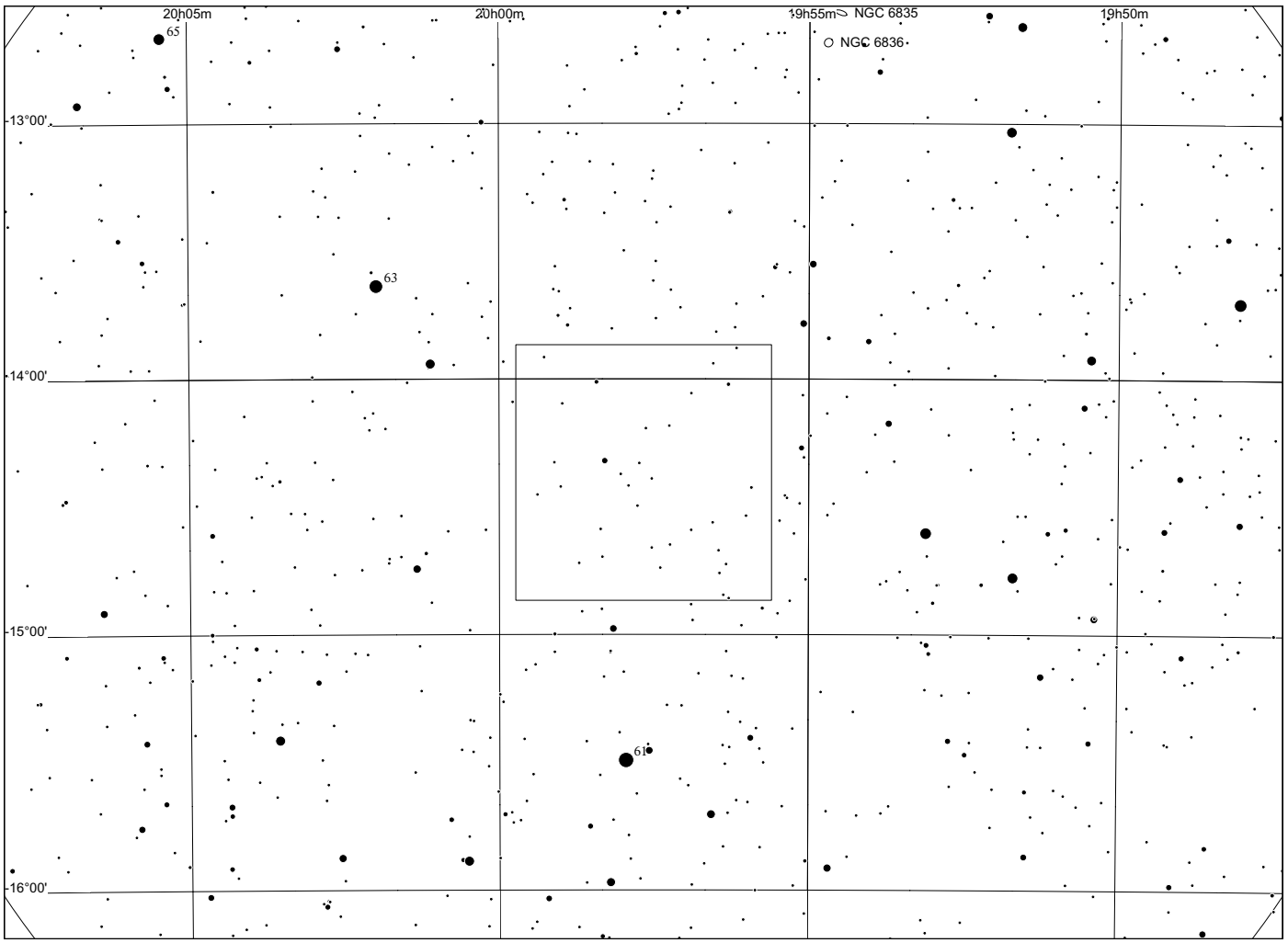
	other name	RA	dec	dia. '	F	S	B
Sh 2-063		19 57 42.5	-14 06 57	55	3	2	1

(27.34°, -20.94°) Distance: Unknown

This is the high latitude molecular cloud MBM 159, which is located at a distance of about 220 pc and may form part of the Aquila rift.

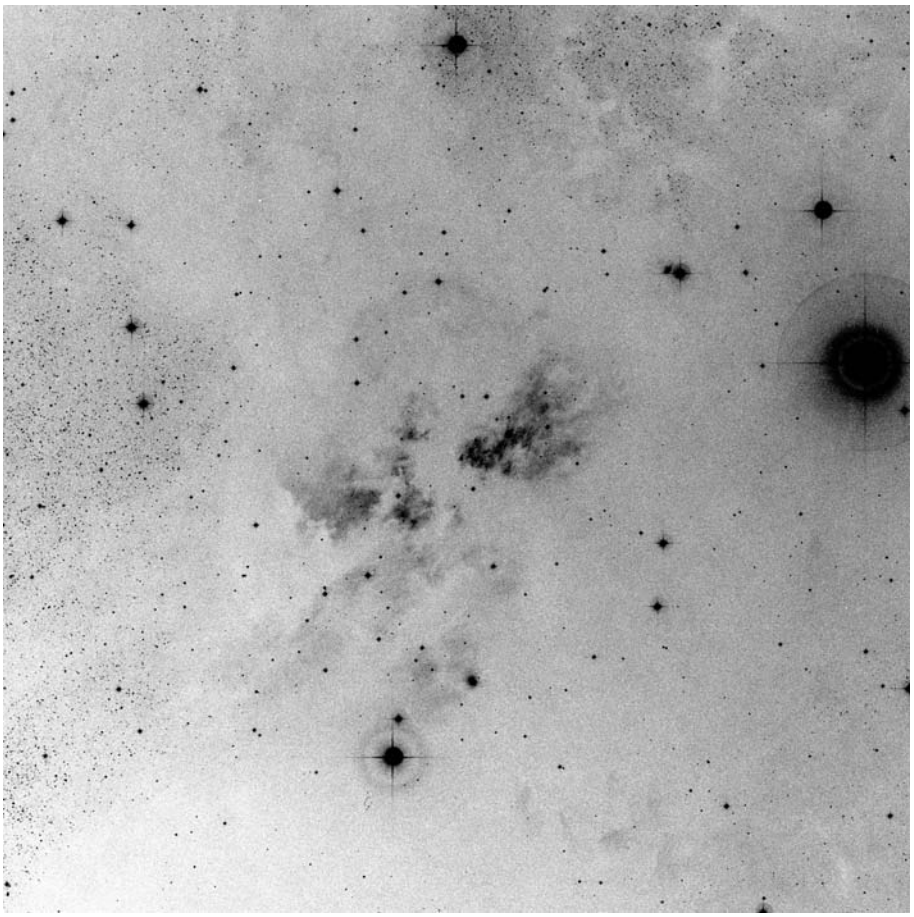
Observing notes:


20h30m
20h00m
19h30m
10°00'
15°00'
20°00'
57
56
51
37
Alshat
Secunda Giedi
52
63
Dabih. Beta1 = Dabih Major
61
55
υ
ρ
π
ο
σ
ρ1
ρ2
57
43
56

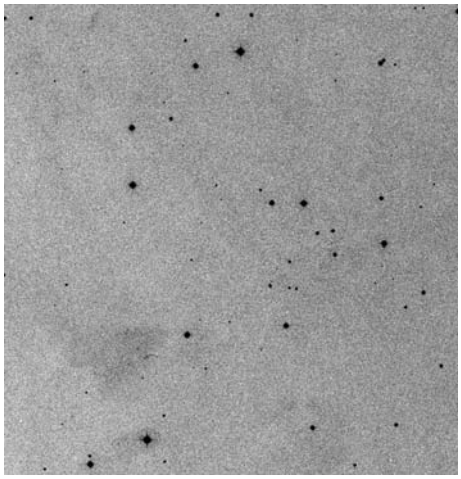

20h05m
20h00m
19h55m
19h50m
NGC 6835
NGC 6836
65
13°00'
14°00'
15°00'
16°00'
63
61

Sh 2 - 64

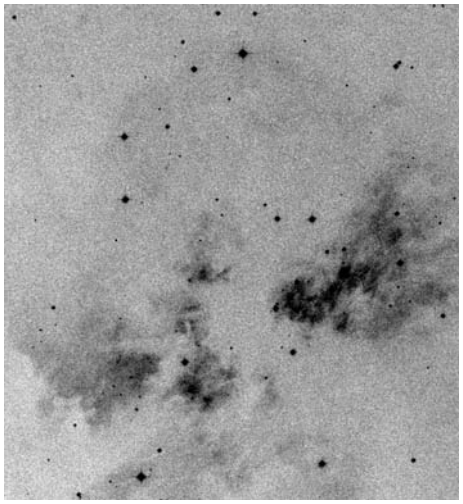
in Serpens



60x60, red



POSS blue



POSS red



RGB Dean Salman

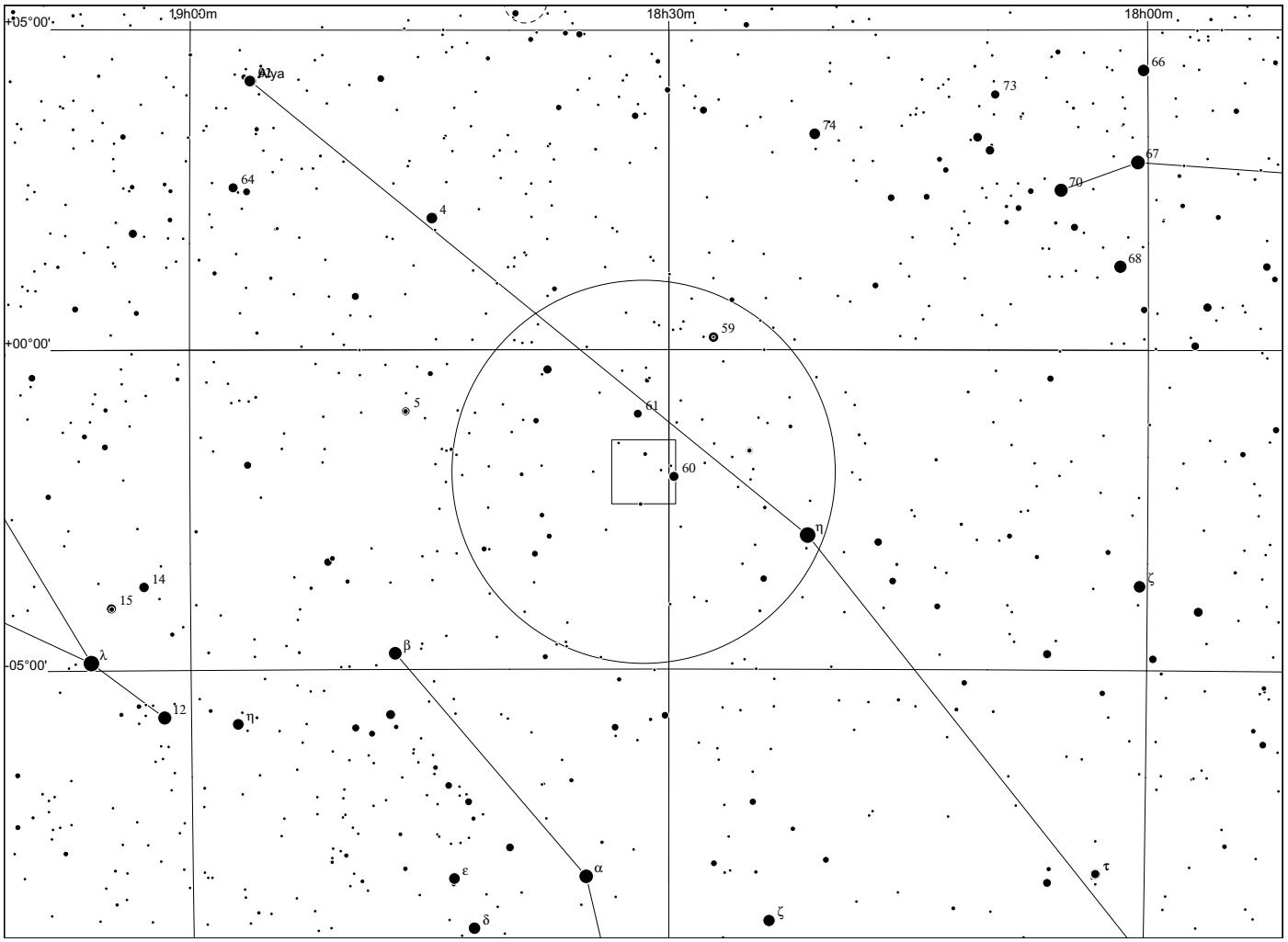
	other name	RA	dec	dia. '	F	S	B
Sh 2-064		18 31 35.0	-01 54 47	25	3	2	2

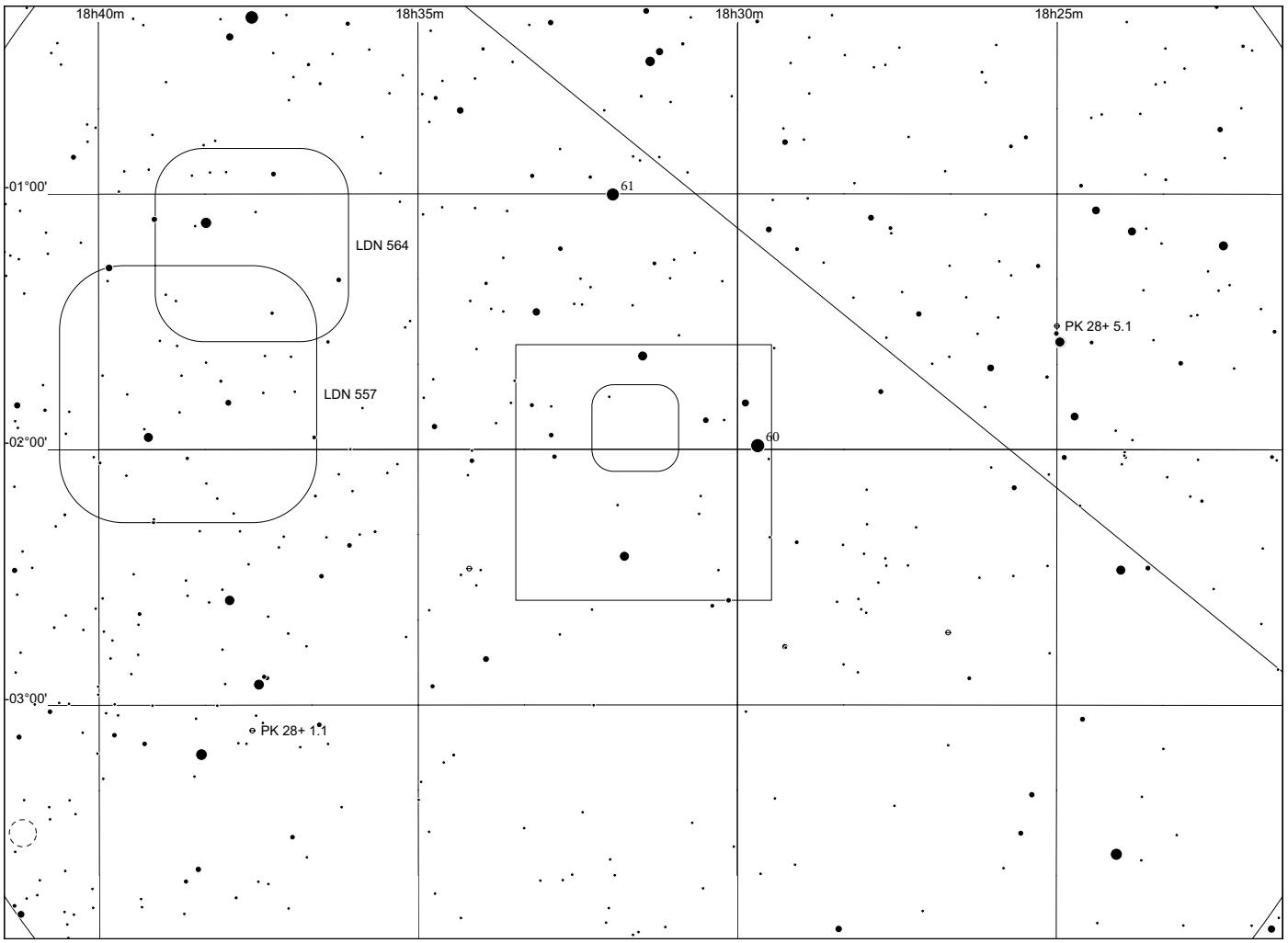
Also: RCW 174 (28.96°, 3.54°) Distance: 400 pc, Size: 2.9 pc Source: 1999ApJ...520..149S

This is the W40 star formation region, also called LBN 90, and is ionised by the three B1V stars W 40 OS 1a, W 40 OS 2a and W 40 OS 3a.

It is obscured by the dust clouds called the Rift, which are located between W40 and our solar system.

Observing notes:


19h00m
18h30m
18h00m
+05°00'
+00°00'
-05°00'
Altya
66
73
74
67
64
4
70
68
59
5
61
60
η
14
15
ζ
λ
β
12
η
ε
α
τ
δ
ζ

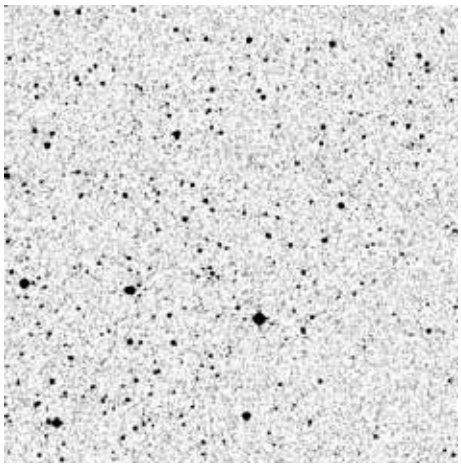

18h40m
18h35m
18h30m
18h25m
-01°00'
-02°00'
-03°00'
61
LDN 564
LDN 557
PK 28+ 5.1
60
PK 28+ 1.1

Sh 2 - 65

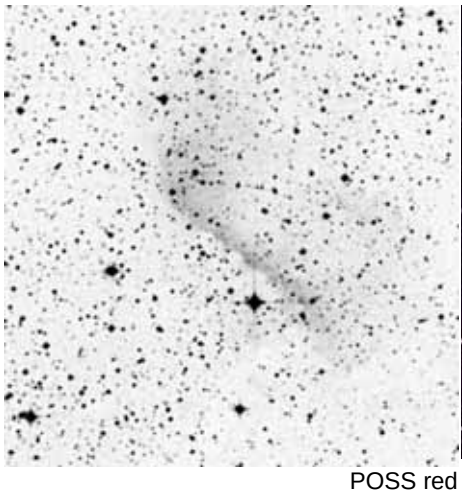
in Aquila



60x60, red



POSS blue



POSS red



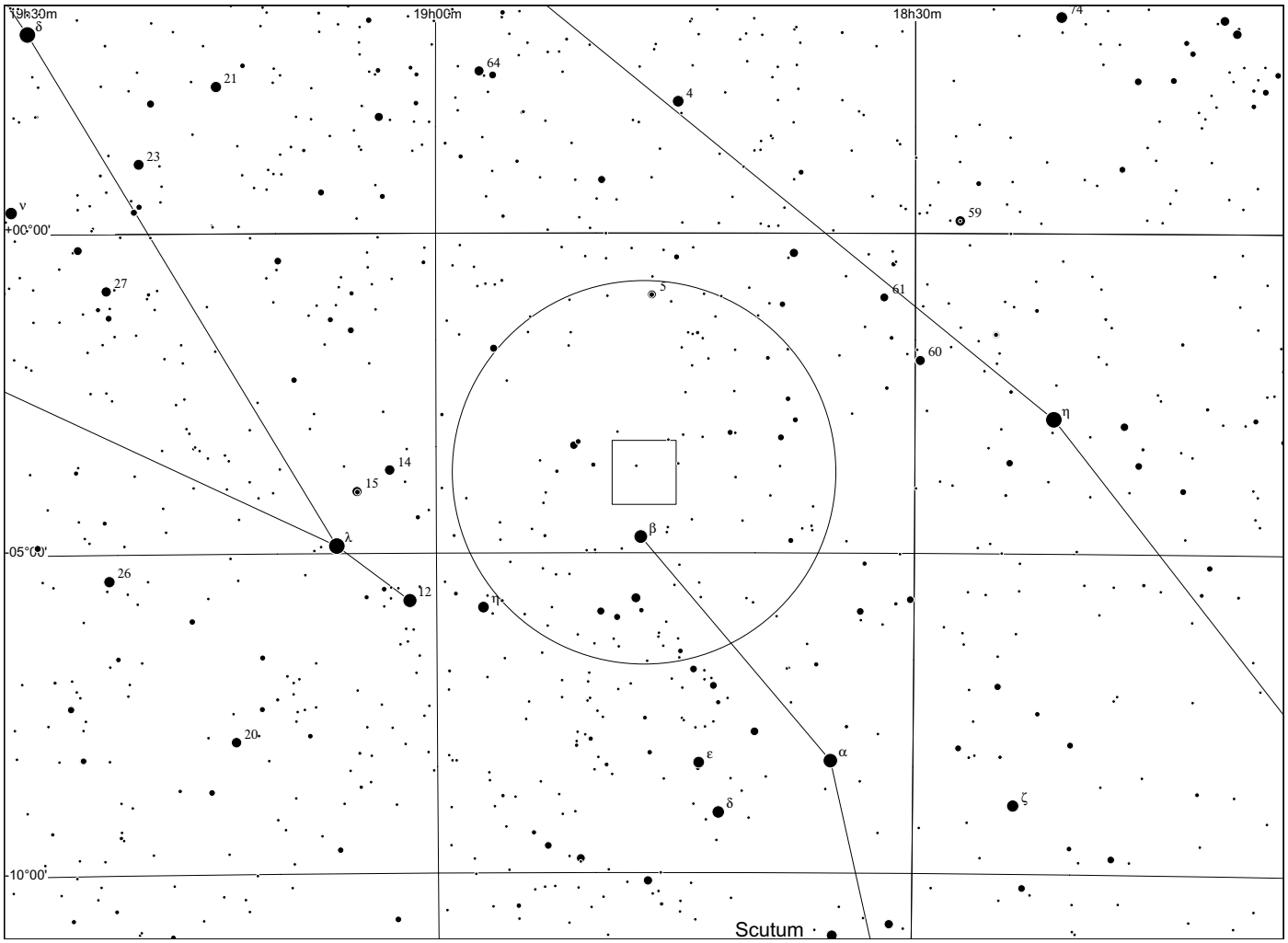
composite

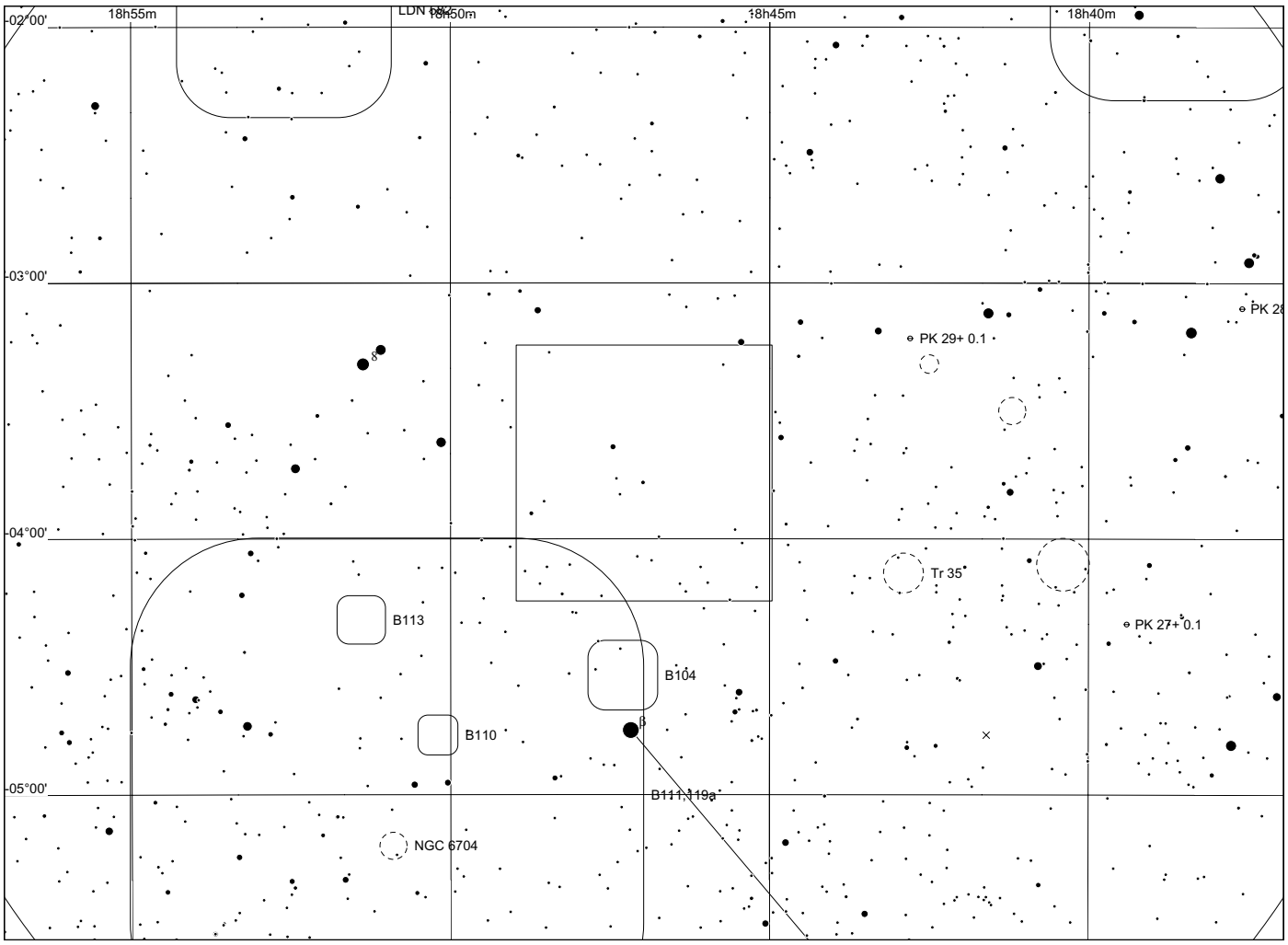
	other name	RA	dec	dia. '	F	S	B
Sh 2-065		18 46 58.0	-03 44 35	7	3	2	2

Also: RCW 175 (29.10°, -0.70°) Distance: 3261 pc, Size: 4.2 pc Source: 2003A&A...397..213P

Excited by the B1 II star S65-4, which SIMBAD says should be called [F89b] S65 4.

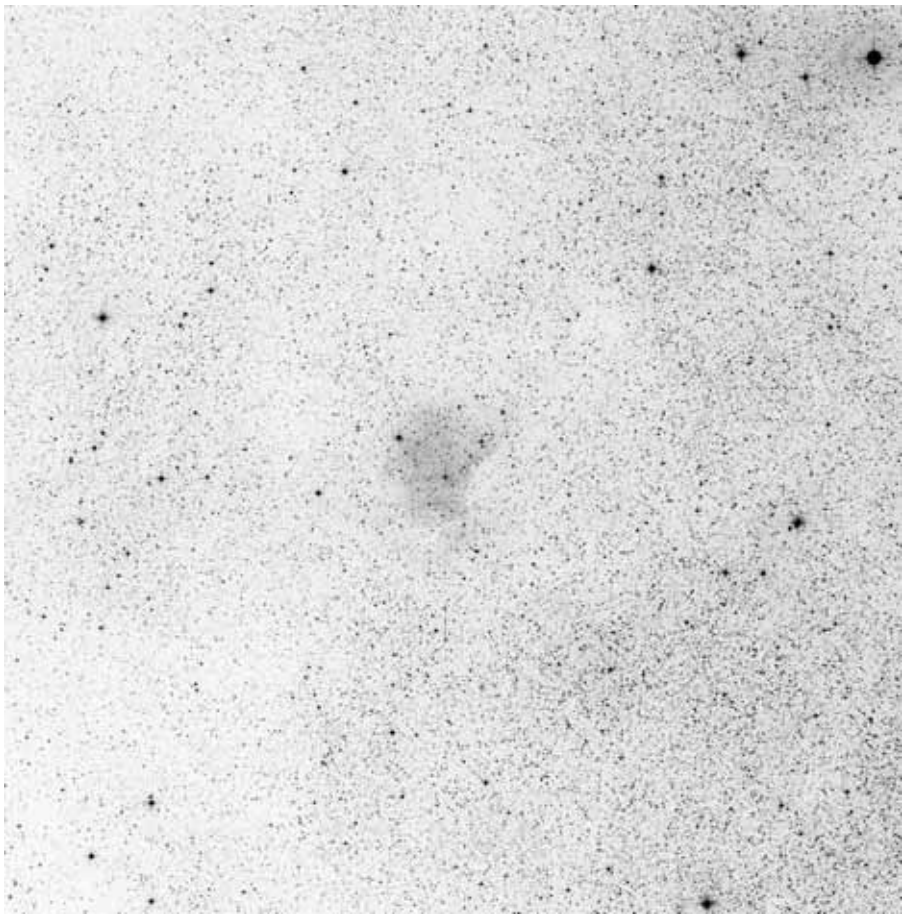
Observing notes:


19h30m
19h00m
18h30m
δ
21
64
4
74
23
ν
59
+00°00'
27
5
61
60
η
14
15
λ
β
-05°00'
26
12
η
20
ε
α
δ
ζ
-10°00'
Scutum

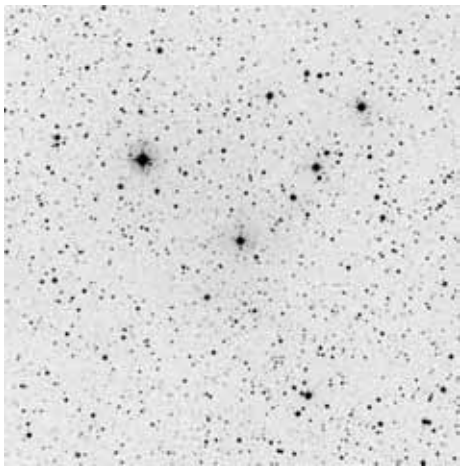

-02°00'
18h55m
18h50m
18h45m
18h40m
-03°00'
PK 29+ 0.1
PK 28
8
-04°00'
Tr 35
B113
PK 27+ 0.1
B104
B110
β
-05°00'
B111,119a
NGC 6704

Sh 2 - 66

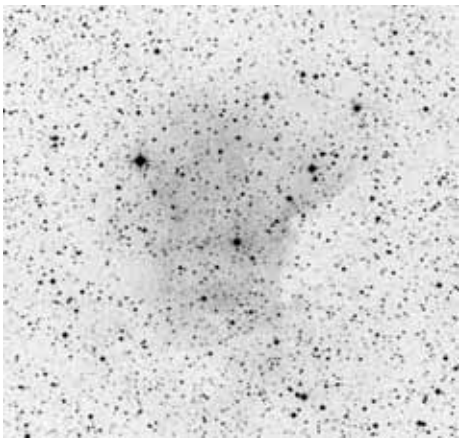
in Aquila



60x60, red



POSS blue



POSS red



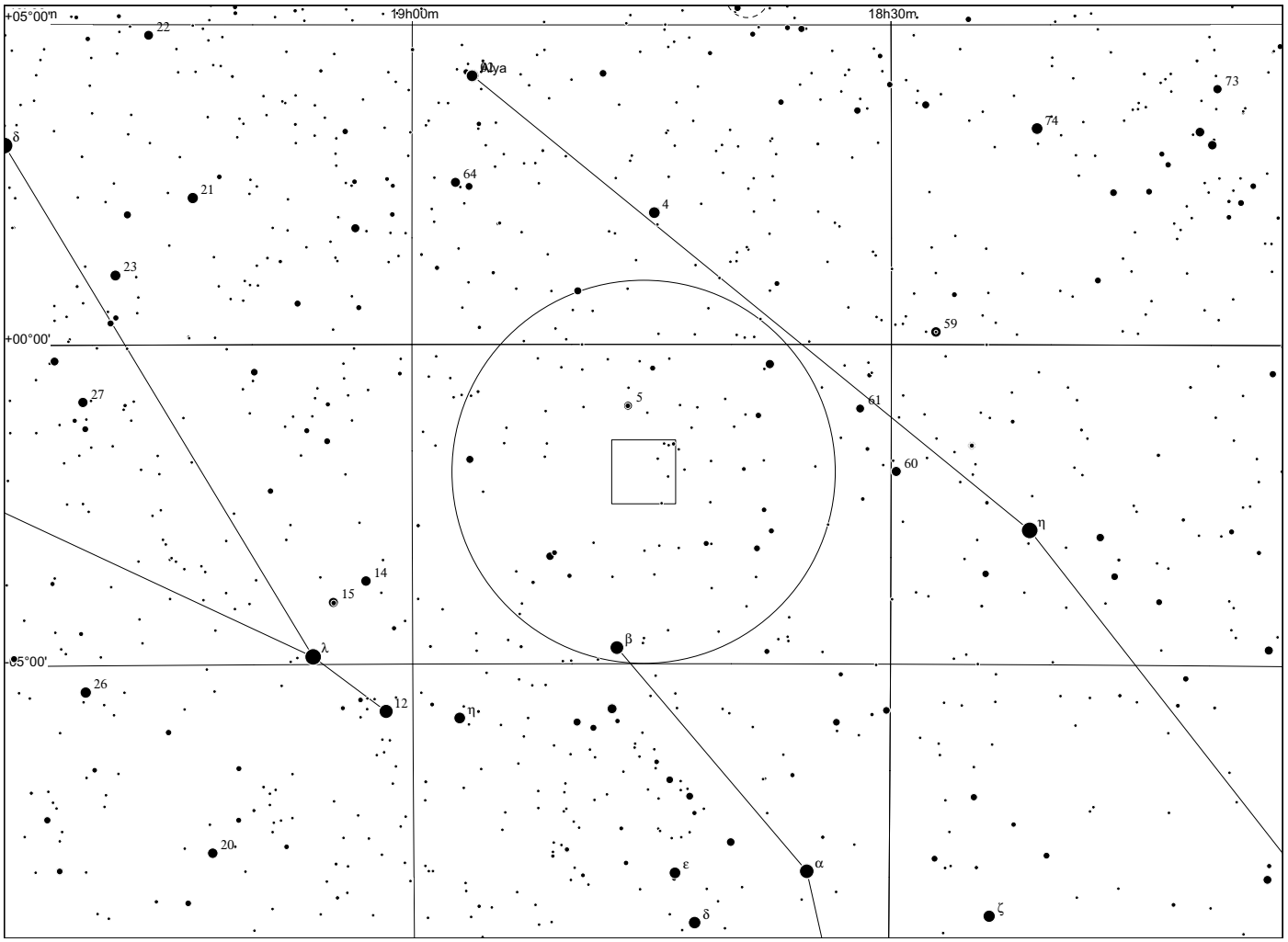
composite

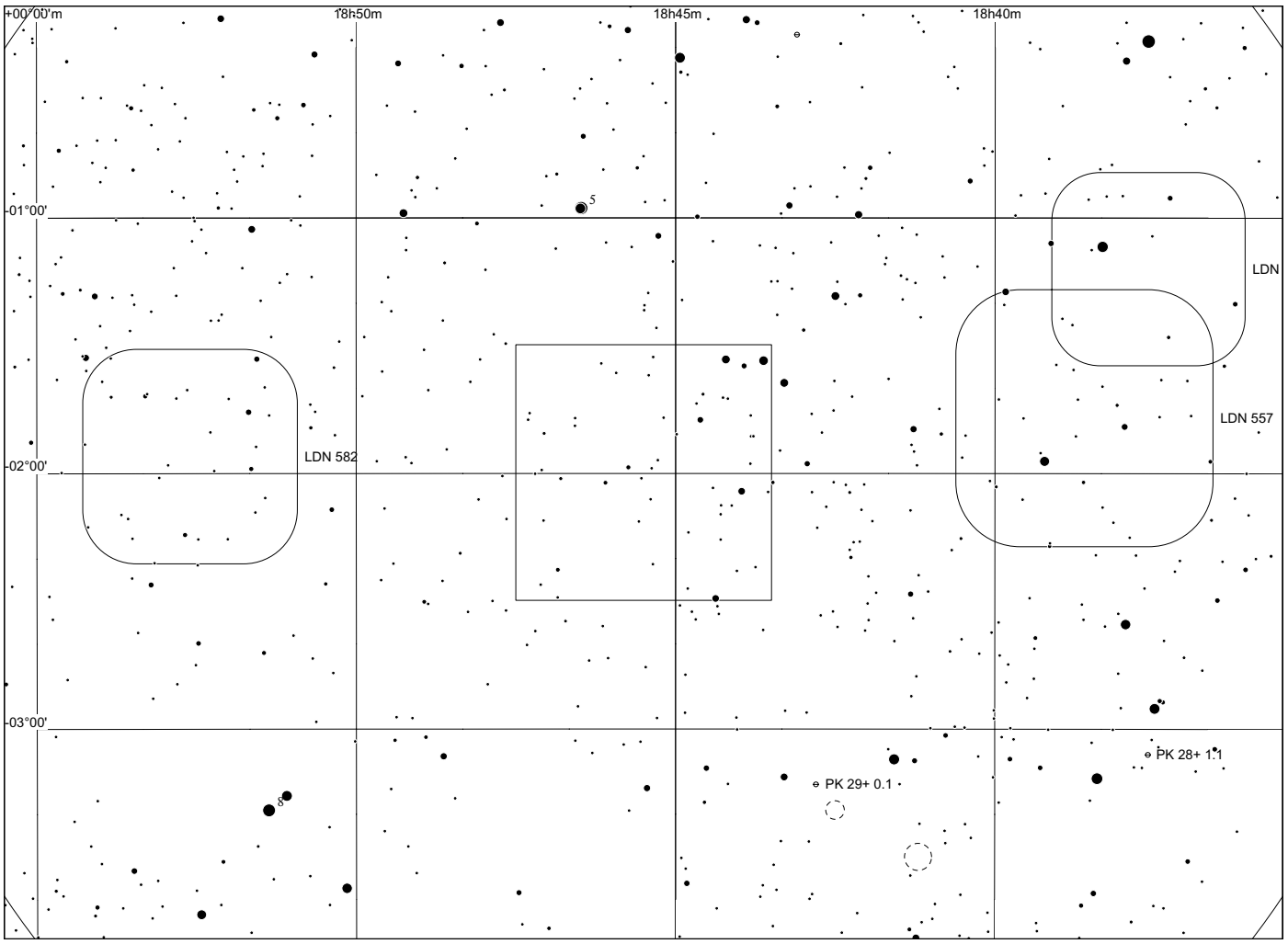
	other name	RA	dec	dia. '	F	S	B
Sh 2-066		18 45 30.0	-01 59 47	8	3	2	2

Also: RCW 176 (30.50°, 0.40°) Distance: 3780 pc, Size: 5.9 pc Source: 2003A&A...397..213P

The exciting star for this HII region is the O9.5 III star LS IV -02 16

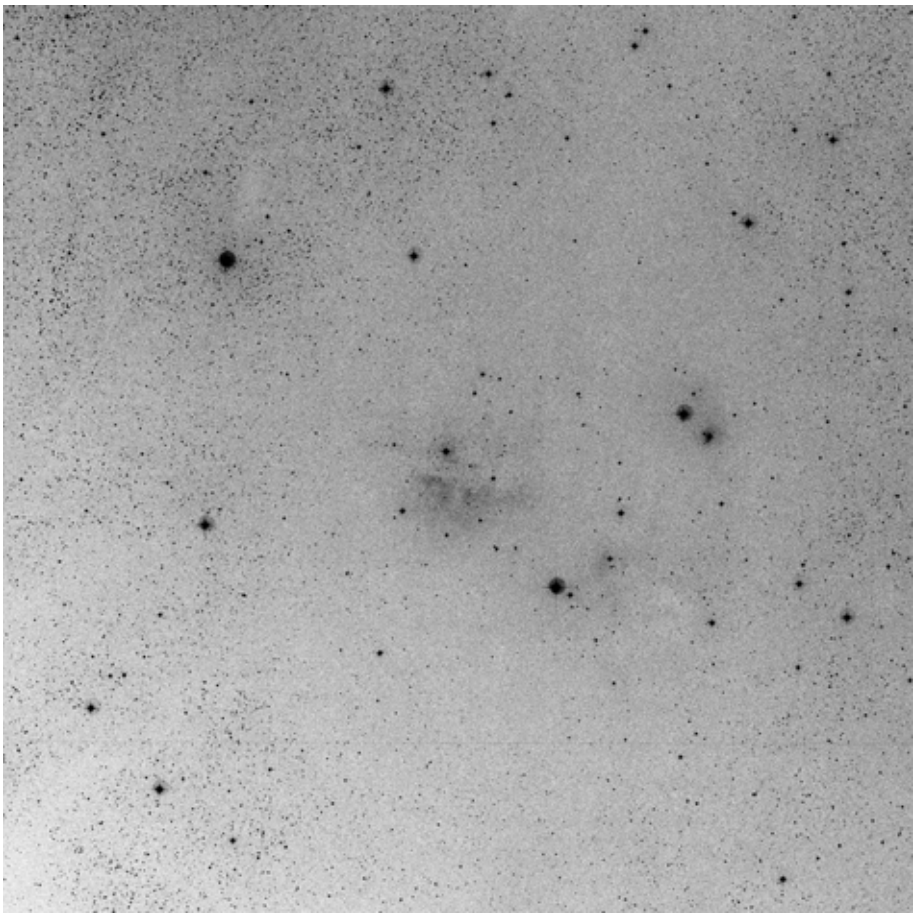
Observing notes:


+05°00'm
19h00m
18h30m
Altya
22
δ
21
64
4
73
74
23
59
+00°00'
27
5
61
60
η
14
15
λ
β
-05°00'
26
12
η
20
ε
α
δ
ζ

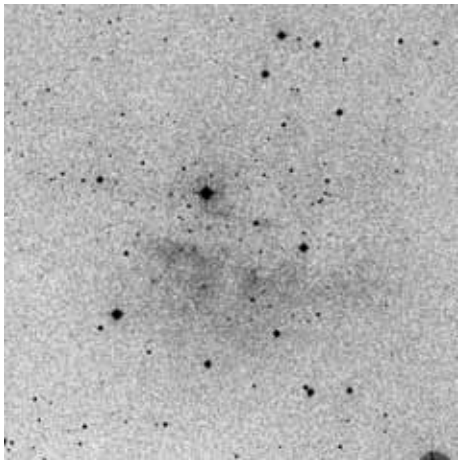

+00°00'm
18h50m
18h45m
18h40m
5
-01°00'
LDN
LDN 557
LDN 582
-02°00'
-03°00'
PK 28+ 1.1
PK 29+ 0.1
8

Sh 2 - 67

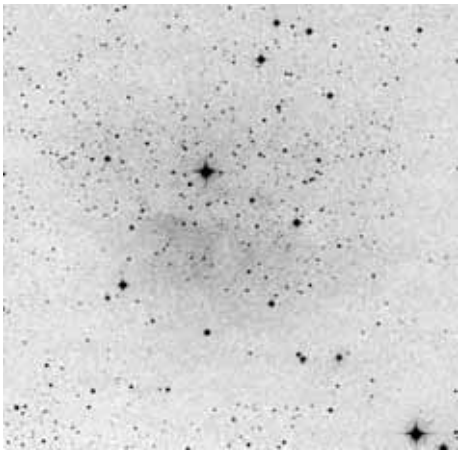
in Aquila



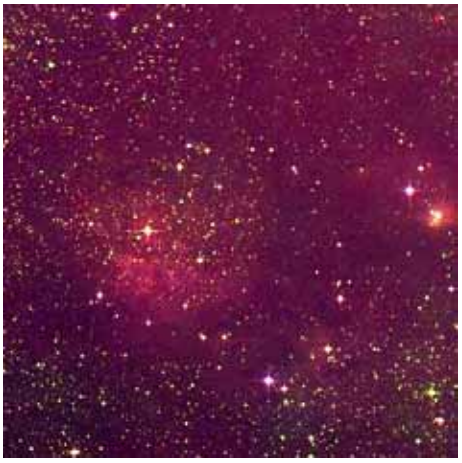
60x60, blue



POSS blue



POSS red



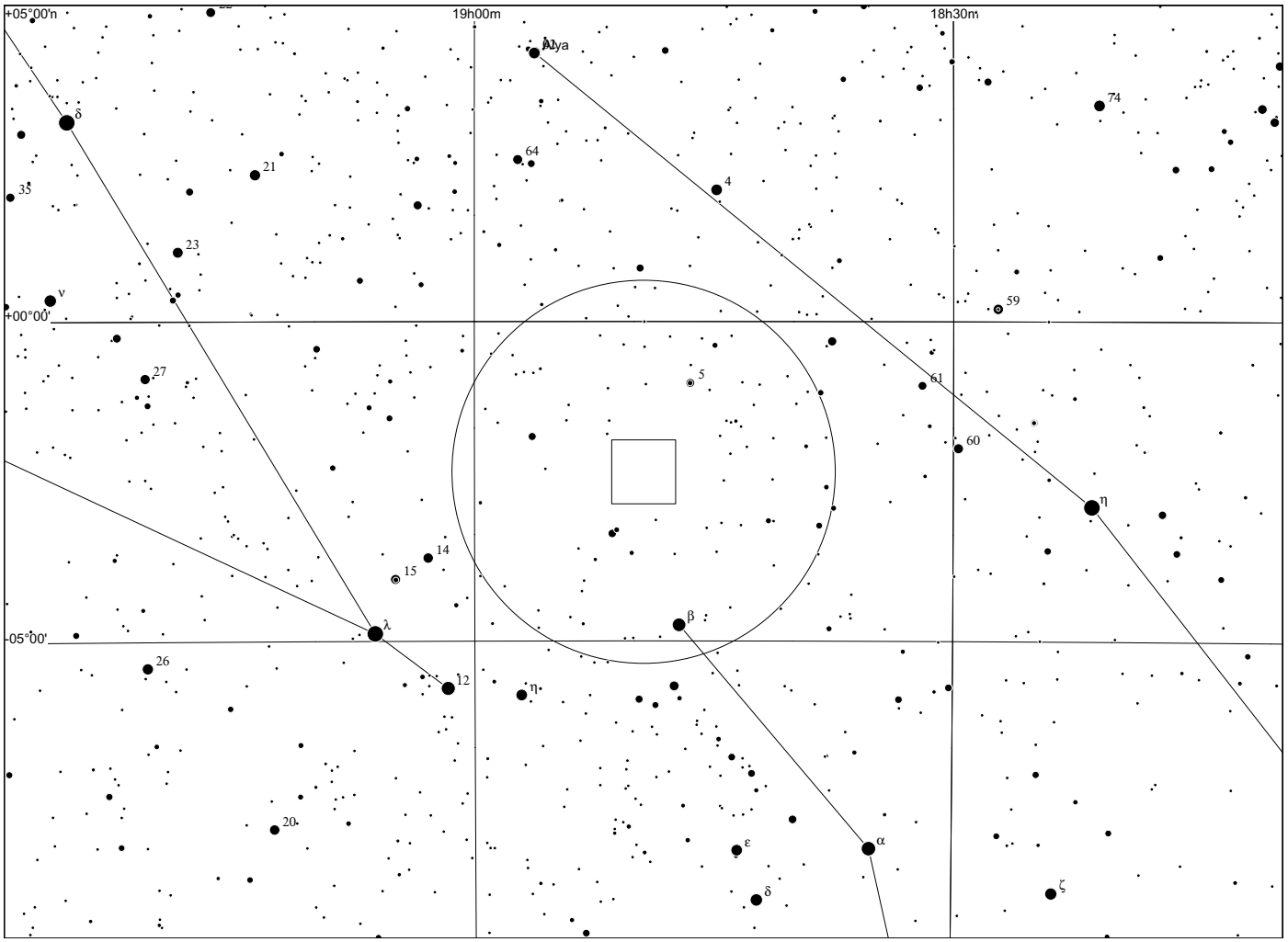
composite

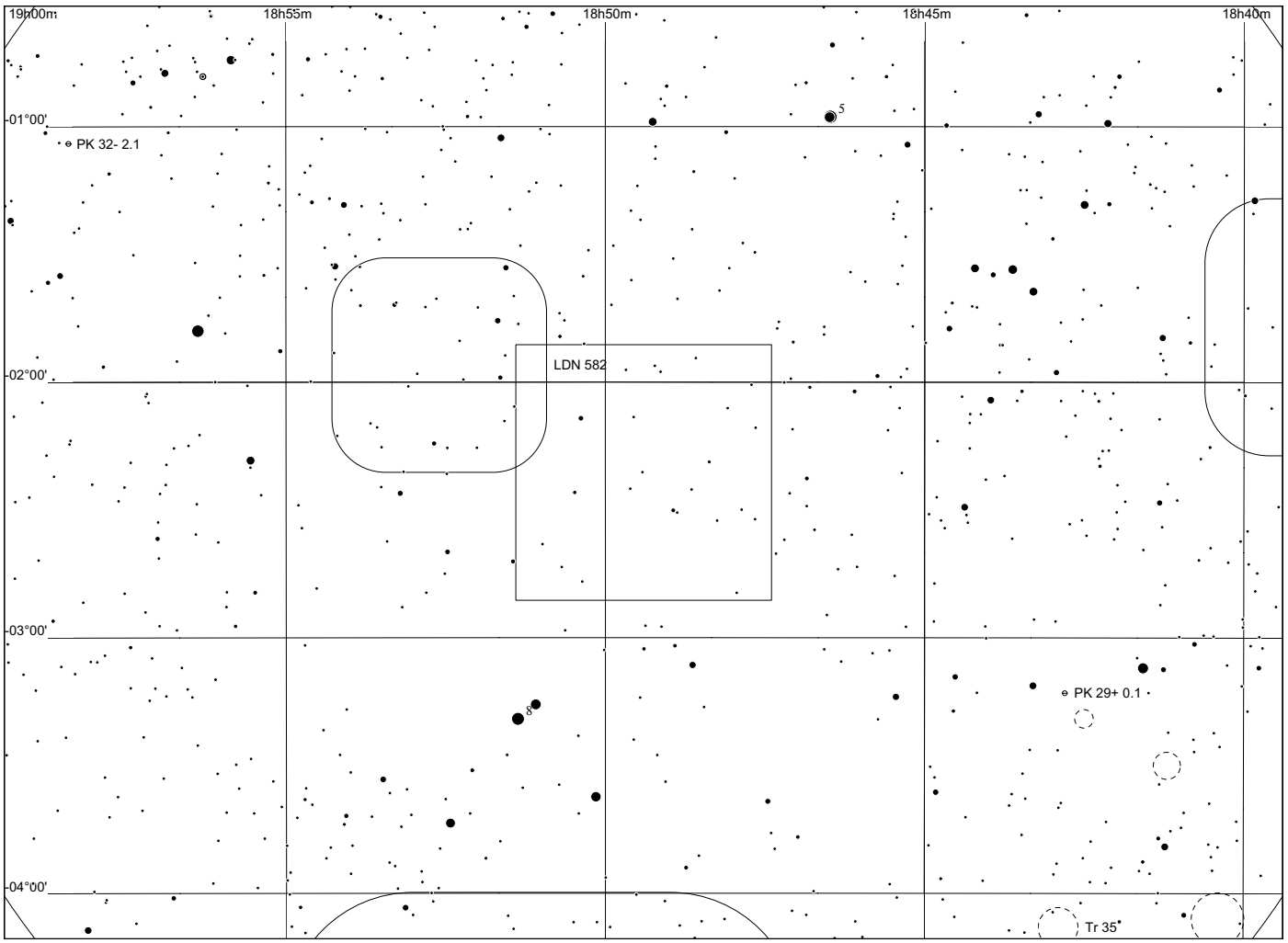
	other name	RA	dec	dia. '	F	S	B
Sh 2-067		18 49 24.4	-02 21 13	10	2	1	1

Distance: 400 pc, Size: 1.2 pc, Source: 1982ApJS...49..183B

Also called LBN 94, this nearby nebula is ionised by the B0.5 V star BD -2 4752.

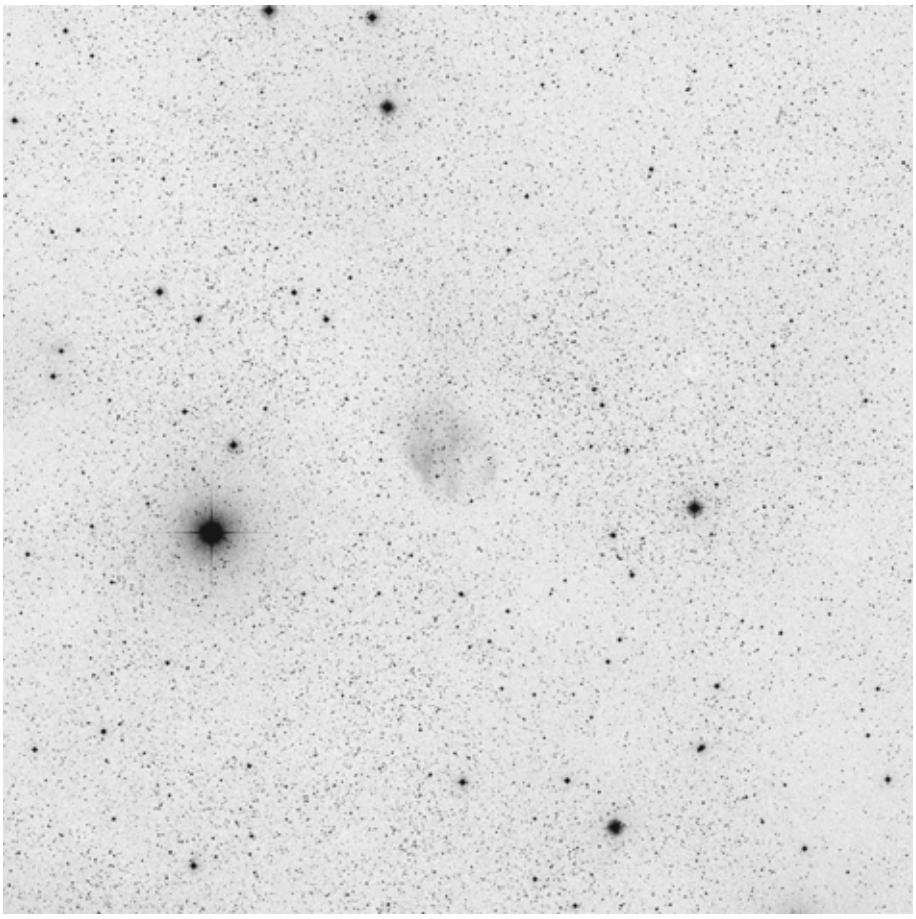
Observing notes:


+05°00'n
19h00m
18h30m
Altya
δ
74
64
21
4
35
23
ν
59
+00°00'
27
5
61
60
η
14
15
λ
β
-05°00'
26
12
η
20
ε
α
δ
ζ

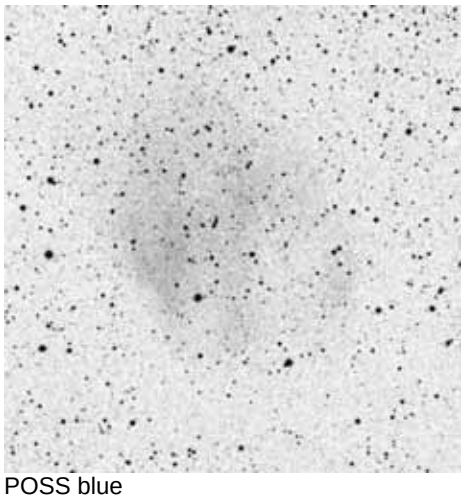

19h00m
18h55m
18h50m
18h45m
18h40m
-01°00'
PK 32- 2.1
5
LDN 582
-02°00'
-03°00'
8
PK 29+ 0.1
-04°00'
Tr 35

Sh 2 - 68

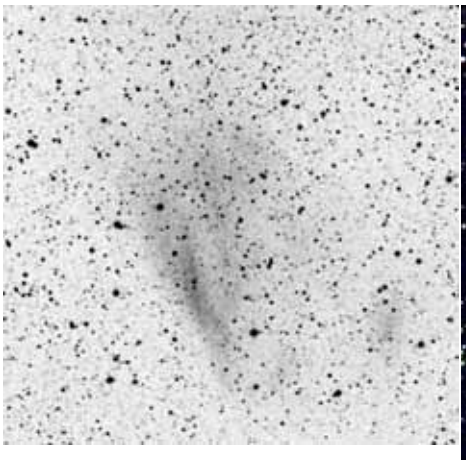
in Serpens



60x60, blue



POSS blue



POSS red

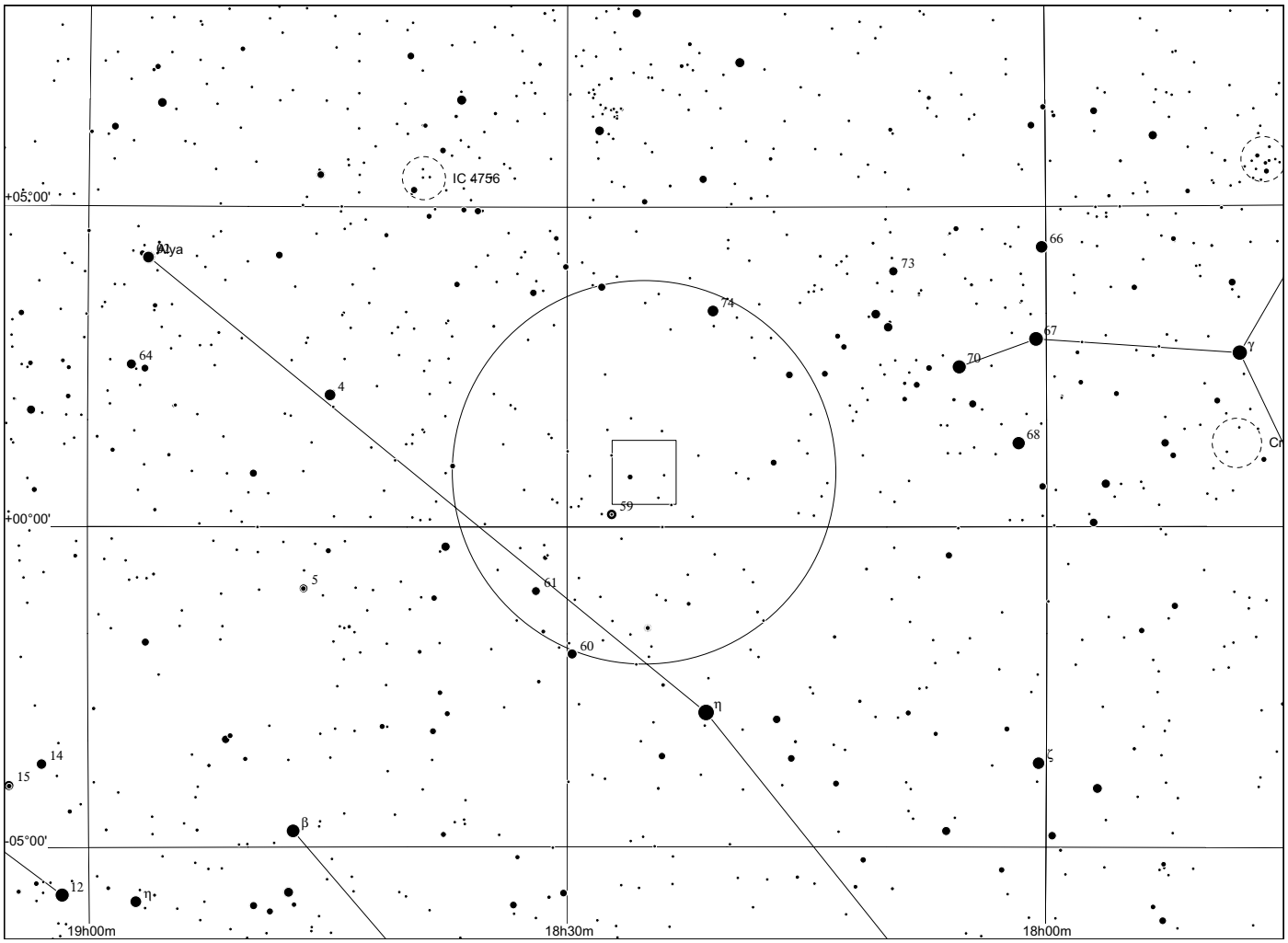


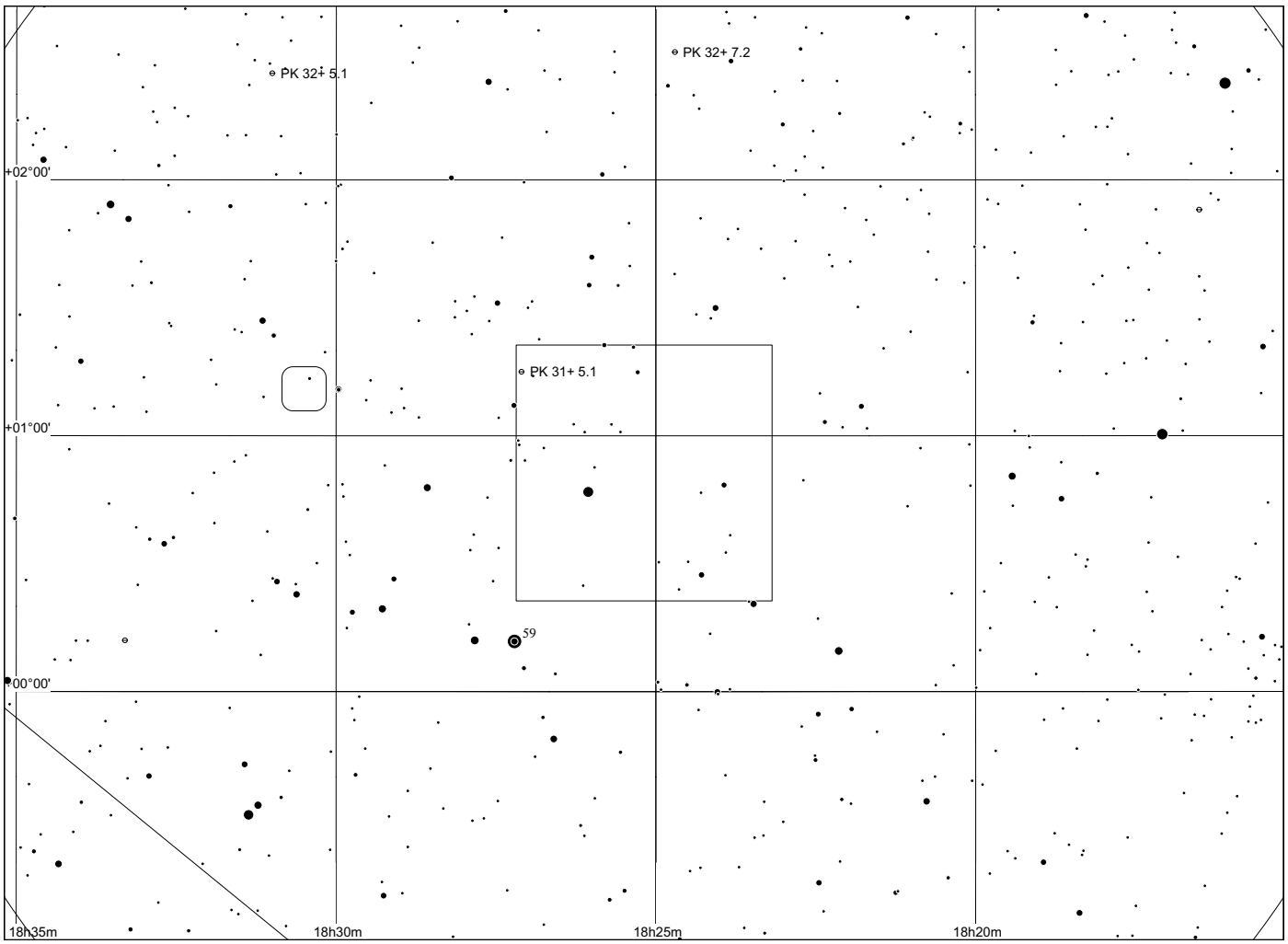
composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-068	PN	18 25 10.8	+00 51 17	8	3	2	2

The expansion of this planetary nebula has been halted by the surrounding local gas but the central star has continued to move so as a result the star is no longer at the centre of the nebula.

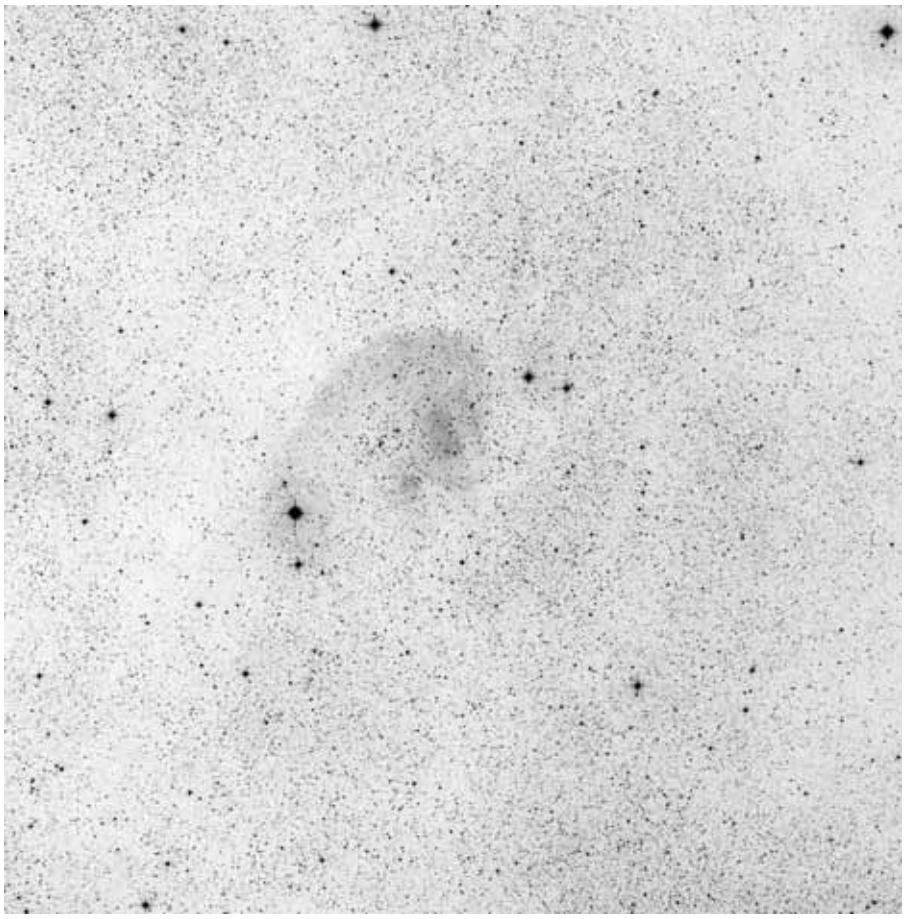
Observing notes:


IC 4756
+05°00'
+00°00'
-05°00'
19h00m
18h30m
18h00m
Alya
66
73
74
67
70
γ
64
4
68
59
5
61
60
η
14
15
ζ
β
12
η

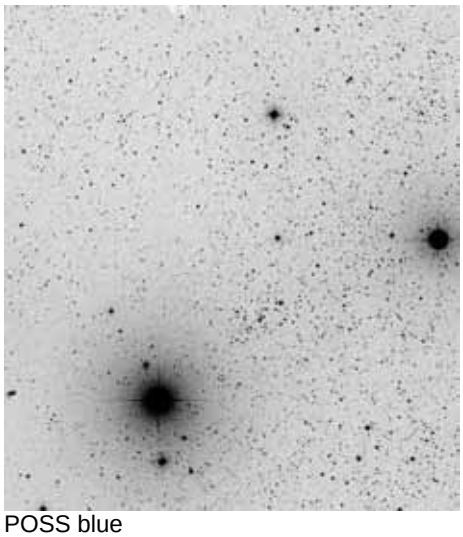

PK 32+ 5.1
PK 32+ 7.2
+02°00'
PK 31+ 5.1
+01°00'
59
+00°00'
18h35m
18h30m
18h25m
18h20m

Sh 2 - 69

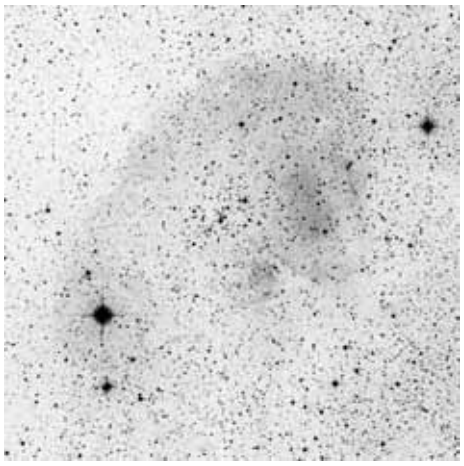
in Aquila



60x60, red



POSS blue



POSS red



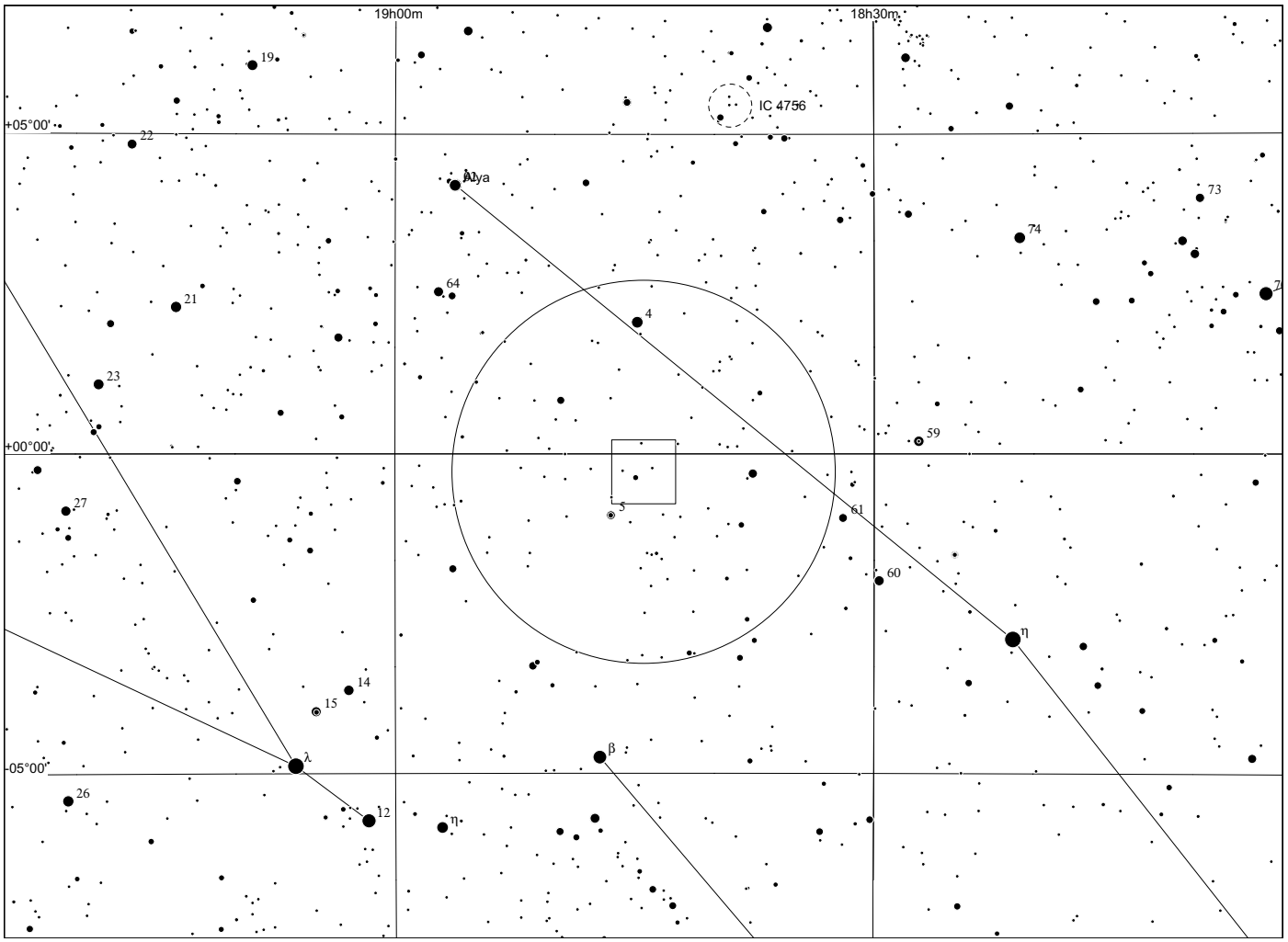
composite

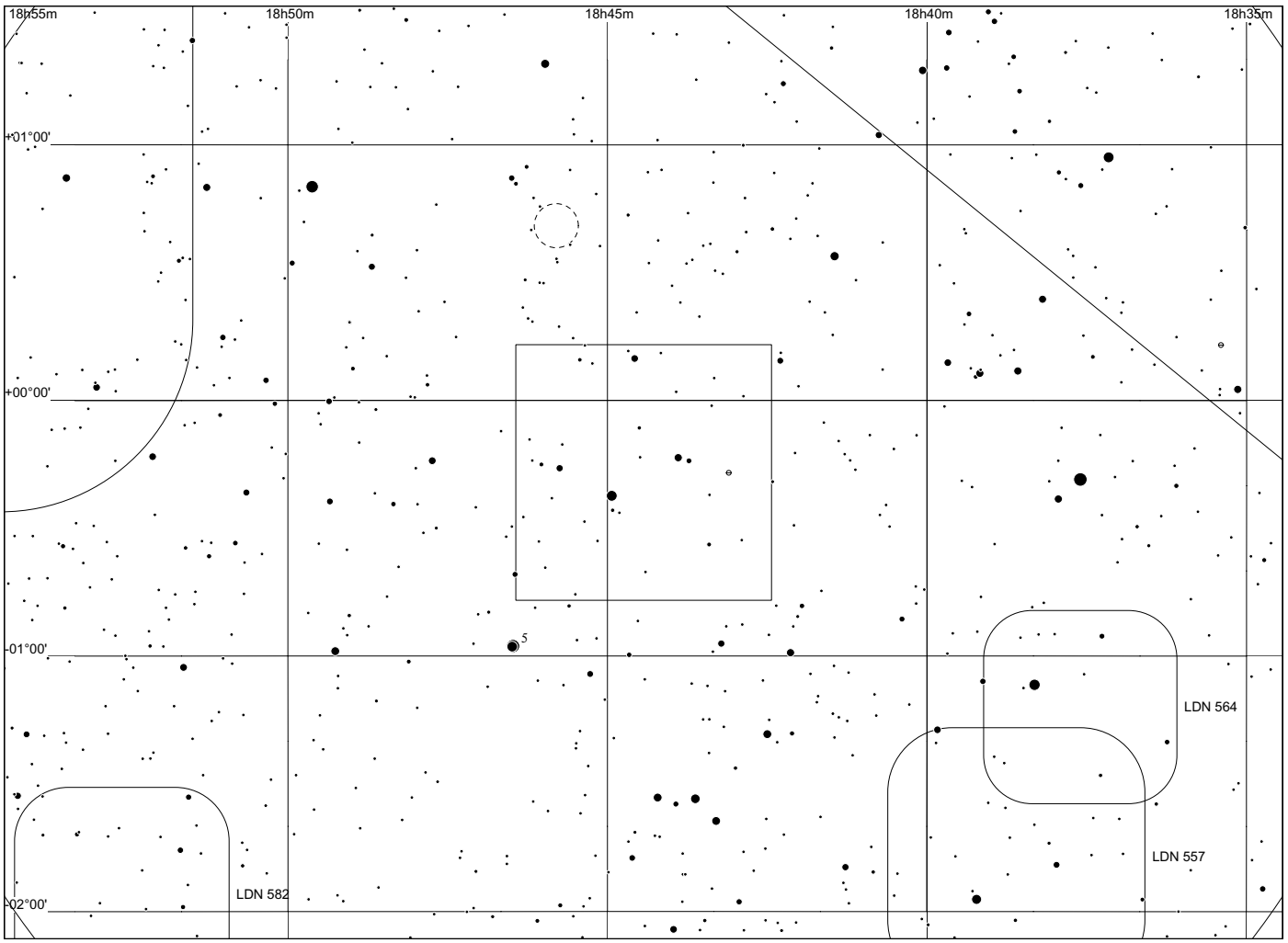
	other name	RA	dec	dia. '	F	S	B
Sh 2-069		18 44 26.1	-00 16 55	20	2	2	2

Also: RCW 177 (31.89°, 1.42°) Distance: 3800 pc, Size: 22.1 pc Source: 2003A&A...397..133R

Excited by the B0.5 IV star S69-2, which SIMBAD says should be called [F89b] S69 2.

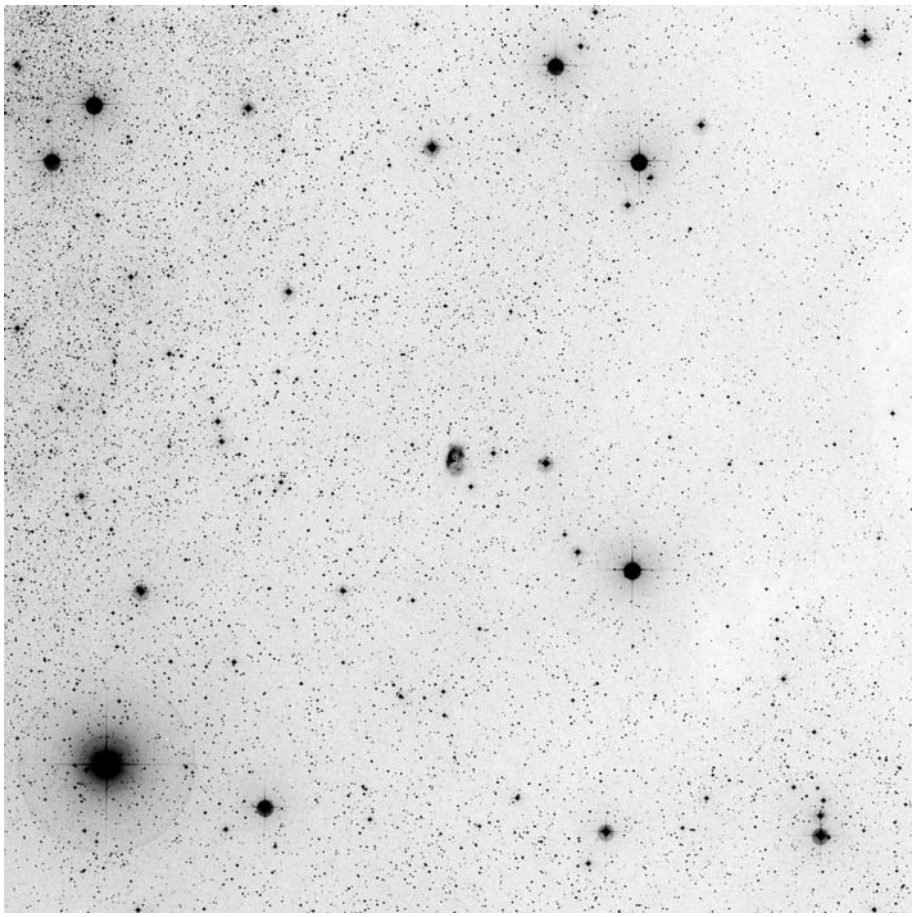
Observing notes:


19h00m
18h30m
+05°00'
+00°00'
-05°00'
IC 4756
Alya
19
22
21
23
27
26
14
15
12
64
4
5
61
60
59
73
74
η
β
λ

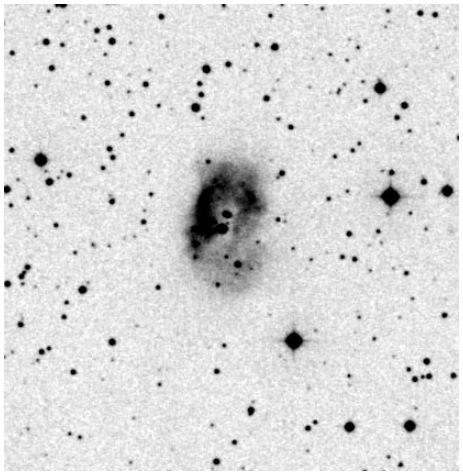

18h55m
18h50m
18h45m
18h40m
18h35m
+01°00'
+00°00'
-01°00'
-02°00'
5
LDN 564
LDN 557
LDN 582

Sh 2 - 71

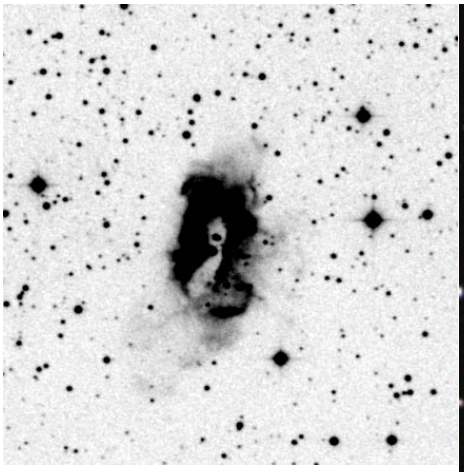
in Aquila



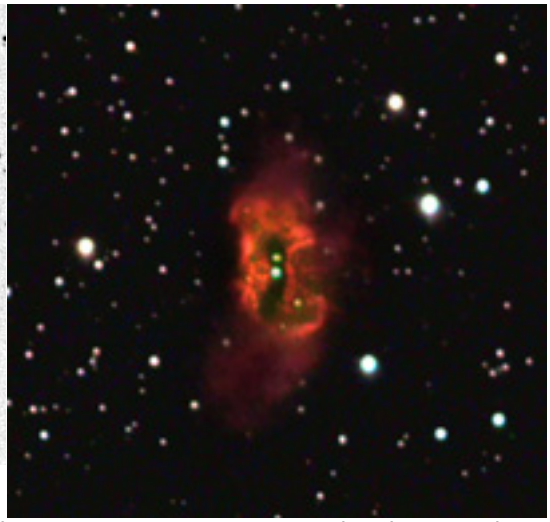
60x60, blue



POSS blue



POSS red

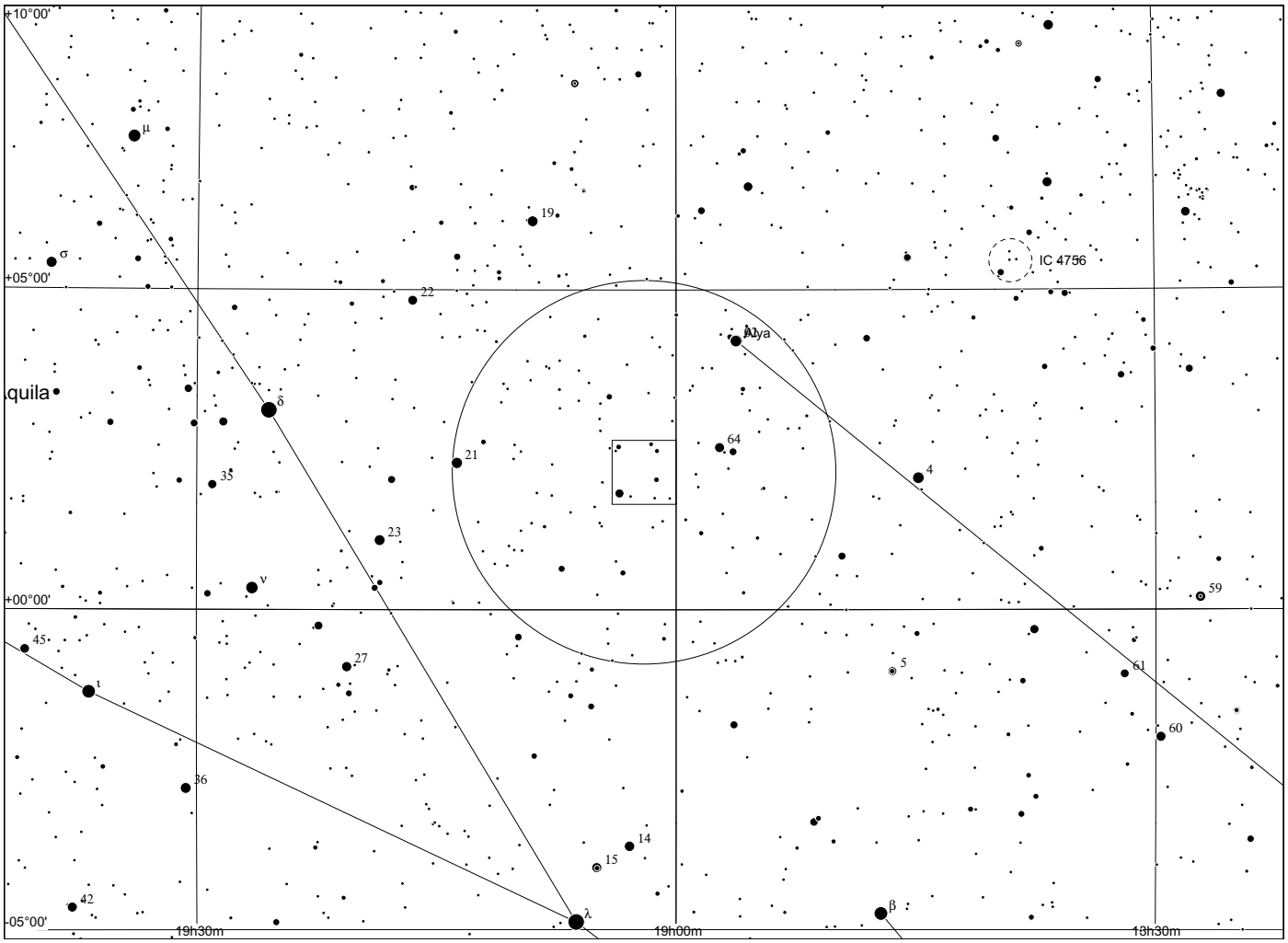


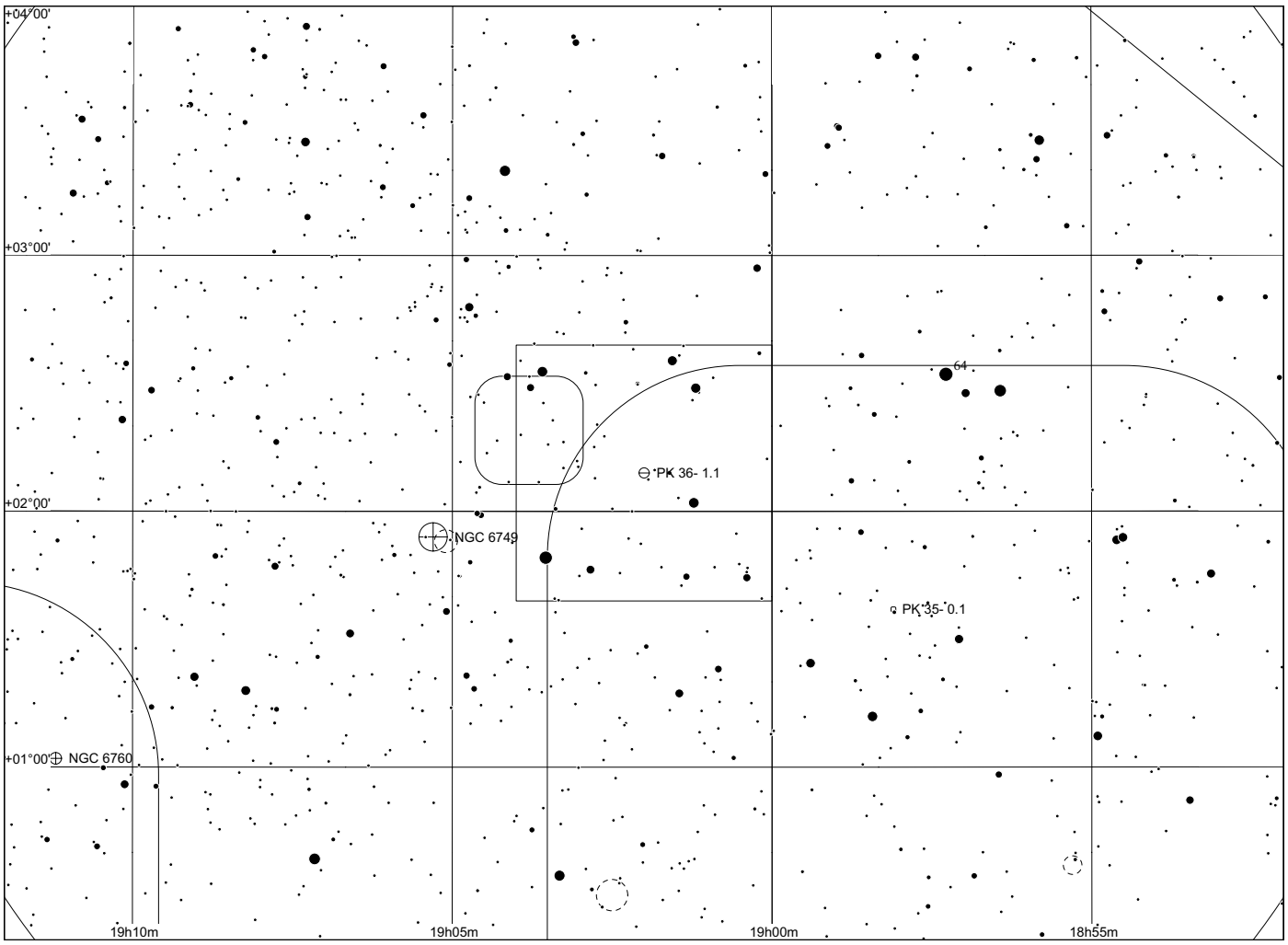
narrowband Dean Salman

	other name	RA	dec	dia. '	F	S	B
Sh 2-071		19 02 02.3	+02 09 35	3	2	2	3

This is an unusual planetary nebula that appears to have a binary central star.

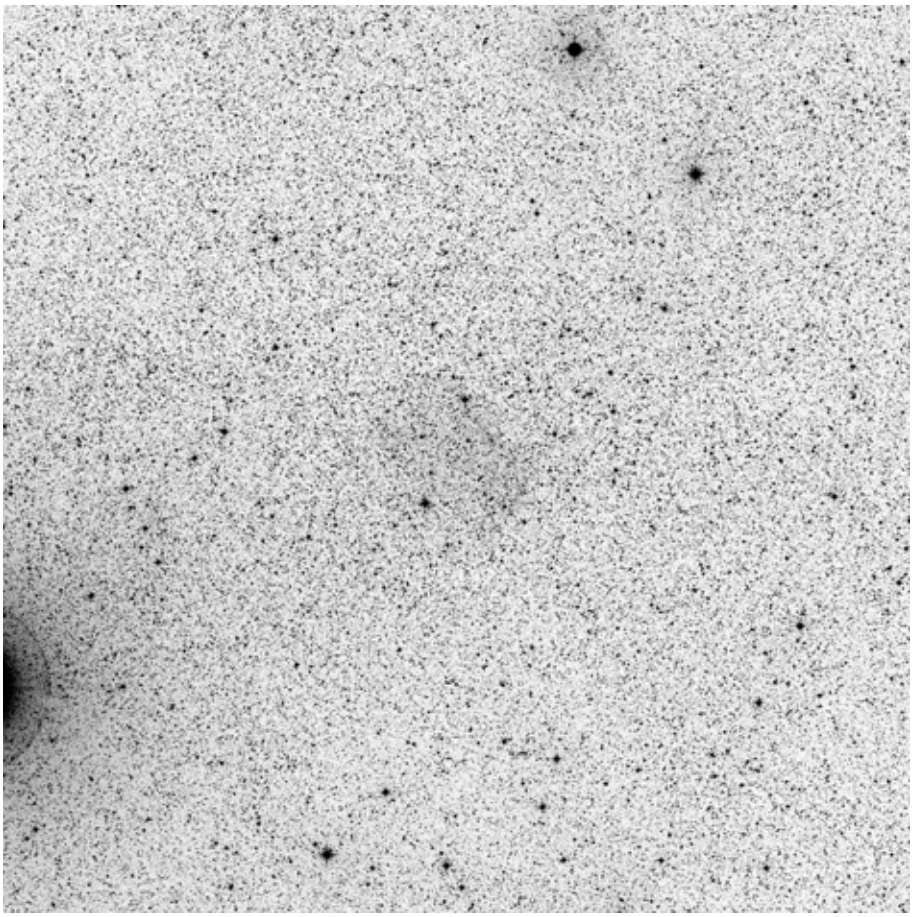
Observing notes:


+10°00'
+05°00'
+00°00'
-05°00'
19h30m
19h00m
18h30m
IC 4756
Alya
quila
μ
σ
δ
ν
ι
λ
β
19
22
21
64
4
35
23
59
45
27
5
61
60
36
14
15
42

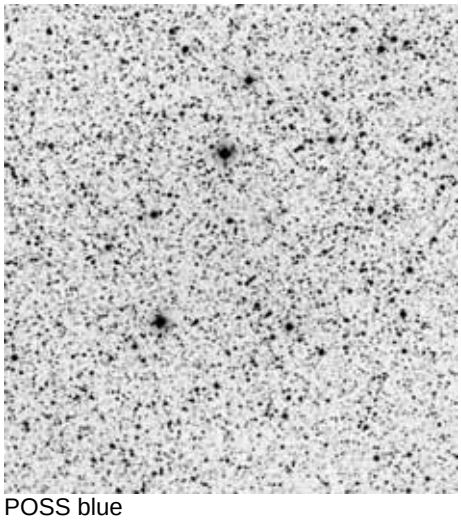

+04°00'
+03°00'
+02°00'
+01°00'
19h10m
19h05m
19h00m
18h55m
64
PK 36- 1.1
NGC 6749
PK 35- 0.1
NGC 6760

Sh 2 - 78

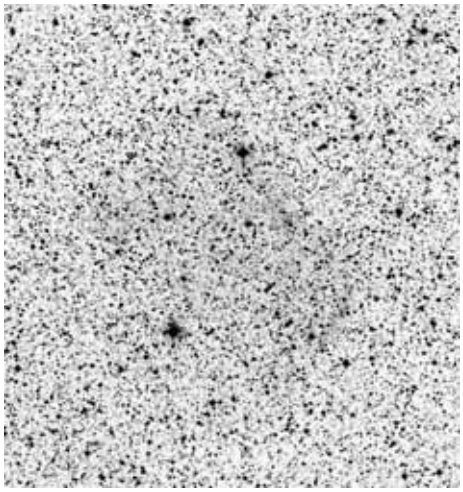
in Aquila



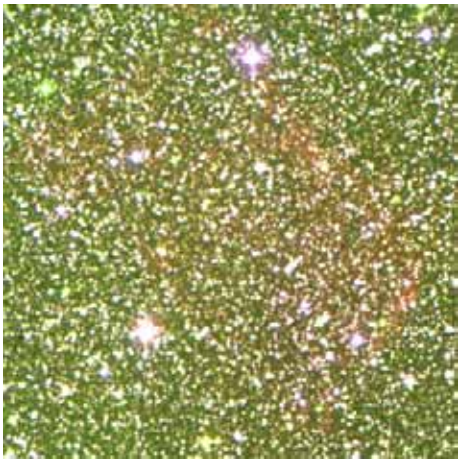
60x60, red enhanced



POSS blue



POSS red



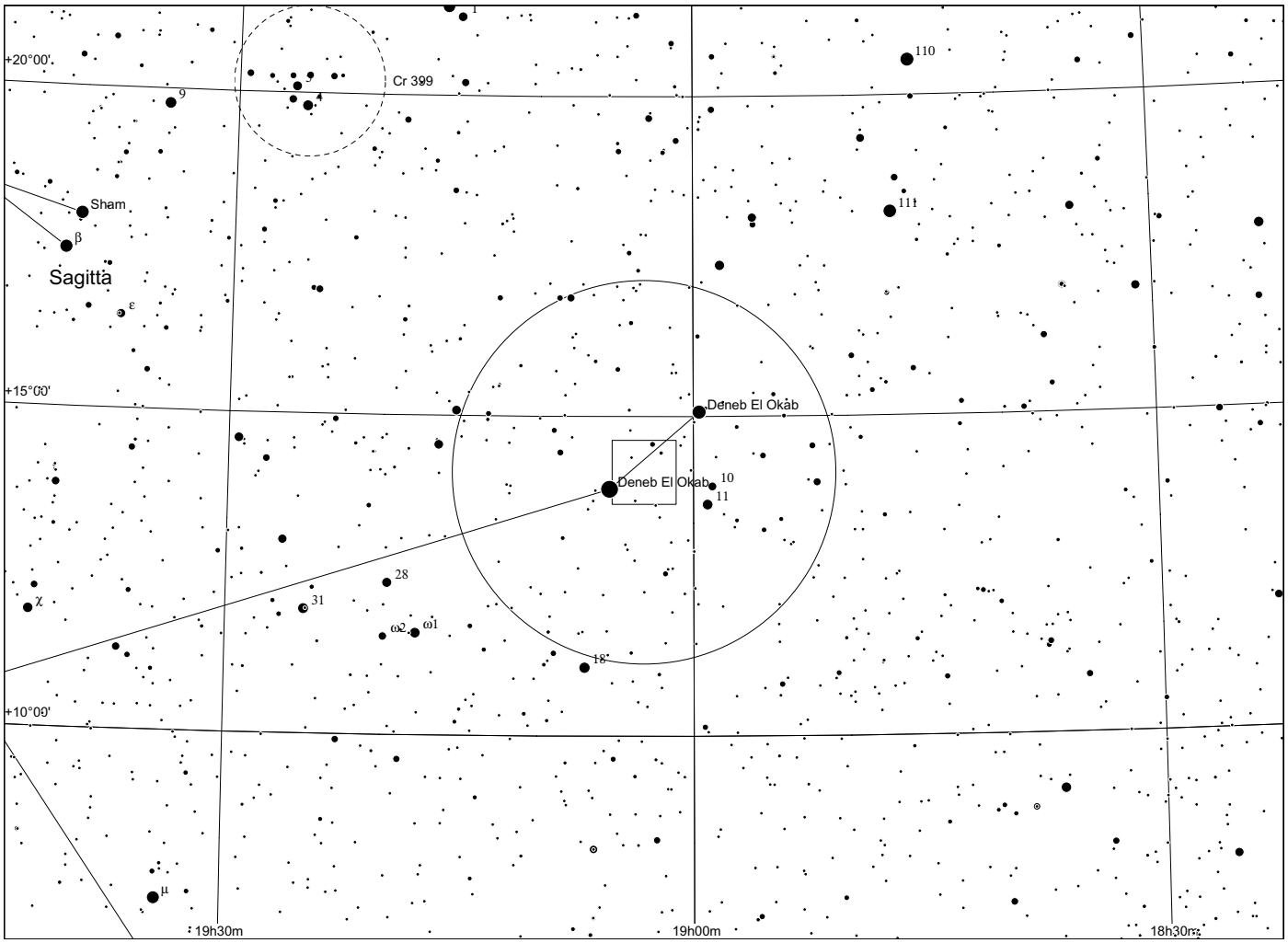
composite

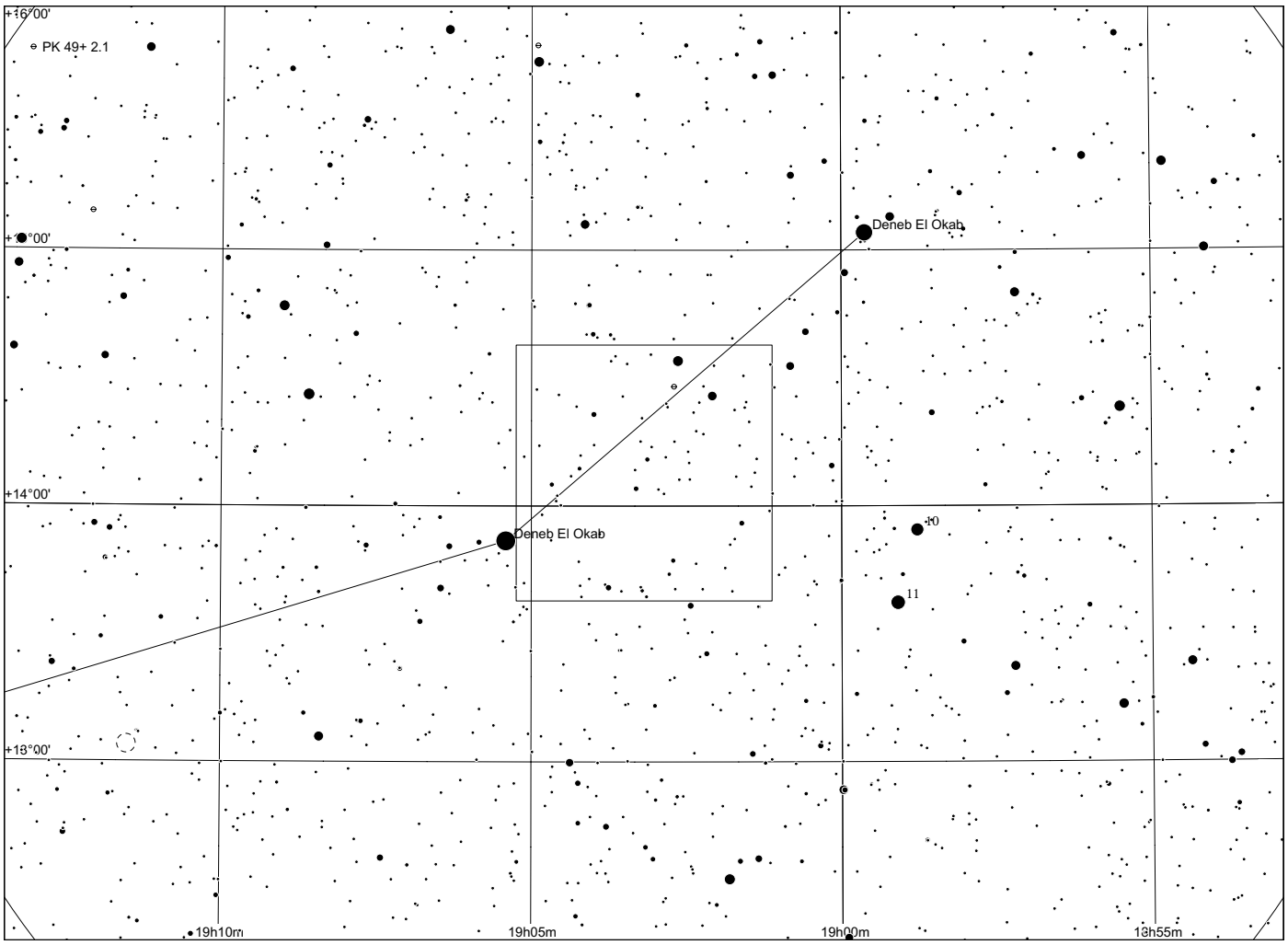
	other name	RA	dec	dia. '	F	S	B
Sh 2-078	CTSS 3, PN	19 03 10.6	+14 07 46	12	1	1	1

Distance: 4300 pc, Size: 15.0 pc, Source: 1989A&AS...77..439F

This is the old planetary nebula CTSS 3 and actually lies at a distance of 700 parsecs.

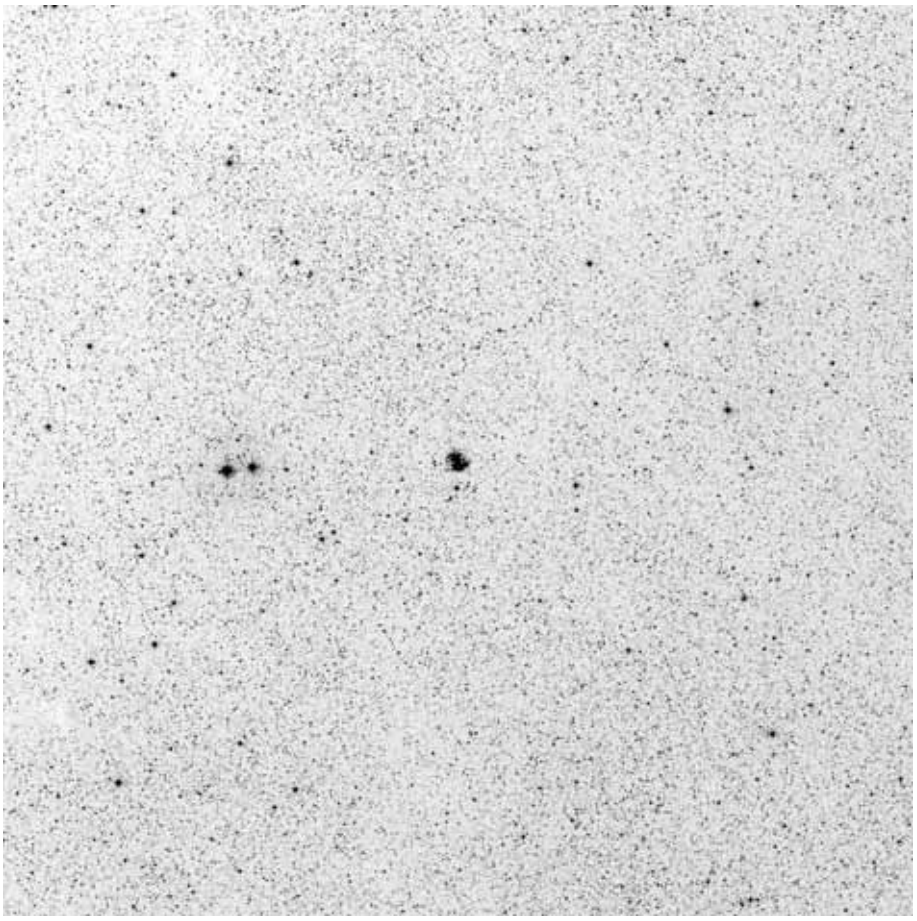
Observing notes:


+20°00'
+15°00'
+10°00'
Cr 399
Sham
β
Sagitta
ε
χ
μ
28
31
ω2
ω1
18
110
111
Deneb El Okab
Deneb El Okab
10
11
19h30m
19h00m
18h30m

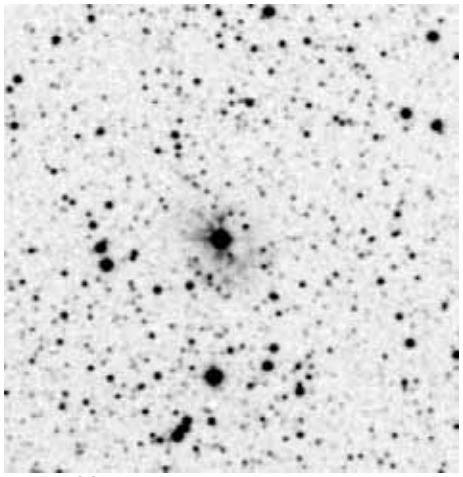

+16°00'
+14°00'
+12°00'
PK 49+ 2.1
Deneb El Okab
Deneb El Okab
10
11
19h10m
19h05m
19h00m
18h55m

Sh 2 - 80

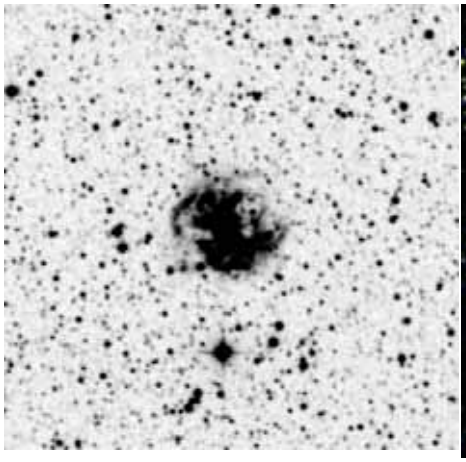
in Sagitta



60x60, red



POSS blue



POSS red



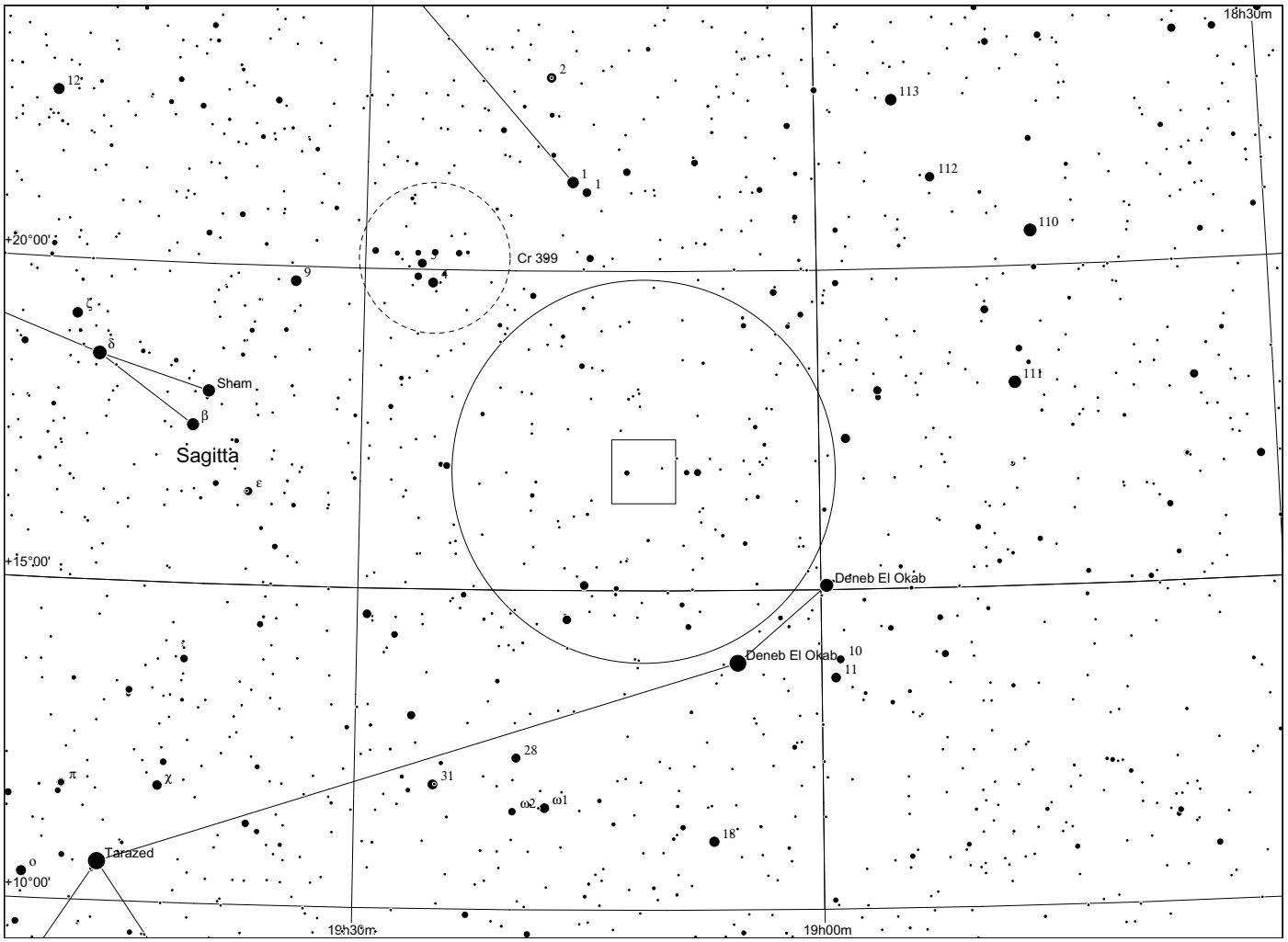
composite

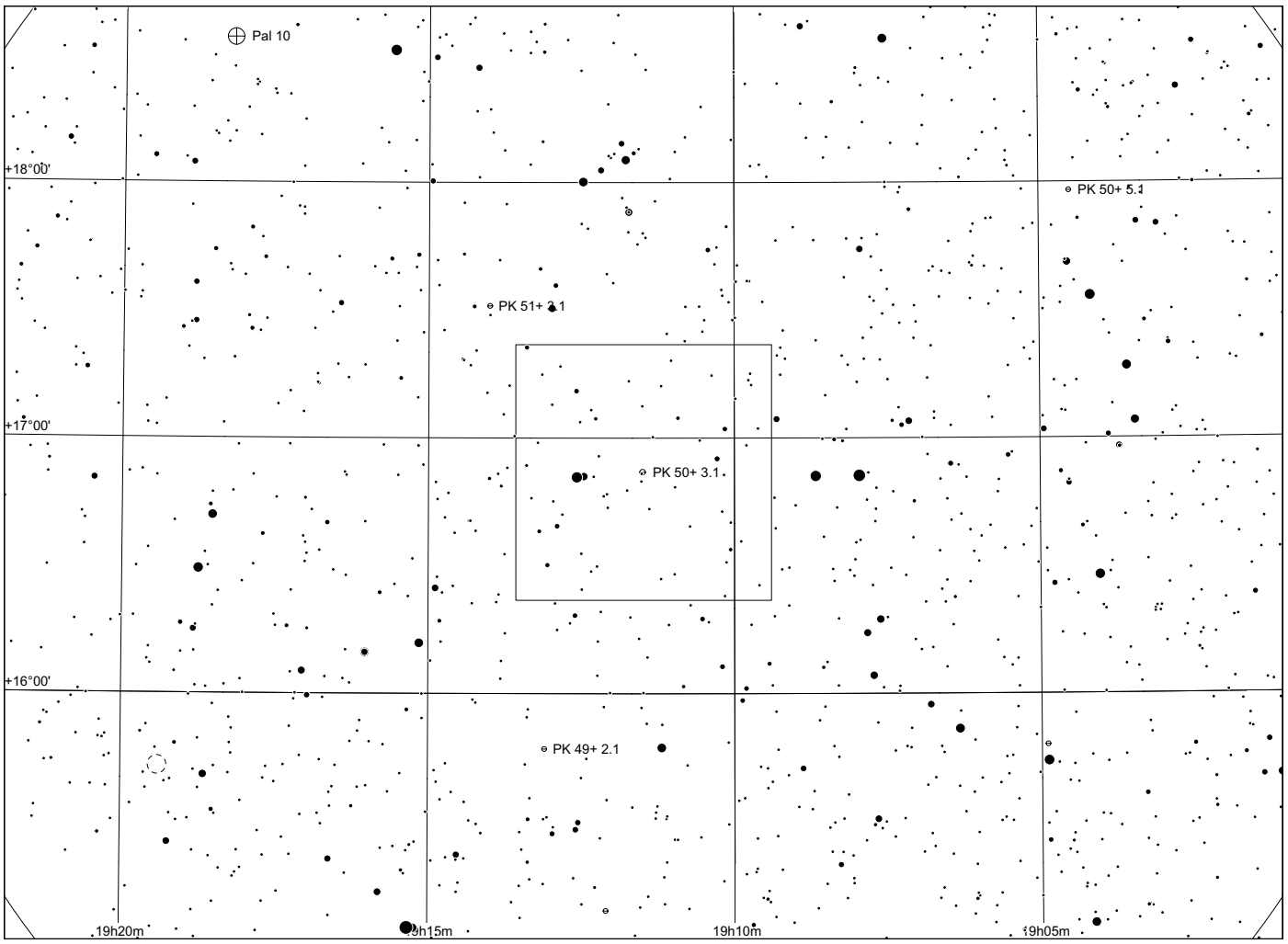
	other name	RA	dec	dia. '	F	S	B
Sh 2-080	M1-67, WR shell	19 11 28.5	+16 51 57	2	3	2	3

Distance: 6400 pc, Size: 3.7 pc Source: 2000A&A...360..227N

This is a ring nebula surrounding the Wolf Rayet star WR 124, also known as Merrill's star.

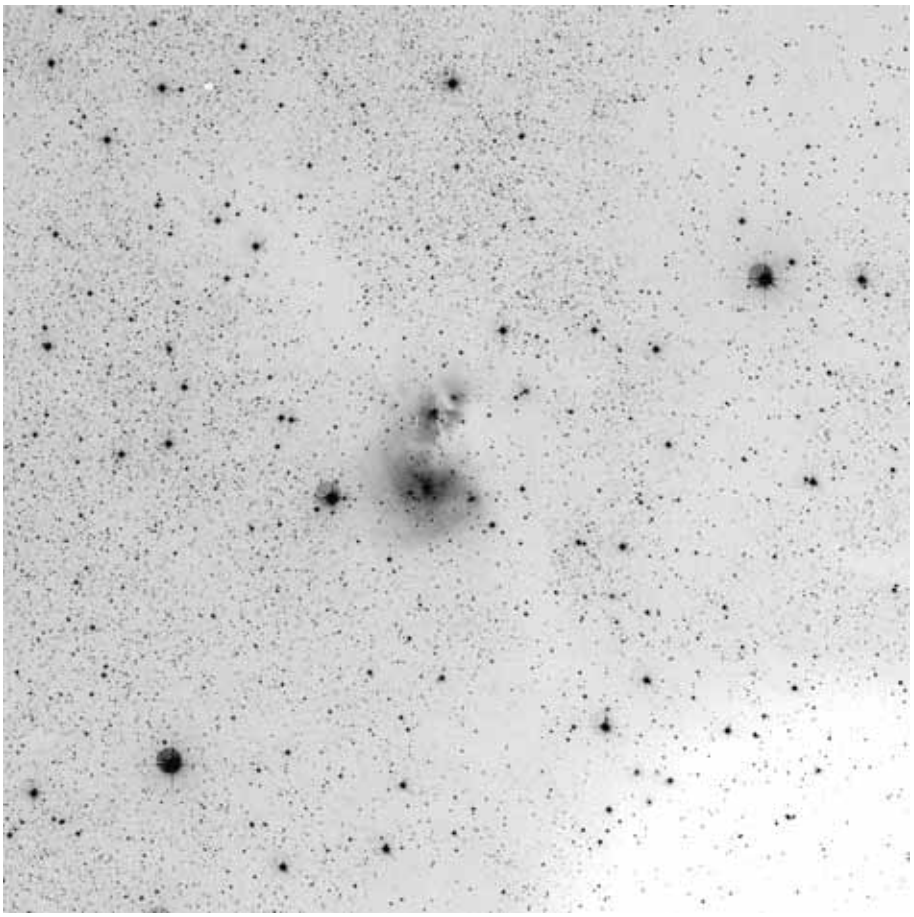
Observing notes:


18h30m
+20°00'
+15°00'
+10°00'
19h30m
19h00m
Cr 399
Sham
Sagitta
Deneb El Okab
Deneb El Okab
Tarazed
12
2
1
1
113
112
110
9
ζ
δ
β
ε
111
10
11
28
31
π
χ
ω2
ω1
18
ο

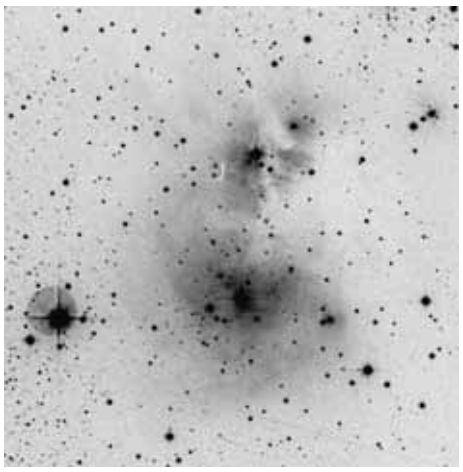

Pal 10
+18°00'
+17°00'
+16°00'
PK 51+ 2.1
PK 50+ 5.1
PK 50+ 3.1
PK 49+ 2.1
19h20m
19h15m
19h10m
19h05m

Sh 2 - 82

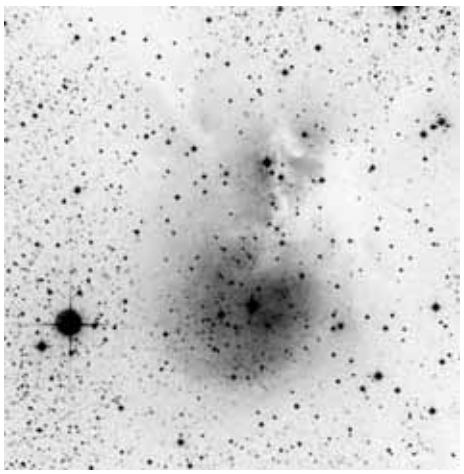
in Sagitta



60x60, blue



POSS blue



POSS red



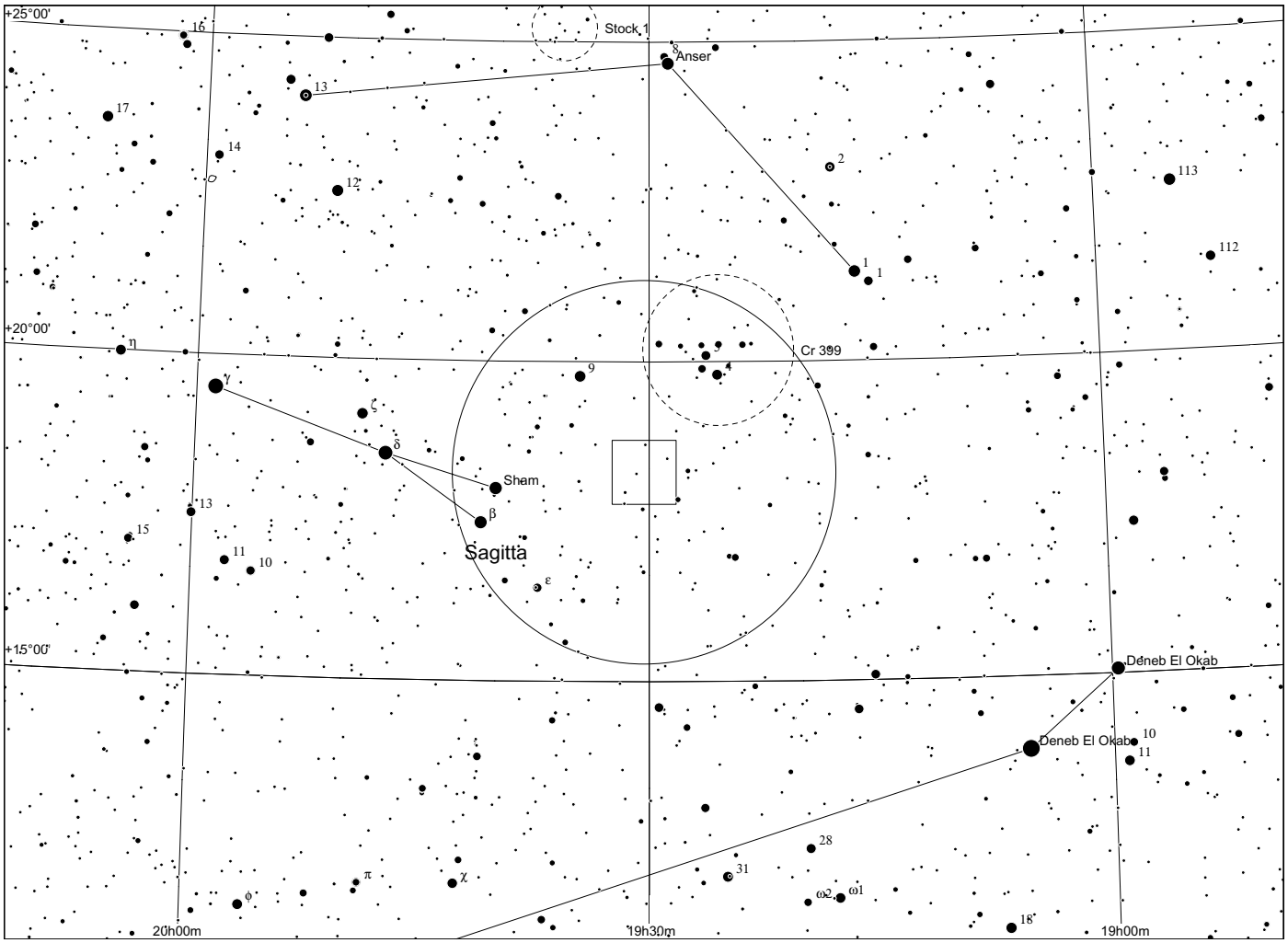
composite

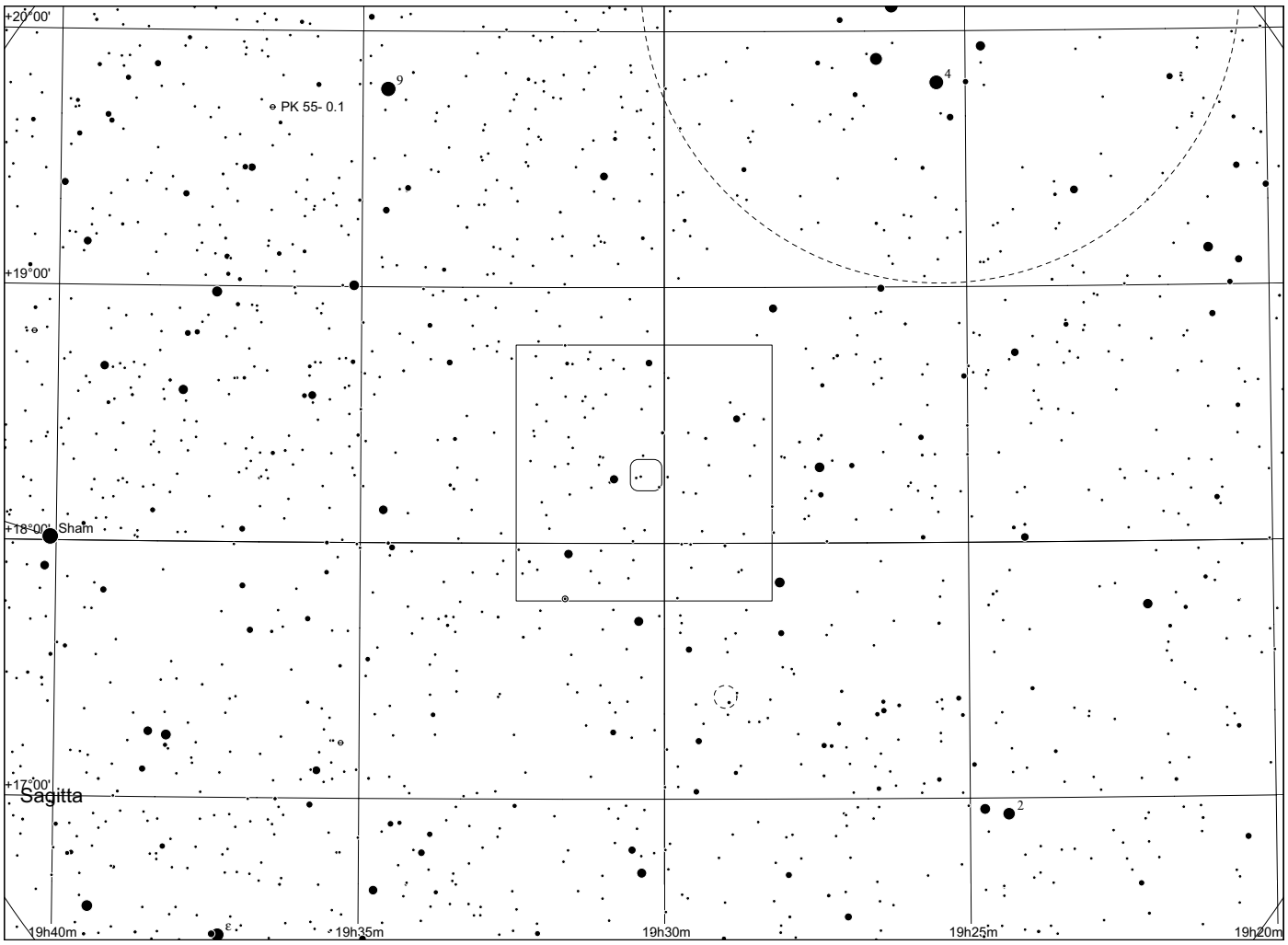
	other name	RA	dec	dia. '	F	S	B
Sh 2-082		19 30 20.4	+18 16 31	9	3	1	2

Distance: 1100 pc, Size: 2.9 pc Source: 1982ApJS...49..183B

This combination HII region and reflection nebula, also called LBN 129 and DG 159, is ionised by the B0.5V star HD 231616. With the current distance estimate, it appears to be near the Vulpecula OB4 association.

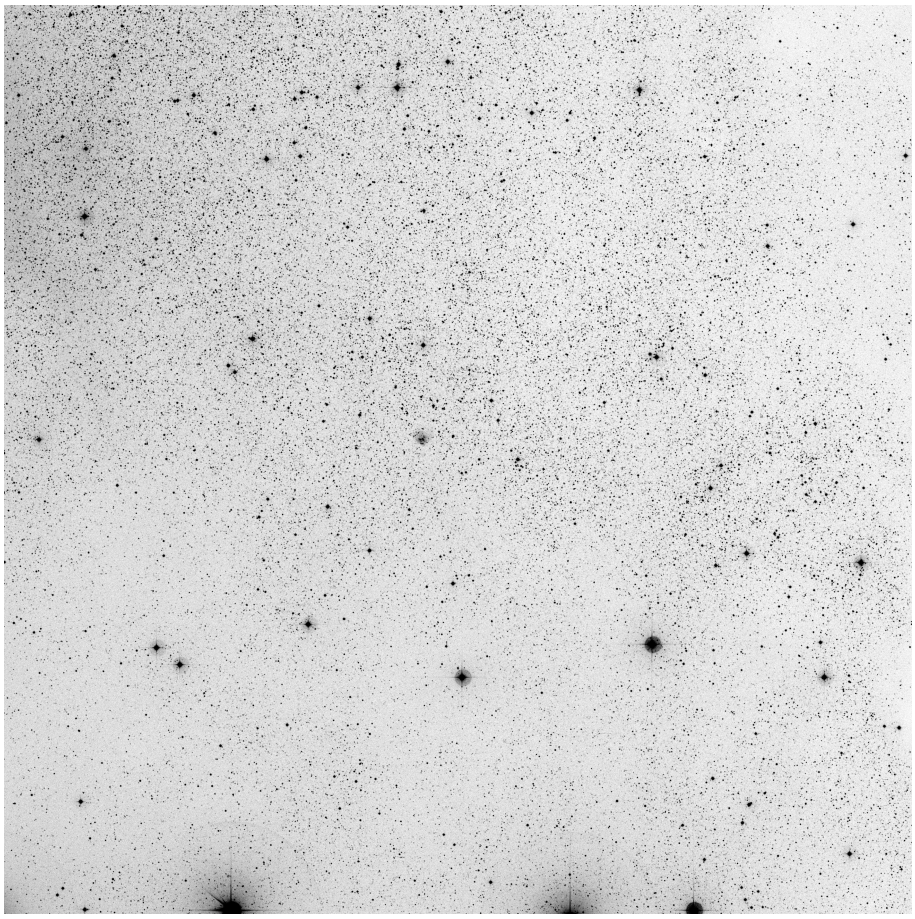
Observing notes:


+25°00'
+20°00'
+15°00'
Stock 1
Anser
Cr 399
Sham
Sagitta
Deneb El Okab
Deneb El Okab
20h00m
19h30m
19h00m

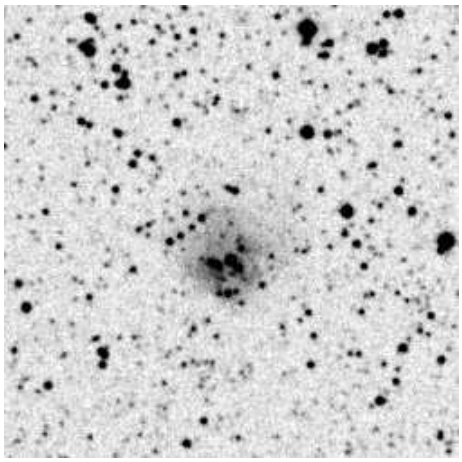

+20°00'
+19°00'
+18°00'
+17°00'
PK 55- 0.1
Sham
Sagitta
19h40m
19h35m
19h30m
19h25m
19h20m

Sh 2 - 83

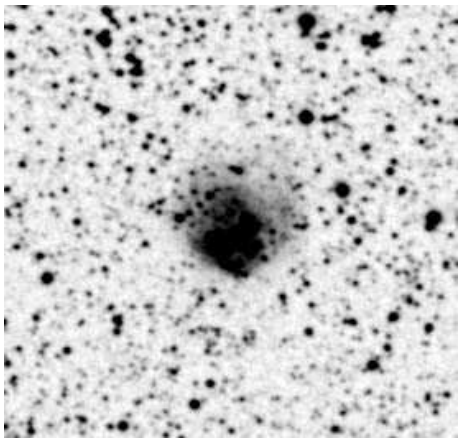
in Vulpecula



60x60, blue



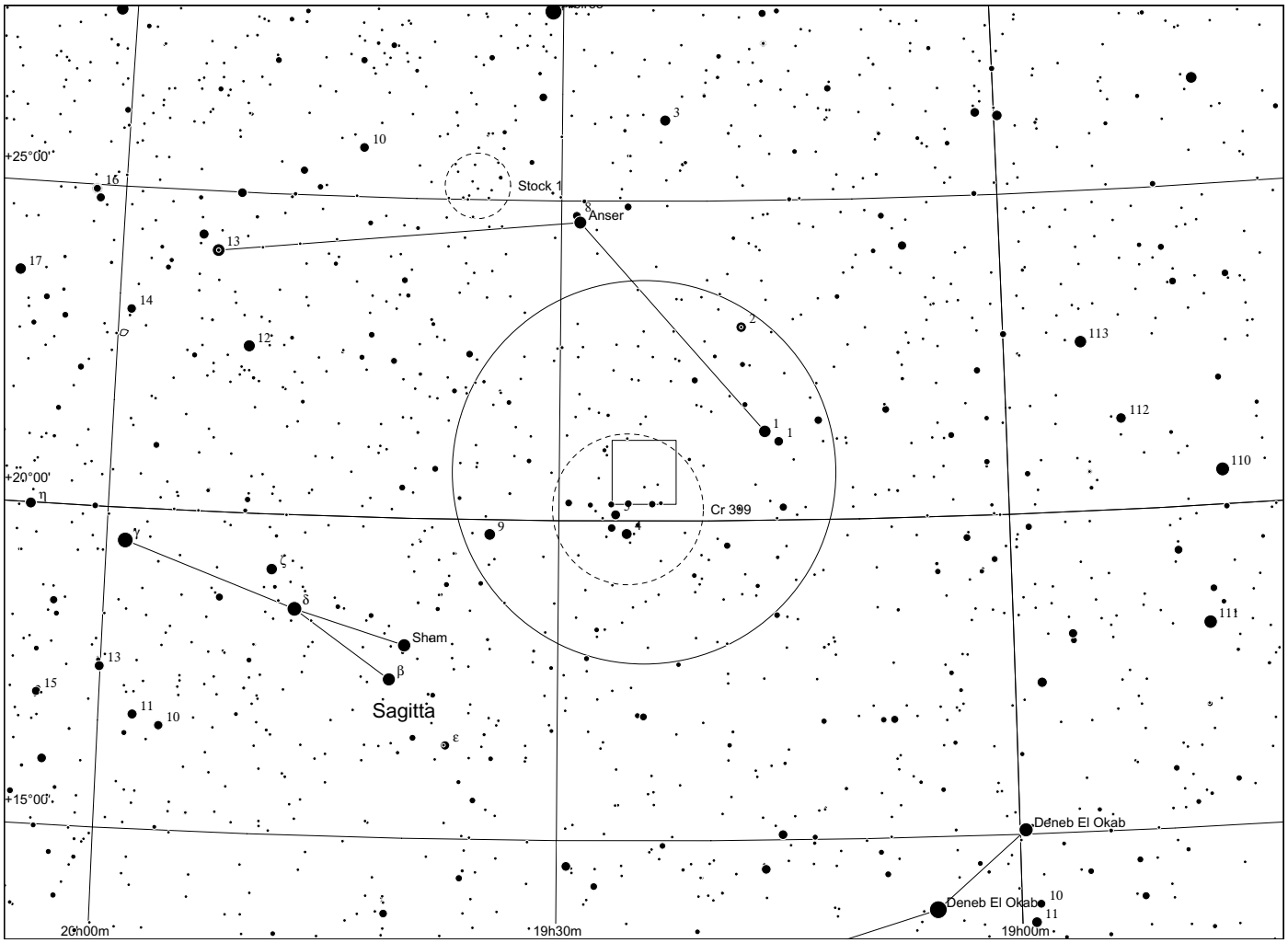
POSS blue

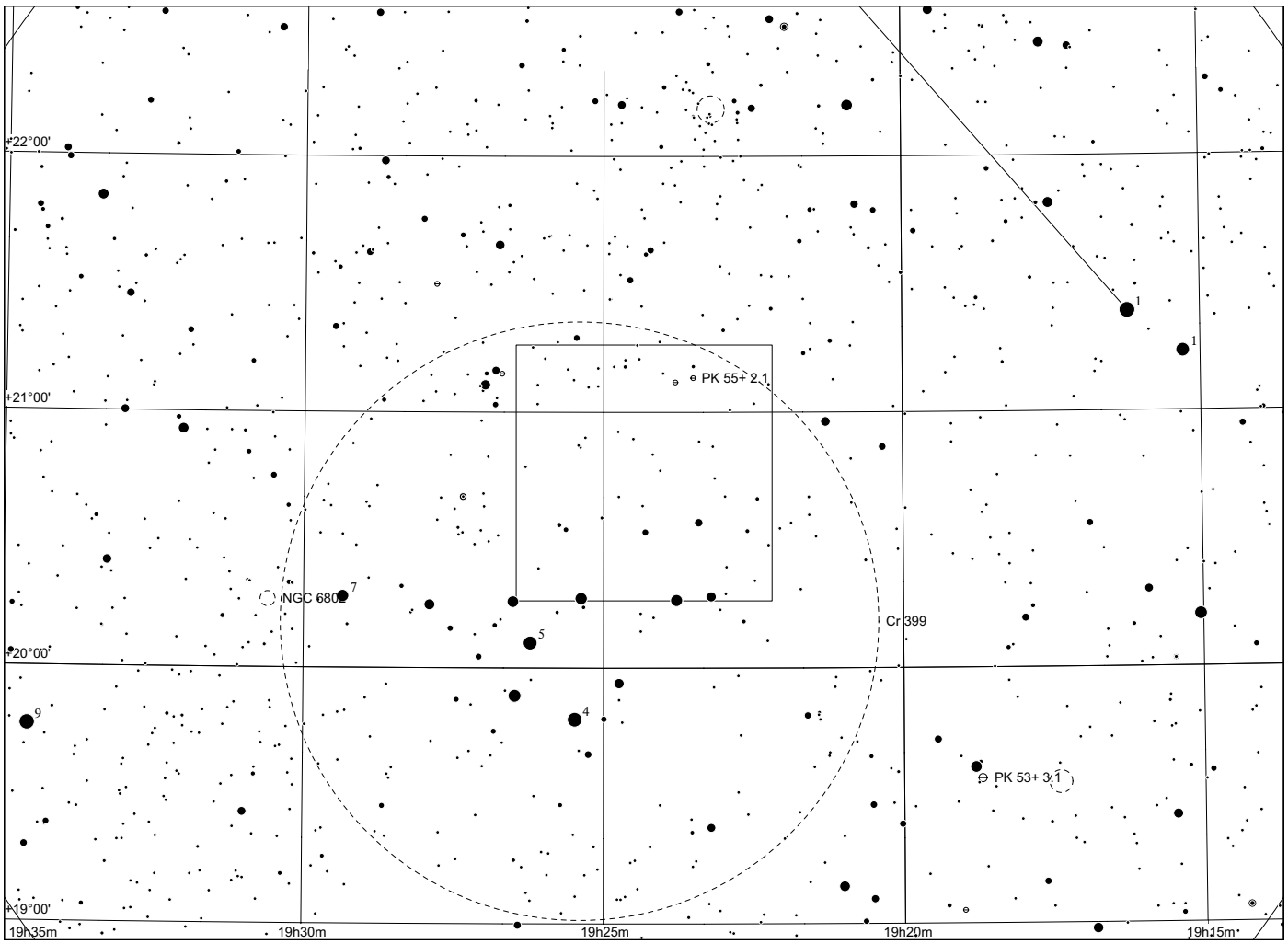


POSS red

	other name	RA	dec	dia. '	F	S	B
Sh 2-083		19 24 32.1	+20 47 45	2	1	2	2

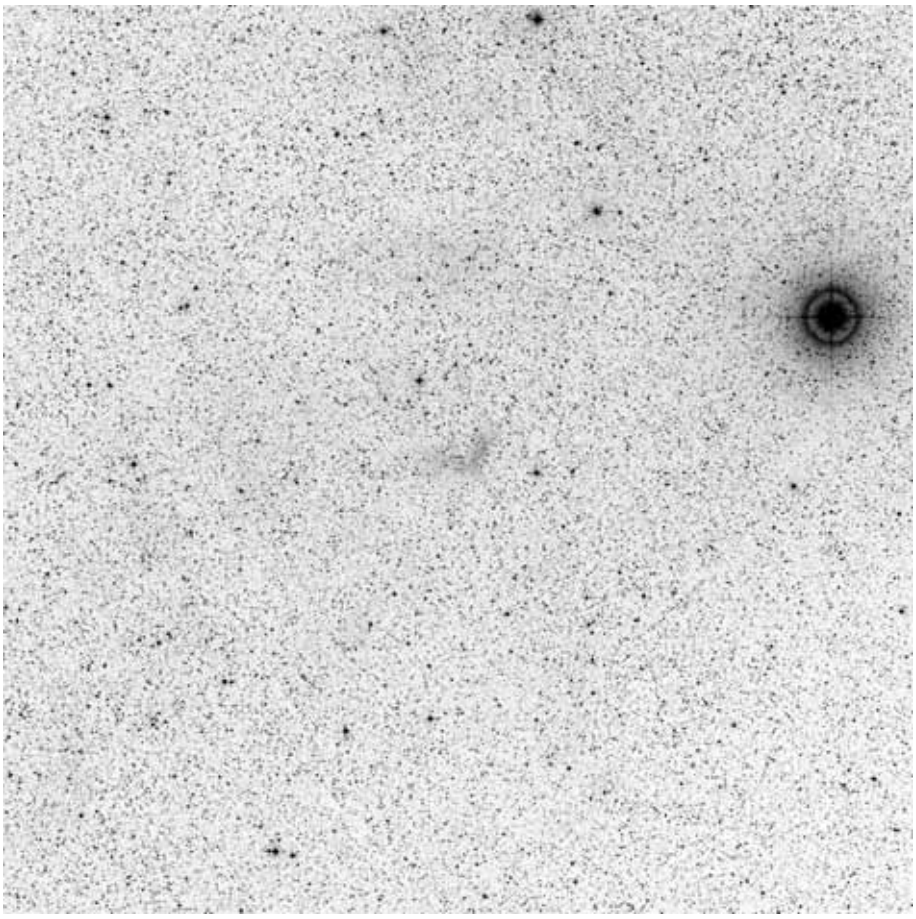
Observing notes:


+25°00'
+20°00'
+15°00'
Stock 1
Anser
Cr 399
Sham
Sagitta
Deneb El Okab
Deneb El Okab
20h00m
19h30m
19h00m

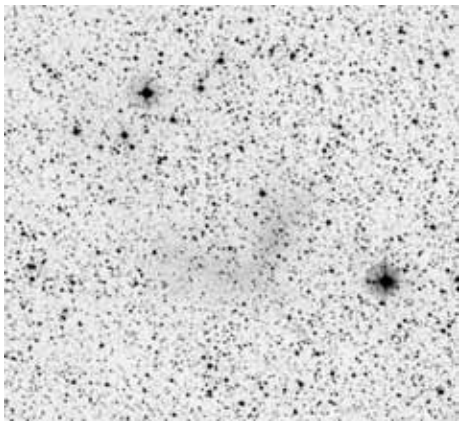

+22°00'
+21°00'
+20°00'
+19°00'
PK 55+ 2 1
NGC 6802
Cr 399
PK 53+ 3 1
19h35m
19h30m
19h25m
19h20m
19h15m

Sh 2 - 84

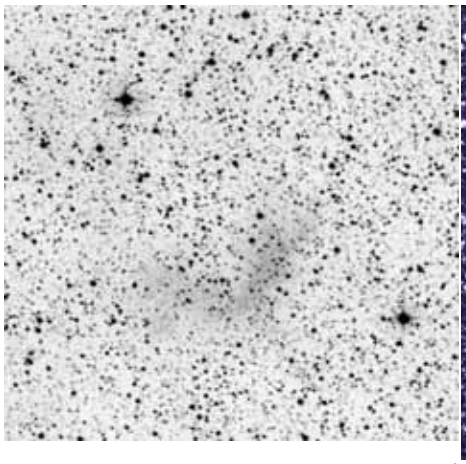
in Sagitta



60x60, red



POSS blue



POSS red



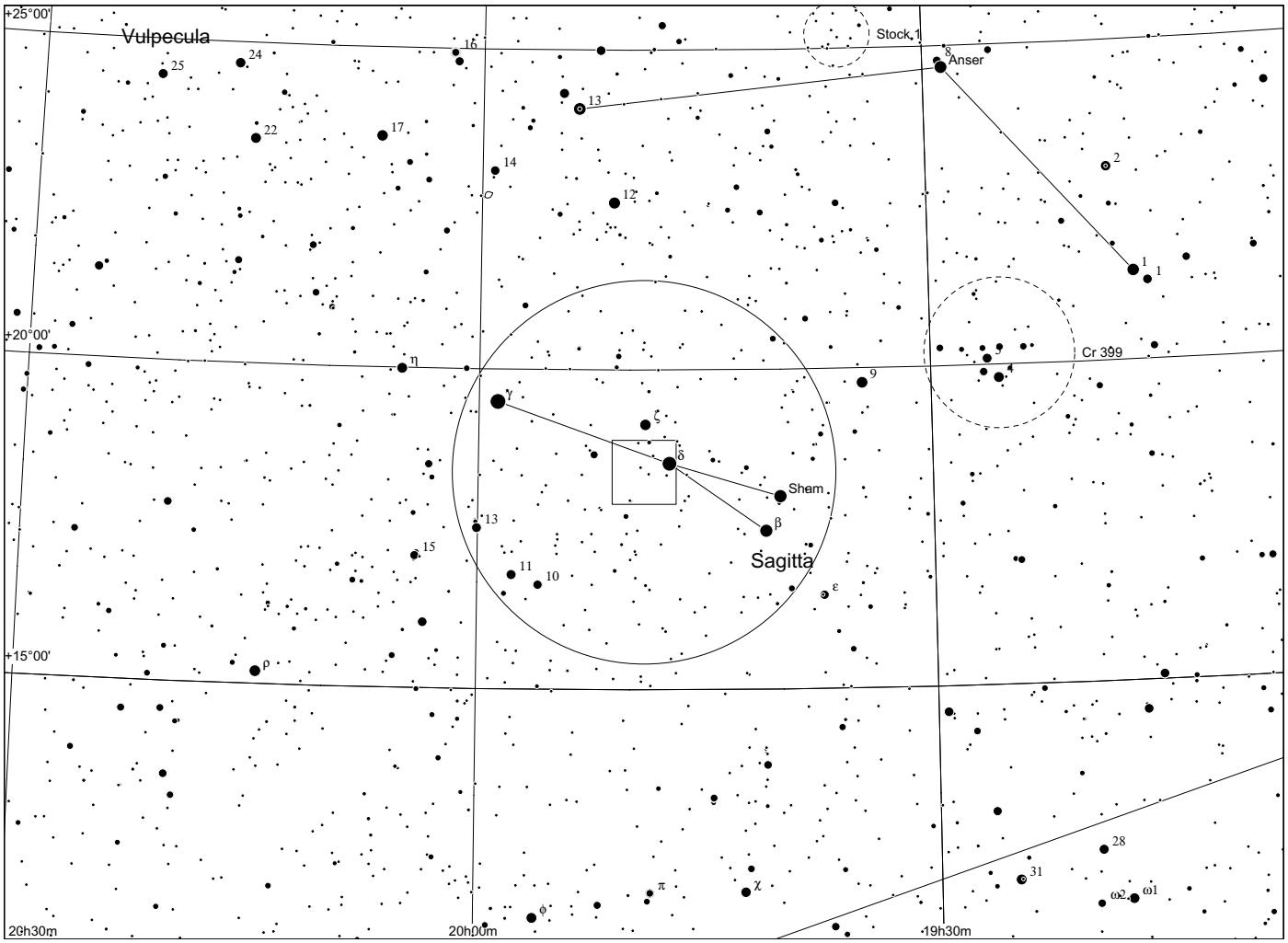
composite

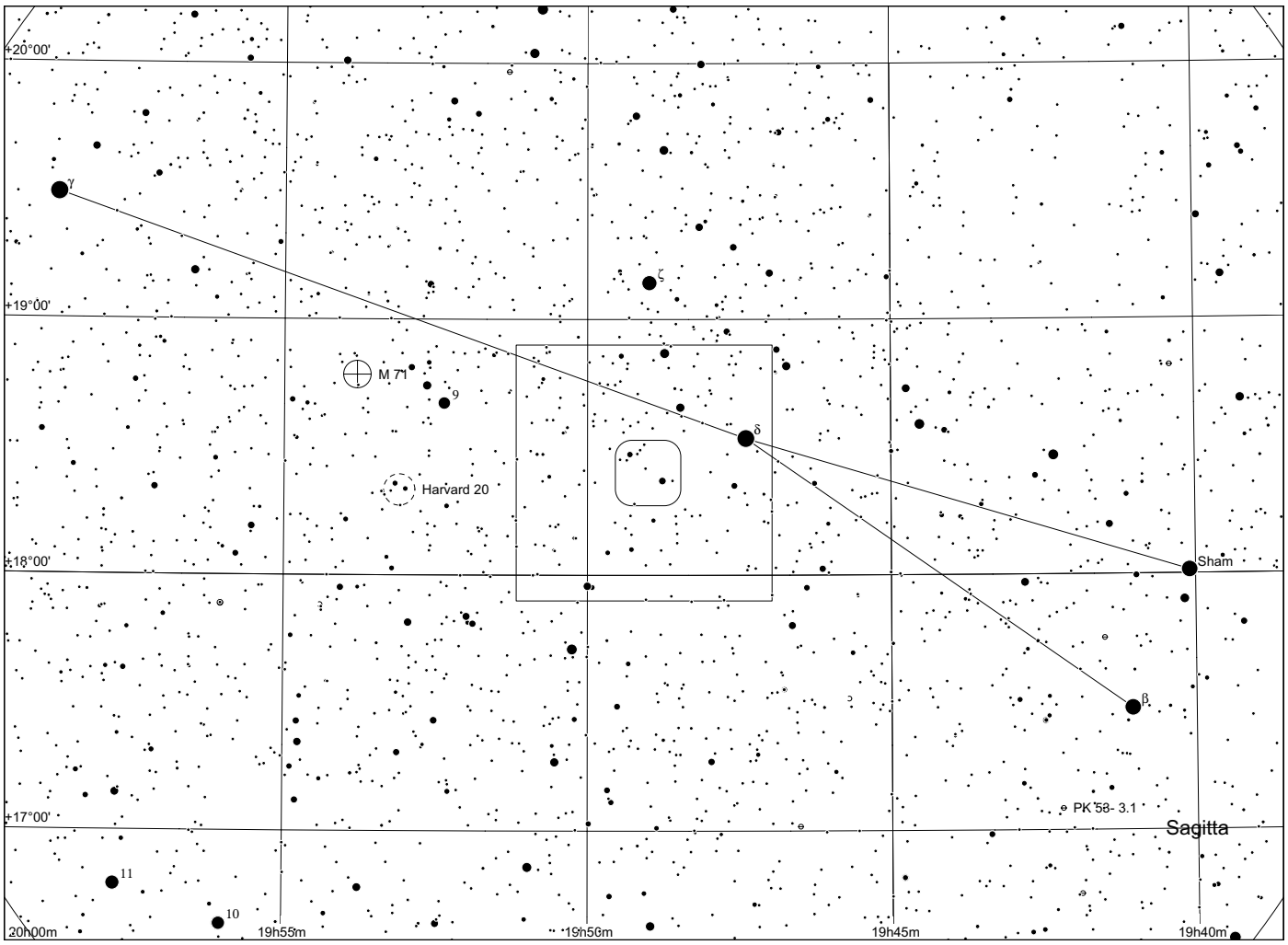
	other name	RA	dec	dia. '	F	S	B
Sh 2-084		19 49 04.0	+18 24 01	15	3	2	3

Distance: 5000 pc, Size: 21.8 pc Source: 1982ApJS...49..183B

This nebula, also called LBN 131, is near in the sky to the Wolf-Rayet star WR 128, and Sharpless associated the two objects in his catalog. However, there is some controversy about whether Sh 2-84 is part of the ring nebula surrounding this star or lies at another distance.

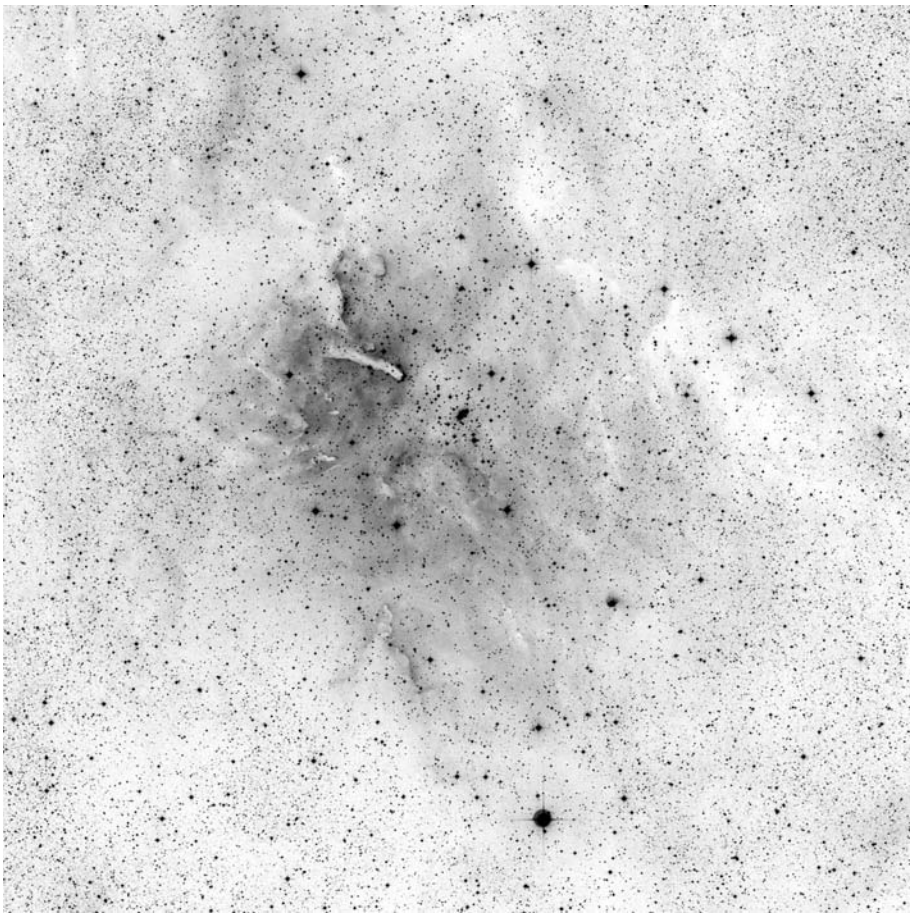
Observing notes:


+25°00'
Vulpecula
Stock 1
Anser
+20°00'
Cr 399
Sham
Sagitta
+15°00'
20h30m
20h00m
19h30m

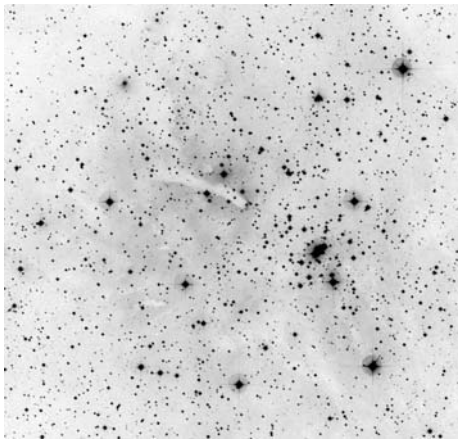

+20°00'
+19°00'
M 71
Harvard 20
+18°00'
Sham
+17°00'
PK 58- 3.1
Sagitta
20h00m
19h55m
19h50m
19h45m
19h40m

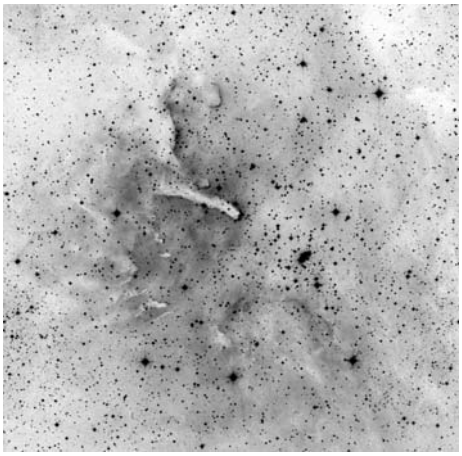
Sh 2 - 86

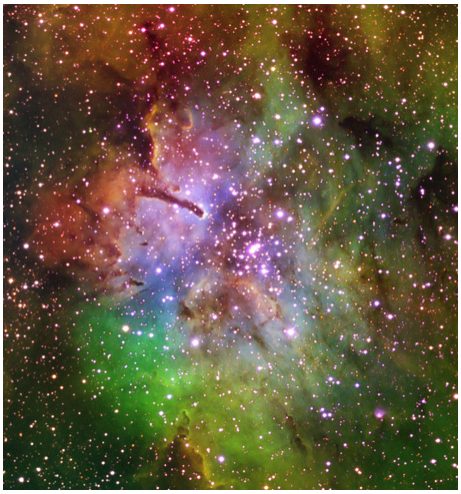
in Vulpecula



60x60, red







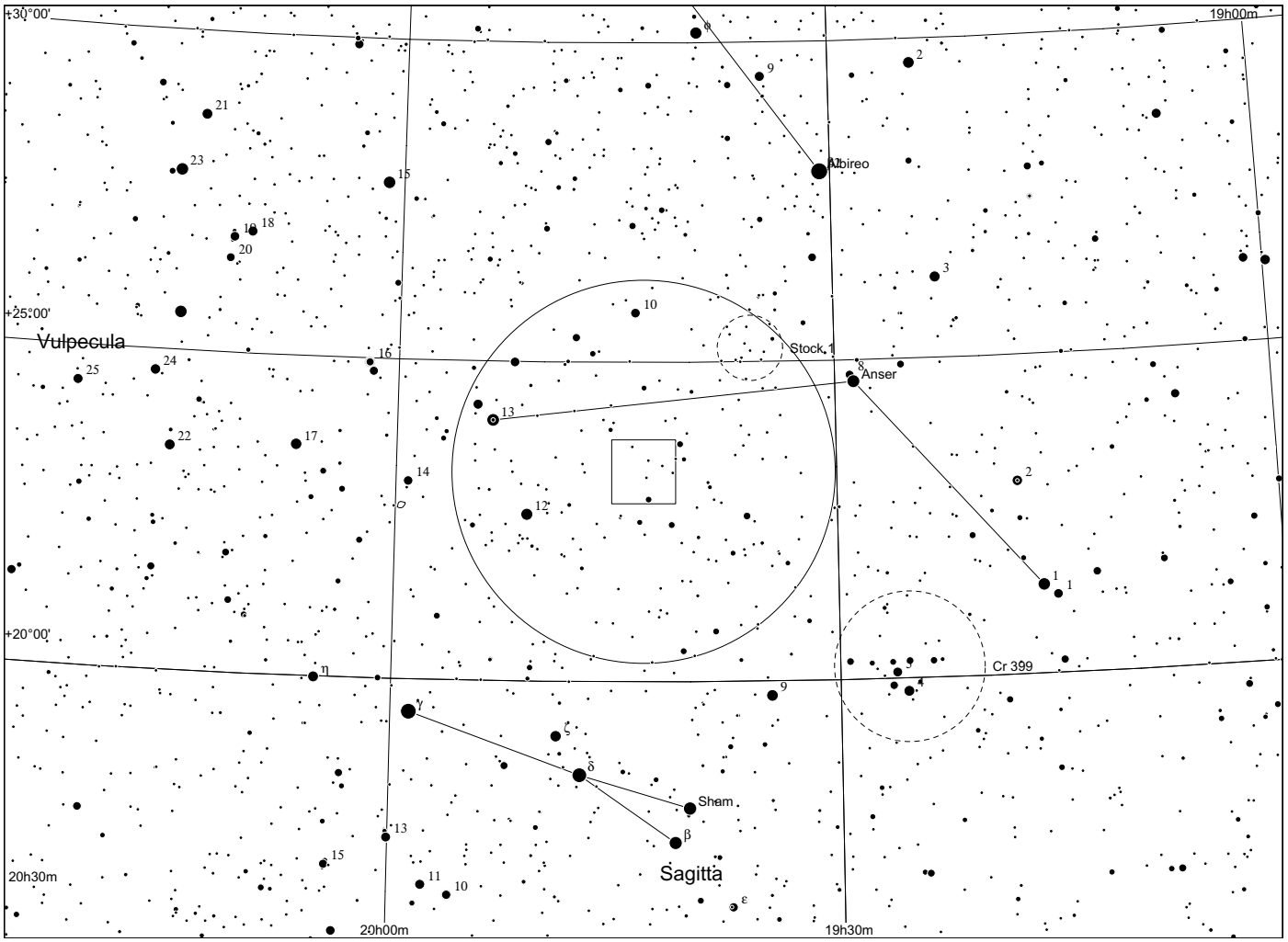
POSS blue POSS red narrowband Dean Salman

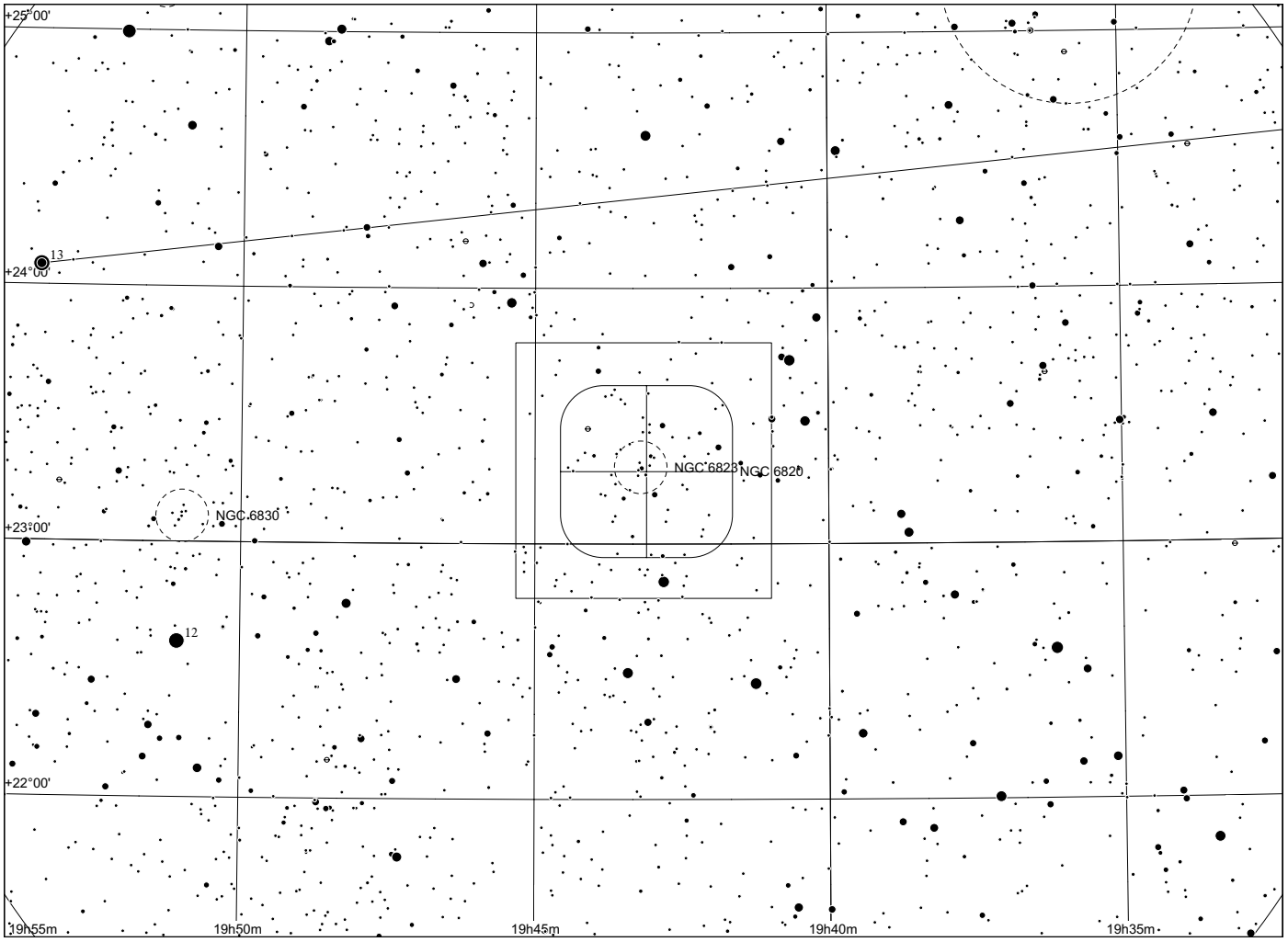
	other name	RA	dec	dia. '	F	S	B
Sh 2-086	NGC6820	19 43 08.8	+23 17 15	40	1	2	2

Distance: 1900 pc, Size: 22.1 pc Source: 1982ApJS...49..183B

NGC 6820 is the radio source W55 and is associated with the star cluster NGC 6823 and Vul OB1.

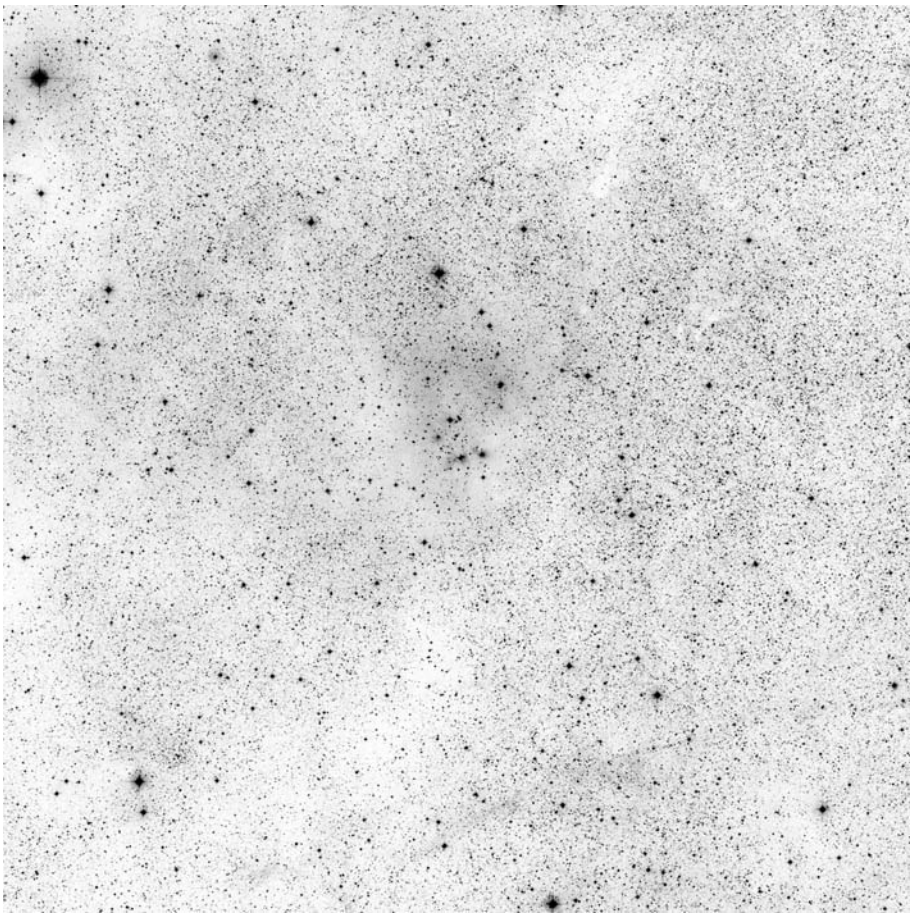
Observing notes:


+30°00'
19h00m
+25°00'
Vulpecula
Albireo
Stock 1
Anser
+20°00'
Cr 399
Sham
Sagitta
20h30m
20h00m
19h30m

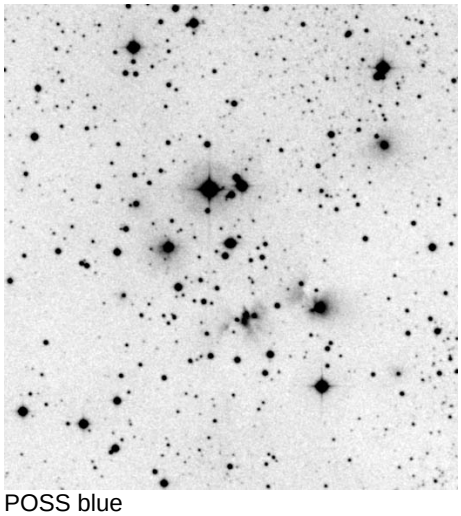

+25°00'
+24°00'
NGC 6823
NGC 6820
NGC 6830
+23°00'
+22°00'
19h55m
19h50m
19h45m
19h40m
19h35m

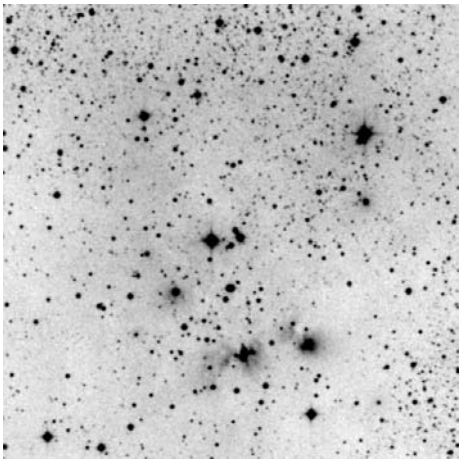
Sh 2 - 87

in Vulpecula



60x60, red







POSS blue

POSS red

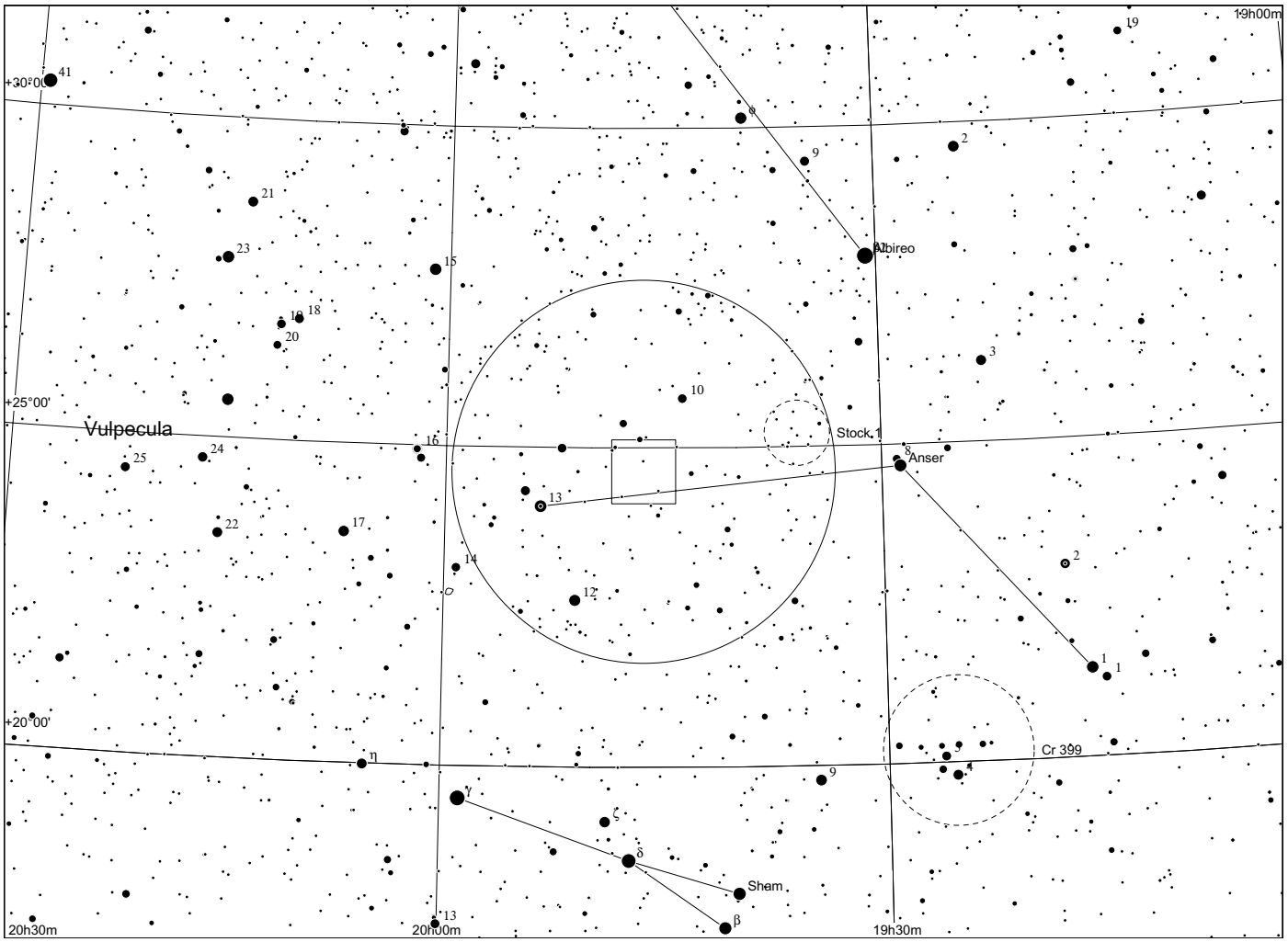
RGB Dean Salman

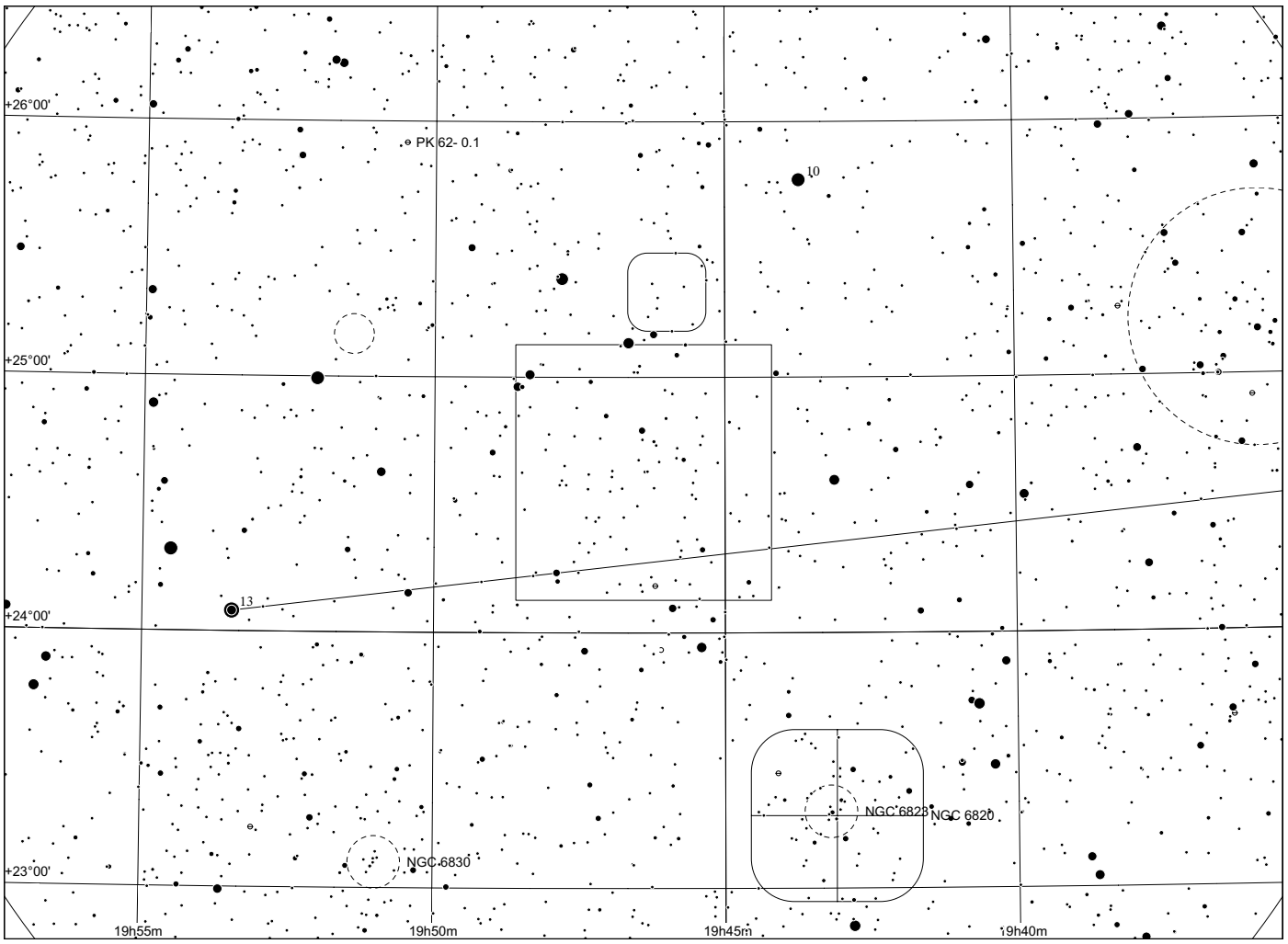
	other name	RA	dec	dia. '	F	S	B
Sh 2-087		19 46 24.4	+24 37 41	10	3	1	1

Distance: 2144 pc, Size: 2.4 pc, Source: 2003A&A...397..213P

This is a massive star formation region associated with a 7000 solar mass molecular cloud and many sources in the far infrared.

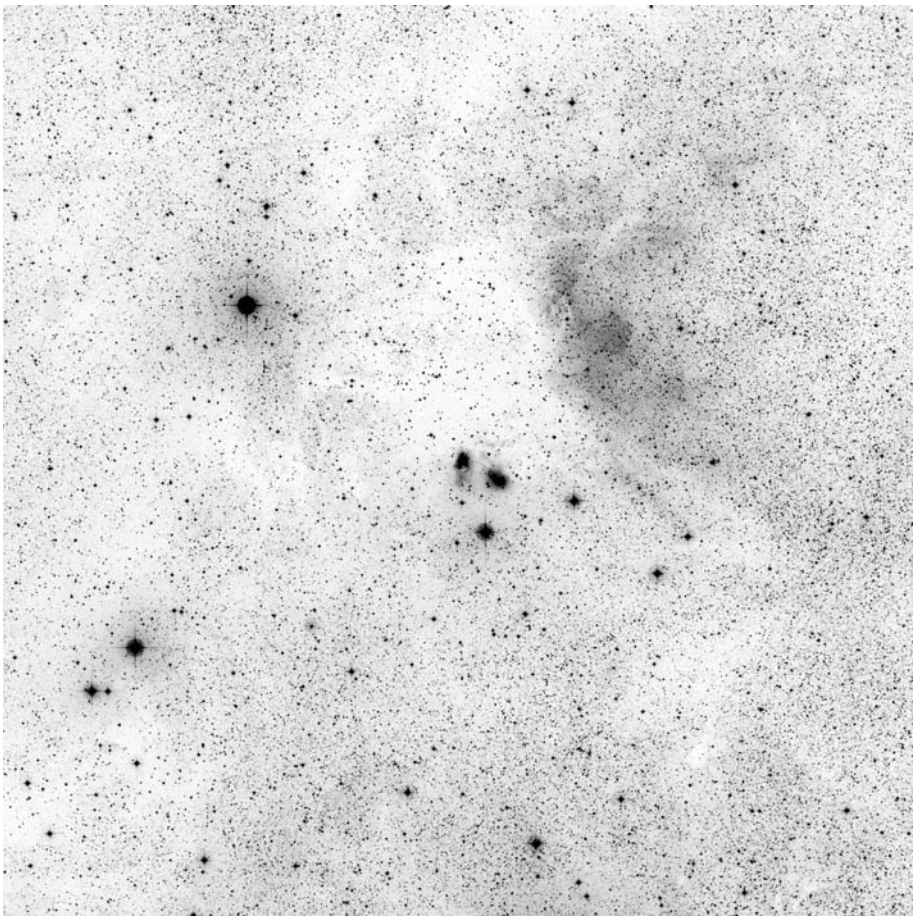
Observing notes:


19h00m
+30°00'
+25°00'
+20°00'
Vulpecula
Albireo
Stock 1
Anser
Cr 399
Sham
20h30m
20h00m
19h30m

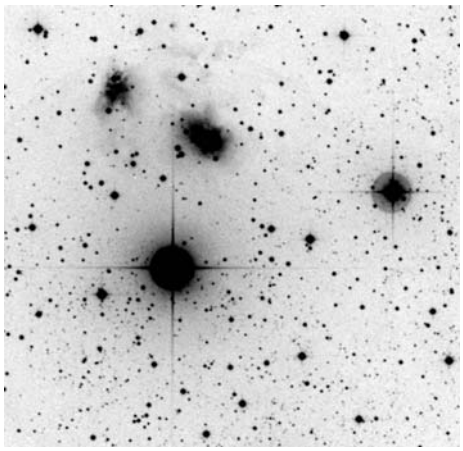

+26°00'
+25°00'
+24°00'
+23°00'
PK 62- 0.1
NGC 6823
NGC 6820
NGC 6830
19h55m
19h50m
19h45m
19h40m

Sh 2 - 88

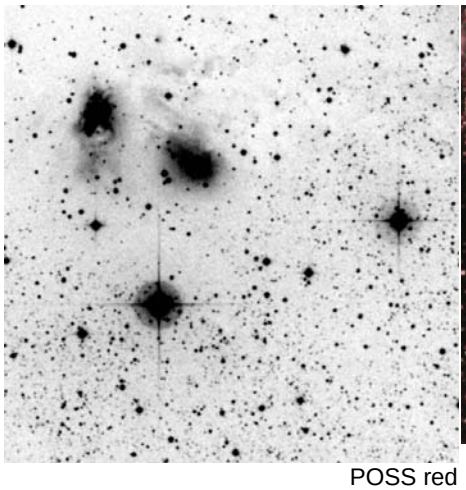
in Vulpecula



60x60, red



POSS blue



POSS red



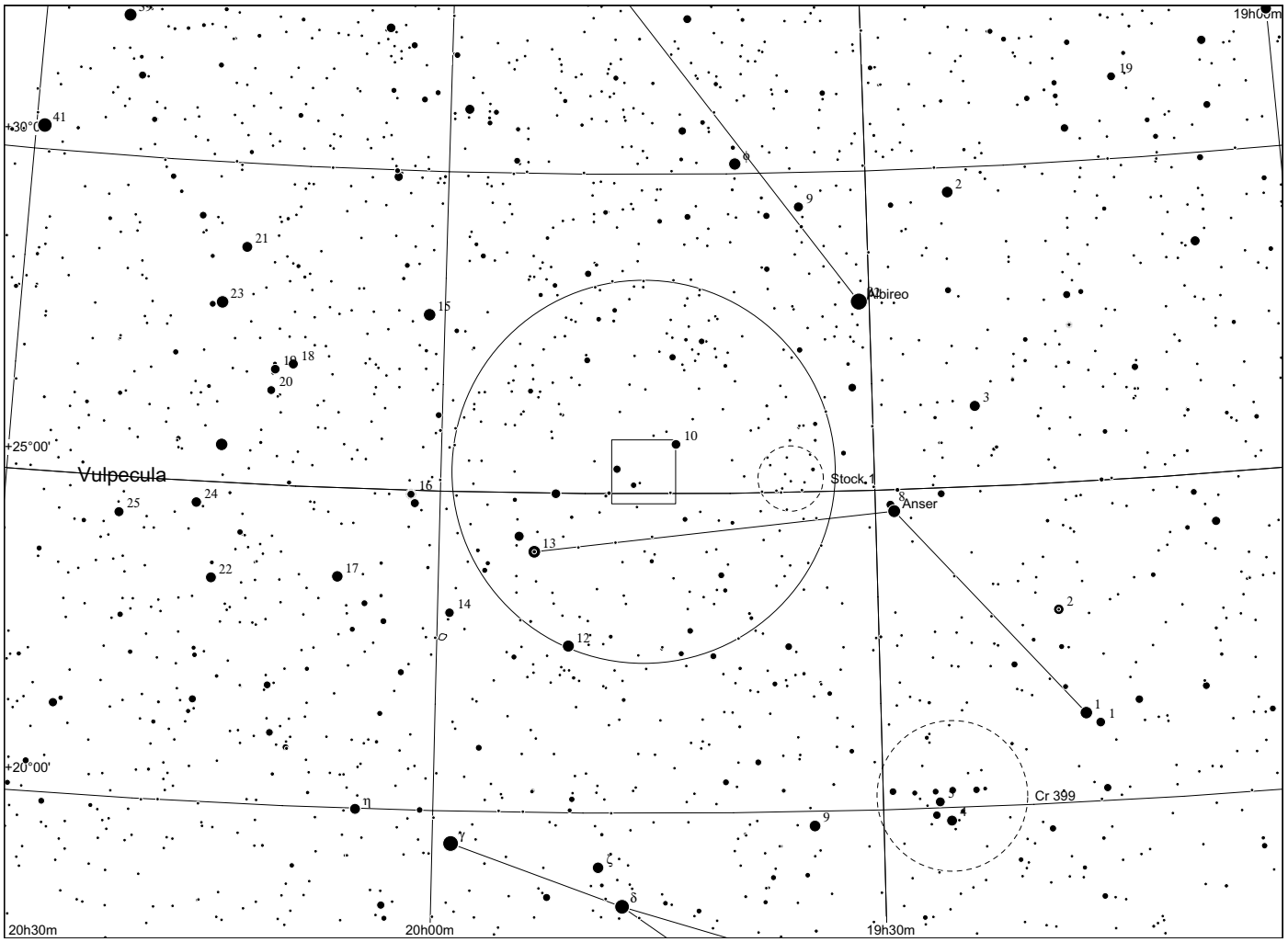
RGB Dean Salman

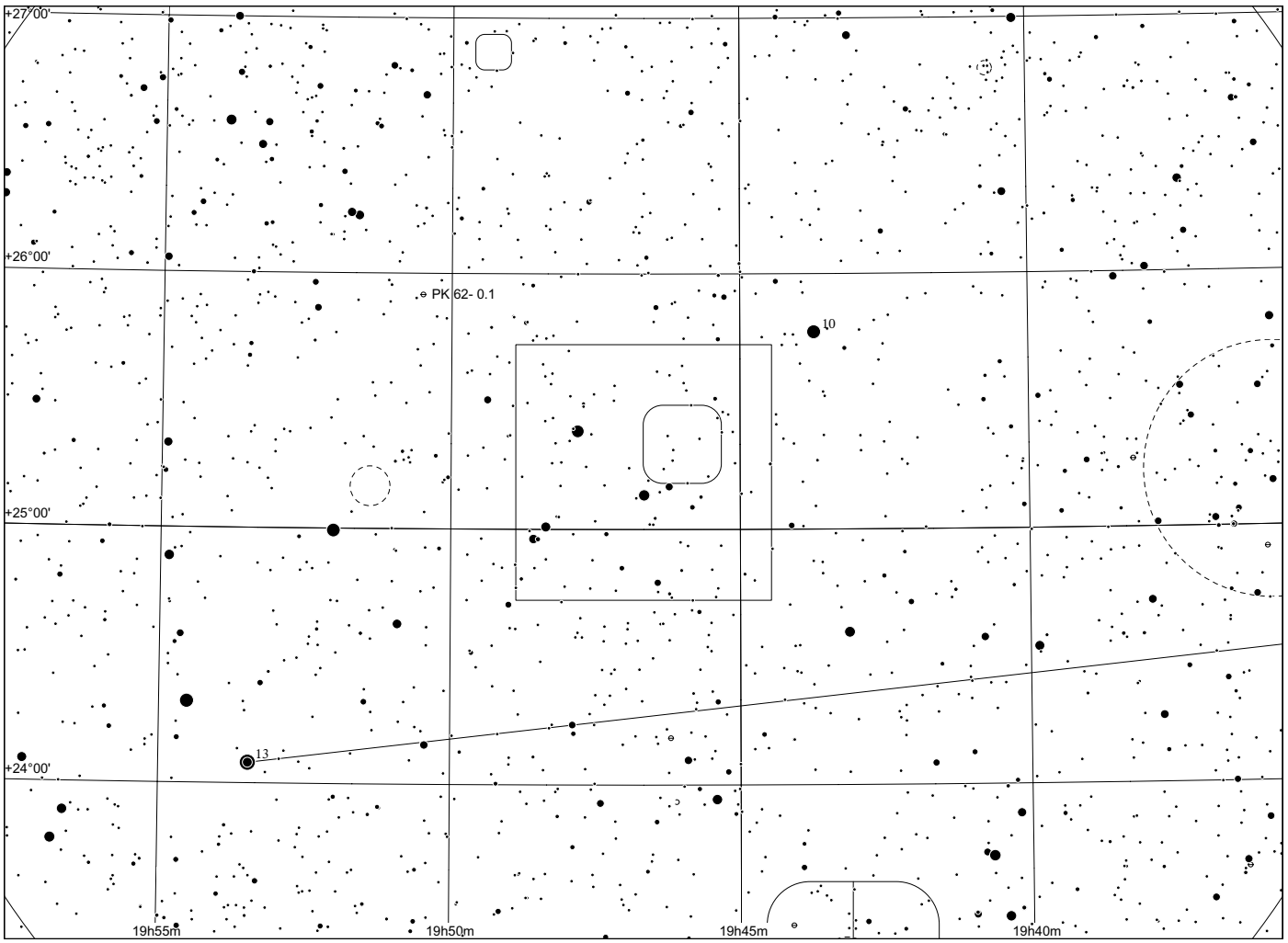
	other name	RA	dec	dia. '	F	S	B
Sh 2-088		19 45 58.4	+25 20 38	25	3	2	2

Distance: 2000 pc, Size: 14.5 pc, Source: 1982ApJS...49..183B

This nebula associated with Vul OB1 consists of three regions - star formation began in a diffuse large nebula Sh 2-88A, then spread to the compact HII region Sh 2-88B1, ionised by an O8.5-9.5 V star, and then finally spread to the ultracompact Sh 2-88B2, ionised by a star dimmer than B0.5 V.

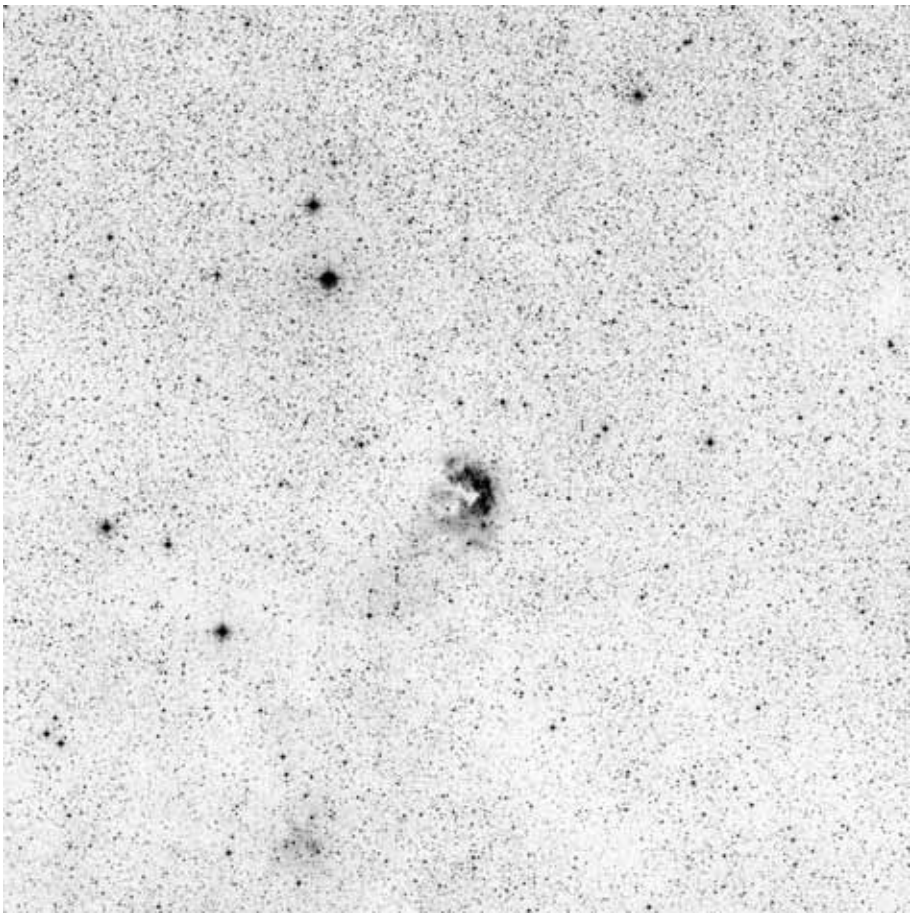
Observing notes:


19h05m
+30°00'
41
19
2
9
21
23
15
Albireo
18
18
20
3
+25°00'
10
Vulpecula
Stock 1
16
25
24
8
Anser
13
22
17
14
2
12
1
1
+20°00'
η
Cr 399
9
γ
δ
20h30m
20h00m
19h30m

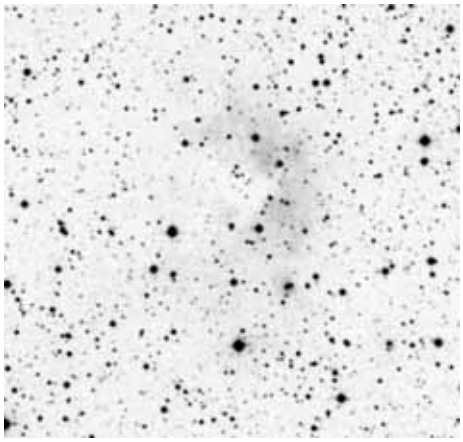

+27°00'
+26°00'
PK 62- 0.1
10
+25°00'
13
+24°00'
19h55m
19h50m
19h45m
19h40m

Sh 2 - 90

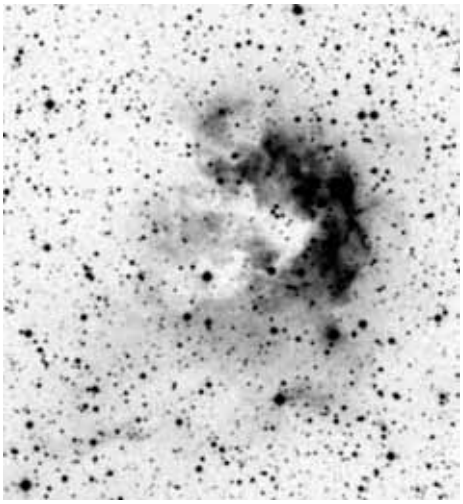
in Vulpecula



60x60, red



POSS blue



POSS red



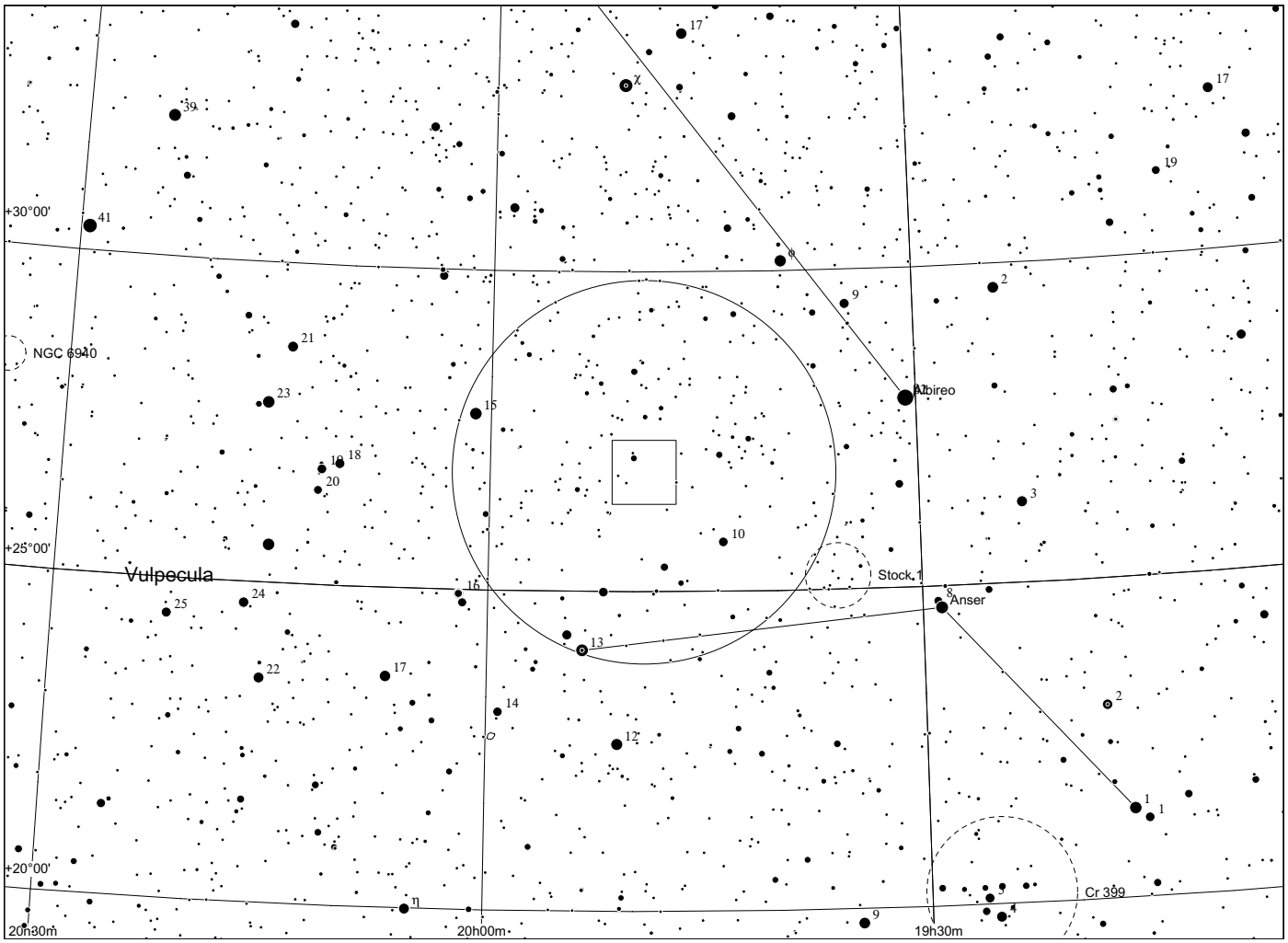
composite

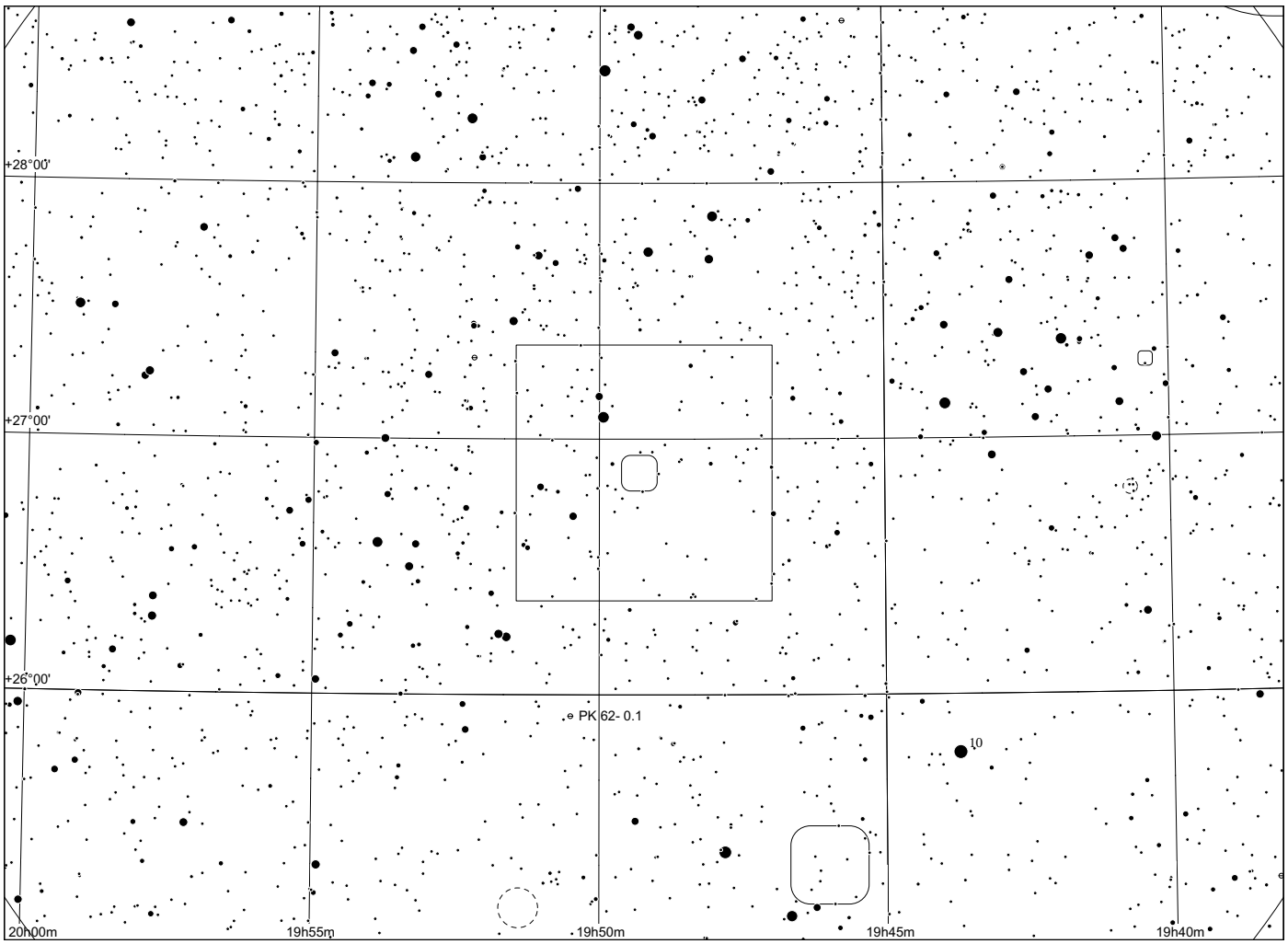
	other name	RA	dec	dia. '	F	S	B
Sh 2-090		19 49 12.7	+26 52 04	6	3	2	2

Distance: 2400 pc, Size: 2.1 pc, Source: 1983A&A...124....1L

Sh 2-90 is a blister on a 60 thousand solar mass molecular cloud and appears to be affected by gas streaming from the Vulpecula OB1 association. It contains a cometary elephant trunk structure on its eastern edge which appears to have originated from a past disturbance from the southwest.

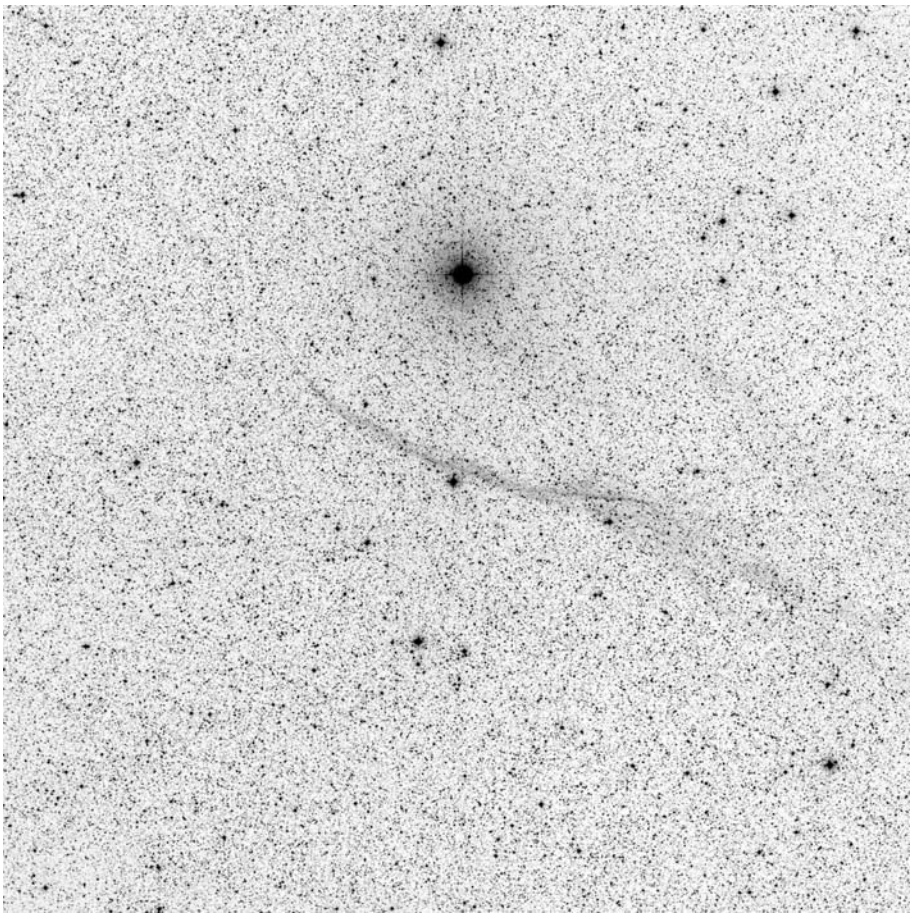
Observing notes:


+30°00'
+25°00'
+20°00'
NGC 6940
Vulpecula
Albireo
Stock 1
Anser
Cr 399
20h30m
20h00m
19h30m

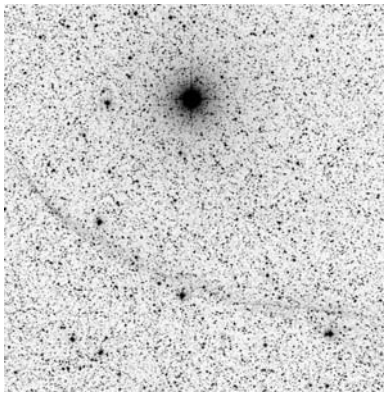

+28°00'
+27°00'
+26°00'
PK 62- 0.1
20h00m
19h55m
19h50m
19h45m
19h40m

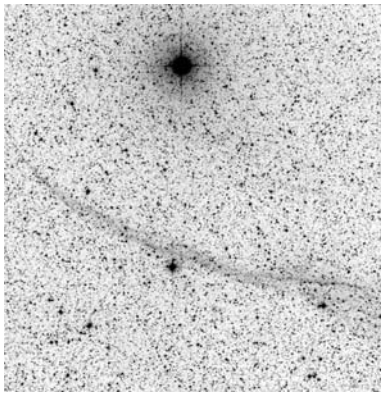
Sh 2 - 91

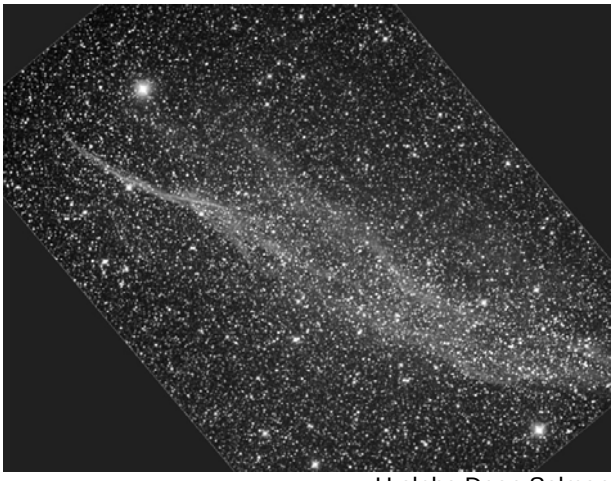
in Cygnus



60x60, red







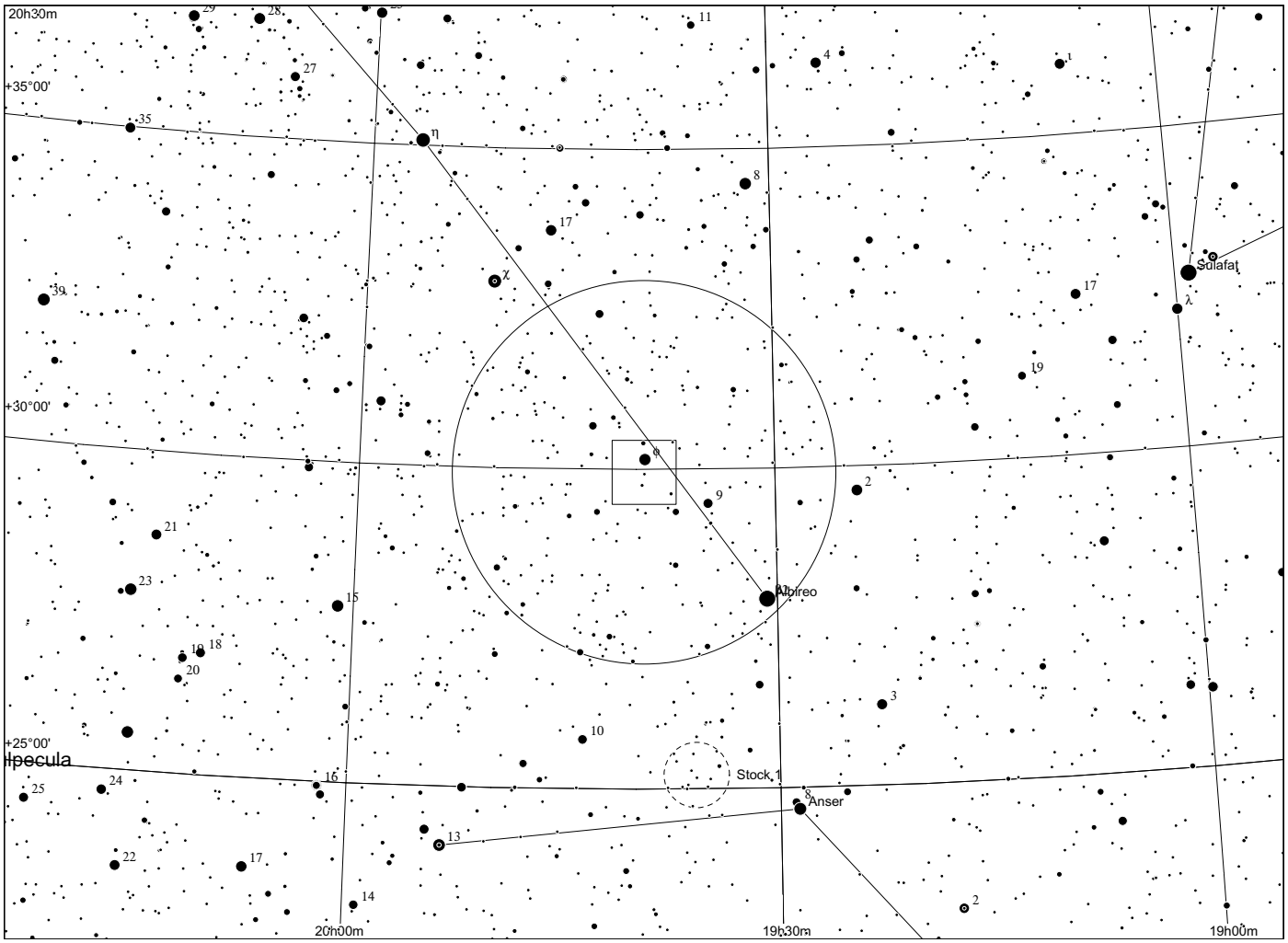
POSS blue POSS red H alpha Dean Salman

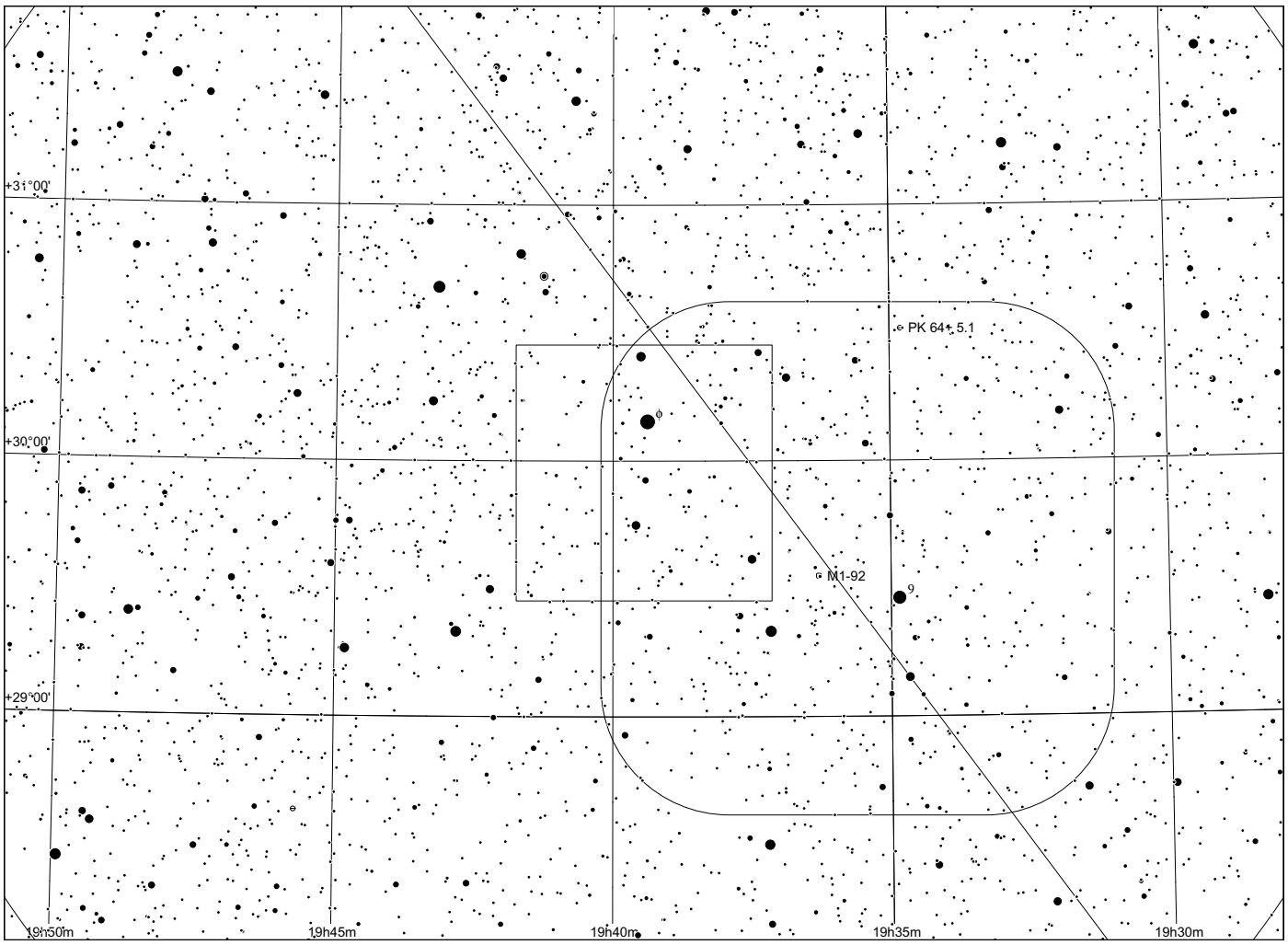
	other name	RA	dec	dia. '	F	S	B
Sh 2-091	part of SNR	19 35 34.0	+29 36 16	120	3	3	2

Distance: 900 pc, Size: 31.4 pc, Source: 1989A&AS...77..439F

This is a filament of the supernova remnant SNR 065.2+05.7, which has a diameter of about 70 parsecs and an age of about 20 thousand years..

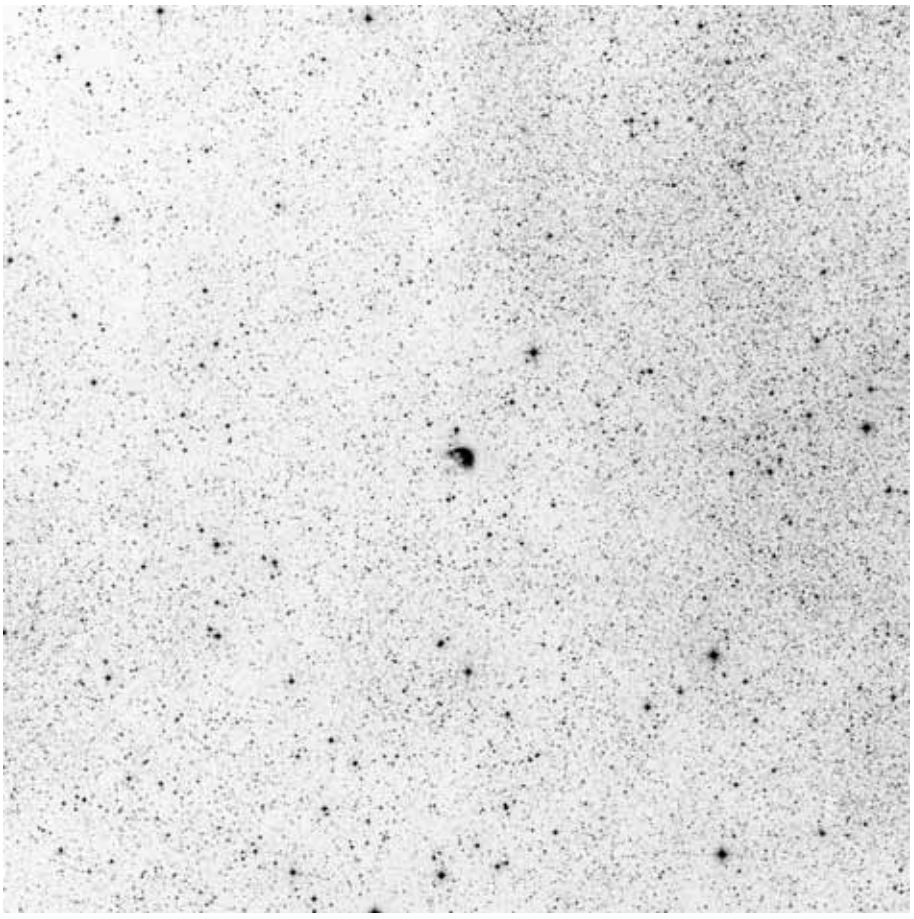
Observing notes:


20h30m
+35°00'
+30°00'
+25°00'
Ipecula
η
χ
φ
Albireo
Sulafat
λ
Stock 1
Anser
20h00m
19h30m
19h00m

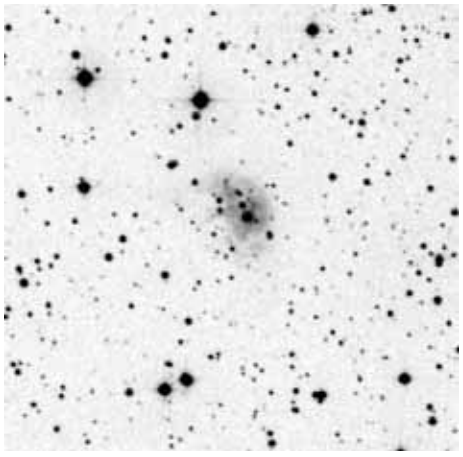

+31°00'
+30°00'
+29°00'
PK 64+5.1
M1-92
φ
19h50m
19h45m
19h40m
19h35m
19h30m

Sh 2 - 93

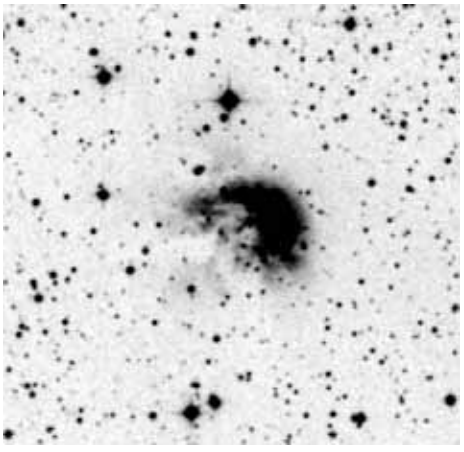
in Vulpecula



60x60, red



POSS blue



POSS red



composite

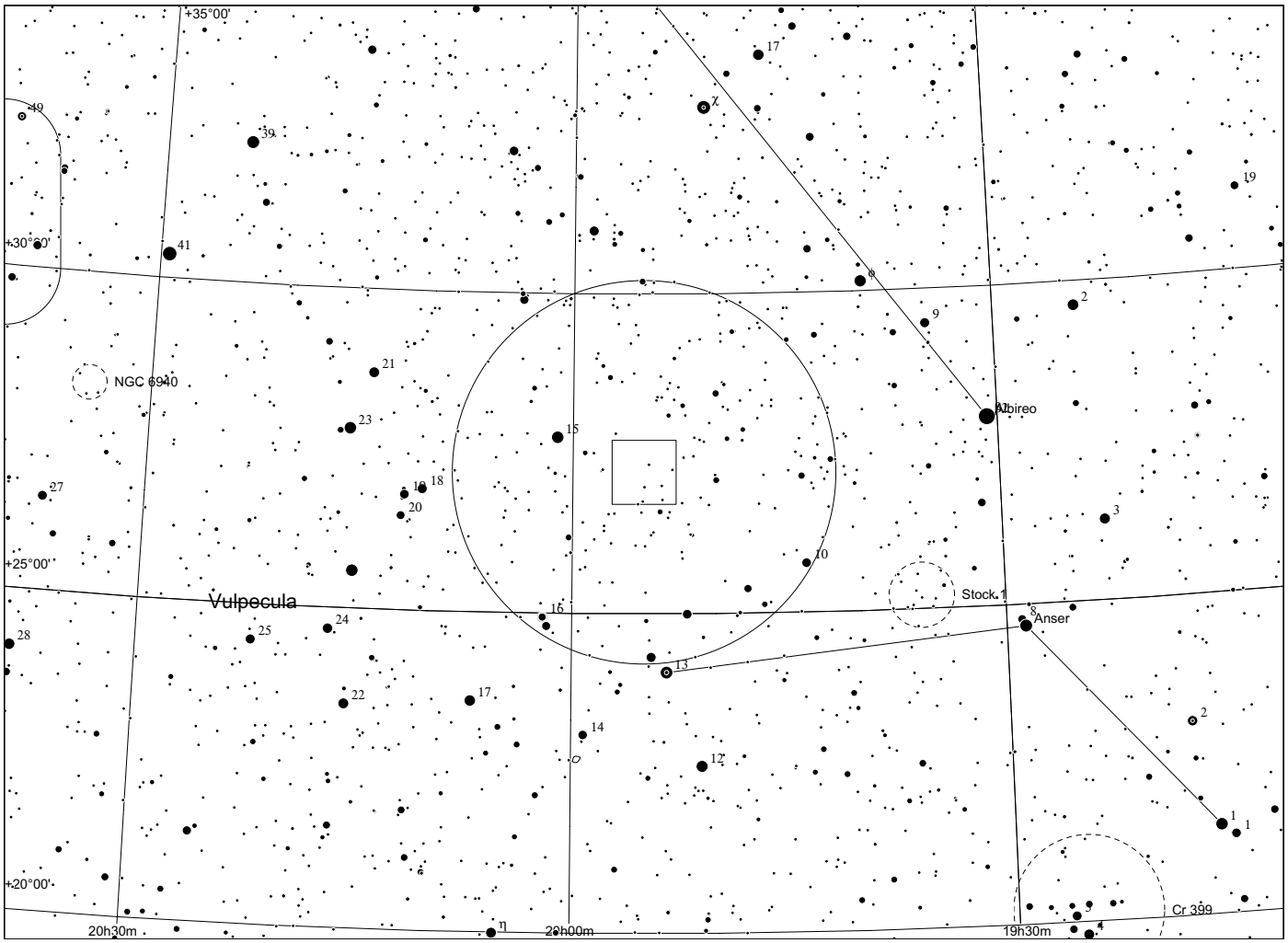
	other name	RA	dec	dia. '	F	S	B
Sh 2-093		19 55 00.6	+27 12 48	1	3	2	3

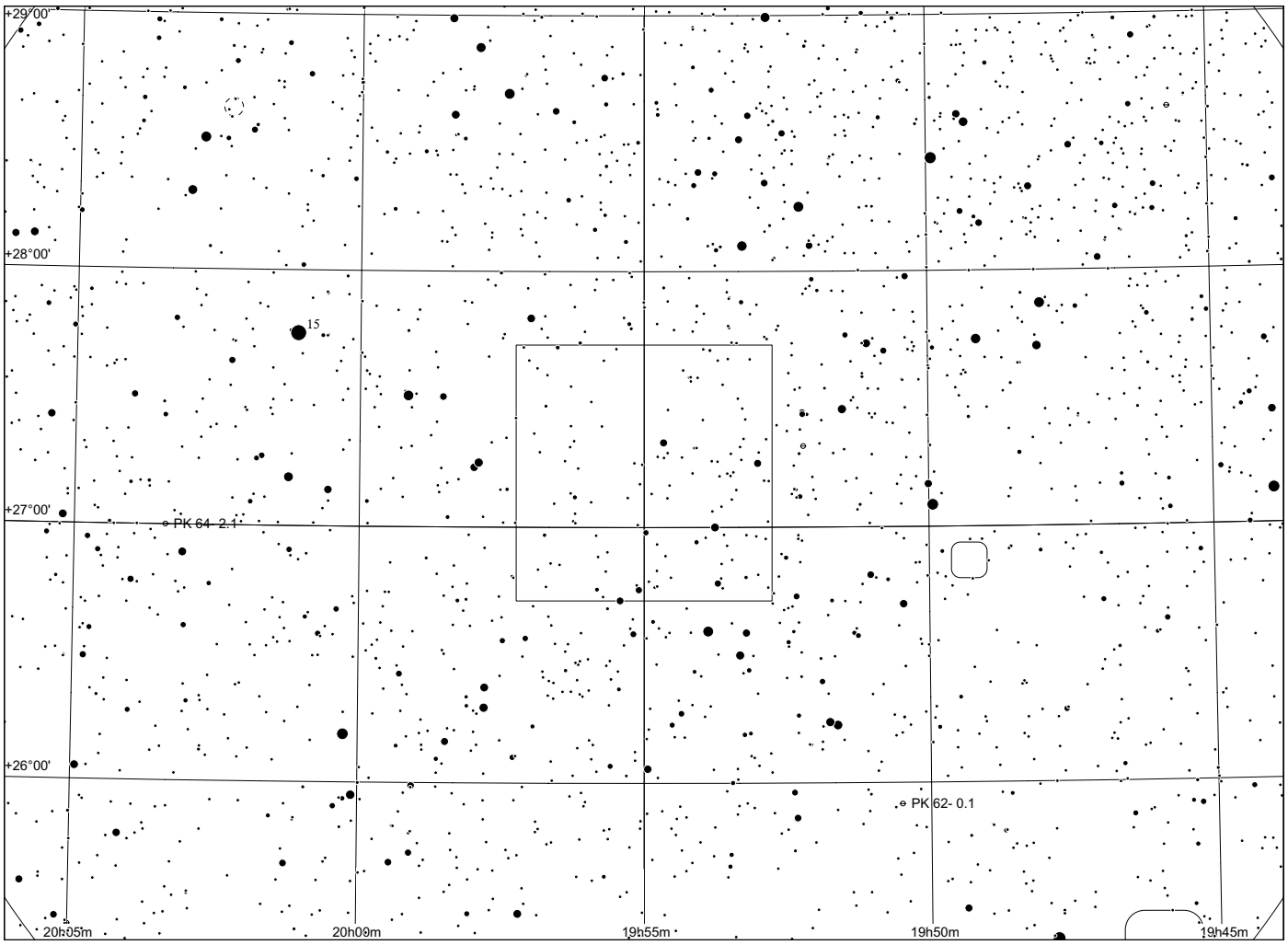
Distance: 3713 pc, Size: 4.4 pc, Source: 2003A&A...397..213P

Ionised by the O9V star [F89b] S93 1 and appears to contain the infrared star cluster [BDS2003] 16.

There is a second distance estimate of 2600 pc - probably best to move this on the map.

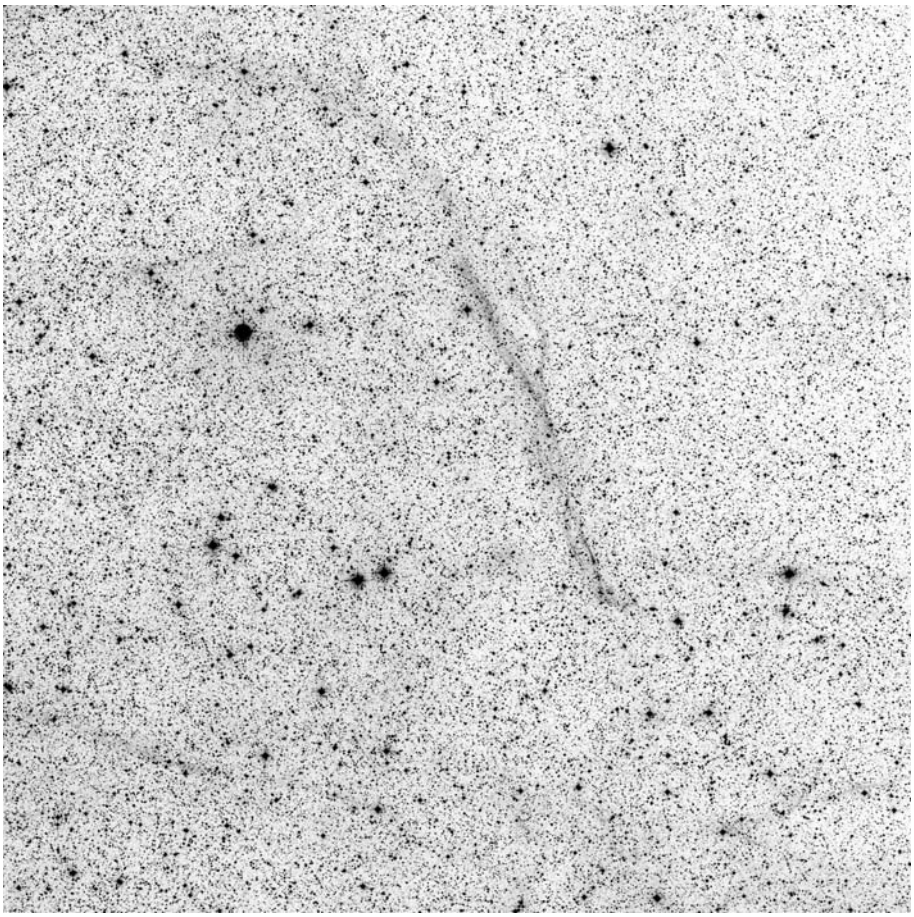
Observing notes:


+35°00'
+30°00'
+25°00'
+20°00'
NGC 6940
Vulpecula
Albireo
Stock 1
Anser
Cr 399
20h30m
20h00m
19h30m

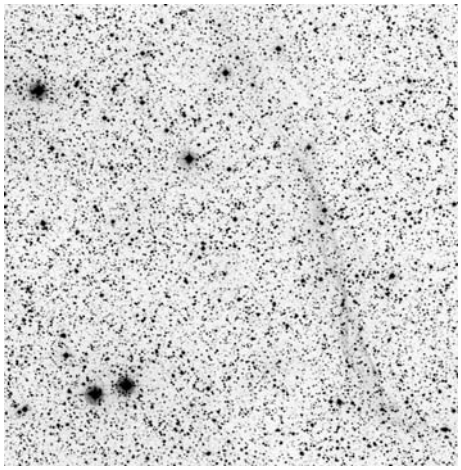

+29°00'
+28°00'
+27°00'
+26°00'
PK 64- 2.1
PK 62- 0.1
20h05m
20h00m
19h55m
19h50m
19h45m

Sh 2 - 94

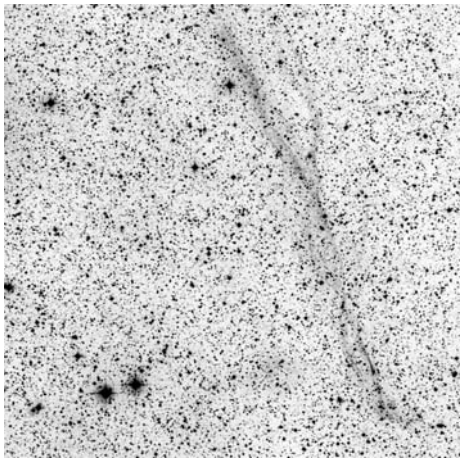
in Cygnus



60x60, red, enhanced



POSS blue



POSS red



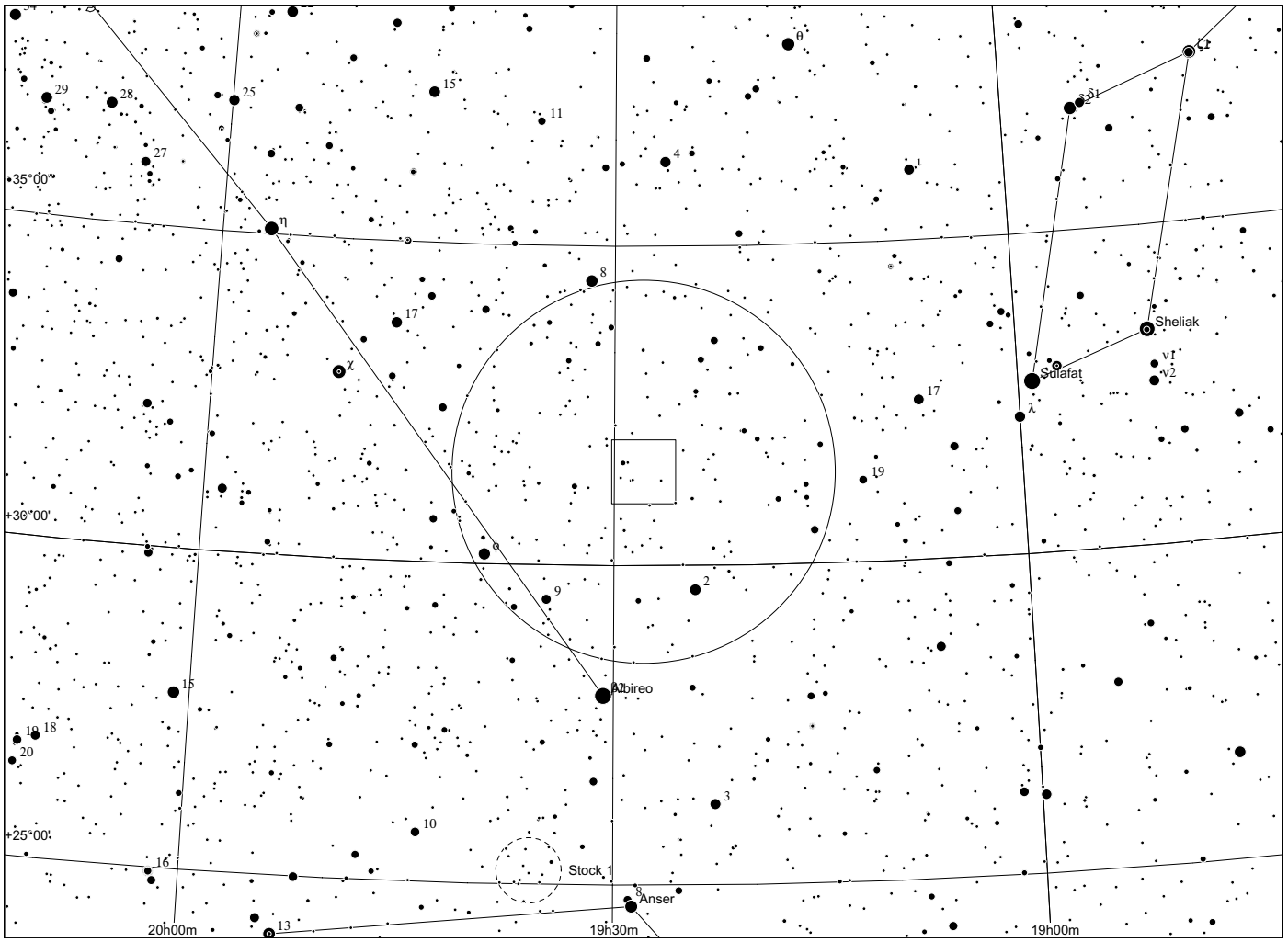
narrowband Dean Salman

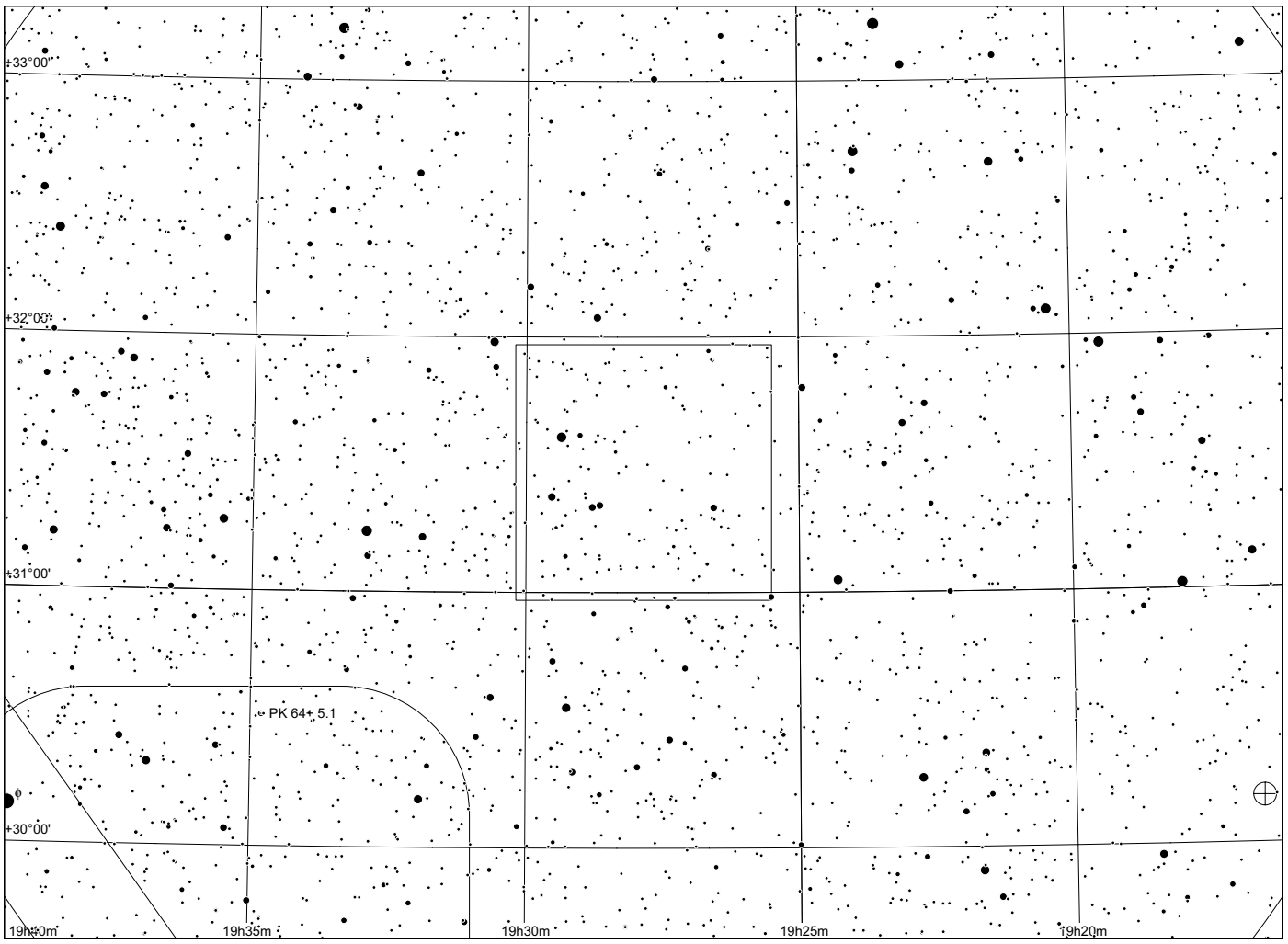
	other name	RA	dec	dia. '	F	S	B
Sh 2-094	part of SNR	19 27 50.8	+31 28 14	25	3	3	1

Distance: 3900 pc, Size: 28.4 pc, Source: 2003A&A...397..133R

This is a filament of the supernova remnant SNR 65.2+5.7 which is actually at 900 pc.

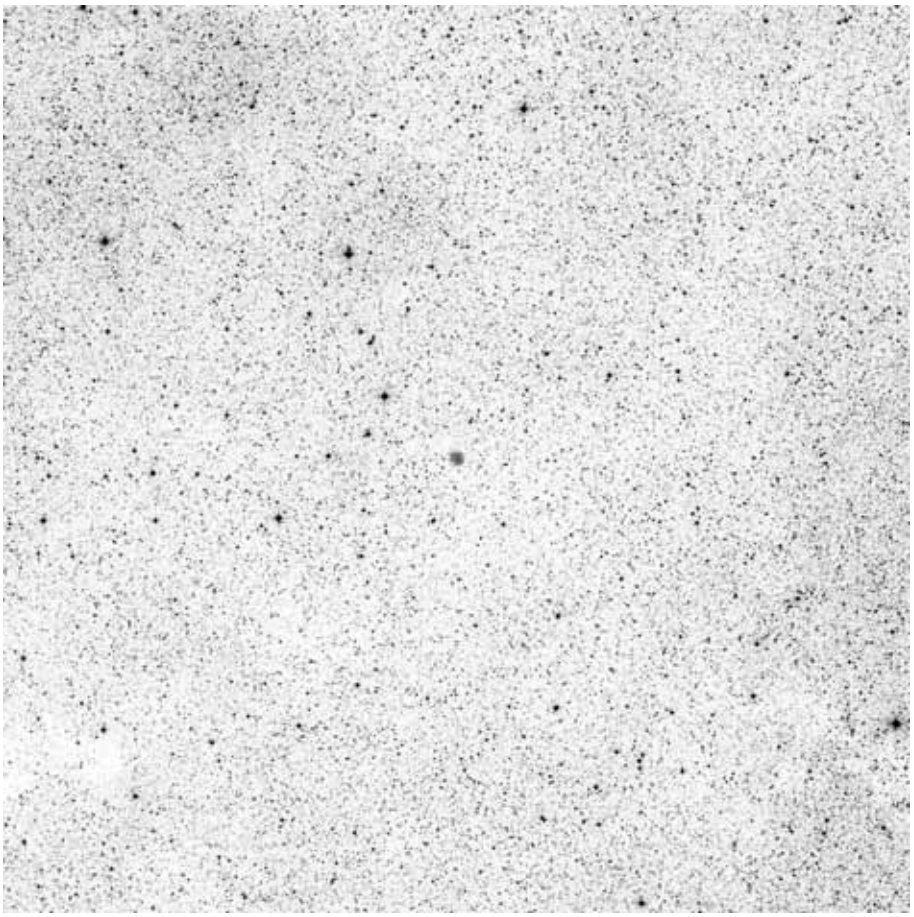
Observing notes:


+35°00'
+30°00'
+25°00'
20h00m
19h30m
19h00m
Sheliak
Sulafat
Albireo
Stock 1
Anser

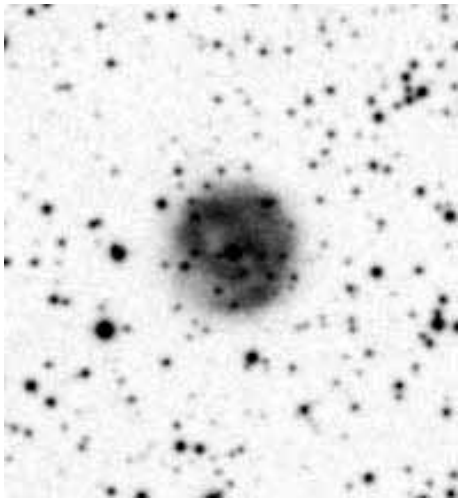

+33°00'
+32°00'
+31°00'
+30°00'
PK 64+ 5.1
19h40m
19h35m
19h30m
19h25m
19h20m

Sh 2 - 95

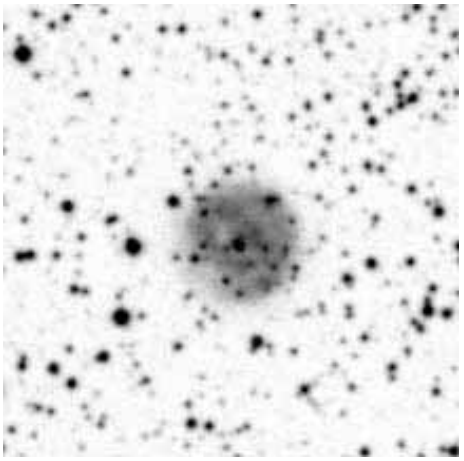
in Vulpecula



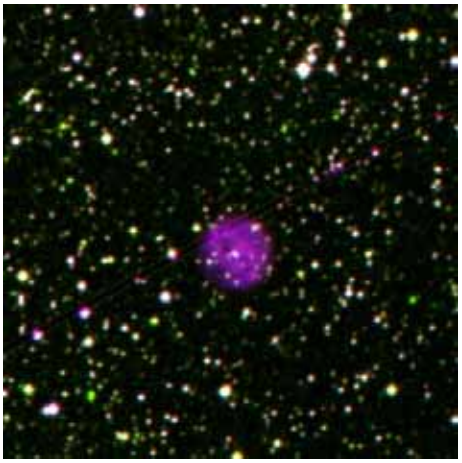
60x60, red



POSS blue



POSS red



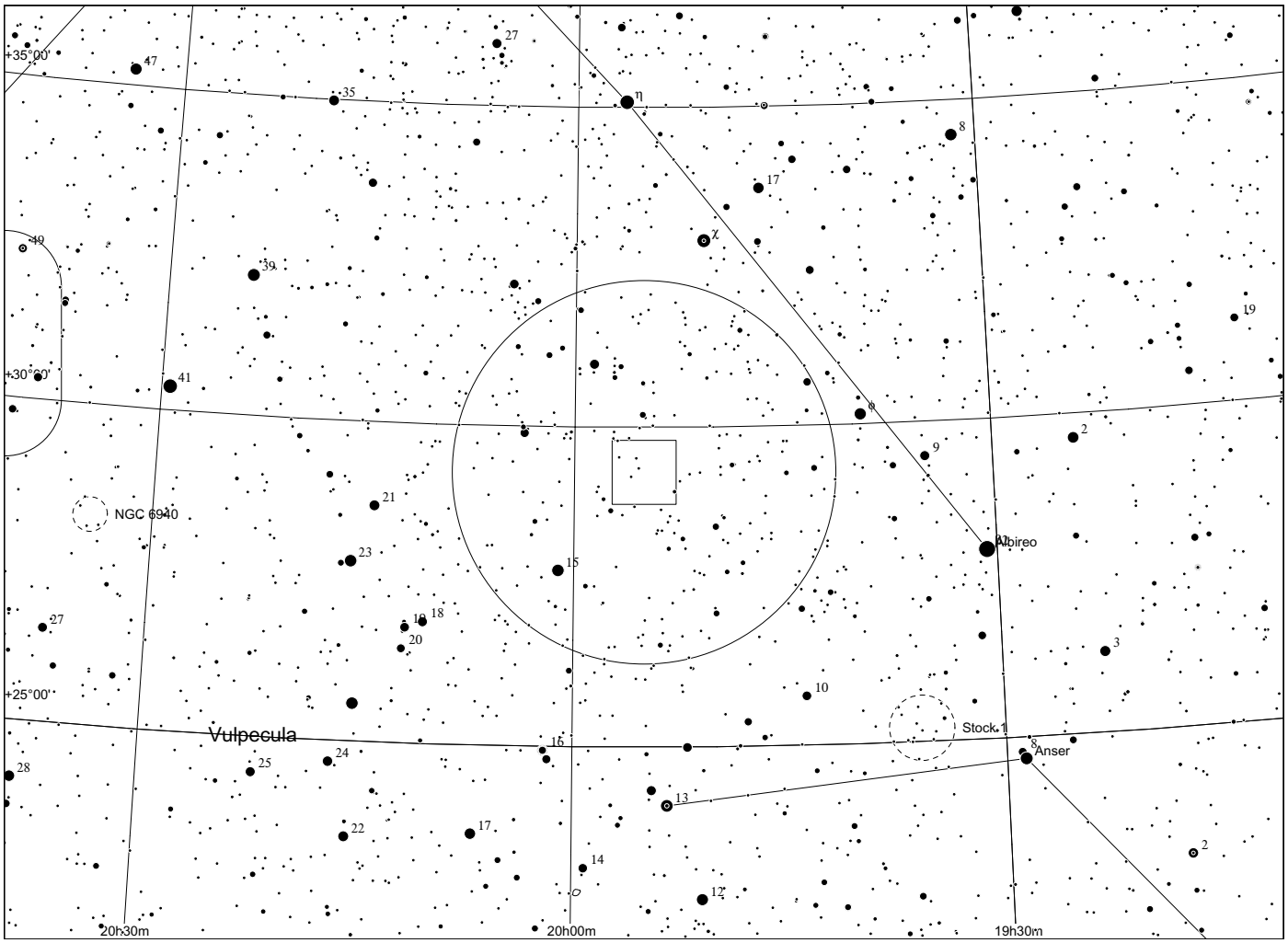
composite

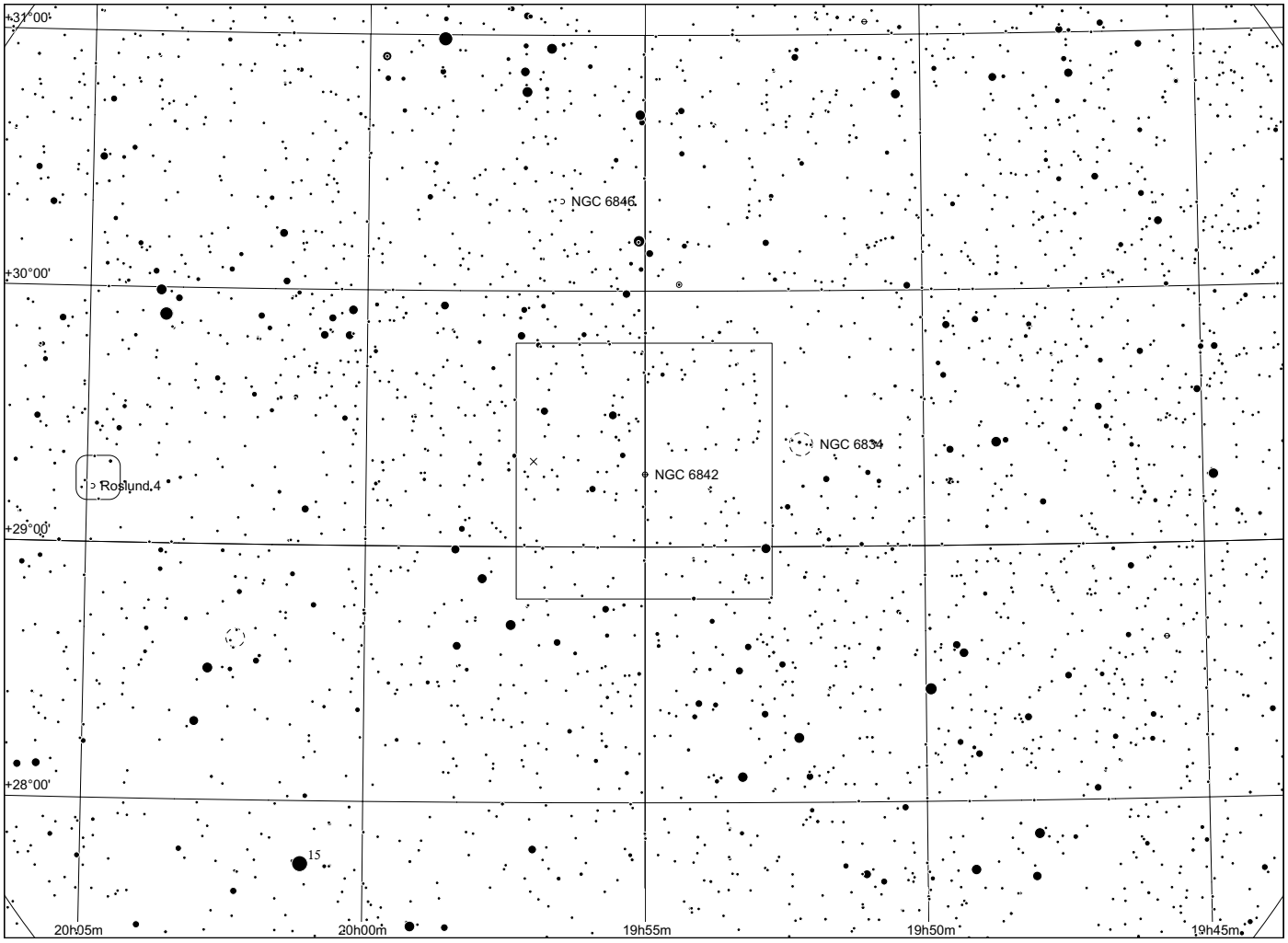
	other name	RA	dec	dia. '	F	S	B
Sh 2-095	NGC6842, PN	19 55 00.9	+29 17 49	1	1	2	2

Distance: Unknown

This is the planetary nebula NGC 6842. Distance: 1250 pc.

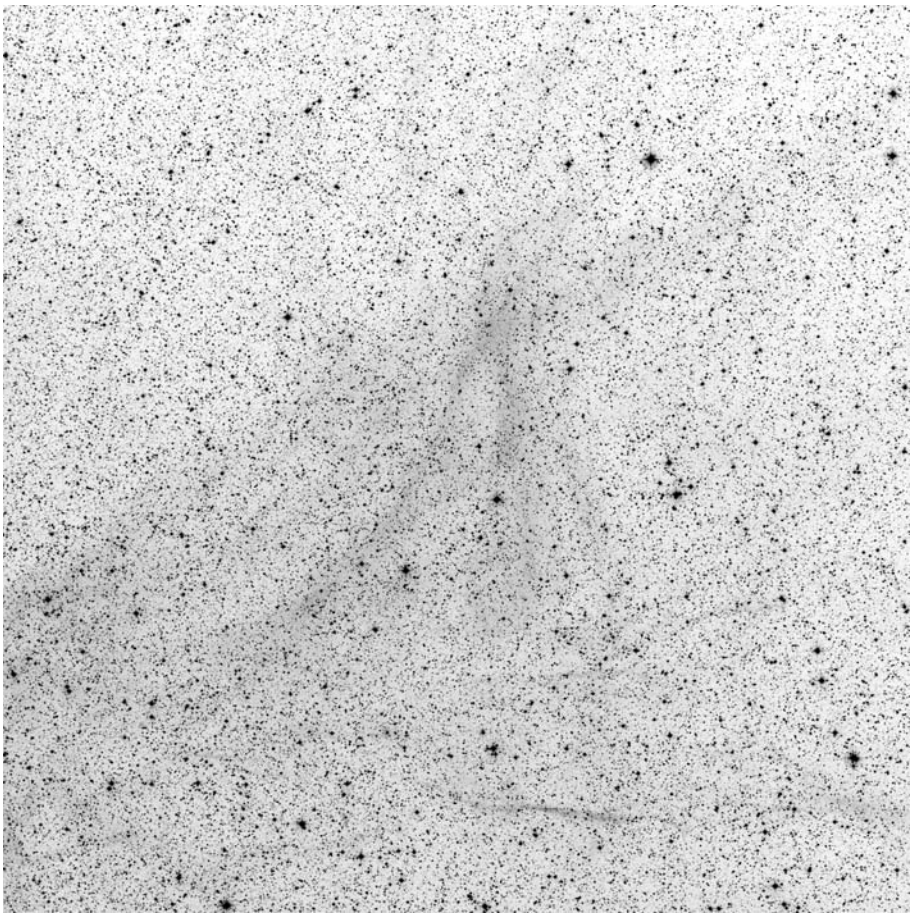
Observing notes:


+35°00'
+30°00'
+25°00'
η
χ
ρ
NGC 6940
Albireo
Vulpecula
Stock 1
Anser
20h30m
20h00m
19h30m

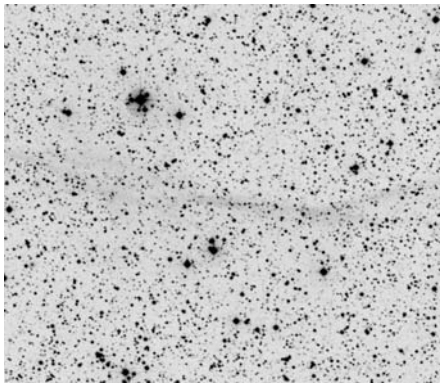

+31°00'
+30°00'
+29°00'
+28°00'
NGC 6846
NGC 6834
NGC 6842
Roslund 4
20h05m
20h00m
19h55m
19h50m
19h45m

Sh 2 - 96

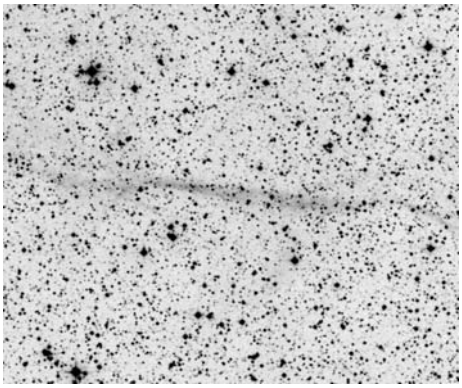
in Cygnus



60x60, red,enhanced



POSS blue, brightest filamen



POSS red



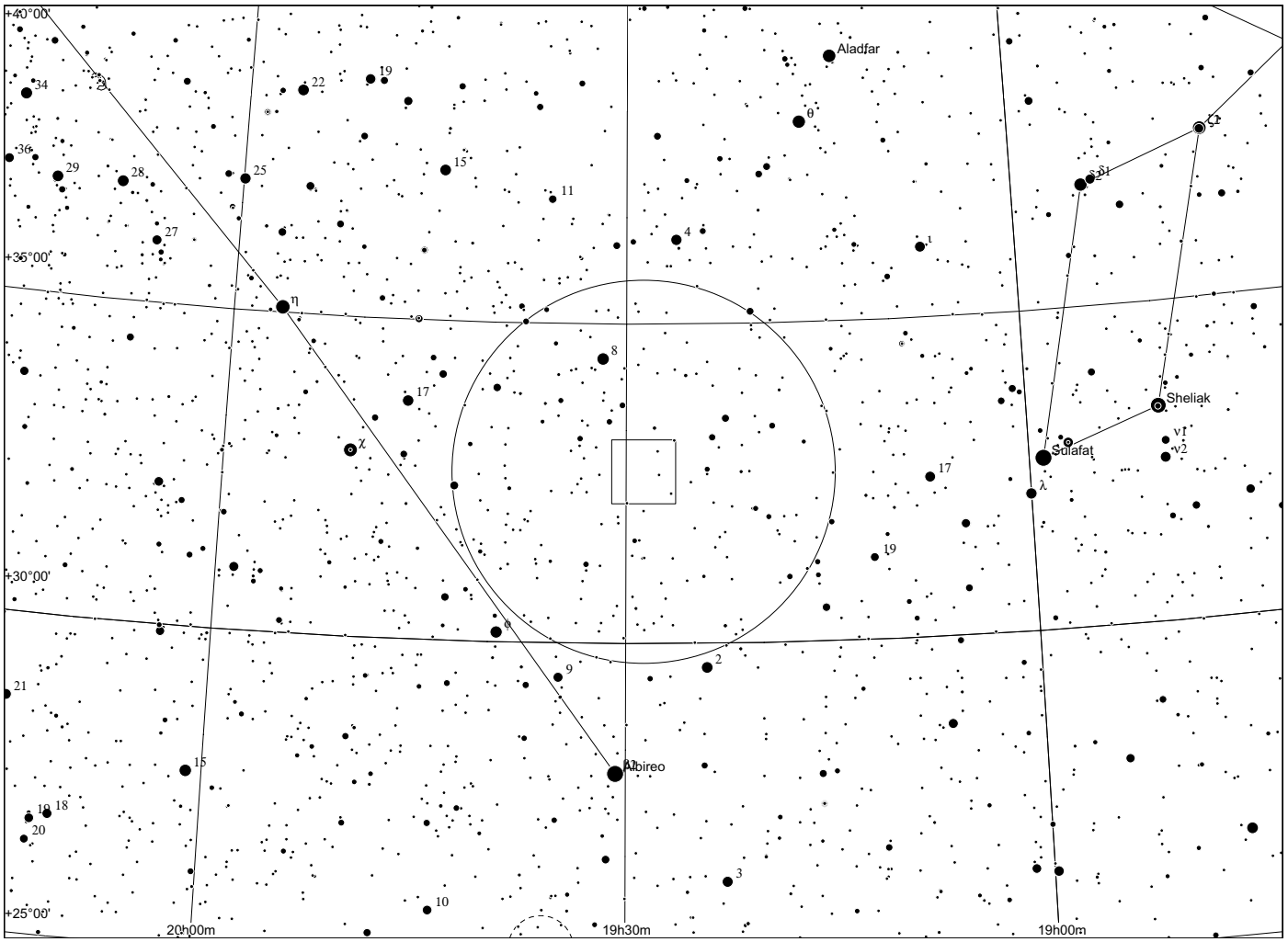
RGB Dean Salman

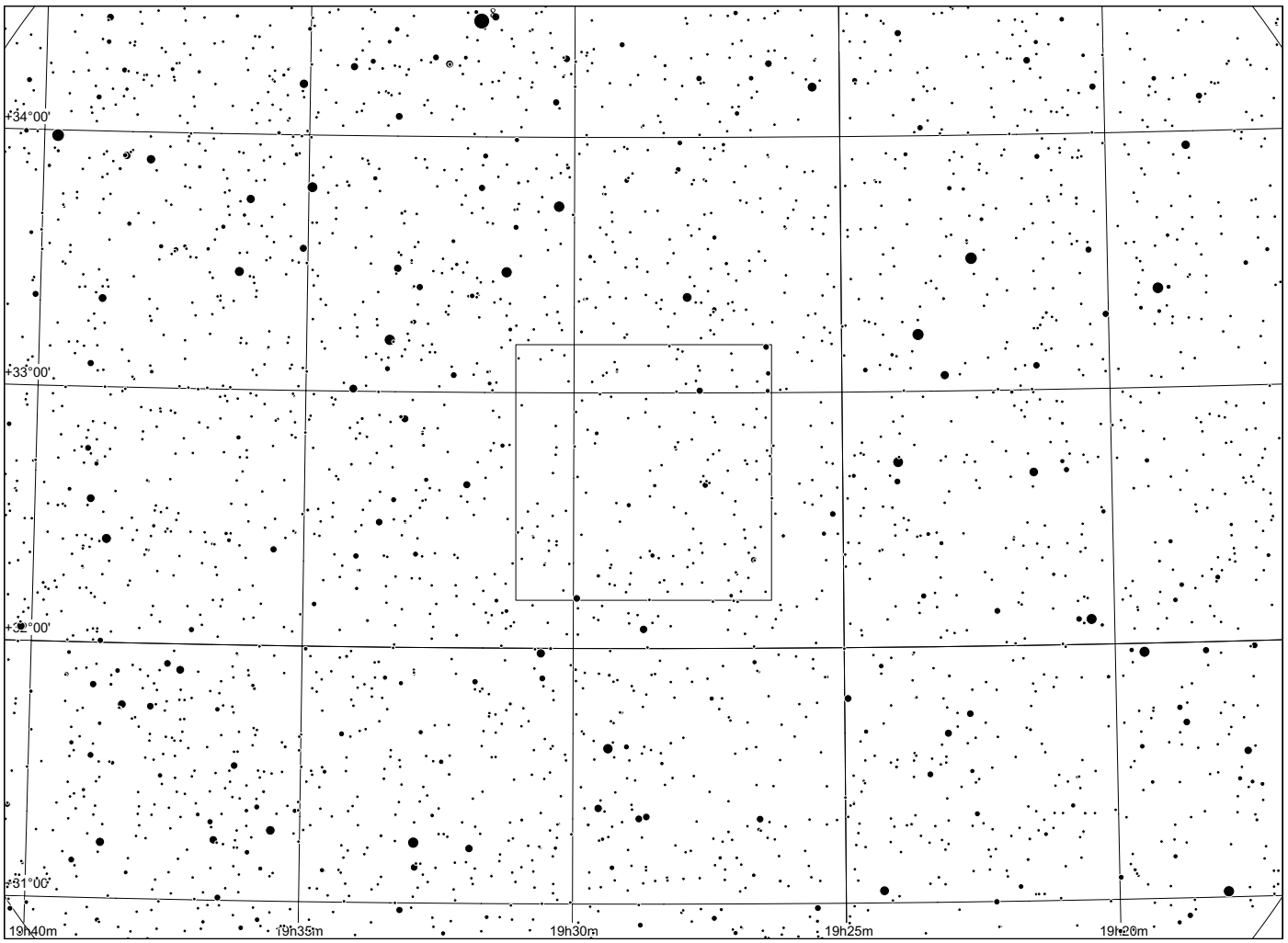
	other name	RA	dec	dia. '	F	S	B
Sh 2-096	part of SNR	19 28 42.0	+32 41 21	25	3	2	1

Distance: 900 pc, Size: 6.5 pc, Source: 1989A&AS...77..439F

Sh 2-96 is part of the same supernova remnant as Sh 2-91 and Sh 2-94: SNR 065.2+05.7.

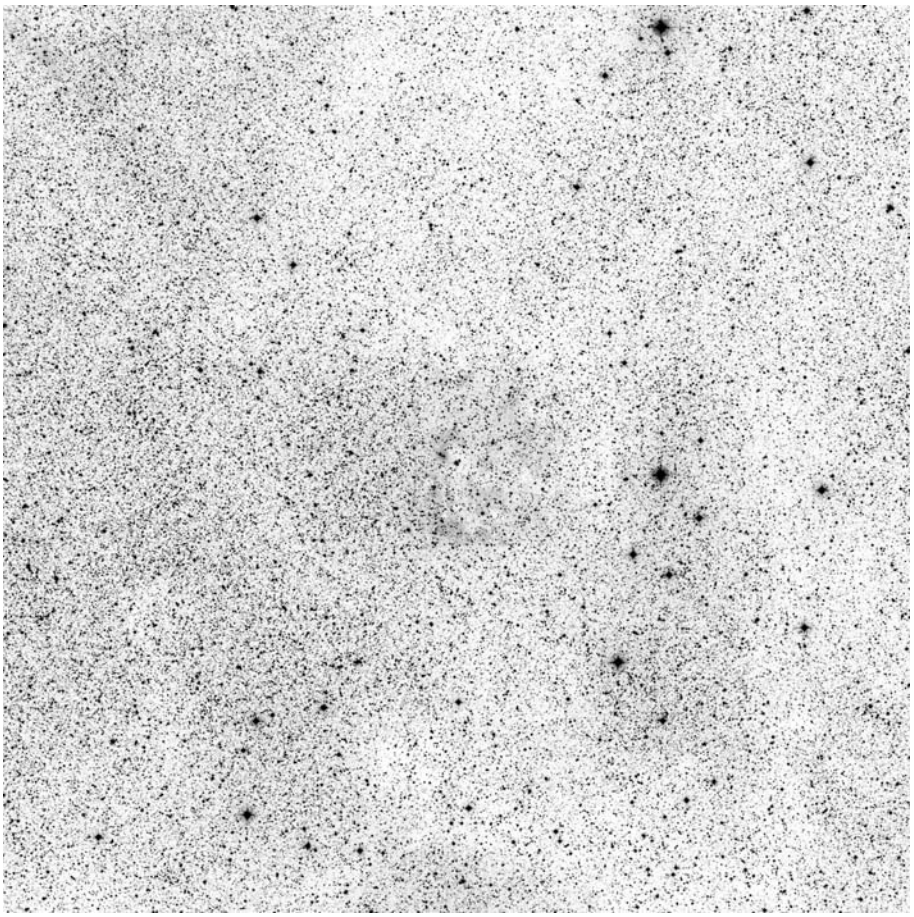
Observing notes:


+40°00'
+35°00'
+30°00'
+25°00'
20h00m
19h30m
19h00m
Aladfar
Sheliak
Sulafat
Albireo
η
χ
θ
λ
ν1
ν2
δ1
δ2

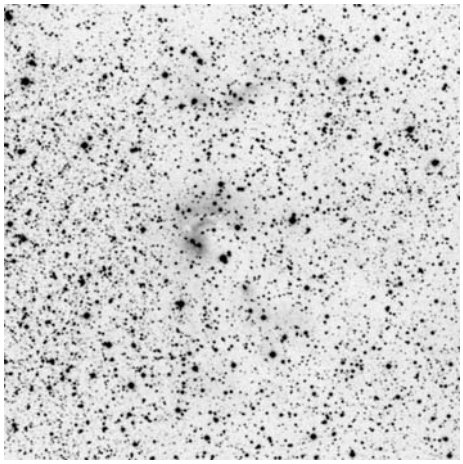

+34°00'
+33°00'
+32°00'
+31°00'
19h40m
19h35m
19h30m
19h25m
19h20m

Sh 2 - 97

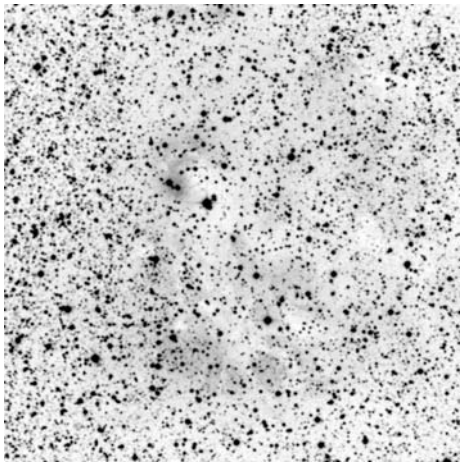
in Cygnus



60x60, red



POSS blue



POSS red



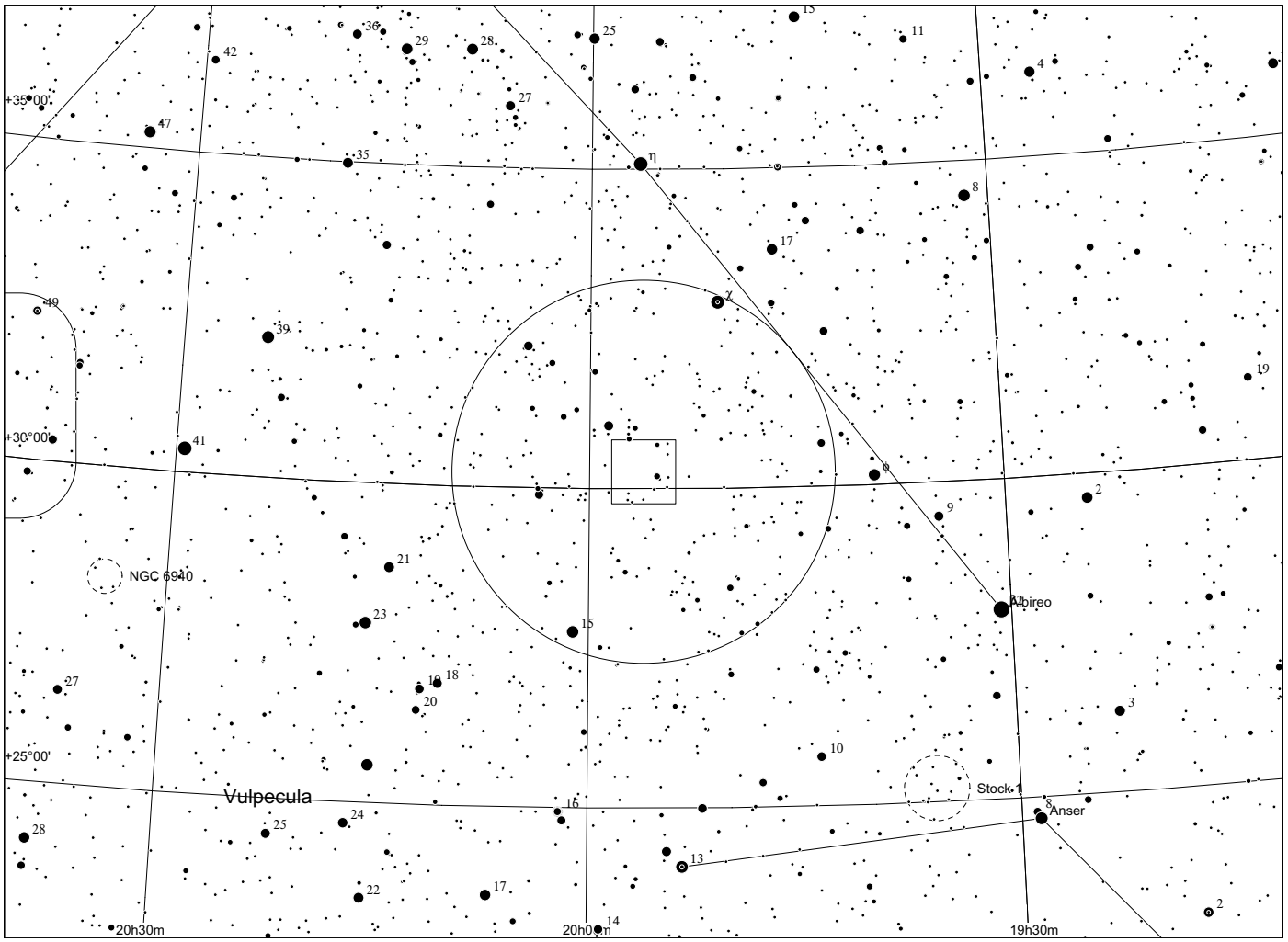
RGB Dean Salman

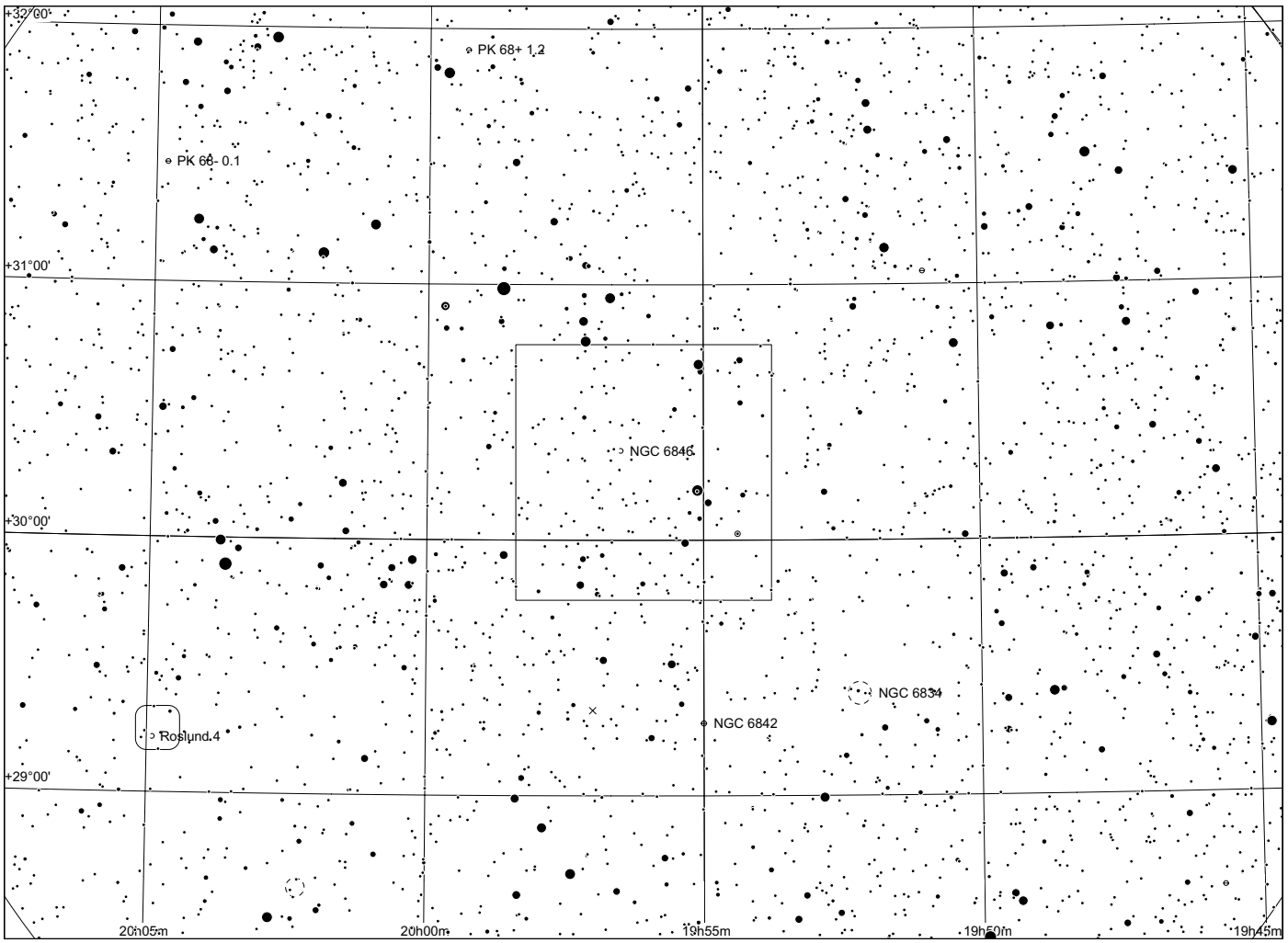
	other name	RA	dec	dia. '	F	S	B
Sh 2-097		19 56 04.6	+30 15 57	10	1	2	1

Distance: 3900 pc, Size: 11.3 pc, Source: 2003A&A...397..133R

Sh 2-97 is ionised by at least four stars - two B1V, one B0.5V and one with a spectral type between O9V and B0V.

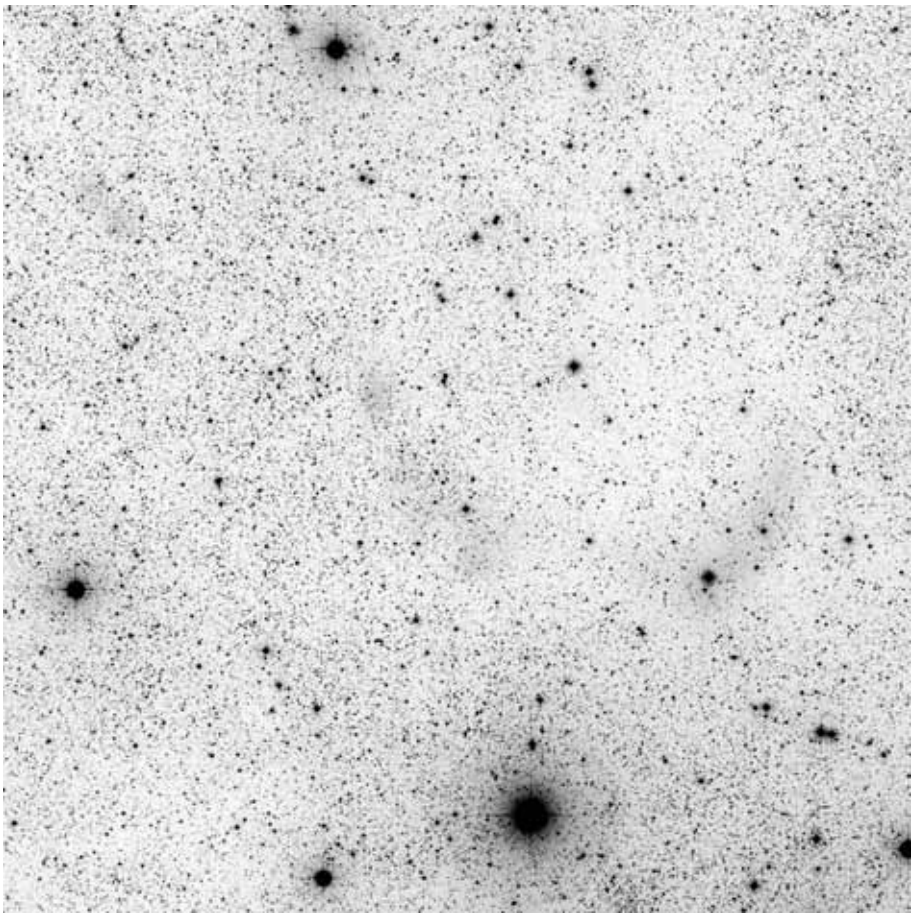
Observing notes:


+35°00'
+30°00'
+25°00'
NGC 6940
Albireo
Vulpecula
Stock 1
Anser
20h30m
20h00m
19h30m

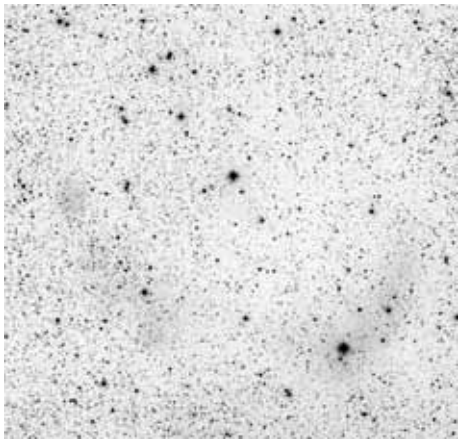

+32°00'
+31°00'
+30°00'
+29°00'
PK 68+ 1.2
PK 66- 0.1
NGC 6846
NGC 6834
NGC 6842
Roslund 4
20h05m
20h00m
19h55m
19h50m
19h45m

Sh 2 - 98

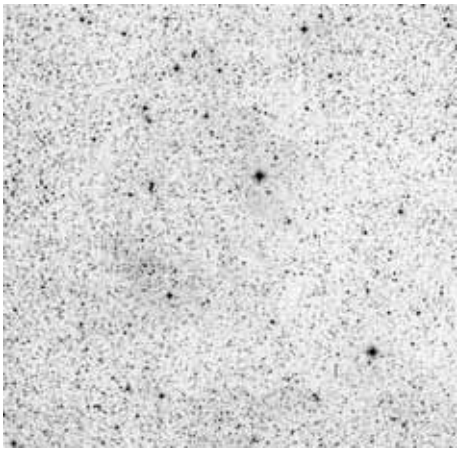
in Cygnus



60x60, blue enhanced



POSS blue



POSS red



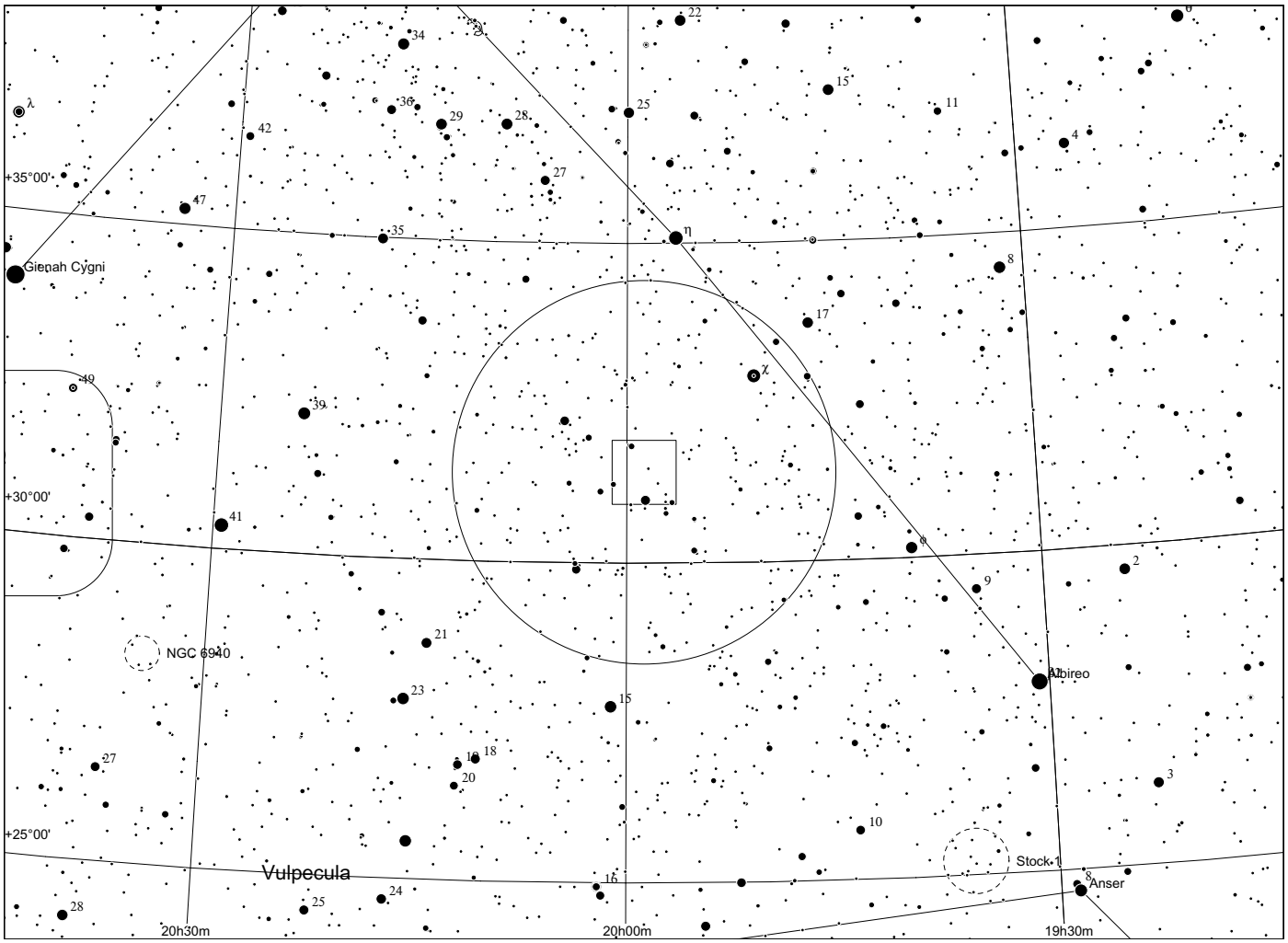
composite

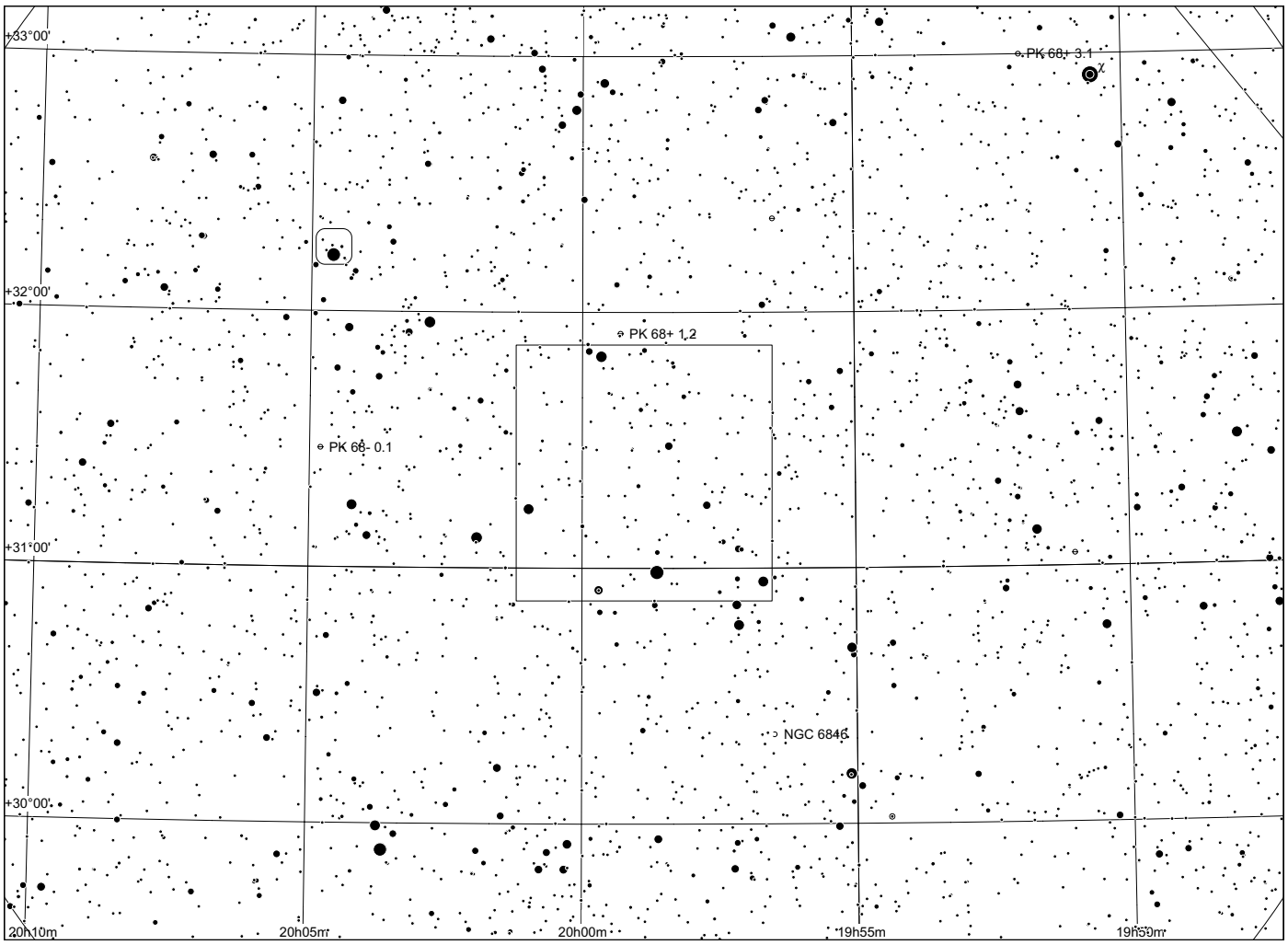
	other name	RA	dec	dia. '	F	S	B
Sh 2-098		19 58 44.3	+31 25 18	15	1	1	1

Distance: 3600 pc, Size: 15.7 pc, Source: 2003A&A...397..133R

This is a ring nebula associated with a 3000 solar mass molecular cloud and the Wolf-Rayet star WR 130.

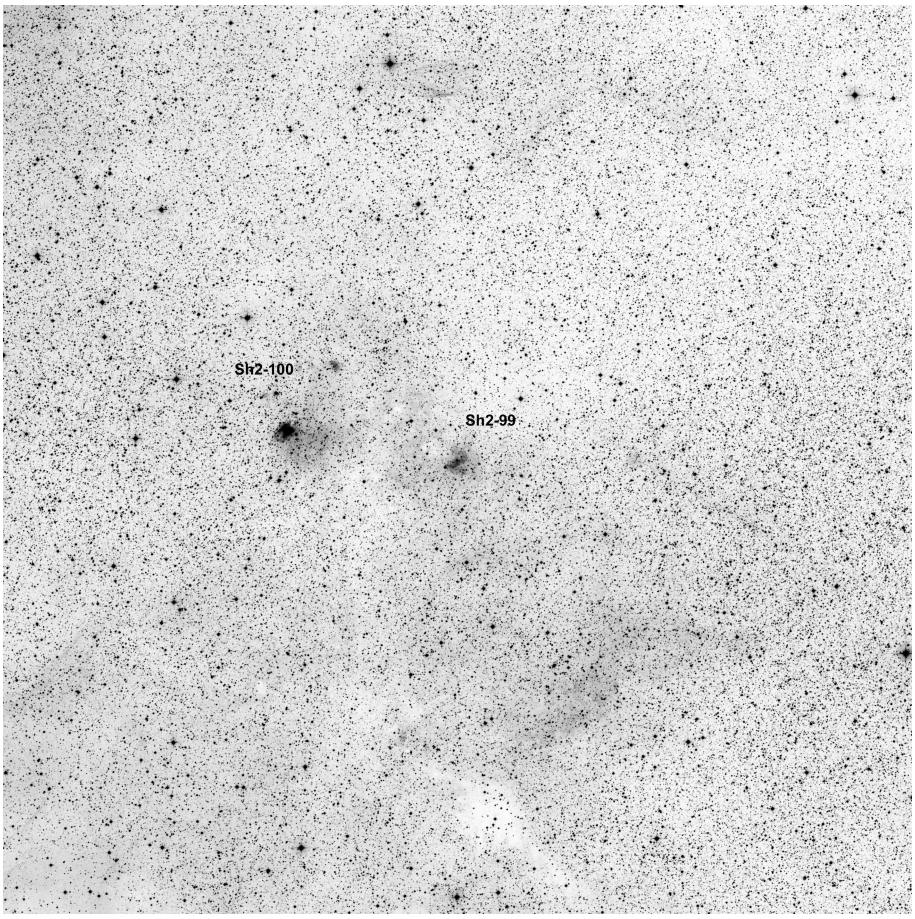
Observing notes:


+35°00'
+30°00'
+25°00'
Sienah Cygni
NGC 6940
Albireo
Vulpecula
Stock 1
Anser
20h30m
20h00m
19h30m

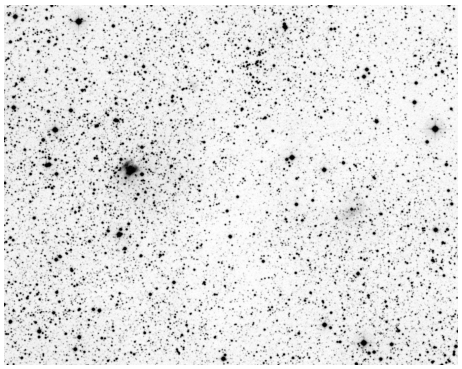

+33°00'
+32°00'
+31°00'
+30°00'
PK 68+ 3.1
PK 68+ 1.2
PK 68- 0.1
NGC 6846
20h10m
20h05m
20h00m
19h55m
19h50m

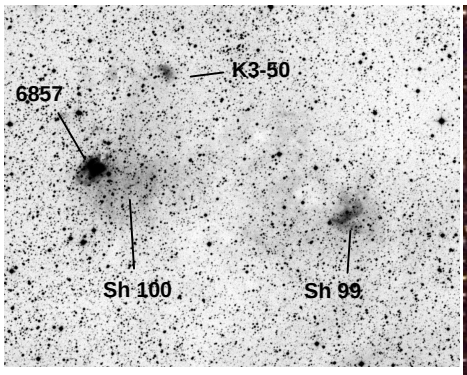
Sh 2 - 99/100

in Cygnus



60x60, red







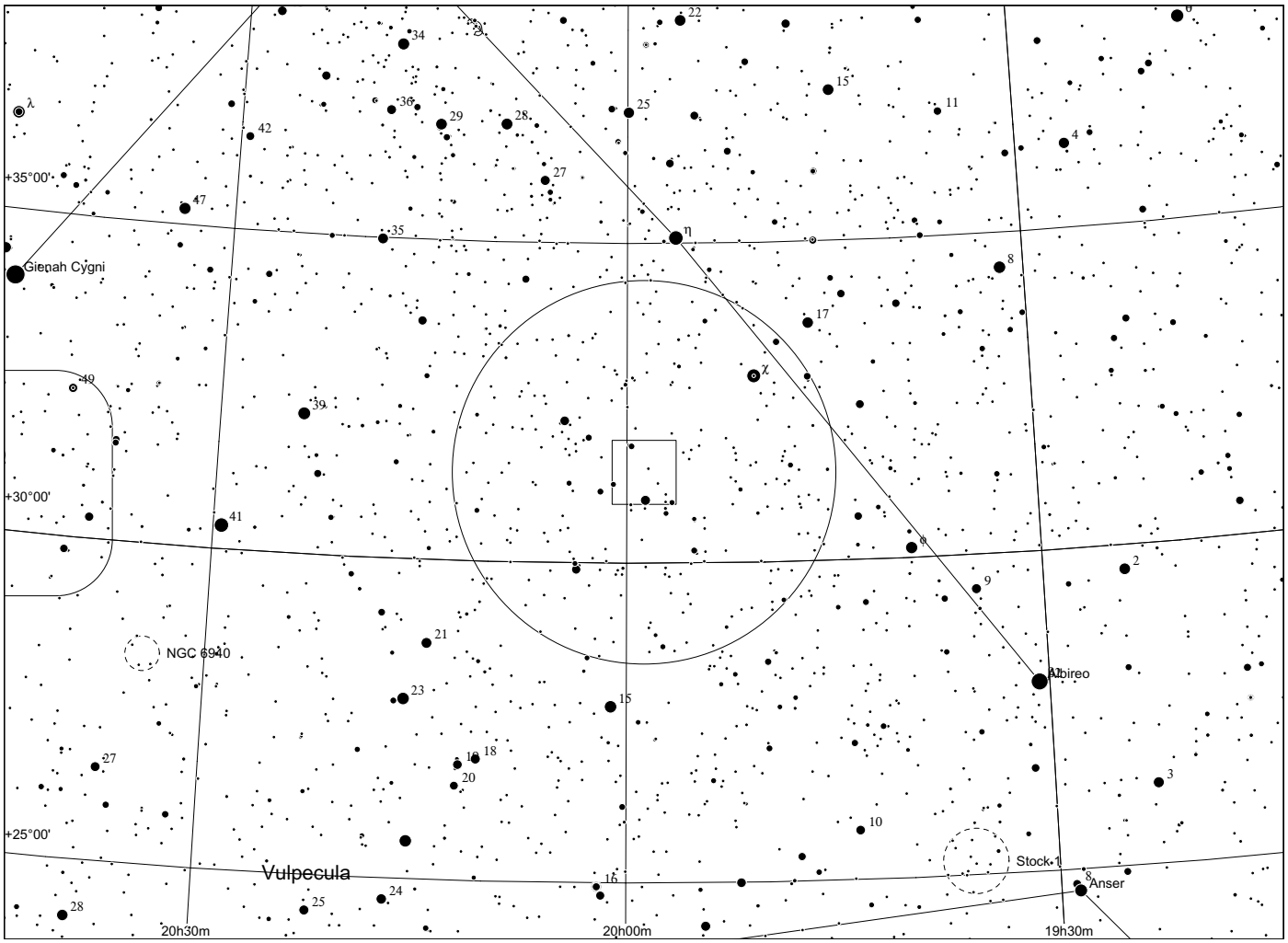
POSS blue POSS red RGB Dean Salman

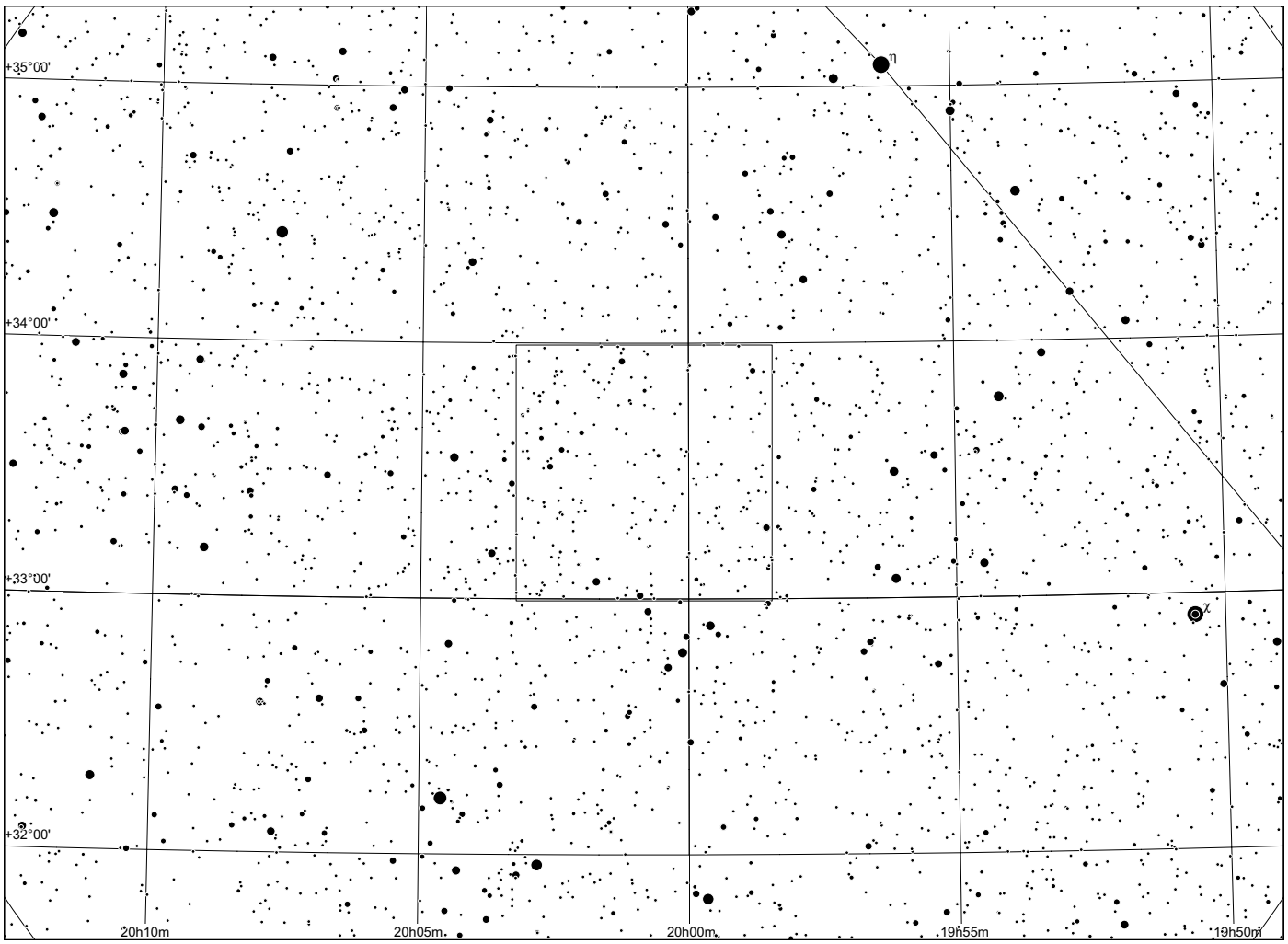
	other name	RA	dec	dia. '	F	S	B
Sh 2-099		20 00 50.5	+33 29 34	5	3	2	3
Sh 2-100	NGC6857	20 01 50.6	+33 30 41	4	3	2	3

Distance: 8000 pc, Size: 11.6 pc, Source: 1982ApJS...49..183B, This HII region is part of the W58 radio complex.

Distance: 7784 pc, Size: 6.1 pc, Source: 2003A&A...397..213P,Sh 2-100 is part of the star formation region W58. Sh 2-100 itself consists of two distinct nebulae - K3-50 (W58A) and NGC 6857.

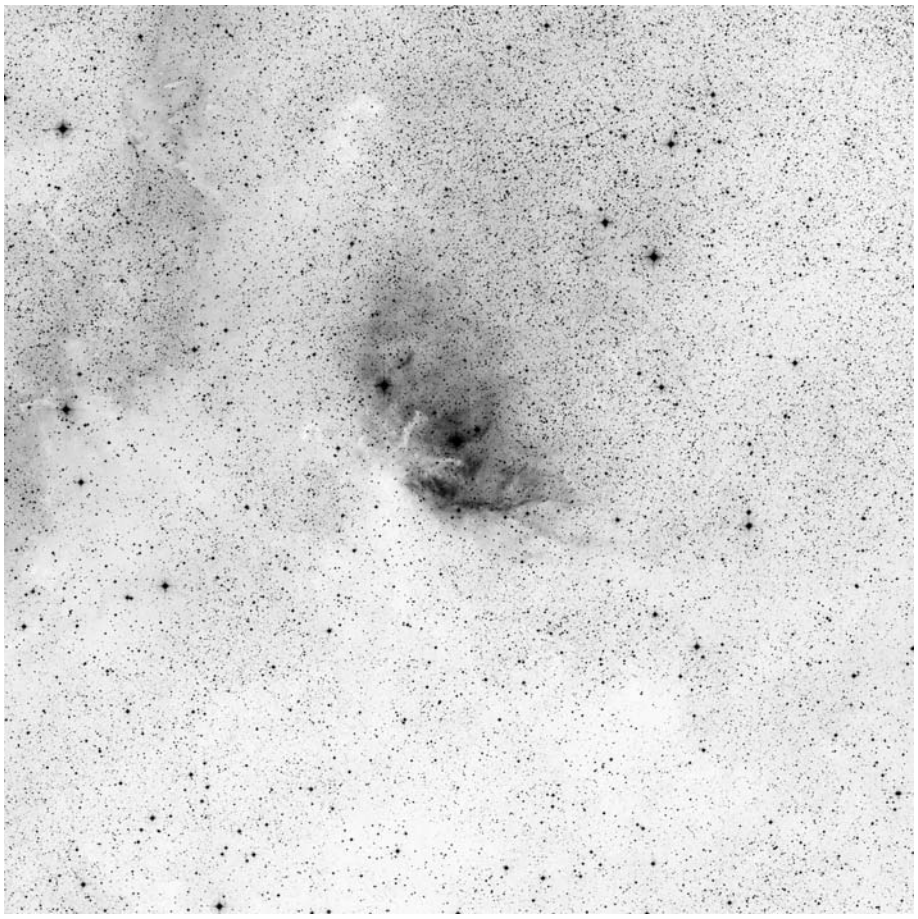
Observing notes:


+35°00'
+30°00'
+25°00'
Gienah Cygni
NGC 6940
Albireo
Vulpecula
Stock 1
Anser
20h30m
20h00m
19h30m

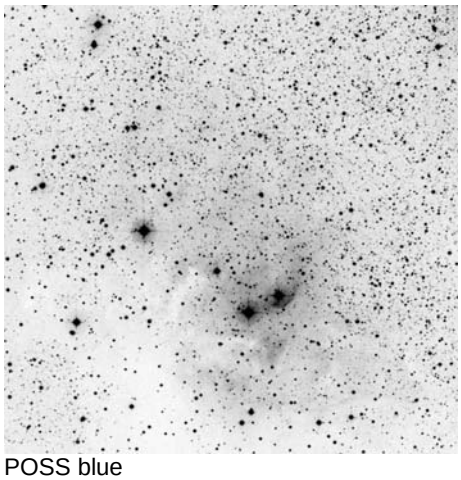

+35°00'
+34°00'
+33°00'
+32°00'
20h10m
20h05m
20h00m
19h55m
19h50m

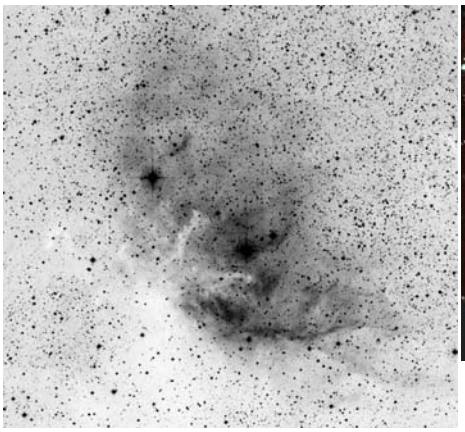
Sh 2 - 101

in Cygnus



60x60, red







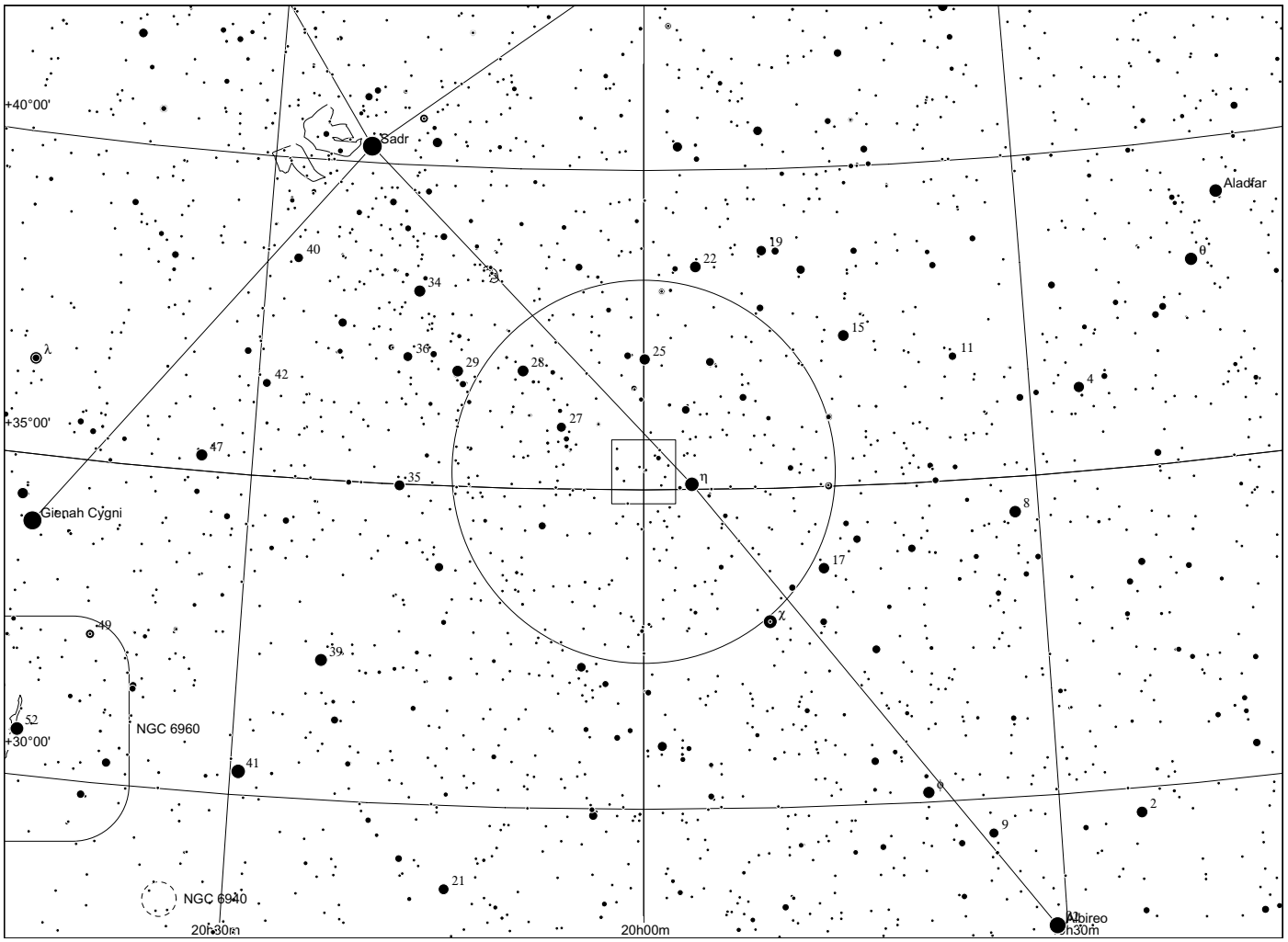
POSS blue POSS red nb Ha/OIII/HeII Dean Salman

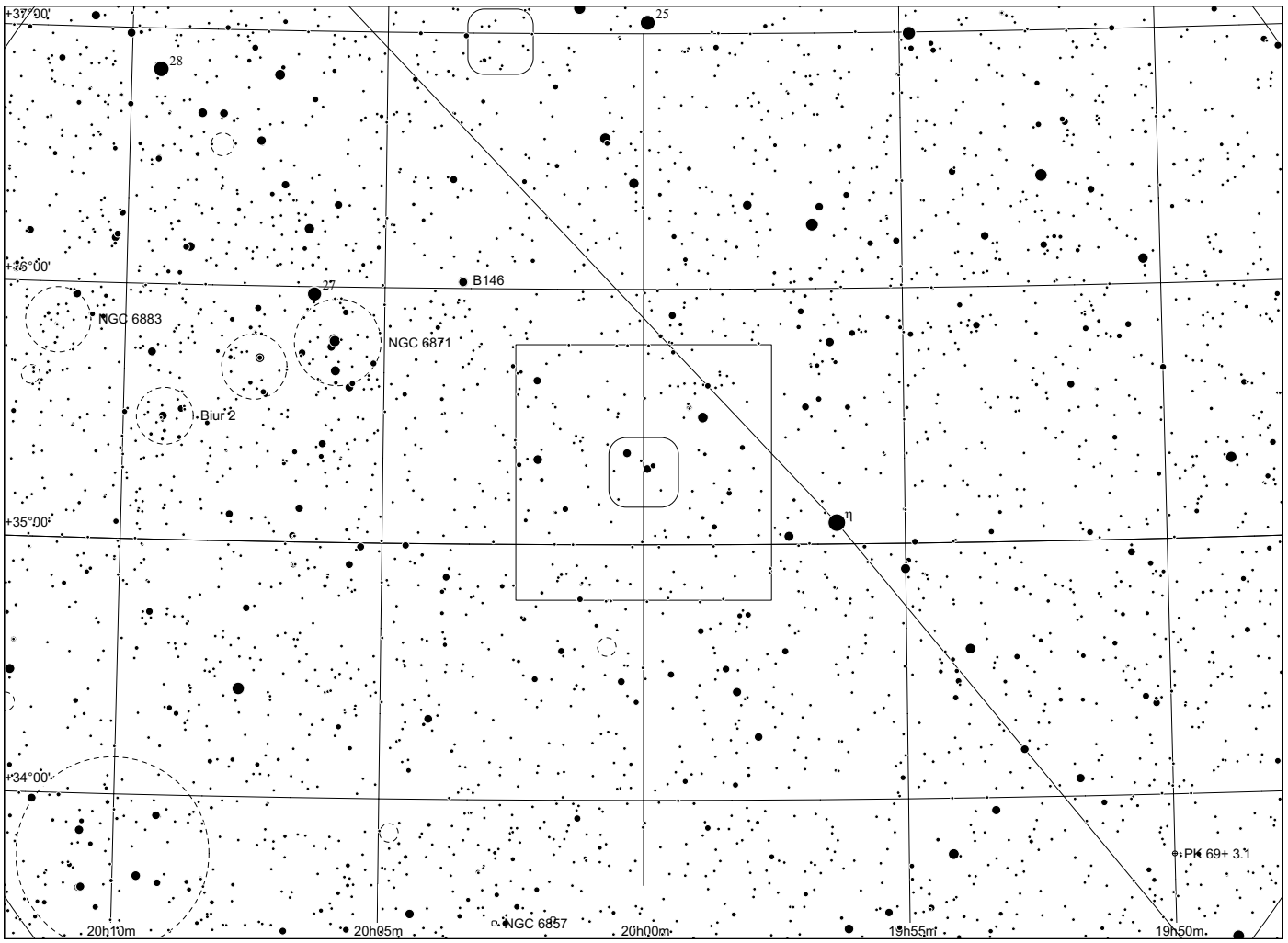
	other name	RA	dec	dia. '	F	S	B
Sh 2-101		19 59 56.8	+35 17 27	20	3	2	2

Distance: 2683 pc, Size: 2.7 pc, Source: 2003A&A...397..213P

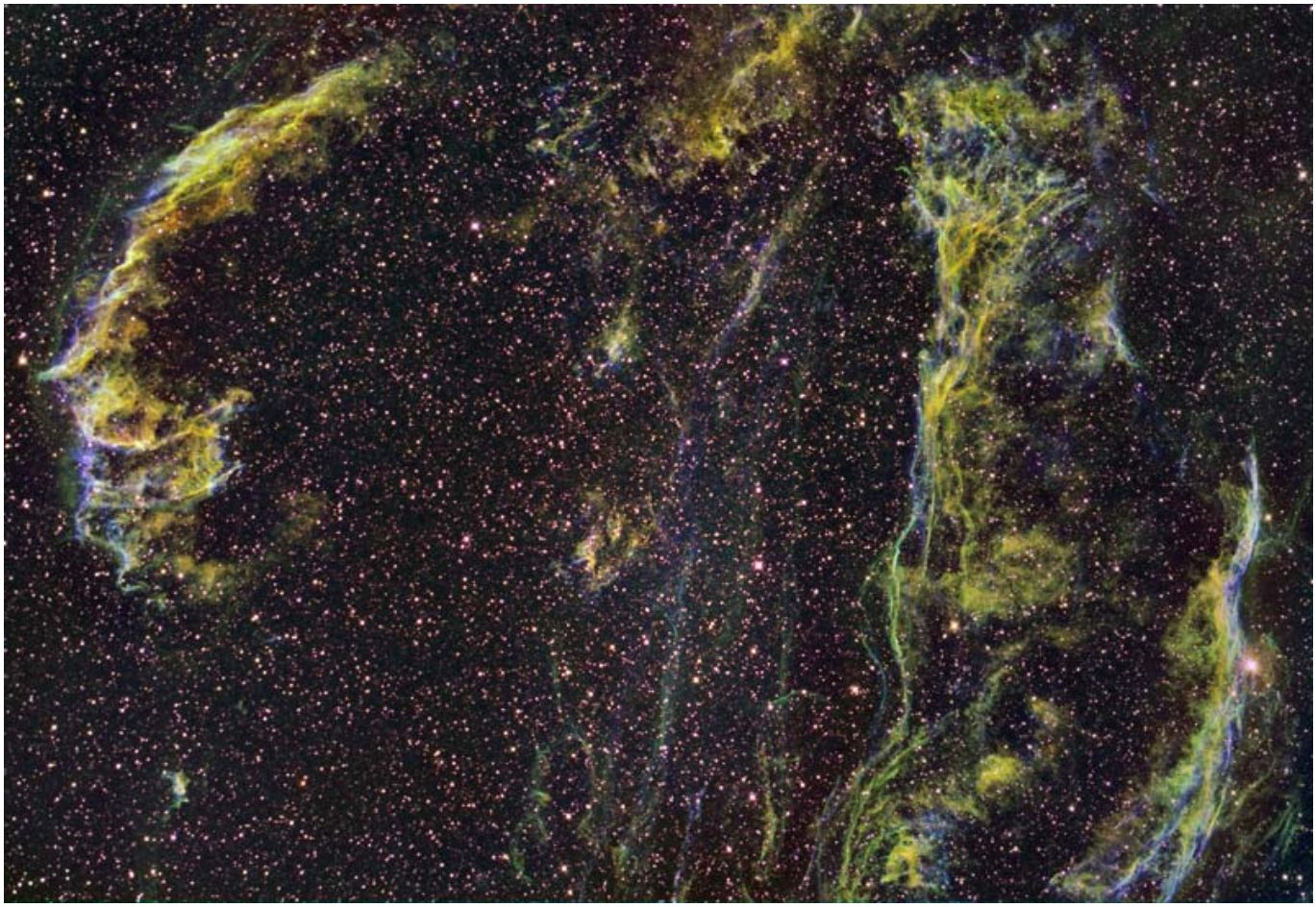
The exciting star for the Tulip nebula is believed to be the O6.5III star HD 227018, which Humphreys places in the Cygnus OB3 association.

Observing notes:


+40°00'
Sadr
Aladfar
40
34
22
19
θ
λ
36
29
28
25
15
11
42
4
+35°00'
27
47
35
η
Gienah Cygni
8
17
χ
49
39
52
NGC 6960
+30°00'
41
2
9
21
NGC 6940
20h30m
20h00m
Albireo
19h30m


+37°00'
25
28
+36°00'
B146
27
NGC 6883
NGC 6871
Biur 2
η
+35°00'
+34°00'
PK 69+ 3.1
20h10m
20h05m
NGC 6857
20h00m
19h55m
19h50m

Sh 2 - 103 in Cygnus



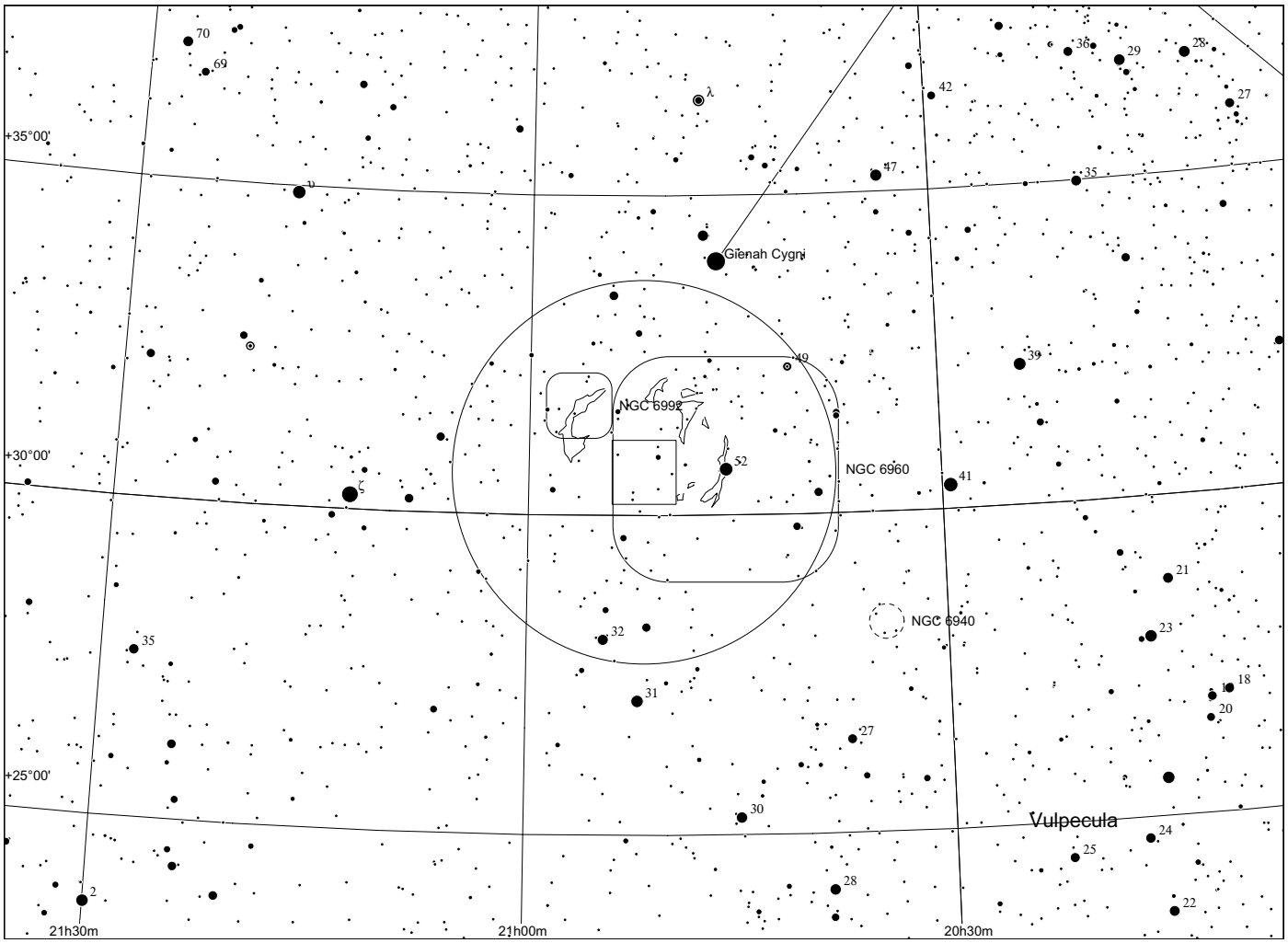
narrow band Dean Salman

	other name	RA	dec	dia. '	F	S	B
Sh 2-103	Veil nebula	20 50 32.3	+30 55 25	210	3	3	3

Distance: 440 pc, Size: 26.9 pc, Source: 2004MNRAS.351..385L

This is the Cygnus Loop supernova remnant.

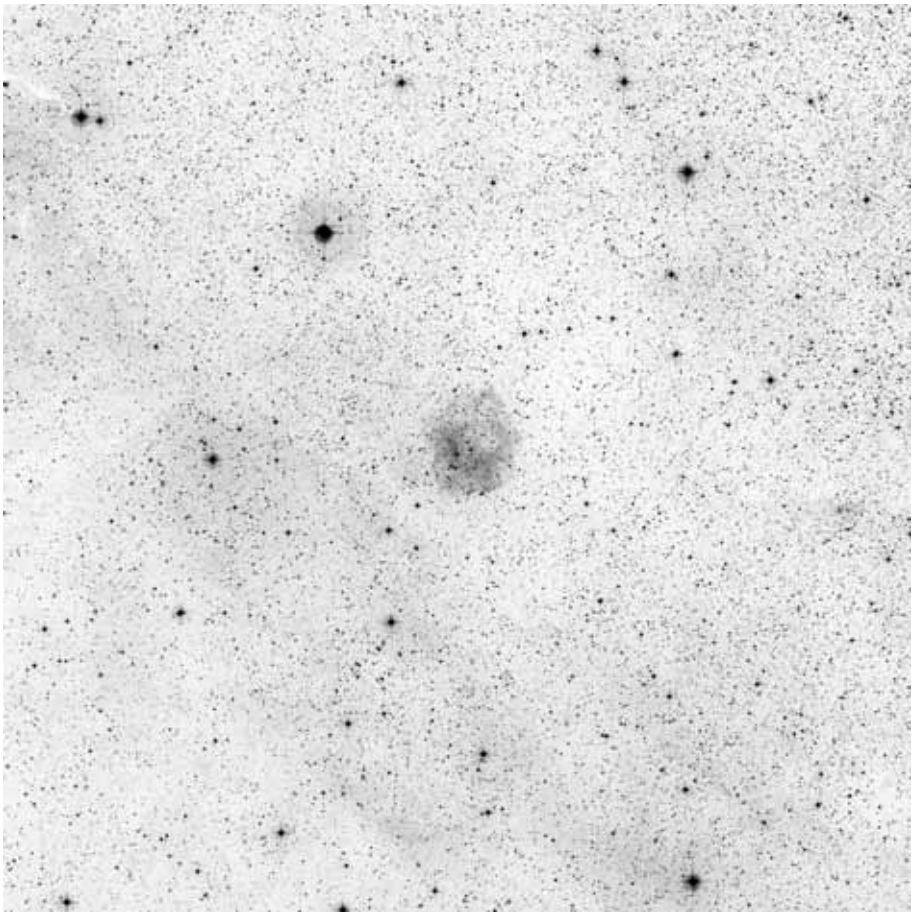
Observing notes:



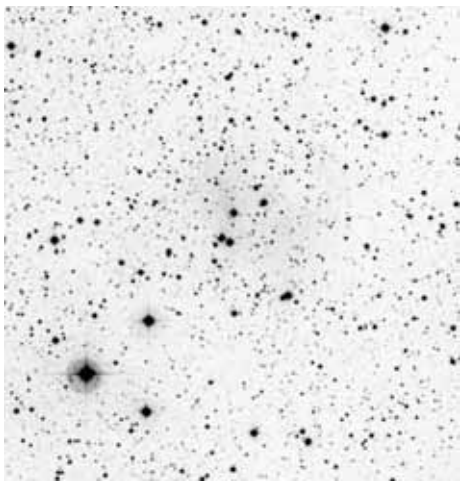
+35°00'
+30°00'
+25°00'
21h30m
21h00m
20h30m
Gienah Cygni
NGC 6992
NGC 6960
NGC 6940
Vulpecula

Sh 2 - 104

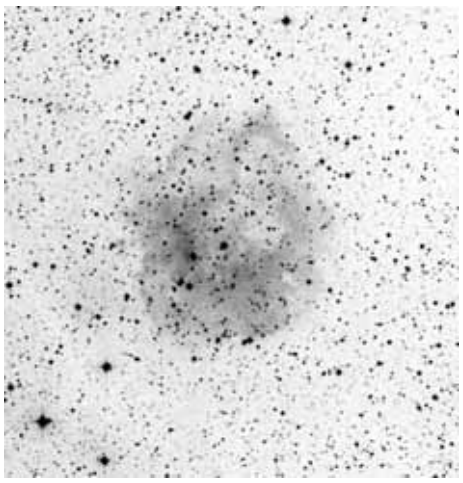
in Cygnus



60x60, red



POSS blue



POSS red



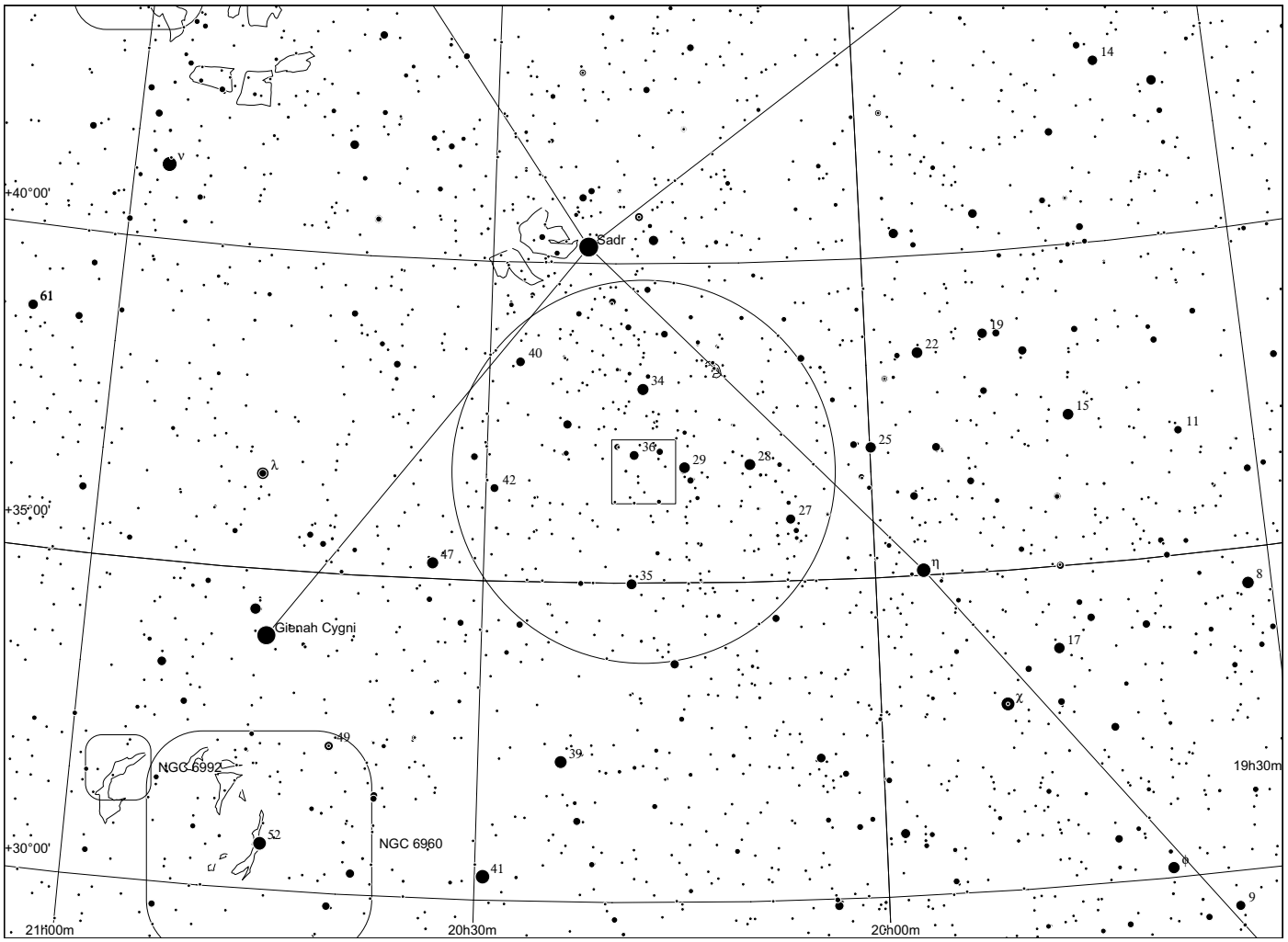
composite

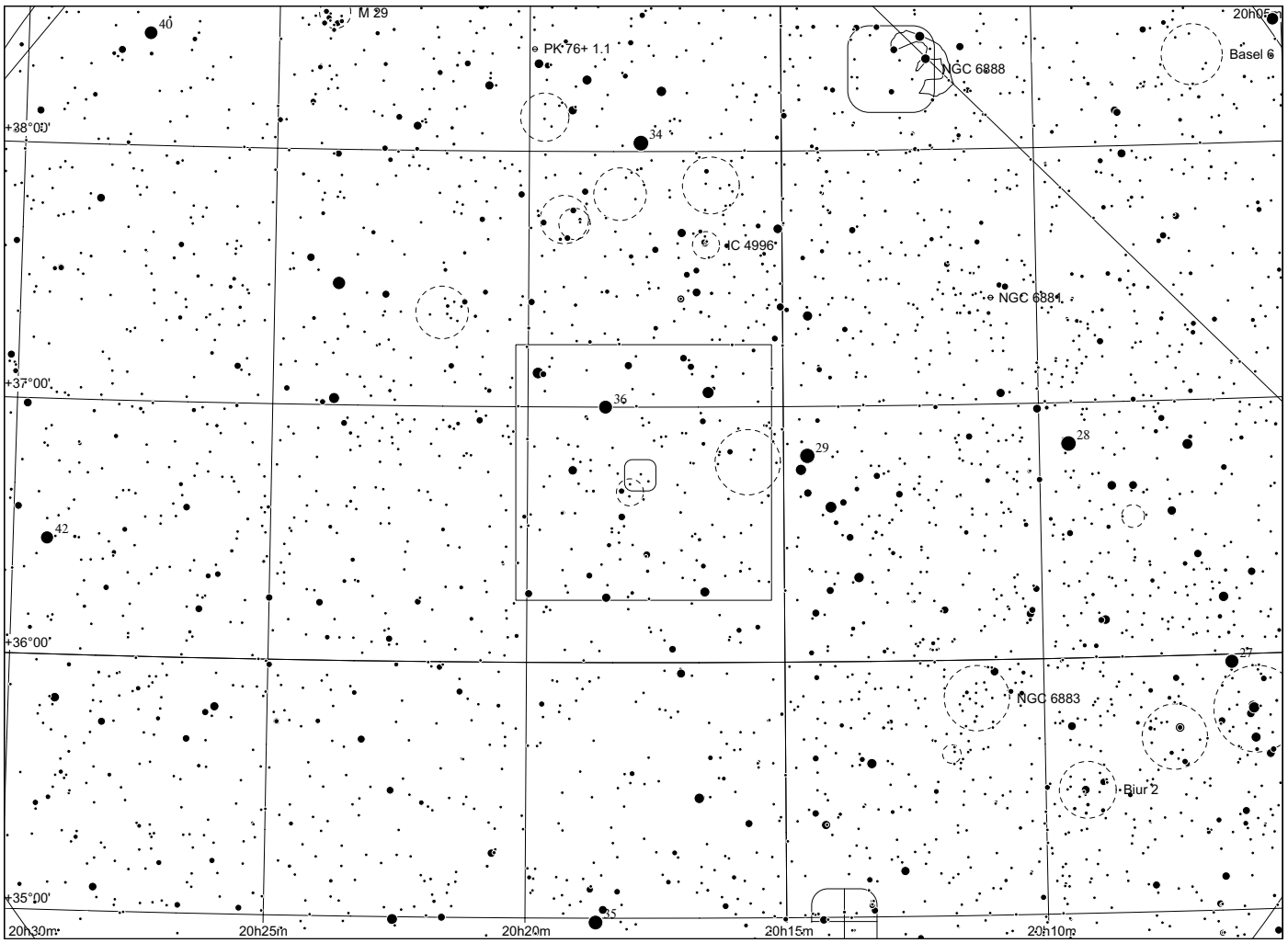
	other name	RA	dec	dia. '	F	S	B
Sh 2-104		20 17 44.6	+36 44 40	7	1	2	2

Distance: 4400 pc, Size: 9.0 pc, Source: 1982ApJS...49..183B

About 450 solar masses of gas form a shell around the ionising O6V star in this HII region located in the outer galaxy.

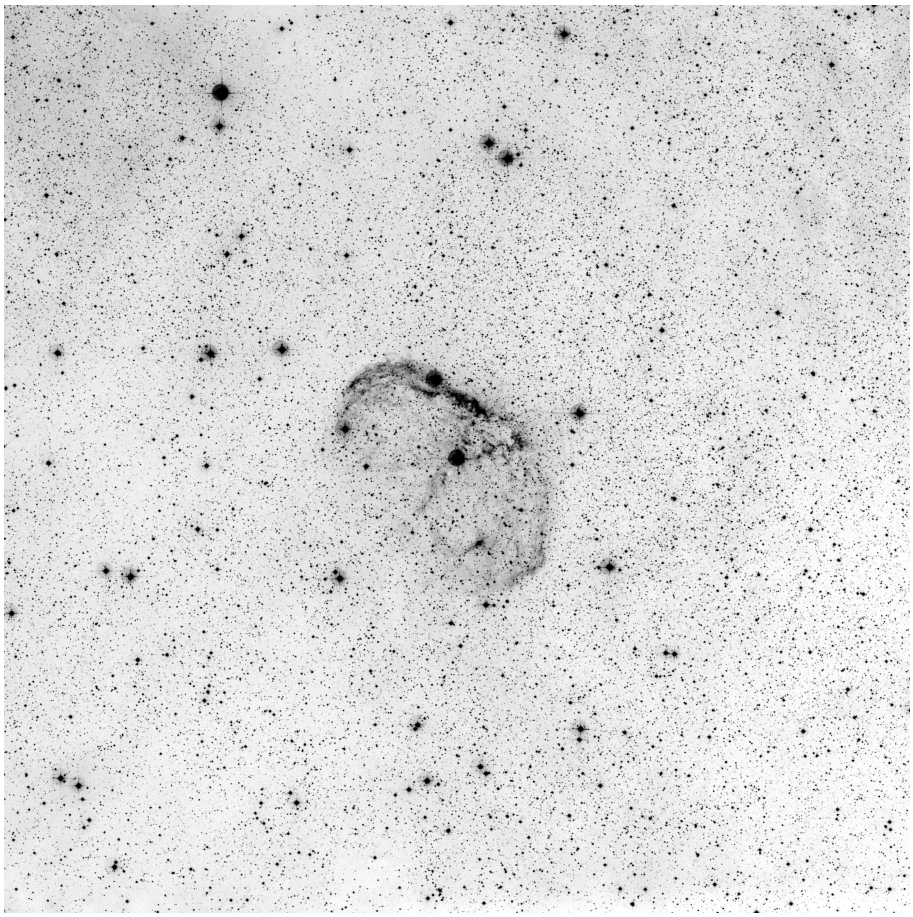
Observing notes:


Sadr
Gienah Cygni
NGC 6992
NGC 6960
+40°00'
+35°00'
+30°00'
21h00m
20h30m
20h00m
19h30m

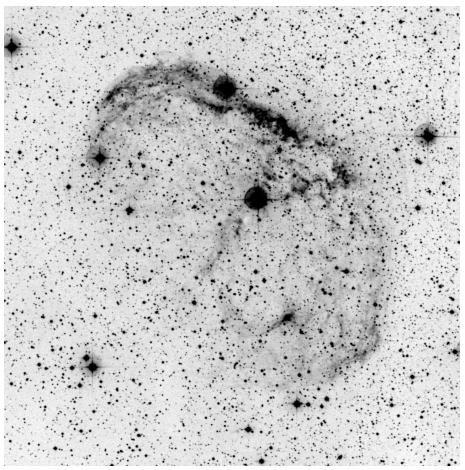

M 29
PK 76+ 1.1
NGC 6888
Basel 6
IC 4996
NGC 6881
NGC 6883
Biur 2
+38°00'
+37°00'
+36°00'
+35°00'
20h30m
20h25m
20h20m
20h15m
20h10m

Sh 2 - 105

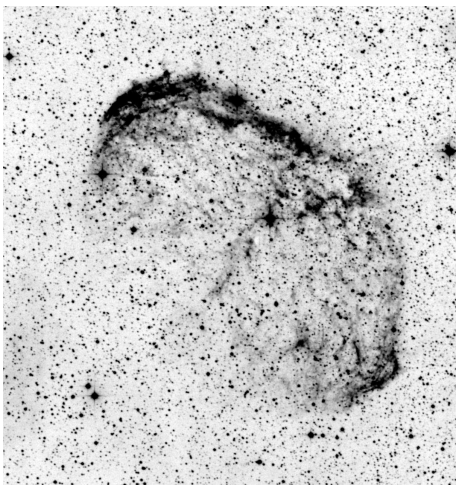
in Cygnus



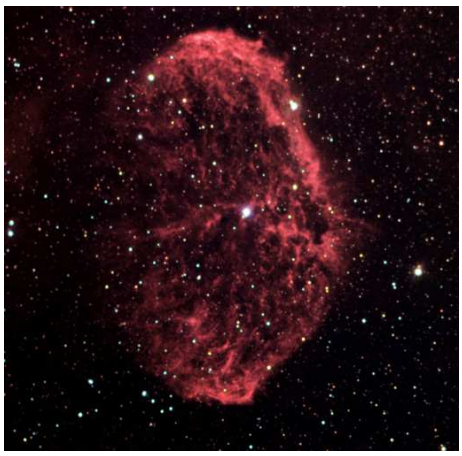
60x60, blue



POSS blue



POSS red



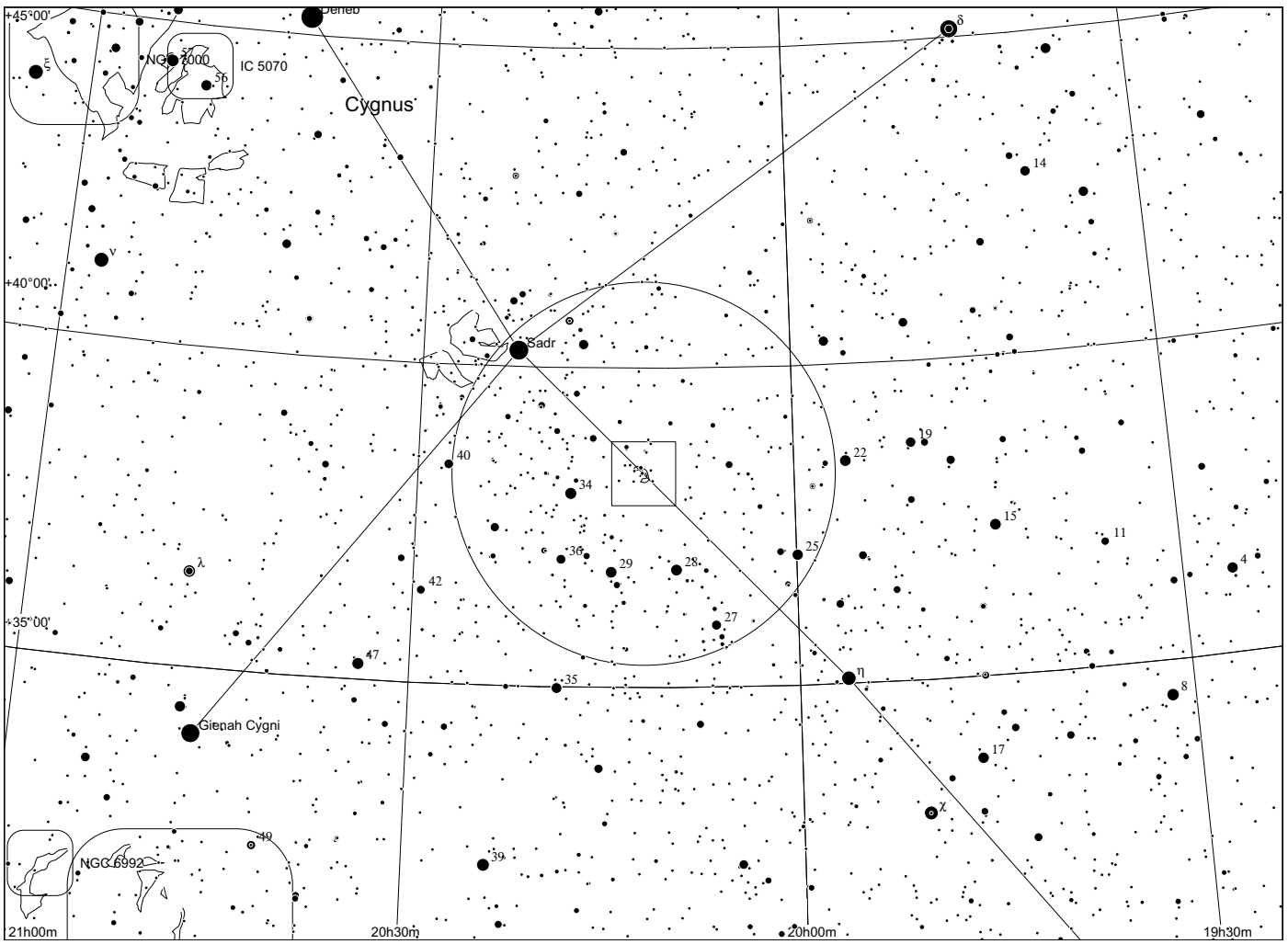
RGB Dean Salman

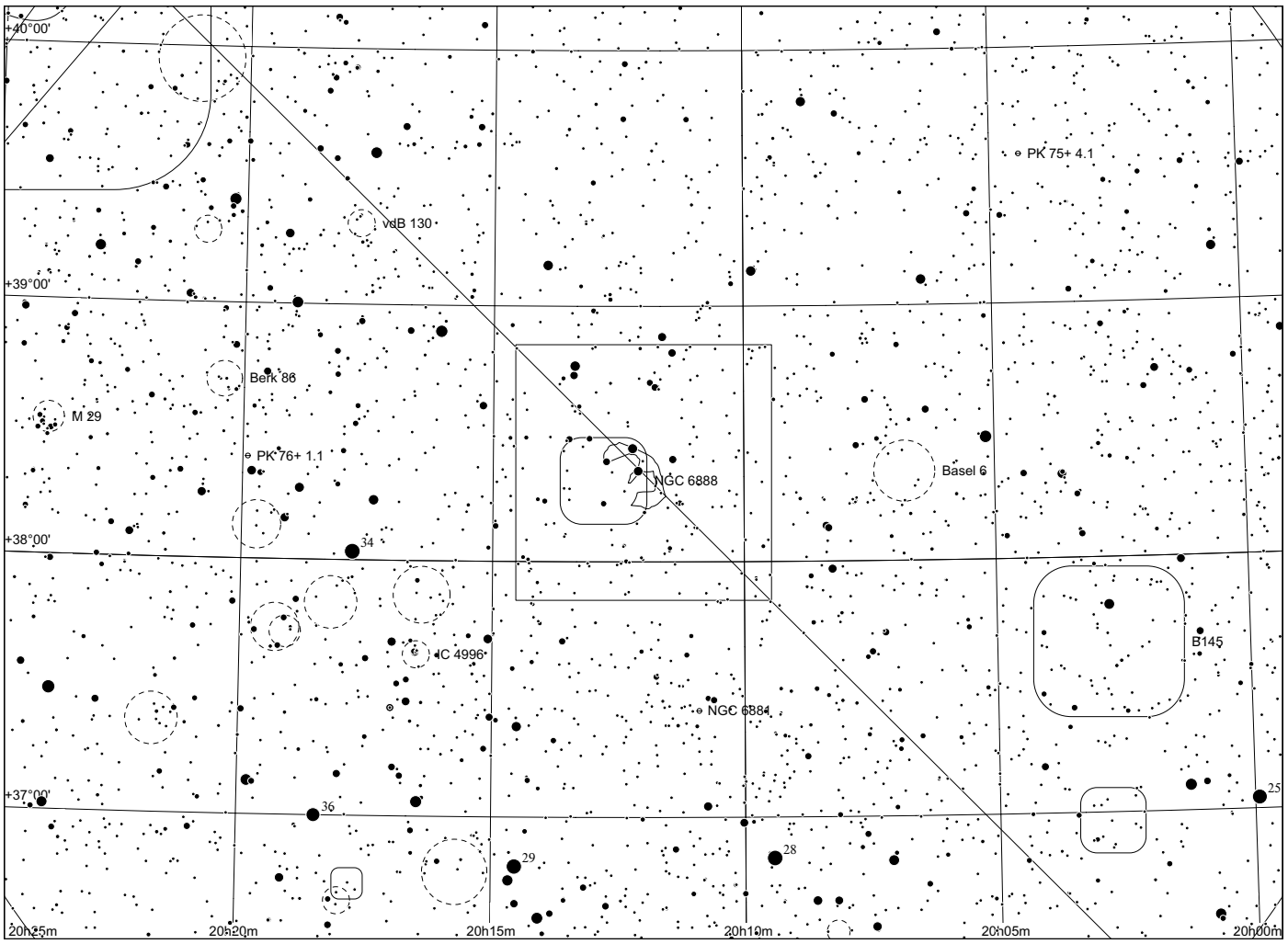
	other name	RA	dec	dia. '	F	S	B
Sh 2-105	NGC<6888 = Crescent Nebula	20 12 02.4	+38 20 59	18	2	3	3

Distance: 1200 pc, Size: 6.3 pc, Source: 1982ApJS...49..183B

NGC 6888, the Crescent nebula, is a ring nebula surrounding the Wolf Rayet star WR 136.

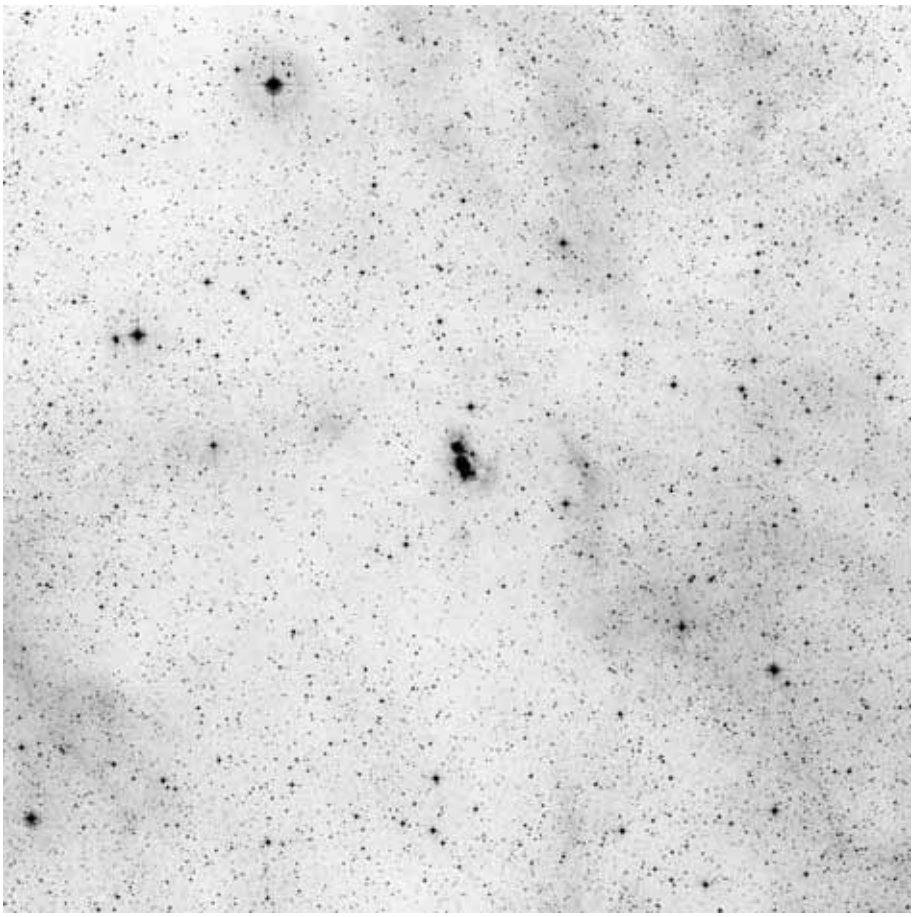
Observing notes:


+45°00'
Deneb
NGC 7000
IC 5070
Cygnus
+40°00'
Sadr
+35°00'
Gienah Cygni
NGC 6992
21h00m
20h30m
20h00m
19h30m

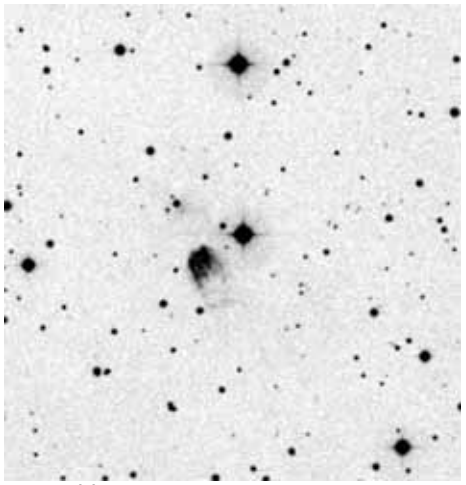

+40°00'
vdB 130
PK 75+ 4.1
+39°00'
Berk 86
M 29
PK 76+ 1.1
NGC 6888
Basel 6
+38°00'
IC 4996
B145
NGC 6884
+37°00'
20h25m
20h20m
20h15m
20h10m
20h05m
20h00m

Sh 2 - 106

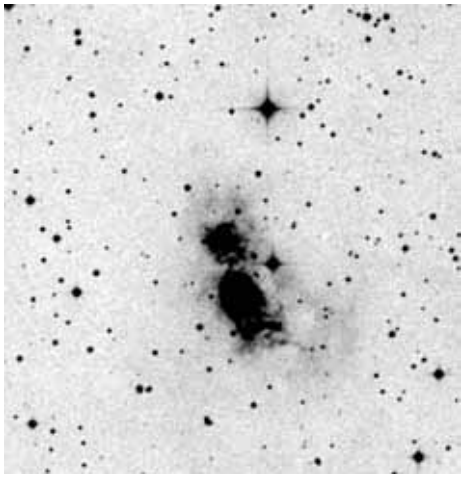
in Cygnus



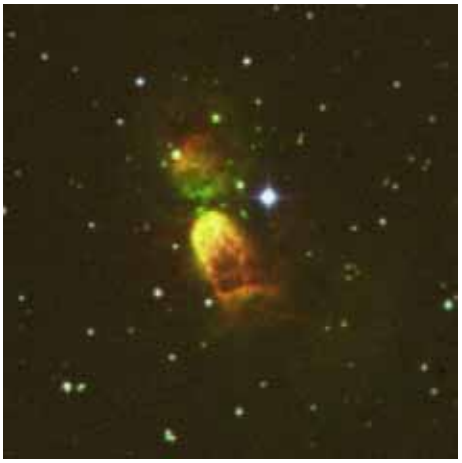
60x60, red



POSS blue



POSS red



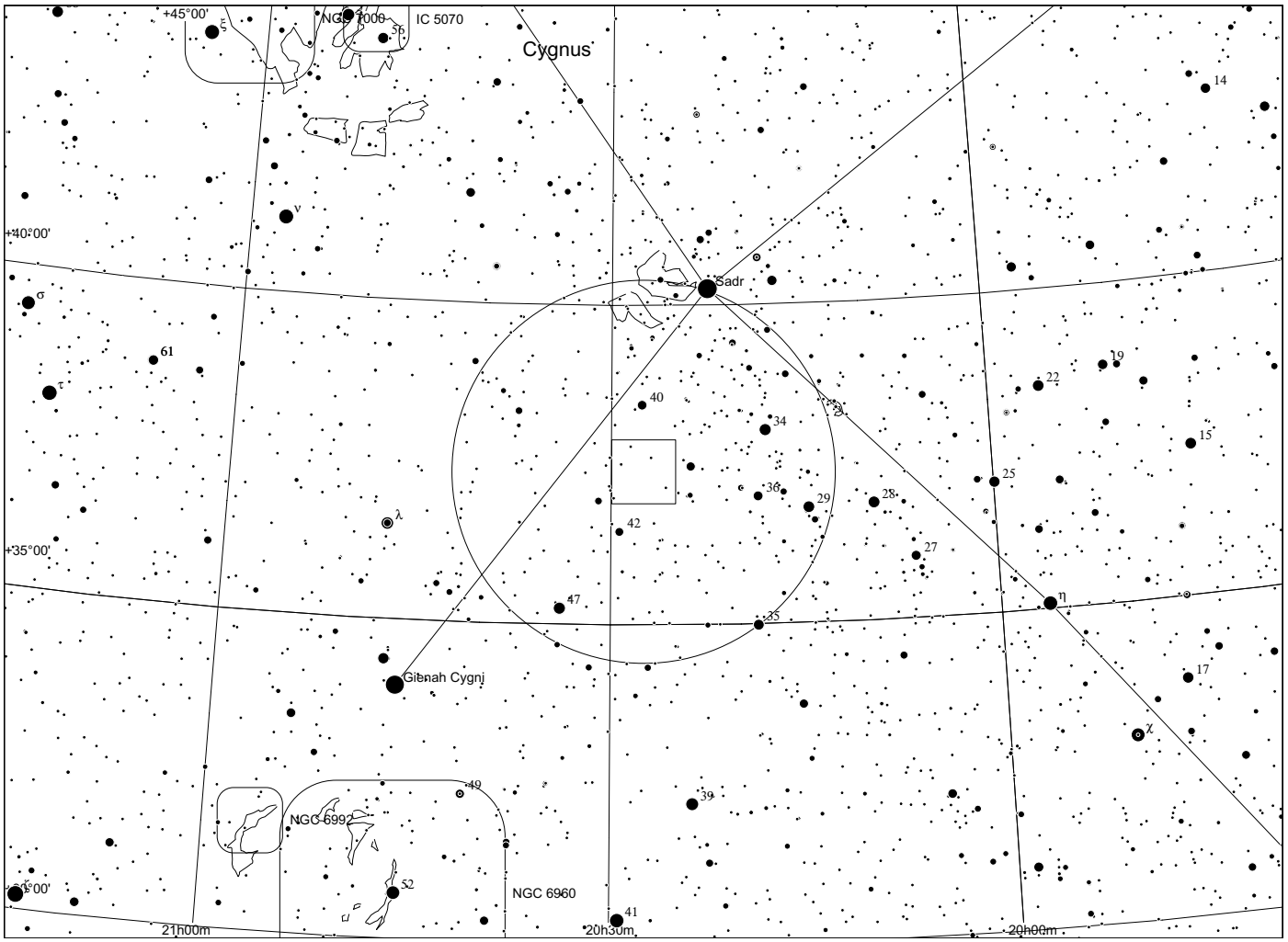
composite

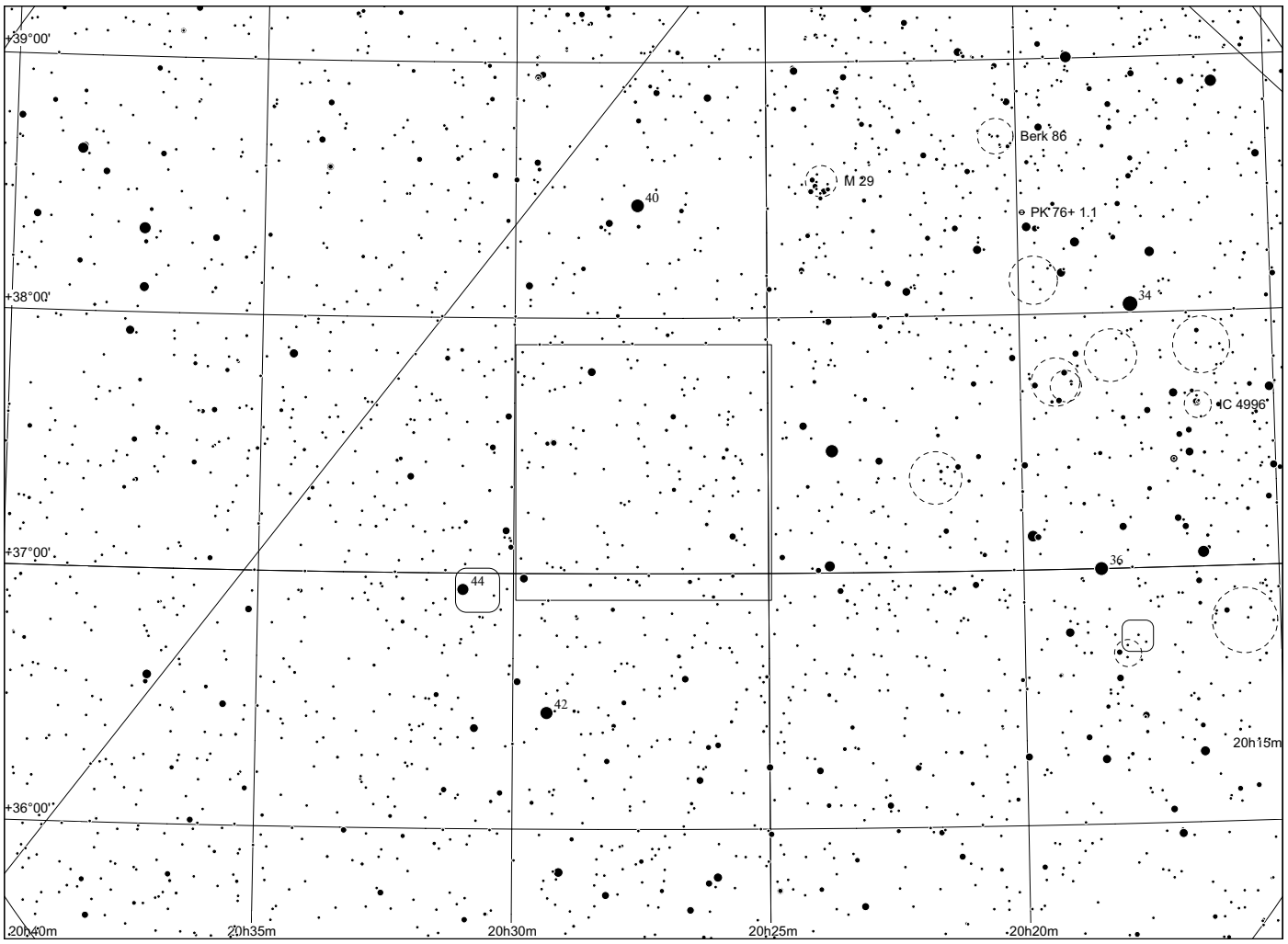
	other name	RA	dec	dia. '	F	S	B
Sh 2-106		20 27 26.9	+37 23 49	3	3	2	3

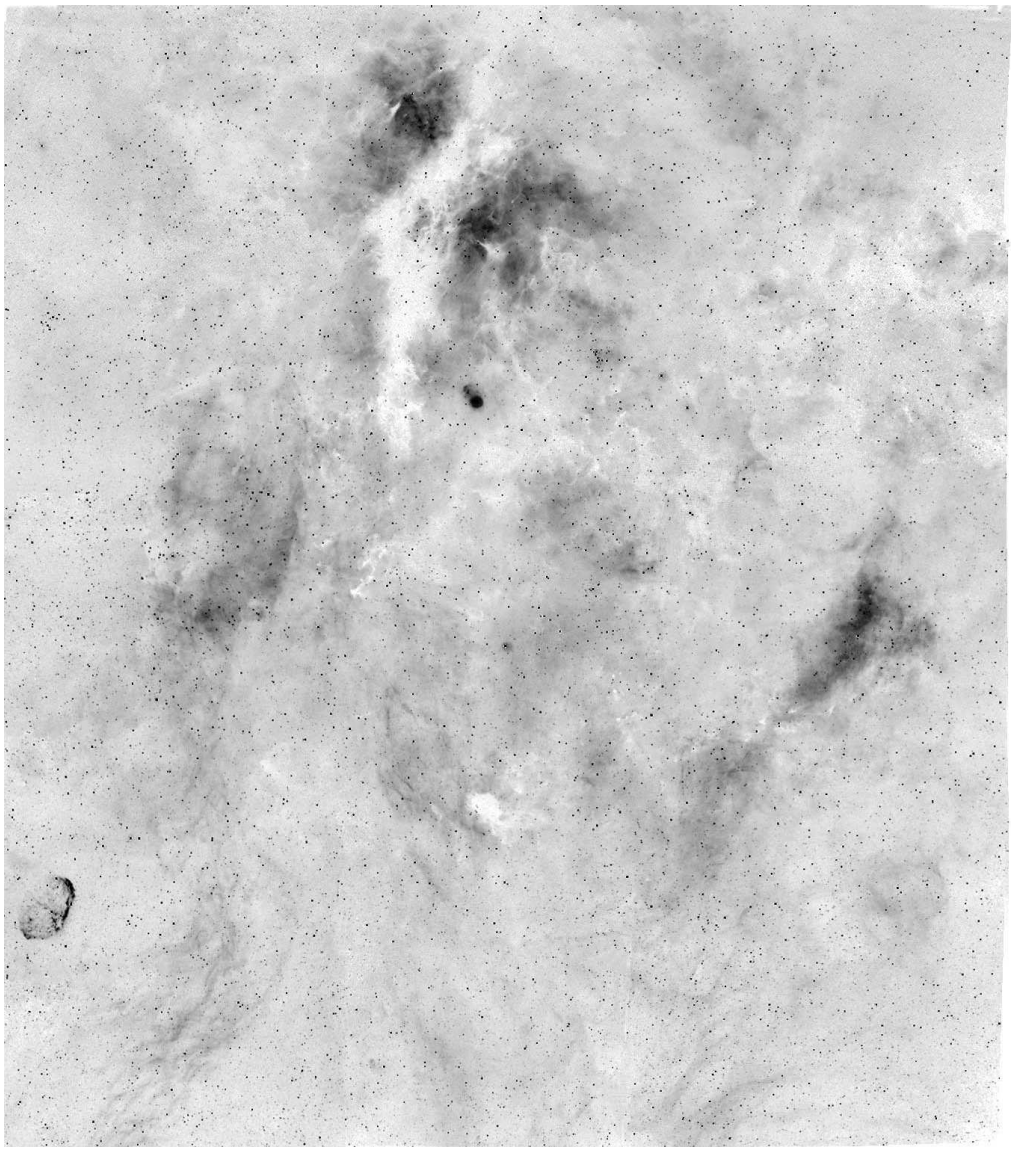
Distance: 600 pc, Size: 0.5 pc, Source: 2004A&A...424..965G

Despite its appearance, this is not a planetary nebula, but a giant molecular cloud and star formation region ionised by an O8 star, S106IR.

Observing notes:


Cygnus
NGC 6960
IC 5070
NGC 6992
Sadr
Gienah Cygni
+45°00'
+40°00'
+35°00'
21h00m
20h30m
20h00m


Berk 86
M 29
PK 76+ 1.1
IC 4996
+39°00'
+38°00'
+37°00'
+36°00'
20h40m
20h35m
20h30m
20h25m
20h20m
20h15m



Sh 2 - 108

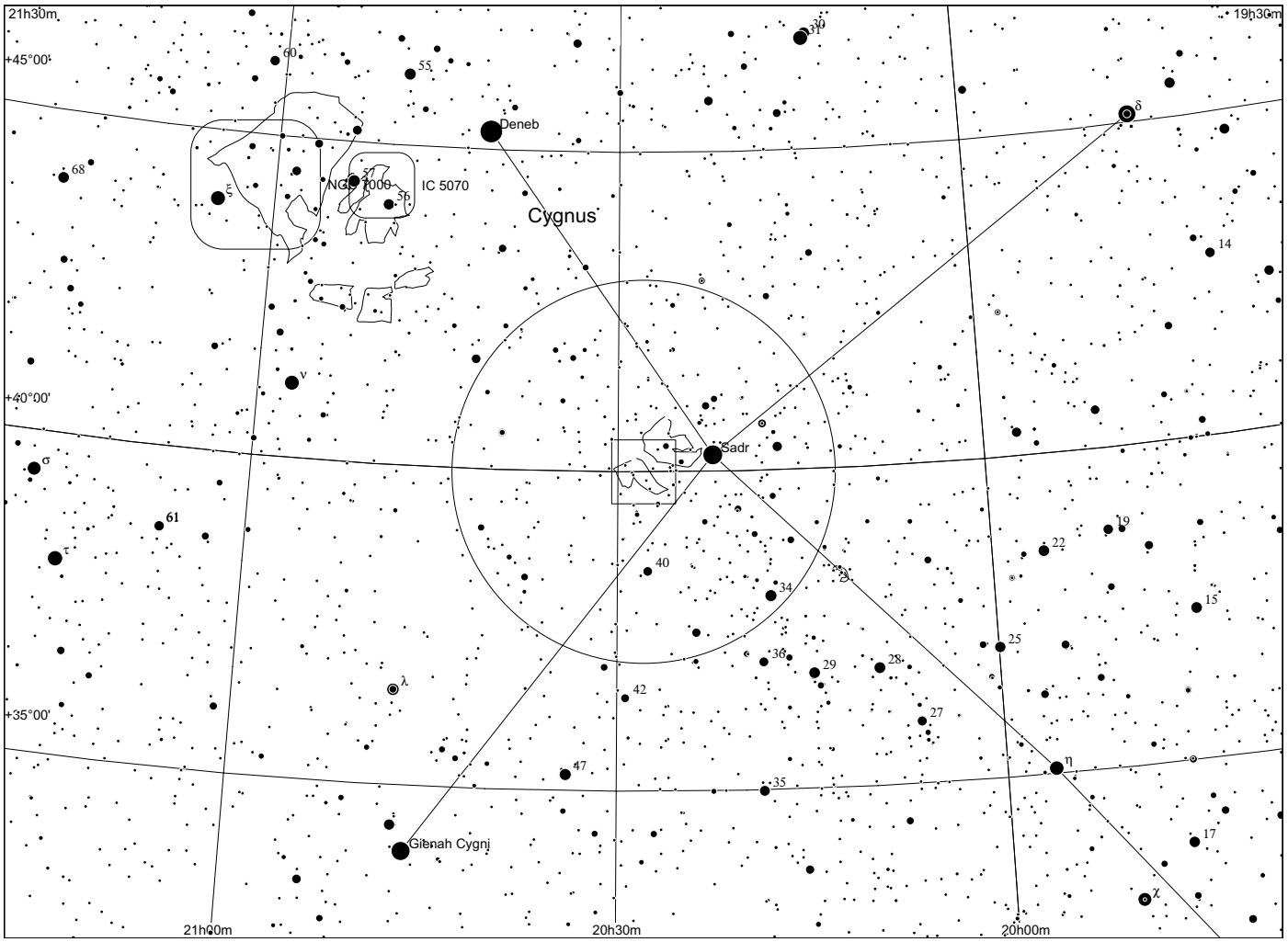
in Cygnus

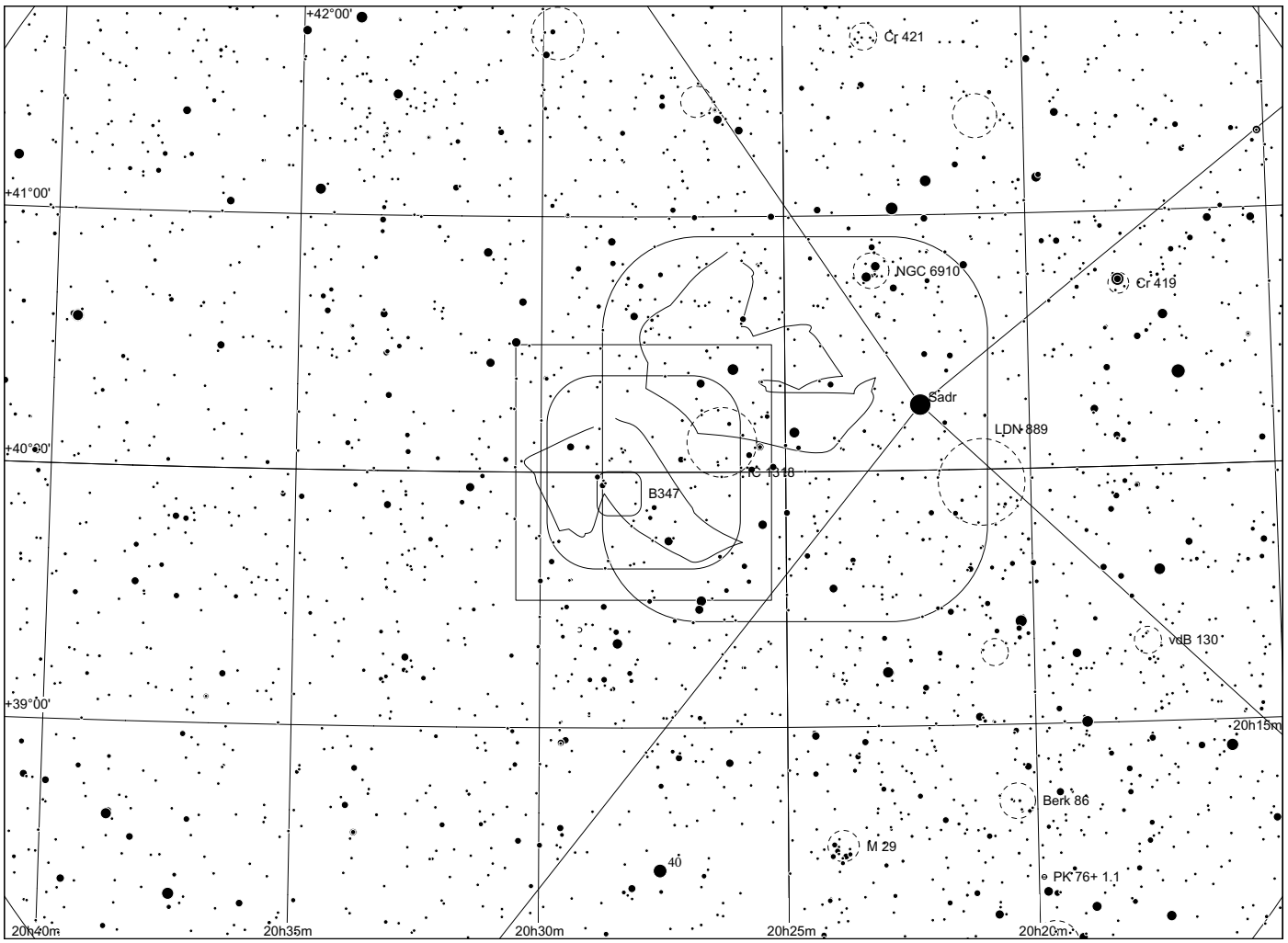
	other name	RA	dec	dia. '	F	S	B
Sh 2-108	IC 1318	20 22 34.8	+40 15 15	180	3	3	3

Distance: 1500 pc, Size: 78.6 pc, Source: 1982ApJS...49..183B

Sometimes called the Gamma Cygni nebula because of the foreground appearance of the F8Iab supergiant, in fact this nebula lies far beyond the star in the depths of the Cygnus complex.

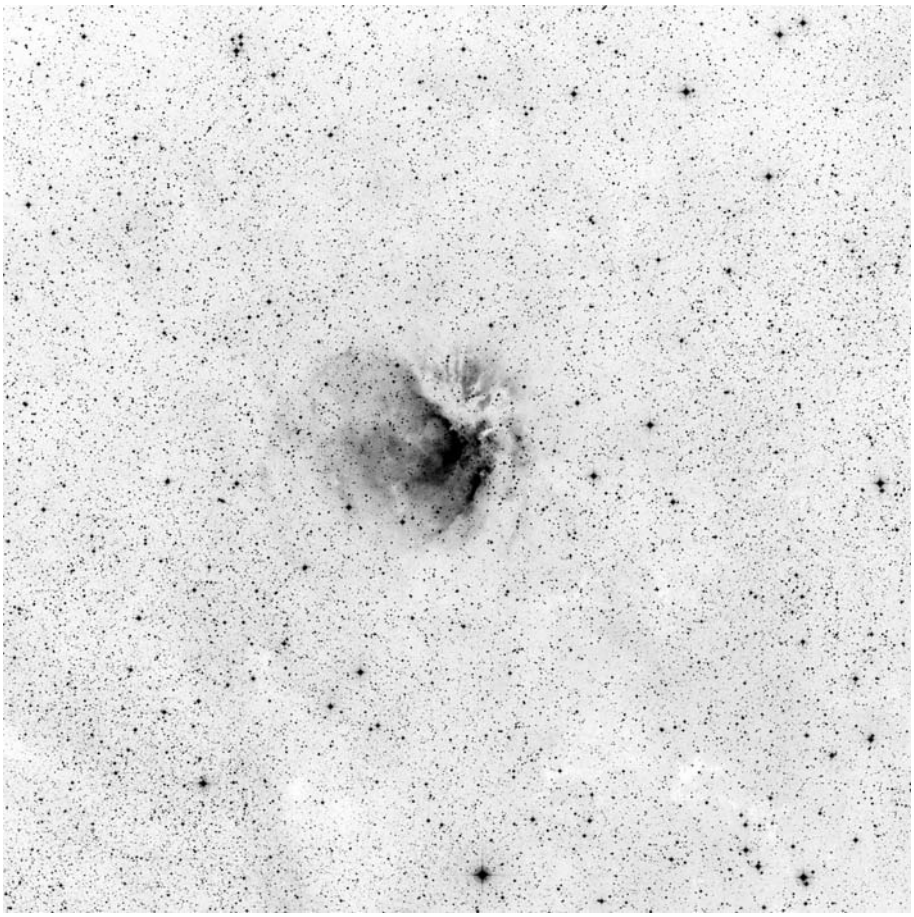
Observing notes:


21h30m
19h30m
+45°00'
+40°00'
+35°00'
Deneb
Cygnus
NGC 7000
IC 5070
Sadr
Gienah Cygni
21h40m
20h30m
20h00m

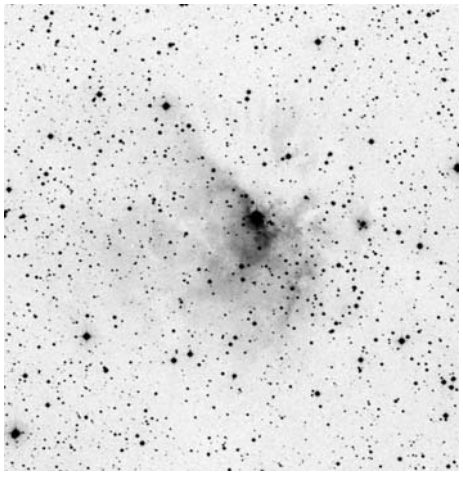

+42°00'
+41°00'
+40°00'
+39°00'
Cr 421
NGC 6910
Cr 419
Sadr
LDN 889
IC 1318
B347
vdB 130
Berk 86
M 29
PK 76+ 1.1
20h40m
20h35m
20h30m
20h25m
20h20m
20h15m

Sh 2 - 112

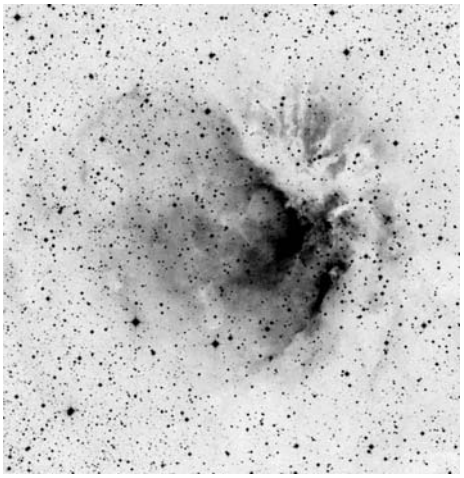
in Cygnus



60x60, red



POSS blue



POSS red



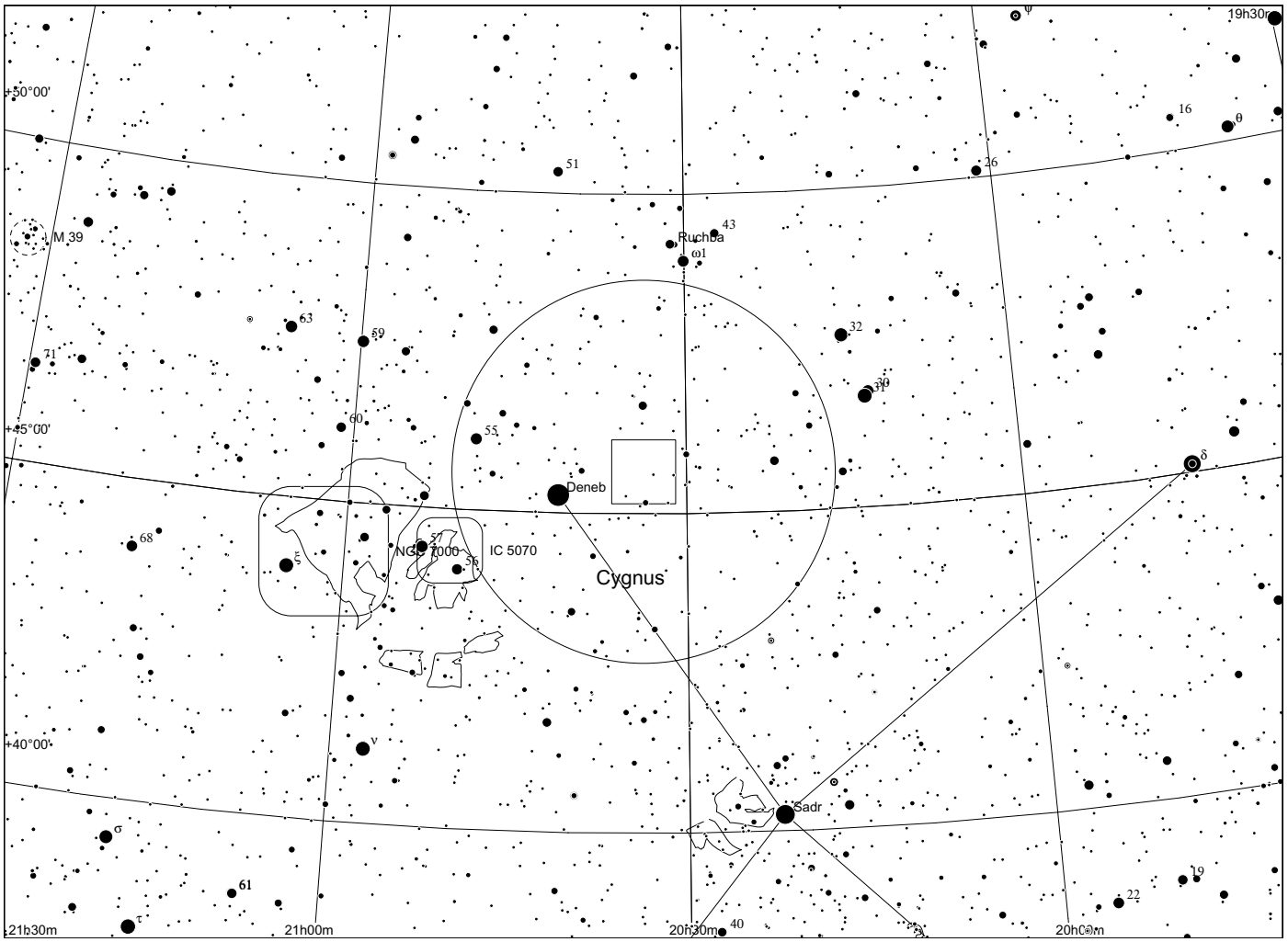
Narrowband Dean Salman

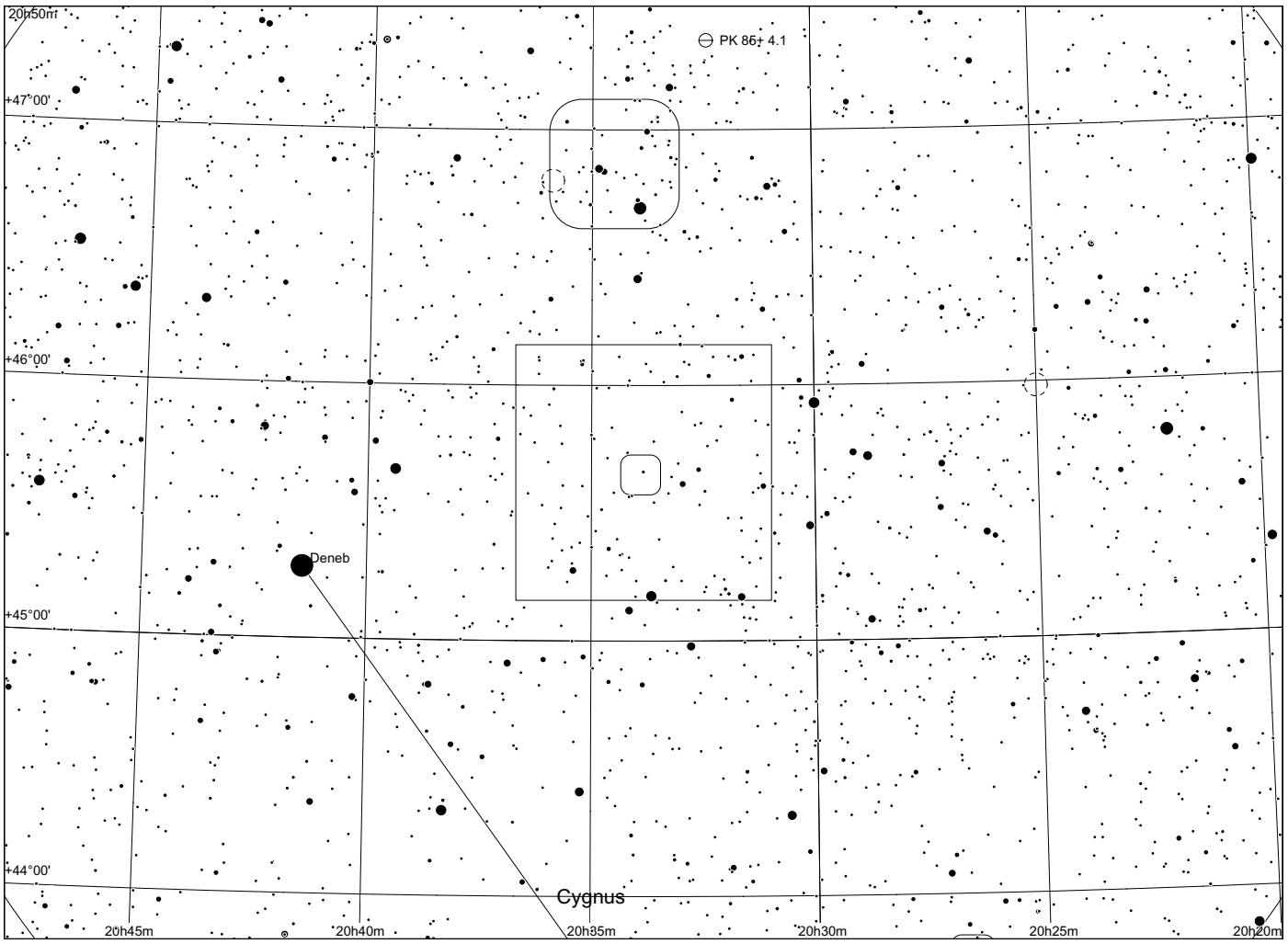
	other name	RA	dec	dia. '	F	S	B
Sh 2-112		20 33 50.2	+45 39 35	15	1	2	2

Distance: 1740 pc, Size: 7.6 pc, Source: 1985A&AS...61..537L

The exciting star for this nebula is the O8V class star BD+45 3216 (SAO 49801). The average distance of the stars associated with this nebula is 1740 pc.

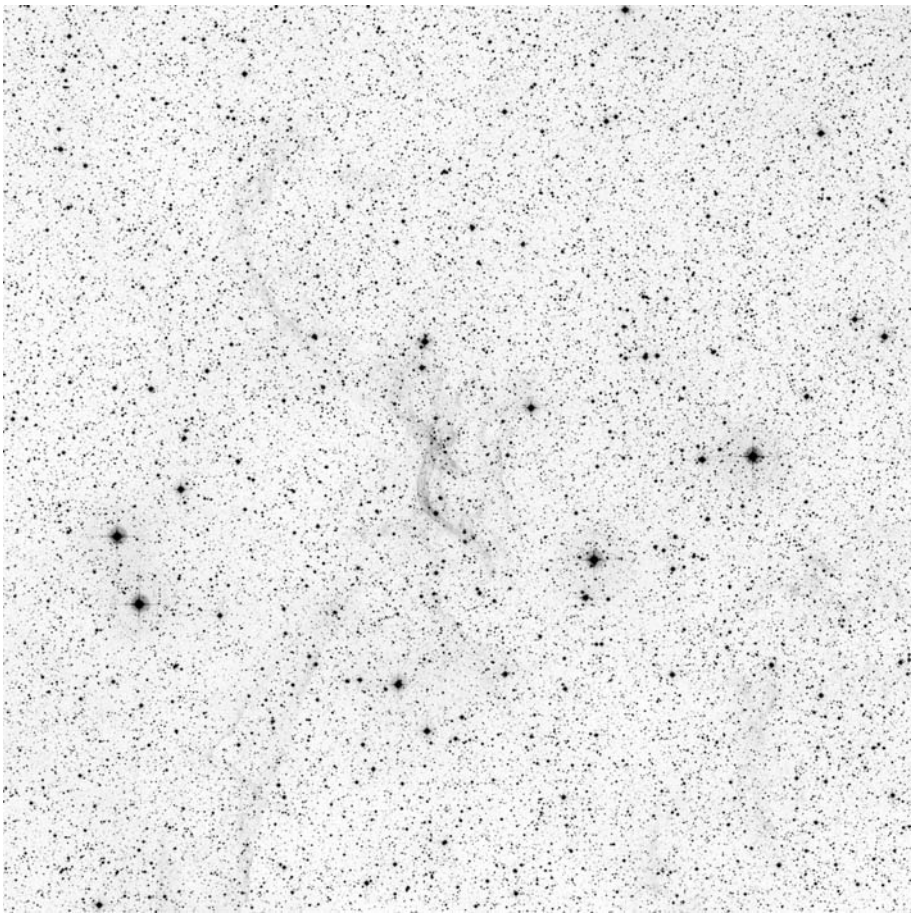
Observing notes:


19h30m
+50°00'
M 39
Ruchba
ω1
Deneb
NGC 7000
IC 5070
Cygnus
+5°00'
+40°00'
Sadr
21h30m
21h00m
20h30m
20h00m

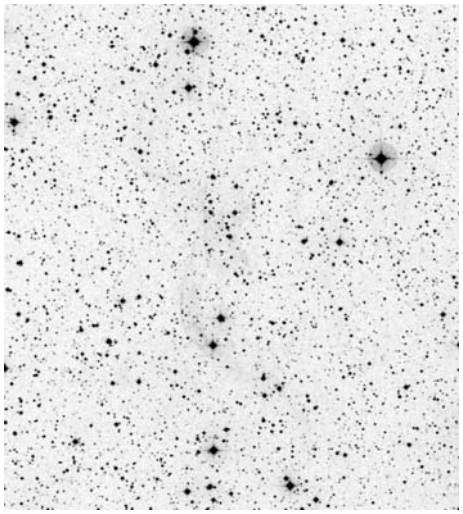

20h50m
PK 86+ 4.1
+47°00'
+46°00'
Deneb
+45°00'
+44°00'
Cygnus
20h45m
20h40m
20h35m
20h30m
20h25m
20h20m

Sh 2 - 114

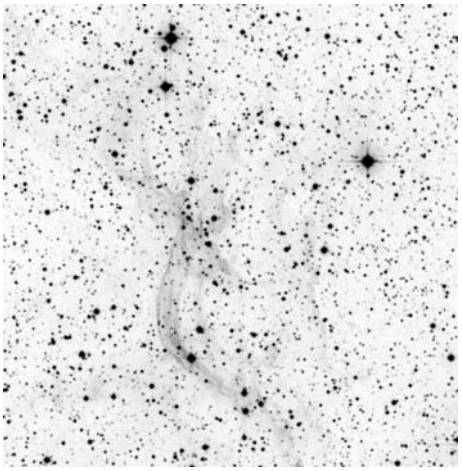
in Cygnus



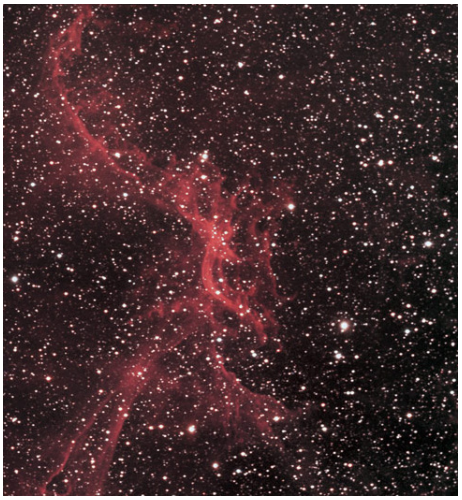
60x60, red



POSS blue



POSS red



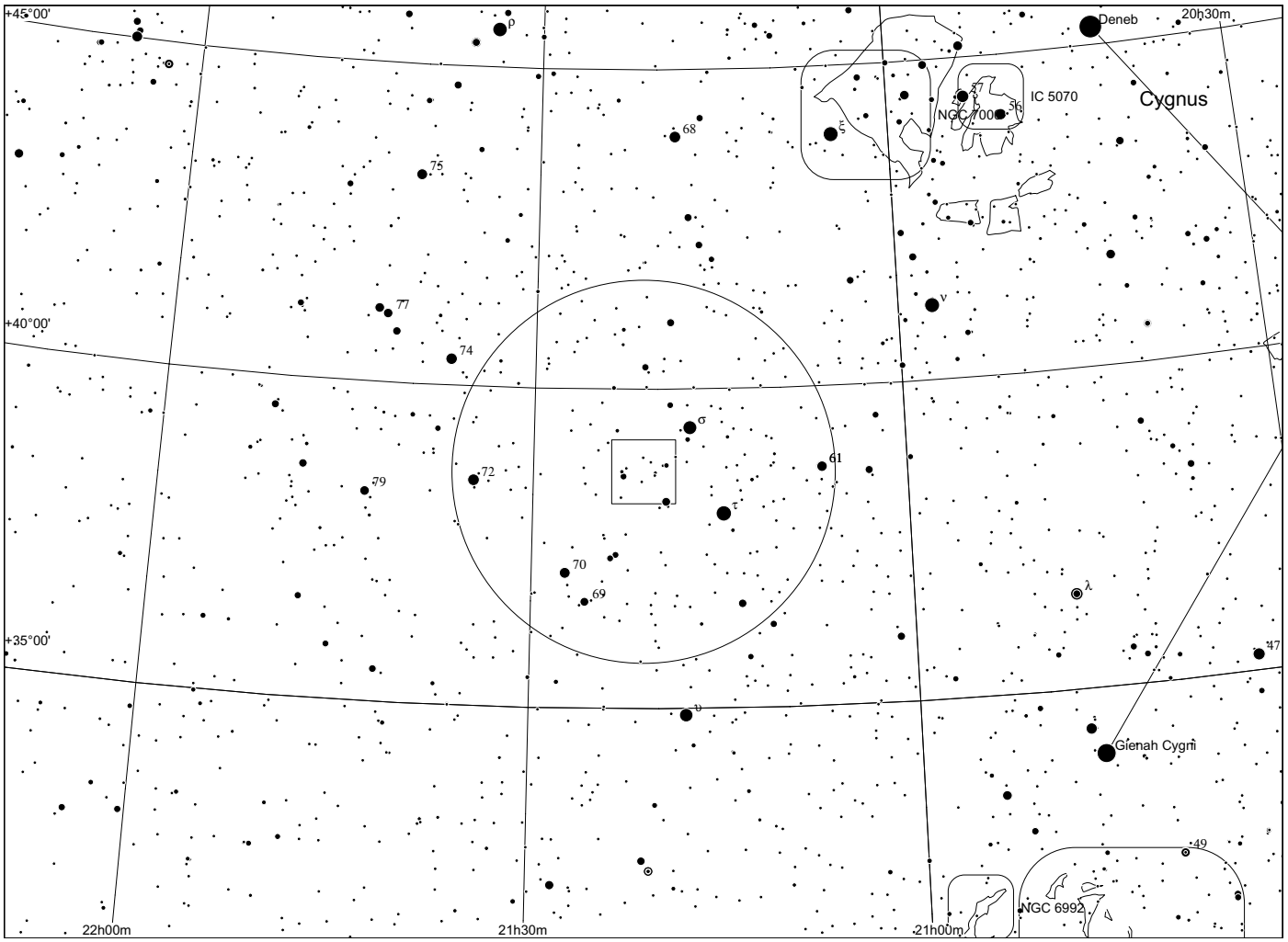
RGB Dean Salman

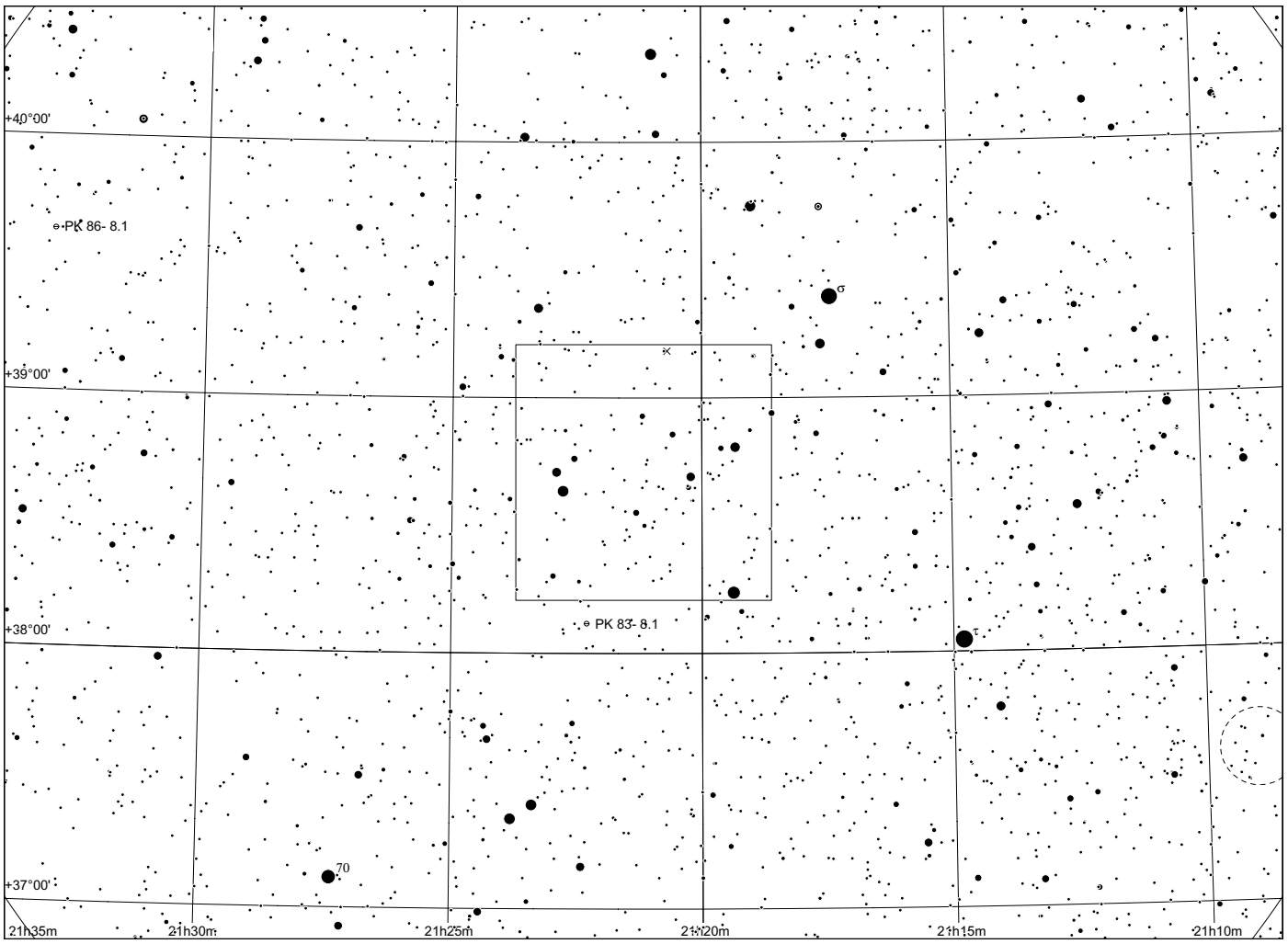
	other name	RA	dec	dia. '	F	S	B
Sh 2-114		21 21 10.5	+38 42 31	9	3	3	2

Distance: 4500 pc, Size: 26.2 pc, Source: 2004BASI...32..335G

Sh 2-113 and Sh 2-114 form, respectively, the southern and northern portions of a filamentary circle that resembles a supernova remnant. However, no supernova remnant appears to be recorded for this location. The distance reference for Sh 2-114 is incorrect and a correct one should be assigned.

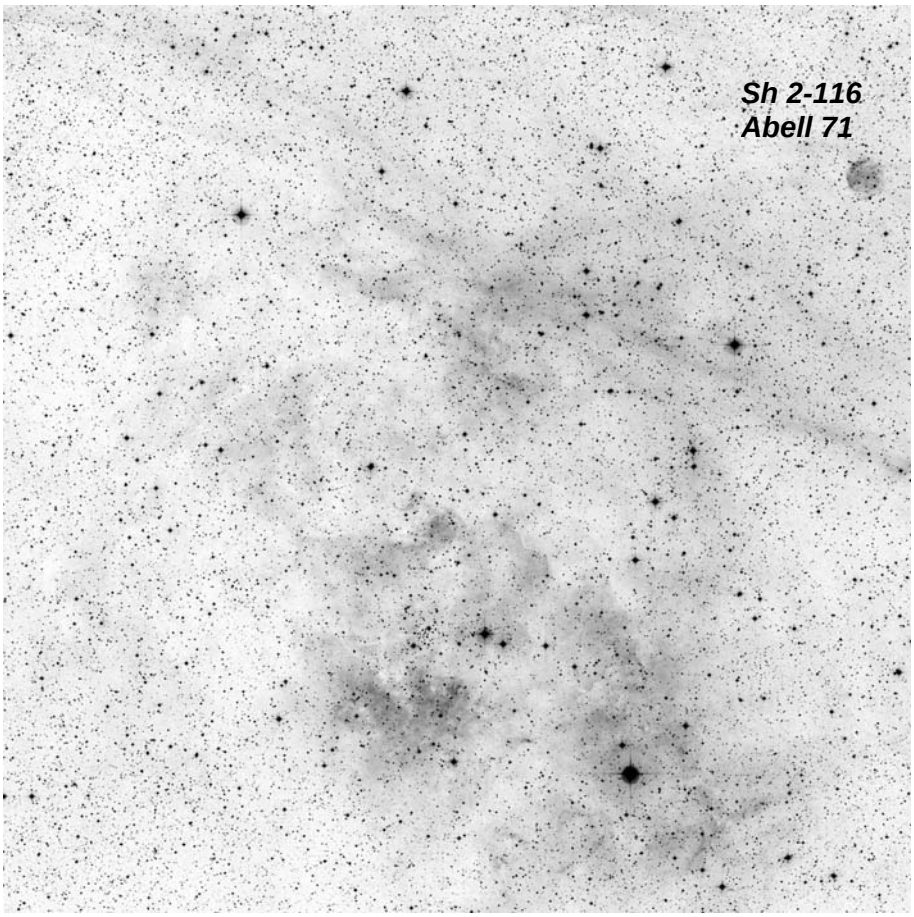
Observing notes:


+45°00'
+40°00'
+35°00'
22h00m
21h30m
21h00m
20h30m
Deneb
Cygnus
IC 5070
NGC 7000
Gienah Cygni
NGC 6992
ρ
ξ
ν
σ
τ
λ
υ
68
75
77
74
72
79
61
70
69
47
49

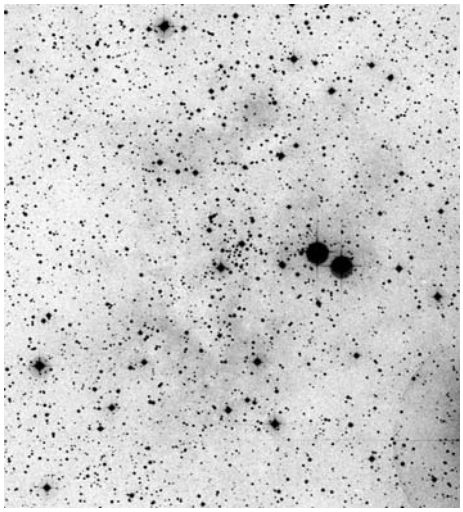

+40°00'
+39°00'
+38°00'
+37°00'
21h35m
21h30m
21h25m
21h20m
21h15m
21h10m
PK 86- 8.1
PK 83- 8.1
σ
τ
70

Sh 2 - 115

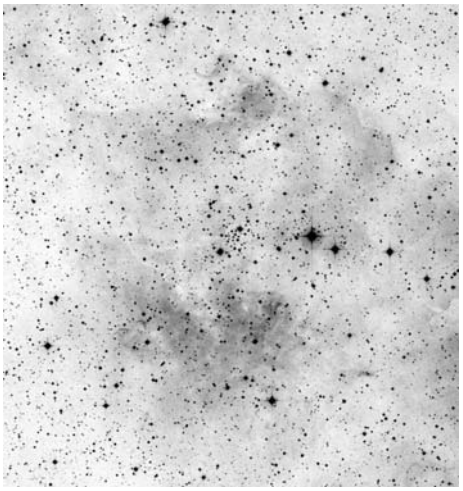
in Cygnus



60x60, red



POSS blue



POSS red



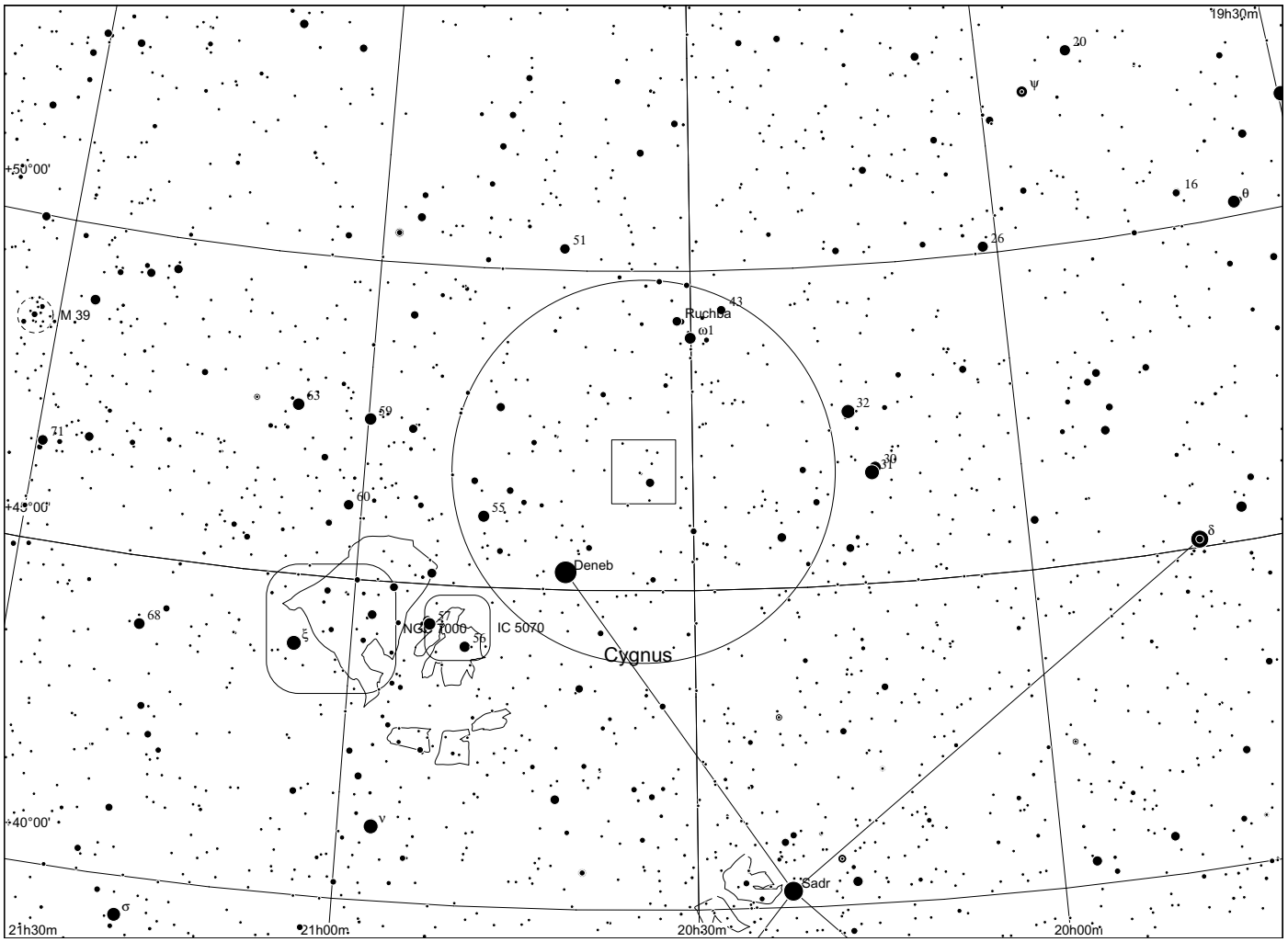
composite

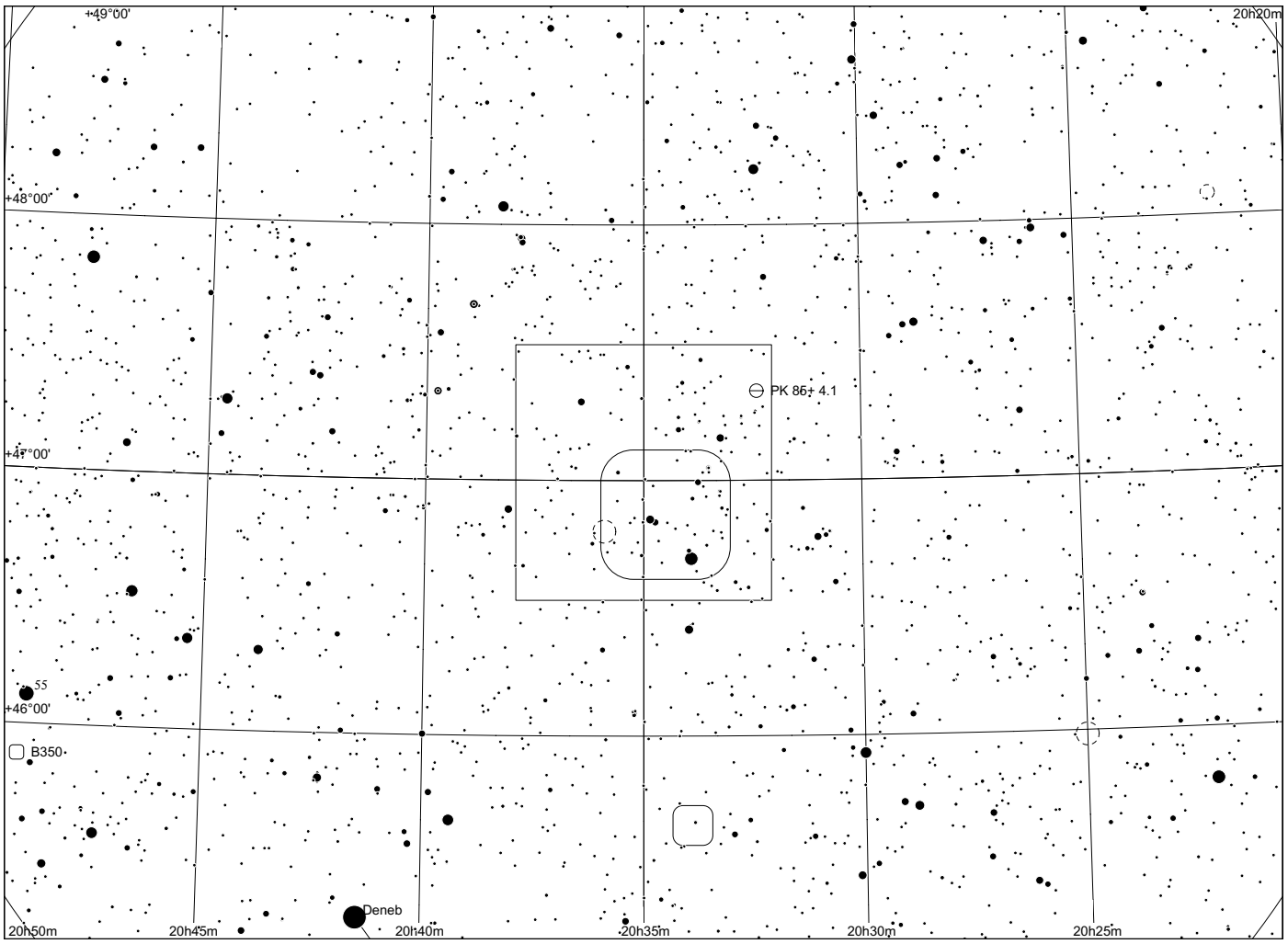
	other name	RA	dec	dia. '	F	S	B
Sh 2-115		20 34 33.0	+46 52 40	50	3	2	2

Distance: 2300 pc, Size: 33.5 pc, Source: 1981A&A...100...28F

In the same direction as the radio source W71, this nebula is ionised by the O6 star LS III +46 12 which is part of the star cluster Berkeley 90 embedded in the nebula. The cloud surrounding Berkeley 90 (part of which is visible as Sh 2-115) contains 4400 solar masses of gas and dust and is about 30 pc long.

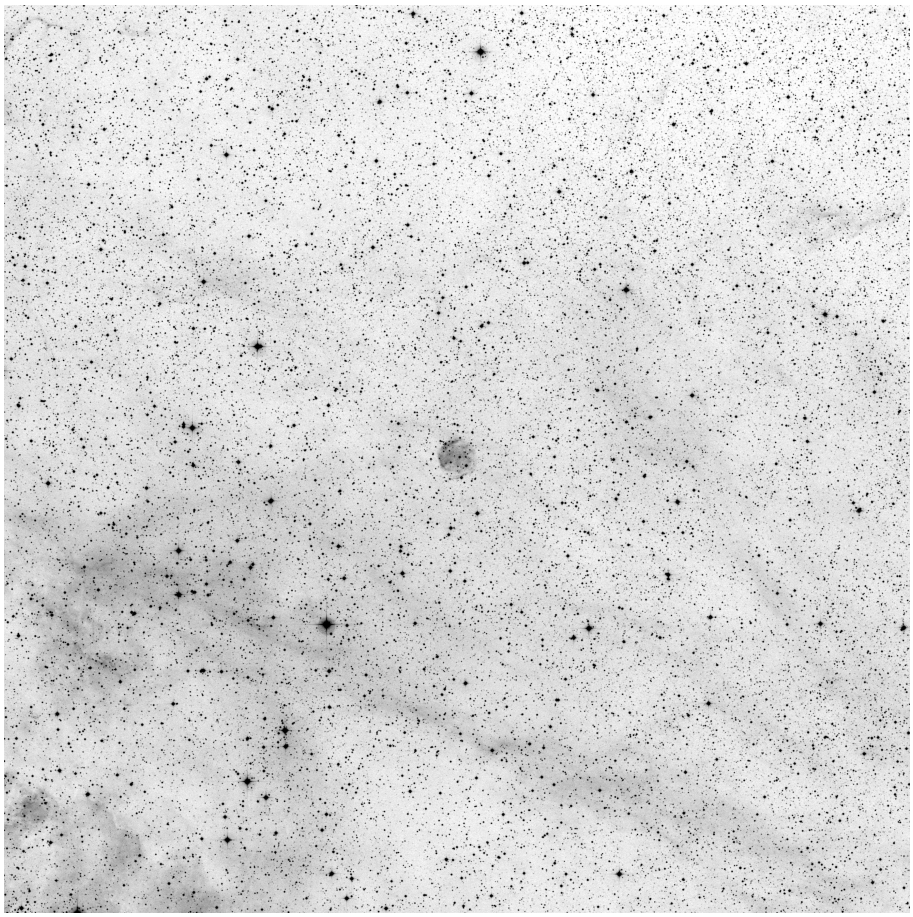
Observing notes:


19h30m
+50°00'
+45°00'
+40°00'
21h30m
21h00m
20h30m
20h00m
M 39
Ruchba
ω1
Deneb
NGC 7000
IC 5070
Cygnus
Sadr
20
ψ
16
θ
51
26
43
63
59
71
32
31
30
60
55
δ
68
ξ
56
ν
σ

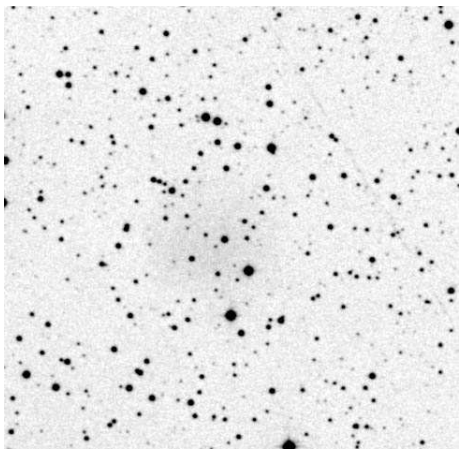

+49°00'
+48°00'
+47°00'
+46°00'
20h20m
20h50m
20h45m
20h40m
20h35m
20h30m
20h25m
PK 86+ 4.1
B350
55
Deneb

Sh 2 - 116

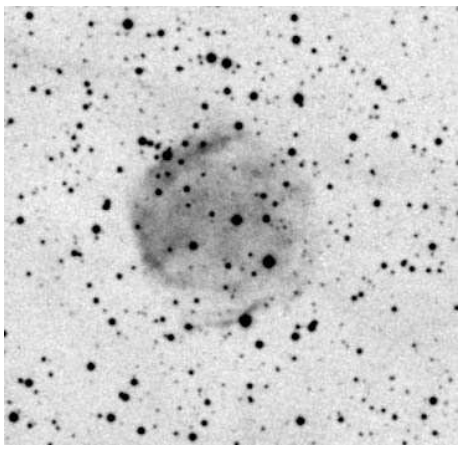
in Cygnus



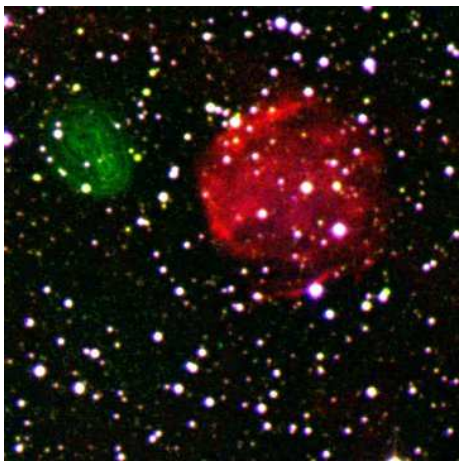
60x60, red



POSS blue



POSS red

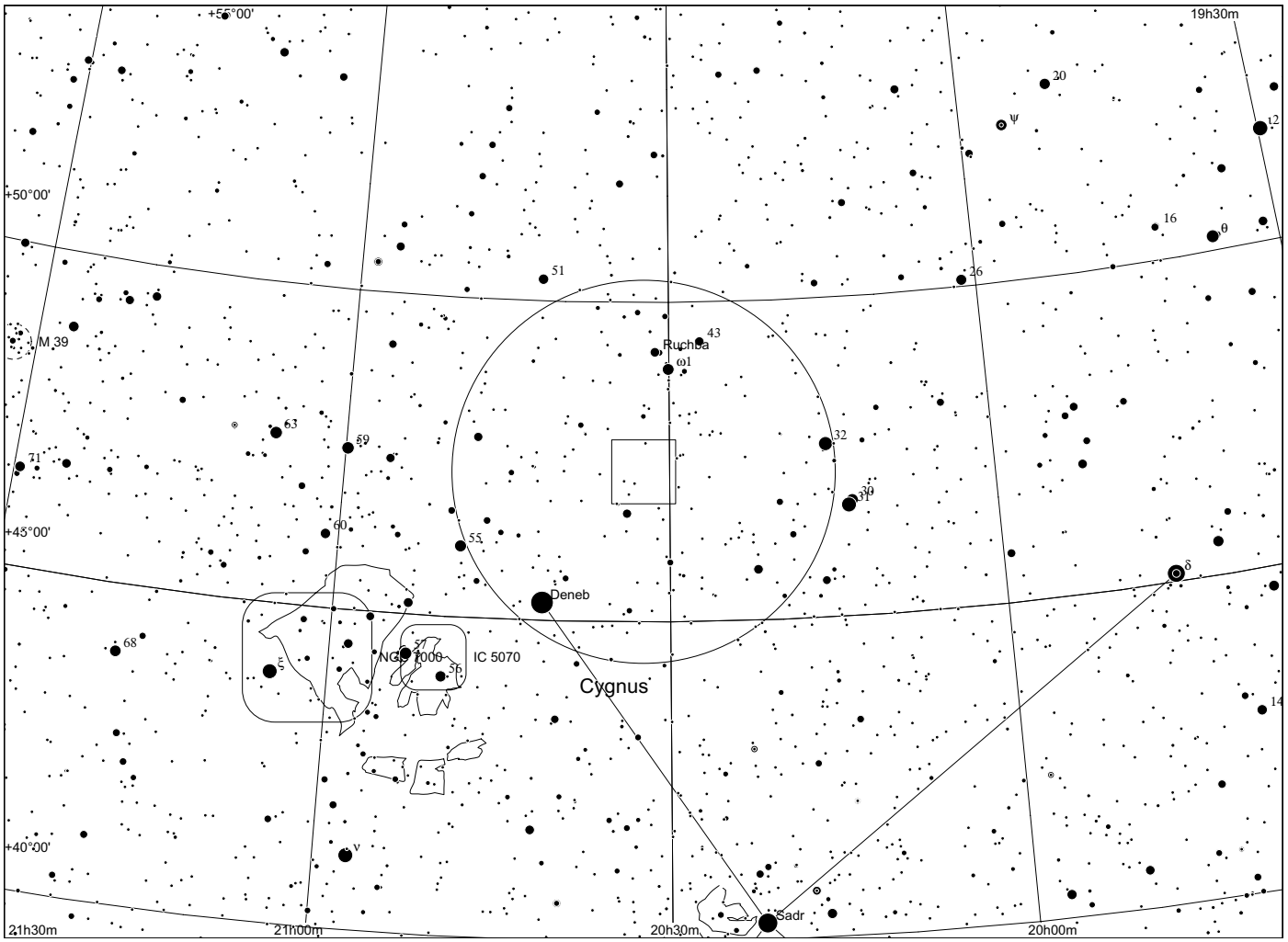


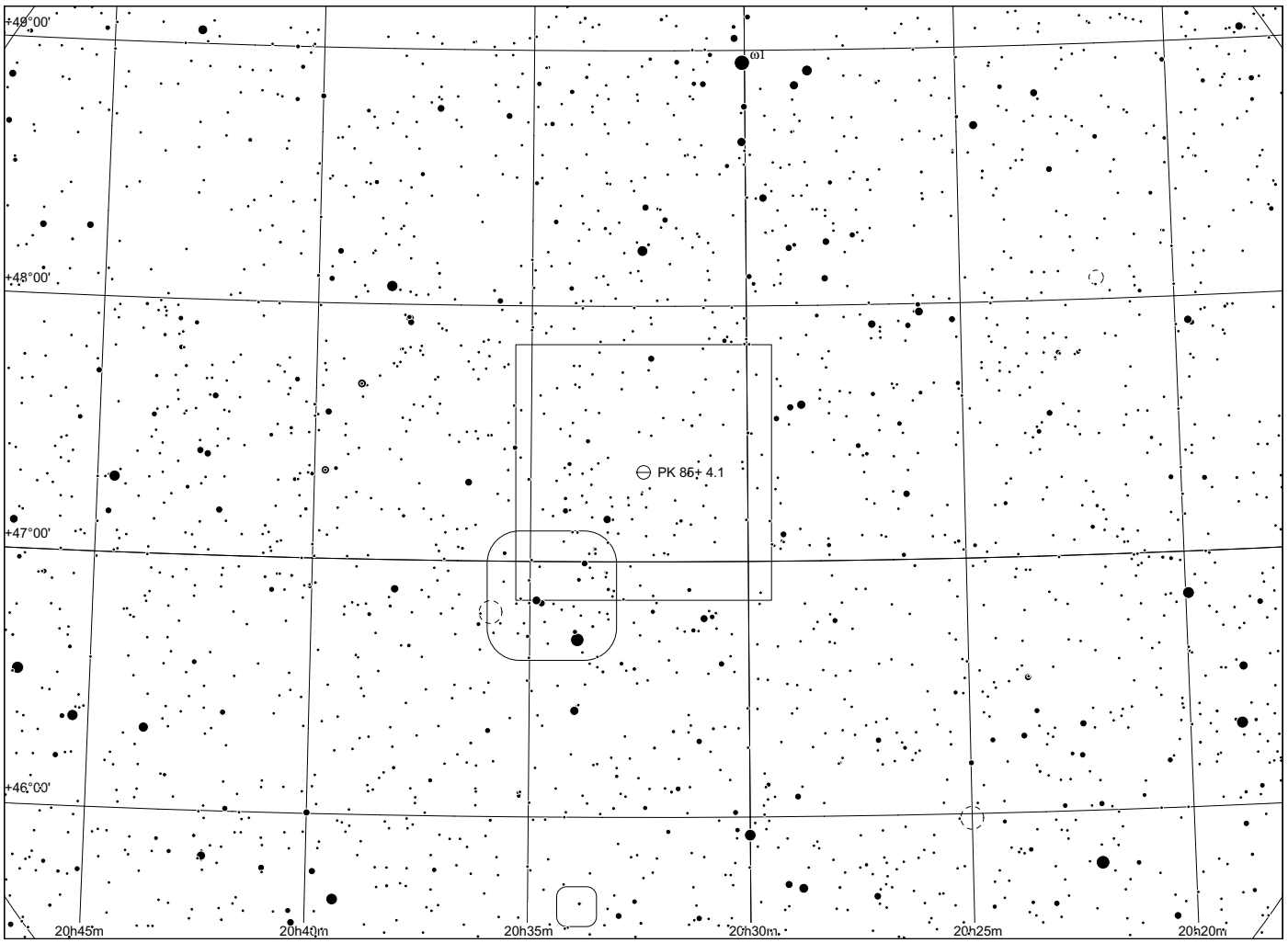
composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-116	Abell 71	20 32 18.6	+47 21 25	2	1	2	2

Often described as the planetary nebula Abell 71, but a 1991 study concluded that this object is actually an HII region. The green glow next to it is probably a fault in the infrared photographic plate.

Observing notes:


+55°00'
+50°00'
+45°00'
+40°00'
19h30m
21h30m
21h00m
20h30m
20h00m
M 39
Ruchba
ω1
Deneb
Sadr
NGC 7000
IC 5070
Cygnus
20
12
16
θ
51
26
43
63
59
71
32
31
30
60
55
δ
68
56
14
ν


+49°00'
+48°00'
+47°00'
+46°00'
ω1
PK 86+4.1
20h45m
20h40m
20h35m
20h30m
20h25m
20h20m



Sh 2 - 117 in Cygnus

narrowband

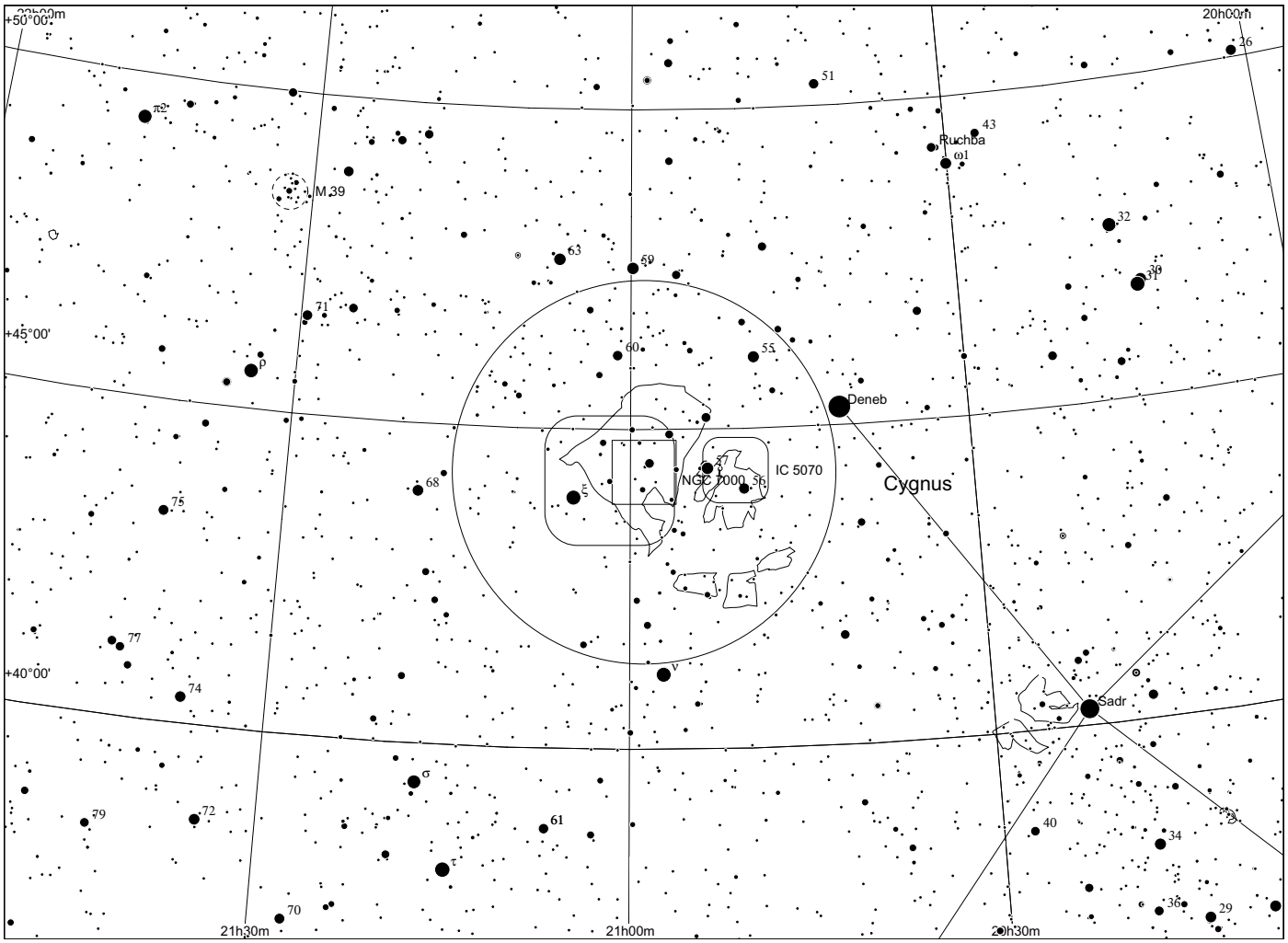
Dean Salman

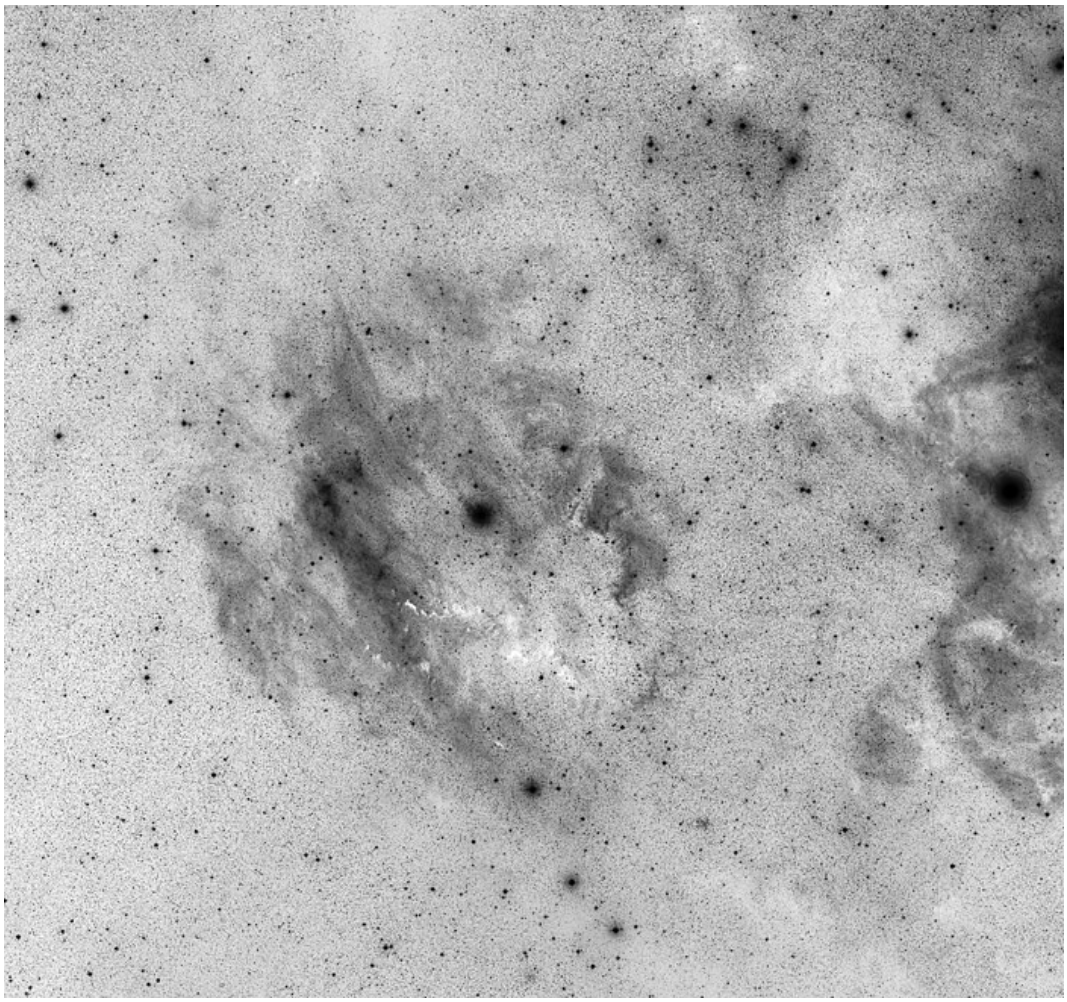
	other name	RA	dec	dia. '	F	S	B
Sh 2-117	NGC7000 North American N.	20 58 46.3	+44 19 19	240	3	3	2

Distance: 800 pc, Size: 55.9 pc, Source: 1982ApJS...49..183B

This is the North American and Pelican nebula, which is visible through a gap in the Rift system of dusty giant molecular clouds that separates the Gould Belt from the Cygnus complex. Sh 2-117 appears to be ionised by the heavily obscured O5V star 2MASS J205551.25+435224.6.

Observing notes:


+50°00'
20h00m
+45°00'
+40°00'
21h30m
21h00m
20h30m
M 39
Ruchba
Deneb
Sadr
Cygnus
IC 5070
NGC 7000
26
51
43
ω1
32
30
31
63
59
71
60
55
ρ
68
ξ
57
56
75
77
74
ν
σ
79
72
61
40
34
τ
70
36
29



Sh 2 - 119

in Cygnus

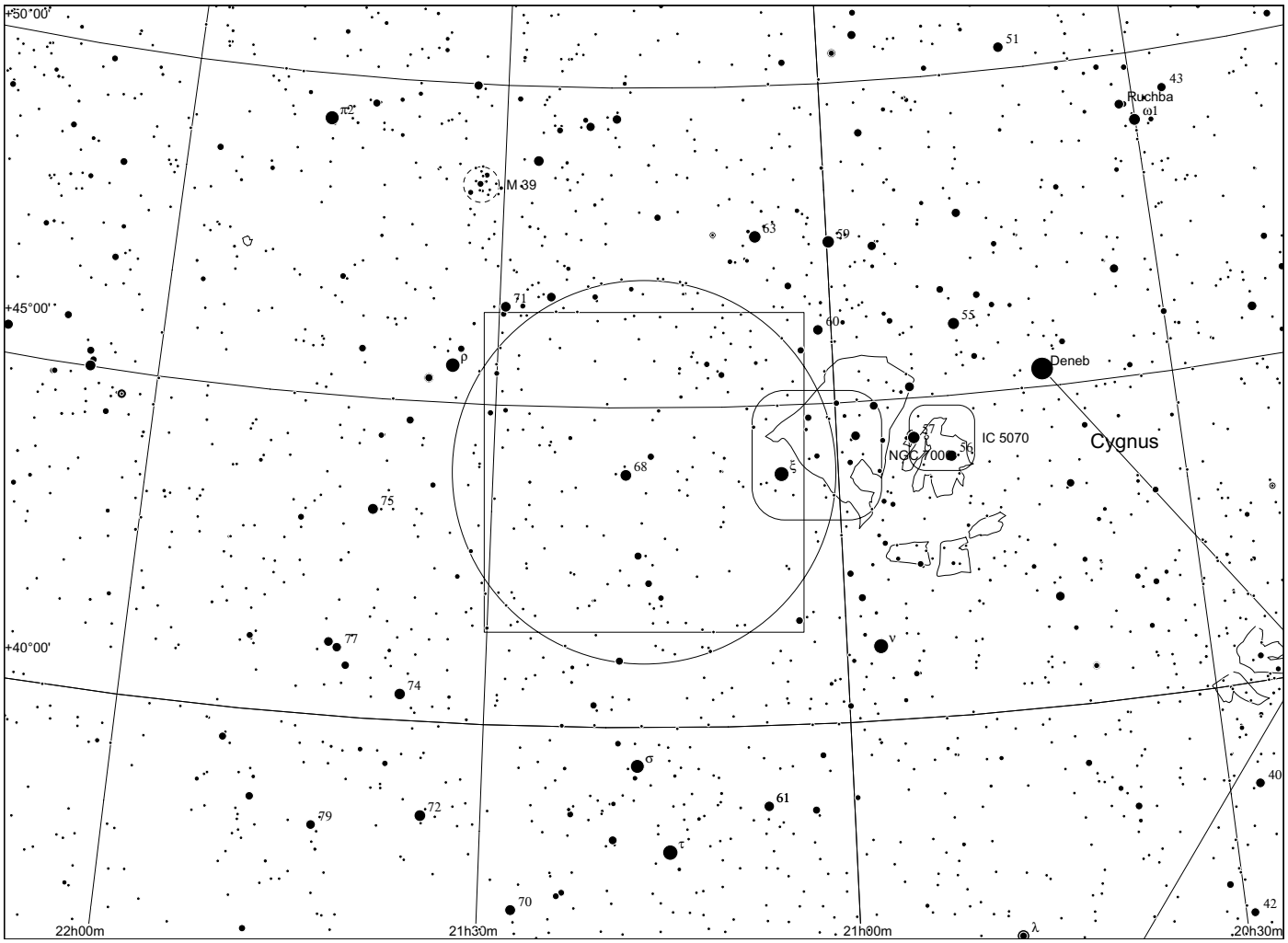
5°x5°

	other name	RA	dec	dia. '	F	S	B
Sh 2-119		21 18 25.0	+43 56 16	160	2	2	3

Distance: 700 pc, Size: 32.6 pc, Source: 1982ApJS...49..183B

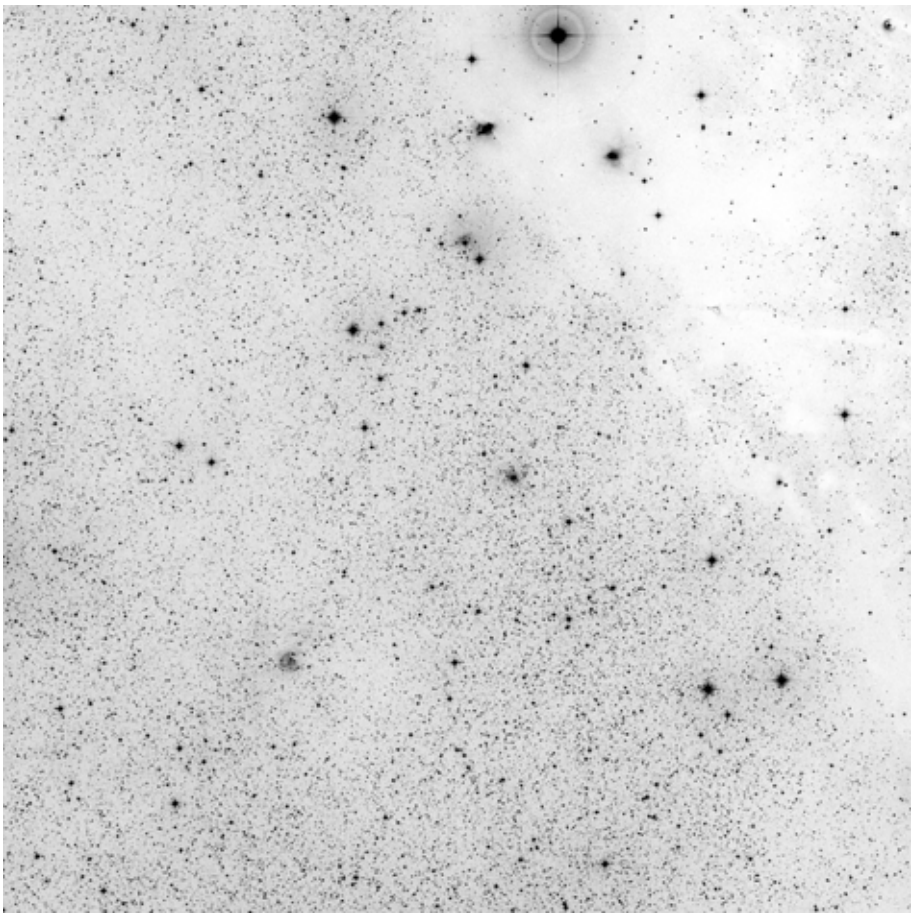
This nebula is near the North American nebula (Sh 2-117, NGC 7000) and appears to be ionised by the O 7.5 III runaway star 68 Cygni (HD 203064), which was likely blasted out of the Cepheus OB2 association about 5.2 million years ago.

Observing notes:

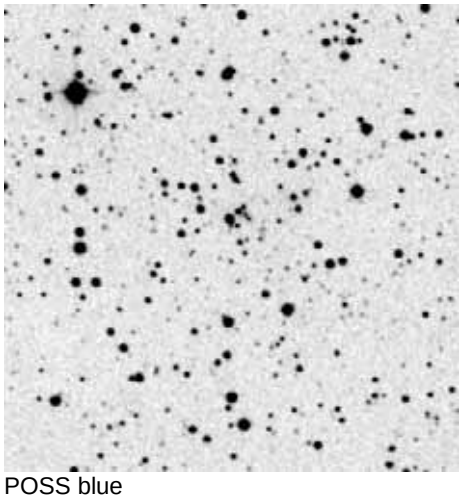

+50°00'
+45°00'
+40°00'
22h00m
21h30m
21h00m
20h30m
M 39
Deneb
Cygnus
IC 5070
NGC 7000
Ruchba
ω1
π2
ρ
ξ
ν
σ
τ
λ
51
43
63
59
71
60
55
68
75
77
74
79
72
61
70
40
42

Sh 2 - 120

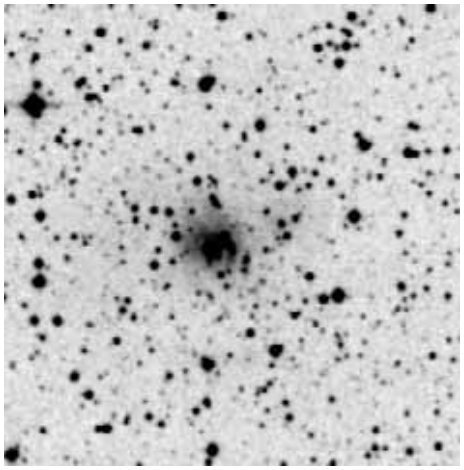
in Cygnus



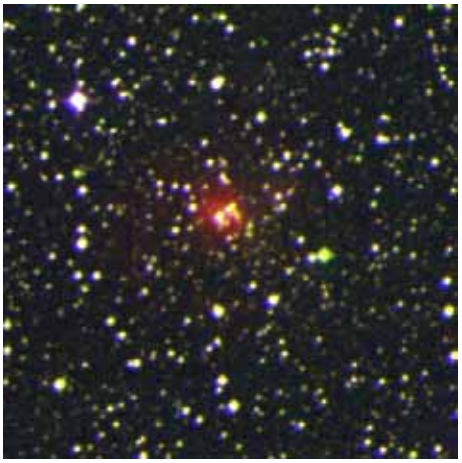
60x60, red



POSS blue



POSS red

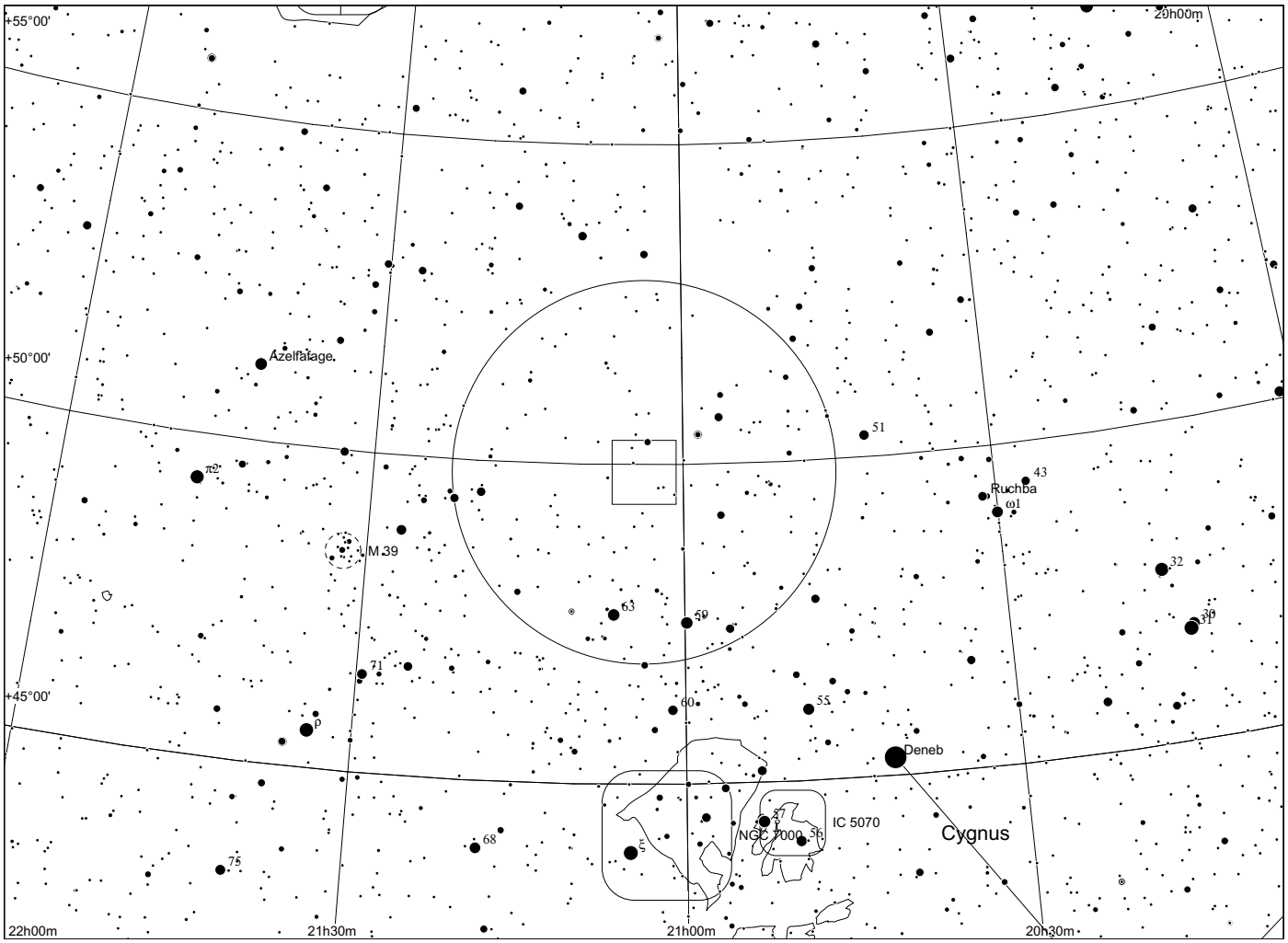


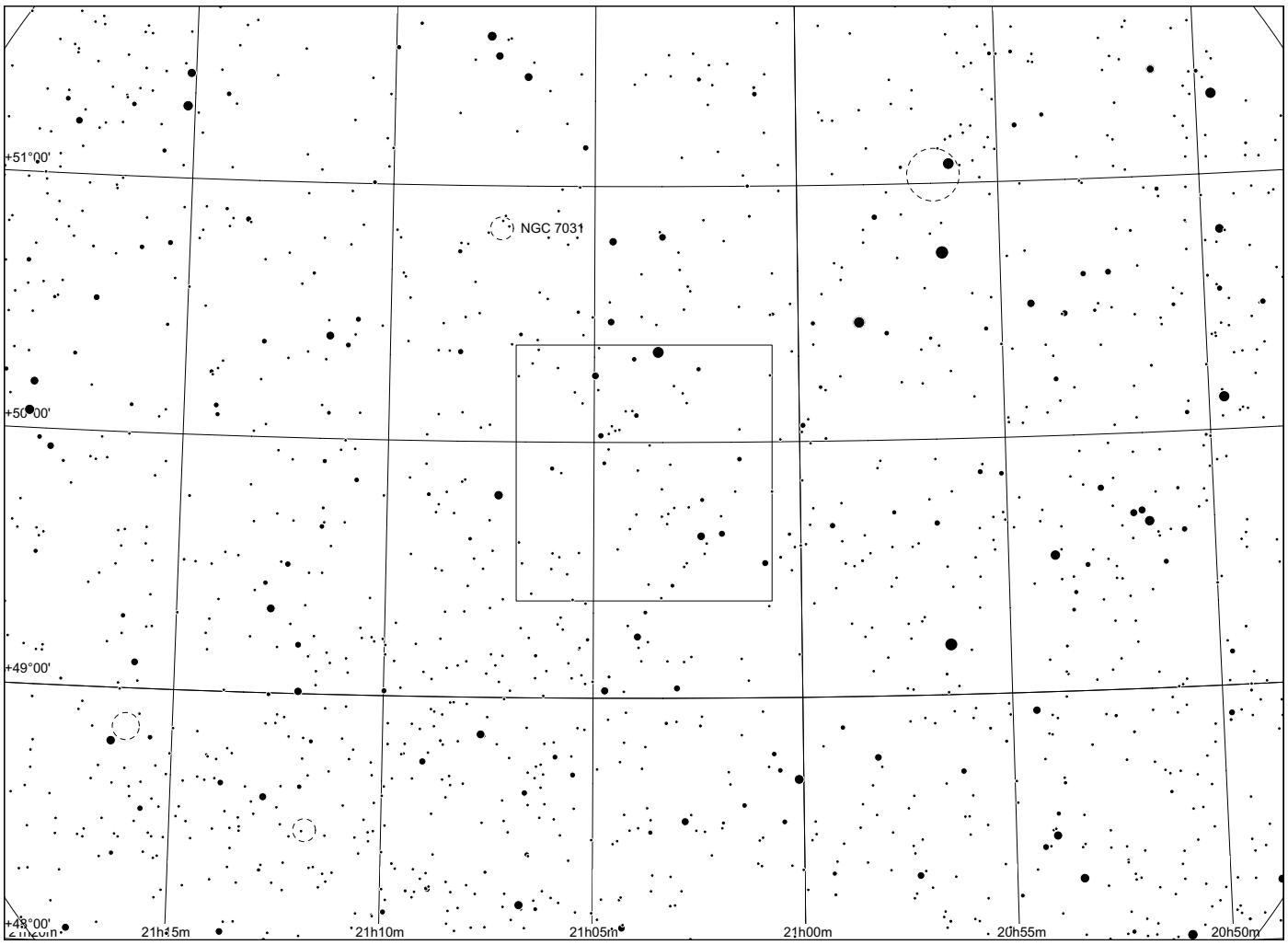
composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-120		21 03 46.6	+49 52 51	1	1	1	1

Distance: 6300 pc, Size: 1.8 pc, Source: 2003A&A...397..133R

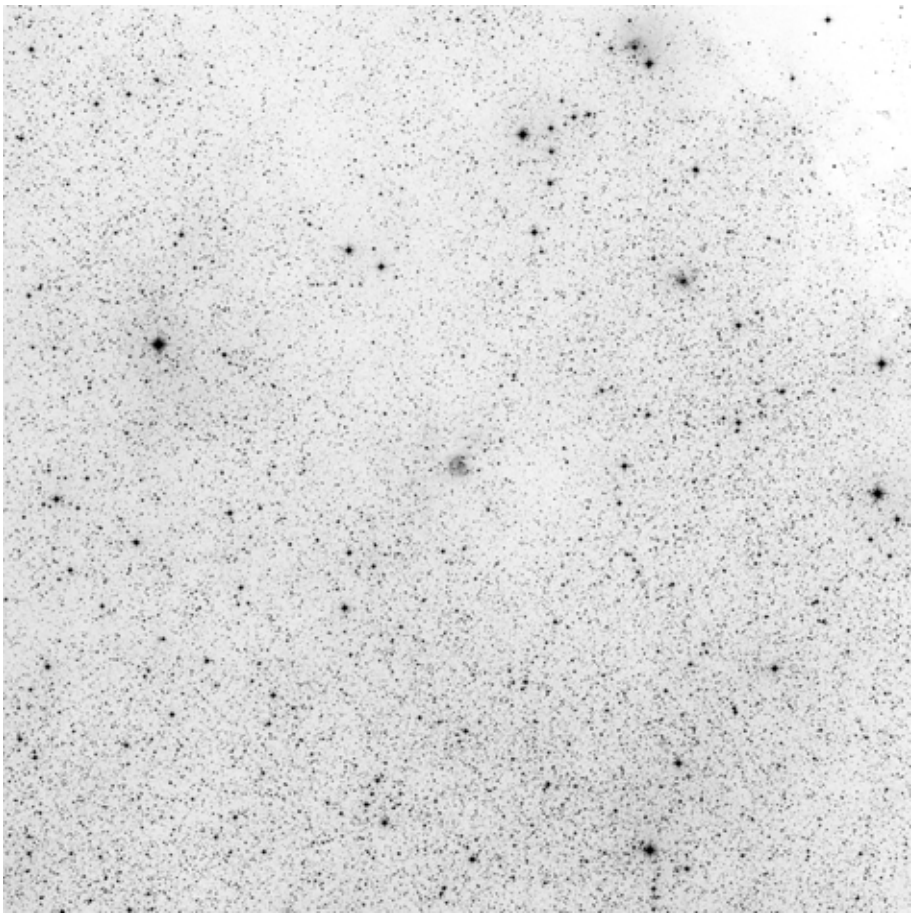
Observing notes:


+55°00'
+50°00'
+45°00'
20h00m
Azelfafage
π2
M 39
51
43
Ruchba
ω1
32
39
63
59
71
60
55
ρ
Deneb
IC 5070
NGC 7000
56
Cygnus
68
ξ
75
22h00m
21h30m
21h00m
20h30m

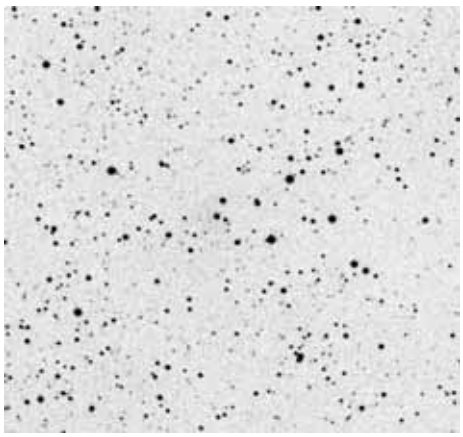

+51°00'
NGC 7031
+50°00'
+49°00'
+48°00'
21h15m
21h10m
21h05m
21h00m
20h55m
20h50m

Sh 2 - 121

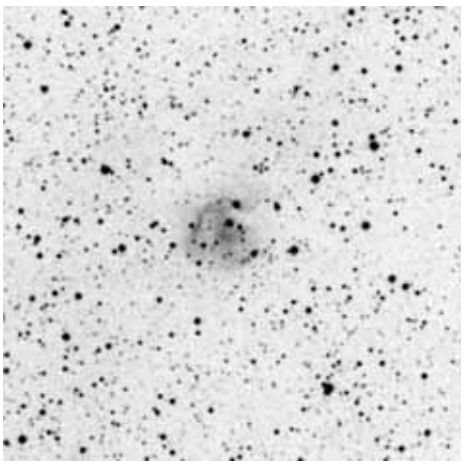
in Cygnus



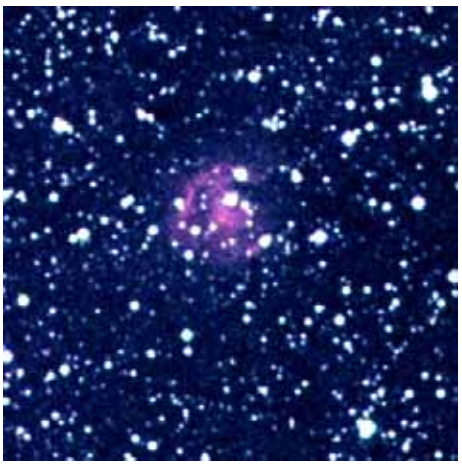
60x60, red



POSS blue



POSS red

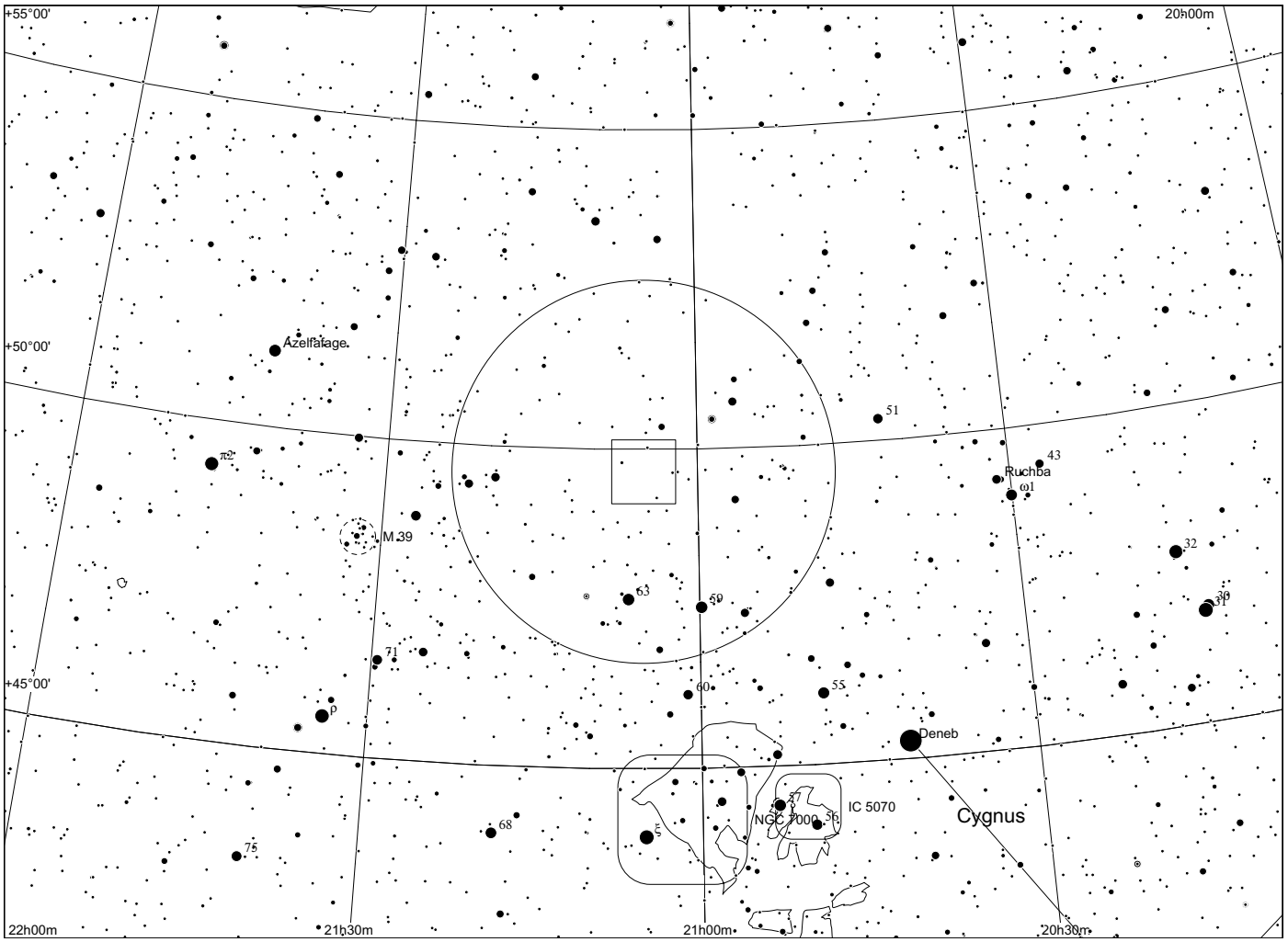


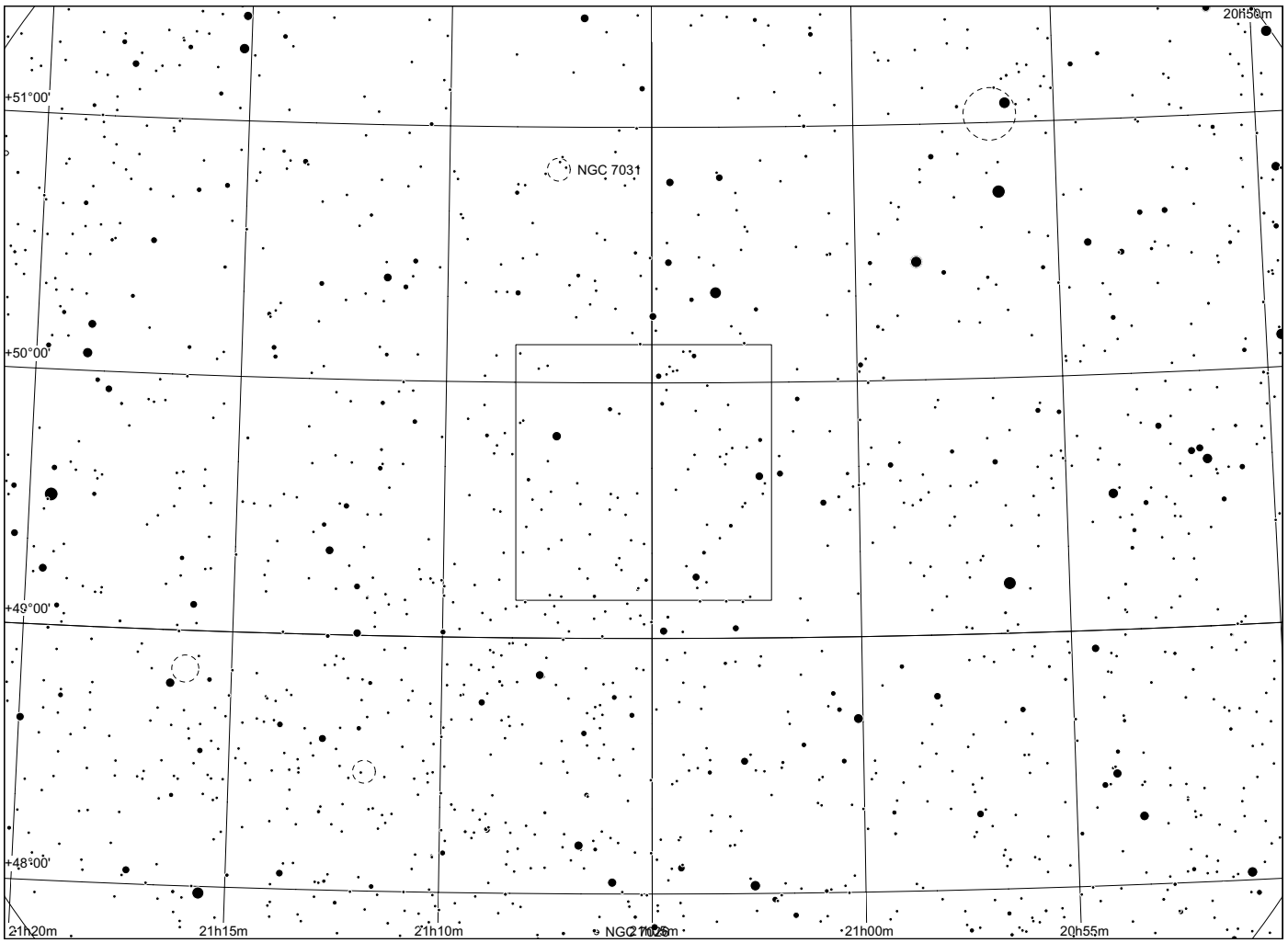
composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-121		21 05 12.4	+49 38 59	1	3	2	1

Distance: 6300 pc, Size: 1.8 pc, Source: 2003A&A...397..133R

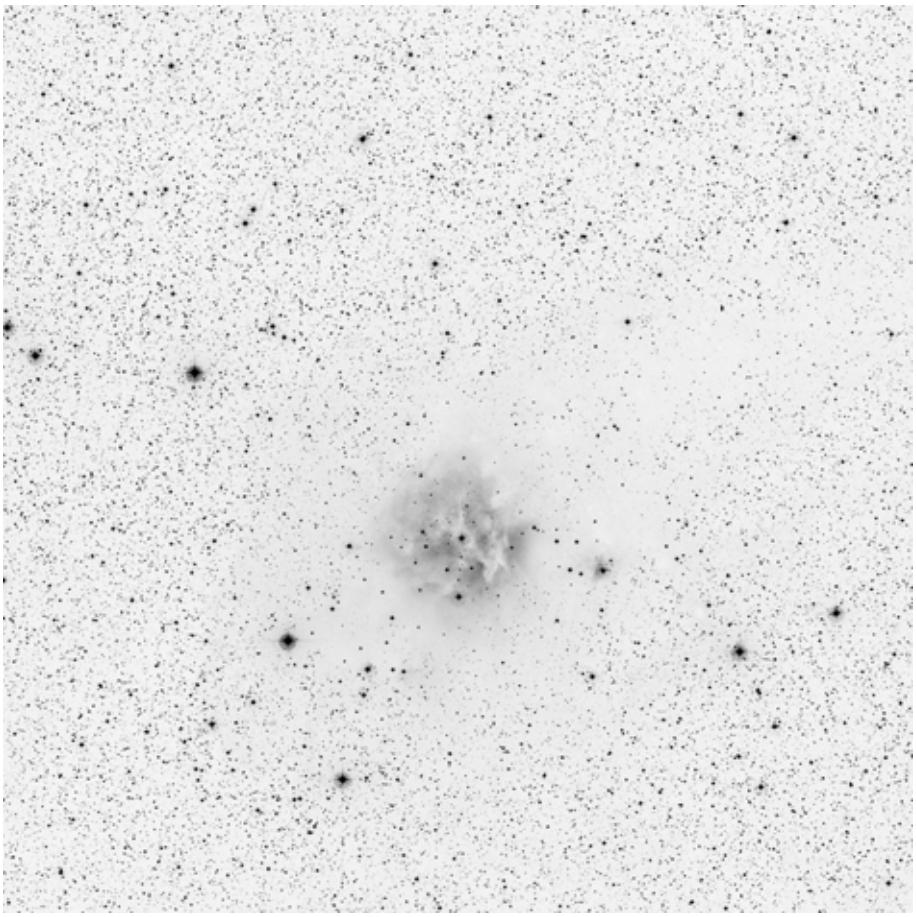
Observing notes:


+55°00'
20h00m
+50°00'
Azelfafage
π2
M 39
51
43
Ruchba
ω1
32
30
31
63
59
71
+45°00'
60
55
ρ
Deneb
IC 5070
NGC 7000
56
Cygnus
68
75
22h00m
21h30m
21h00m
20h30m

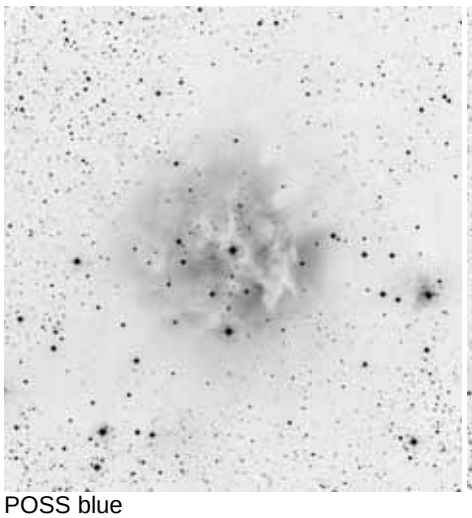

20h50m
+51°00'
NGC 7031
+50°00'
+49°00'
+48°00'
21h20m
21h15m
21h10m
NGC 7026
21h00m
20h55m

Sh 2 - 125

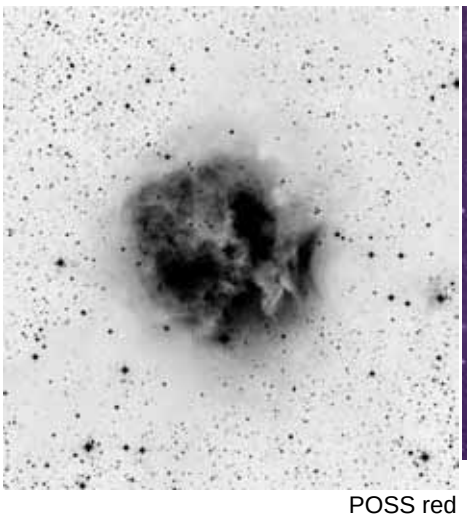
in Cygnus



60x60, blue



POSS blue



POSS red



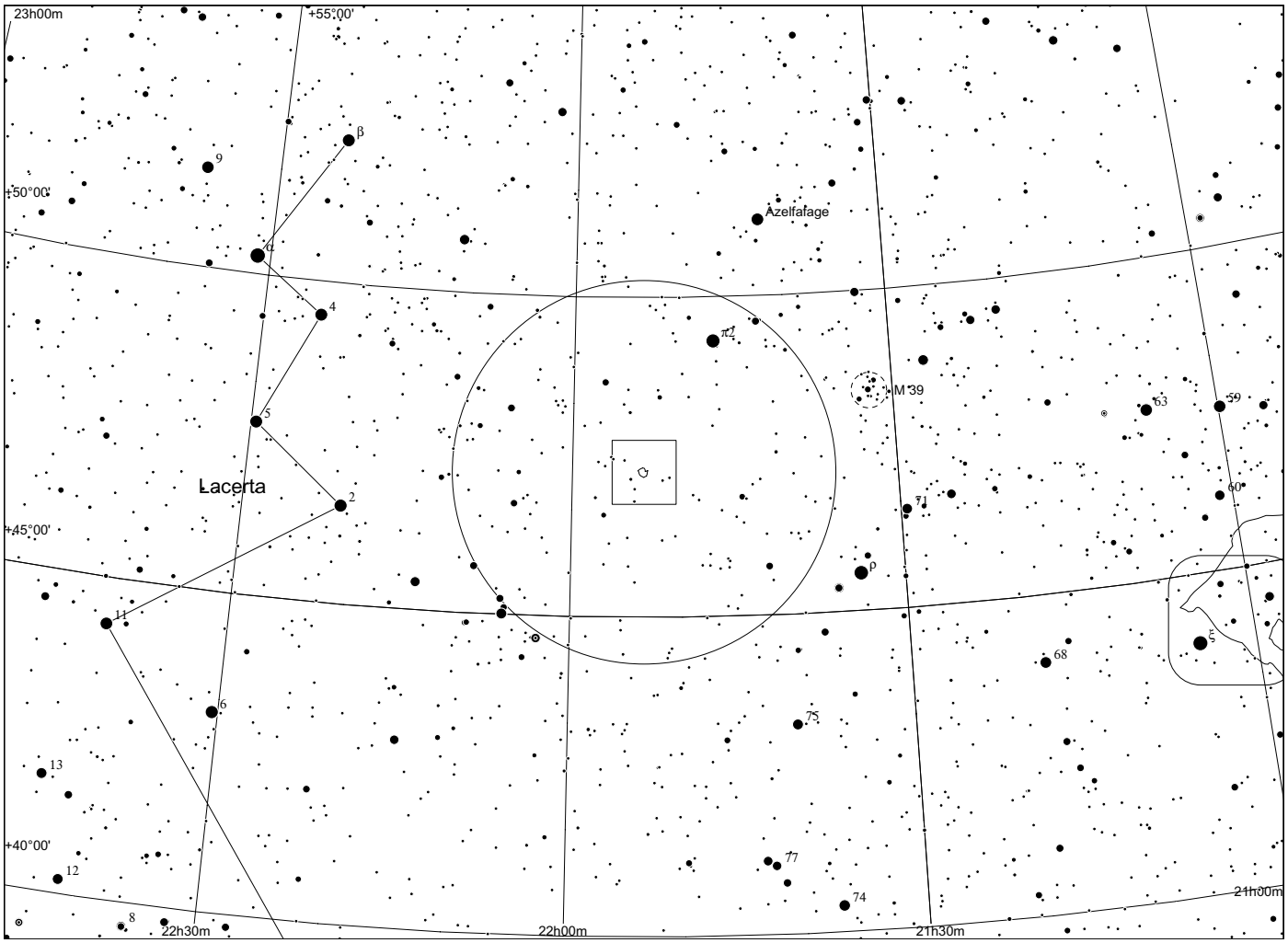
composite

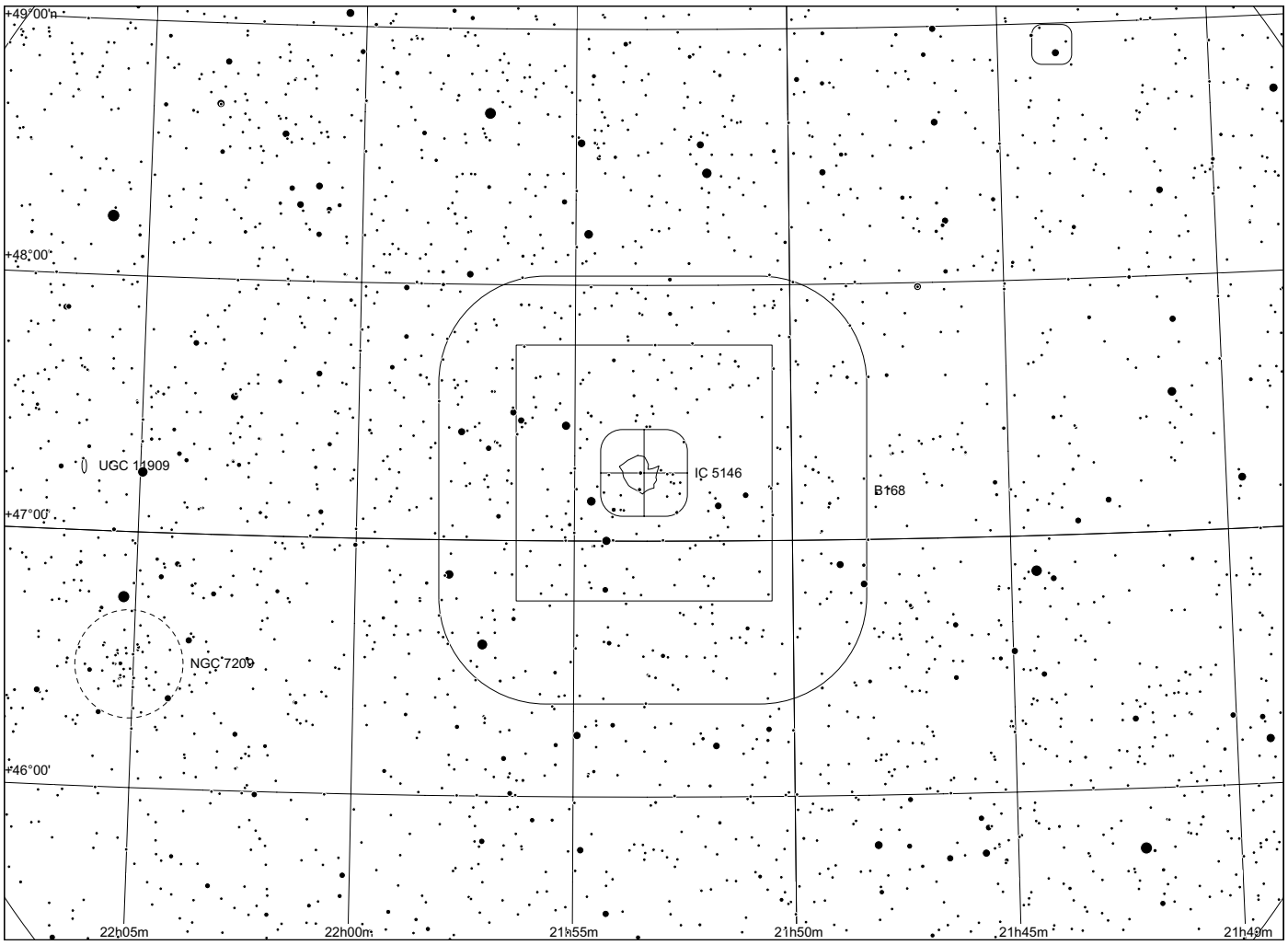
	other name	RA	dec	dia. '	F	S	B
Sh 2-125	IC 5146 = Cocoon Nebula	21 53 32.7	+47 16 18	9	2	2	3

Distance: 1000 pc, Size: 2.6 pc, Source: 1982ApJS...49..183B

The Cocoon nebula is associated with the star cluster IC 5146.

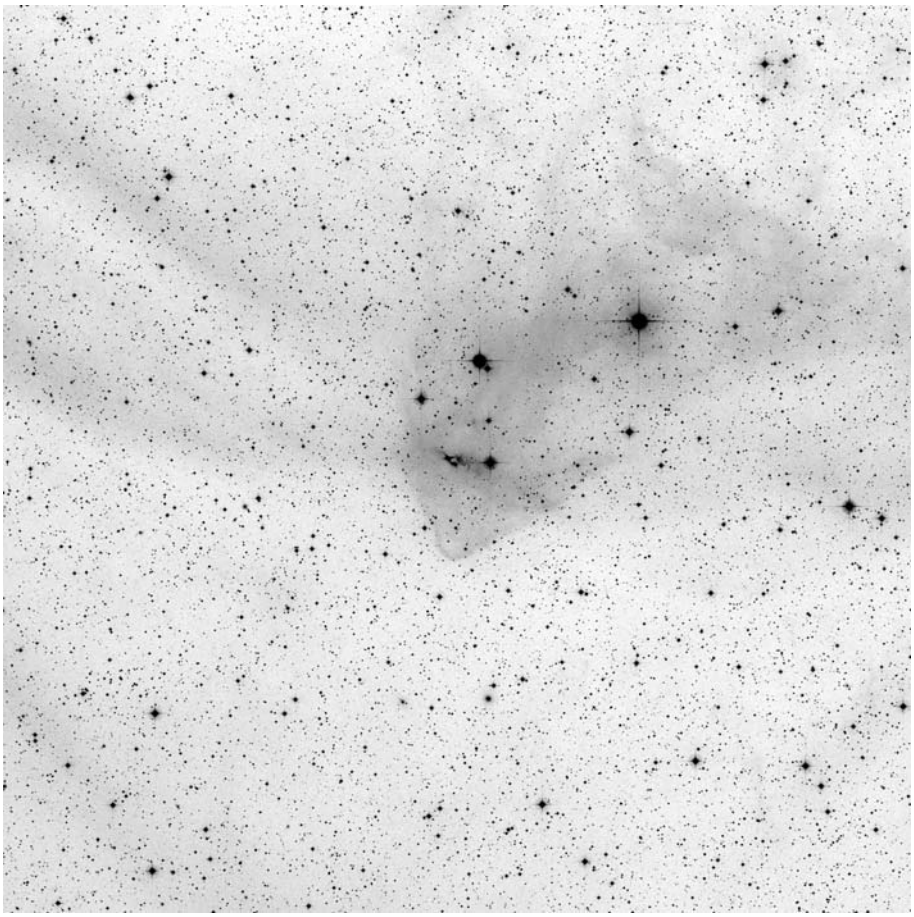
Observing notes:


23h00m
+55°00'
+50°00'
+45°00'
+40°00'
β
9
α
4
5
2
11
6
13
12
8
Lacerta
Azelfafage
π2
M 39
63
59
60
71
ρ
68
ξ
75
77
74
22h30m
22h00m
21h30m
21h00m

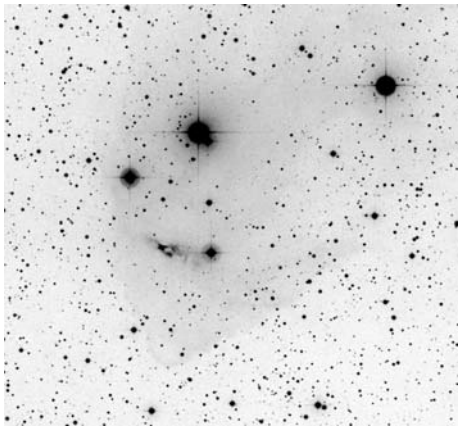

+49°00'
+48°00'
+47°00'
+46°00'
UGC 11909
IC 5146
B168
NGC 7209
22h05m
22h00m
21h55m
21h50m
21h45m
21h40m

Sh 2 - 126

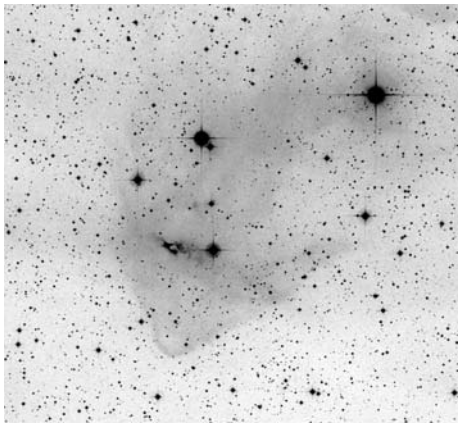
in Lacerta



60x60, red



POSS blue



POSS red



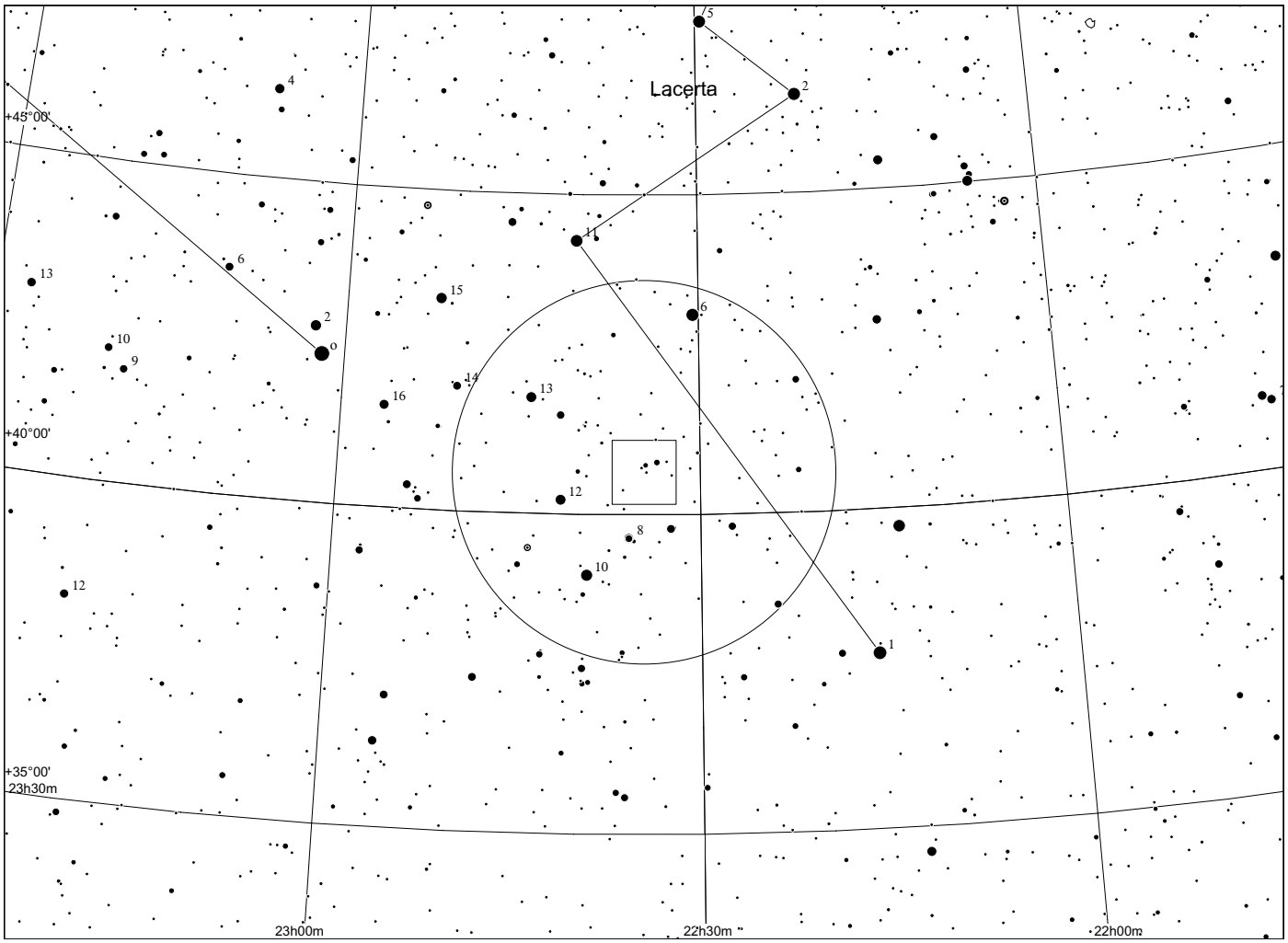
composite

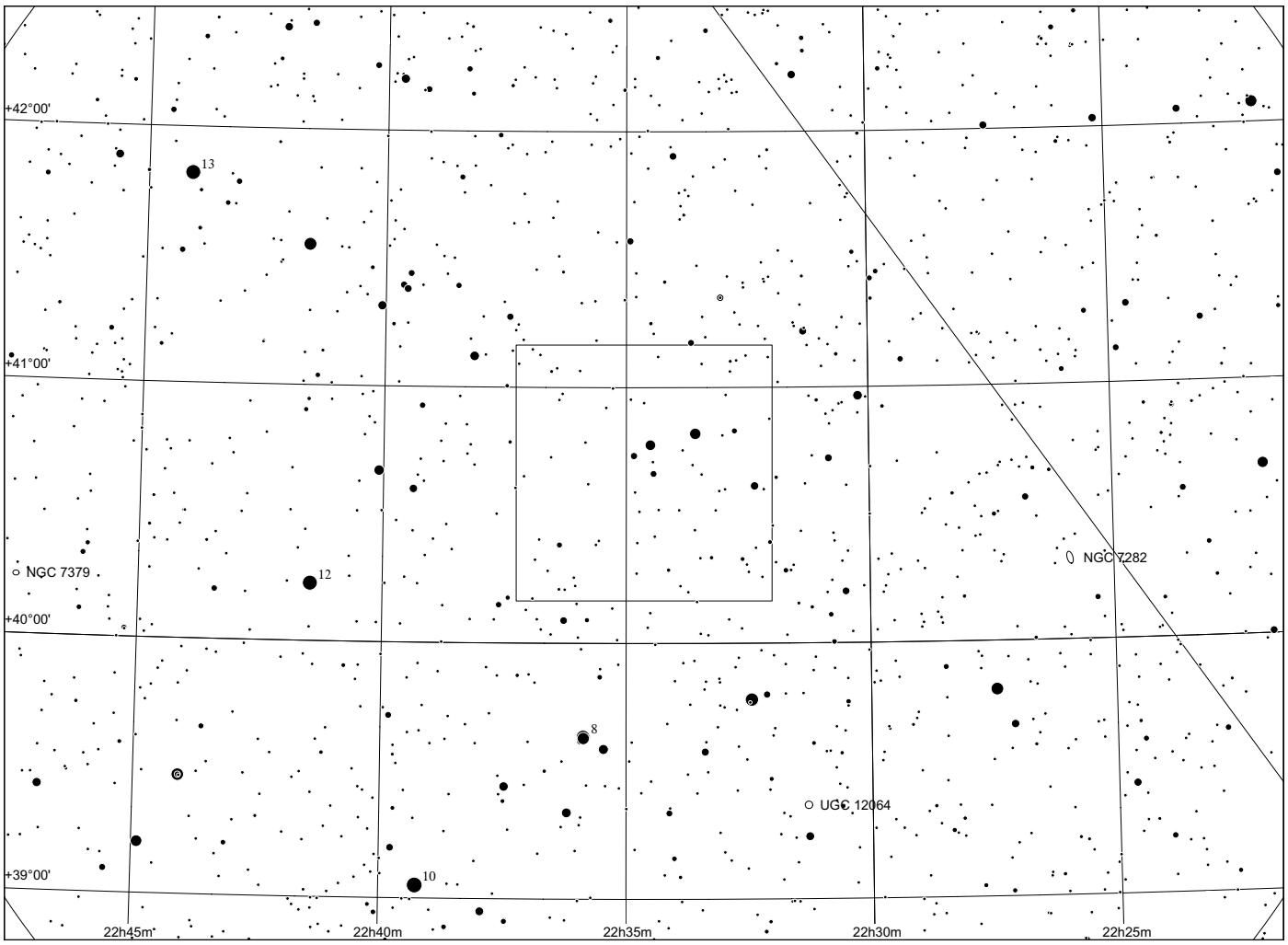
	other name	RA	dec	dia. '	F	S	B
Sh 2-126		22 34 38	+40 40 00	160	3	2	2

Distance: 600 pc, Size: 27.9 pc, Source: 1982ApJS...49..183B

This HII region is also called the 10 Lacertae complex.

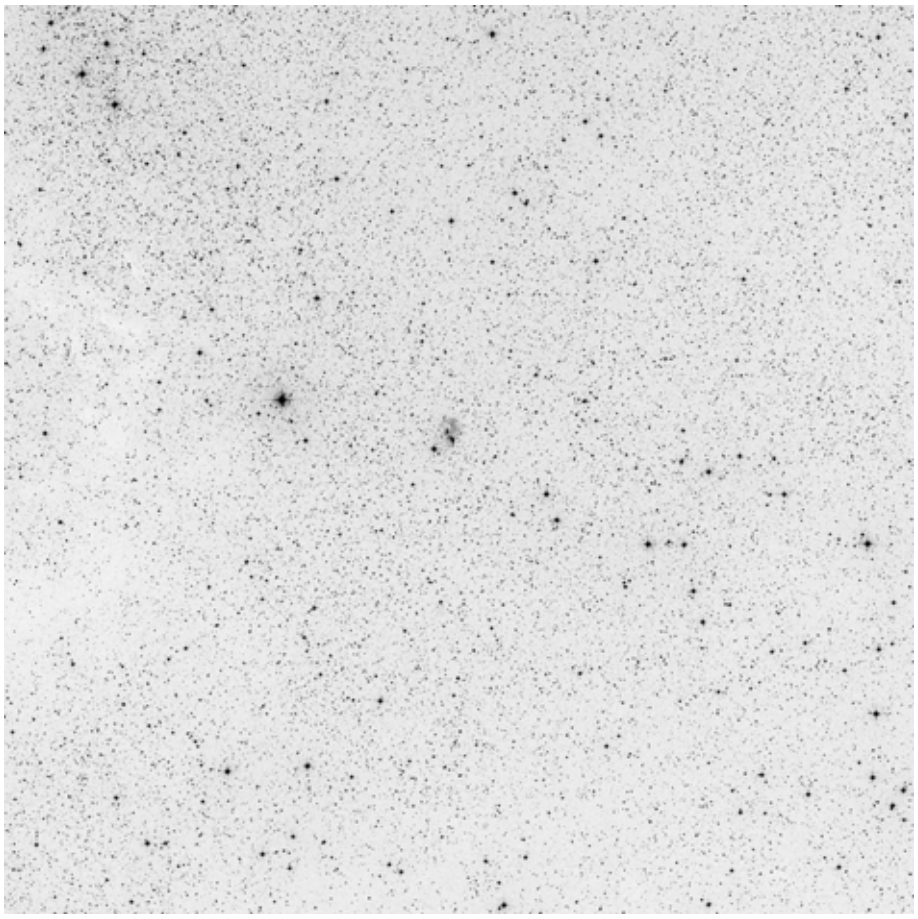
Observing notes:


Lacerta
+45°00'
+40°00'
+35°00'
23h30m
23h00m
22h30m
22h00m

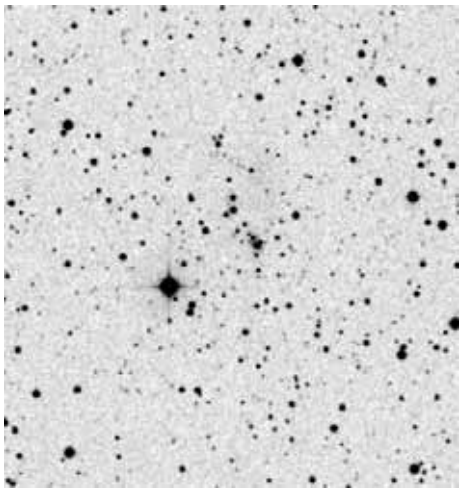

+42°00'
+41°00'
+40°00'
+39°00'
NGC 7379
NGC 7282
UGC 12064
22h45m
22h40m
22h35m
22h30m
22h25m

Sh 2 - 127

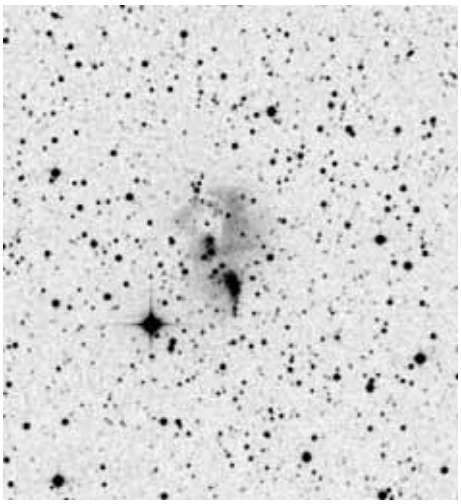
in Cygnus



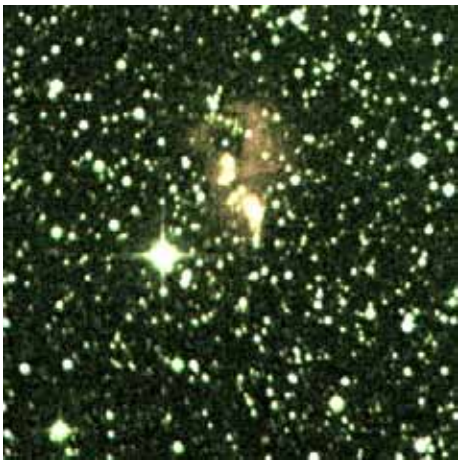
60x60, red



POSS blue



POSS red

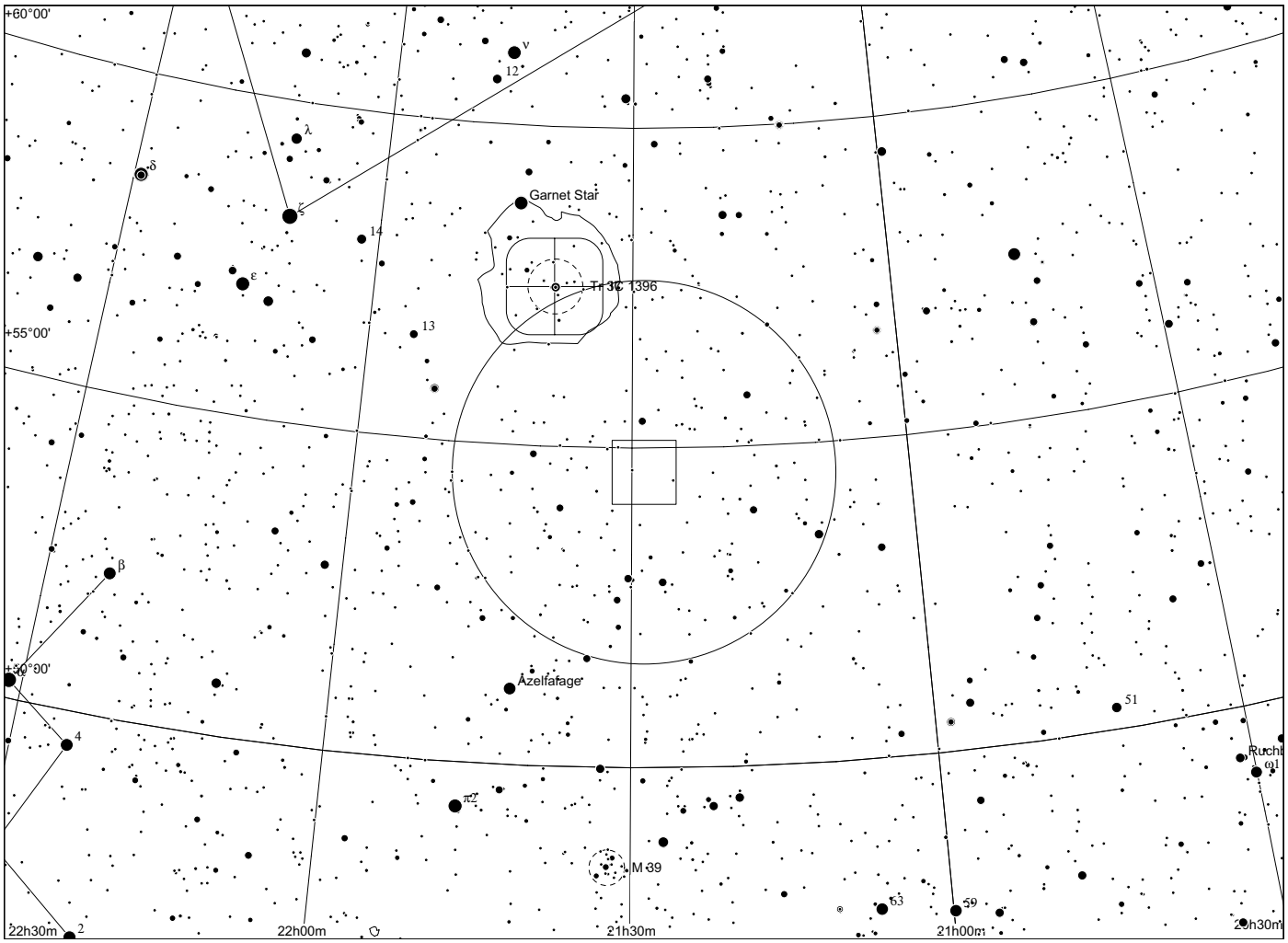


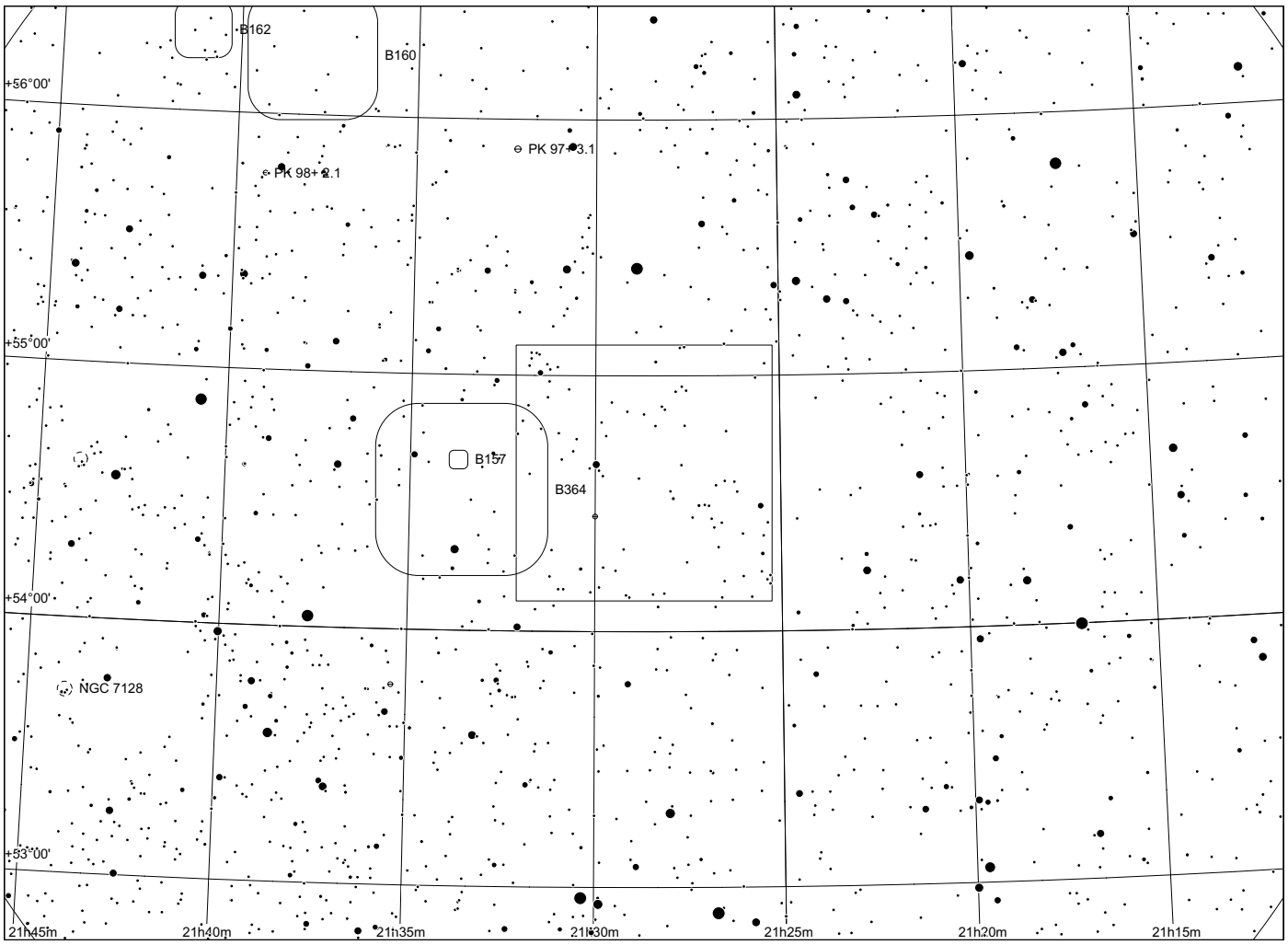
composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-127		21 28 41.0	+54 37 14	2	3	2	2

Distance: 9700 pc, Size: 5.6 pc, Source: 2003A&A...397..133R

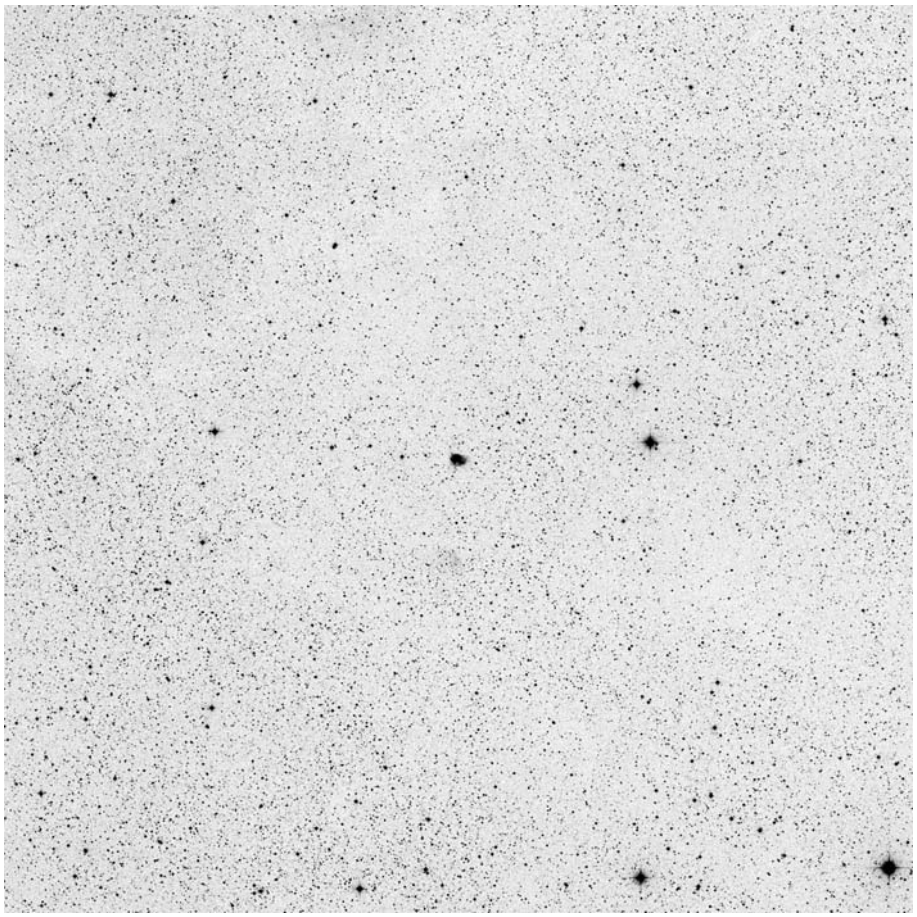
Observing notes:


+60°00'
+55°00'
+50°00'
ν
12
λ
δ
ζ
14
ε
13
Garnet Star
Tr 3C 1396
β
Azelfafage
4
π2
M 39
51
Ruchb
ω1
63
59
2
22h30m
22h00m
21h30m
21h00m
20h30m

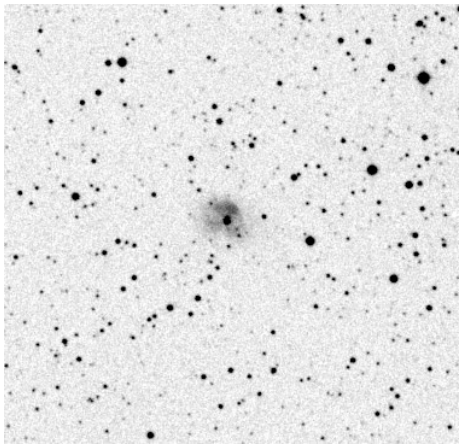

B162
B160
+56°00'
PK 97+3.1
PK 98+2.1
+55°00'
B157
B364
+54°00'
NGC 7128
+53°00'
21h45m
21h40m
21h35m
21h30m
21h25m
21h20m
21h15m

Sh 2 - 128

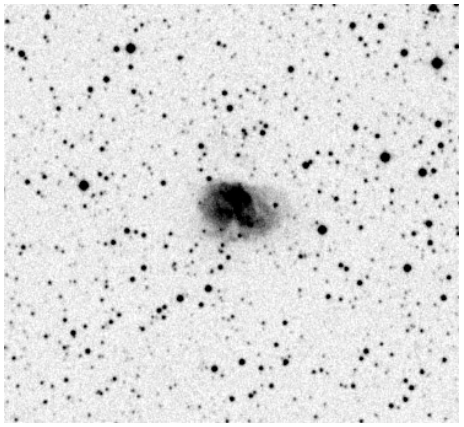
in Cepheus



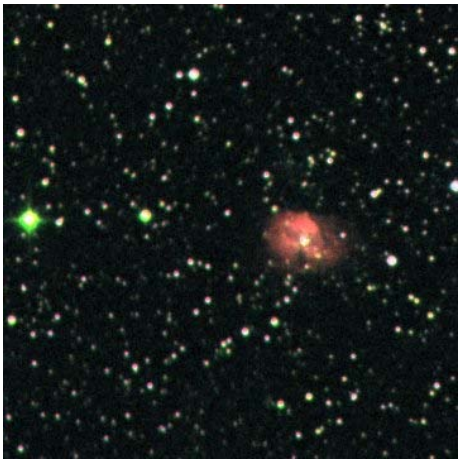
60x60, red



POSS blue



POSS red



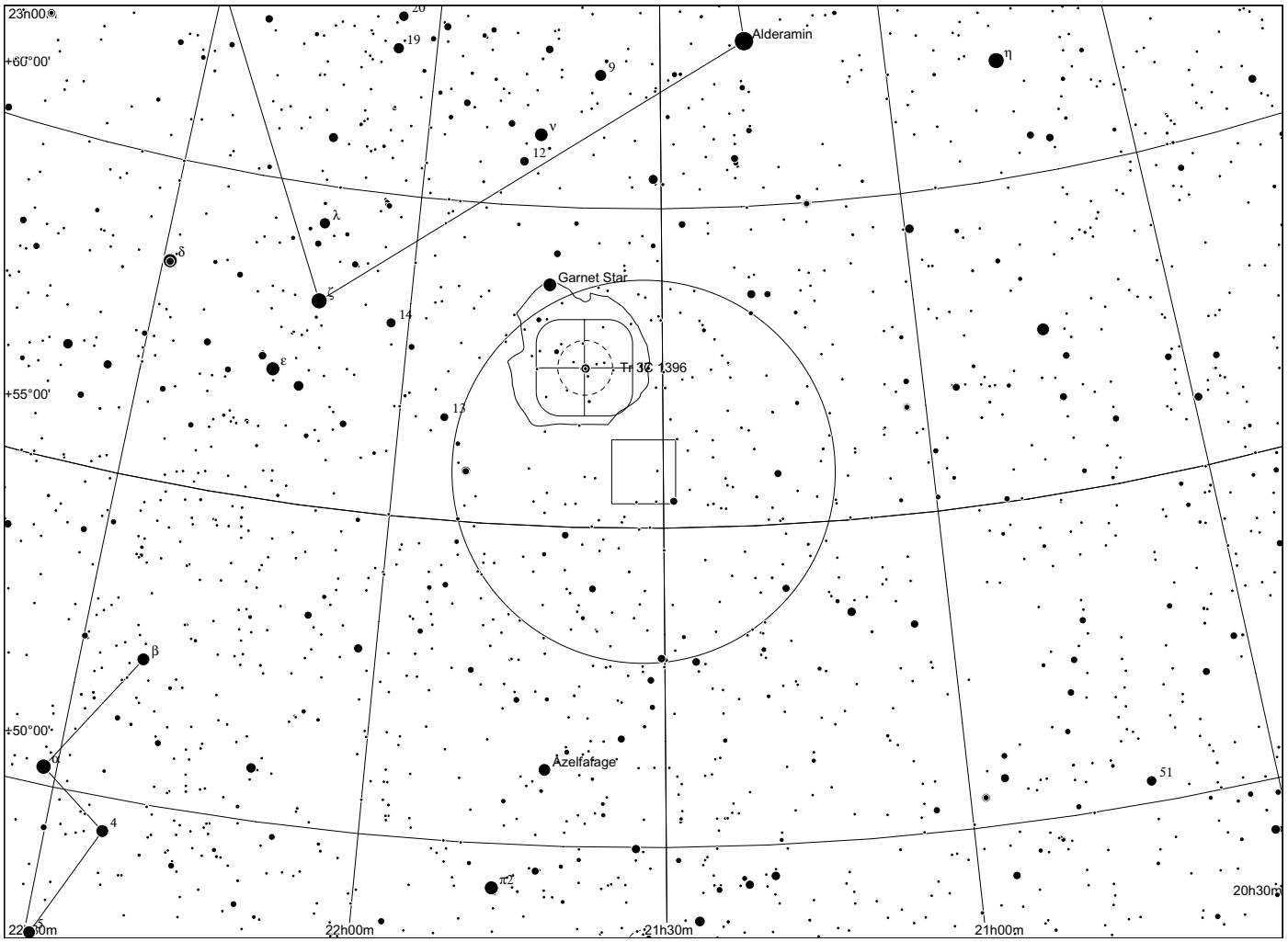
composite

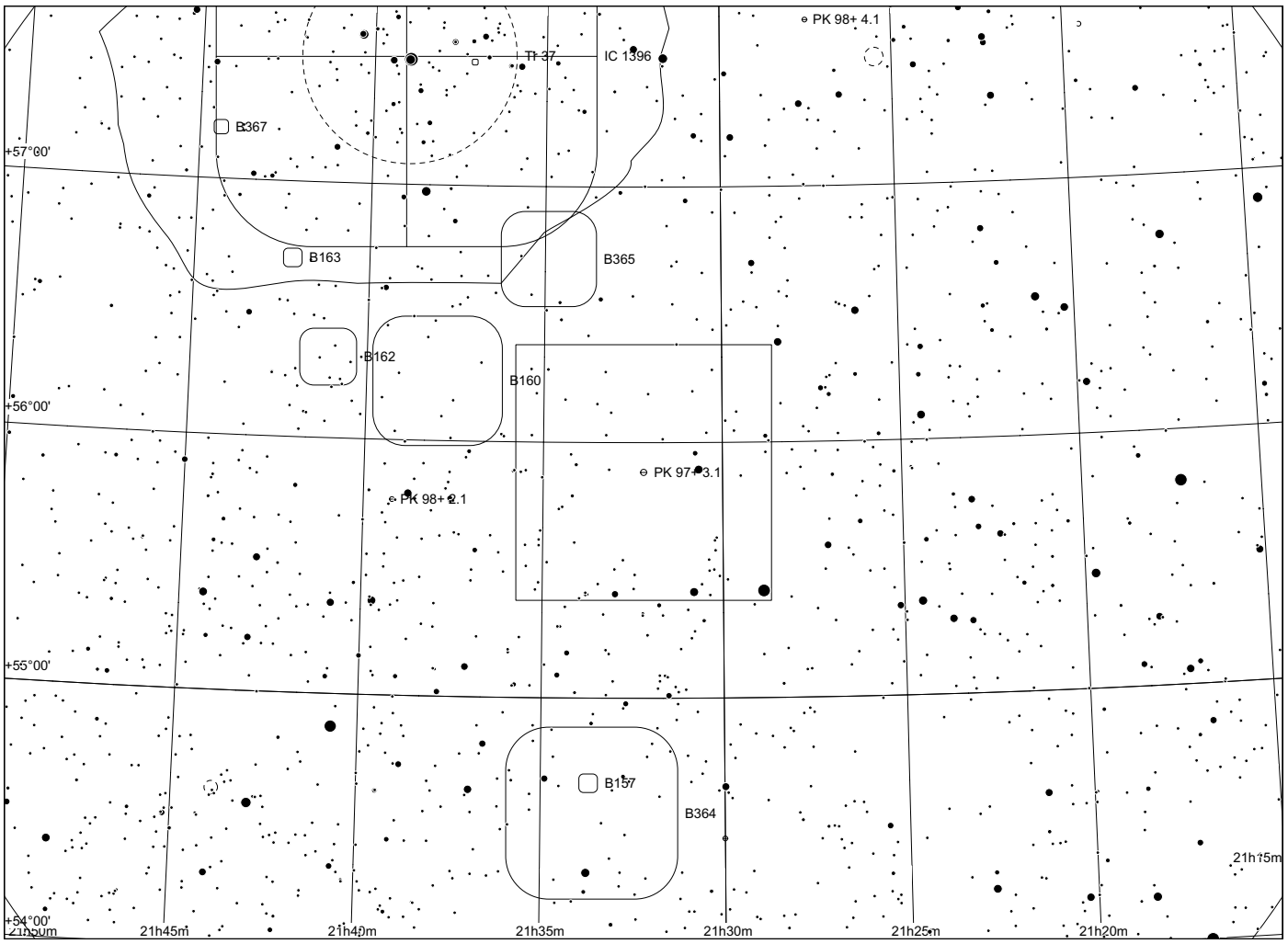
	other name	RA	dec	dia. '	F	S	B
Sh 2-128	Abell 77	21 32 08.4	+55 51 34	1	3	2	3

Distance: 9400 pc, Size: 2.7 pc, Source: 2003AJ....126.1861B

This region is actually located at a distance of 9.4 kpc, is about one million years old and is ionised by an O7 star.

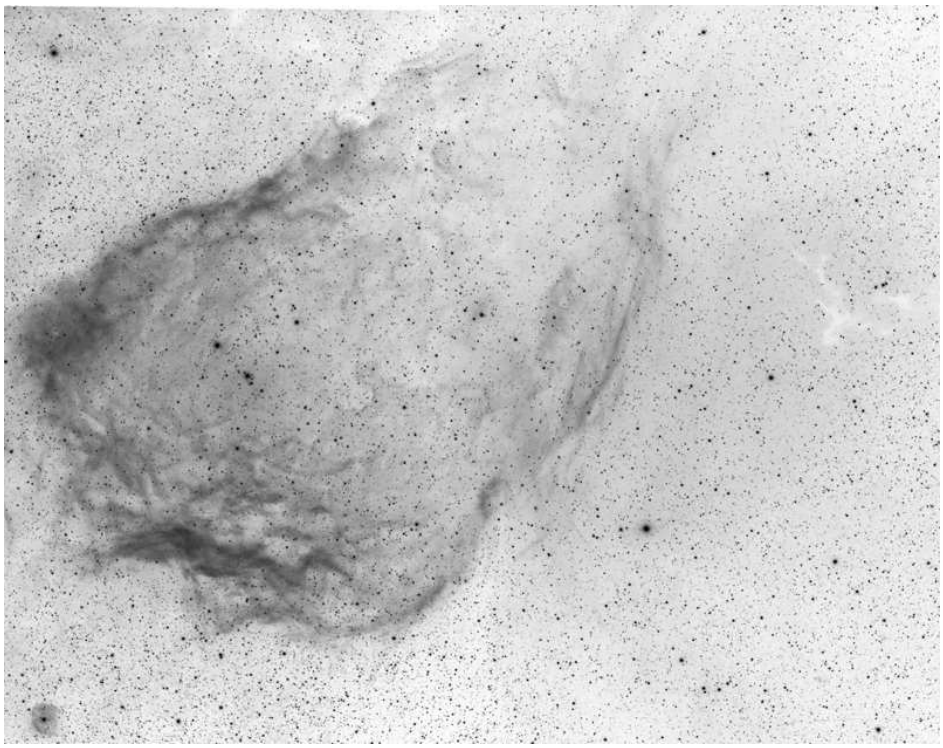
Observing notes:

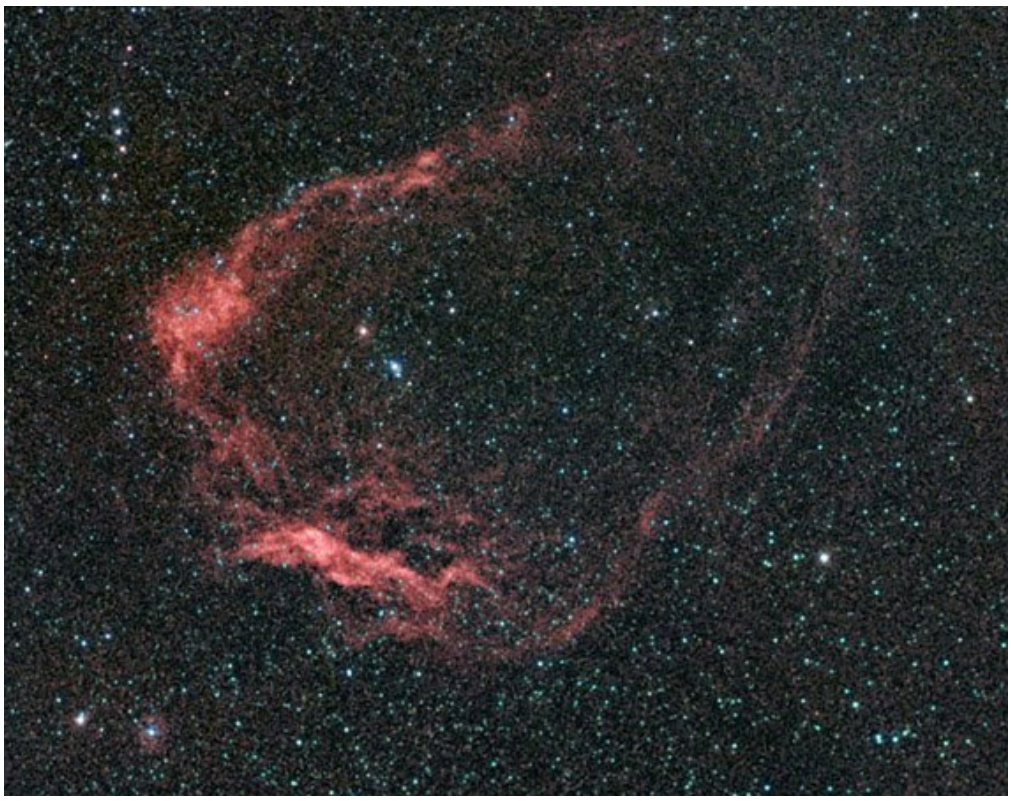

23h00m
+60°00'
+55°00'
+50°00'
22h00m
22h00m
21h30m
21h00m
20h30m
Alderamin
Garnet Star
Tr 37
IC 1396
Azelfafage
20
19
9
12
14
13
51
4


PK 98+ 4.1
Tr 37
IC 1396
B367
+57°00'
B163
B365
B162
B160
+56°00'
PK 97+ 3.1
PK 98+ 2.1
+55°00'
B157
B364
21h15m
+54°00'
21h50m
21h45m
21h40m
21h35m
21h30m
21h25m
21h20m

Sh 2 - 129

in Cepheus





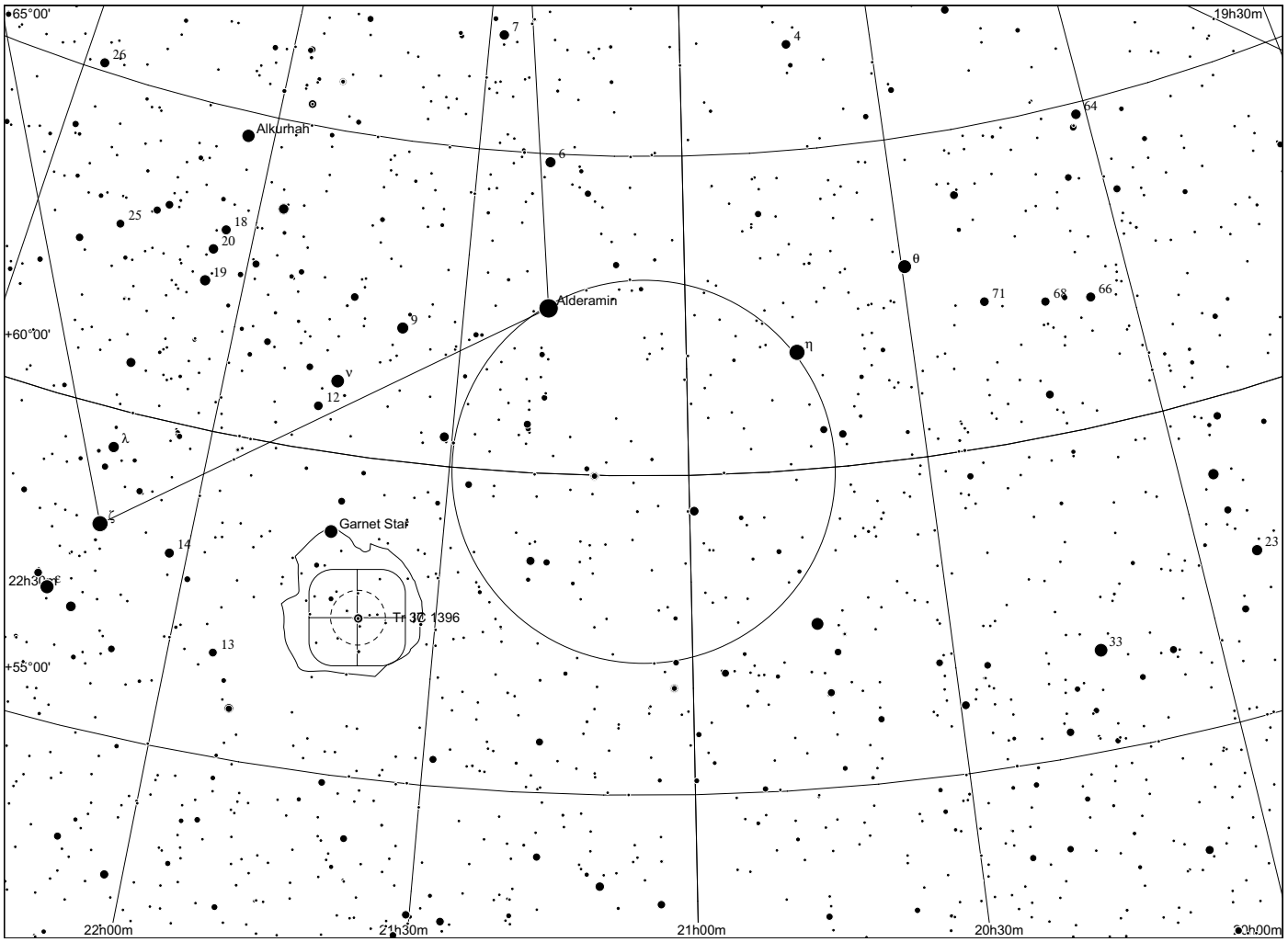
H alpha Dean Salman

	other name	RA	dec	dia. '	F	S	B
Sh 2-129		21 11 44.4	+59 57 40	140	3	2	2

Distance: 400 pc, Size: 16.3 pc, Source: 1982ApJS...49..183B

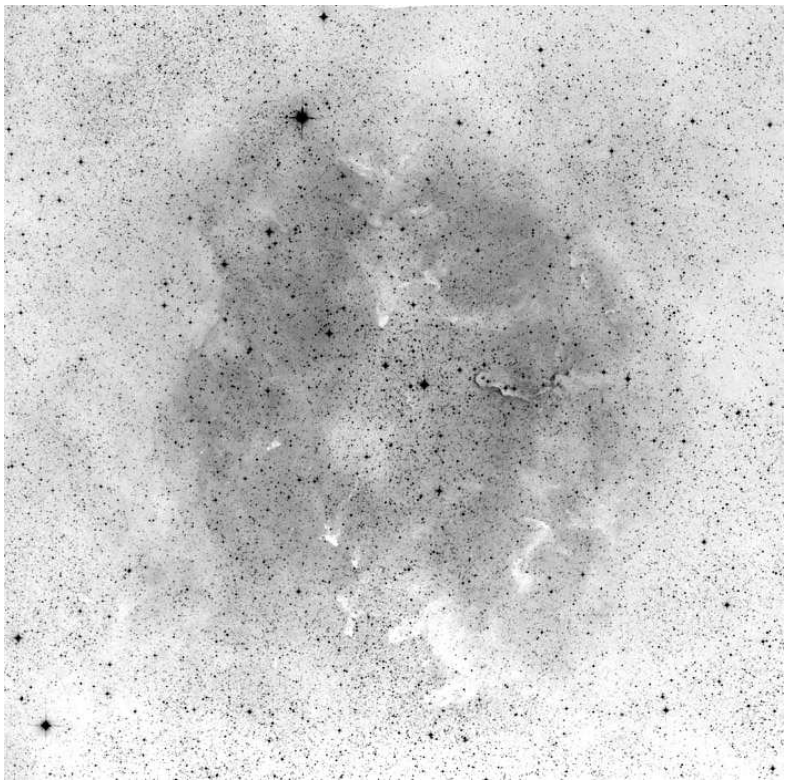
Sometimes called the Flying Bat nebula.

Observing notes:

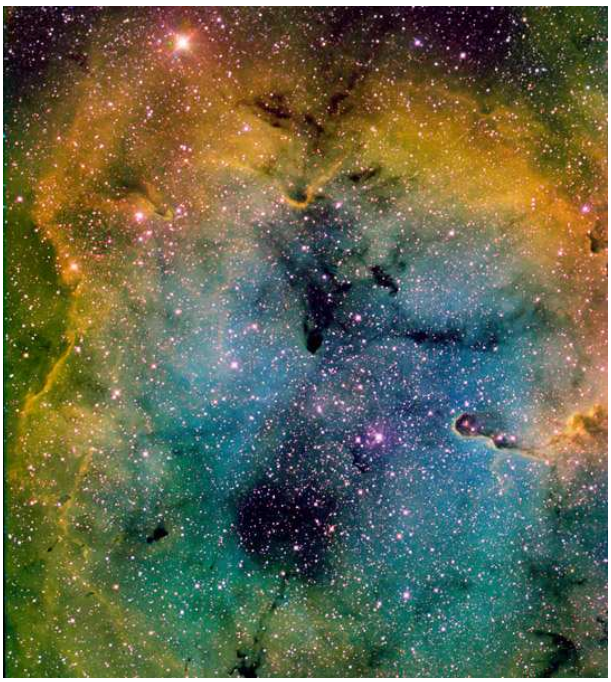

65°00'
19h30m
+60°00'
+55°00'
22h30m
22h00m
21h30m
21h00m
20h30m
20h00m
Alkurhah
Alderamin
Garnet Star
Tr 3C 1396
26
7
4
64
6
25
18
20
19
θ
71
68
66
9
η
ν
12
λ
ζ
14
23
13
33

Sh 2 - 131

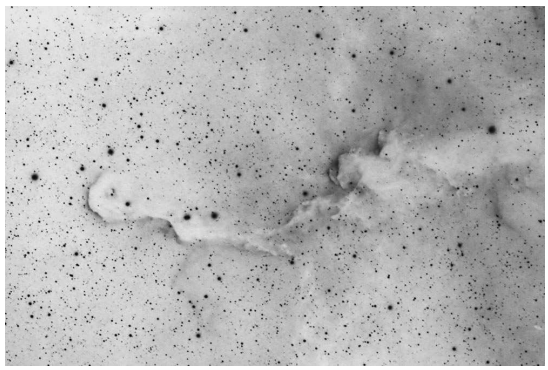
in Cepheus



60x60, red



narrow band Dean Salman



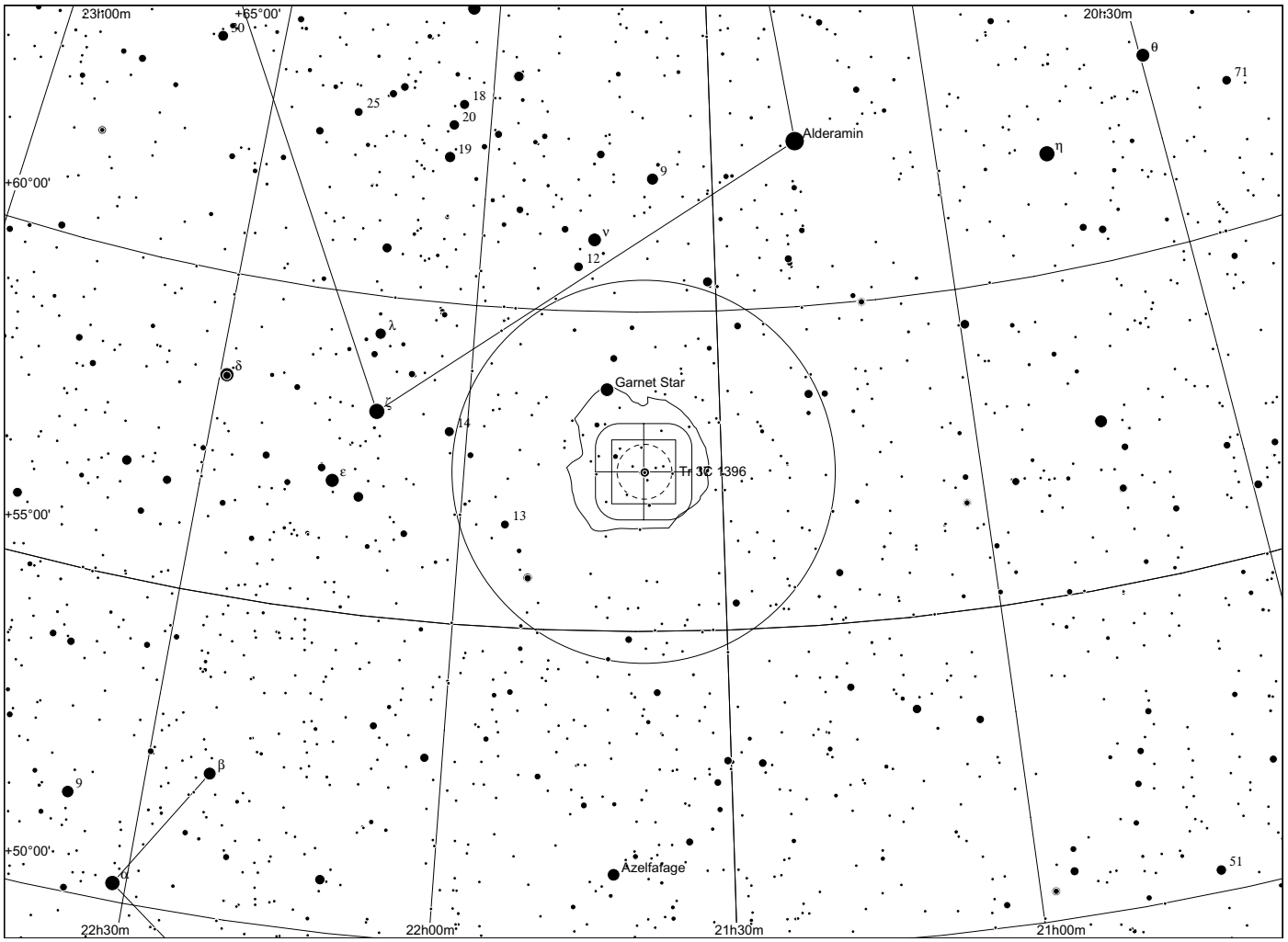
vdB 142

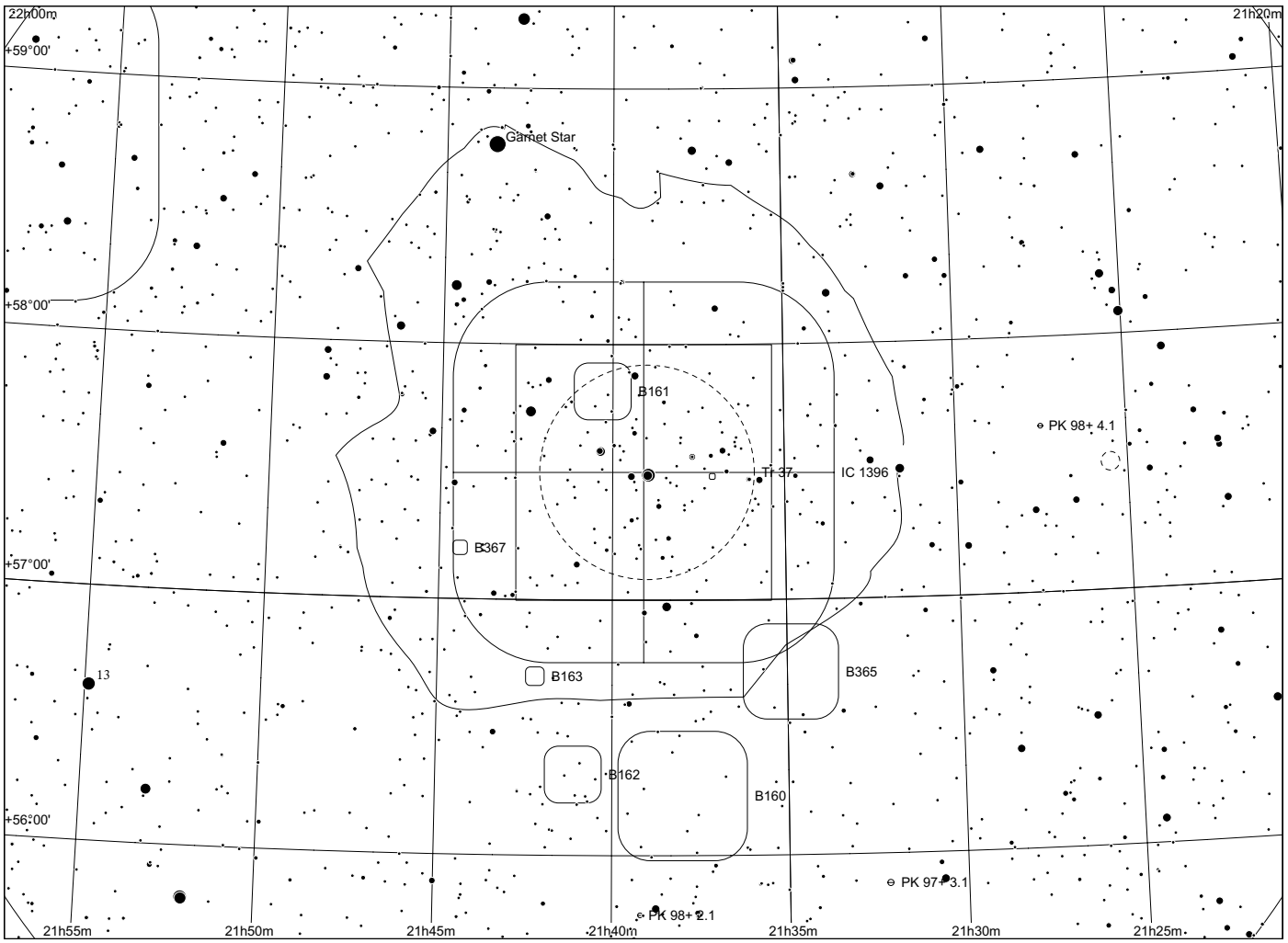
	other name	RA	dec	dia. '	F	S	B
Sh 2-131	IC 1396	21 39 00.2	+57 29 10	170	1	2	2

Distance: 860 pc, Size: 42.5 pc, Source: 1982ApJS...49..183B

Sh 2-131 surrounds the star cluster IC 1396 and lies at the heart of the Cepheus bubble, the giant expanding shell of gas and dust around the Cep OB2 association.

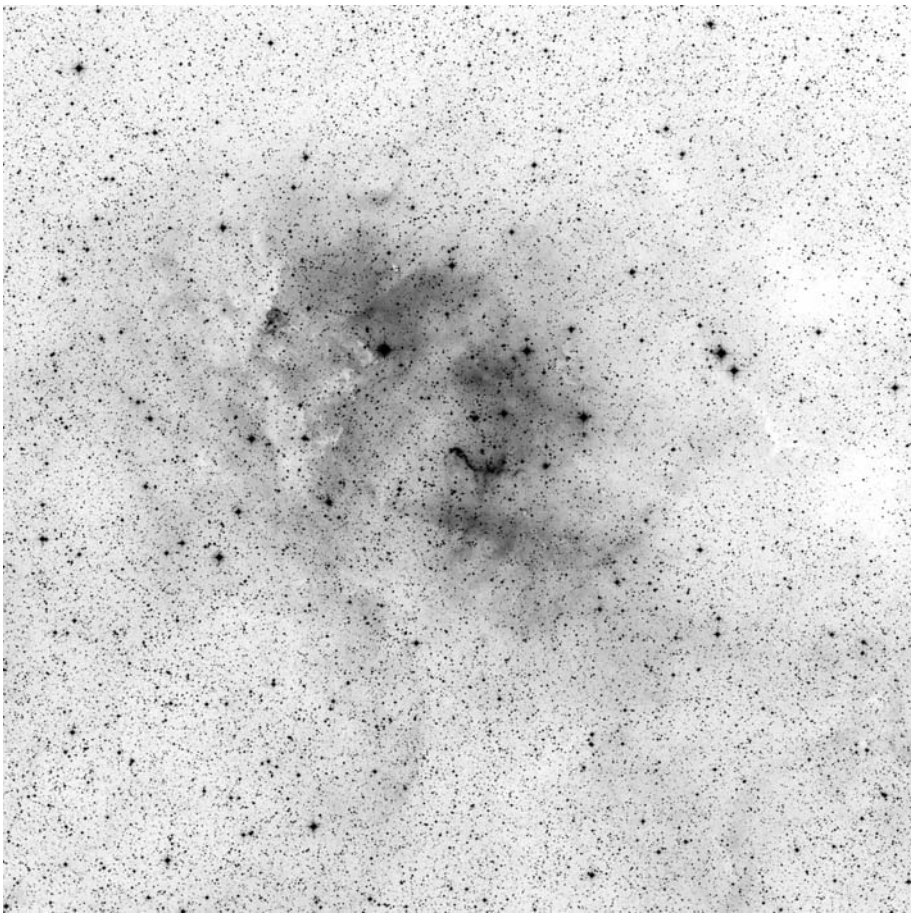
Observing notes:


23h00m
+65°00'
20h30m
Alderamin
+60°00'
Garnet Star
Tr 37
IC 1396
+55°00'
Âzelfafage
+50°00'
22h30m
22h00m
21h30m
21h00m

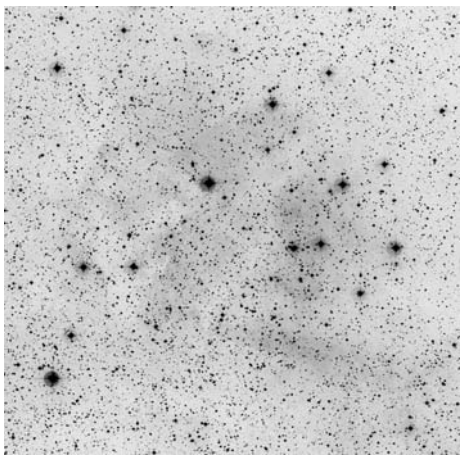

22h00m
21h20m
+59°00'
Garnet Star
+58°00'
B161
PK 98+ 4.1
Tr 37
IC 1396
B367
+57°00'
B163
B365
B162
B160
+56°00'
PK 97+ 3.1
PK 98+ 2.1
21h55m
21h50m
21h45m
21h40m
21h35m
21h30m
21h25m

Sh 2 - 132

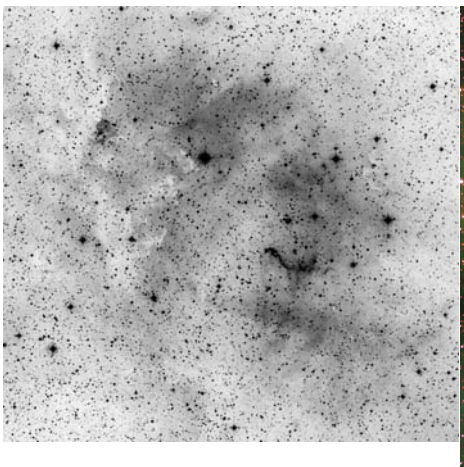
in Cepheus



60x60, red



POSS blue



POSS red



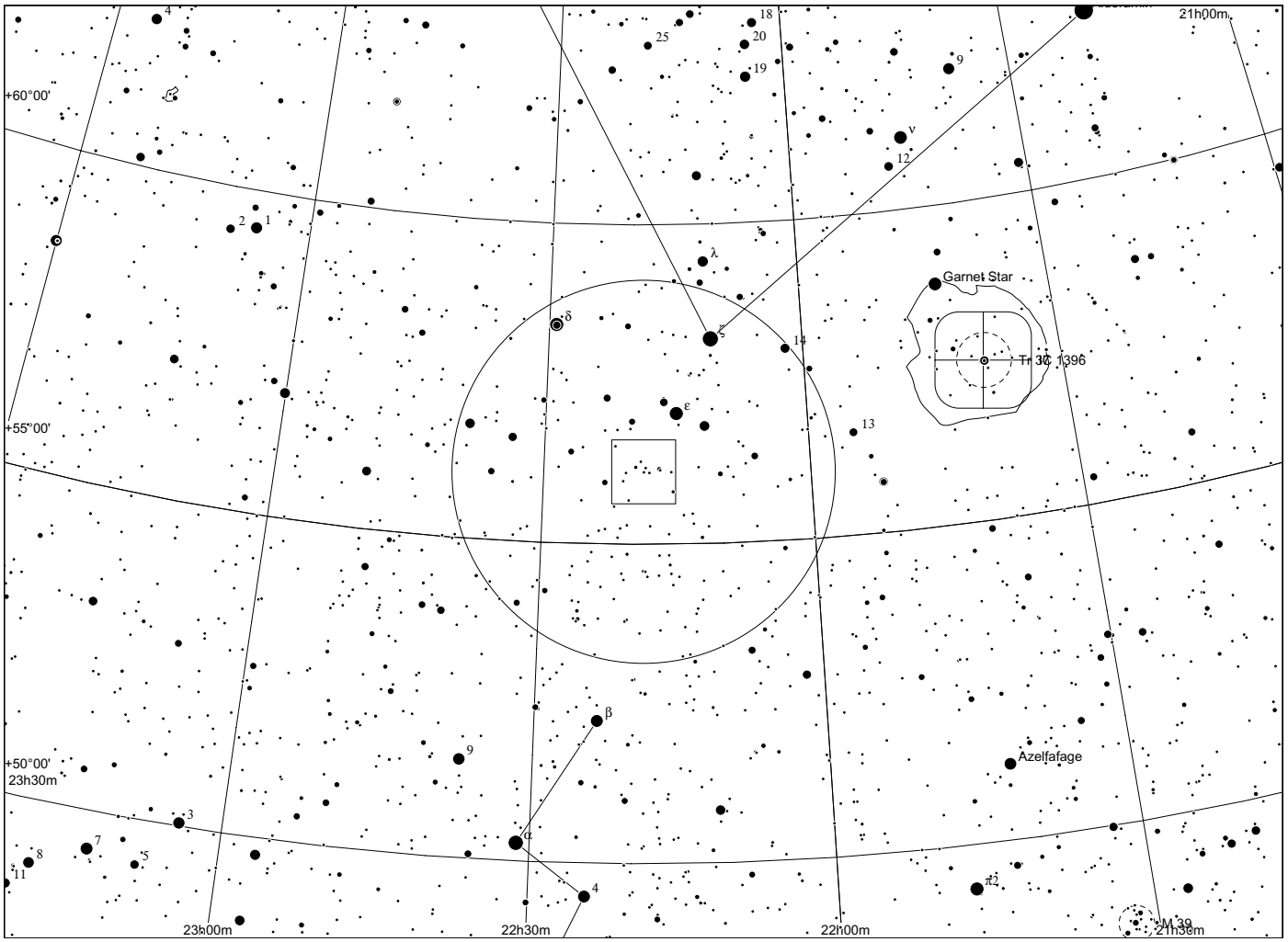
narrowband Dean Salman

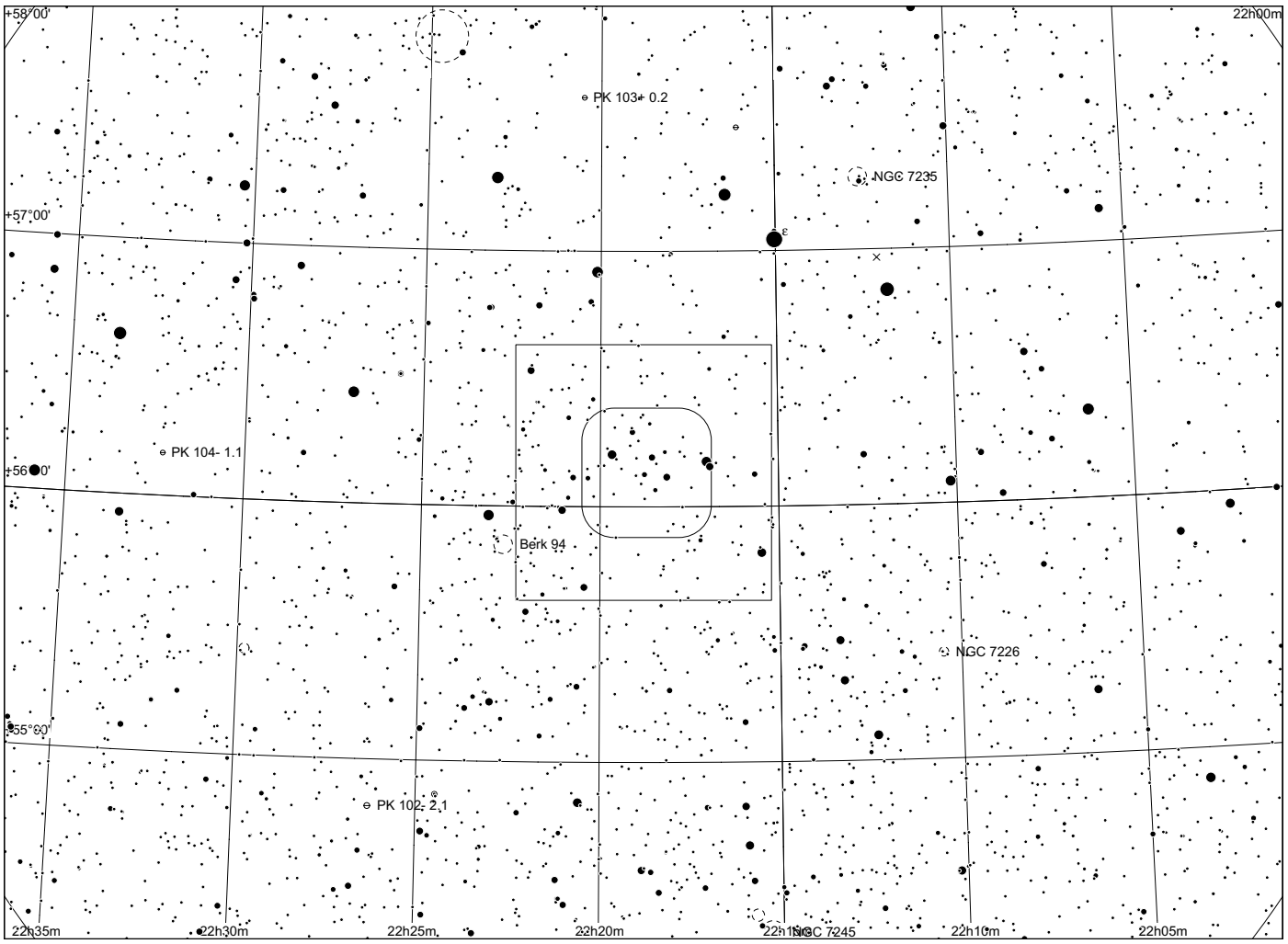
	other name	RA	dec	dia. '	F	S	B
Sh 2-132		22 18 47.0	+56 08 05	90	3	3	2

Distance: 3180 pc, Size: 83.3 pc, Source: 1978A&A....70..205H

This giant HII region in the Cepheus OB1 association is ionised by two WR stars and several OB stars. HD 211853 (WR 153) and an O 8.5 star lie near the middle of the radio shell associated with this nebula.

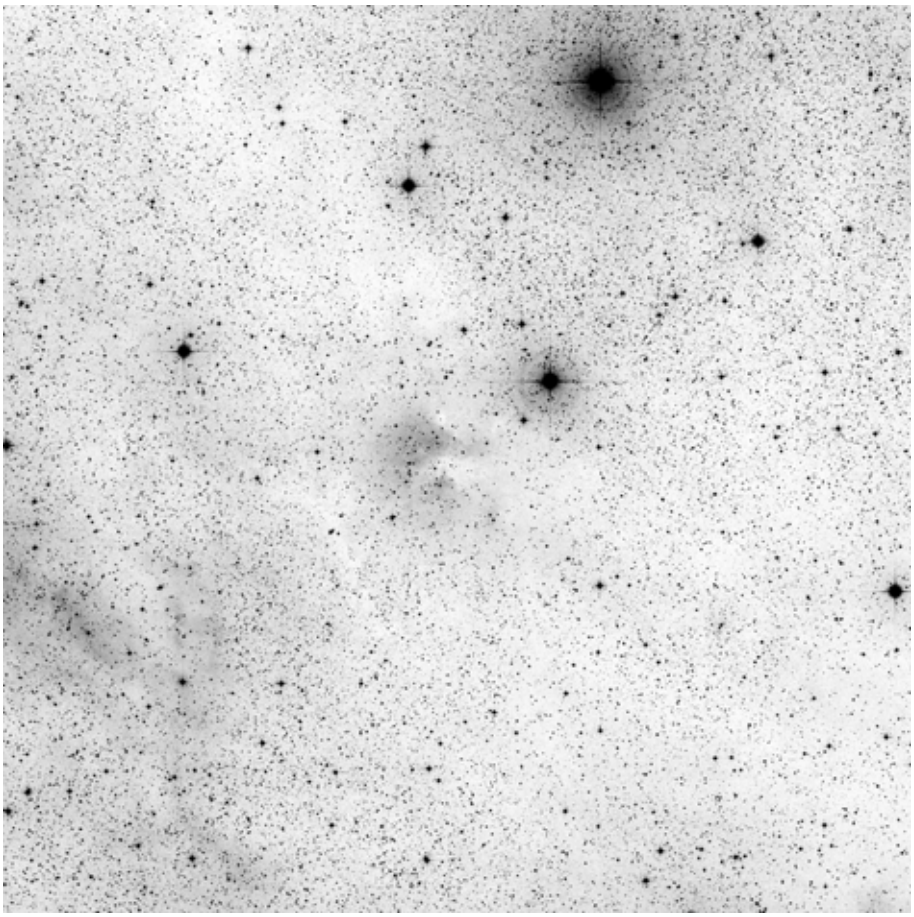
Observing notes:


21h00m
+60°00'
Garnet Star
Tr 37 1396
+55°00'
Azelfafage
+50°00'
23h30m
M 39
23h00m
22h30m
22h00m
21h30m

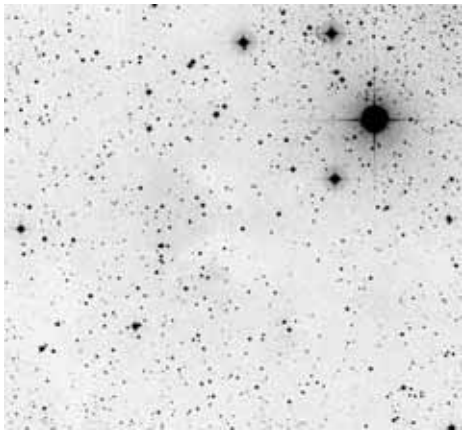

+58°00'
22h00m
PK 103+ 0.2
NGC 7235
+57°00'
PK 104- 1.1
+56°00'
Berk 94
NGC 7226
55°00'
PK 102- 2.1
22h35m
22h30m
22h25m
22h20m
NGC 7245
22h10m
22h05m

Sh 2 - 134

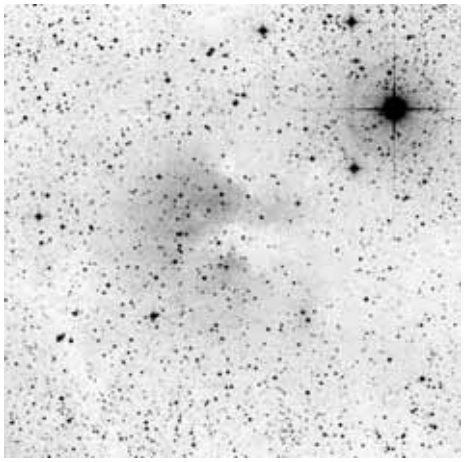
in Cepheus



60x60, red



POSS blue



POSS red



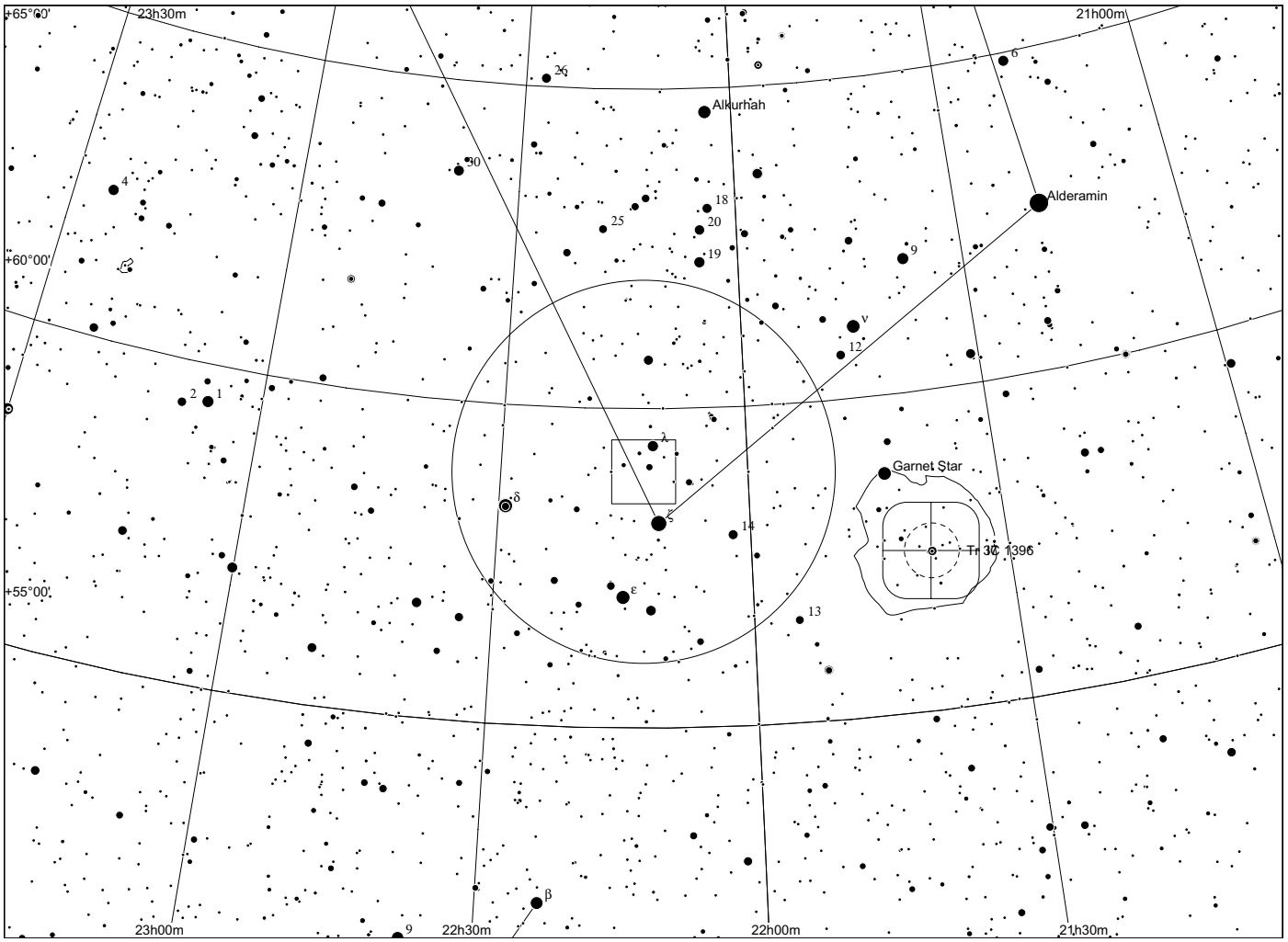
composite

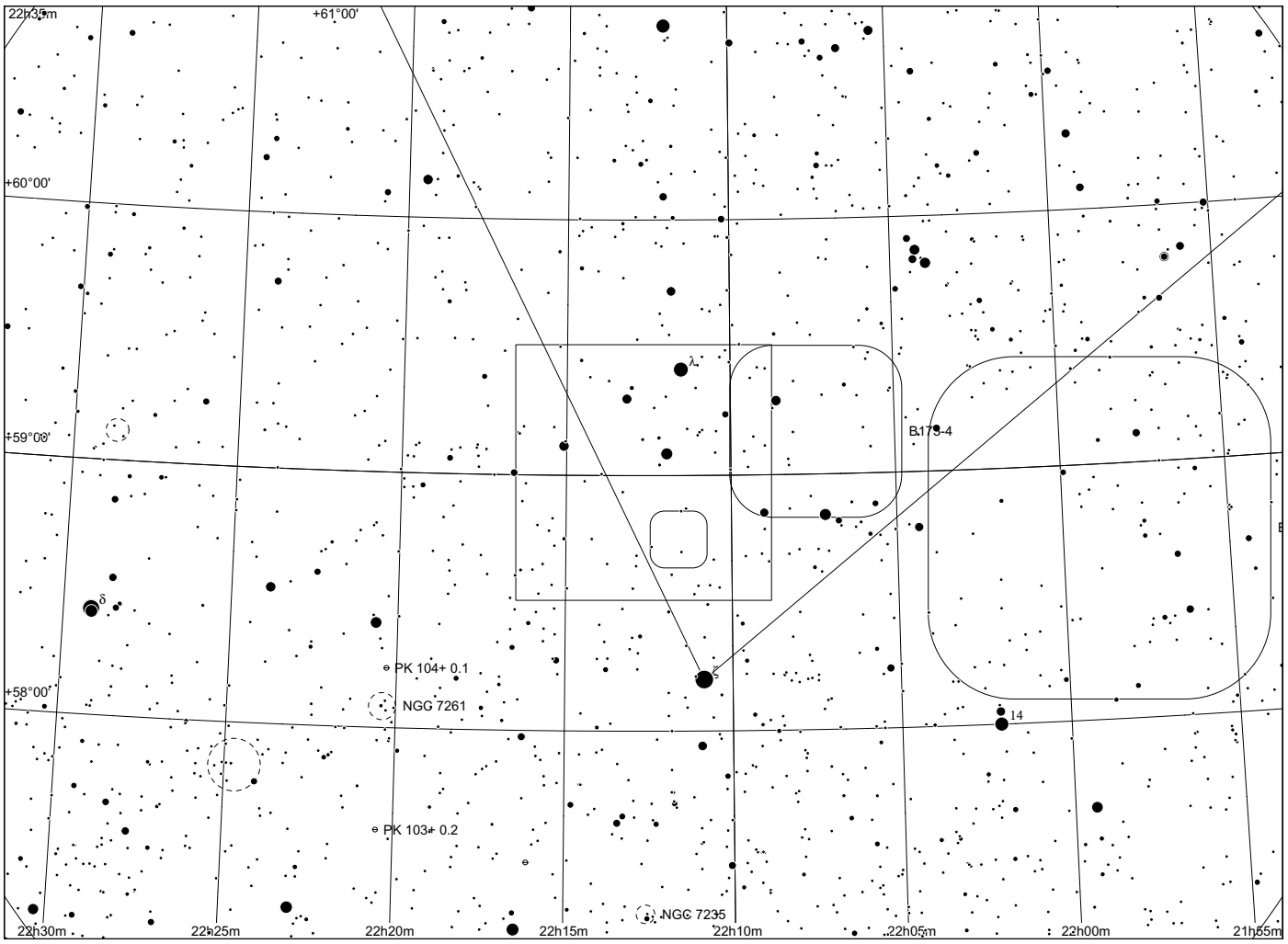
	other name	RA	dec	dia. '	F	S	B
Sh 2-134		22 11 29.1	+59 24 37	160	3	2	2

Distance: 900 pc, Size: 41.9 pc, Source: 1982ApJS...49..183B

This HII region is associated with an expanding bubble in Cep OB2. Also involved with this bubble are the HII regions IC 1396 (also called Sh 2-131), S129, S133, and S140. Lam Cep (HD 210839) is the exciting star for this HII region.

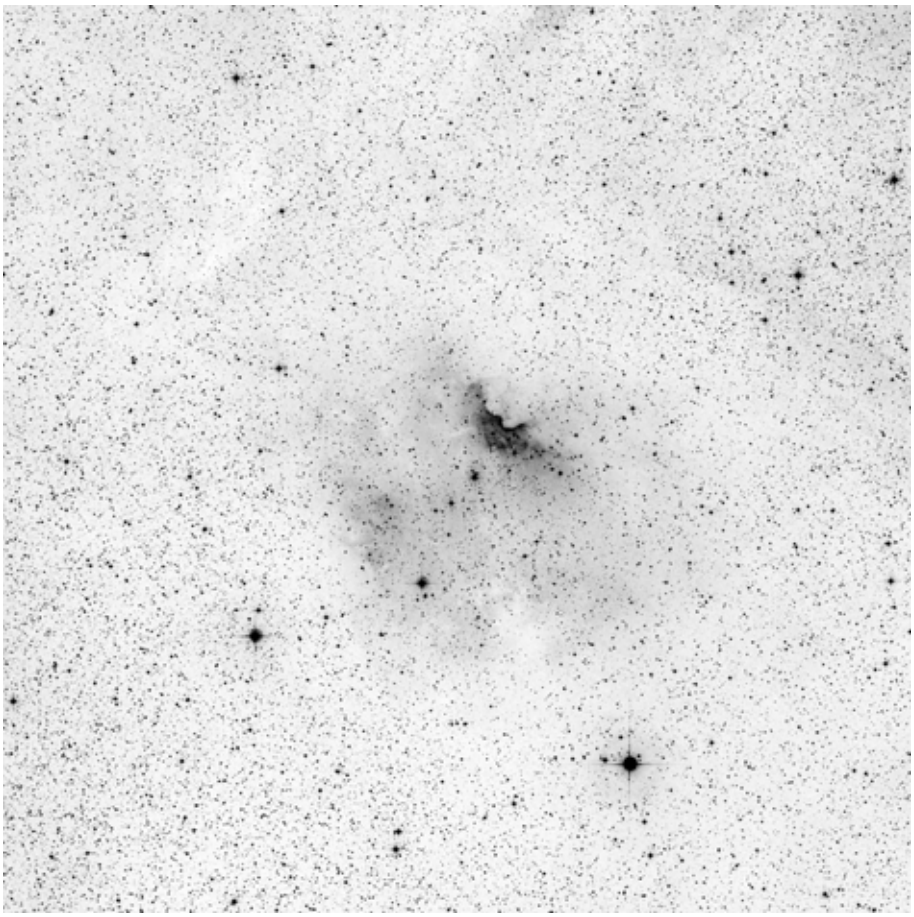
Observing notes:


+65°00'
23h30m
21h00m
Alkurhah
Alderamin
+60°00'
Garnet Star
Tr 37, 1396
+55°00'
23h00m
22h30m
22h00m
21h30m

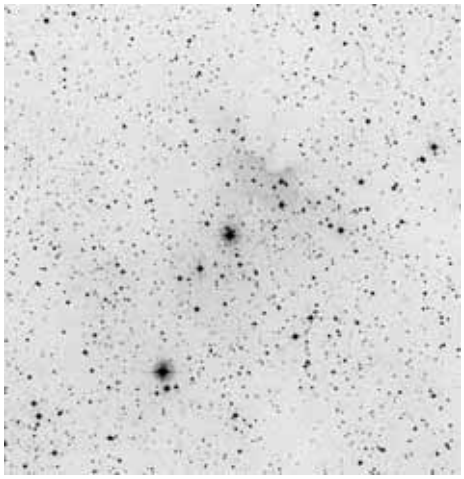

22h35m
+61°00'
+60°00'
+59°00'
B175-4
PK 104+ 0.1
+58°00'
NGC 7261
PK 103+ 0.2
NGC 7235
22h30m
22h25m
22h20m
22h15m
22h10m
22h05m
22h00m
21h55m

Sh 2 - 135

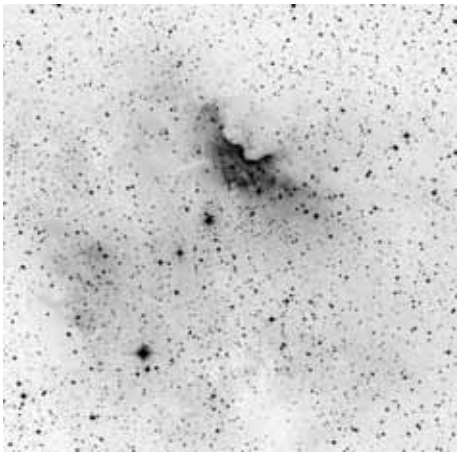
in Cepheus



60x60, red



POSS blue



POSS red



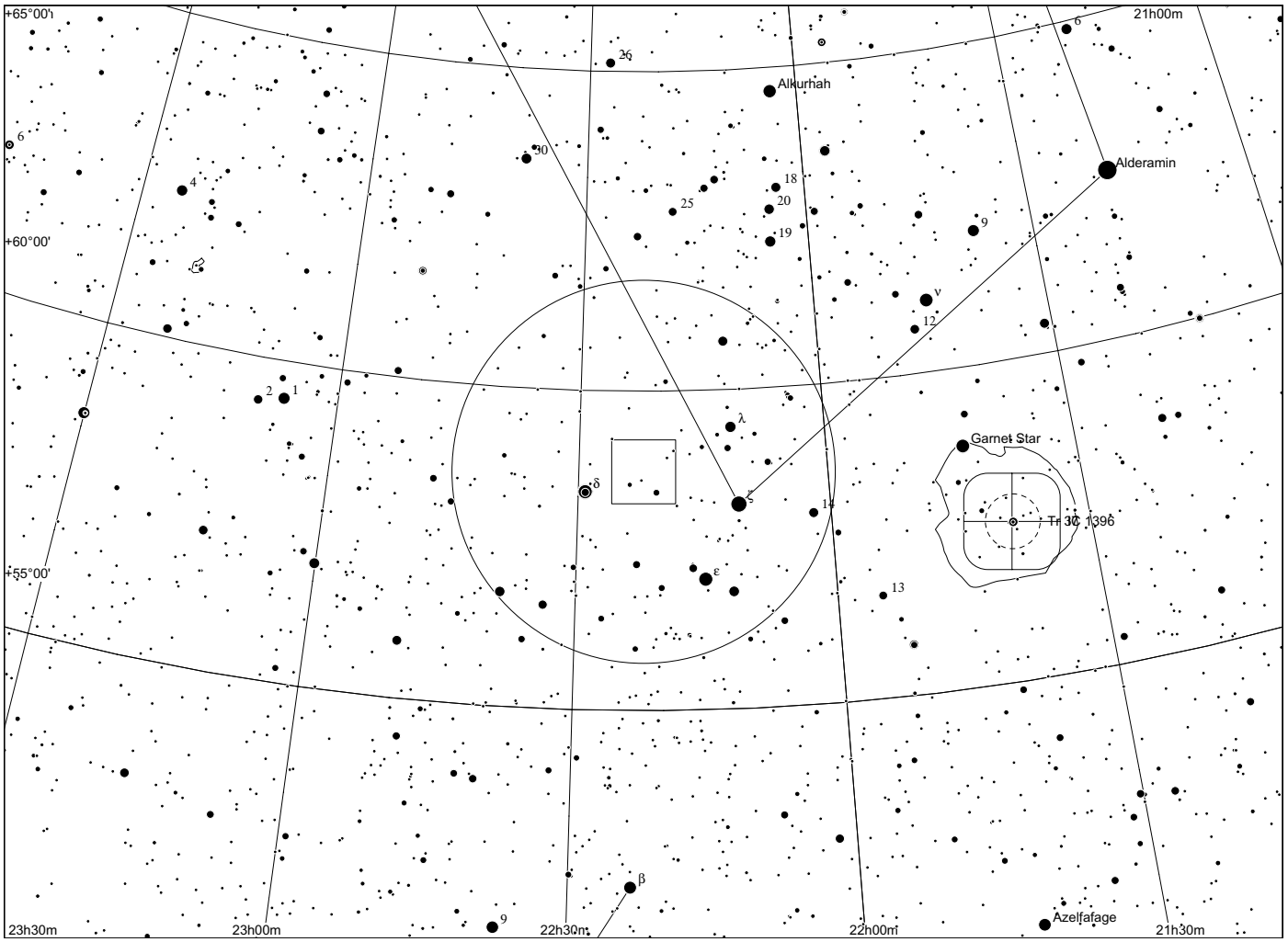
composite

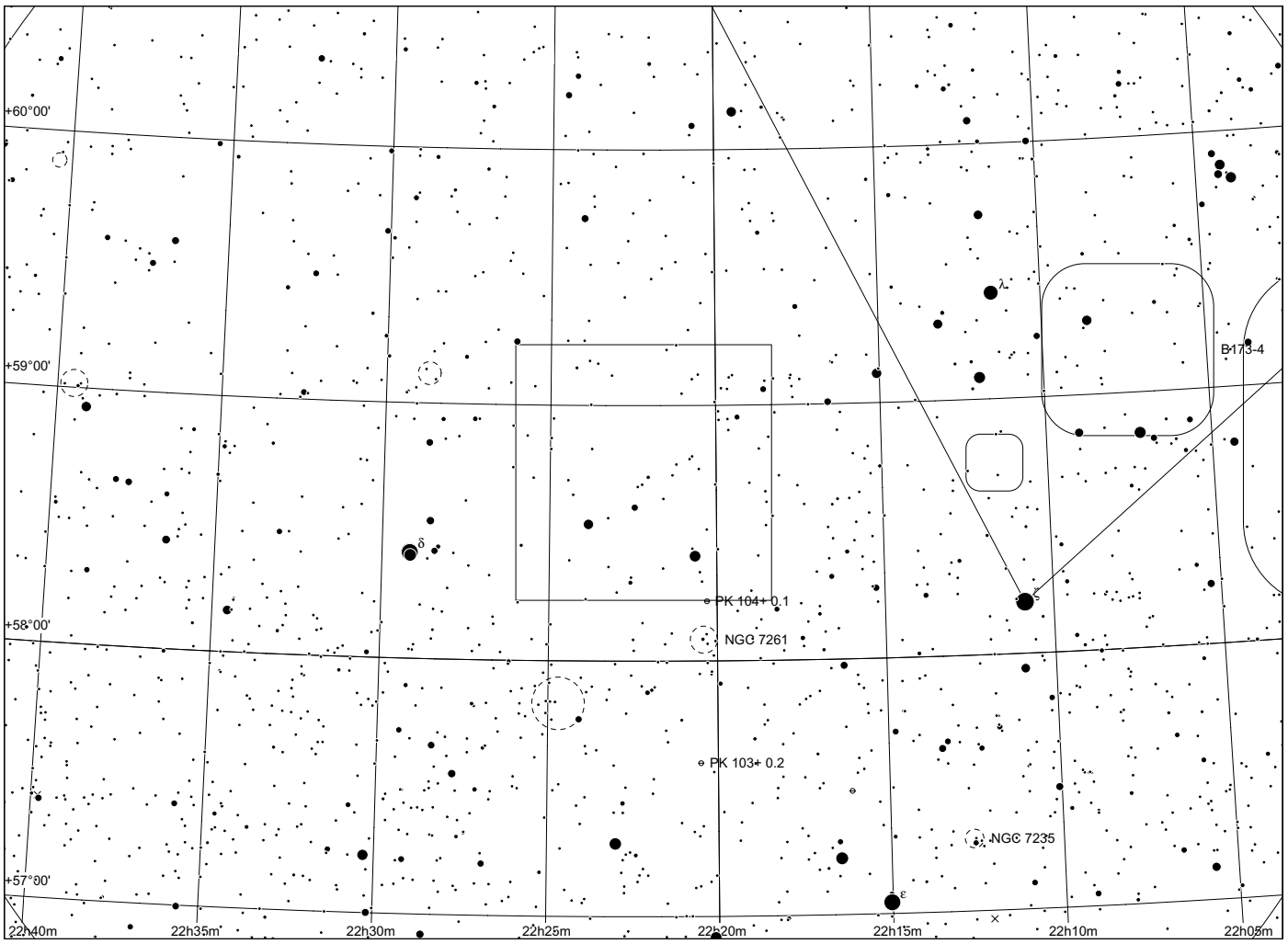
	other name	RA	dec	dia. '	F	S	B
Sh 2-135		22 22 11.0	+58 44 18	15	3	2	2

Distance: 1400 pc, Size: 6.1 pc, Source: 1982ApJS...49..183B

This is probably a blister on a dark dust cloud in front of the bright nebula. The nebula is ionised by an O9.5V class star and located at a distance of 1900 parsecs.

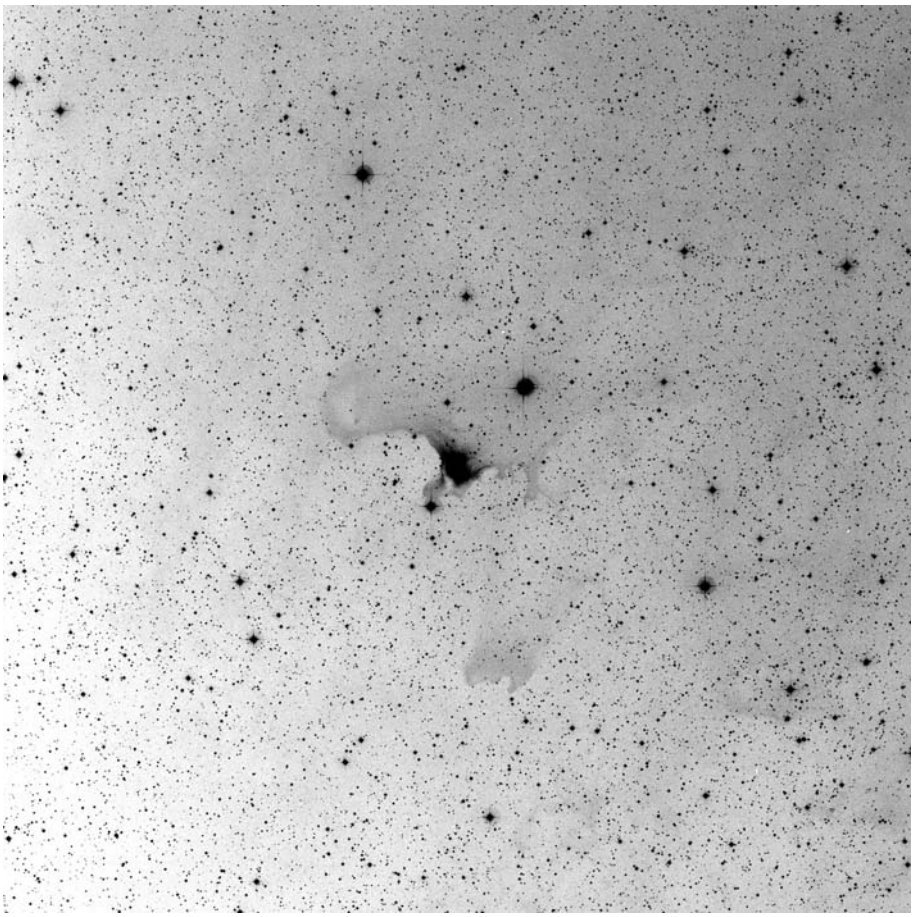
Observing notes:


+65°00'
+60°00'
+55°00'
21h00m
Alkurhah
Alderamin
Garnet Star
Tr 37, 1396
Azelfafage
23h30m
23h00m
22h30m
22h00m
21h30m

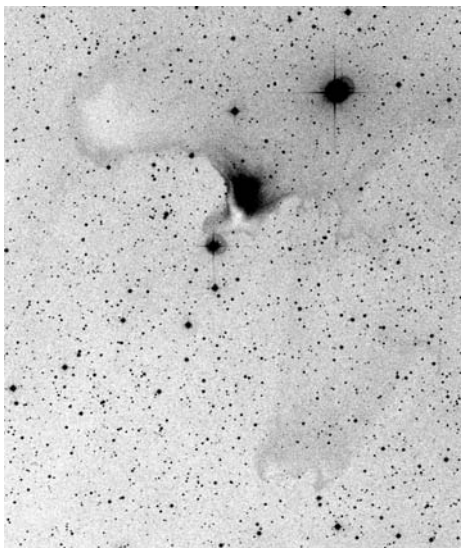

+60°00'
+59°00'
+58°00'
+57°00'
B173-4
PK 104+ 0.1
NGC 7261
PK 103+ 0.2
NGC 7235
22h40m
22h35m
22h30m
22h25m
22h20m
22h15m
22h10m
22h05m

Sh 2 - 136

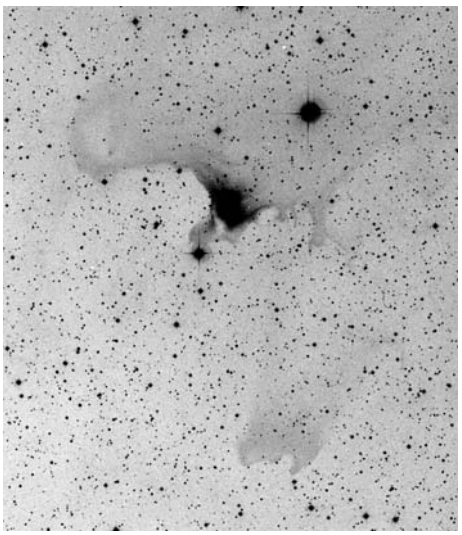
in Cepheus



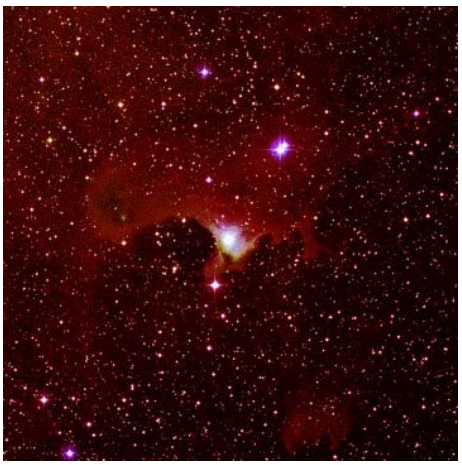
60x60, red



POSS blue



POSS red



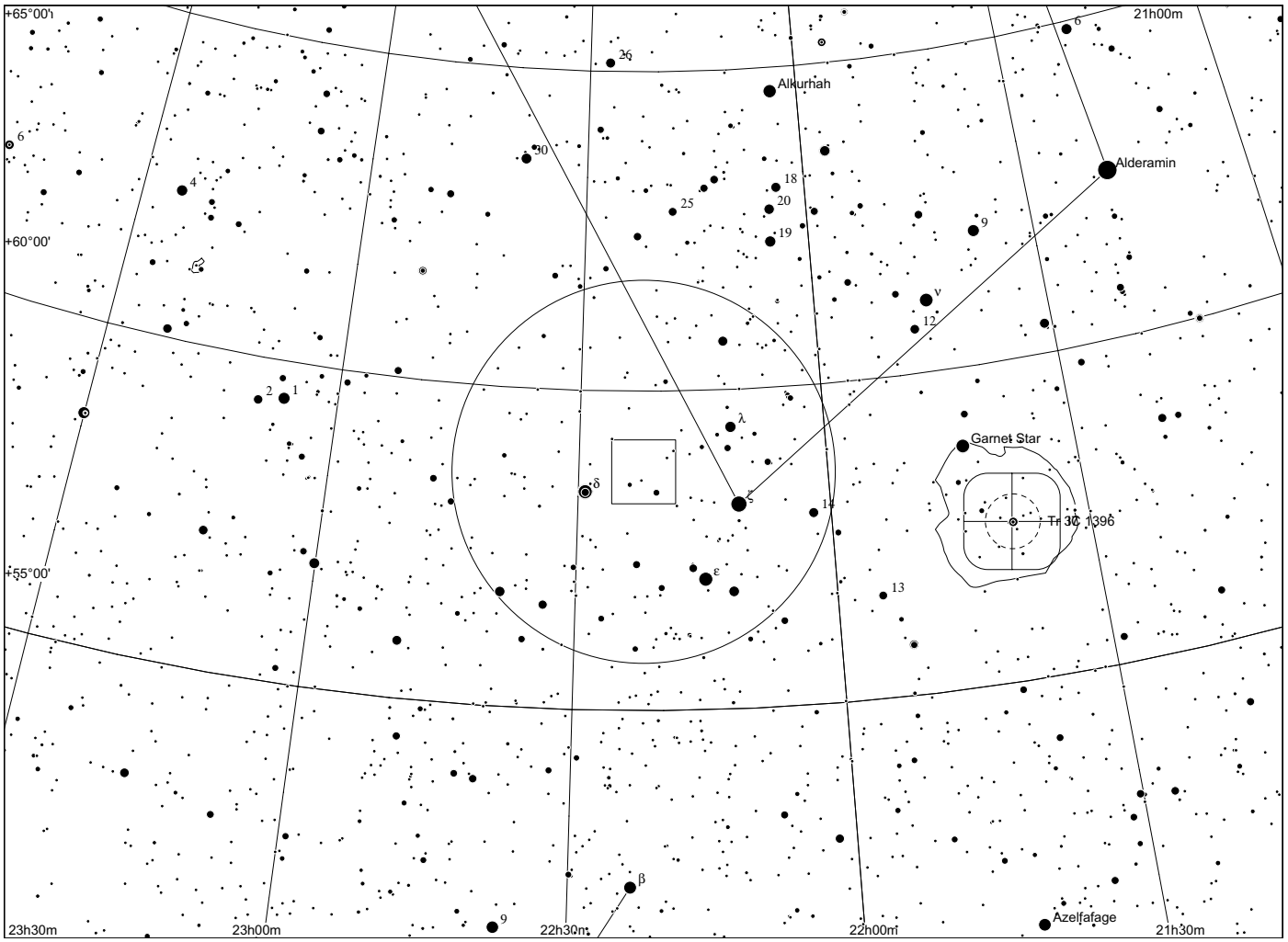
composite

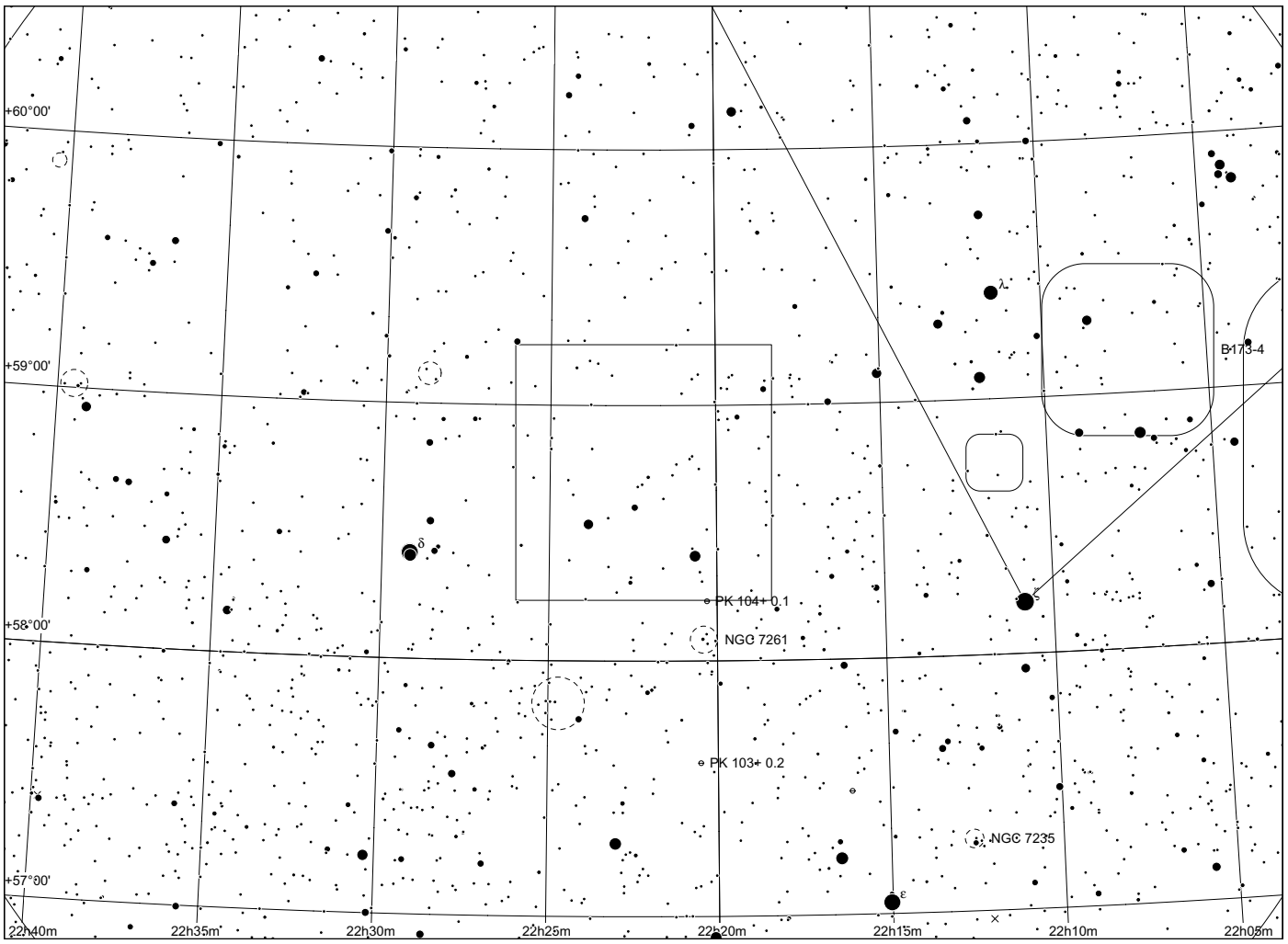
	other name	RA	dec	dia. '	F	S	B
Sh 2-136	Gespensternebel	21 16 29.5	+68 15 12	5	3	2	3

Distance: 450 pc, Size: 0.7 pc, Source: 2005MmSAI..76..400M

This is a Bok globule, not an HII region. Inside the glowing globule, CB 230, new stars are being born.

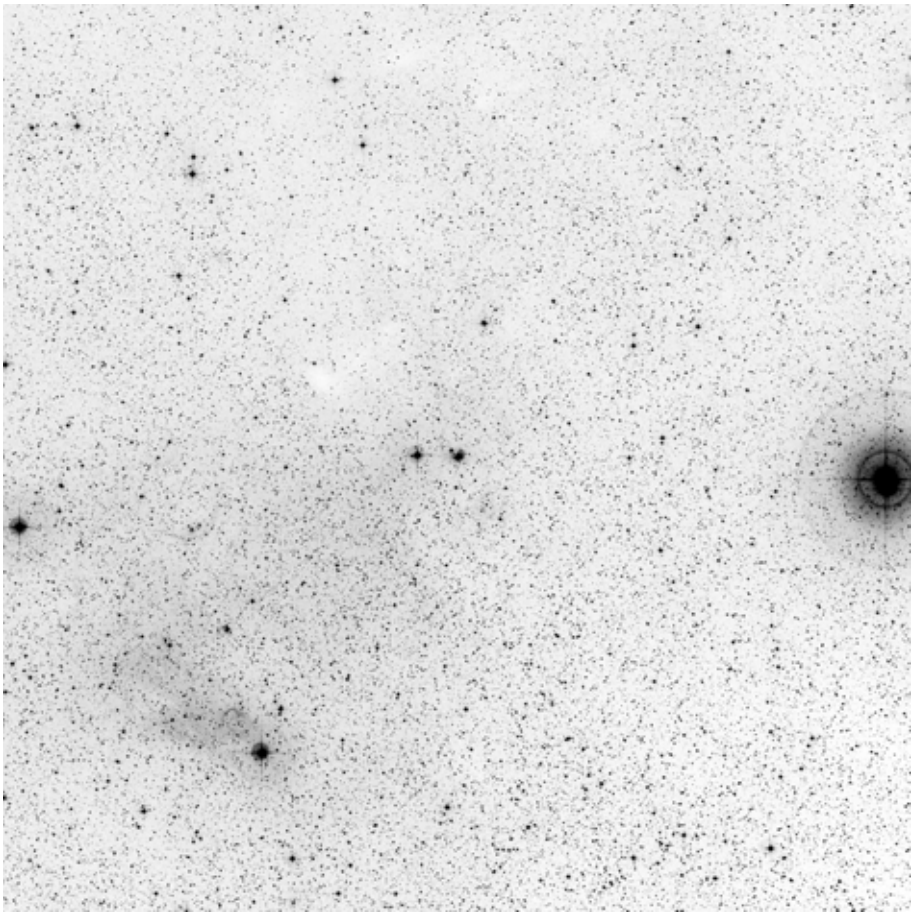
Observing notes:


+65°00'
+60°00'
+55°00'
21h00m
Alkurhah
Alderamin
Garnet Star
Tr 37, 1396
Azelfafage
23h30m
23h00m
22h30m
22h00m
21h30m

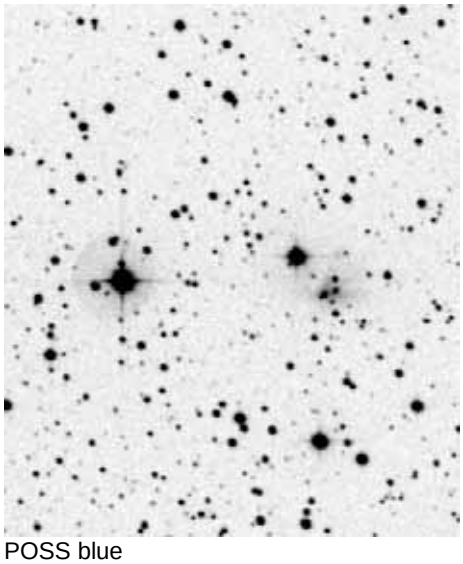

+60°00'
+59°00'
+58°00'
+57°00'
B173-4
PK 104+ 0.1
NGC 7261
PK 103+ 0.2
NGC 7235
22h40m
22h35m
22h30m
22h25m
22h20m
22h15m
22h10m
22h05m

Sh 2 - 138

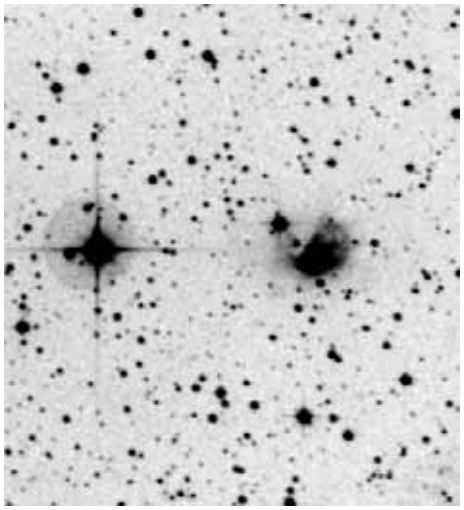
in Cepheus



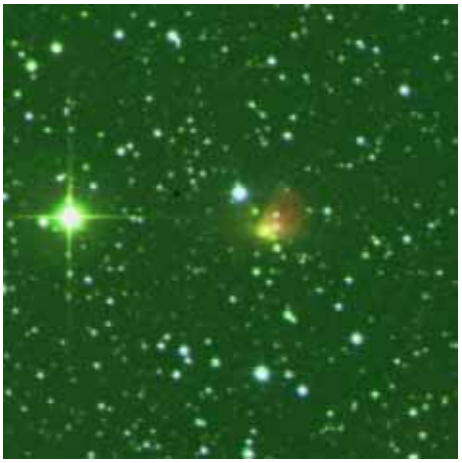
60x60, red



POSS blue



POSS red



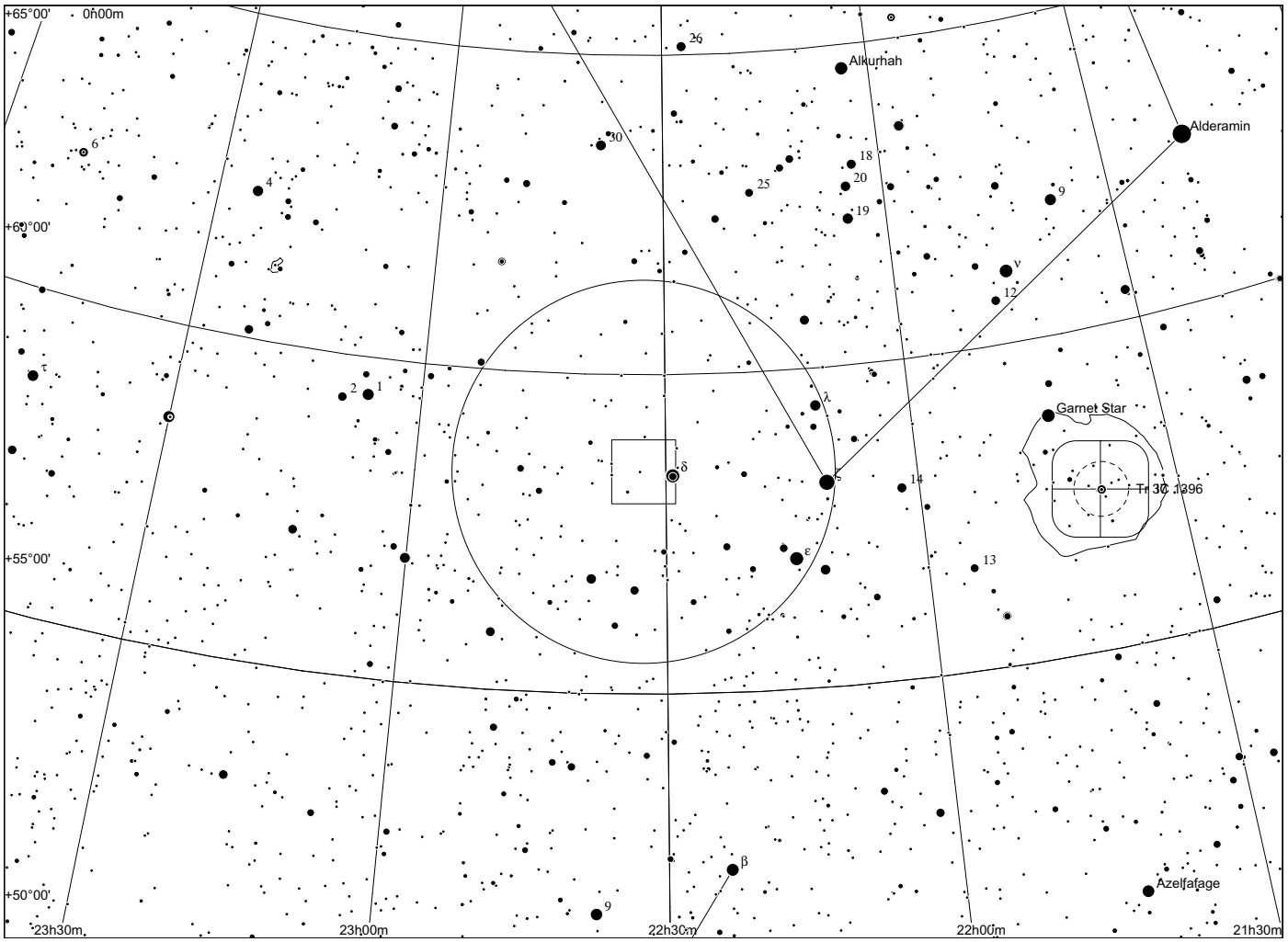
composite

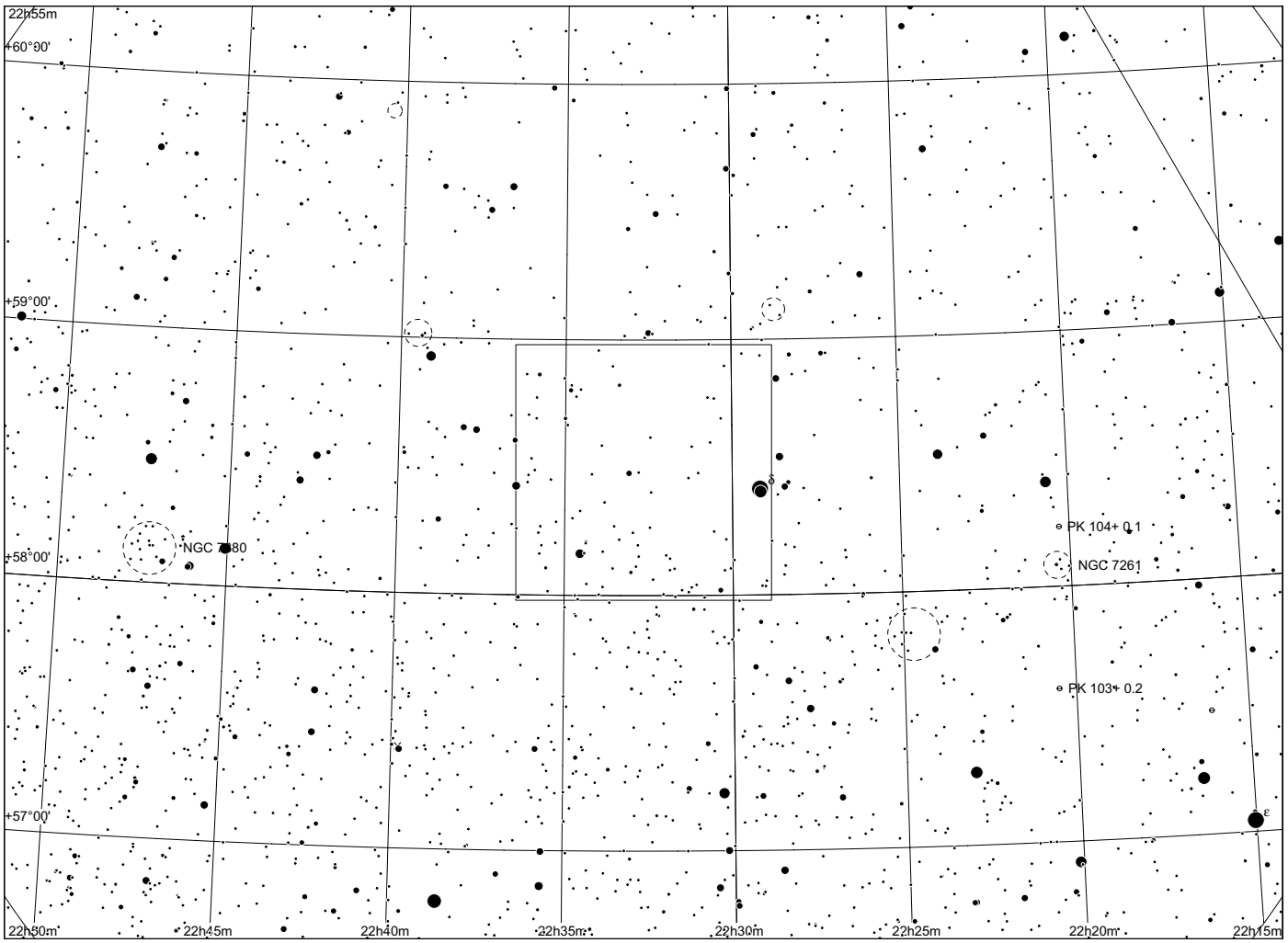
	other name	RA	dec	dia. '	F	S	B
Sh 2-138		22 32 39.0	+58 28 55	1	3	2	2

Distance: 4000 pc, Size: 1.2 pc, Source: 2003A&A...397..133R

Embedded in this compact HII region is a large star cluster resembling the Orion Trapezium cluster: it is centrally peaked around several massive stars, and is dense - more than 550 stars at its centre.

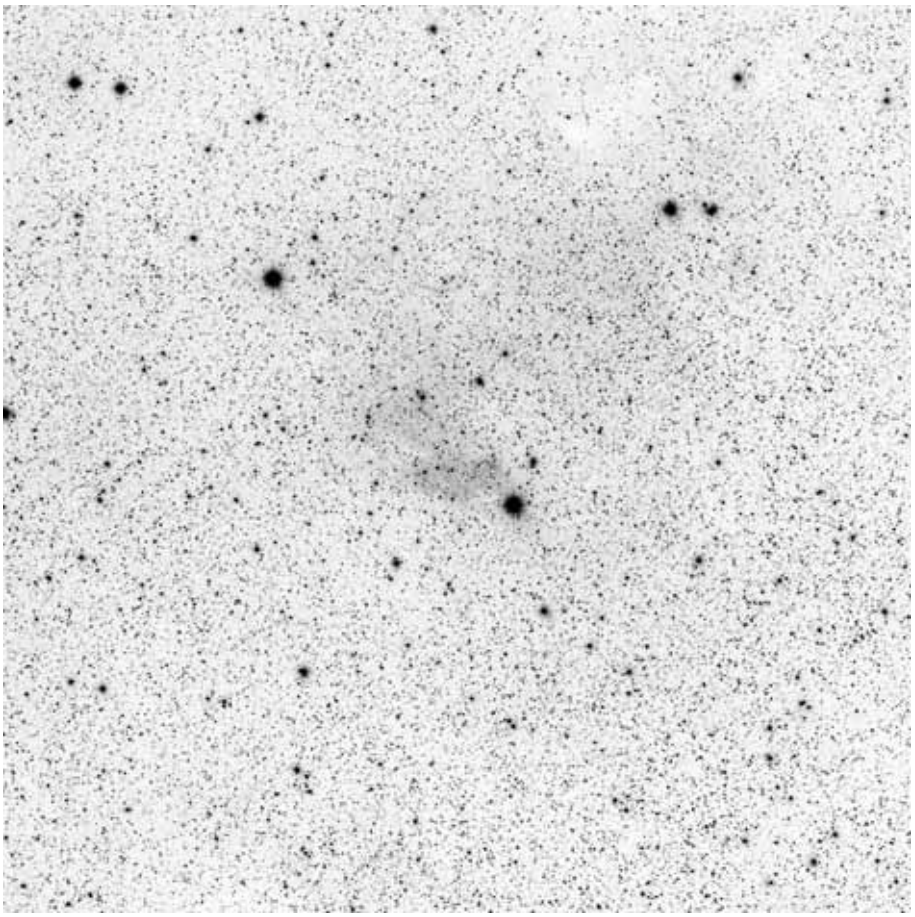
Observing notes:


+65°00'
0h00m
Alkurhah
Alderamin
+60°00'
Garnet Star
Tr 37
NGC 7396
+55°00'
Azelfafage
+50°00'
23h30m
23h00m
22h30m
22h00m
21h30m

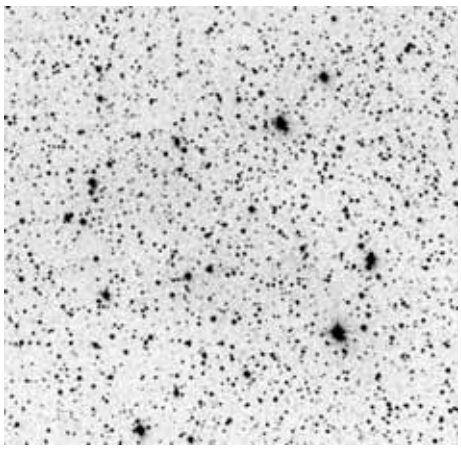

22h55m
+60°00'
+59°00'
NGC 7380
PK 104+ 0.1
+58°00'
NGC 7261
PK 103+ 0.2
+57°00'
22h50m
22h45m
22h40m
22h35m
22h30m
22h25m
22h20m
22h15m

Sh 2 - 139

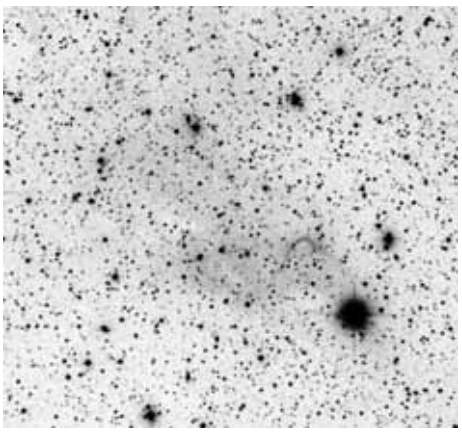
in Cepheus



60x60, red



POSS blue



POSS red

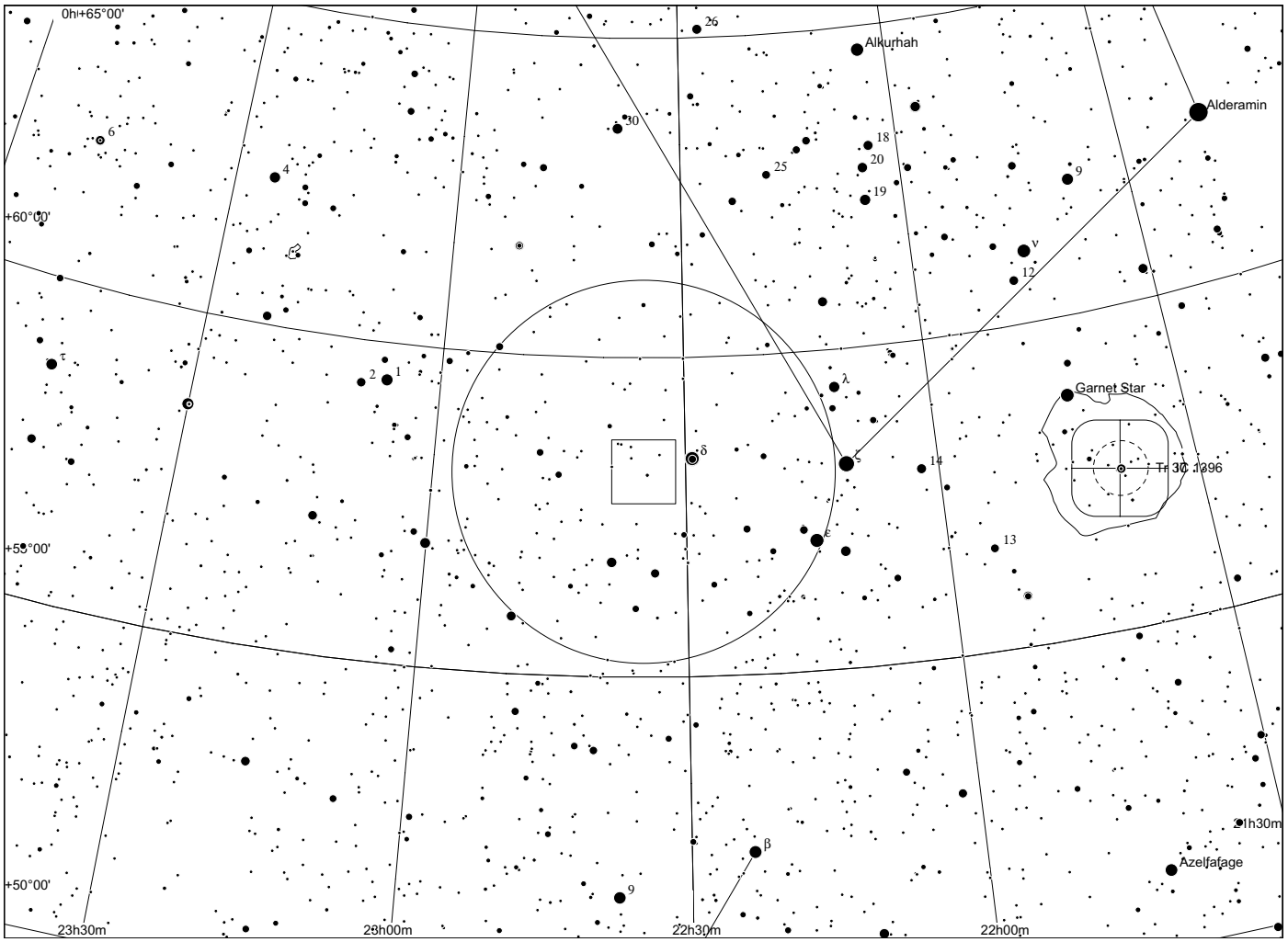


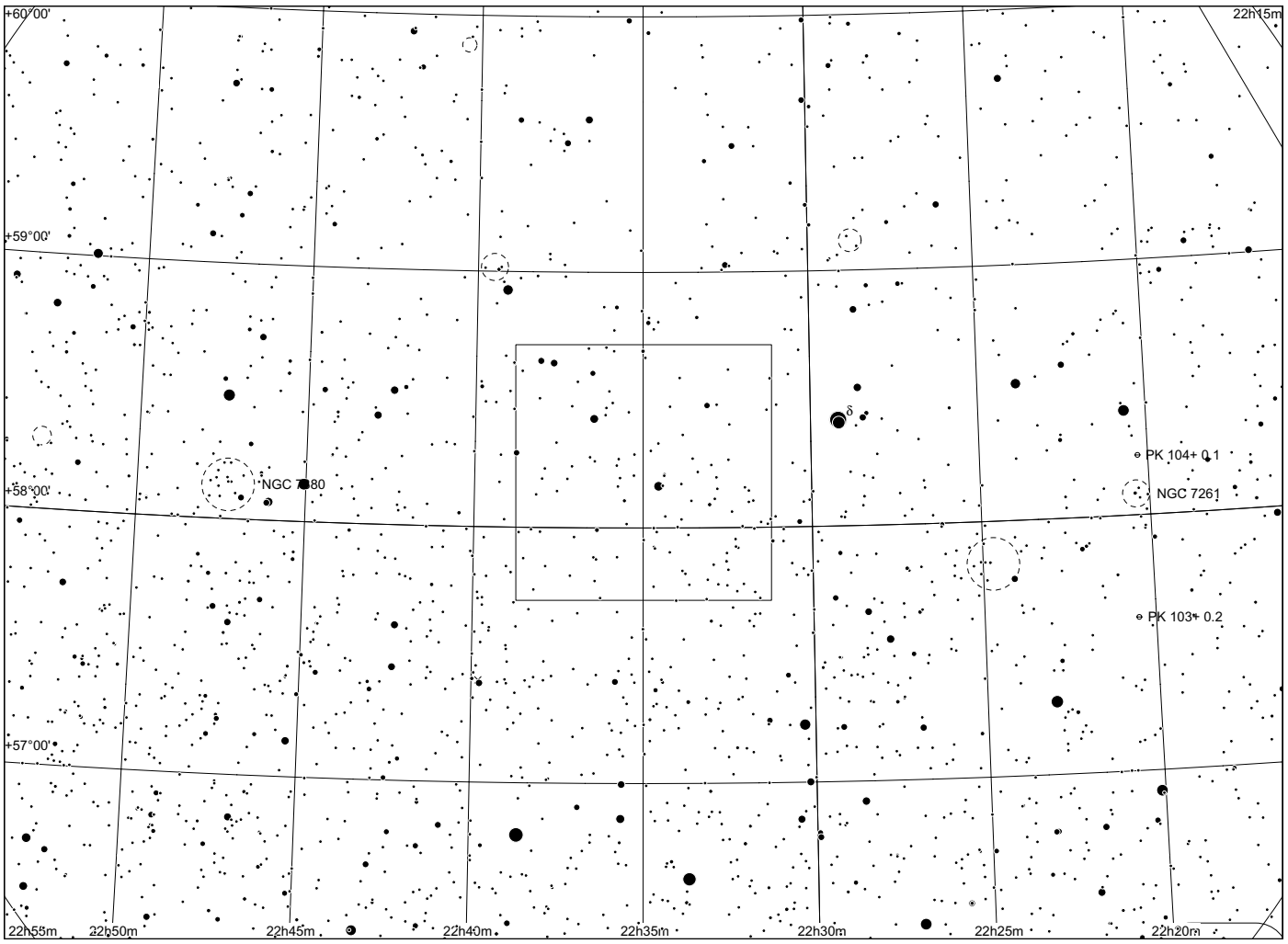
composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-139		22 34 59.4	+58 13 02	10	3	2	1

Distance: 3300 pc, Size: 24.0 pc, Source: 1982ApJS...49..183B

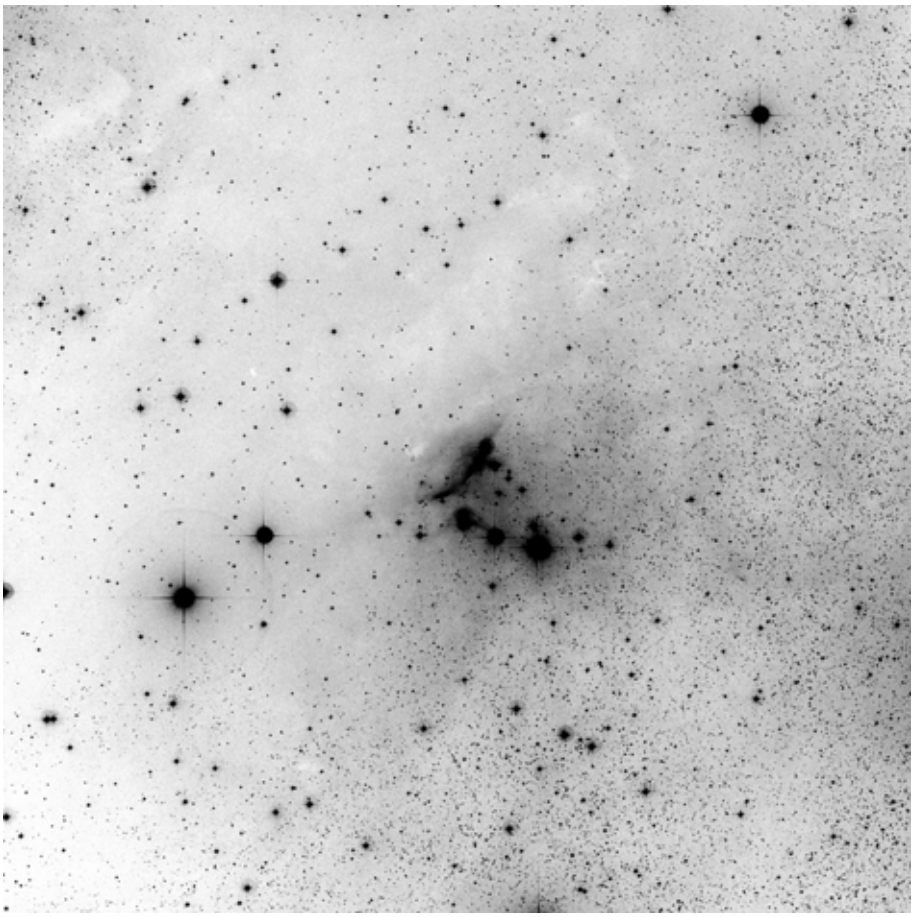
Observing notes:


0h+65°00'
+60°00'
+55°00'
+50°00'
23h30m
23h00m
22h30m
22h00m
21h30m
Alkurhah
Alderamin
Garnet Star
Tr 3C 1396
Azelfafage
26
30
6
4
18
20
25
19
9
ν
12
τ
2
1
λ
δ
ζ
14
ε
13
β
9

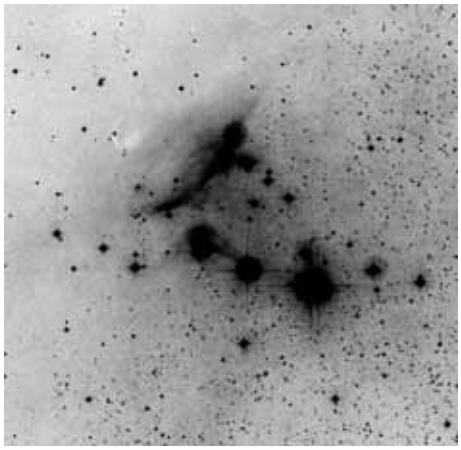

+60°00'
+59°00'
+58°00'
+57°00'
22h15m
22h55m
22h50m
22h45m
22h40m
22h35m
22h30m
22h25m
22h20m
δ
PK 104+ 0.1
NGC 7261
PK 103+ 0.2

Sh 2 - 140

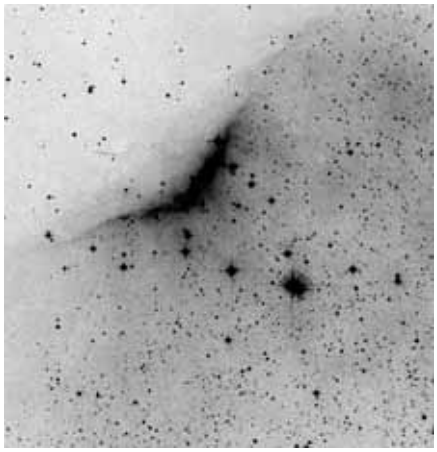
in Cepheus



60x60, blue



POSS blue



POSS red



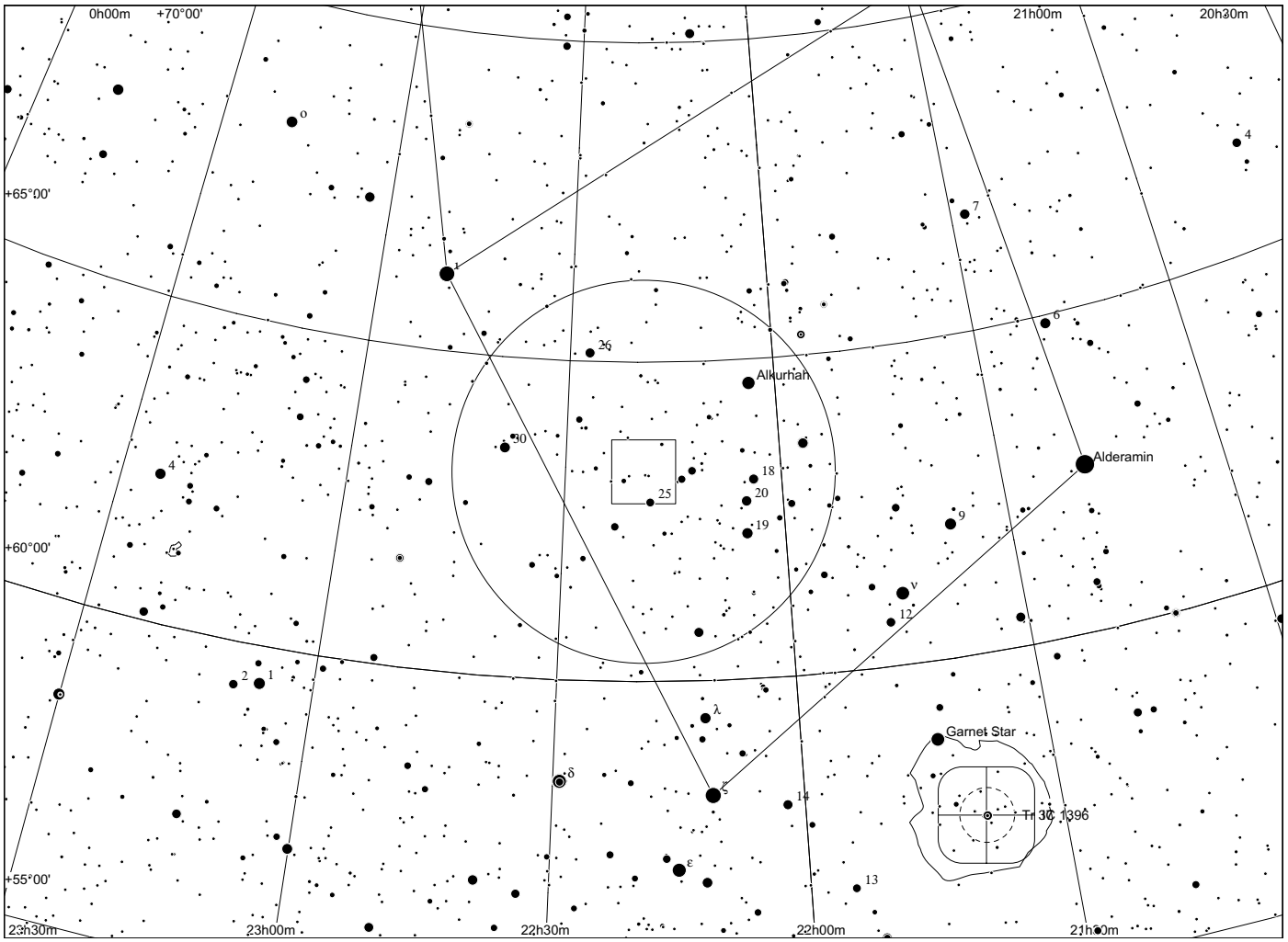
composite

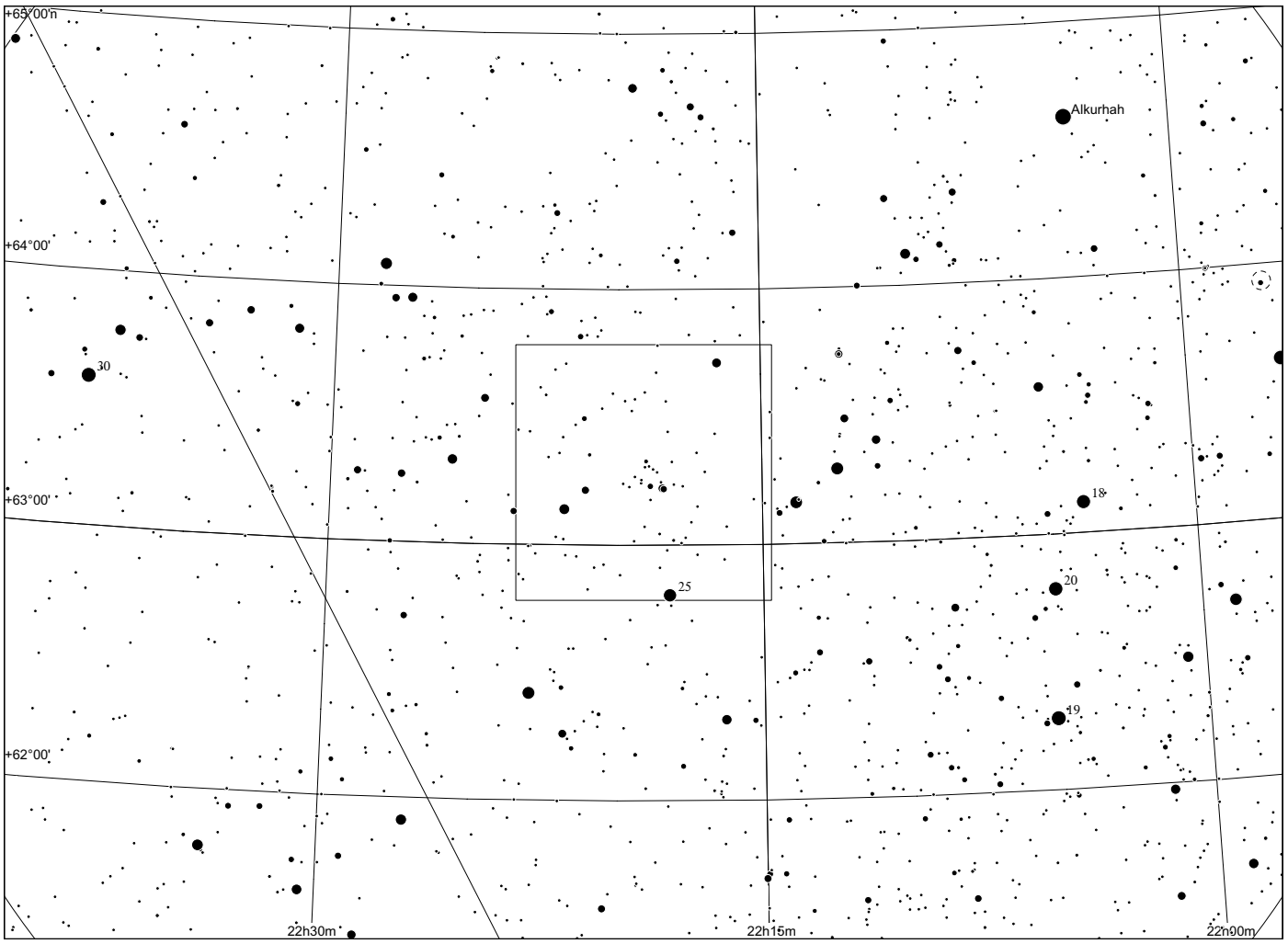
	other name	RA	dec	dia. '	F	S	B
Sh 2-140		22 19 07.0	+63 17 07	30	2	2	3

Distance: 900 pc, Size: 7.9 pc, Source: 1982ApJS...49..183B

Sh 2-140 is created by the B0.5 V star HD 211880 exciting the southwest side of the L1204 molecular cloud.

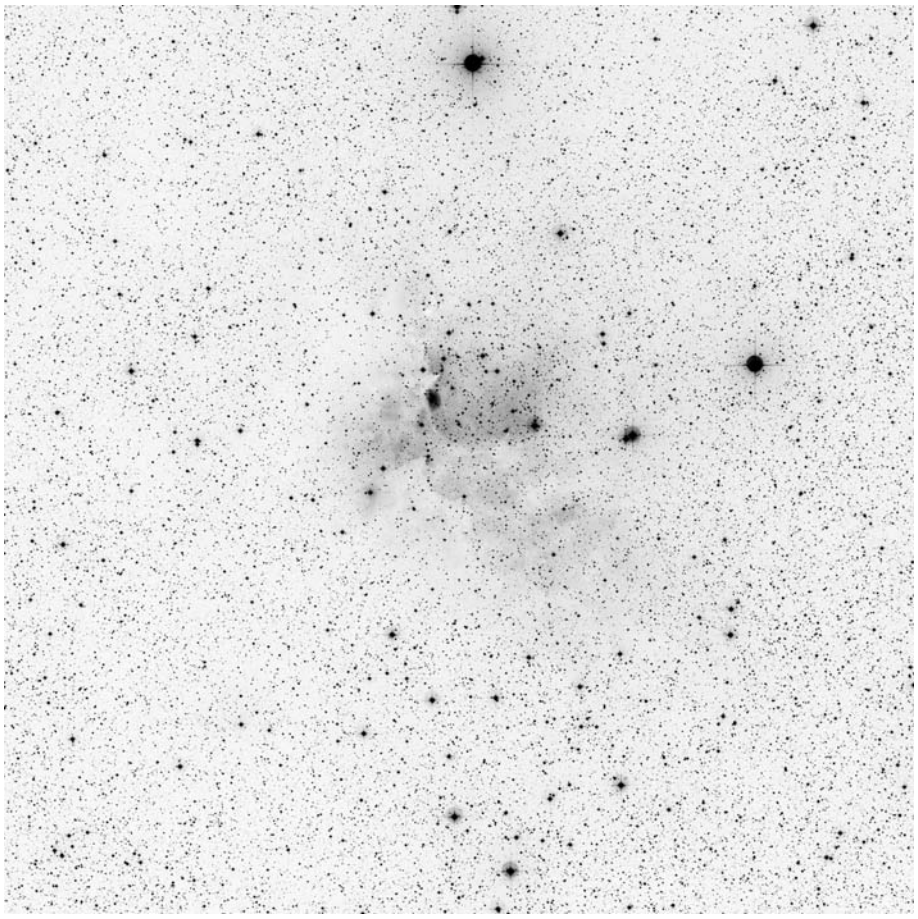
Observing notes:


0h00m
+70°00'
21h00m
20h30m
+65°00'
+60°00'
+55°00'
23h30m
23h00m
22h30m
22h00m
21h30m
Alkurhah
Alderamin
Garnet Star
Tr 3C 1396
o
4
7
1
6
26
30
18
20
25
19
9
ν
12
2
λ
δ
ζ
14
ε
13

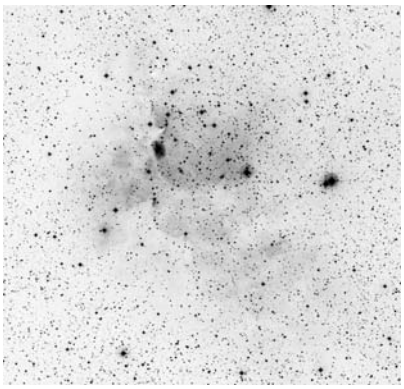

+65°00'n
+64°00'
+63°00'
+62°00'
22h30m
22h15m
22h00m
Alkurhah
30
18
25
20
19

Sh 2 - 142

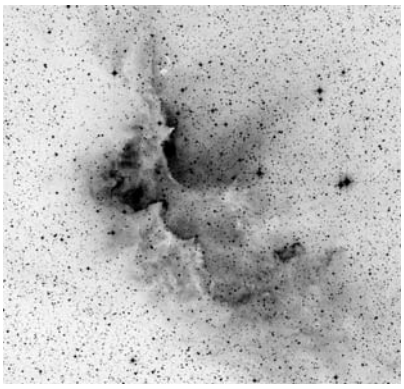
in Cepheus



60x60, blue



POSS blue



POSS red



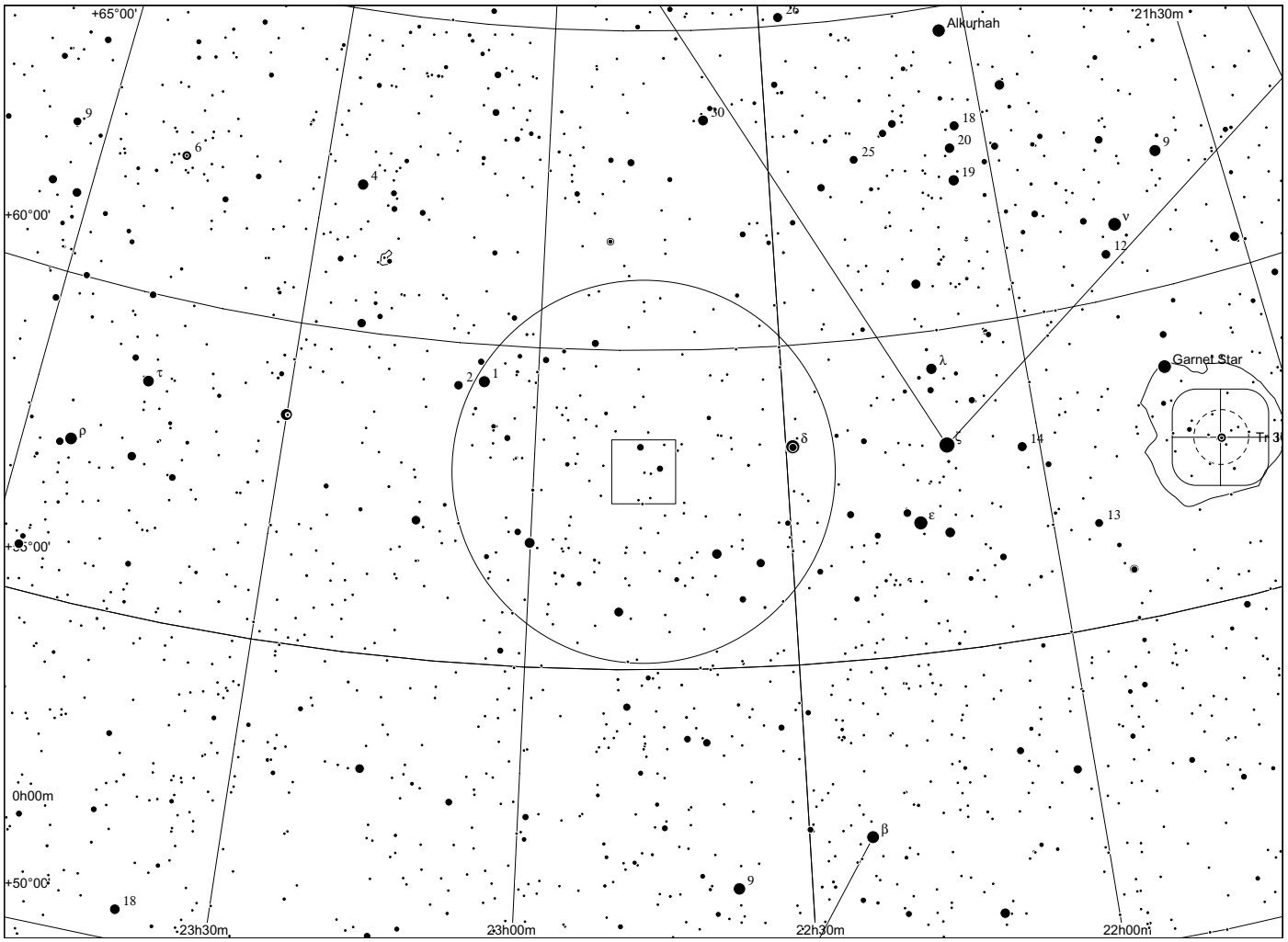
narrow band Dean Salman

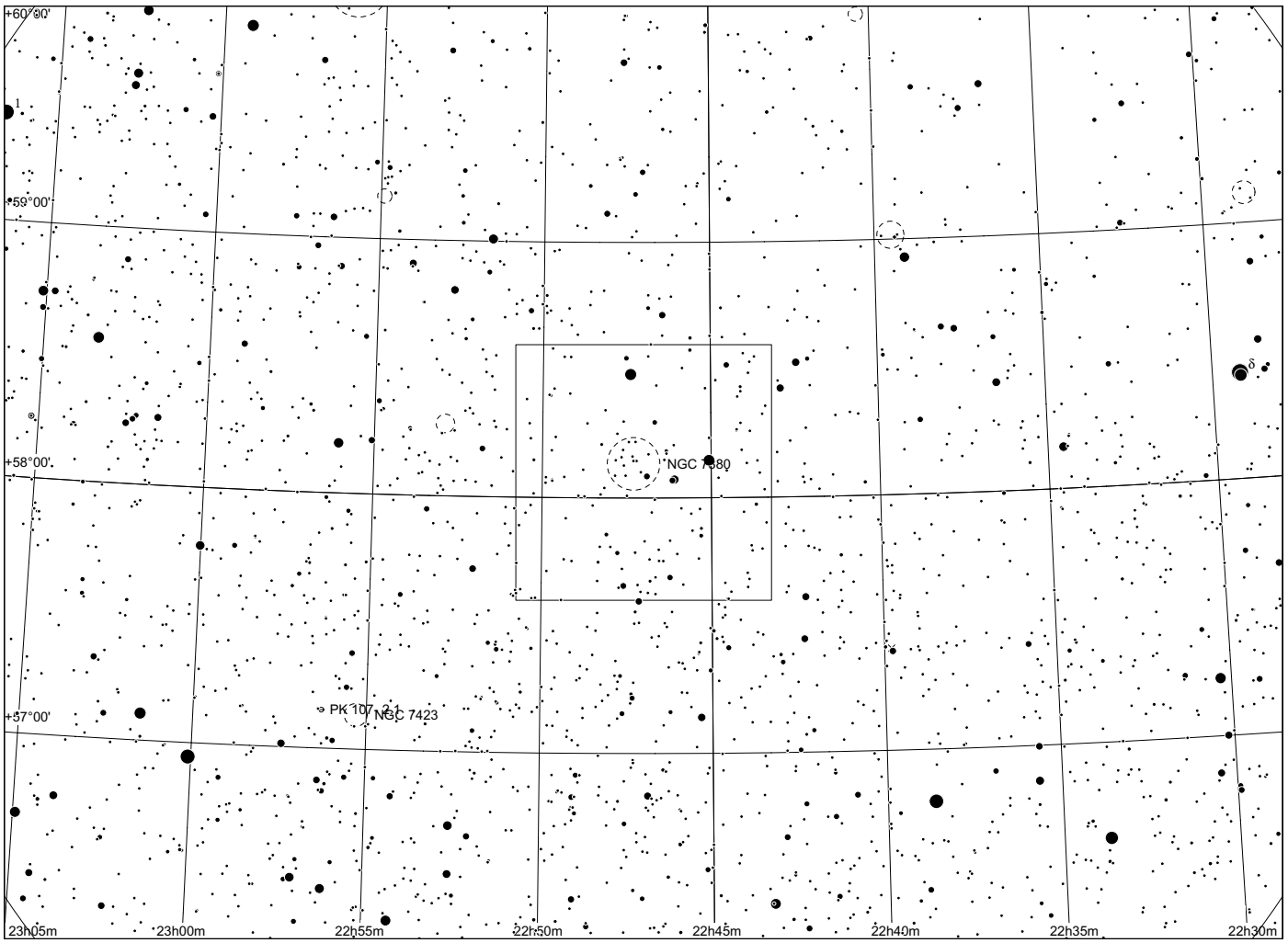
	other name	RA	dec	dia. '	F	S	B
Sh 2-142	Contains NGC7380	22 47 35.1	+58 03 39	30	3	3	3

Distance: 3537 pc, Size: 7.2 pc, Source: 2003A&A...397..213P

This HII region, entwined with the star cluster NGC 7380, contains 4000 solar masses of gas and is ionised by the eclipsing binary star DH Cephei (O6+O6). It is associated with a molecular cloud containing an additional 6-15 thousand solar masses of gas, and the star cluster NGC 7382, which are all part of the Cepheus OB1 association.

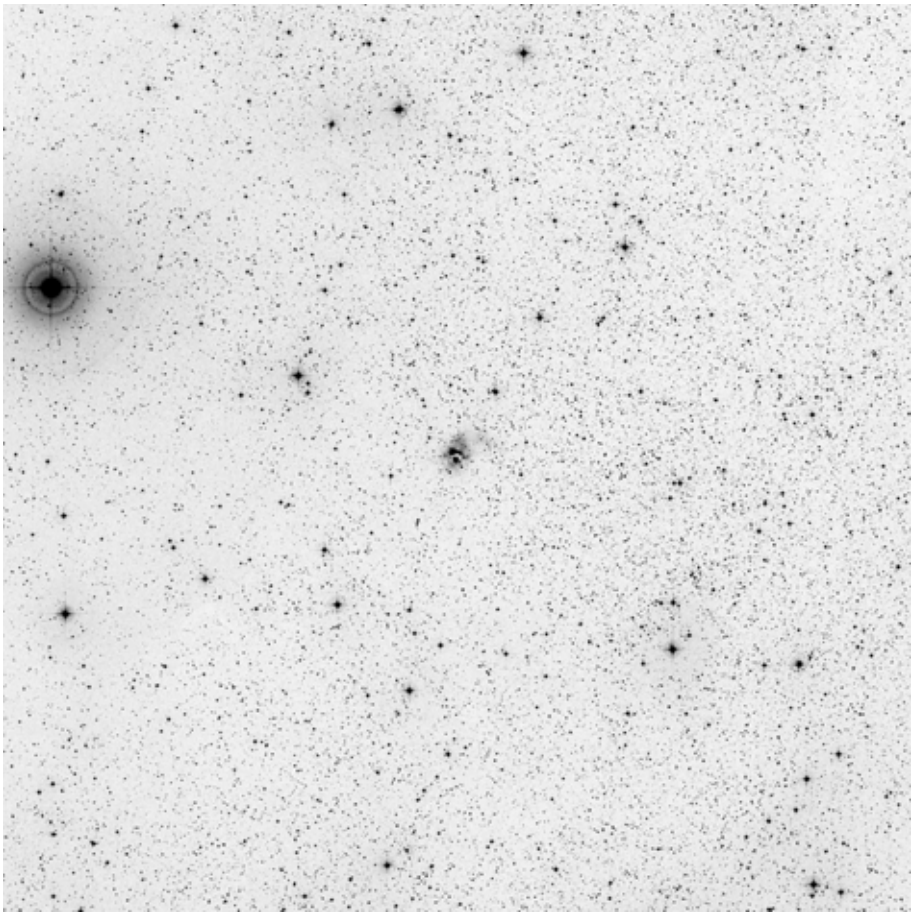
Observing notes:


+65°00'
+60°00'
+55°00'
+50°00'
21h30m
0h00m
23h30m
23h00m
22h30m
22h00m
Alkurhah
Garnet Star
Tr 3
NGC 7380

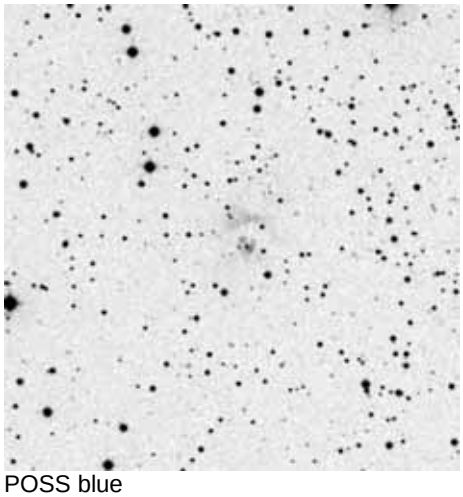

+60°00'
+59°00'
+58°00'
+57°00'
PK 107 2.1
NGC 7423
23h05m
23h00m
22h55m
22h50m
22h45m
22h40m
22h35m
22h30m

Sh 2 - 146

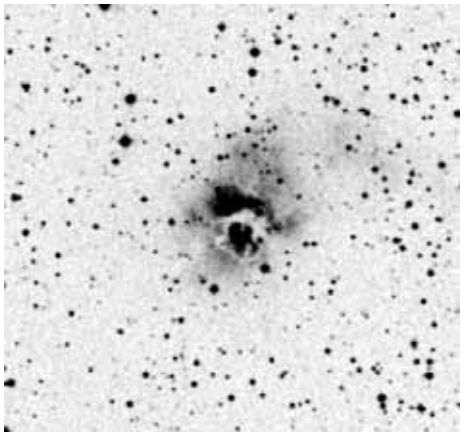
in Cepheus



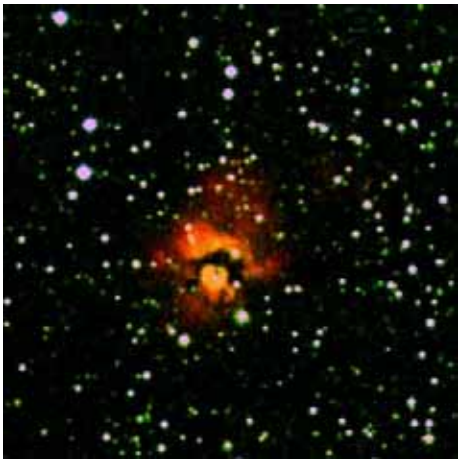
60x60, red



POSS blue



POSS red



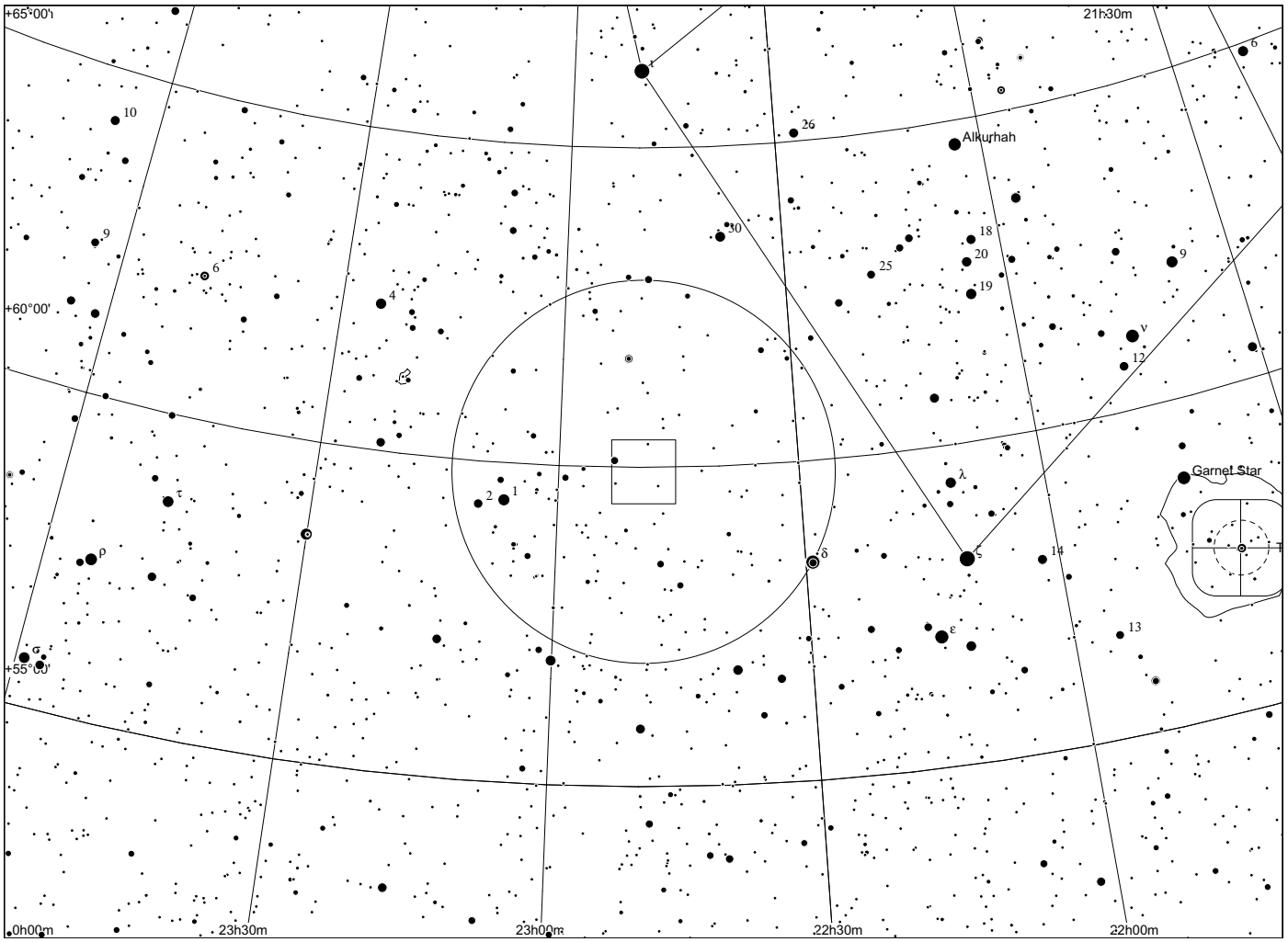
composite

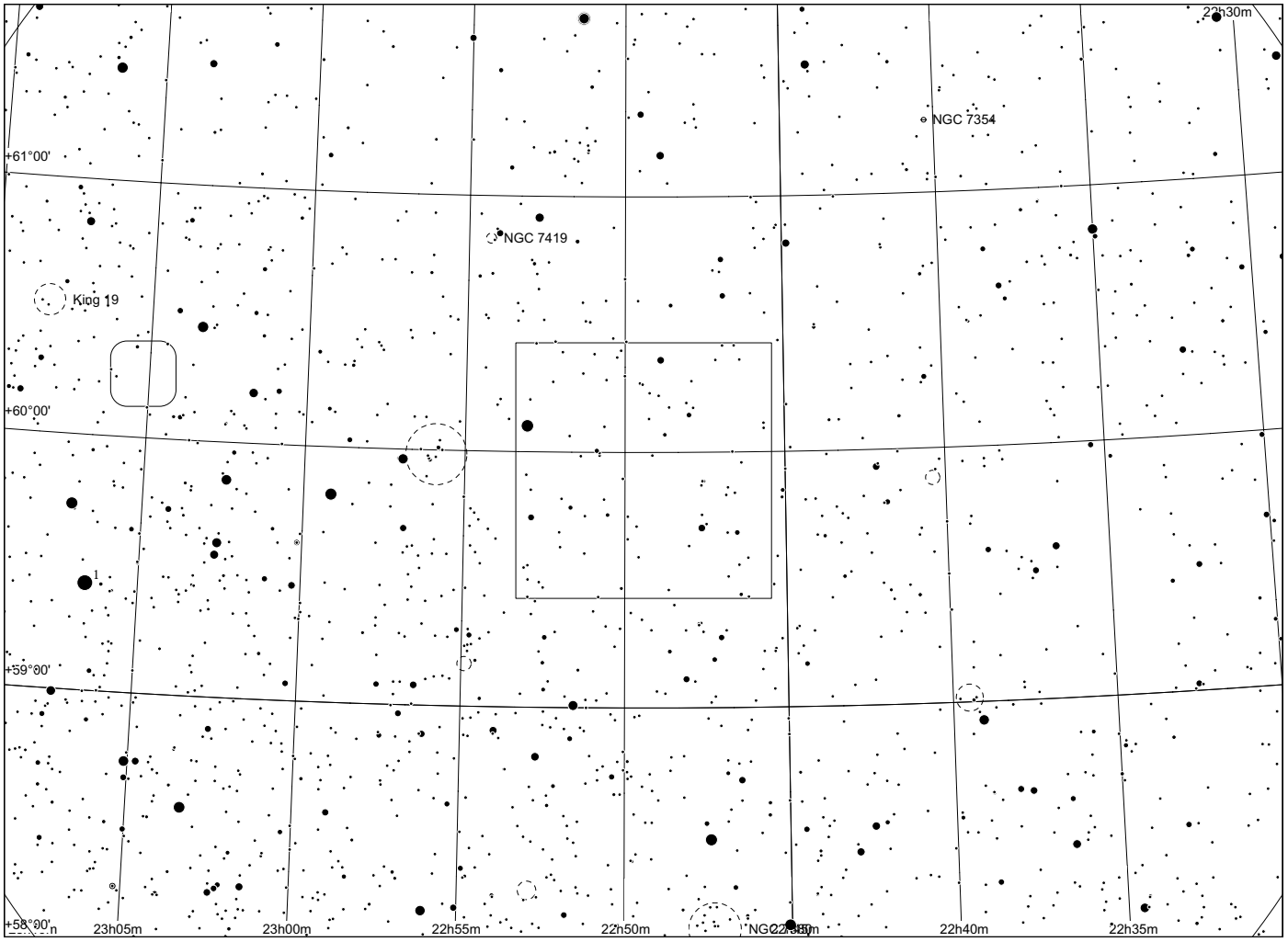
	other name	RA	dec	dia. '	F	S	B
Sh 2-146		22 49 25.5	+59 55 45	2	3	2	2

Distance: 5483 pc, Size: 5.9 pc, Source: 2003A&A...397..213P

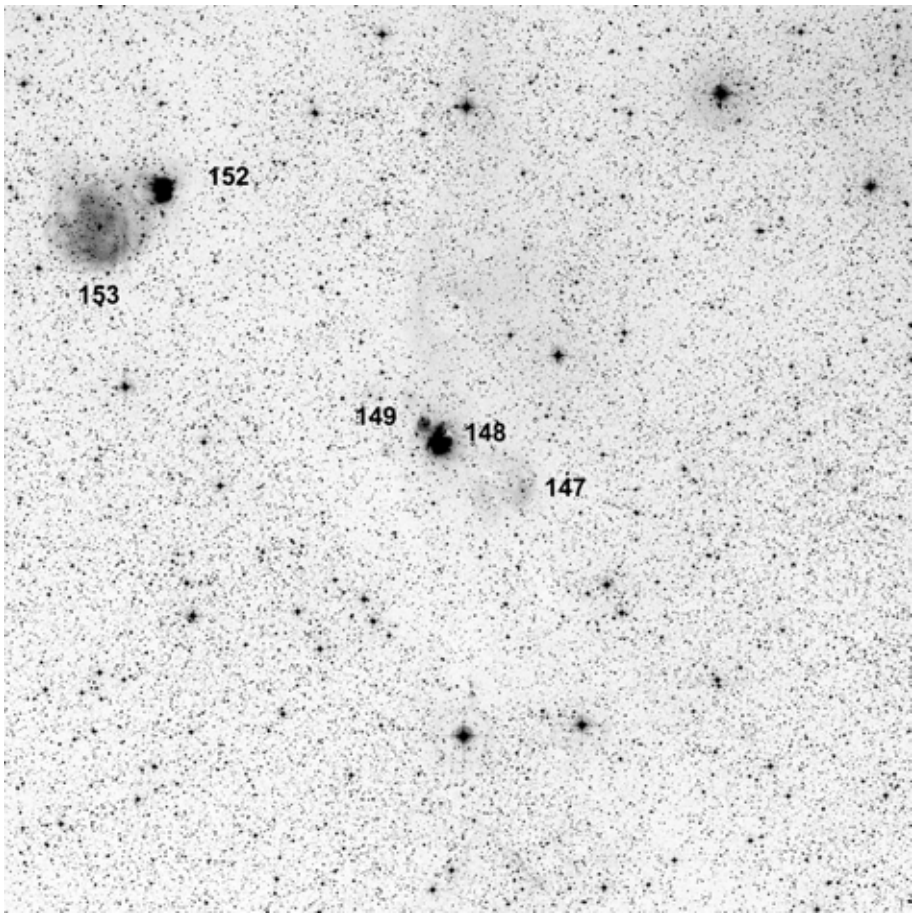
This HII region is split in half by a dust cloud and is excited by a highly obscured O7 star.

Observing notes:

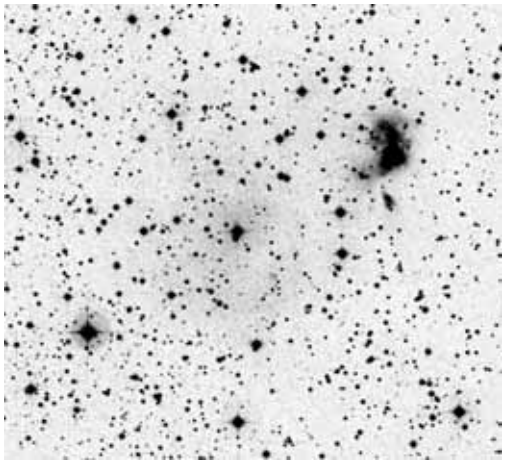

+65°00'
21h30m
Alkurhah
Garnet Star
+60°00'
+55°00'
0h00m
23h30m
23h00m
22h30m
22h00m


22h30m
NGC 7354
+61°00'
NGC 7419
King 19
+60°00'
+59°00'
+58°00'
23h05m
23h00m
22h55m
22h50m
22h40m
22h35m

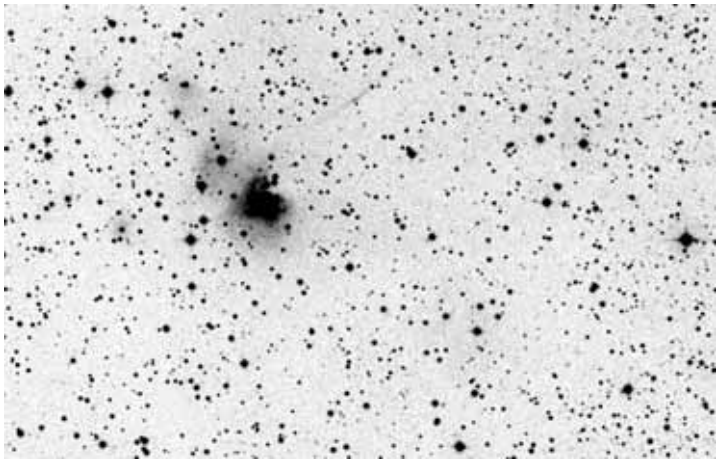
Sh 2 - 147/148/149 /152/153 in Cepheus



60x60, red



POSS blue 153/152



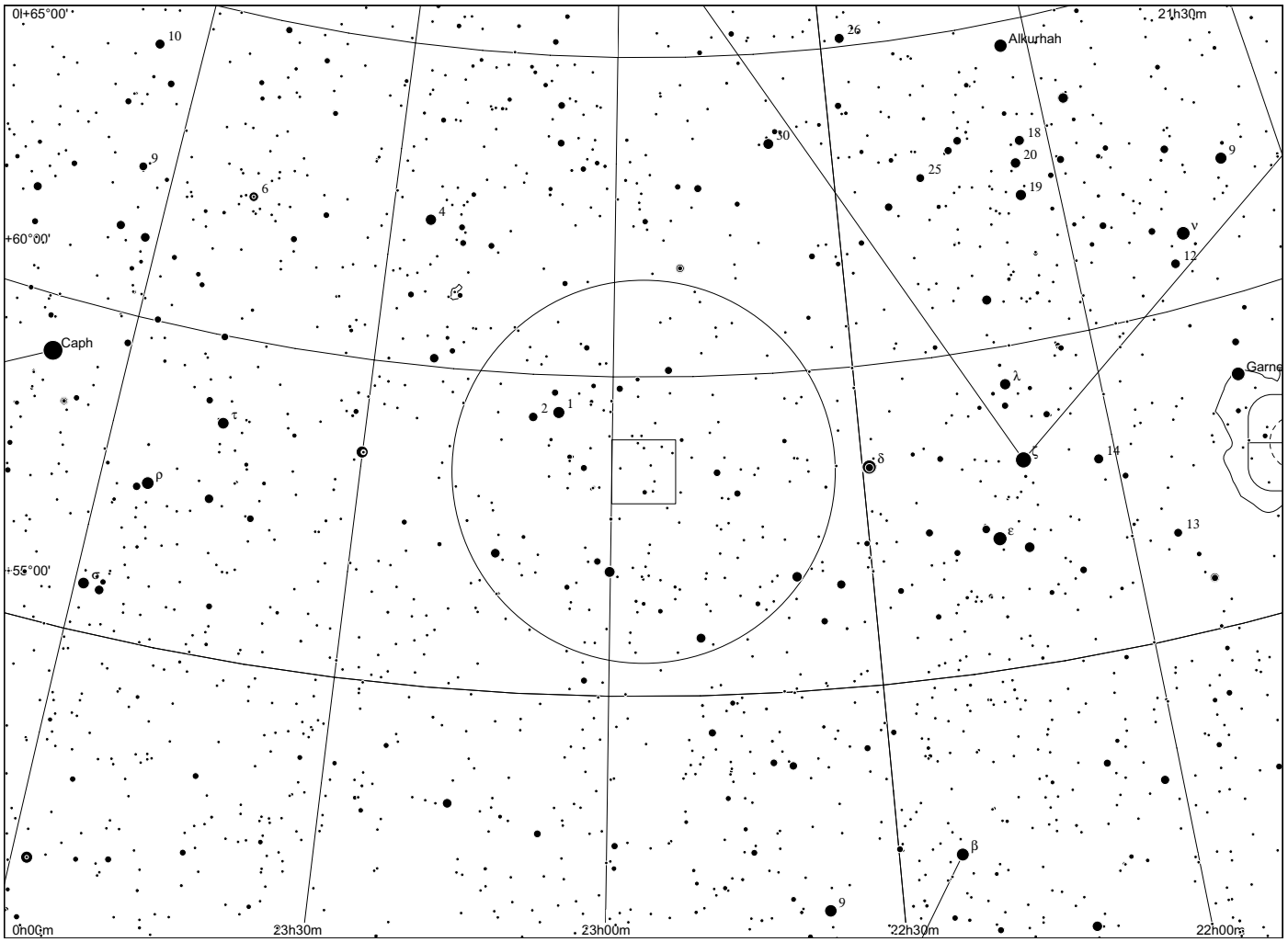
149/148 147

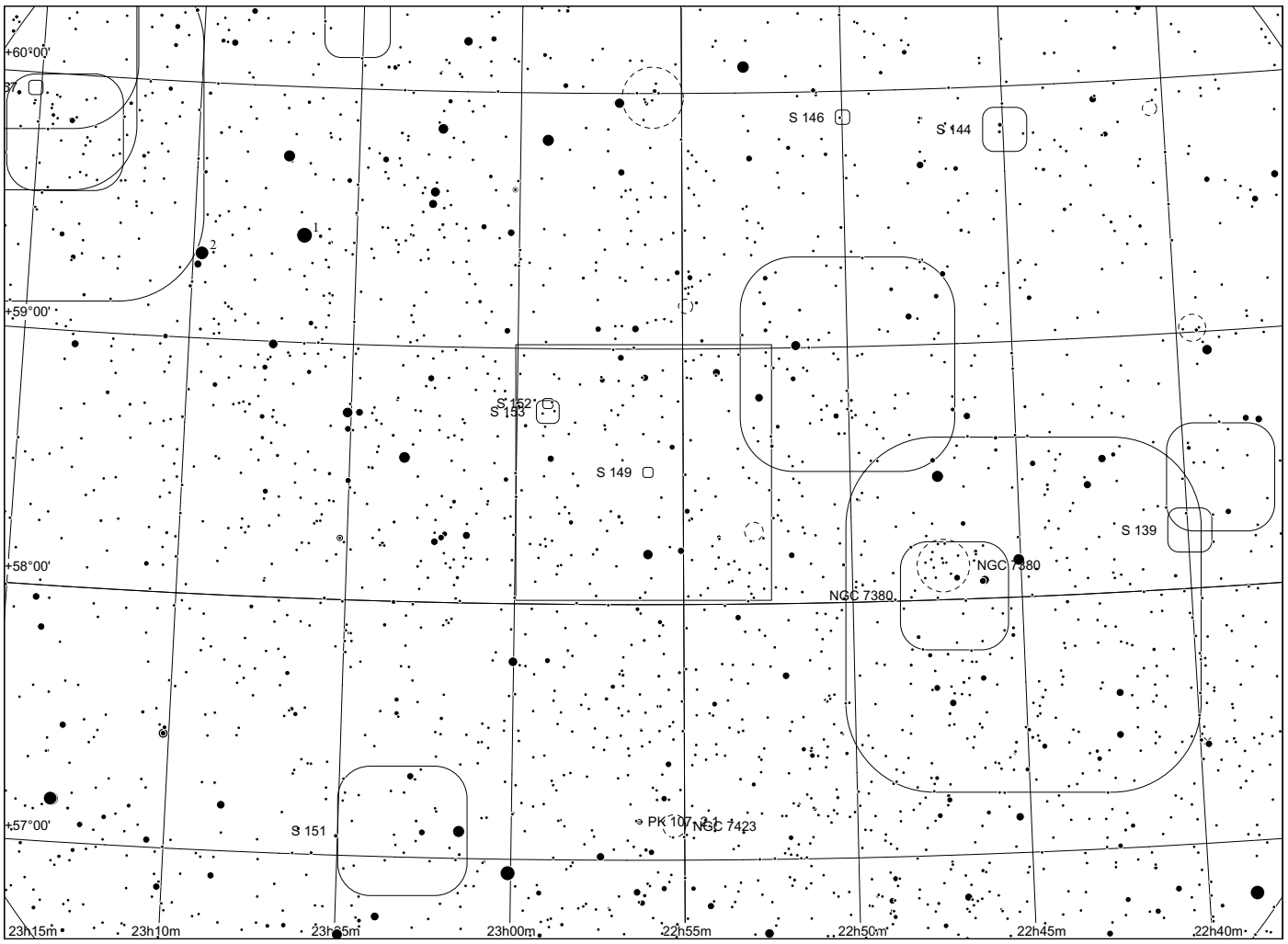
	other name	RA	dec	dia. '	F	S	B
Sh 2-147		22 55 29.2	+58 28 01	2	1	1	1
Sh 2-148		22 56 11.4	+58 31 02	2	3	2	3
Sh 2-149		22 56 23.5	+58 32 03	1	1	1	2
Sh 2-152		22 58 37.2	+58 47 08	2	3	2	3
Sh 2-153		22 59 13.6	+58 44 10	5	1	2	2

Distance: 5300 pc, Source: 2003A&A...397..133R

Sh 2-147, Sh 2-148, Sh 2-149, Sh 2-152 and Sh 2-153 are all parts of the same giant molecular cloud located at a distance of about 4500 pc.

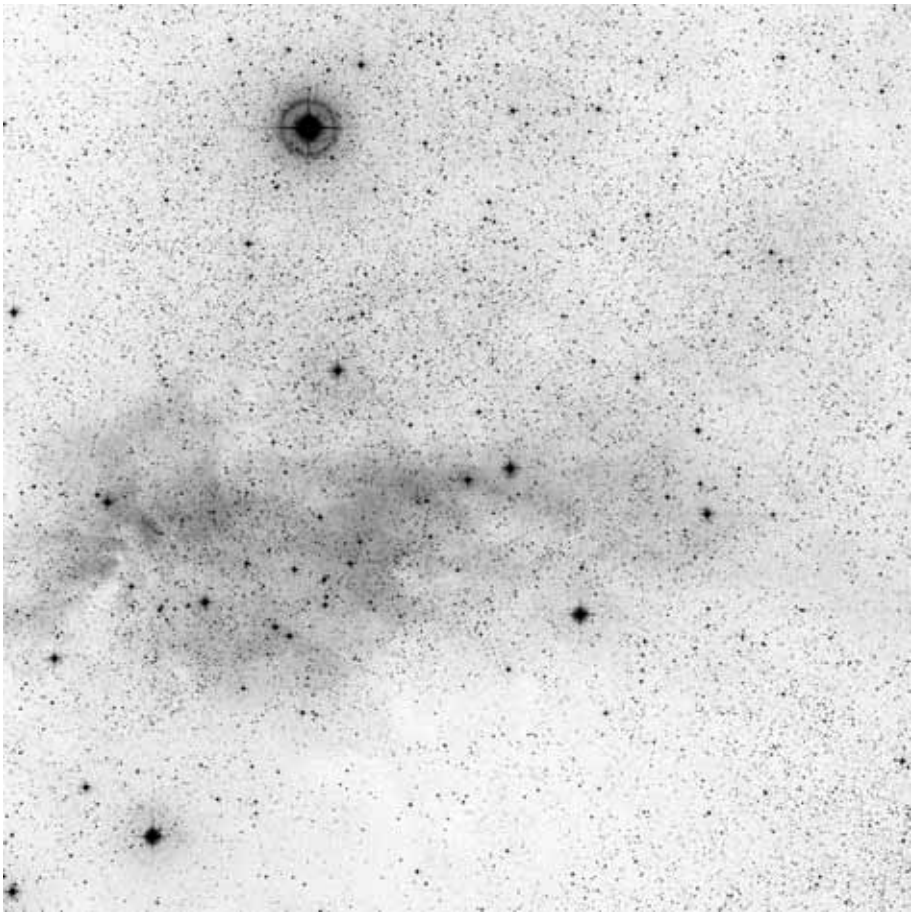
Observing notes:


0l+65°00'
21h30m
Alkurhah
+60°00'
Caph
Garne
+55°00'
0h00m
23h30m
23h00m
22h30m
22h00m

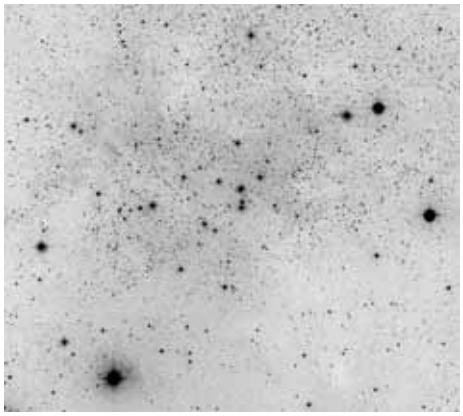

+60°00'
S 146
S 144
+59°00'
S 152
S 153
S 149
S 139
+58°00'
NGC 7380
NGC 7380
+57°00'
S 151
PK 107 2-1
NGC 7423
23h15m
23h10m
23h05m
23h00m
22h55m
22h50m
22h45m
22h40m

Sh 2 - 154

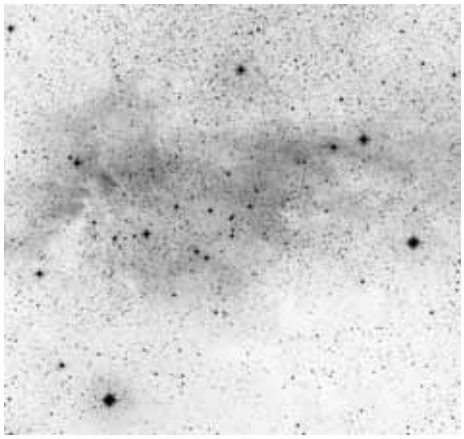
in Cepheus



60x60, red



POSS blue



POSS red

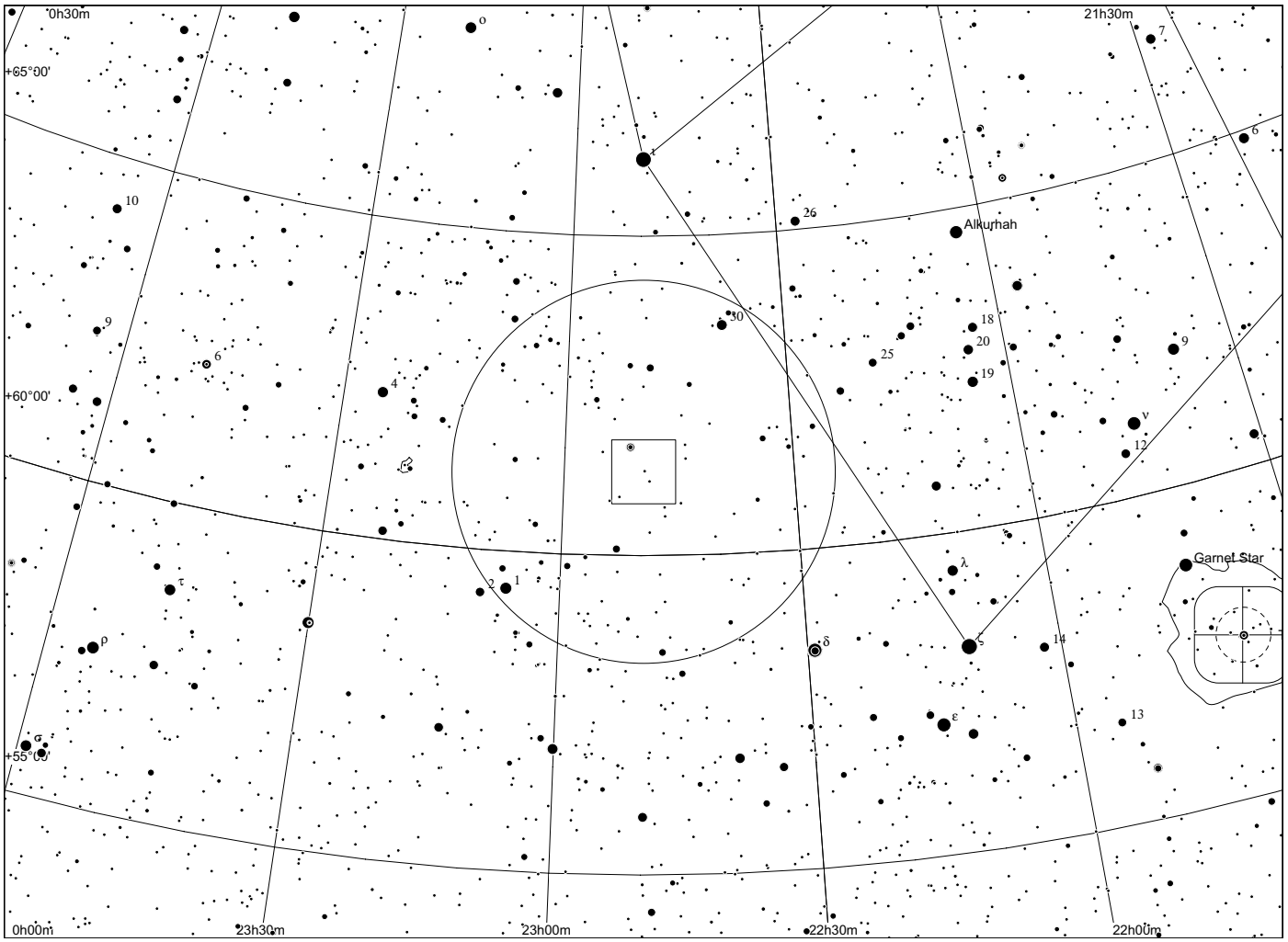


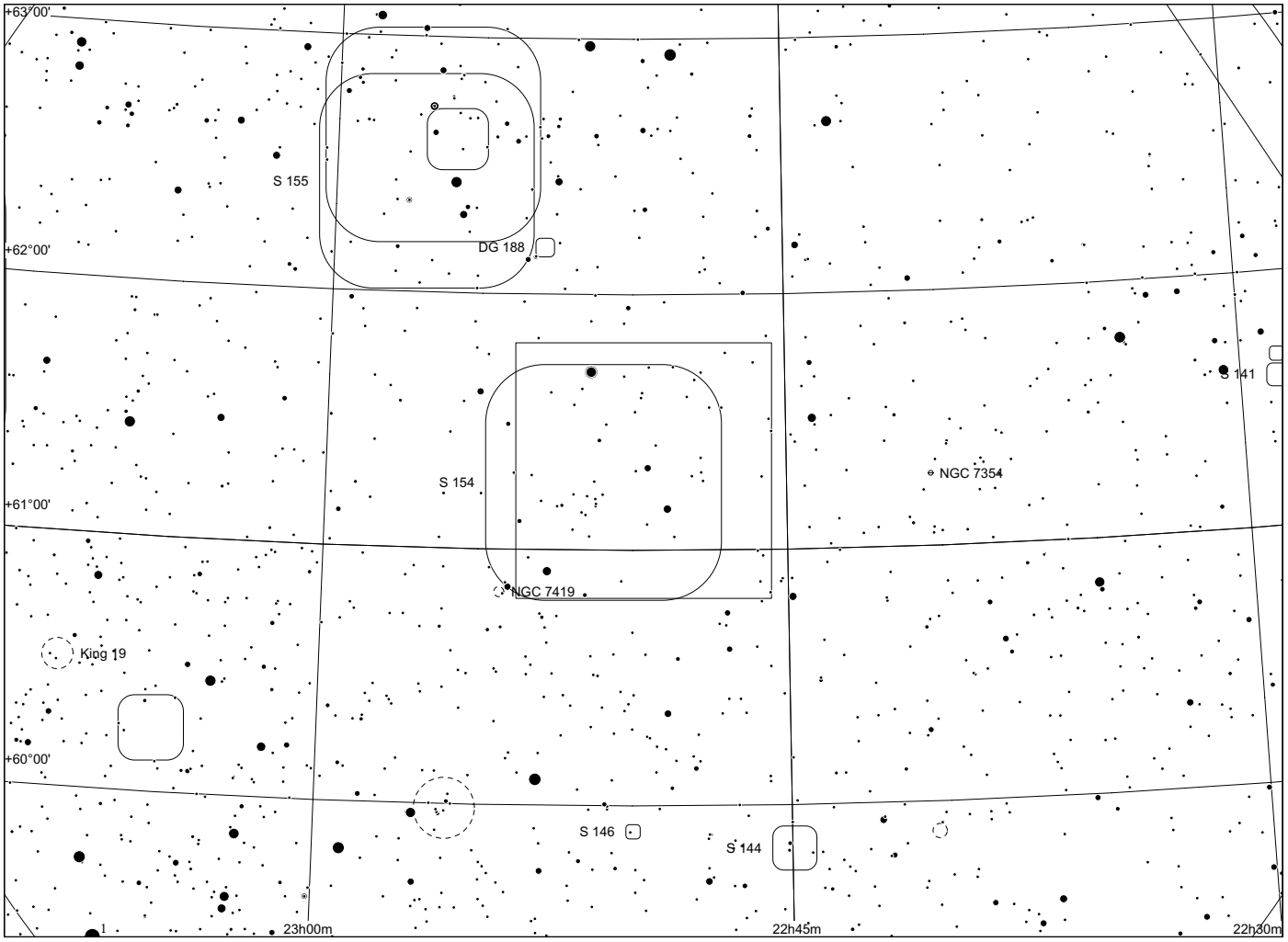
composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-154		22 51 24.6	+61 10 50	60	3	2	2

Distance: 1000 pc, Size: 17.5 pc, Source: 2000ApJ...537..221U

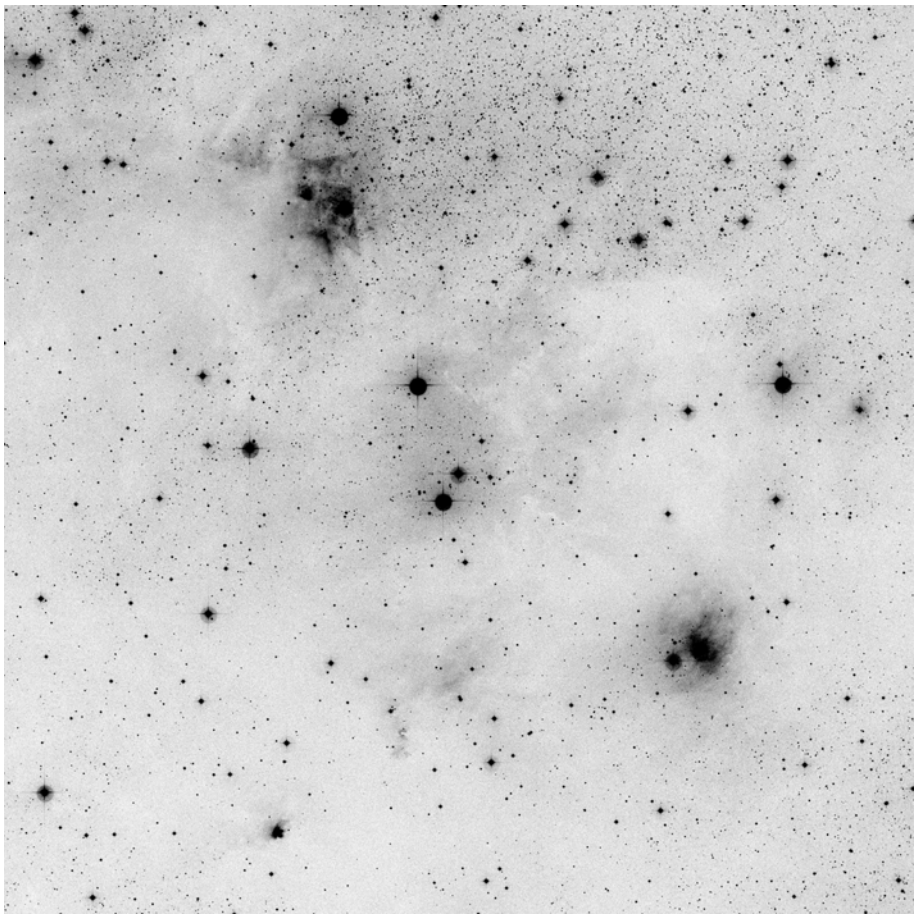
Observing notes:


0h30m
21h30m
+65°00'
+60°00'
+55°00'
Alkurhah
Garnet Star
0h00m
23h30m
23h00m
22h30m
22h00m

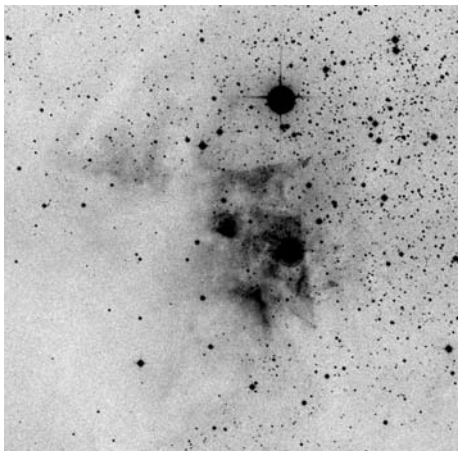

+63°00'
+62°00'
+61°00'
+60°00'
S 155
DG 188
S 154
NGC 7419
NGC 7354
S 141
King 19
S 146
S 144
23h00m
22h45m
22h30m

Sh 2 - 155

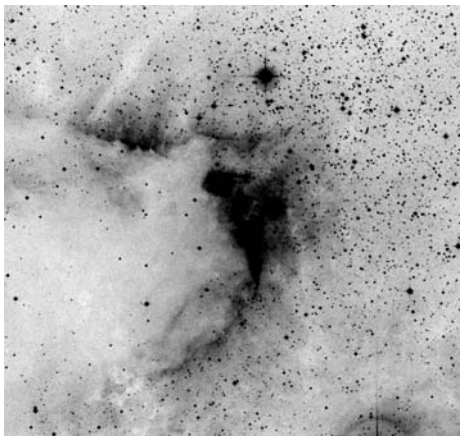
in Cepheus



60x60, red



POSS blue



POSS red



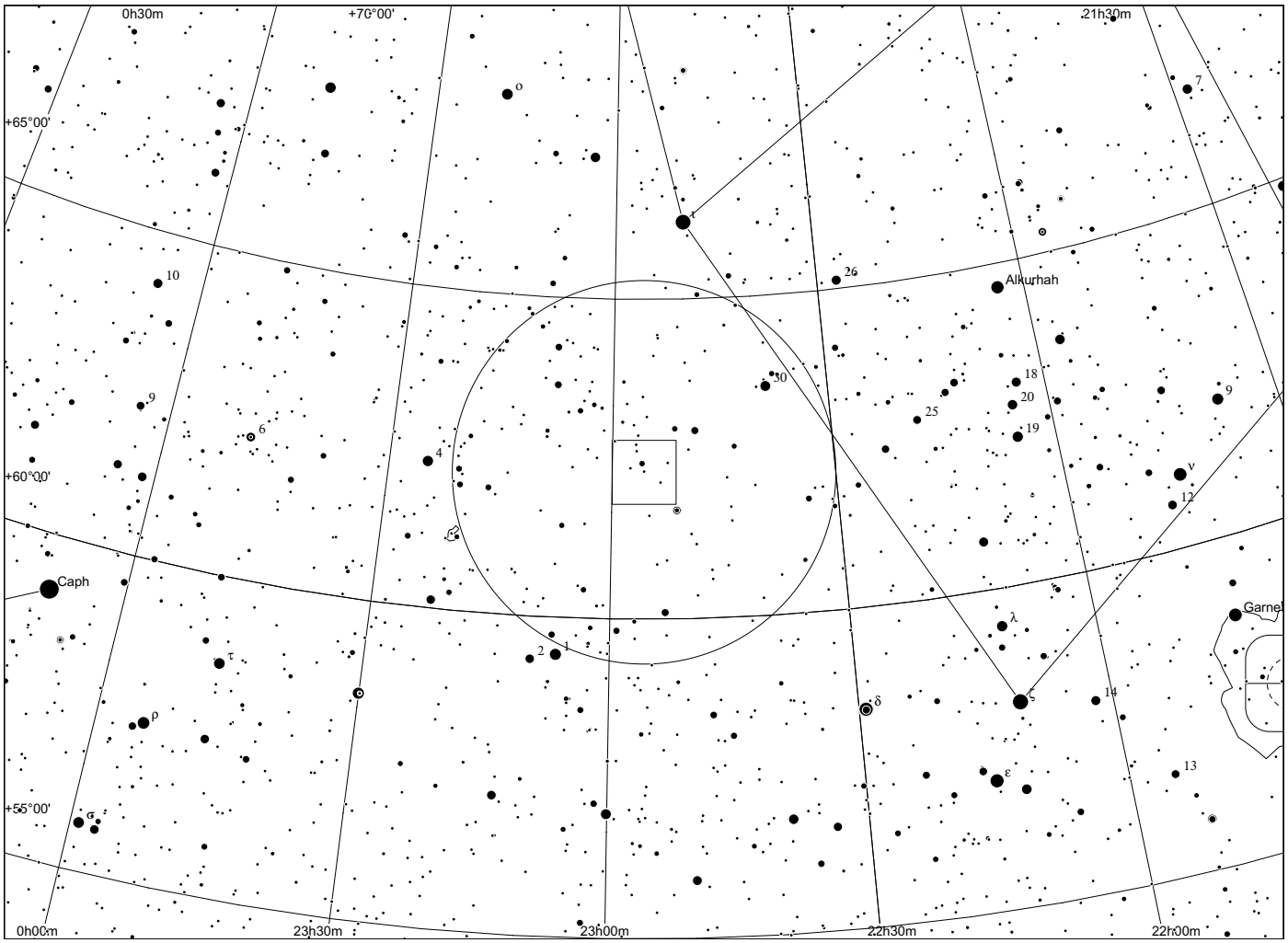
composite

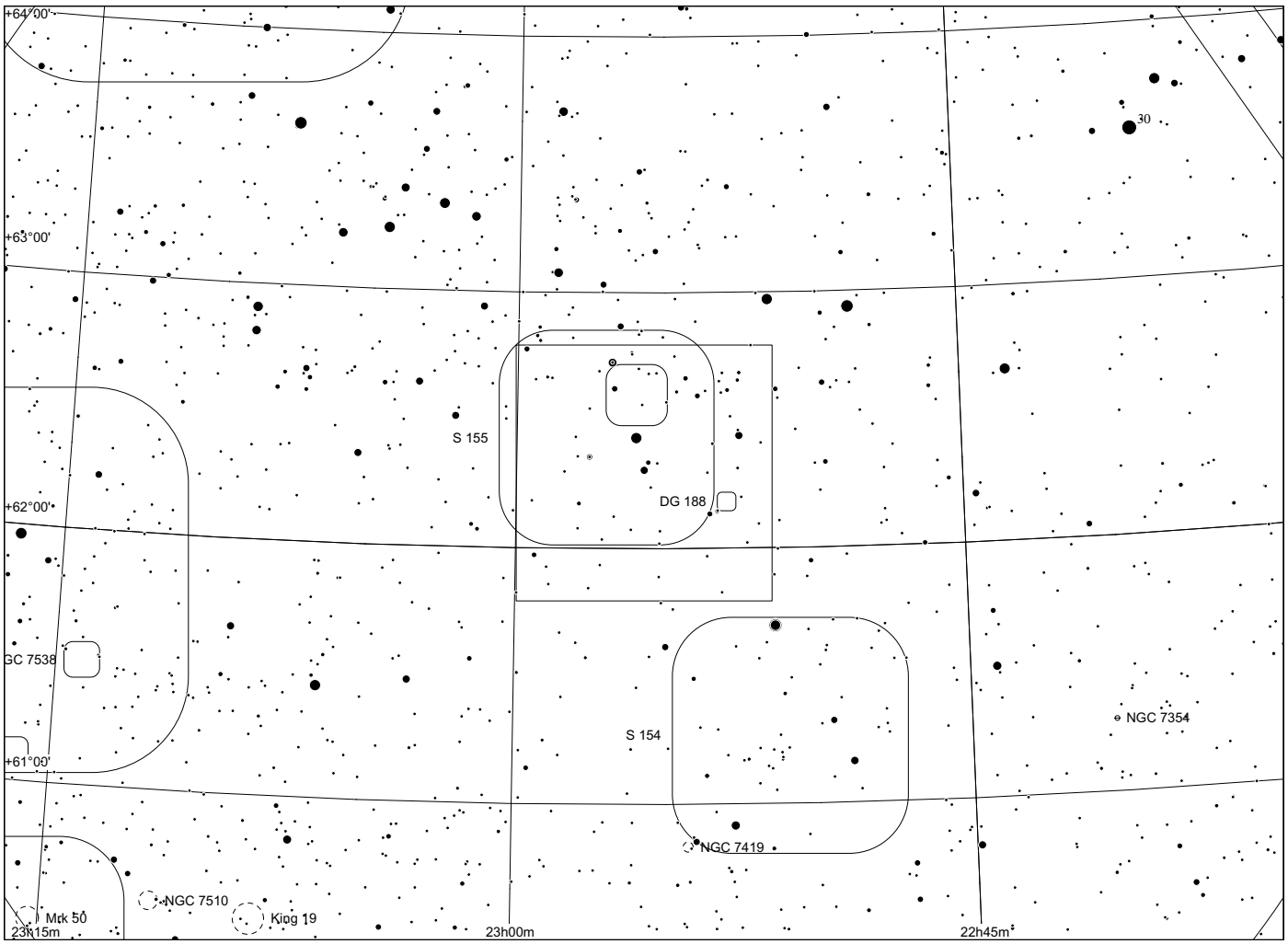
	other name	RA	dec	dia. '	F	S	B
Sh 2-155	Cave Nebula	22 56 43.2	+62 37 04	60	3	2	2

Distance: 730 pc, Size: 12.7 pc, Source: 1982ApJS...49..183B

The Cave Nebula interacts with the Cepheus B molecular cloud.

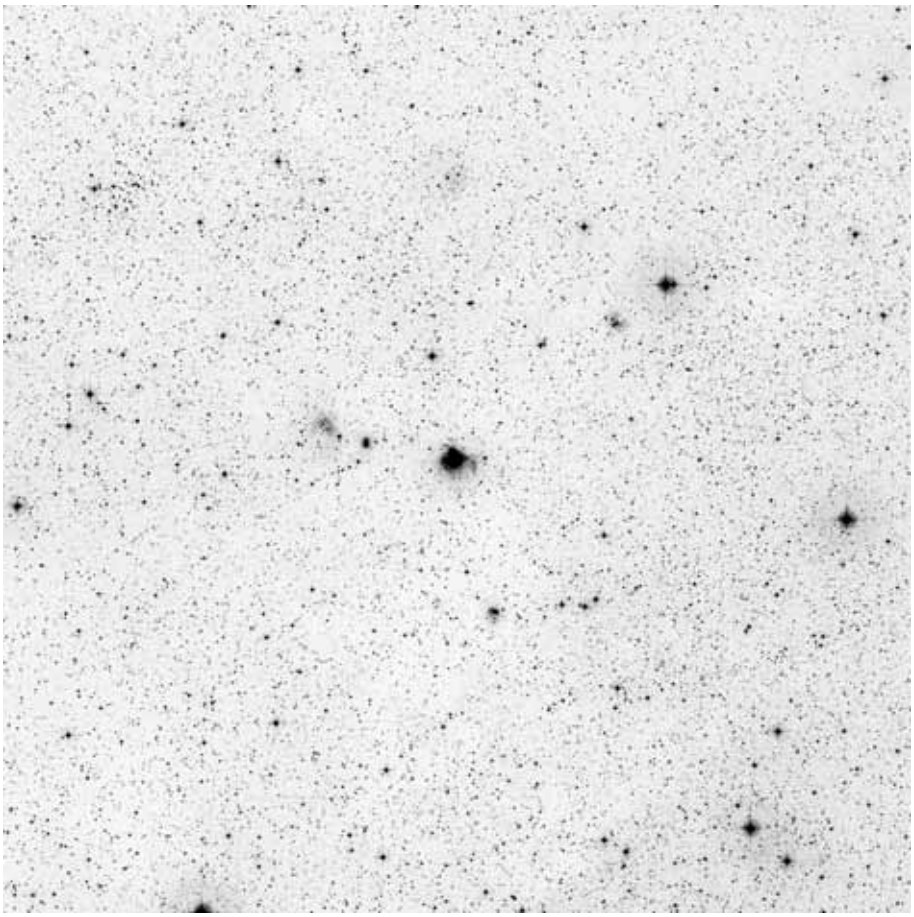
Observing notes:


0h30m
+70°00'
21h30m
+65°00'
Alkurhah
Caph
Garnet
+60°00'
+55°00'
0h00m
23h30m
23h00m
22h30m
22h00m

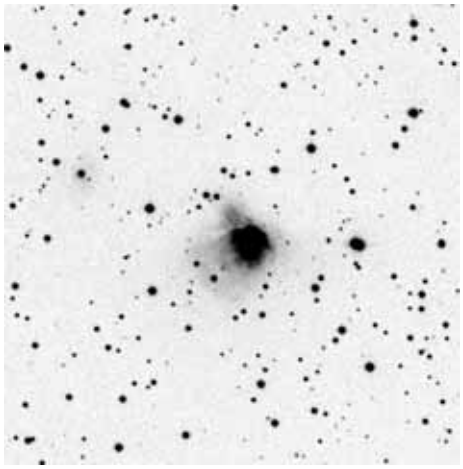

+64°00'
+63°00'
S 155
DG 188
+62°00'
GC 7538
S 154
NGC 7354
+61°00'
NGC 7419
NGC 7510
Mrk 50
King 19
23h15m
23h00m
22h45m

Sh 2 - 156

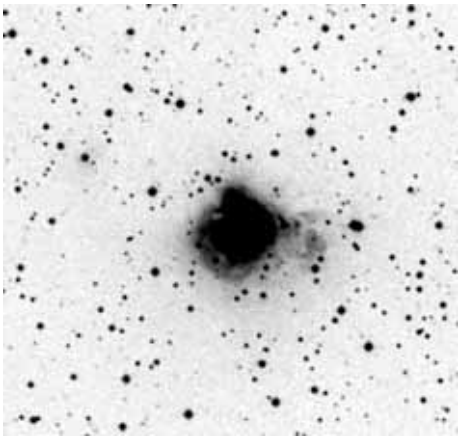
in Cepheus



60x60, red



POSS blue



POSS red



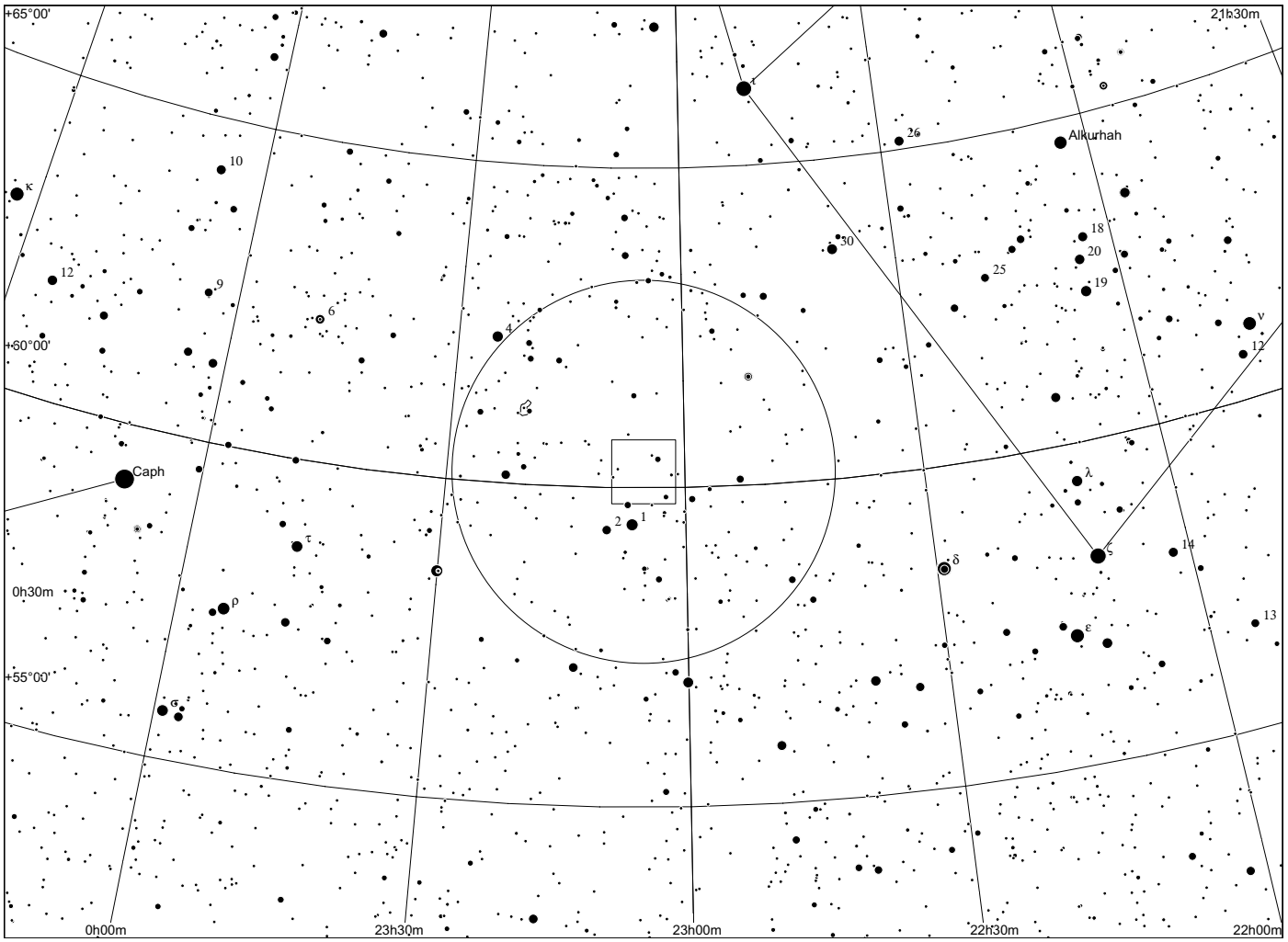
composite

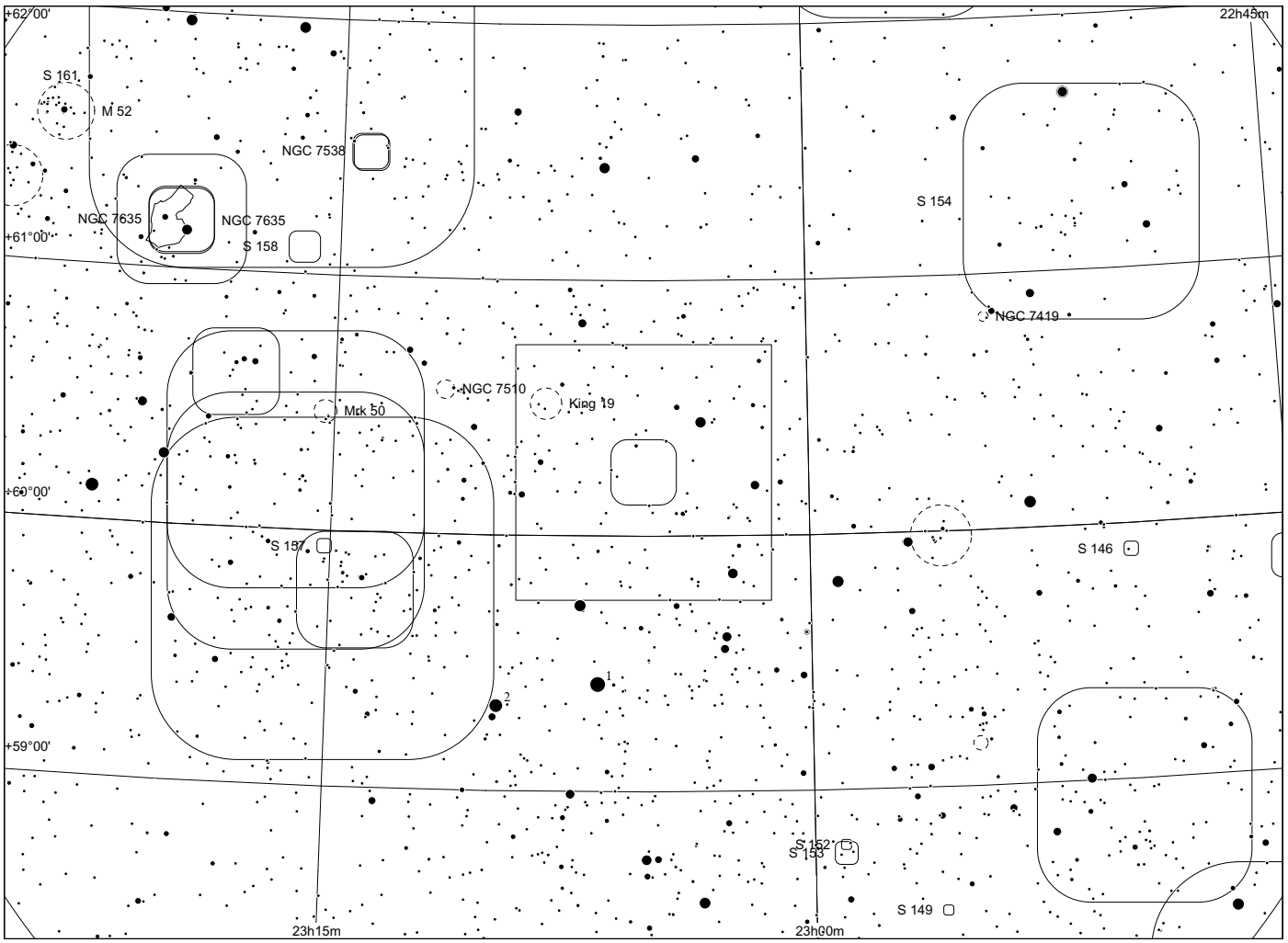
	other name	RA	dec	dia. '	F	S	B
Sh 2-156	IC 1470	23 05 09.6	+60 15 23	2	1	2	3

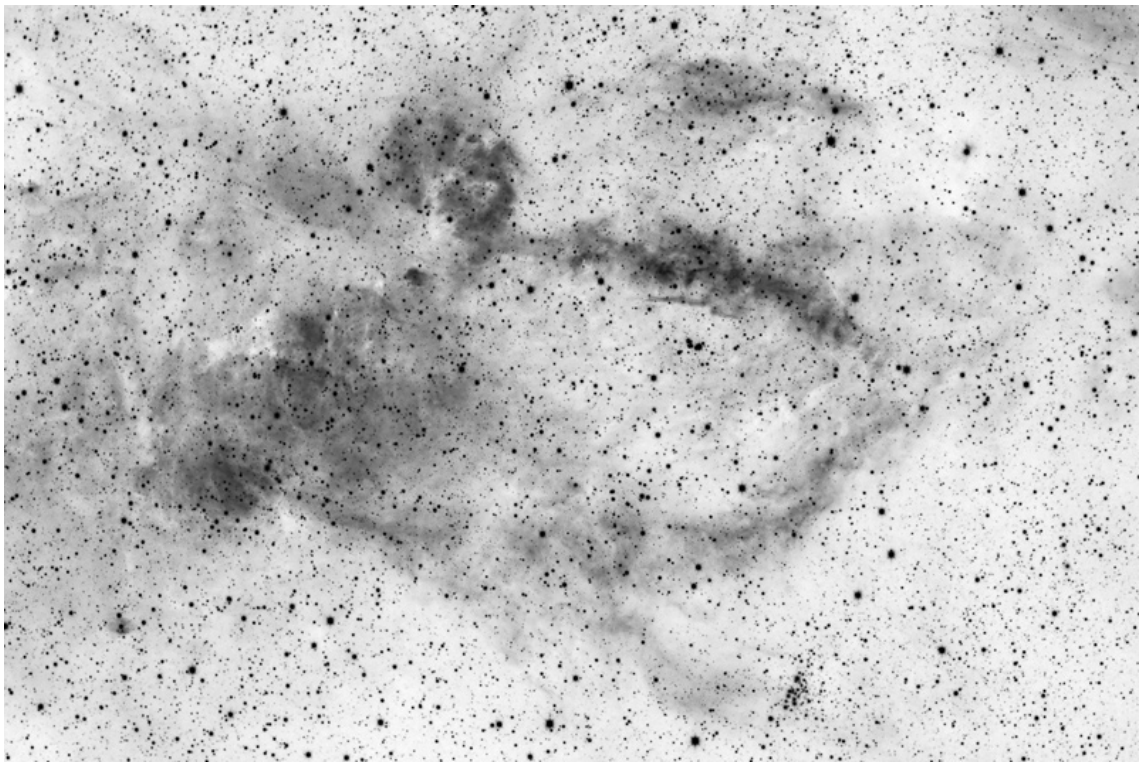
Distance: 4891 pc, Size: 5.1 pc, Source: 2003A&A...397..213P

Also called IC 1470, this HII region is part of the star cluster NGC 7510. It appears to be ionised by a single O7 class star. The bright core is only one of five distinct and apparently independent emission sources within a giant molecular cloud. The distance is estimated to be about 3500 to 4000 parsecs.

Observing notes:

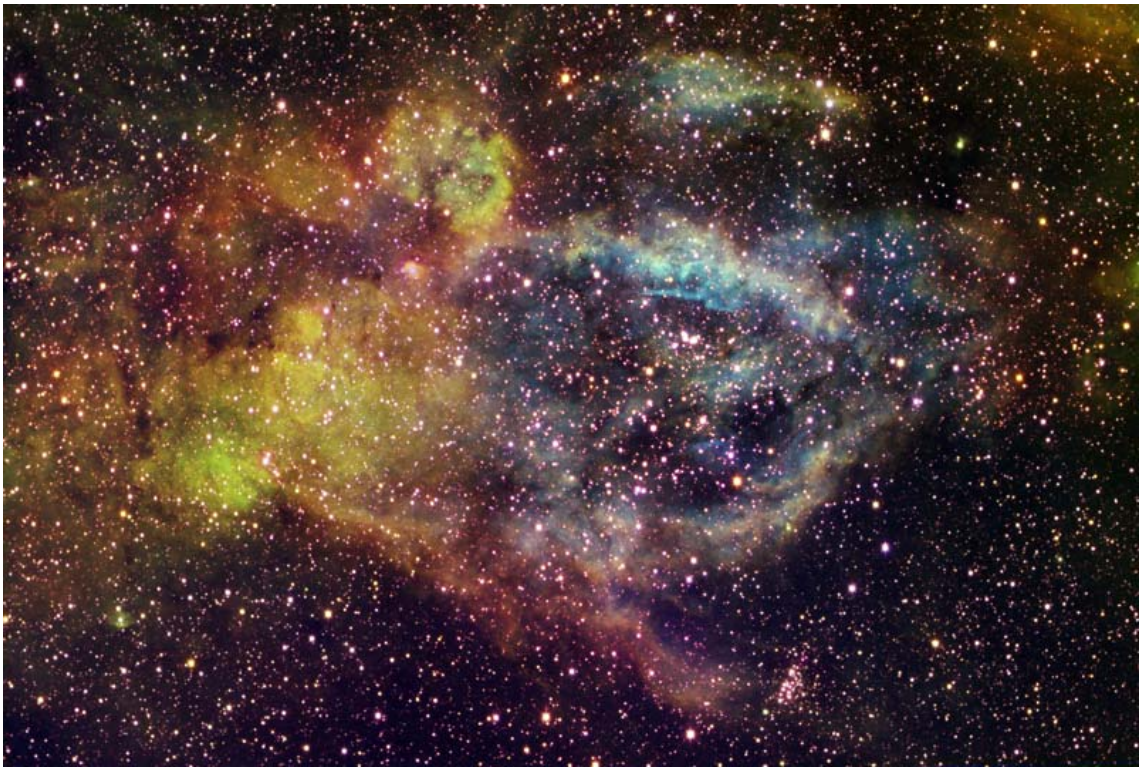

+65°00'
21h30m
Alkurhah
+60°00'
Caph
0h30m
+55°00'
0h00m
23h30m
23h00m
22h30m
22h00m


+62°00'
22h45m
S 161
M 52
NGC 7538
NGC 7635
NGC 7635
S 158
+61°00'
S 154
NGC 7419
NGC 7510
King 19
Mrk 50
+60°00'
S 157
S 146
+59°00'
S 152
S 153
S 149
23h15m
23h00m



Sh 2 - 157 in Cep/Cas

both images are rotated, north to the right



narrowband

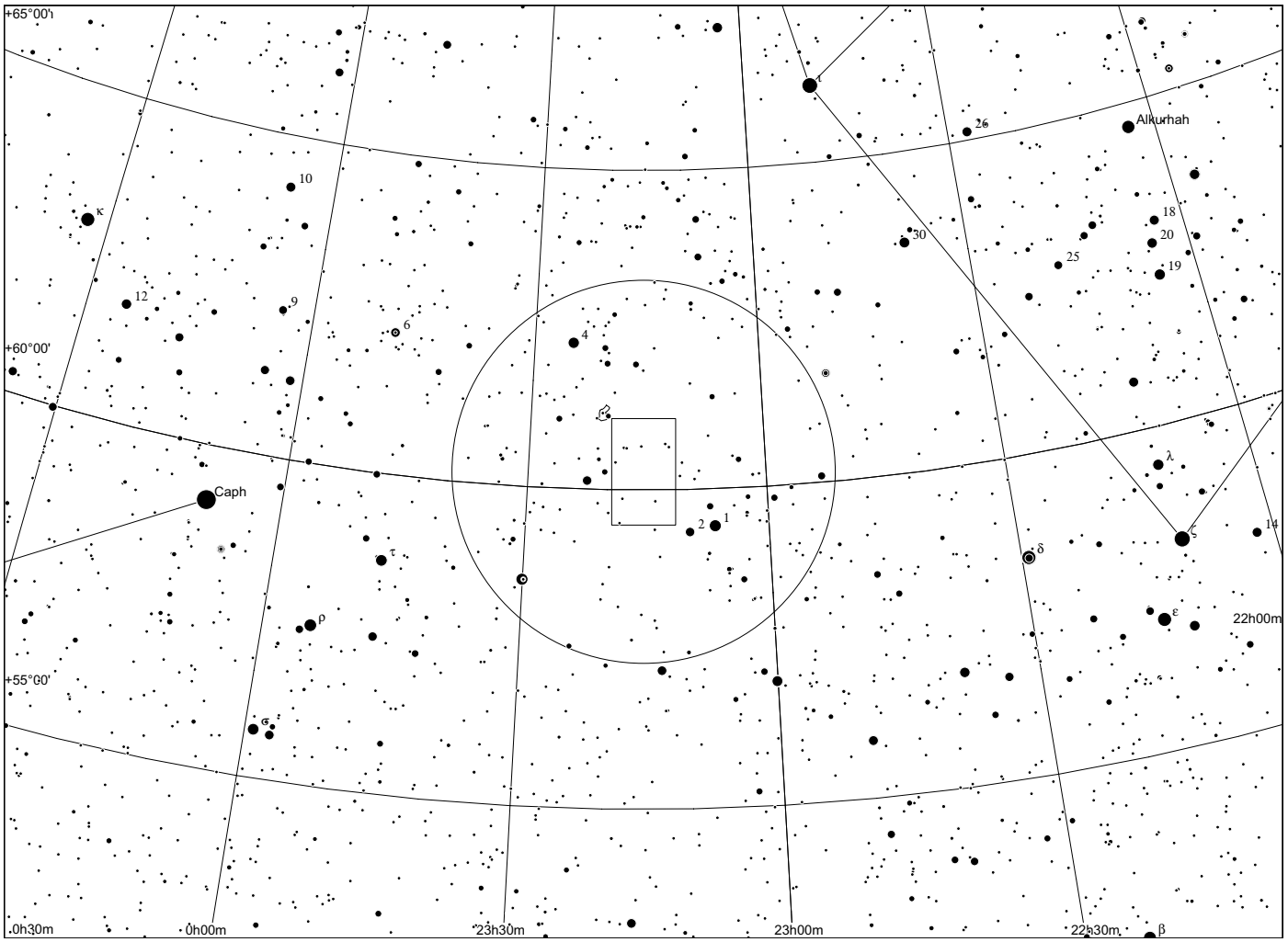
Dean Salman

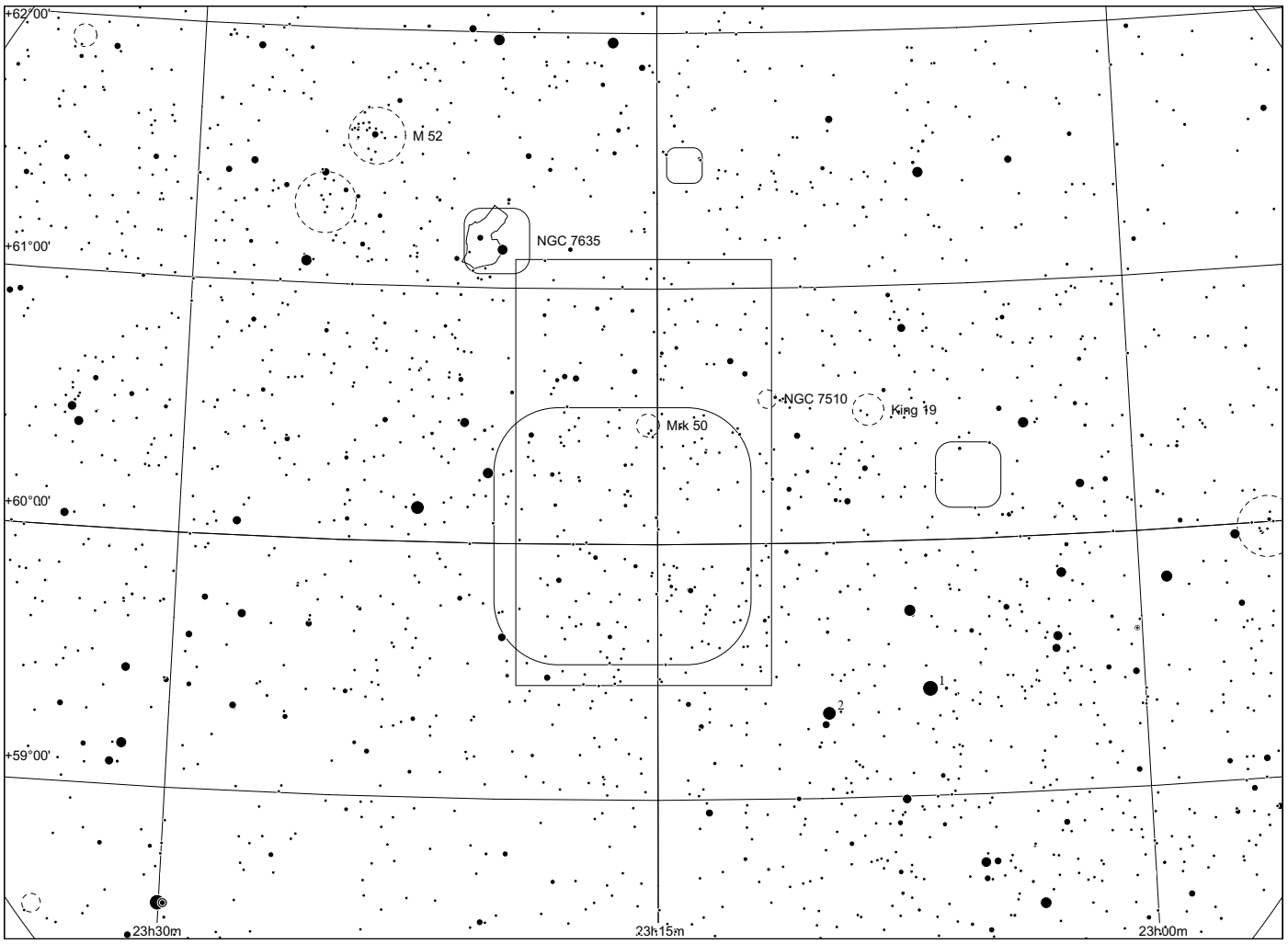
	other name	RA	dec	dia. '	F	S	B
Sh 2-157		23 16 03.2	+60 02 44	90	3	3	3

Distance: 2500 pc, Size: 65.5 pc, Source: 1982ApJS...49..183B

This is a ring nebula around WR 157, in the Basel 3 (Markarian 50) cluster that is in turn part of Cas OB2.

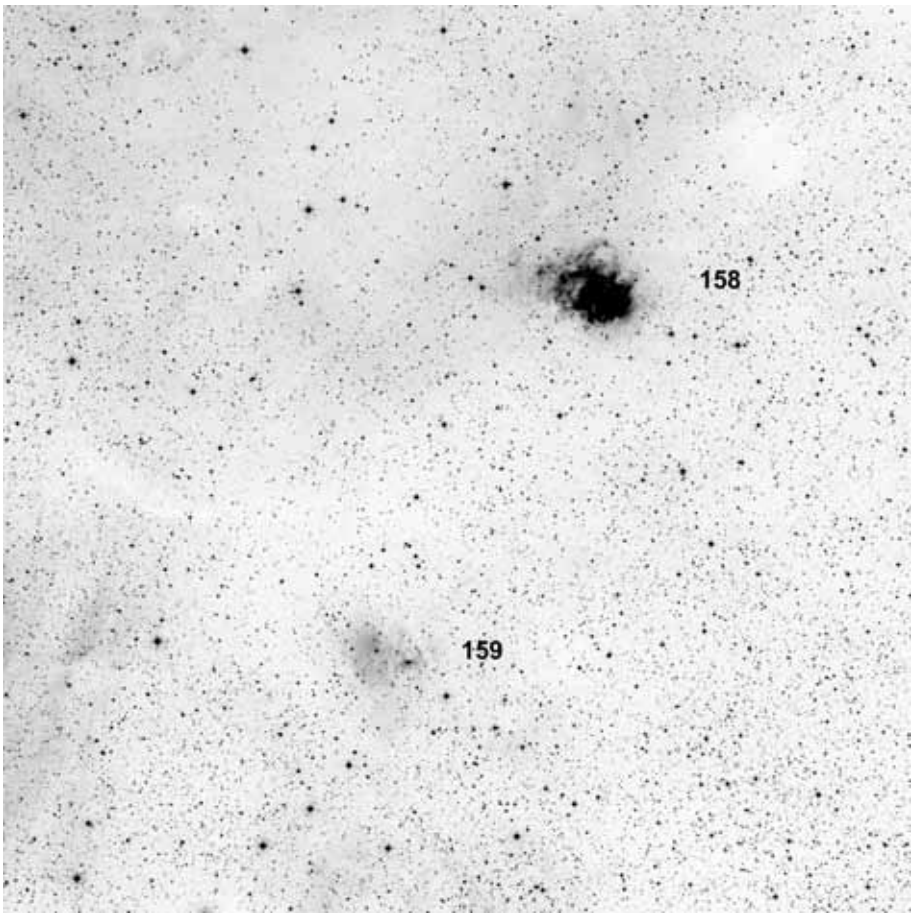
Observing notes:


+65°00'
+60°00'
+55°00'
0h30m
0h00m
23h30m
23h00m
22h30m
22h00m
Alkurhah
Caph
κ
ι
ρ
τ
σ
ε
ζ
δ
λ
β
1
2
4
6
9
10
12
14
18
19
20
25
26
30

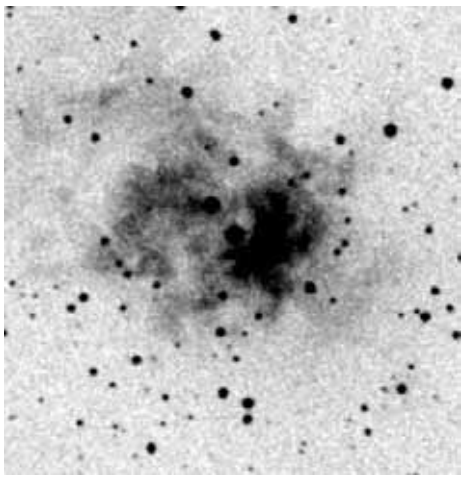

+62°00'
+61°00'
+60°00'
+59°00'
23h30m
23h15m
23h00m
M 52
NGC 7635
NGC 7510
King 19
Mrk 50
1
2

Sh 2 - 158/159

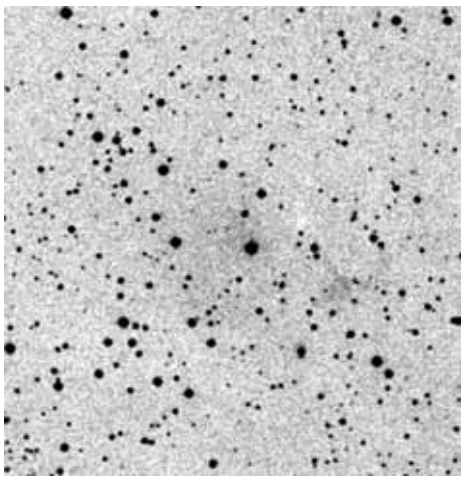
in Cep/Cas



60x60, red



POSS blue 158



159



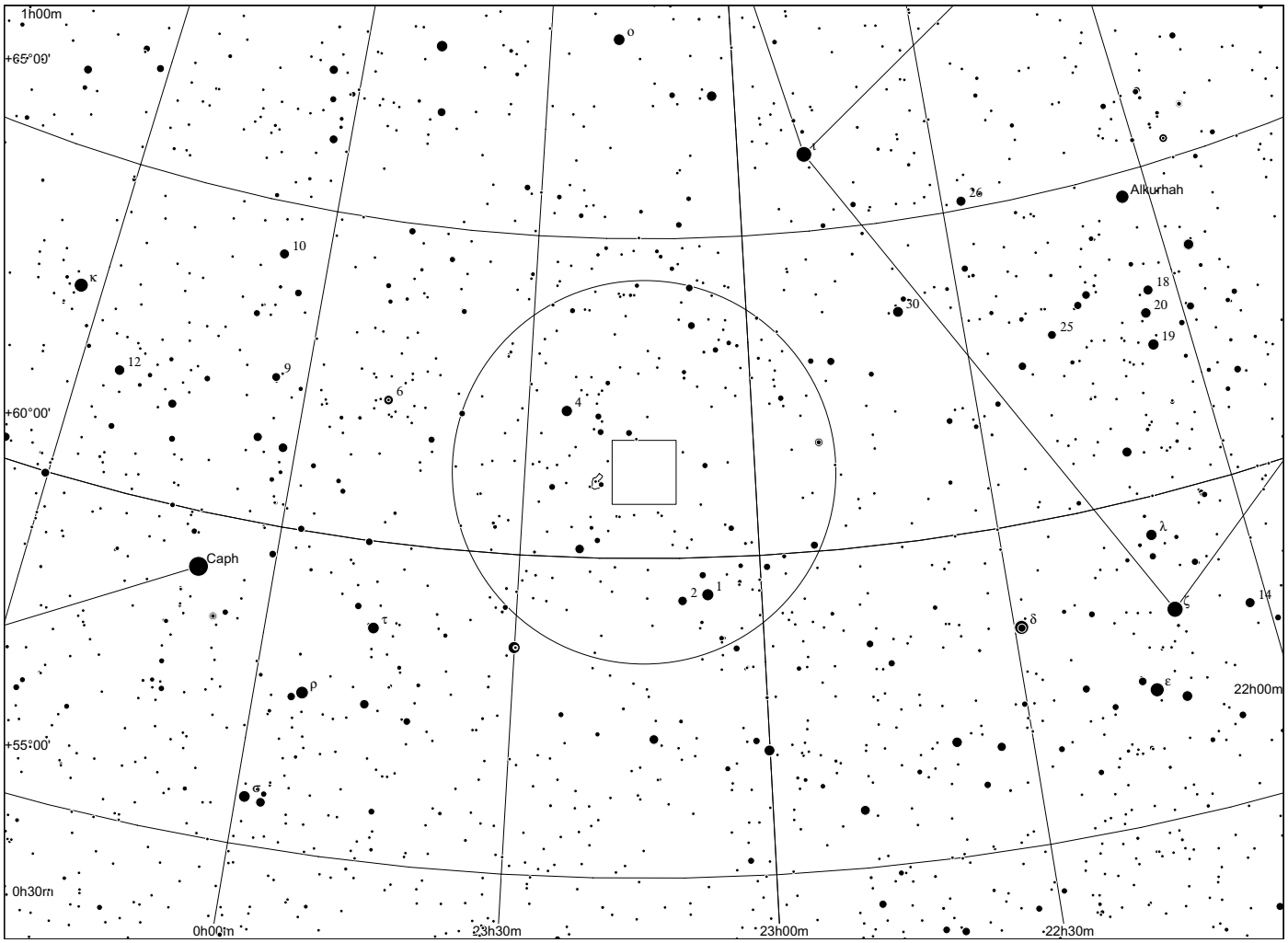
composite

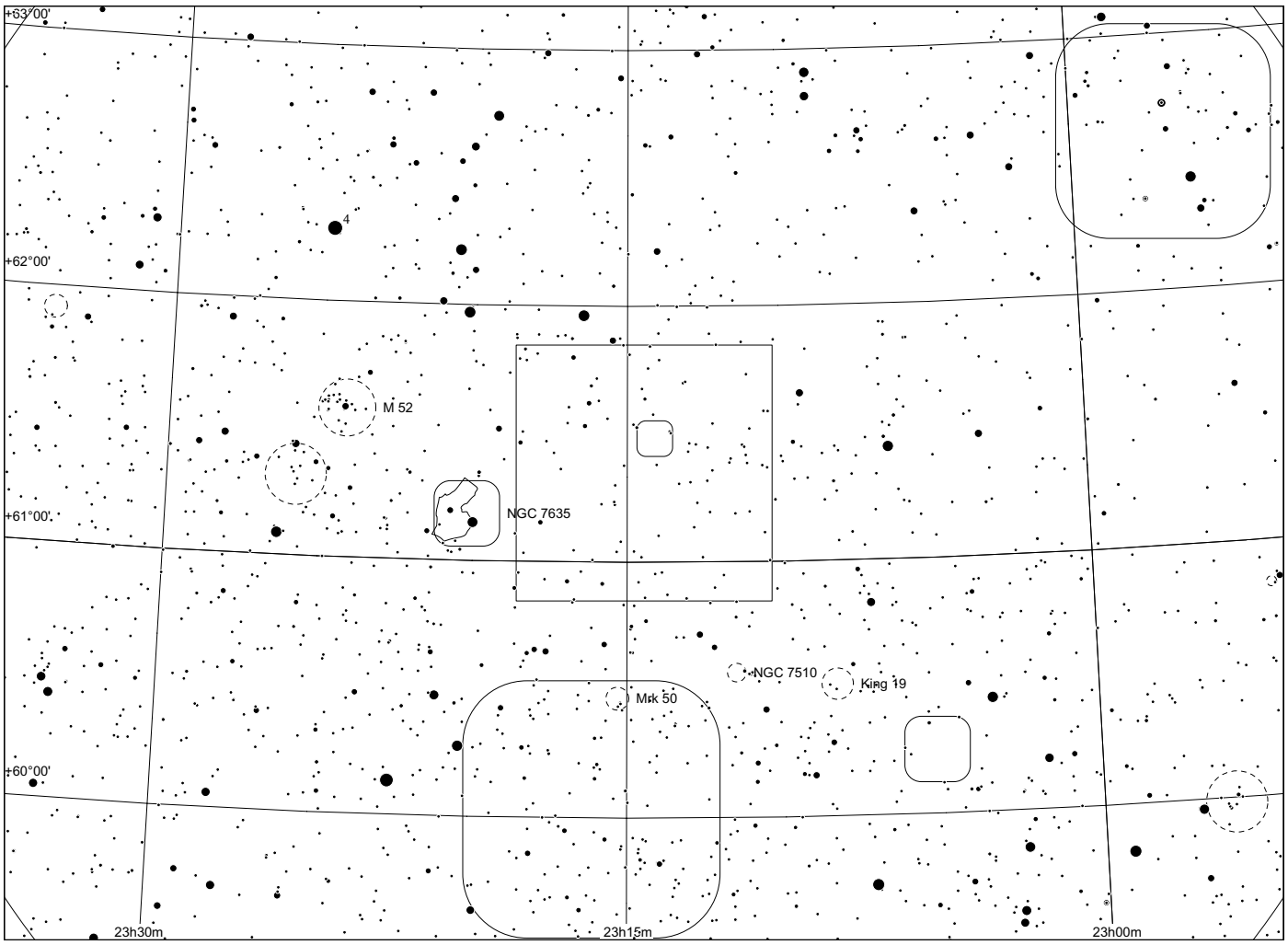
	other name	RA	dec	dia. '	F	S	B
Sh 2-158	NGC7538	23 13 39.6	+61 30 40	10	2	3	3
Sh 2-159		23 15 43.0	+61 08 44	7	3	2	2

Distance: 2800 pc, Size: 1.3 pc, Source: 2004ApJ...616.1042O

This is NGC 7538, a major star formation region in Cas OB2. It is surrounded by the much larger diffuse nebula Sh 2-161B.

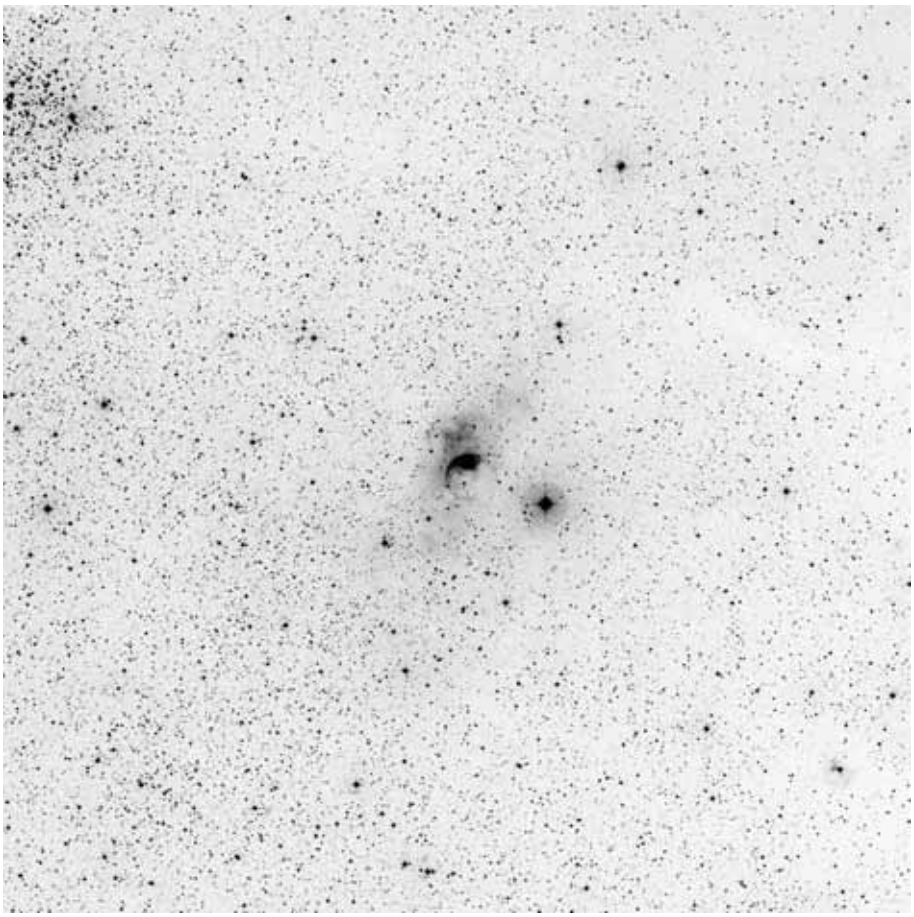
Observing notes:


1h00m
+65°00'
+60°00'
+55°00'
0h30m
0h00m
23h30m
23h00m
22h30m
22h00m
Alkurhah
Caph
o
ι
κ
τ
ρ
σ
λ
ζ
δ
ε
1
2
4
6
9
10
12
14
18
19
20
25
26
30

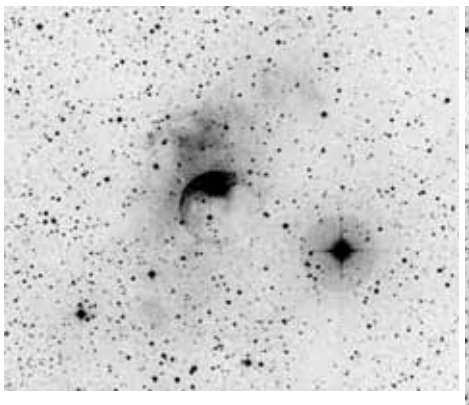

+63°00'
+62°00'
+61°00'
+60°00'
23h30m
23h15m
23h00m
4
M 52
NGC 7635
NGC 7510
King 19
Mrk 50

Sh 2 - 162

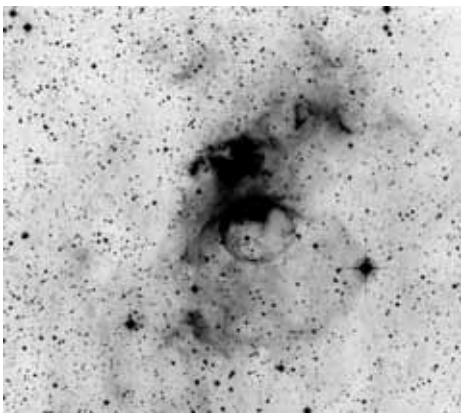
in Cassiopeia



60x60, blue



POSS blue



POSS red



composite

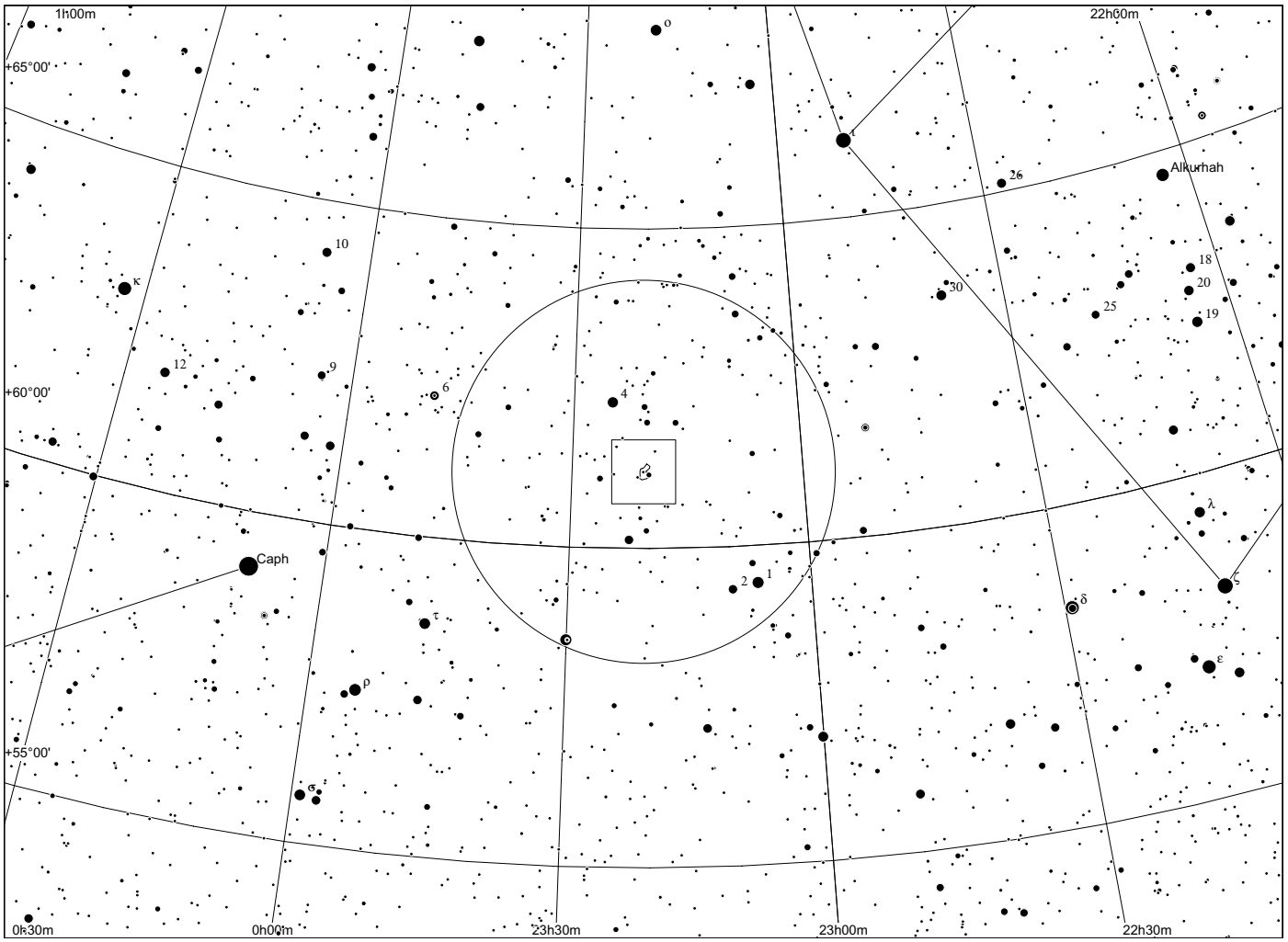
	other name	RA	dec	dia. '	F	S	B
Sh 2-162	NGC7635 = Bubble Nebula	23 20 41.5	+61 11 52	40	3	3	3

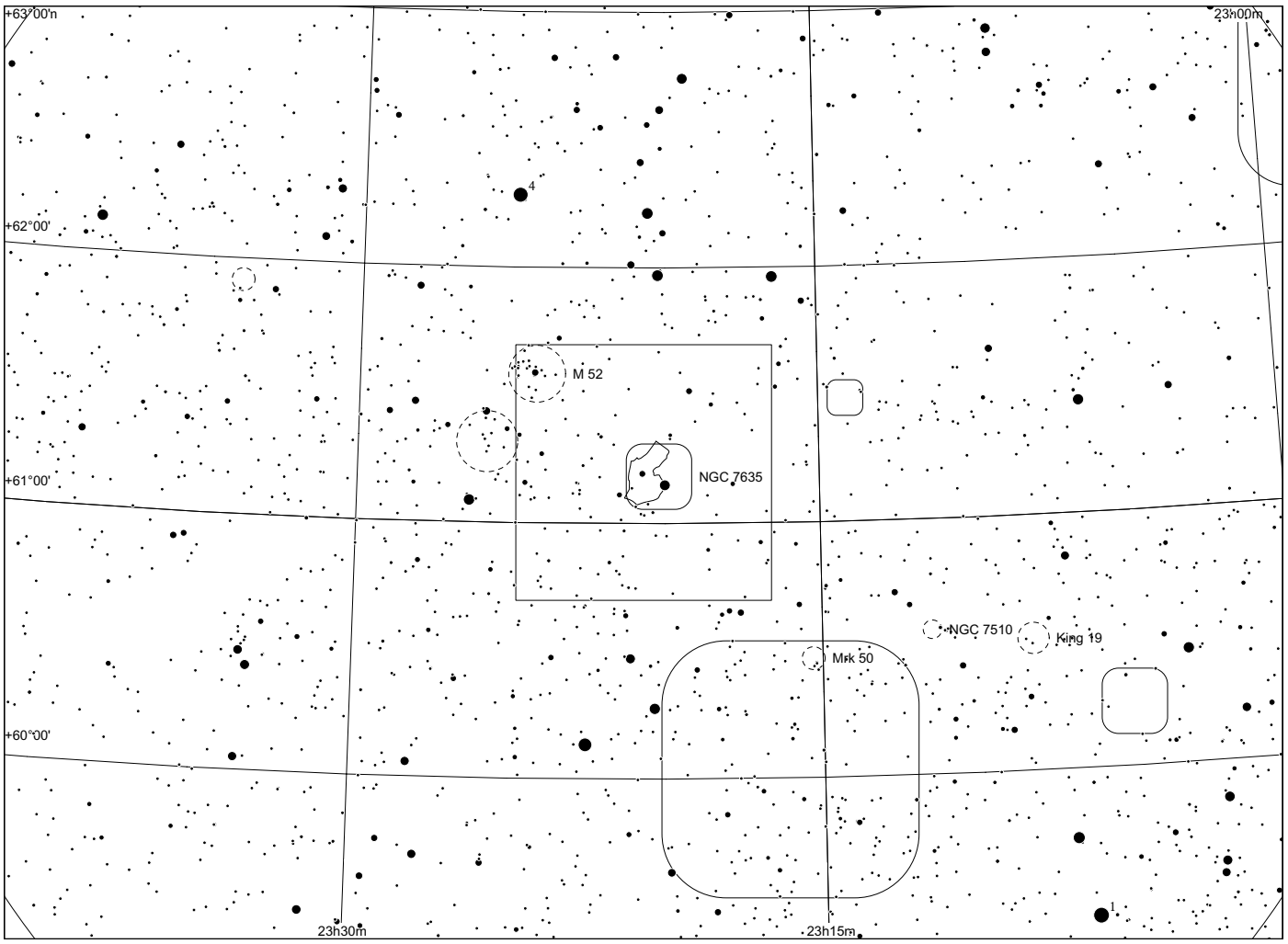
Distance: 3813 pc, Size: 5.8 pc, Source: 2003A&A...397..213P

This is the Bubble nebula, NGC 7635, a circular shell around the O6.5 IIIf star BD +60°2522.

A recent study finds the distance to Sh 2-162 to be 2500 parsecs, more in line with its assumed position in the Cas OB2 association.

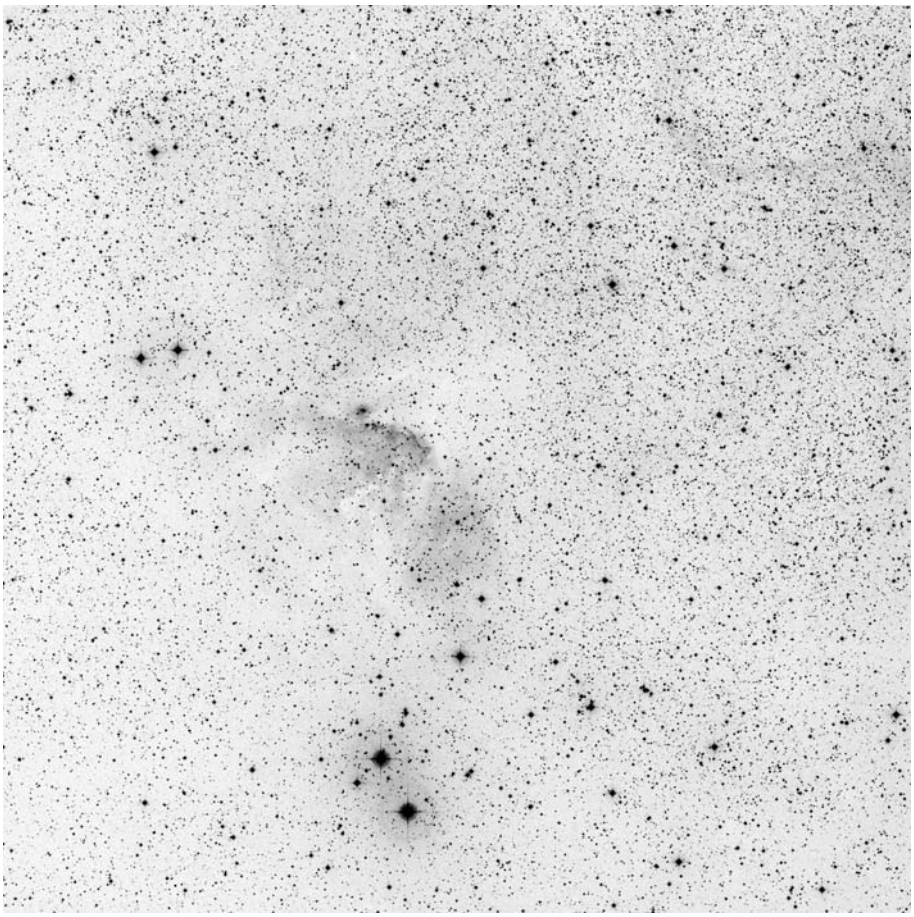
Observing notes:


1h00m
22h00m
+65°00'
+60°00'
+55°00'
0h30m
0h00m
23h30m
23h00m
22h30m
Alkurhah
Caph
o
ι
κ
λ
ζ
δ
ε
ρ
τ
σ
1
2
4
6
9
10
12
18
19
20
25
26
30

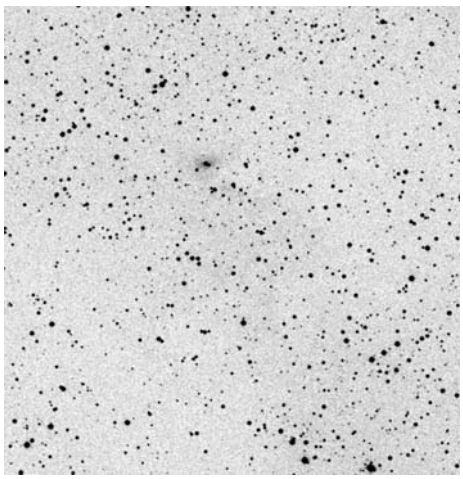

+63°00'n
23h00m
+62°00'
+61°00'
+60°00'
23h30m
23h15m
M 52
NGC 7635
NGC 7510
King 19
Mrk 50
4
1

Sh 2 - 163

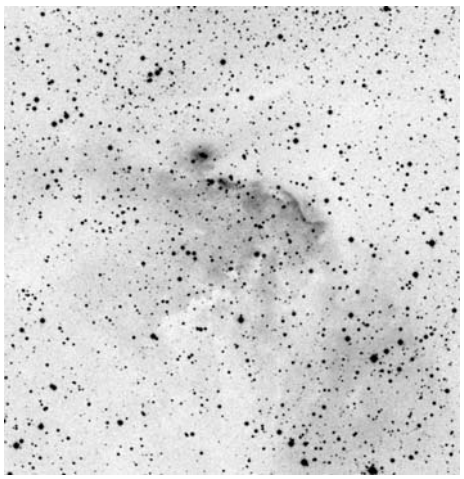
in Cassiopeia



60x60, red



POSS blue



POSS red



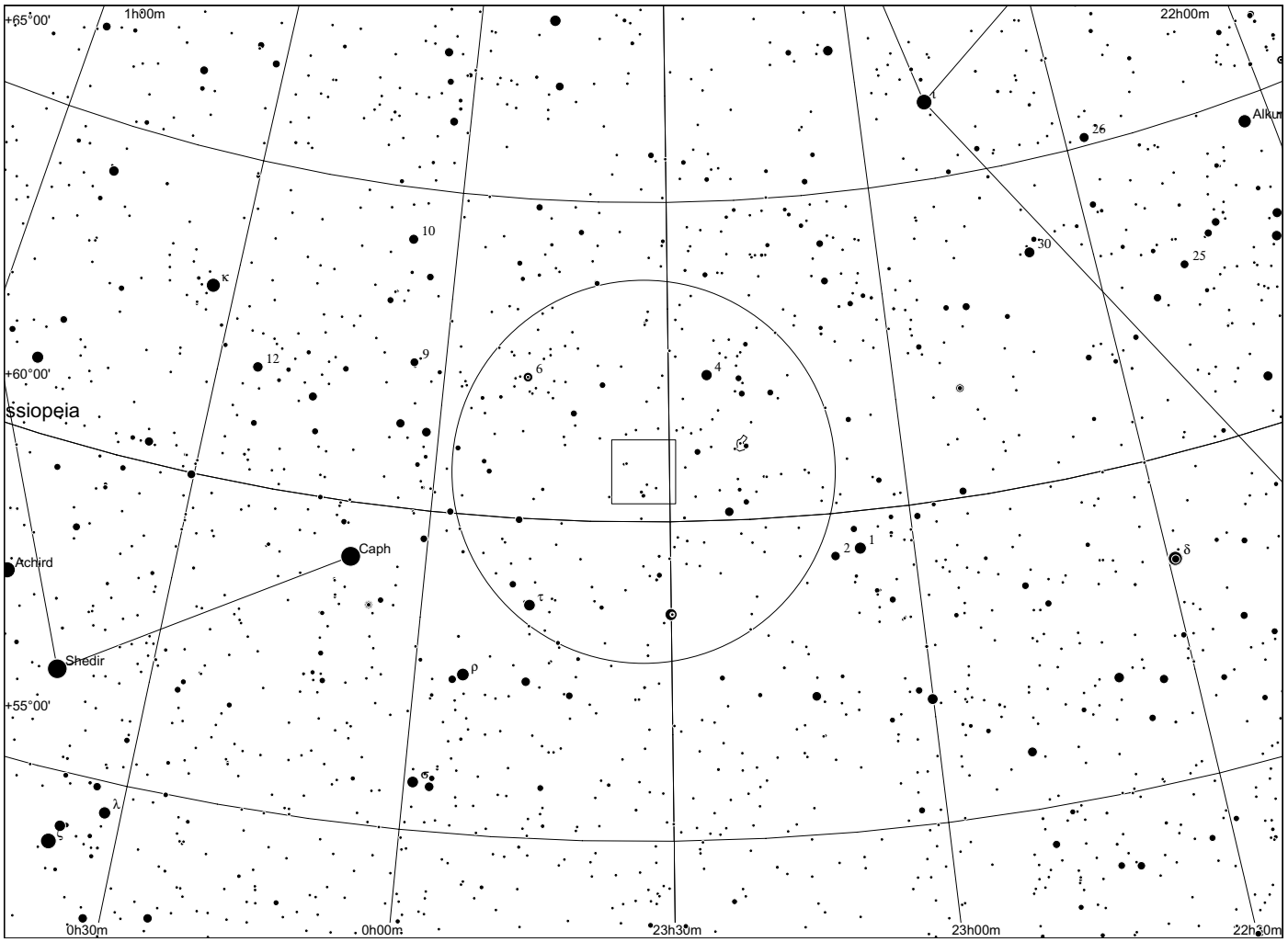
RGB Dean Salman

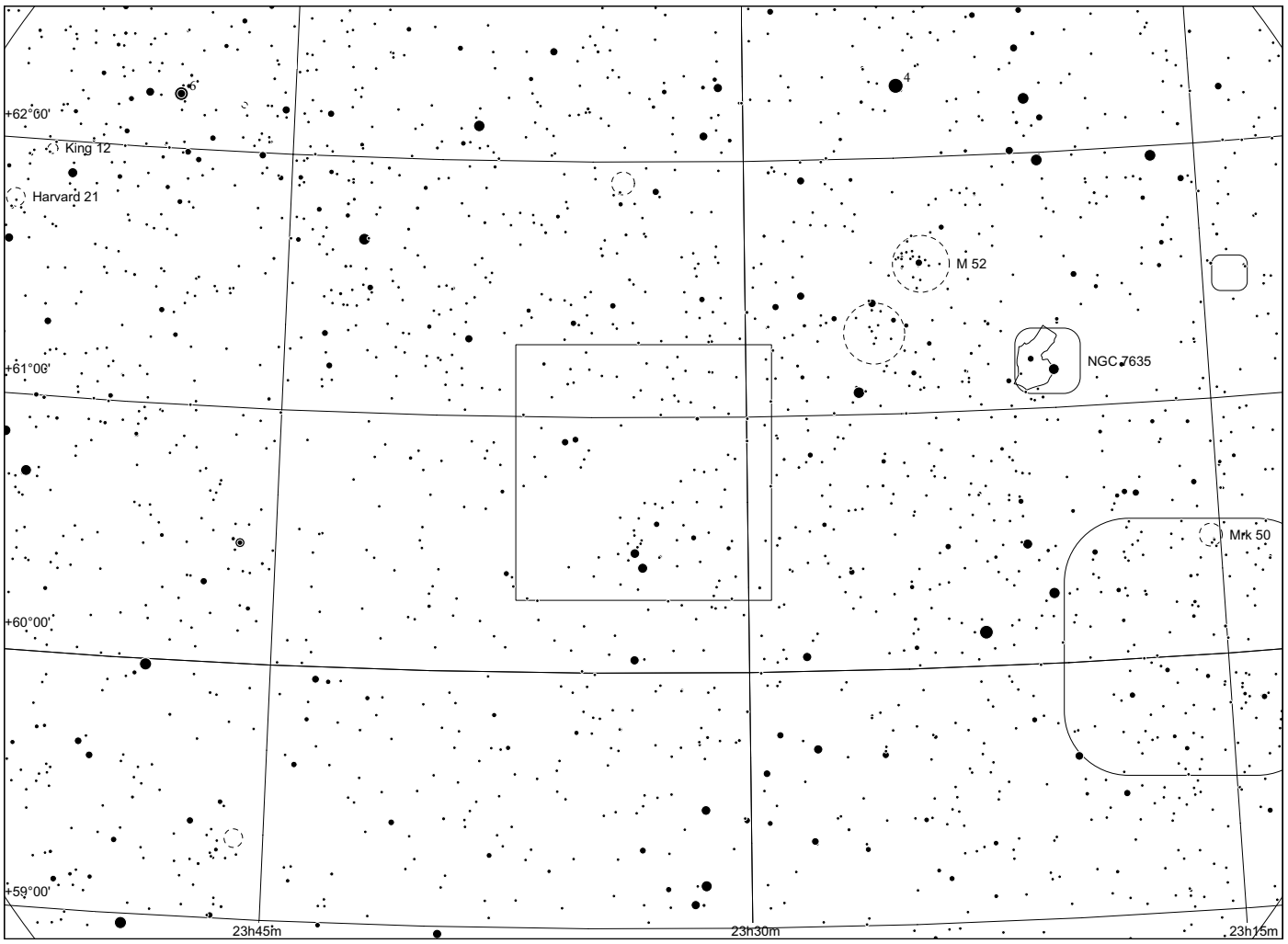
	other name	RA	dec	dia. '	F	S	B
Sh 2-163		23 33 19.3	+60 47 09	10	3	2	2

Distance: 3839 pc, Size: 12.4 pc, Source: 2003A&A...397..213P

Ionised by the O 9.5 V class star LSI +60 8 at 2800 parsecs and contains the infrared cluster [BDS2003] 45. A second distance estimate of 2500 parsecs.

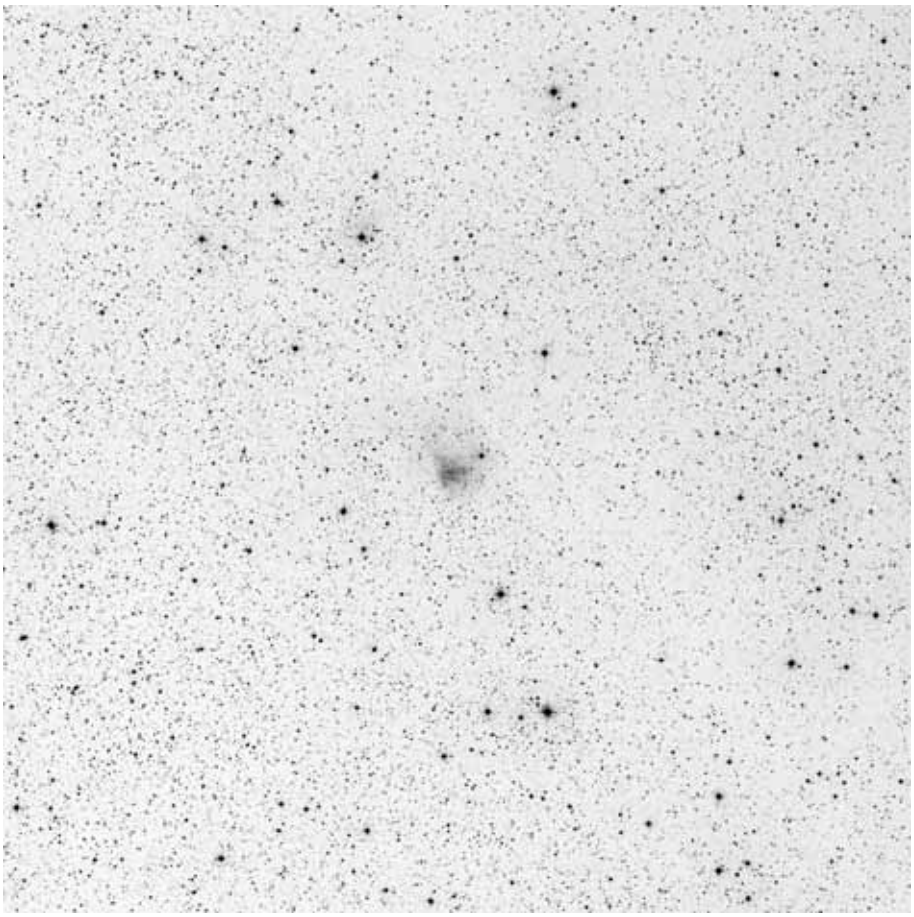
Observing notes:


+65°00'
1h00m
22h00m
Alkurhah
26
30
25
10
κ
12
9
6
4
+60°00'
ssiopeia
Caph
Achird
2
1
δ
τ
Shedir
ρ
+55°00'
σ
λ
ζ
0h30m
0h00m
23h30m
23h00m
22h30m

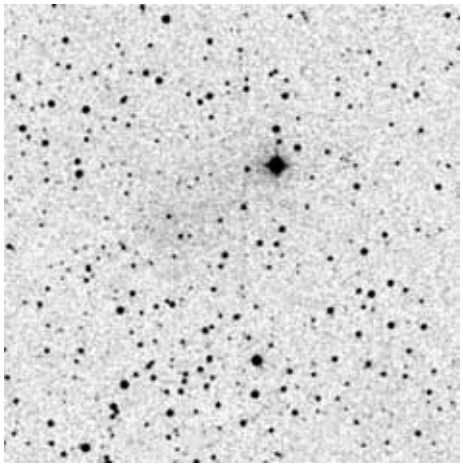

6
4
+62°00'
King 12
Harvard 21
M 52
+61°00'
NGC 7635
Mrk 50
+60°00'
+59°00'
23h45m
23h30m
23h15m

Sh 2 - 164

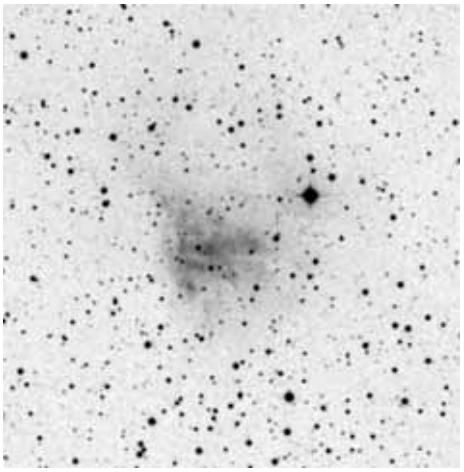
in Cassiopeia



60x60, red



POSS blue



POSS red



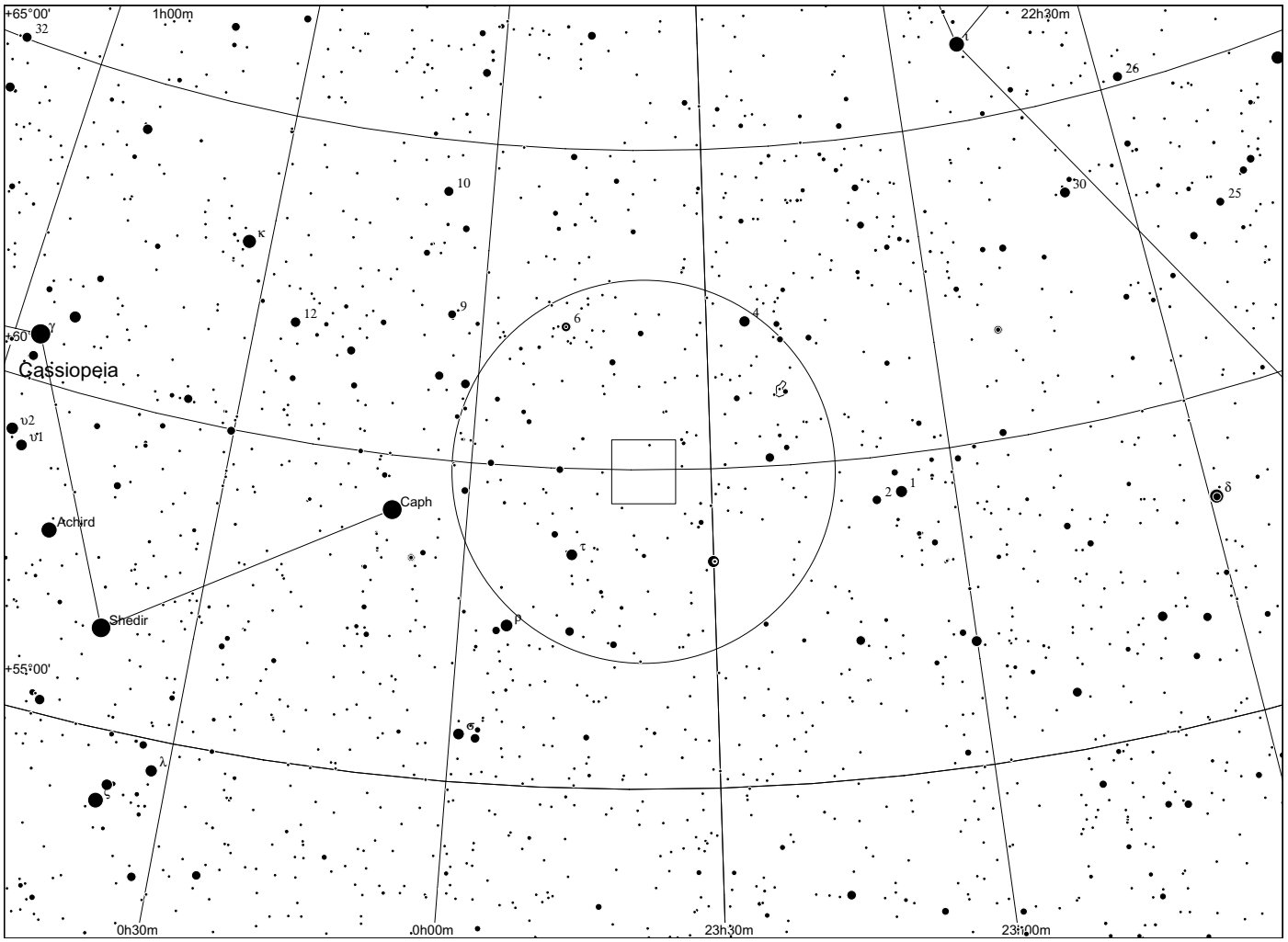
composite

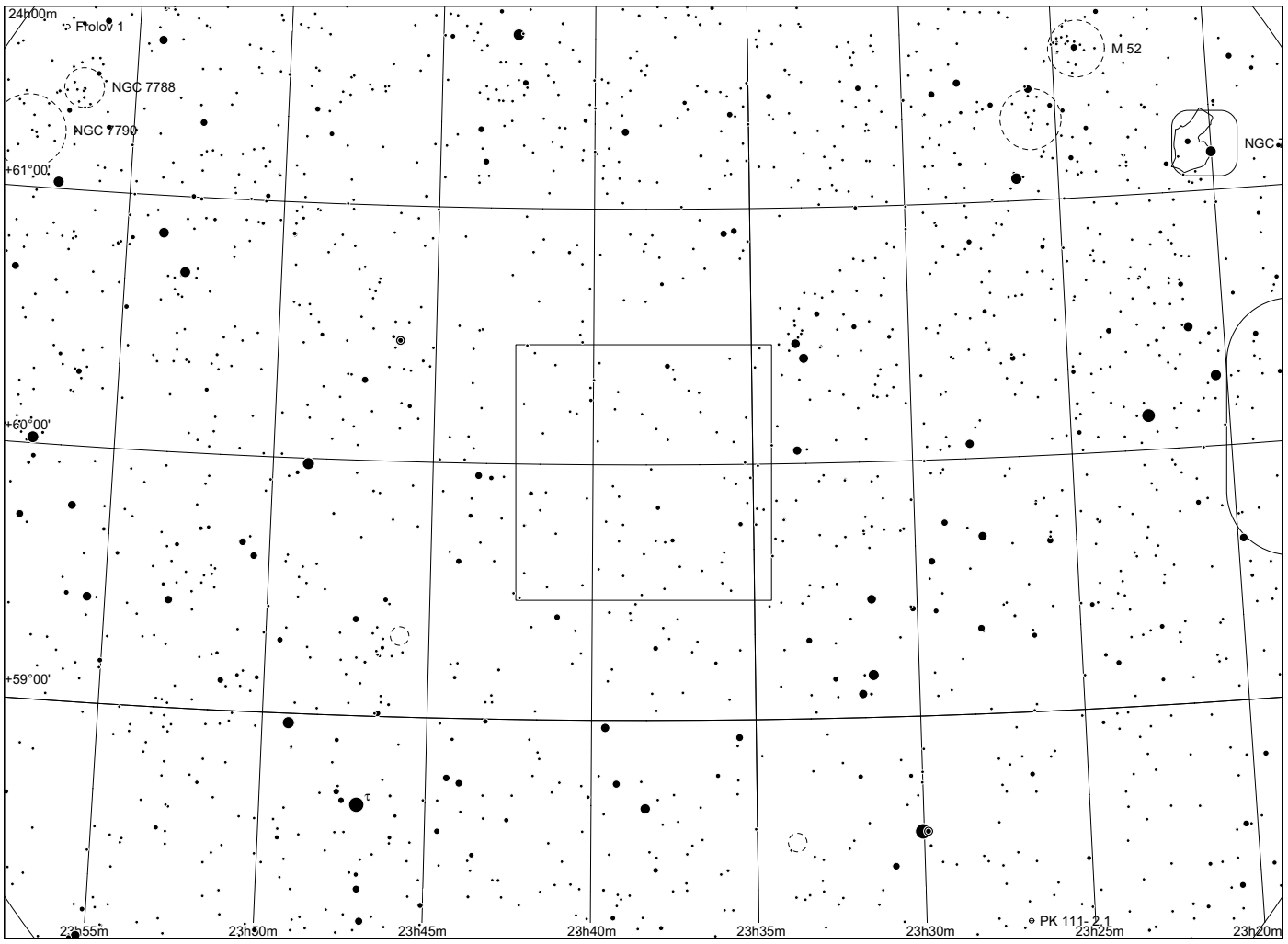
	other name	RA	dec	dia. '	F	S	B
Sh 2-164		23 38 25.3	+59 58 13	3	3	2	2

Distance: 5000 pc, Size: 4.4 pc, Source: 1982ApJS...49..183B

Ionised by the B1 Ib supergiant LS I +59 10 with two distance estimates of 3500 +/- 1500 parsecs and 2820 parsecs.

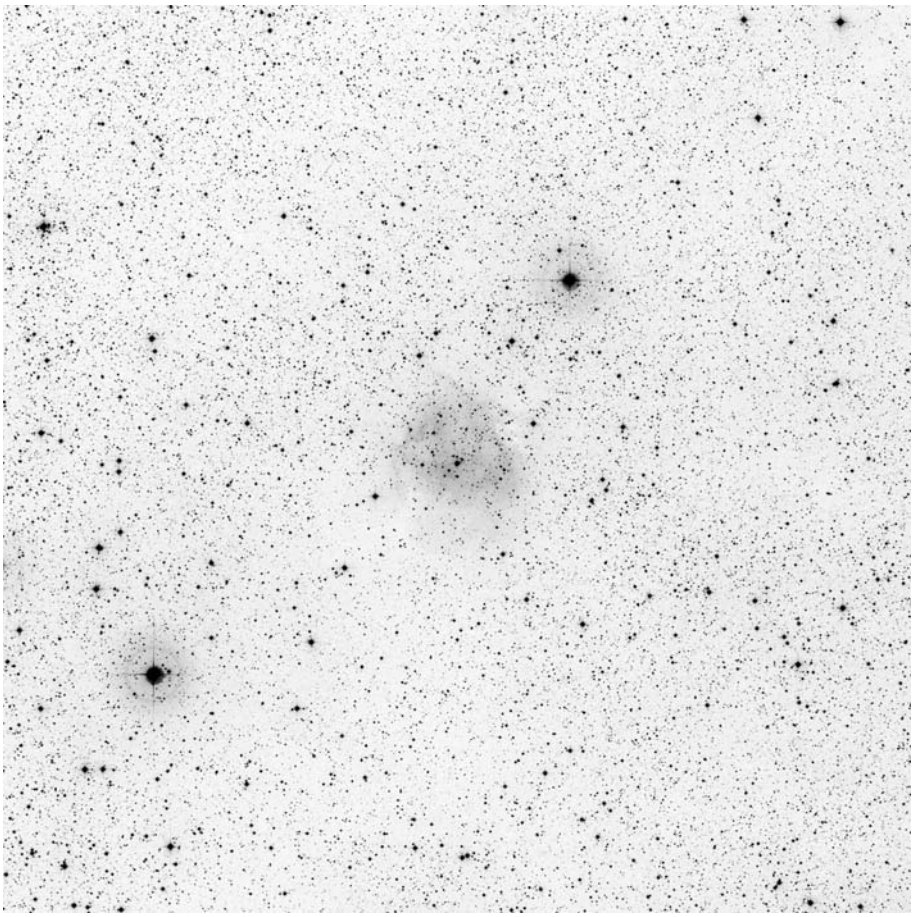
Observing notes:


+65°00'
1h00m
22h30m
32
1
26
10
30
25
κ
12
9
6
4
γ
+60°
Cassiopeia
υ2
υ1
2
1
δ
Caph
Achird
τ
Shedir
ρ
+55°00'
σ
λ
0h30m
0h00m
23h30m
23h00m

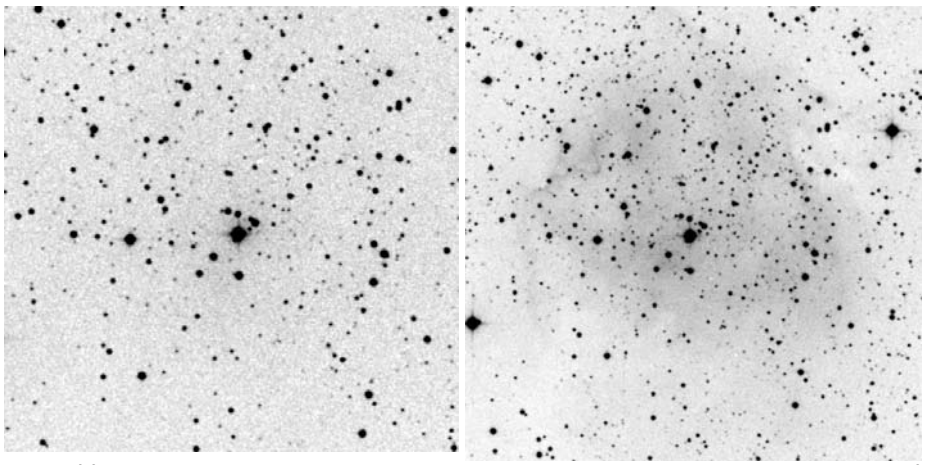

24h00m
Ftolov 1
M 52
NGC 7788
NGC 7790
NGC
+61°00'
+60°00'
+59°00'
τ
23h55m
23h50m
23h45m
23h40m
23h35m
23h30m
PK 111-2.1
23h25m
23h20m

Sh 2 - 165

in Cassiopeia



60x60, red



POSS blue

POSS red



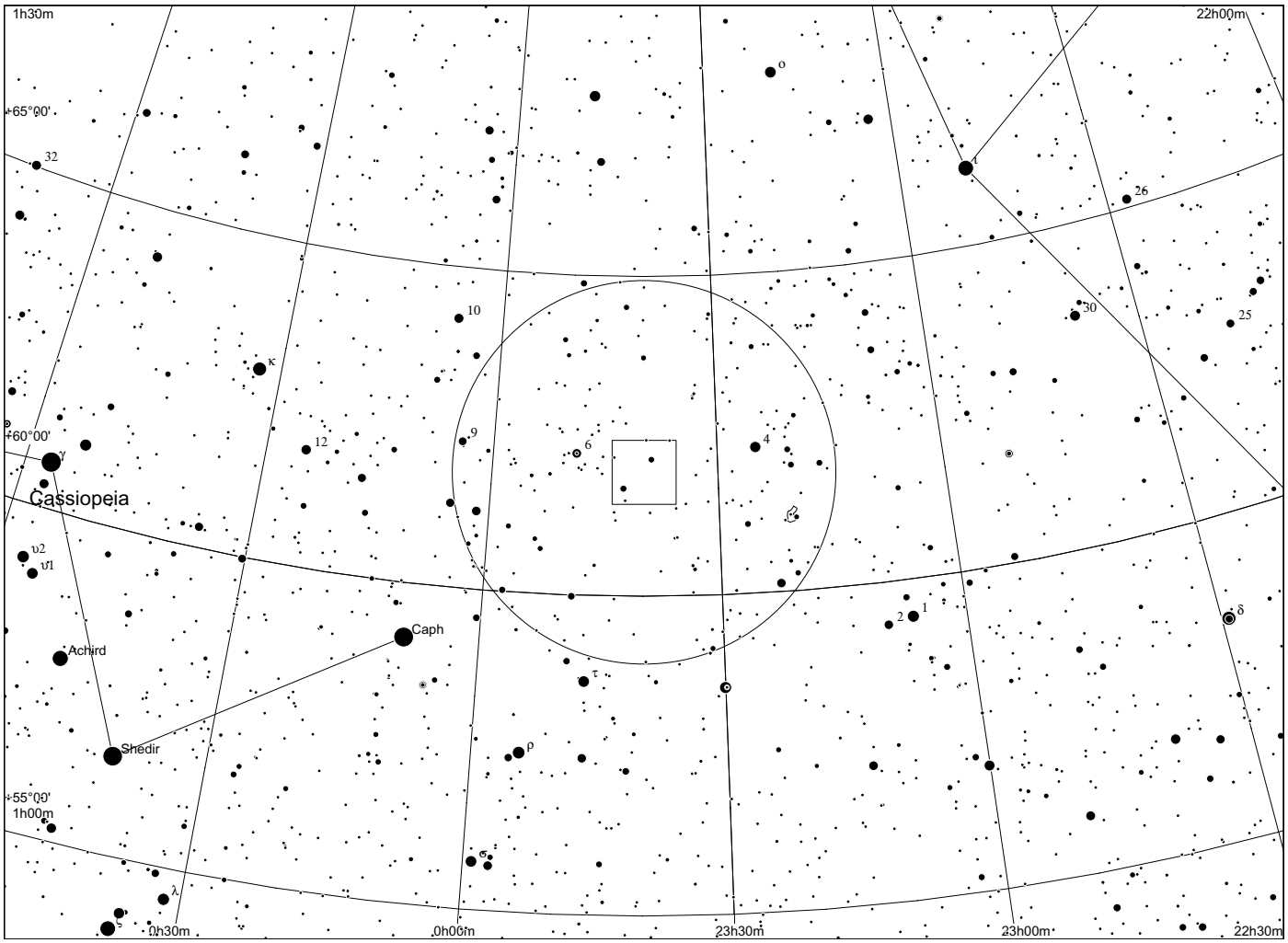
RGB Dean Salman

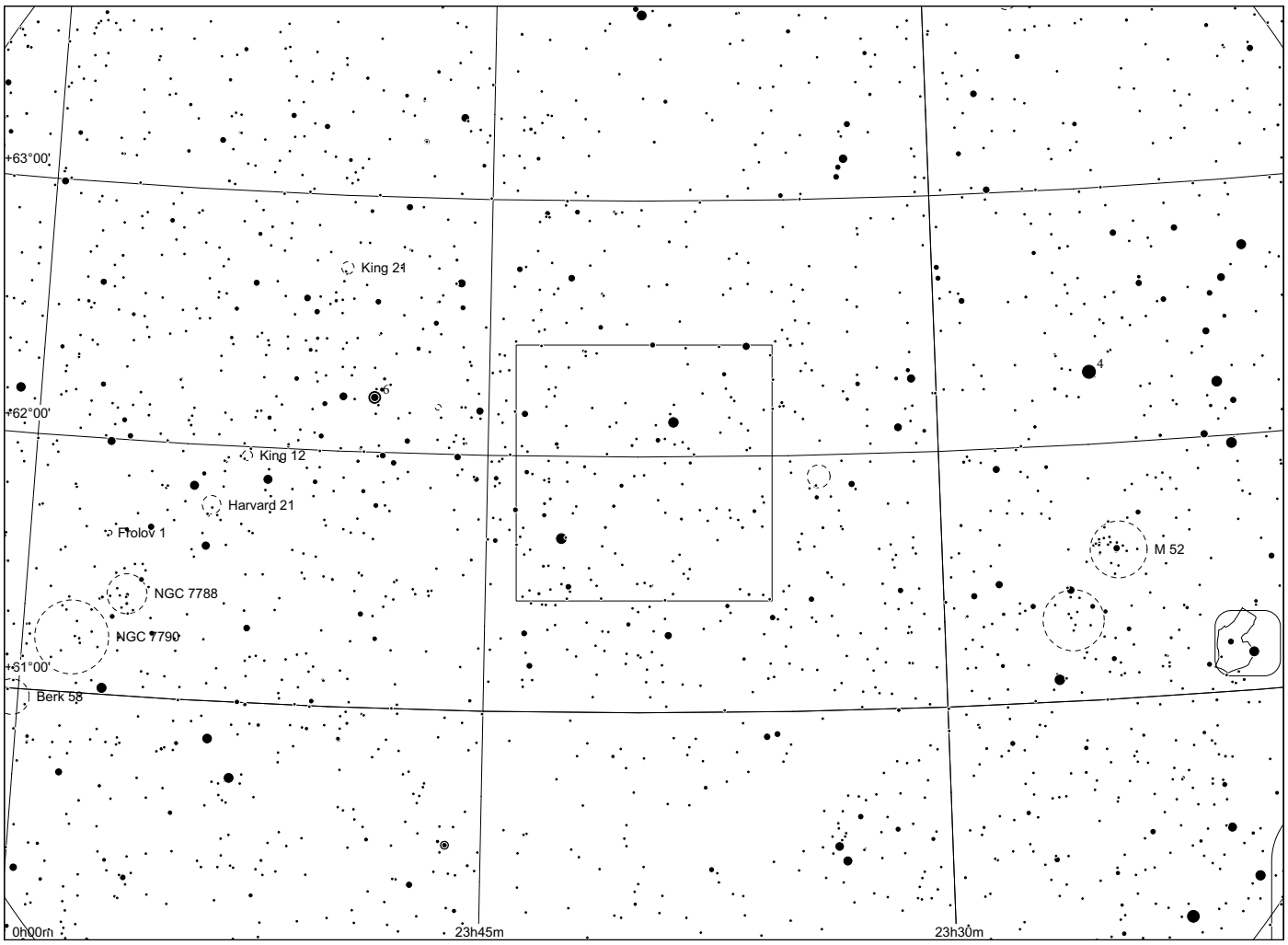
	other name	RA	dec	dia. '	F	S	B
Sh 2-165		23 39 48.1	+61 56 15	10	2	2	2

Distance: 1600 pc, Size: 4.7 pc, Source: 1982ApJS...49..183B

Excited by B0 V star BD 61 +2494, distance estimates of 2020 and 2400 parsecs. Contains the infrared cluster [BDS2003] 46.

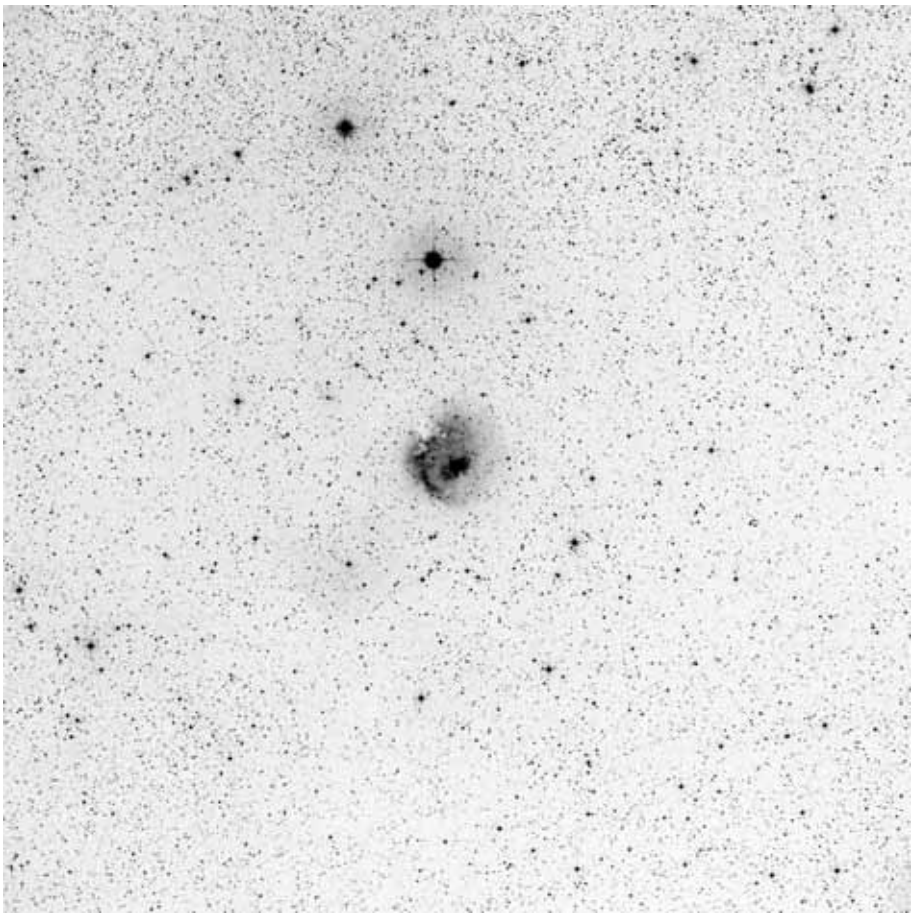
Observing notes:


1h30m
22h00m
+65°00'
32
o
1
26
10
30
25
κ
+60°00'
γ
12
9
6
4
Cassiopeia
υ2
υ1
2
1
δ
Caph
Achird
τ
Shedir
ρ
+55°00'
1h00m
λ
0h30m
0h00m
23h30m
23h00m
22h30m

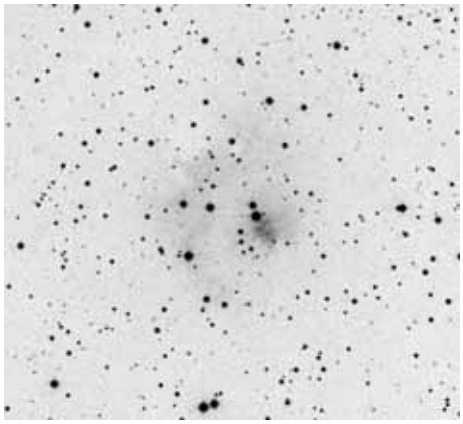

+63°00'
King 24
4
+62°00'
King 12
Harvard 21
Pfolov 1
M 52
NGC 7788
NGC 7790
+61°00'
Berk 58
0h00m
23h45m
23h30m

Sh 2 - 168

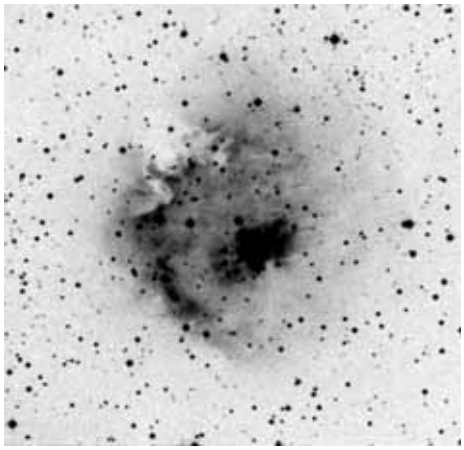
in Cassiopeia



60x60, red



POSS blue



POSS red



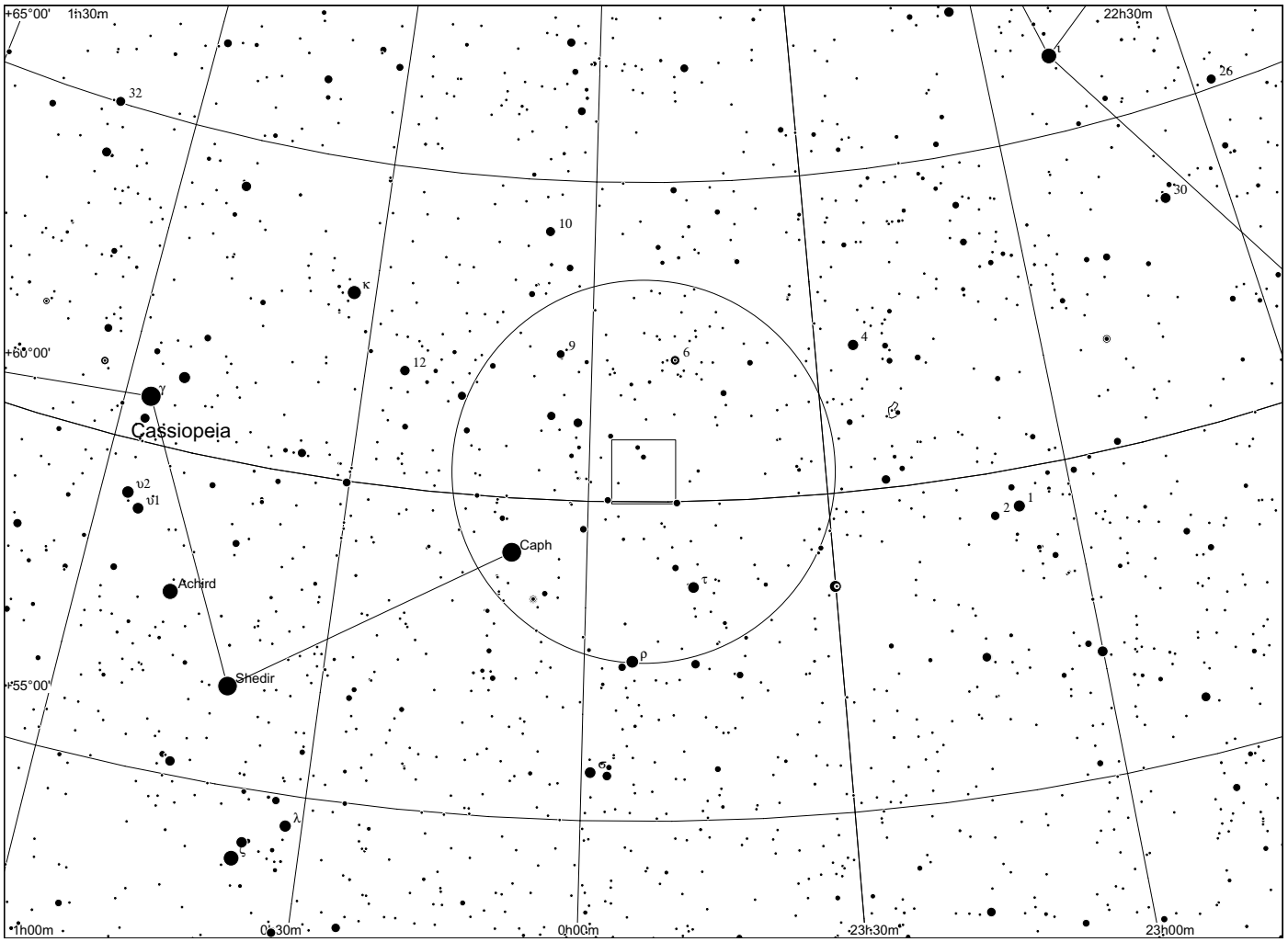
composite

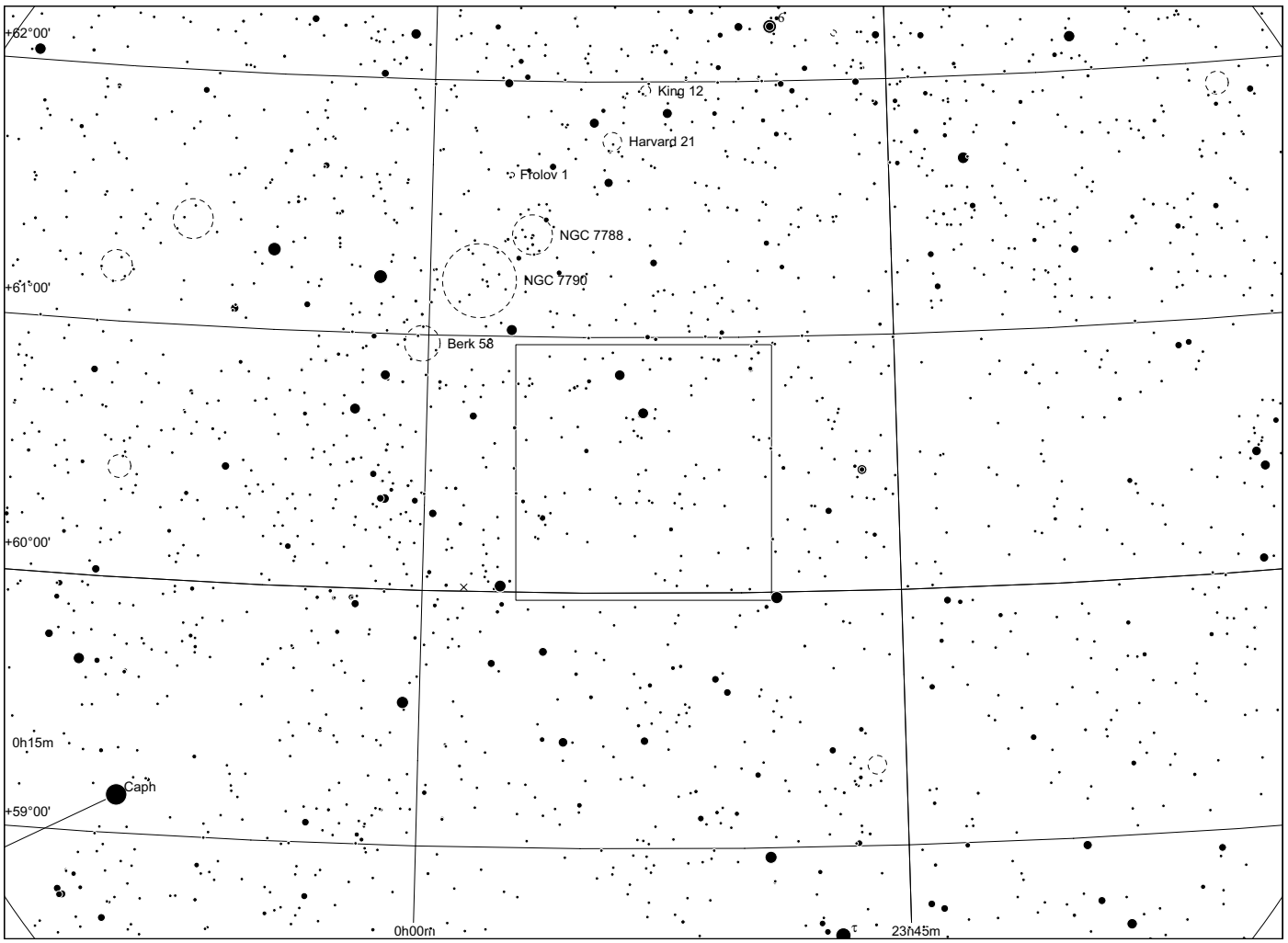
	other name	RA	dec	dia. '	F	S	B
Sh 2-168		23 53 03.5	+60 28 23	7	2	2	2

Distance: 3575 pc, Size: 2.9 pc, Source: 2003A&A...397..213P

This is in the direction of Cas OB5.

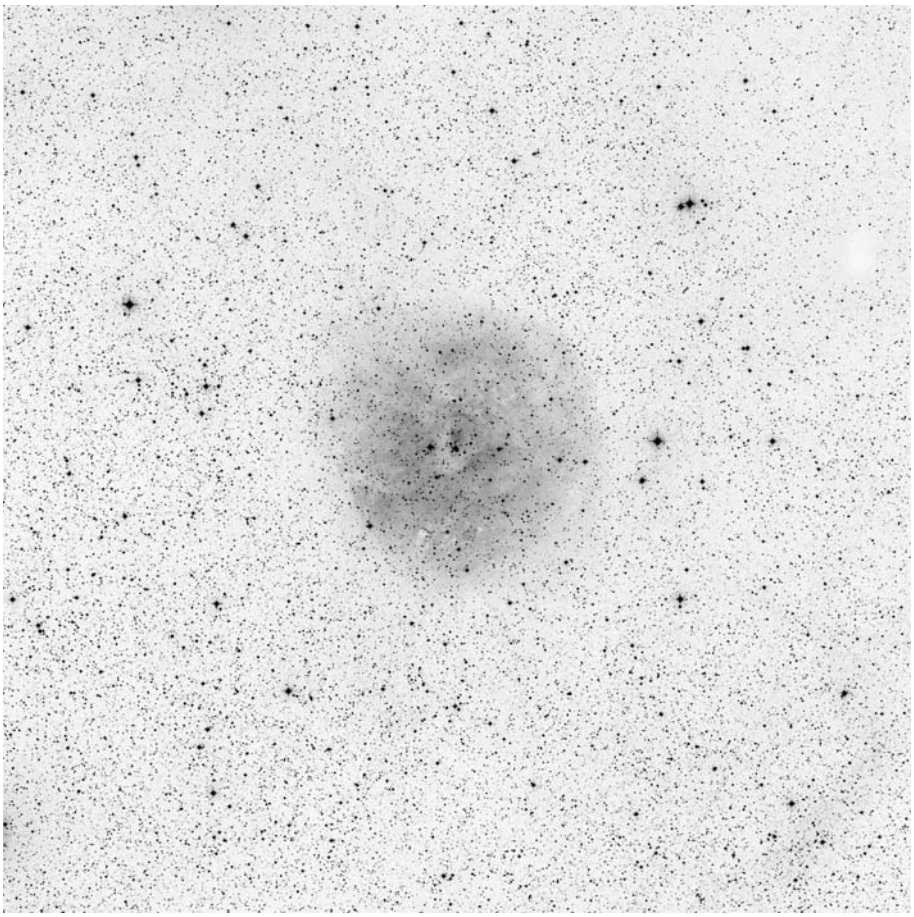
Observing notes:


+65°00'
1h30m
22h30m
32
26
30
10
κ
+60°00'
12
9
6
4
γ
Cassiopeia
υ2
υ1
2
1
Caph
Achird
τ
ρ
Shedir
+55°00'
λ
ξ
1h00m
0h30m
0h00m
23h30m
23h00m

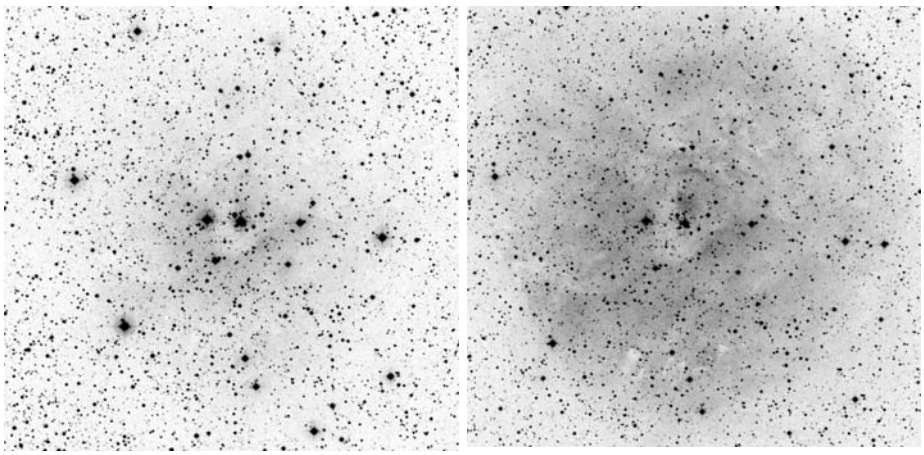

+62°00'
σ
King 12
Harvard 21
Frolov 1
NGC 7788
NGC 7790
+61°00'
Berk 58
+60°00'
0h15m
Caph
+59°00'
0h00m
τ
23h45m

Sh 2 - 170

in Cassiopeia



60x60, red





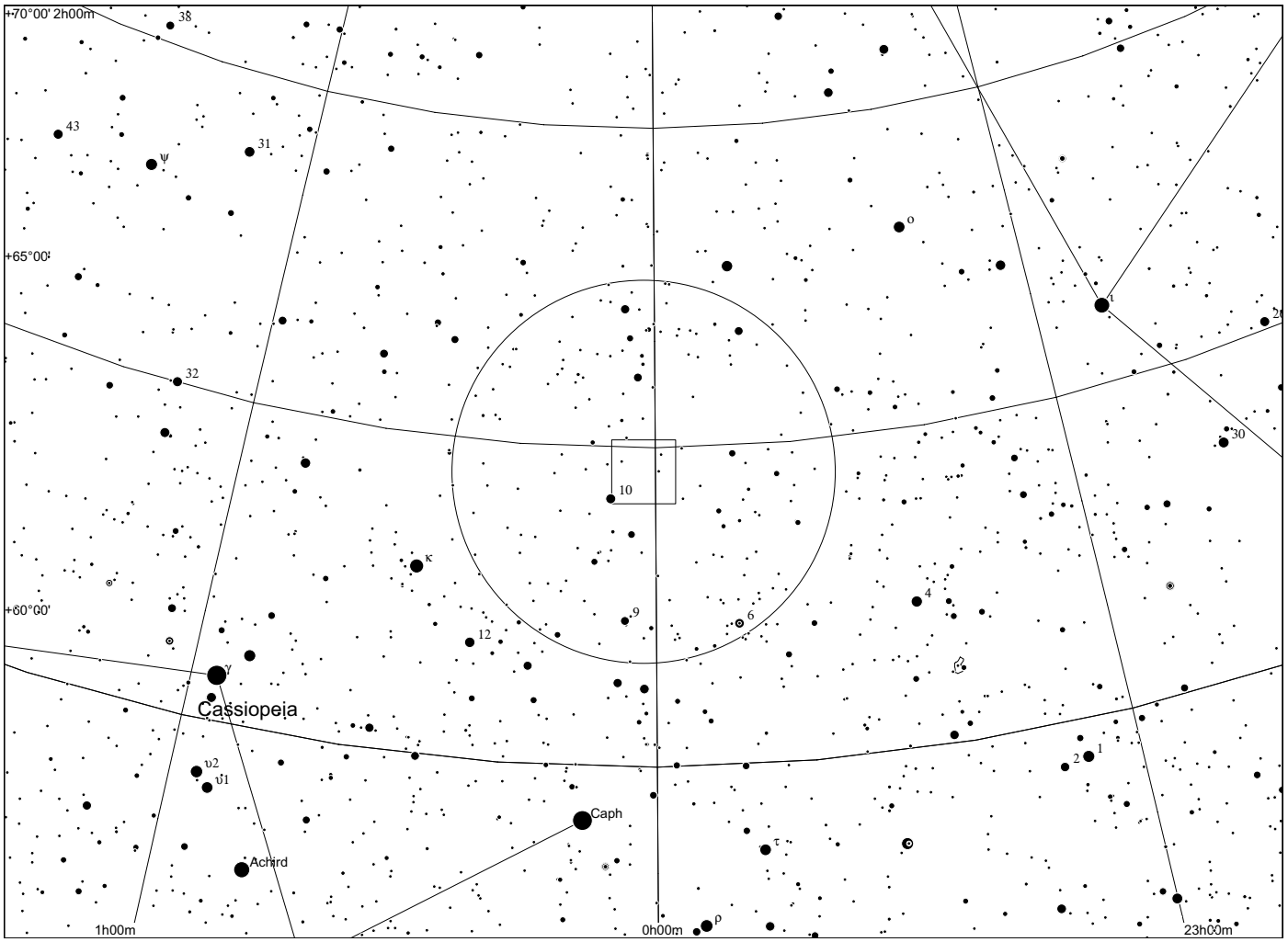
POSS blue POSS red RGB Dean Salman

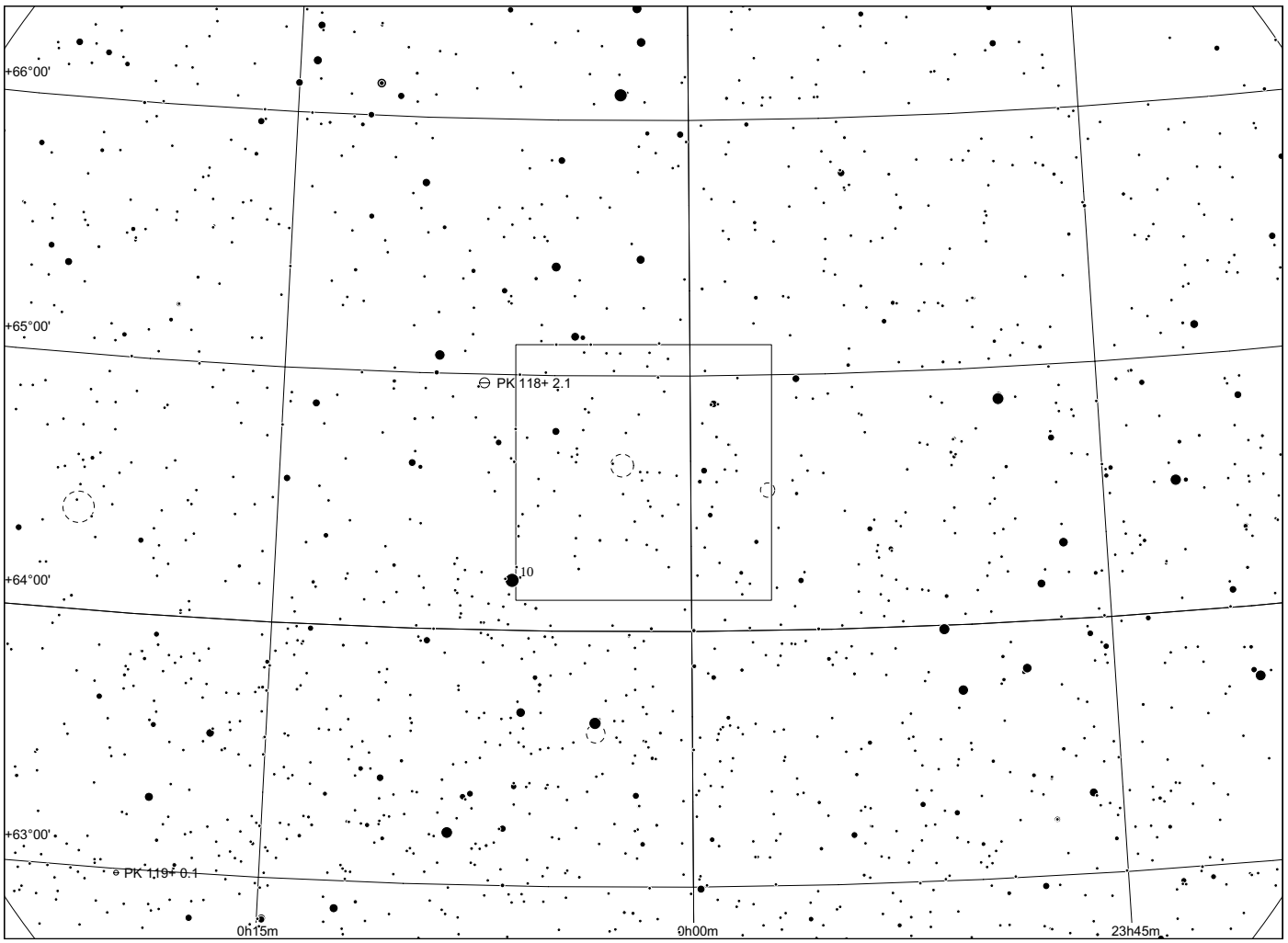
	other name	RA	dec	dia. '	F	S	B
Sh 2-170		00 01 42.0	+64 37 24	20	1	2	2

Distance: 2300 pc, Size: 13.4 pc, Source: 1982ApJS...49..183B

Sh 2-170 is in the vicinity of the Cassiopeia OB5 supershell. The sole exciting star of Sh 2-170 is DM+63 2093, an O8 V star of 31 solar masses.

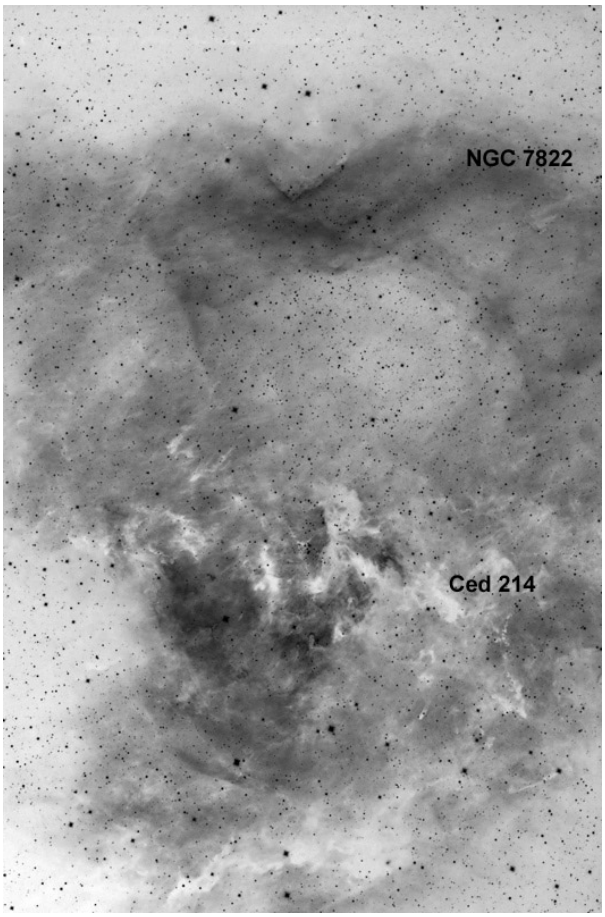
Observing notes:

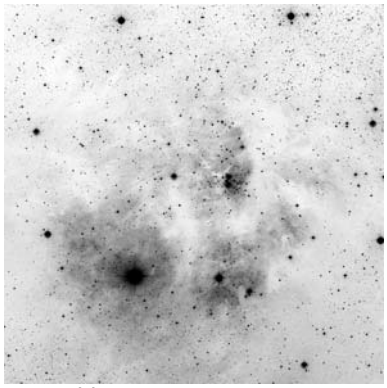

+70°00' 2h00m
38
43
31
ψ
+65°00'
o
1
2
32
30
10
κ
+60°00'
9
6
12
4
γ
Cassiopeia
υ2
υ1
2
1
Caph
τ
Achird
ρ
1h00m
0h00m
23h00m


+66°00'
+65°00'
PK 118+ 2.1
10
+64°00'
+63°00'
PK 119+ 0.1
0h15m
0h00m
23h45m

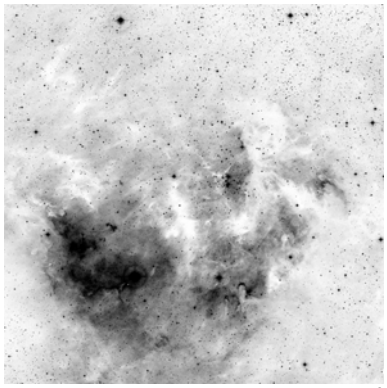
Sh 2 - 171

in Cepheus





POSS blue



POSS red



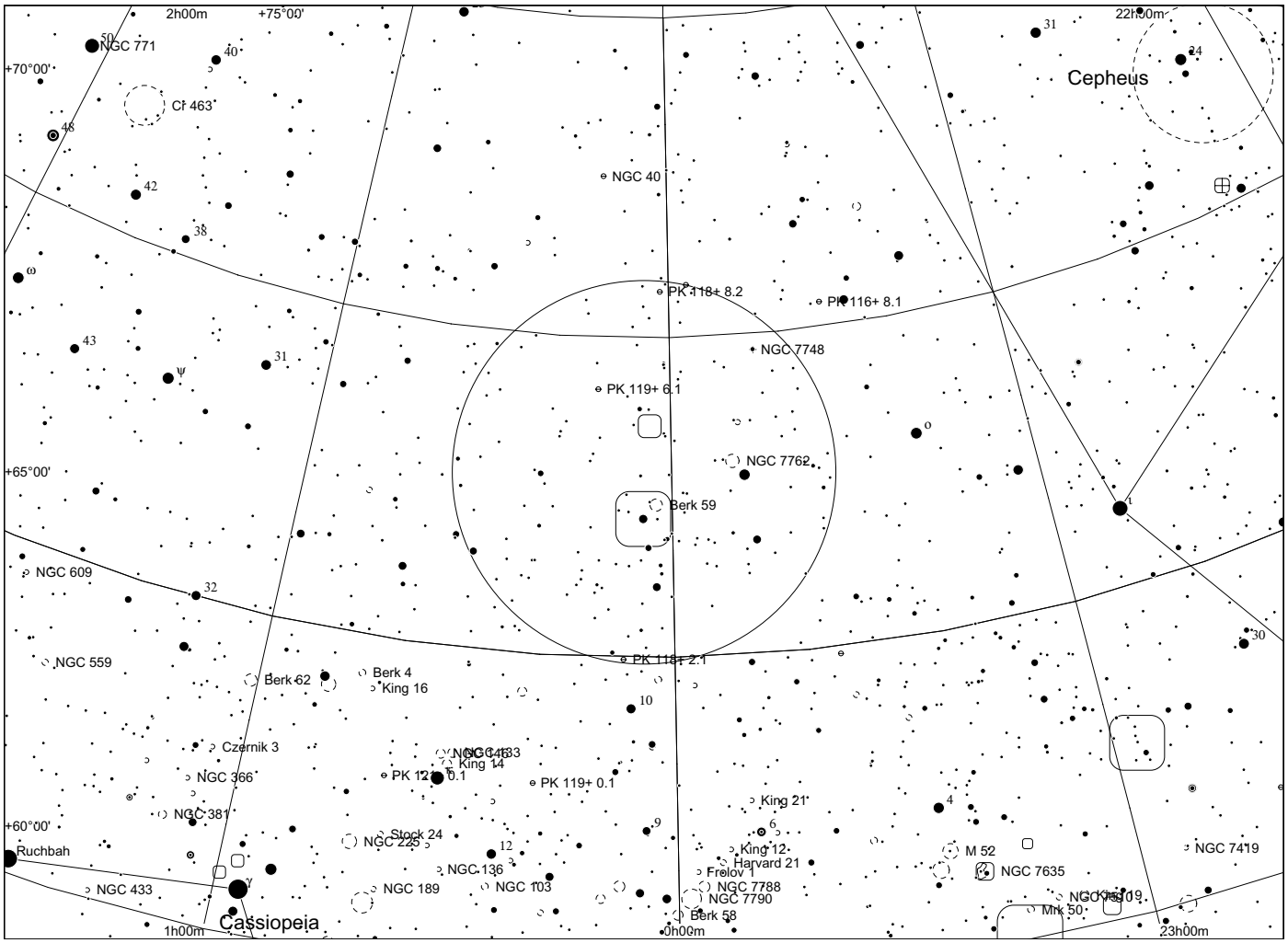
Halpha RGB Dean Salman

	other name	RA	dec	dia. '	F	S	B
Sh 2-171	NGC7822 + Ced214	00 04 40.0	+67 09 24	180	3	2	3

Distance: 840 pc, Size: 44.0 pc, Source: 1982ApJS...49..183B

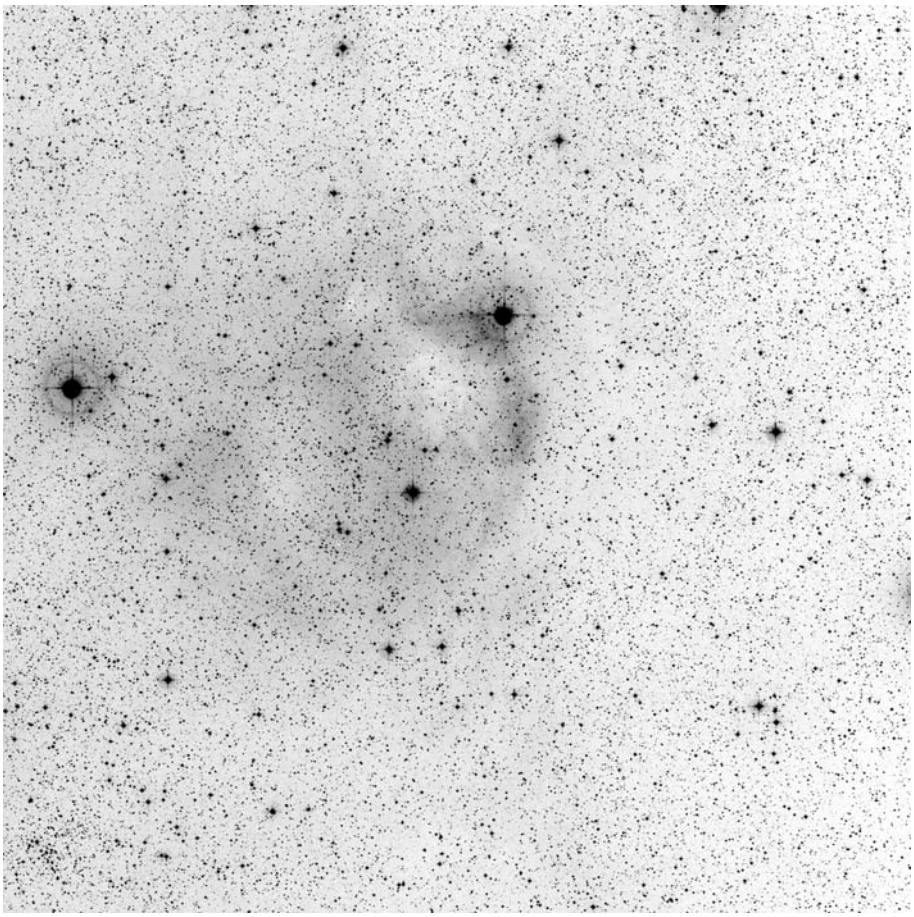
This expanding shell of gas and dust was created by the original star cluster at the heart of the Cep OB4 association, which has now dispersed. It is now lit and ionized by the young star cluster Berkeley 59, at its south end (Cederblad 214) and it is expanding into the dark nebula NGC 7822 at its north end. Berkeley 59 is surrounded by another dark region of disturbed gas and dust containing the radio source W1.

Observing notes:

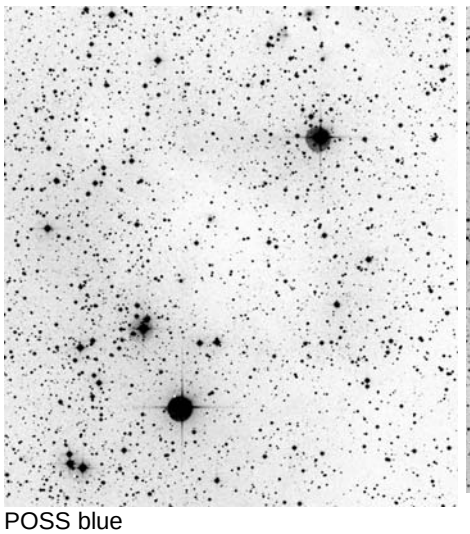

2h00m
+75°00'
22h00m
+70°00'
+65°00'
+60°00'
1h00m
0h00m
23h00m
Cepheus
Cassiopeia
NGC 771
Cr 463
NGC 40
PK 118+ 8.2
PK 116+ 8.1
NGC 7748
PK 119+ 6.1
NGC 7762
Berk 59
NGC 609
NGC 559
PK 118+ 2.1
Berk 62
Berk 4
King 16
Czernik 3
NGC 7433
King 14
NGC 366
PK 120+ 0.1
PK 119+ 0.1
NGC 381
King 21
Stock 24
NGC 225
Ruchbah
NGC 136
King 12
Harvard 21
M 52
NGC 7635
NGC 7419
Frolov 1
NGC 433
NGC 189
NGC 103
NGC 7788
NGC 7790
Berk 58
Mrk 50
NGC 7709

Sh 2 - 173

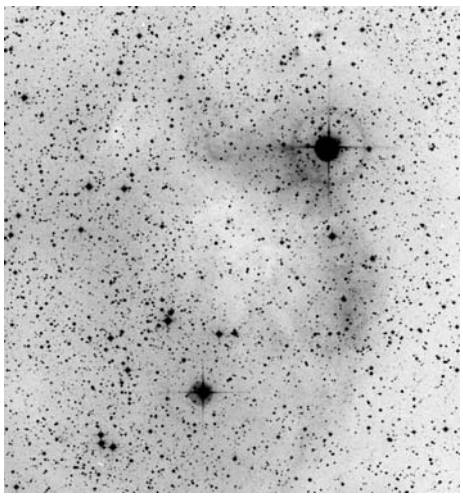
in Cassiopeia



60x60, red



POSS blue



POSS red



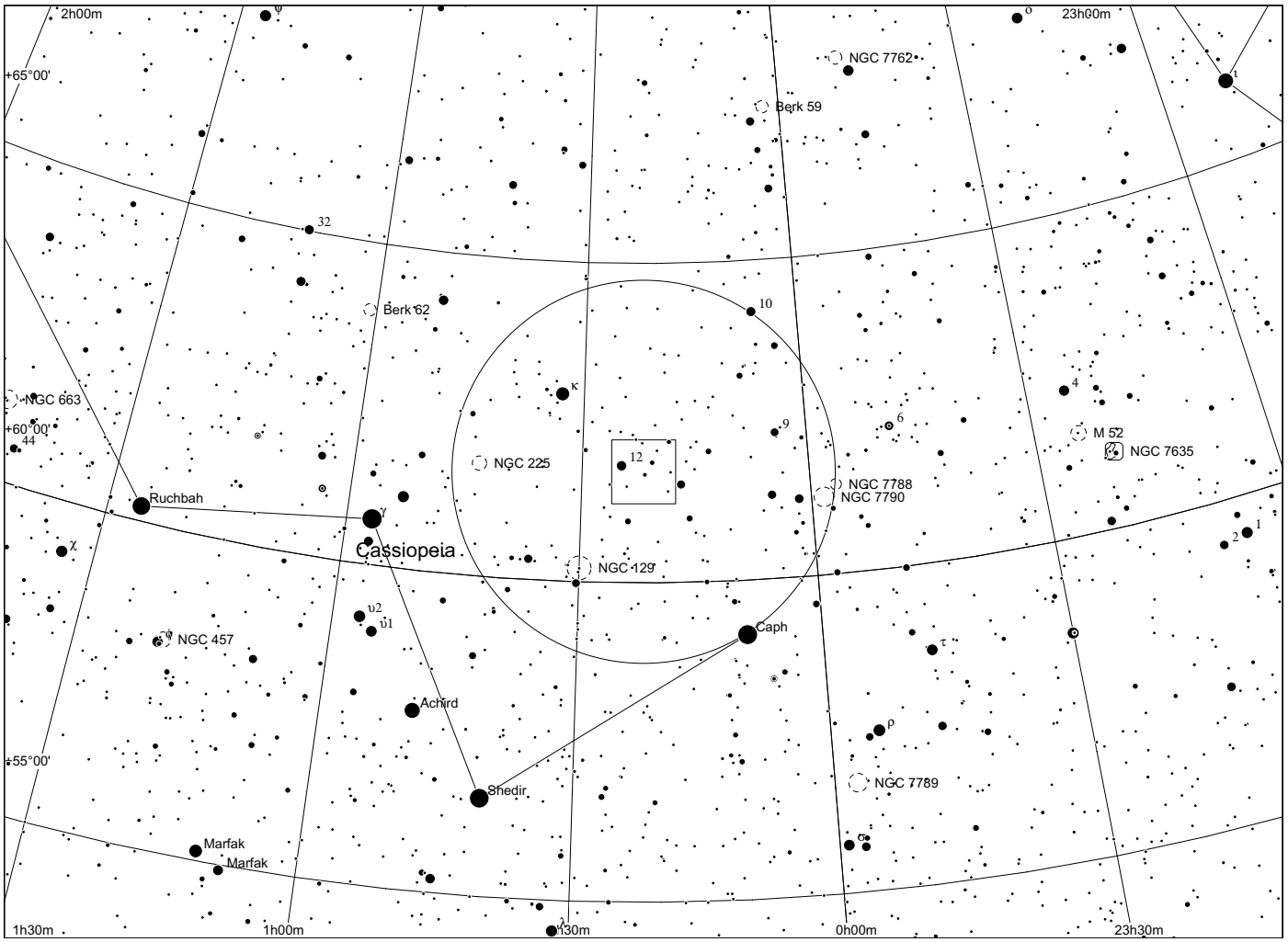
composite

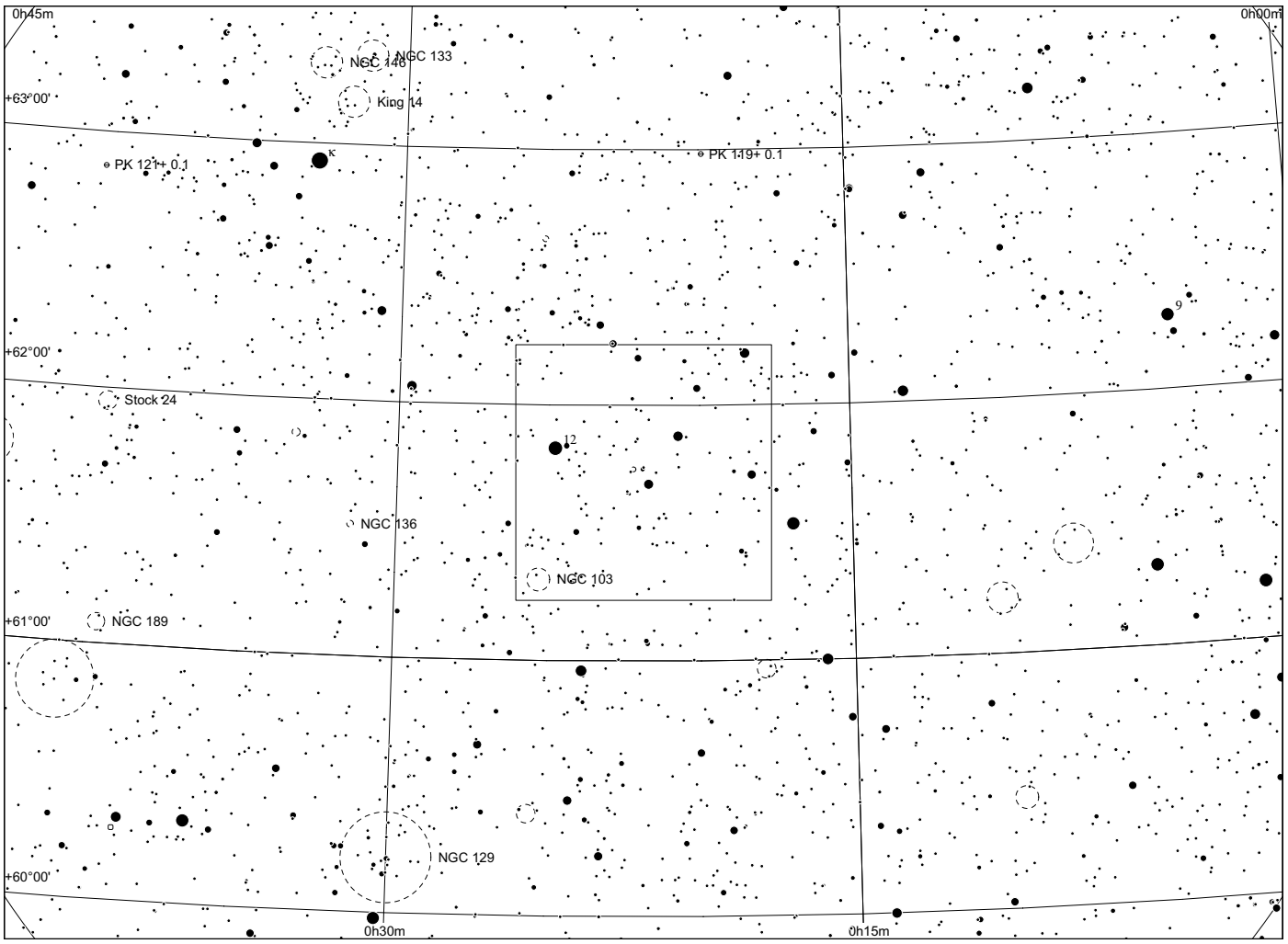
	other name	RA	dec	dia. '	F	S	B
Sh 2-173		00 21 51.8	+61 44 17	30	1	2	2

Distance: 2700 pc, Size: 23.6 pc, Source: 1982ApJS...49..183B

Sh 2-173 is part of the Cas OB5 super shell.

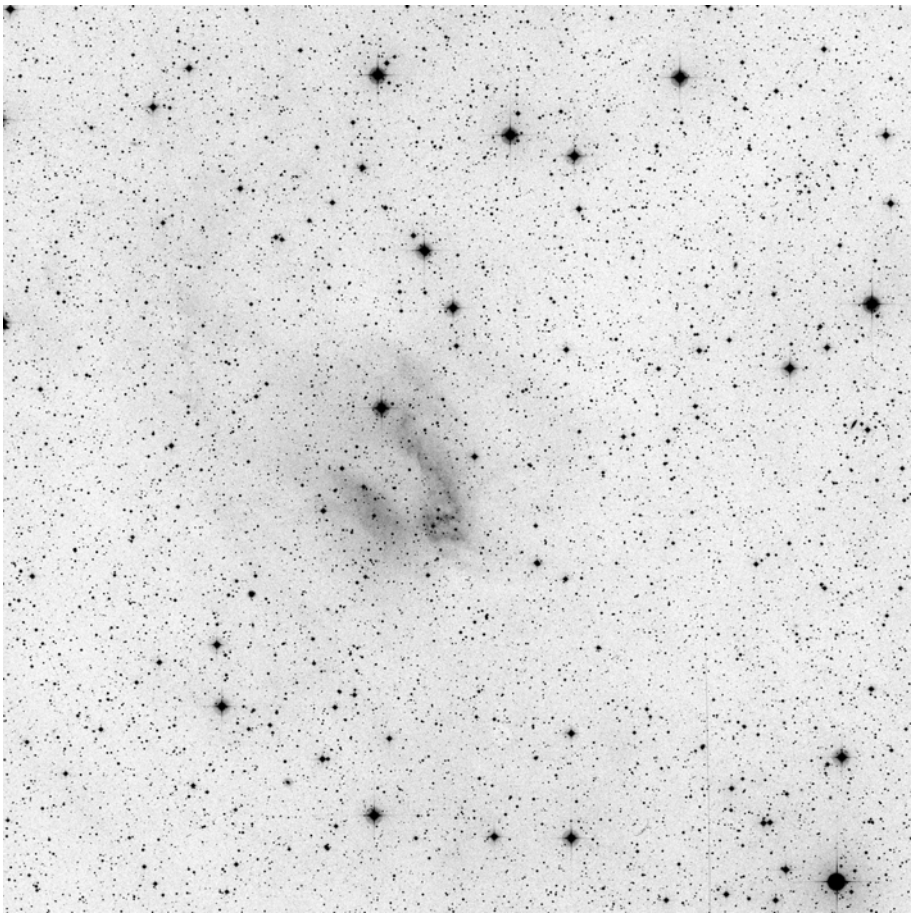
Observing notes:


2h00m
23h00m
+65°00'
NGC 7762
Berk 59
32
Berk 62
10
κ
NGC 663
+60°00'
44
NGC 225
12
9
6
4
M 52
NGC 7635
NGC 7788
NGC 7790
Ruchbah
γ
Cassiopeia
χ
NGC 129
υ2
υ1
Caph
NGC 457
Achird
ρ
+55°00'
Shedir
NGC 7789
Marfak
Marfak
1h30m
1h00m
0h30m
0h00m
23h30m

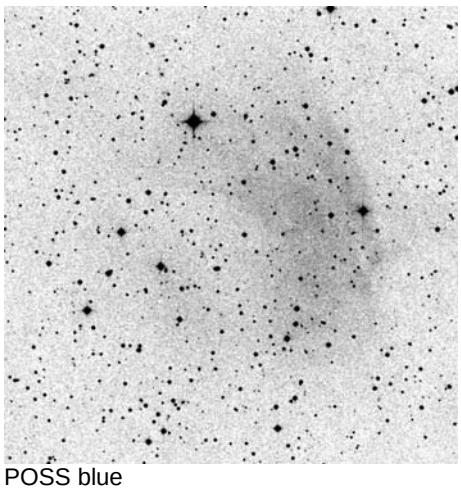

0h45m
0h00m
NGC 146
NGC 133
+63°00'
King 14
PK 121+ 0.1
κ
PK 119+ 0.1
9
+62°00'
Stock 24
12
NGC 136
NGC 103
+61°00'
NGC 189
NGC 129
+60°00'
0h30m
0h15m

Sh 2 - 174

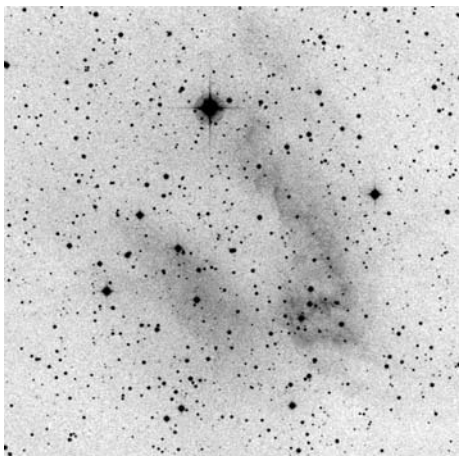
in Cepheus



60x60, red



POSS blue



POSS red

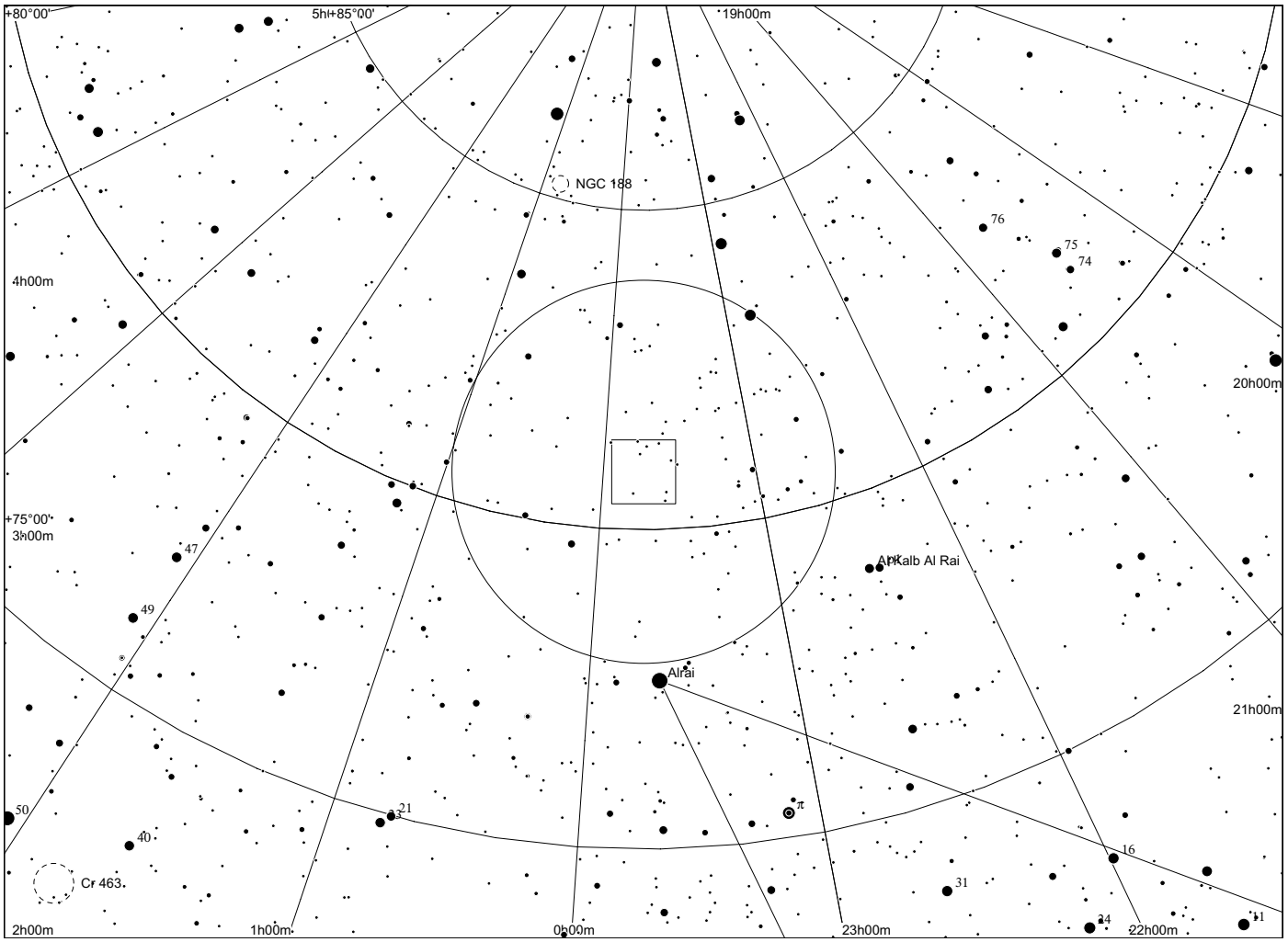


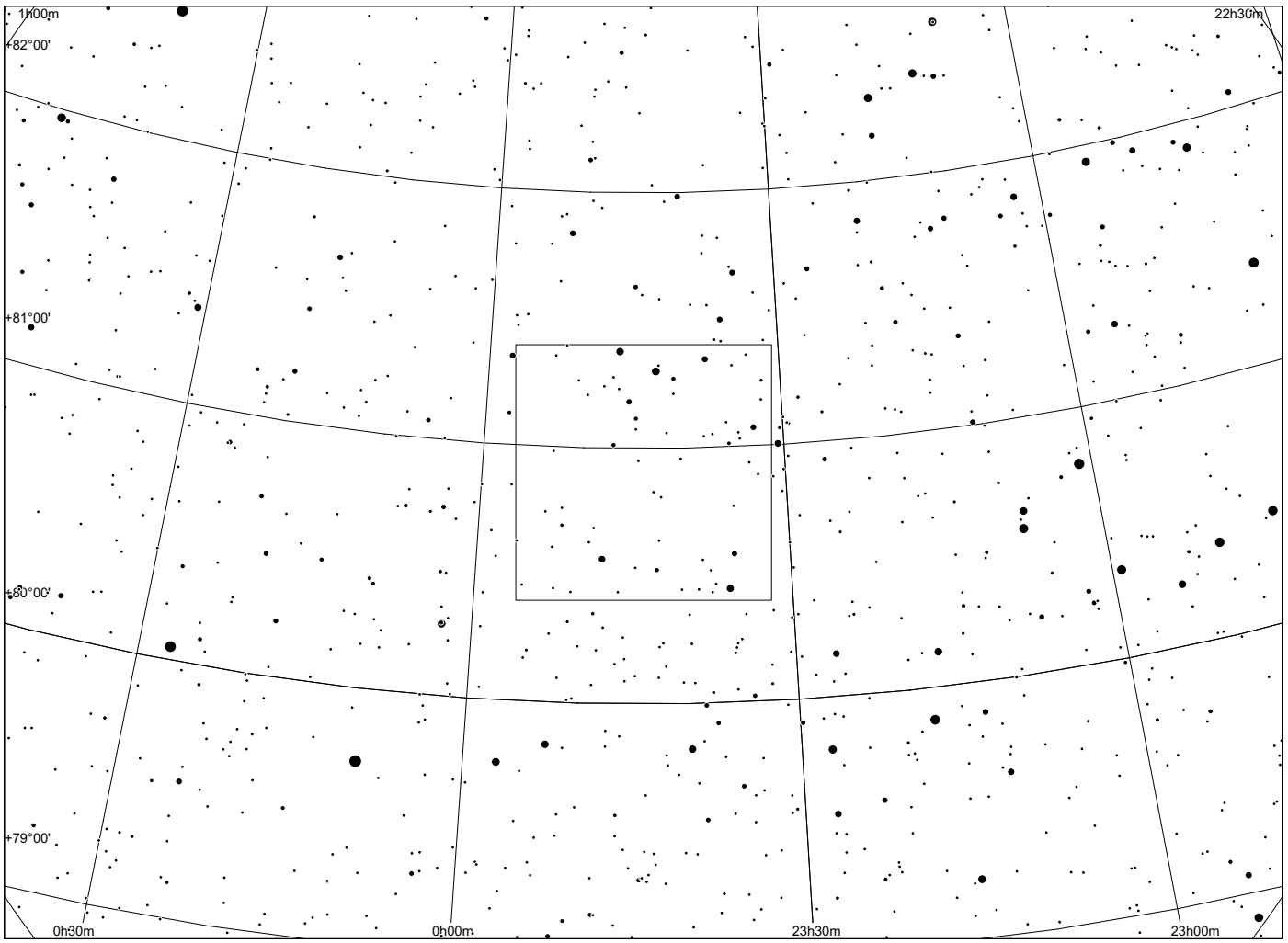
RGB Dean Salman

	other name	RA	dec	dia. '	F	S	B
Sh 2-174		23 46 49.1	+80 56 20	10	3	2	1

The former central star of this old planetary nebula, the white dwarf GD 561, has drifted to the outside of the nebula. Both are located about 300 pc away.

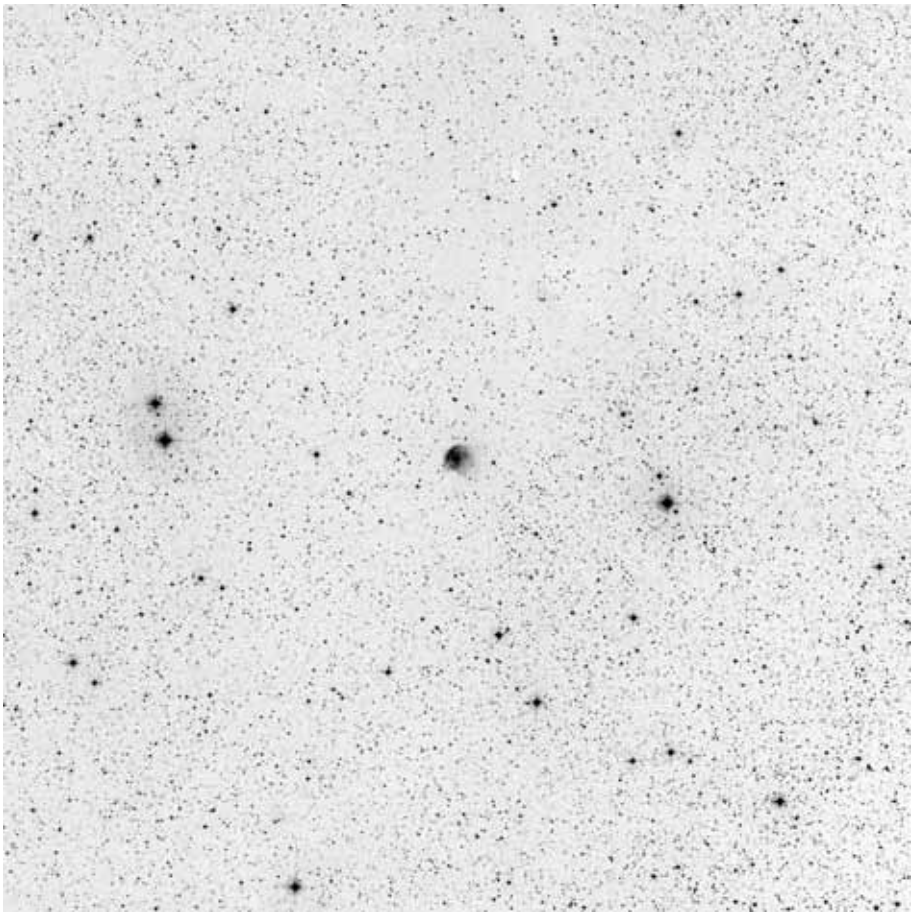
Observing notes:


+80°00'
5h
+85°00'
19h00m
NGC 188
76
75
74
4h00m
20h00m
+75°00'
3h00m
47
49
Alkalb Al Rai
Alrai
21h00m
50
40
21
π
16
31
Cr 463
2h00m
1h00m
0h00m
23h00m
22h00m

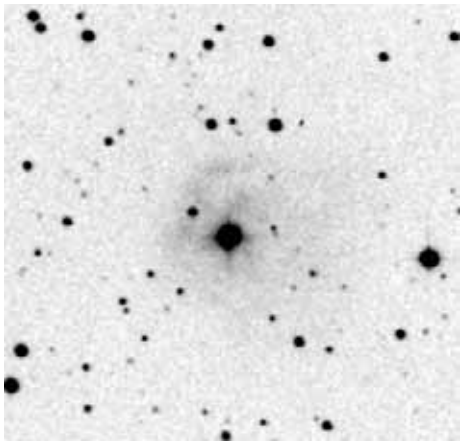

1h00m
22h30m
+82°00'
+81°00'
+80°00'
+79°00'
0h30m
0h00m
23h30m
23h00m

Sh 2 - 175

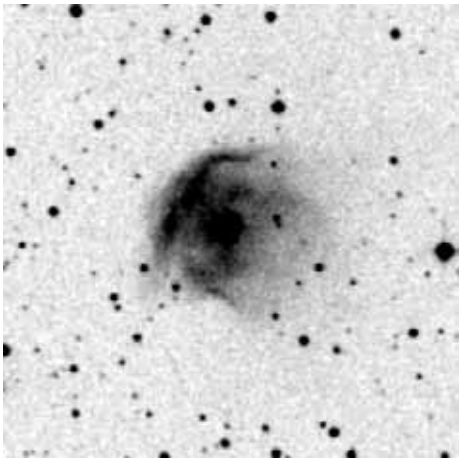
in Cassiopeia



60x60, red



POSS blue



POSS red



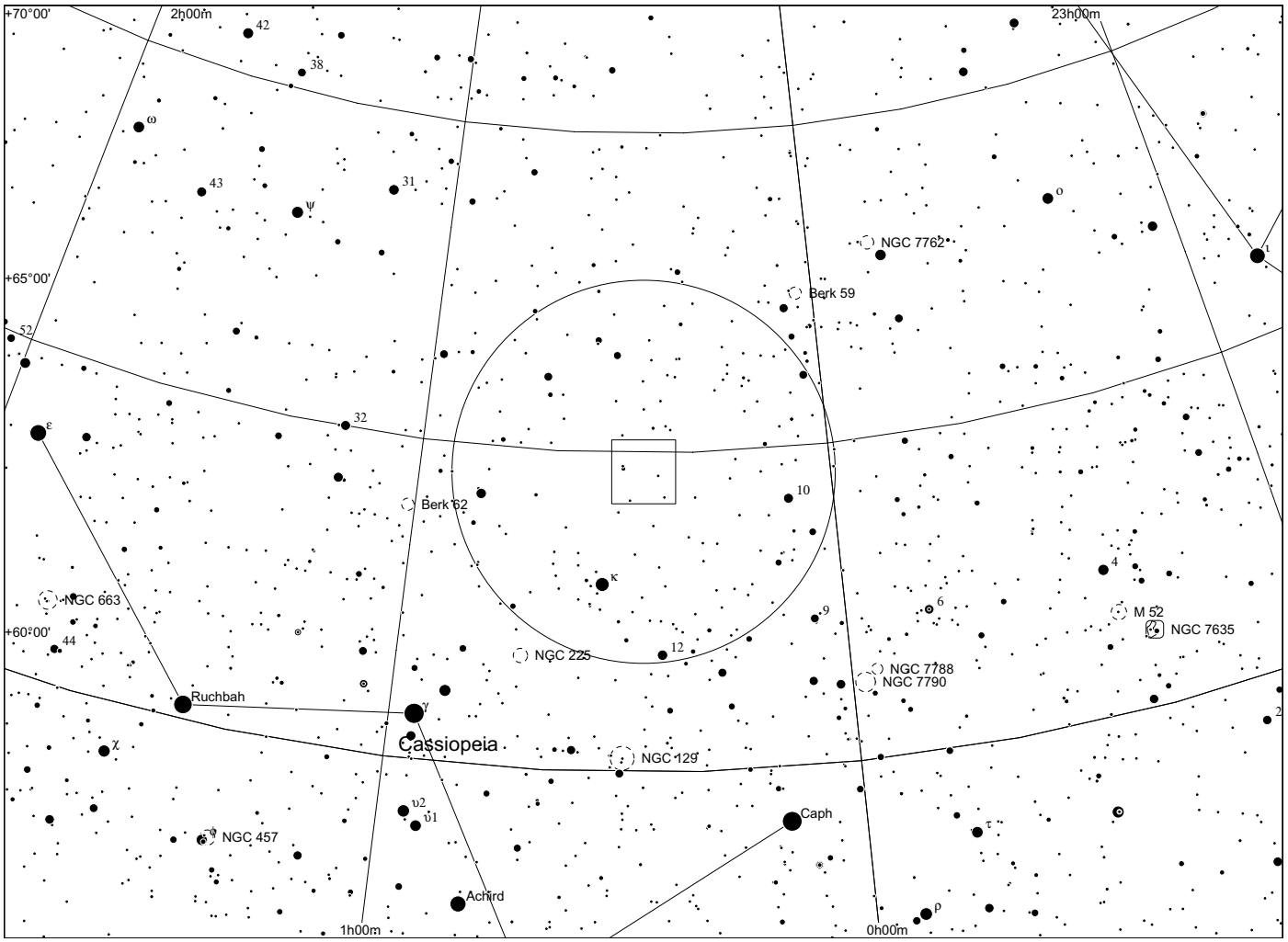
composite

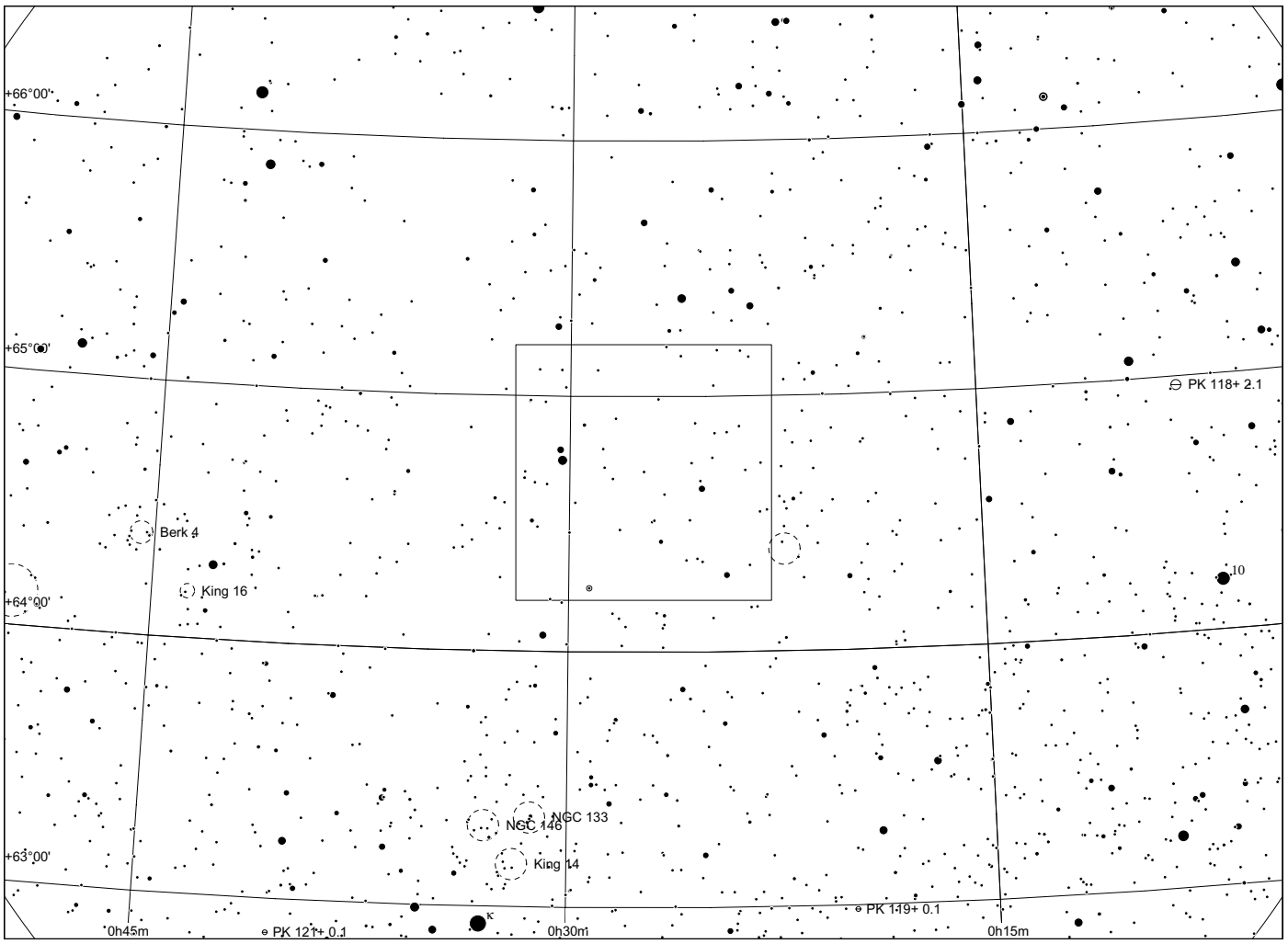
	other name	RA	dec	dia. '	F	S	B
Sh 2-175		00 27 18.6	+64 42 13	2	1	2	2

Distance: 1700 pc, Size: 1.0 pc, Source: 1982ApJS...49..183B

This is in Cas OB5.

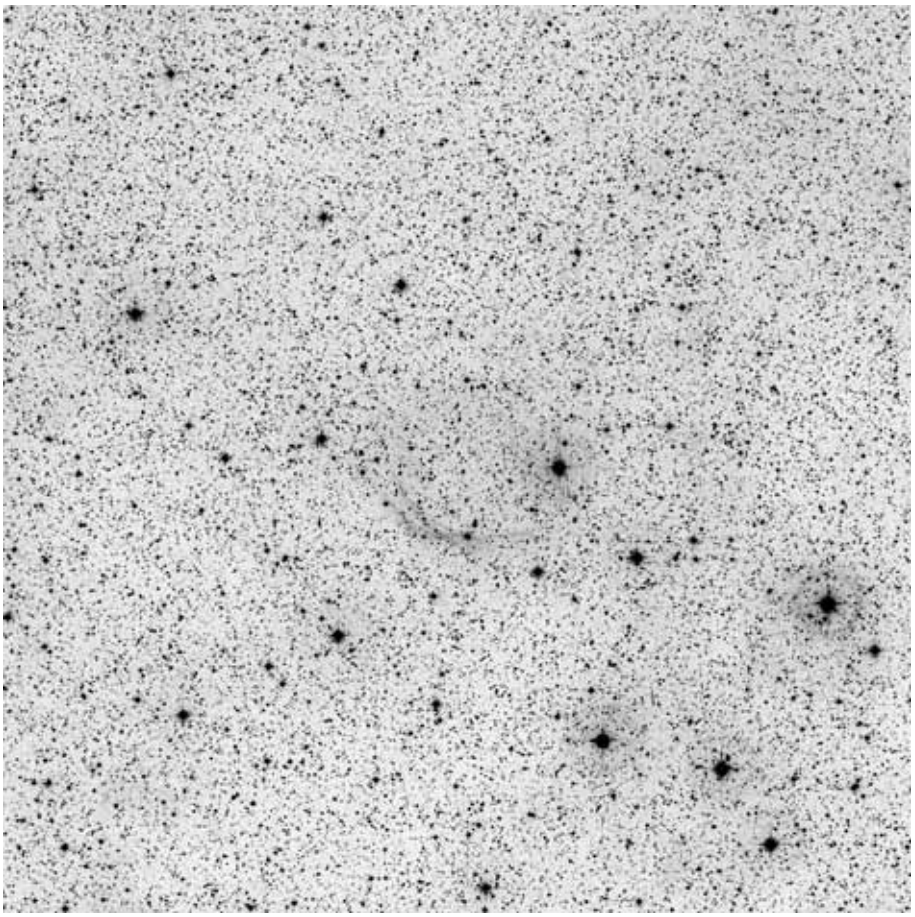
Observing notes:


+70°00'
2h00m
23h00m
42
38
ω
43
31
ψ
o
NGC 7762
+65°00'
Berk 59
52
32
ε
Berk 62
10
κ
4
NGC 663
6
9
M 52
+60°00'
44
NGC 7635
NGC 225
12
NGC 7788
NGC 7790
Ruchbah
γ
2
χ
Cassiopeia
NGC 129
υ2
υ1
Caph
τ
ψ
NGC 457
Achird
ρ
1h00m
0h00m

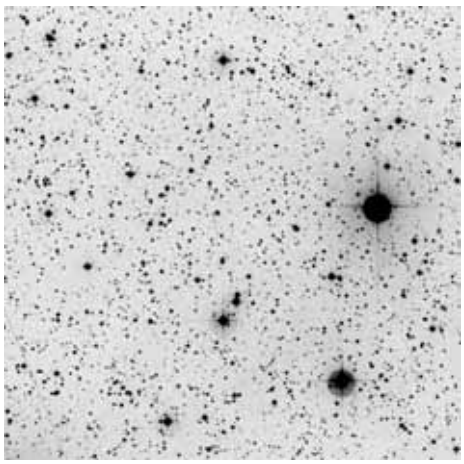

+66°00'
+65°00'
PK 118+ 2.1
Berk 4
King 16
10
+64°00'
NGC 133
NGC 146
+63°00'
King 14
PK 119+ 0.1
0h45m
PK 121+ 0.1
0h30m
0h15m

Sh 2 - 176

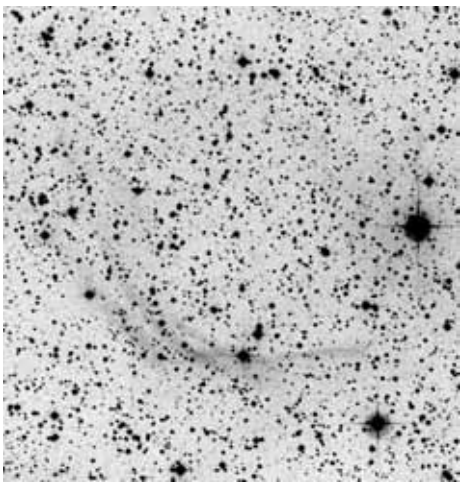
in Cassiopeia



60x60, red



POSS blue



POSS red

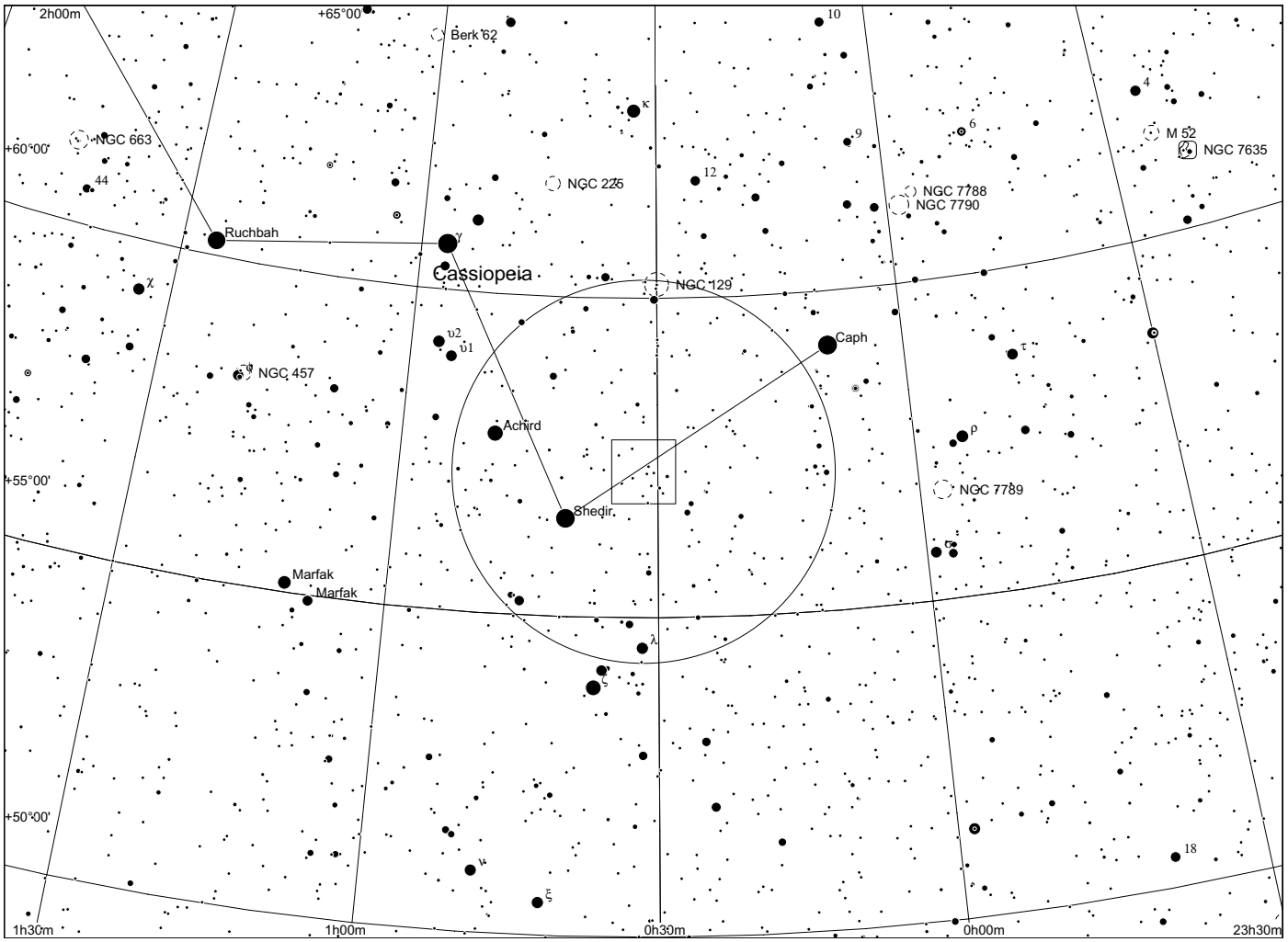


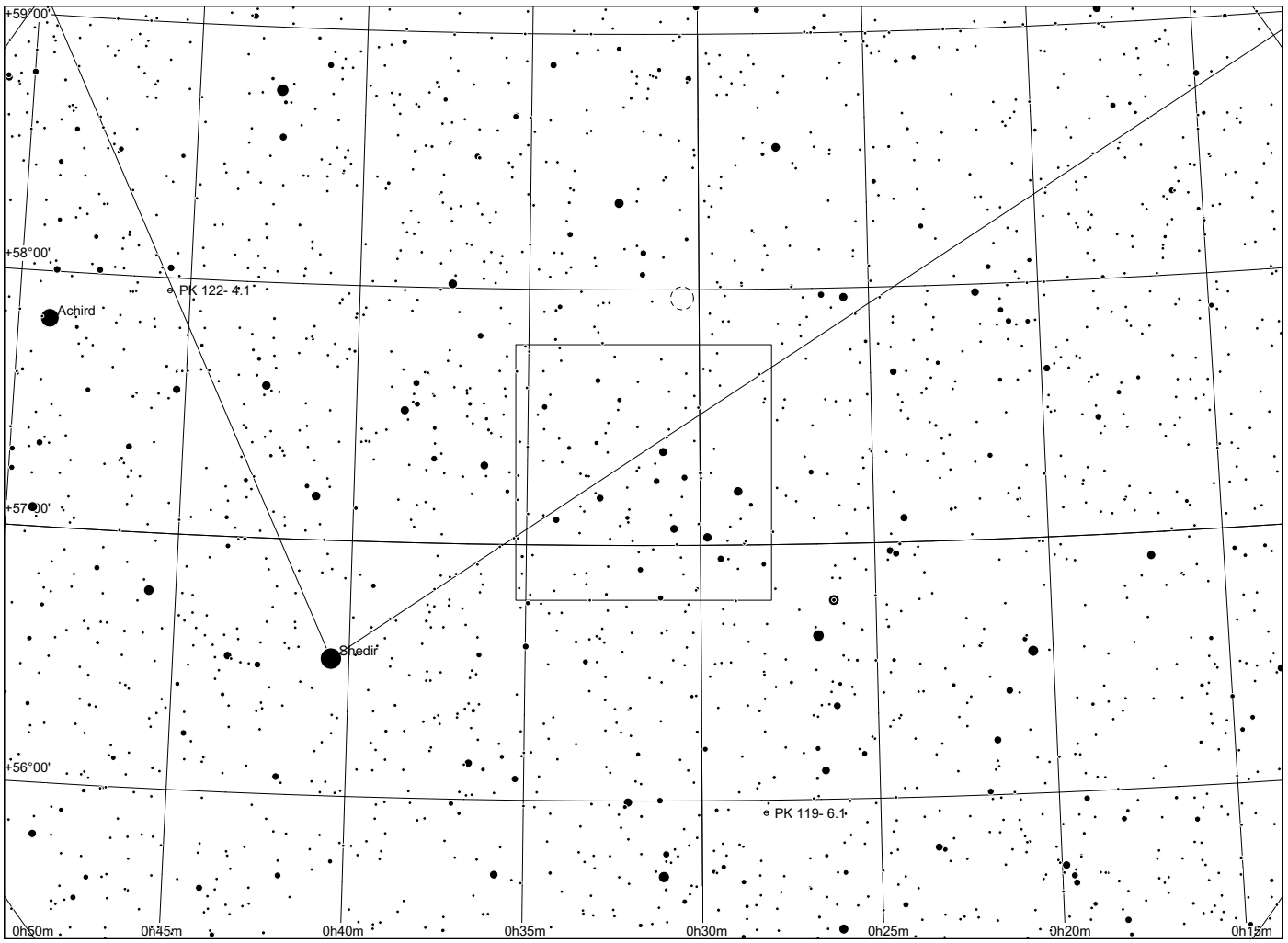
composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-176		00 31 38.3	+57 17 09	10	3	2	1

This is a planetary nebula at a distance of about 140 pc. The central star is a blue subdwarf.

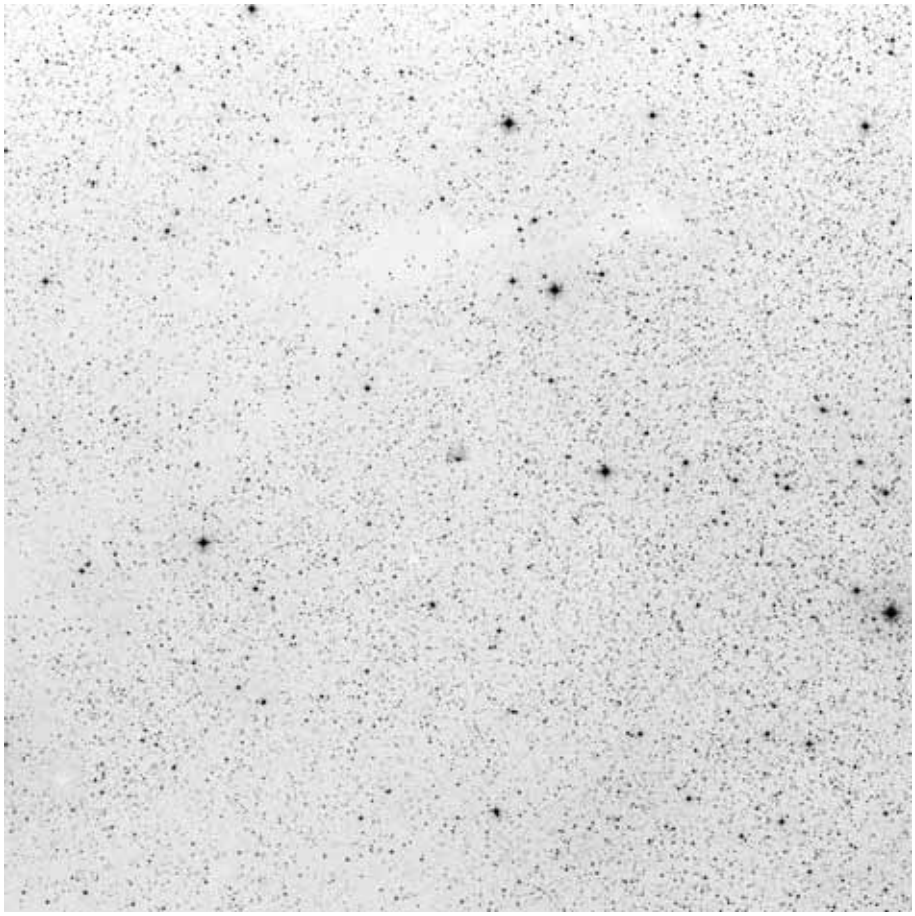
Observing notes:


2h00m
+65°00'
Berk 62
10
κ
4
NGC 663
+60°00'
9
6
M 52
NGC 7635
44
12
NGC 225
NGC 7788
NGC 7790
Ruchbah
γ
Cassiopeia
χ
NGC 129
υ2
υ1
Caph
τ
φ
NGC 457
Achird
ρ
+55°00'
NGC 7789
Shedir
Marfak
Marfak
λ
ζ
+50°00'
18
μ
ξ
1h30m
1h00m
0h30m
0h00m
23h30m

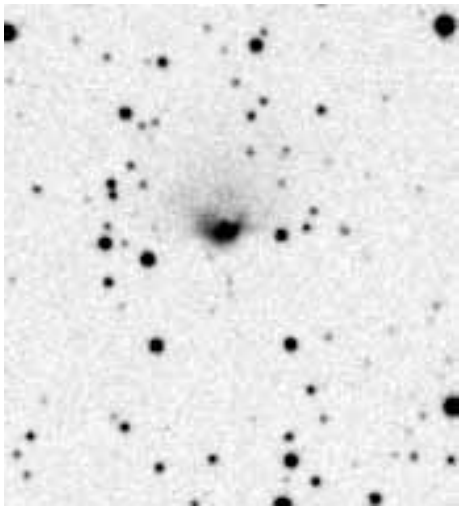

+59°00'
+58°00'
PK 122- 4.1
Achird
+57°00'
Shedir
+56°00'
PK 119- 6.1
0h50m
0h45m
0h40m
0h35m
0h30m
0h25m
0h20m
0h15m

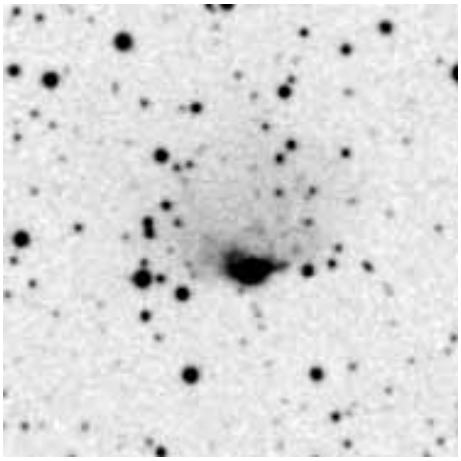
Sh 2 - 179

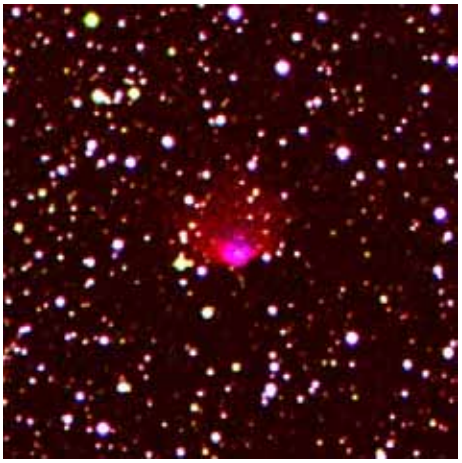
in Cassiopeia



60x60, red





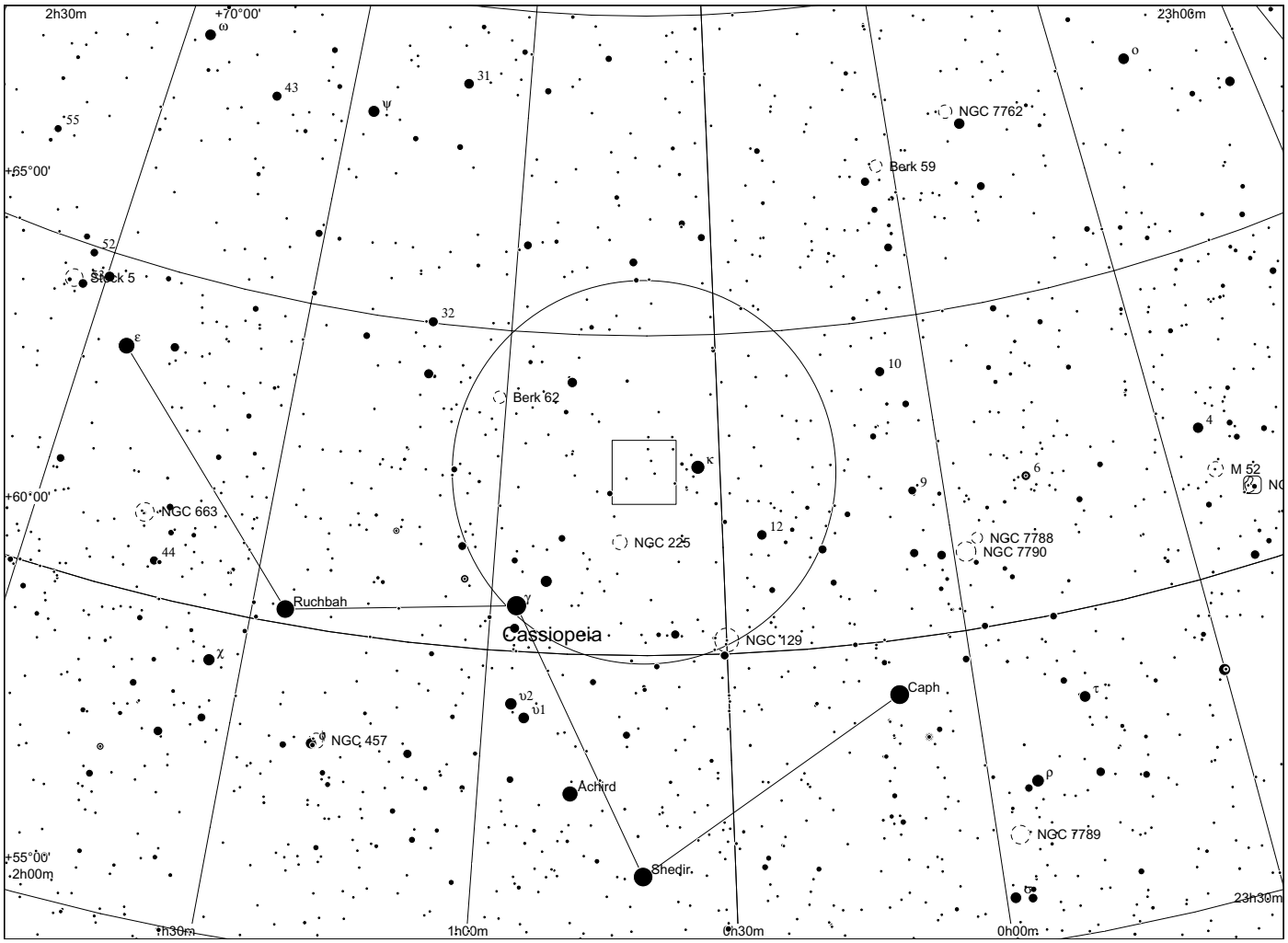


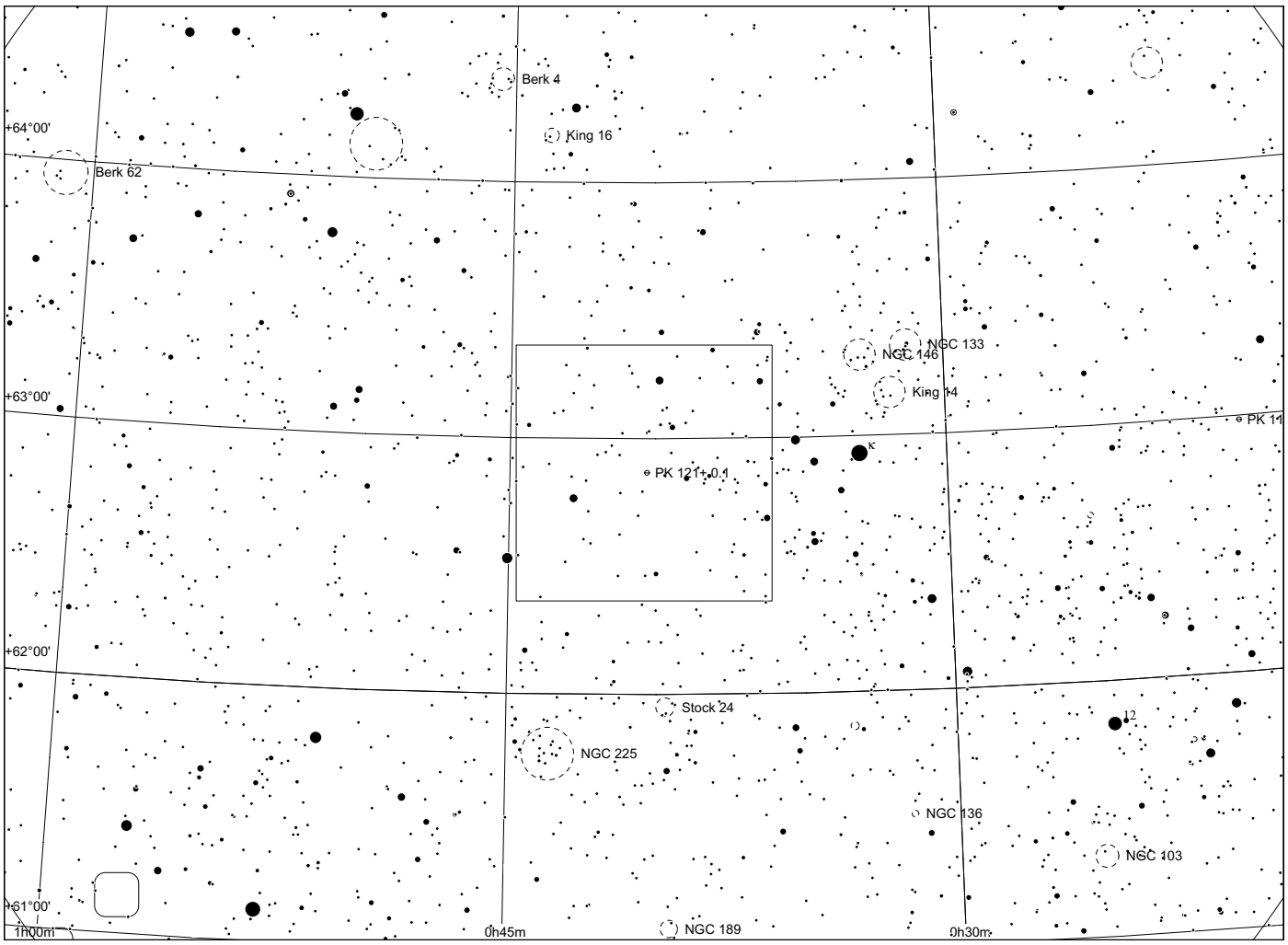
POSS blue POSS red composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-179	BV 5-2	00 40 24.6	+62 51 58	1	1	1	1

This is the planetary nebula PN BV-2, at an unknown distance.

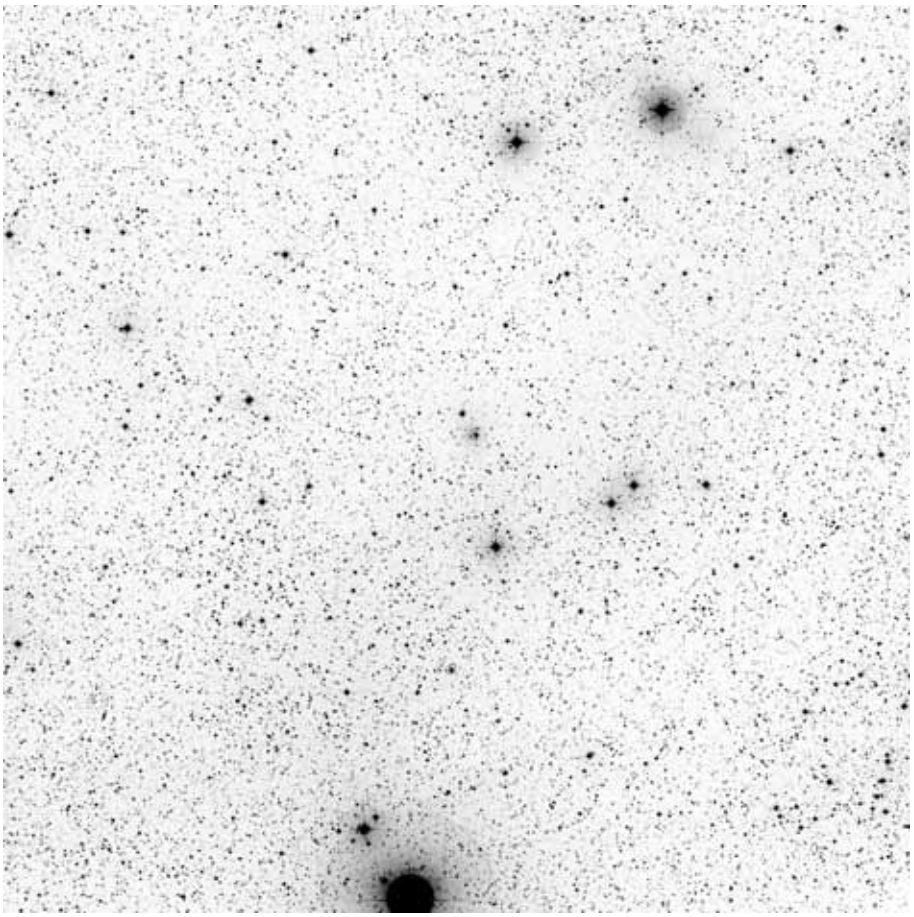
Observing notes:


2h30m
+70°00'
23h06m
NGC 7762
Berk 59
+65°00'
Stock 5
Berk 62
+60°00'
NGC 663
NGC 225
M 52
NGC 7788
NGC 7790
Ruchbah
Cassiopeia
NGC 129
Caph
NGC 457
Achird
NGC 7789
Shedir
+55°00'
2h00m
1h30m
1h00m
0h30m
0h00m
23h30m

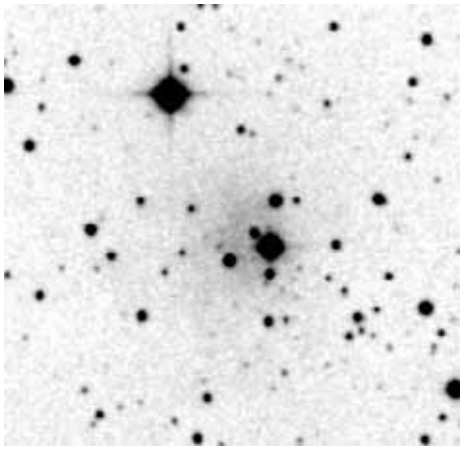

Berk 4
King 16
+64°00'
Berk 62
NGC 133
NGC 146
King 14
+63°00'
PK 121+0.1
Stock 24
+62°00'
NGC 225
NGC 136
NGC 103
+61°00'
1h00m
0h45m
NGC 189
0h30m

Sh 2 - 182

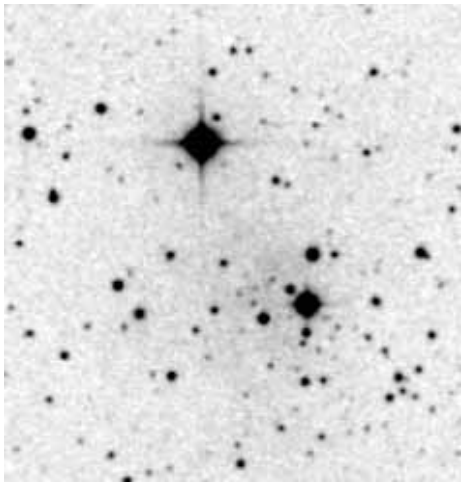
in Cassiopeia



60x60, blue



POSS blue



POSS red



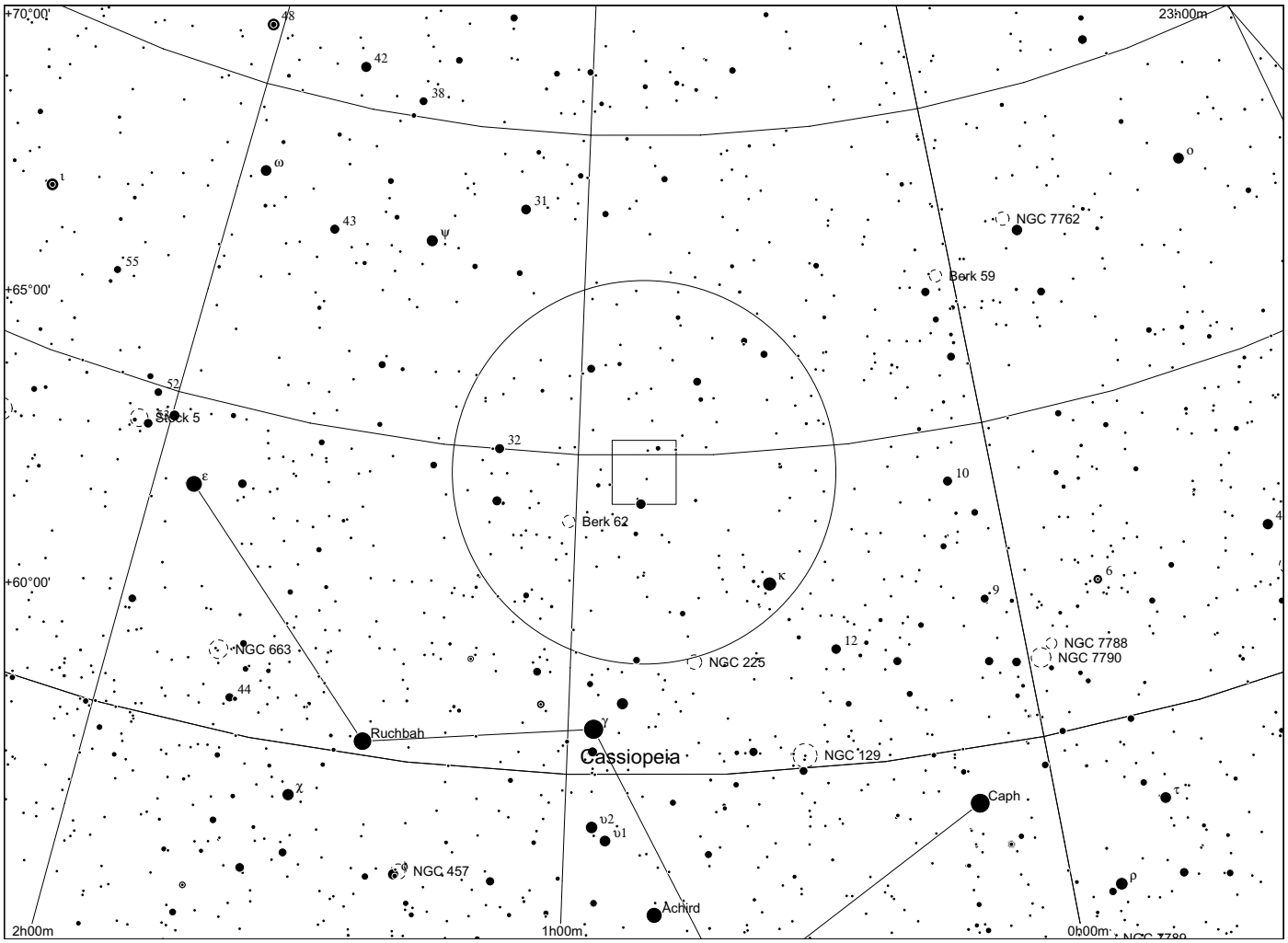
composite

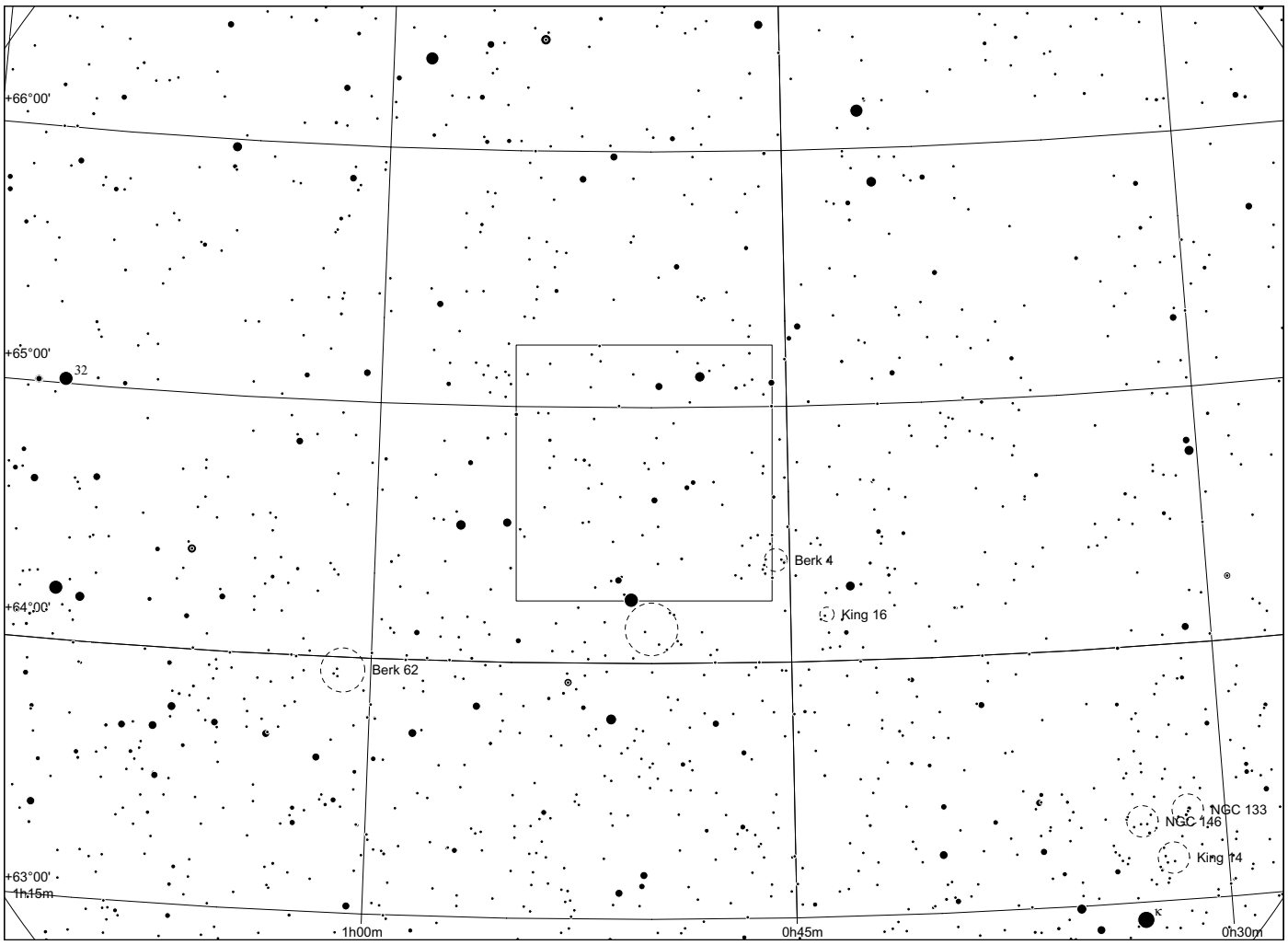
	other name	RA	dec	dia. '	F	S	B
Sh 2-182		00 50 16.4	+64 44 42	2	3	1	1

Distance: 1400 pc, Size: 0.8 pc, Source: 2003A&A...397..133R

This appears to be a reflection nebula of unknown distance.

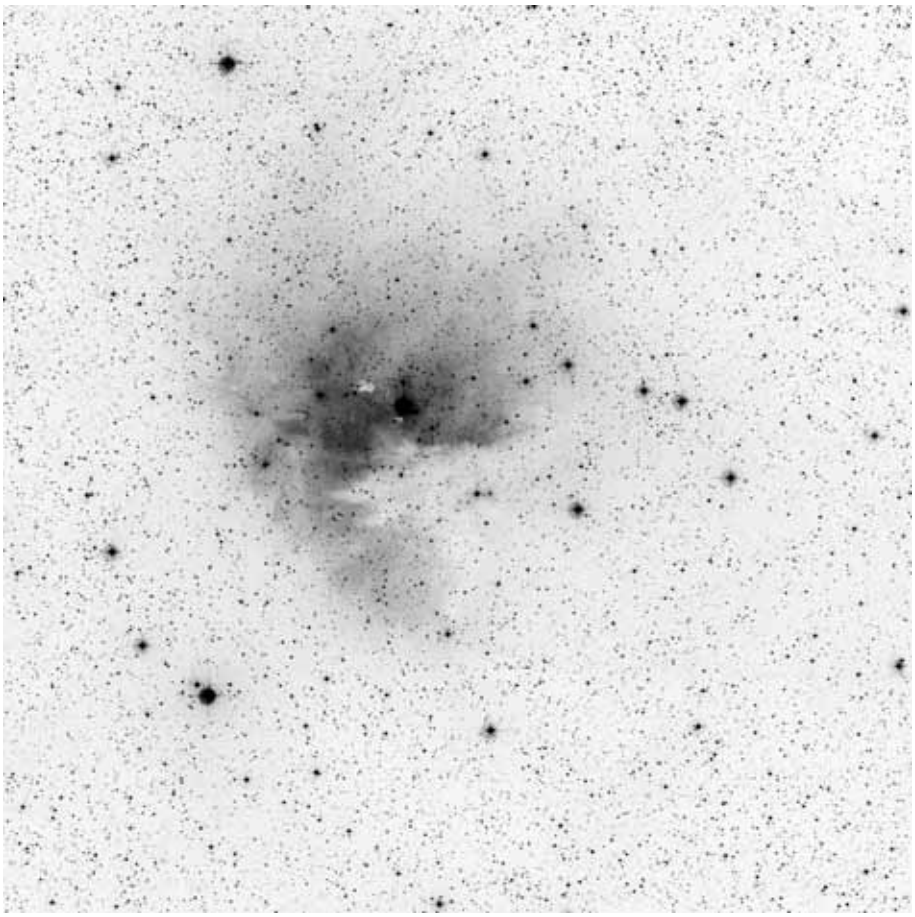
Observing notes:


+70°00'
23h00m
48
42
38
ω
ι
31
43
ψ
55
ο
NGC 7762
Berk 59
+65°00'
52
Stock 5
32
ε
10
Berk 62
4
κ
+60°00'
6
9
12
NGC 663
NGC 225
NGC 7788
NGC 7790
44
Ruchbah
γ
Cassiopeia
NGC 129
χ
Caph
τ
υ2
υ1
NGC 457
ρ
Achird
2h00m
1h00m
0h00m

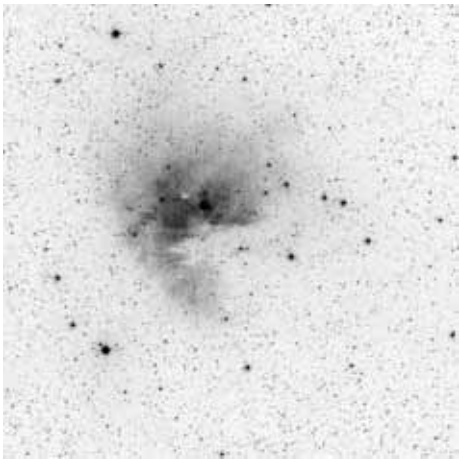

+66°00'
+65°00'
32
Berk 4
+64°00'
King 16
Berk 62
NGC 133
NGC 146
King 14
+63°00'
1h15m
κ
1h00m
0h45m
0h30m

Sh 2 - 184

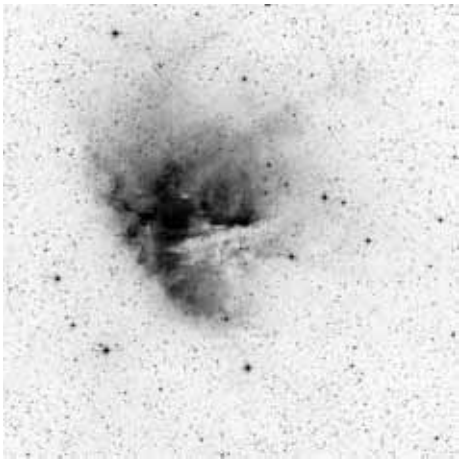
in Cassiopeia



60x60, blue



POSS blue



POSS red



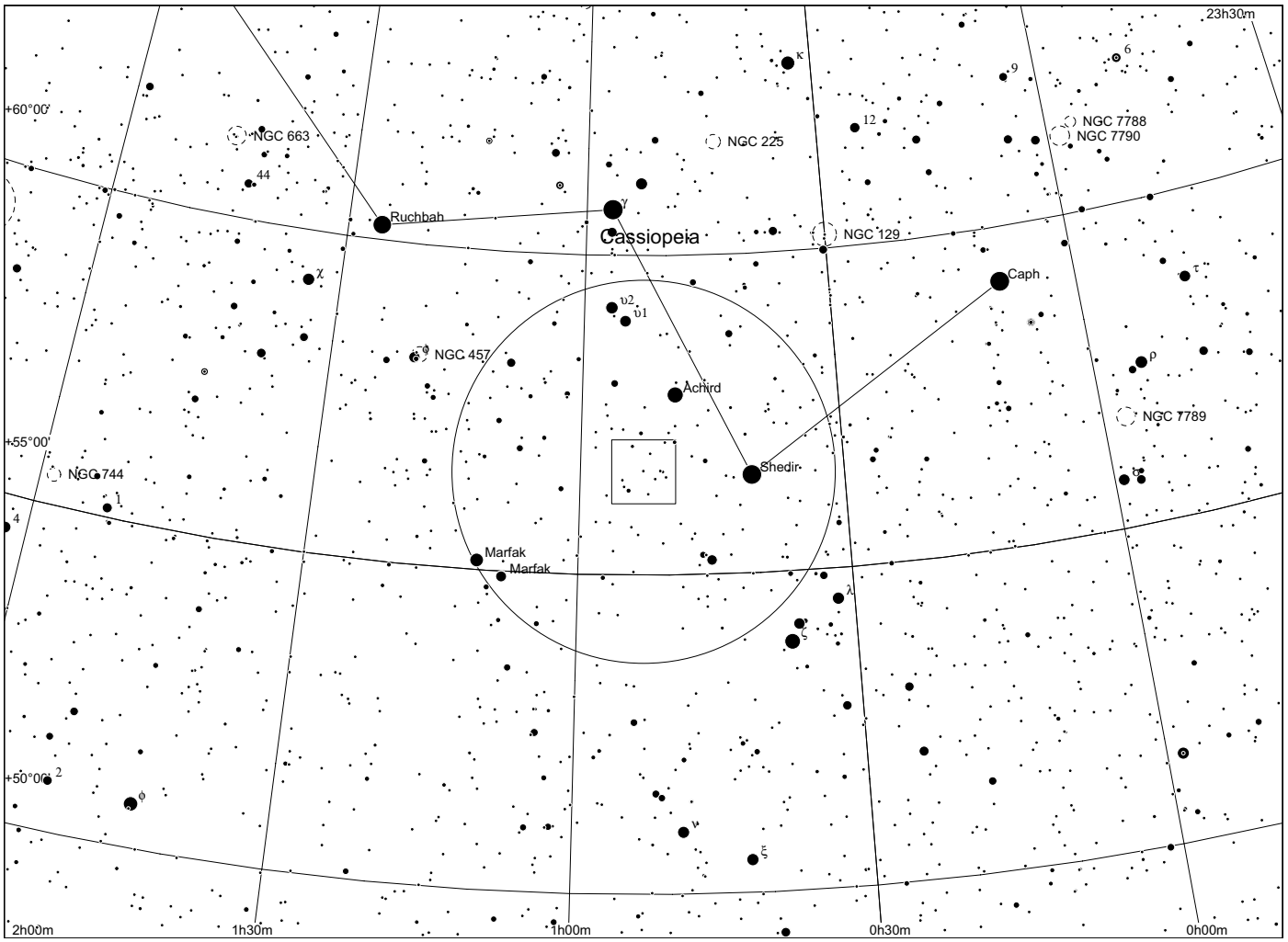
composite

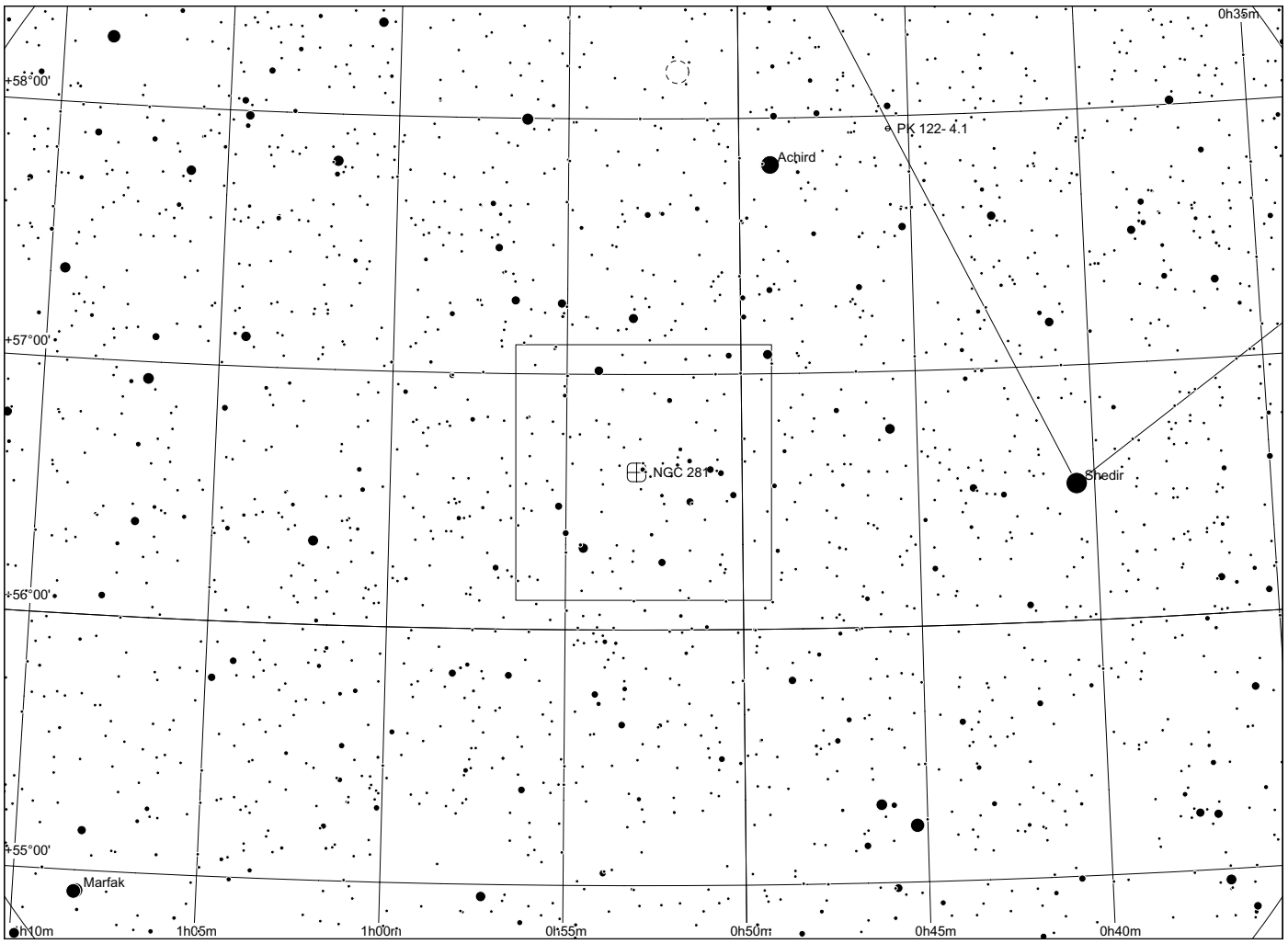
	other name	RA	dec	dia. '	F	S	B
Sh 2-184	NGC281	00 52 50.1	+56 36 37	40	3	2	3

Distance: 2386 pc, Size: 4.9 pc, Source: 2003A&A...397..213P

Often called NGC 281, this bright nebula located far below the galactic plane is also nicknamed the Pac Man nebula by amateur astronomers. IC 1590, the star cluster at the heart of the nebula, is about 3.5 million years old. The core of the star cluster IC 1590 is the O6 class trapezium system HD 5005, which ionises Sh 2-184.

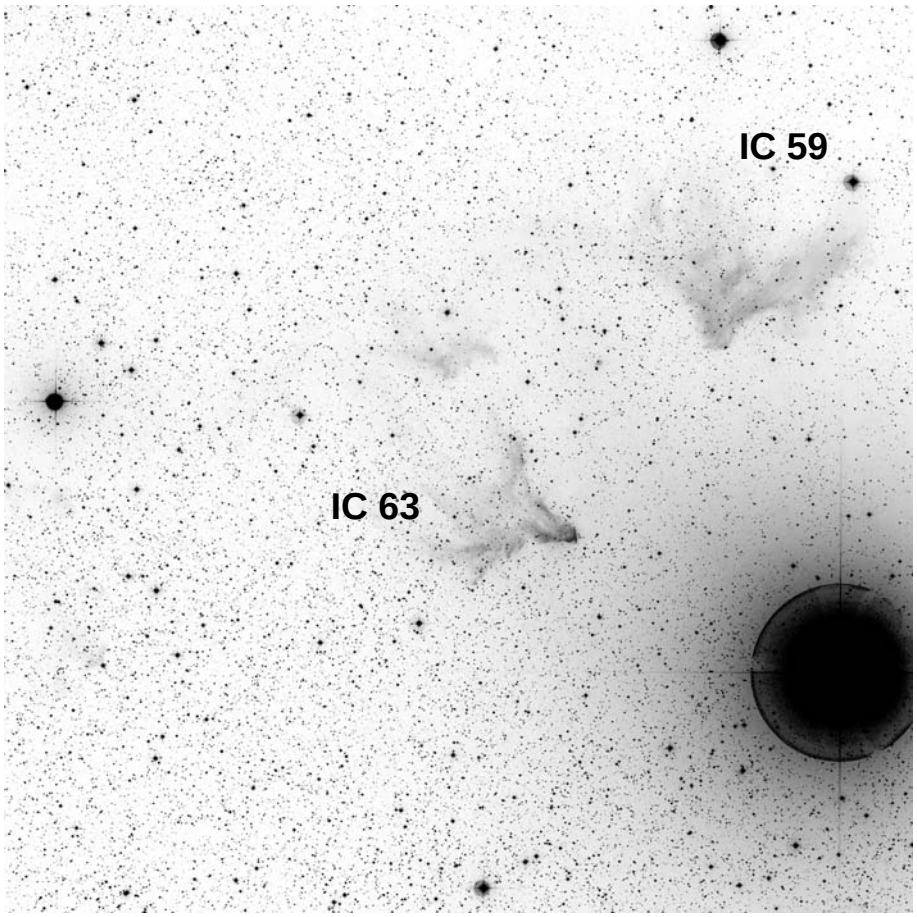
Observing notes:


23h30m
+60°00'
NGC 663
44
NGC 225
12
NGC 7788
NGC 7790
Ruchbah
Cassiopeia
NGC 129
Caph
χ
υ2
υ1
NGC 457
Achird
ρ
NGC 7789
+55°00'
NGC 744
Shedir
Marfak
Marfak
λ
ξ
+50°00'
φ
ν
ξ
2h00m
1h30m
1h00m
0h30m
0h00m

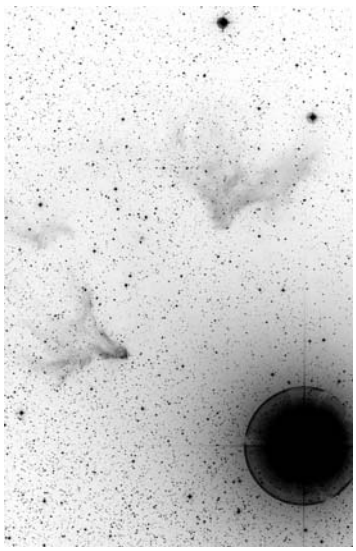

0h35m
+58°00'
PK 122- 4.1
Achird
+57°00'
NGC 281
Shedir
+56°00'
+55°00'
Marfak
1h10m
1h05m
1h00m
0h55m
0h50m
0h45m
0h40m

Sh 2 - 185

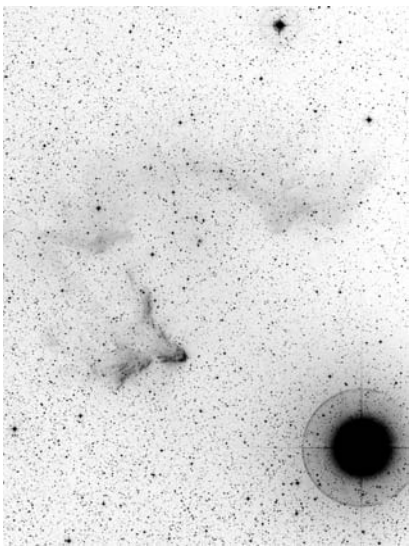
in Cassiopeia



60x60, red



POSS blue



POSS red



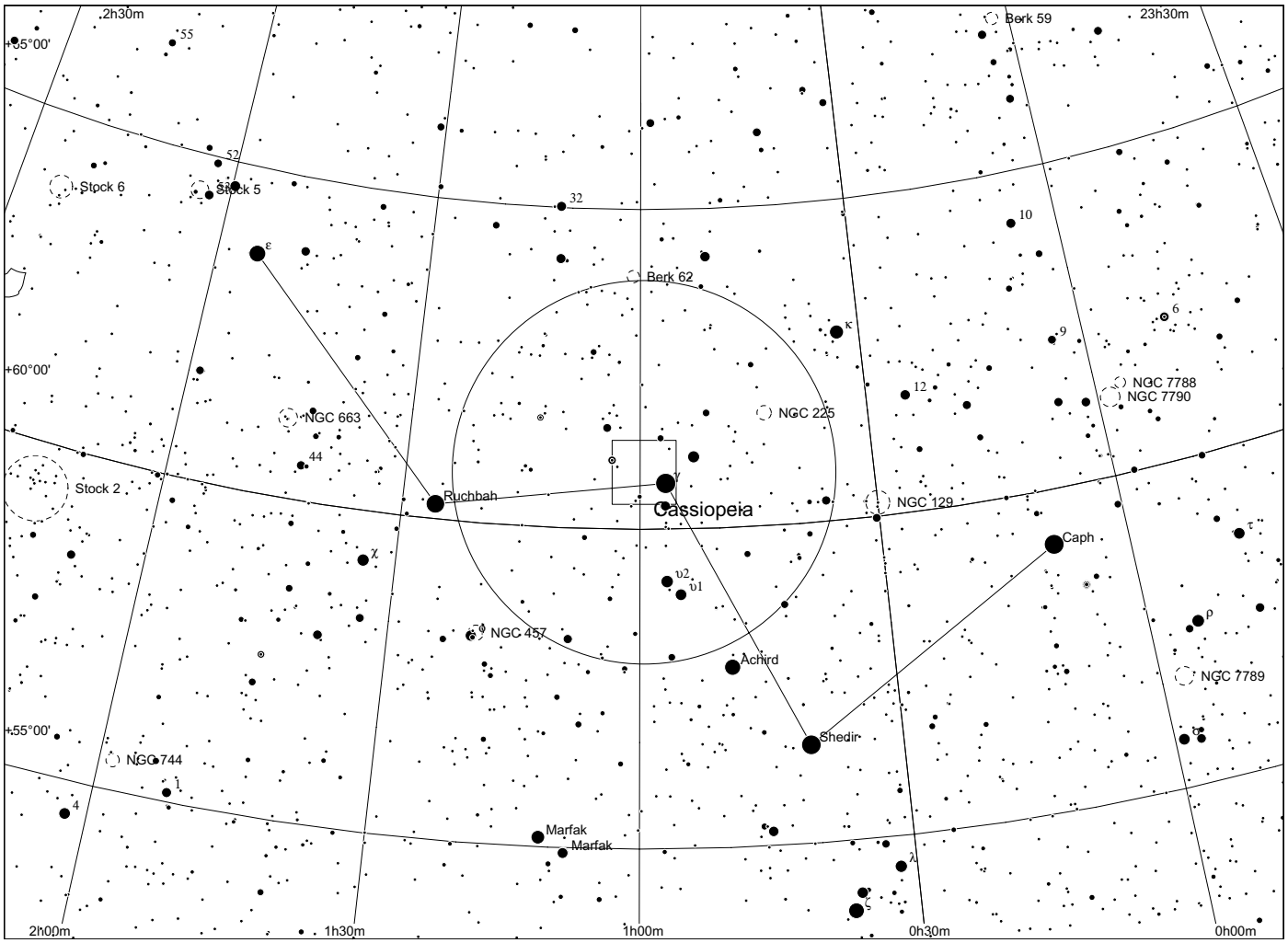
RGB Dean Salman

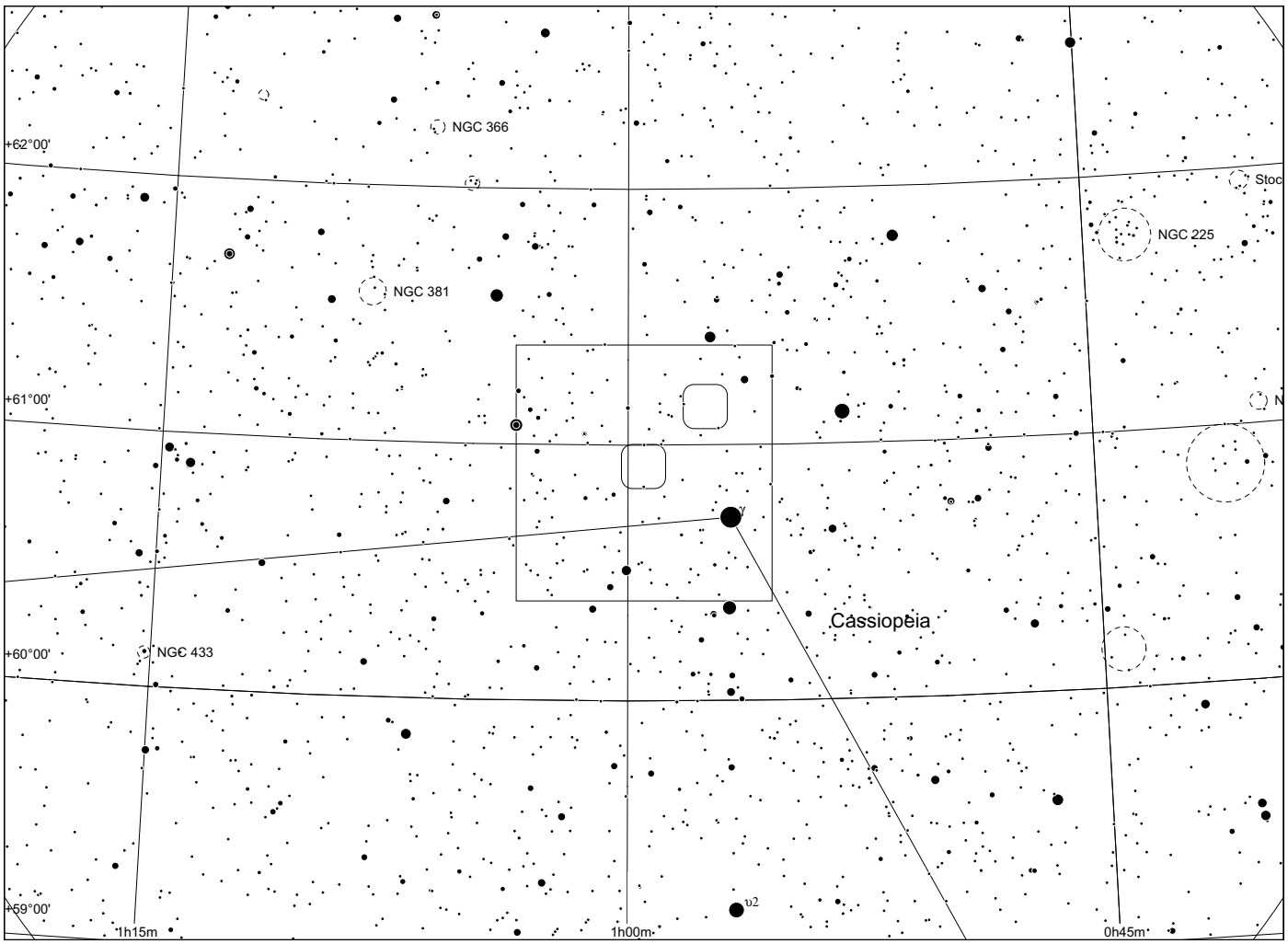
	other name	RA	dec	dia. '	F	S	B
Sh 2-185	IC 59/63	00 60 00.0	+60 59 23	120	3	2	2

Distance: 210 pc, Size: 7.3 pc,Source: 1982ApJS...49..183B

This region consists of IC 59, IC 61, IC 63 and gamma Cassiopeiae. It is a combination of a reflection nebula and HII region.

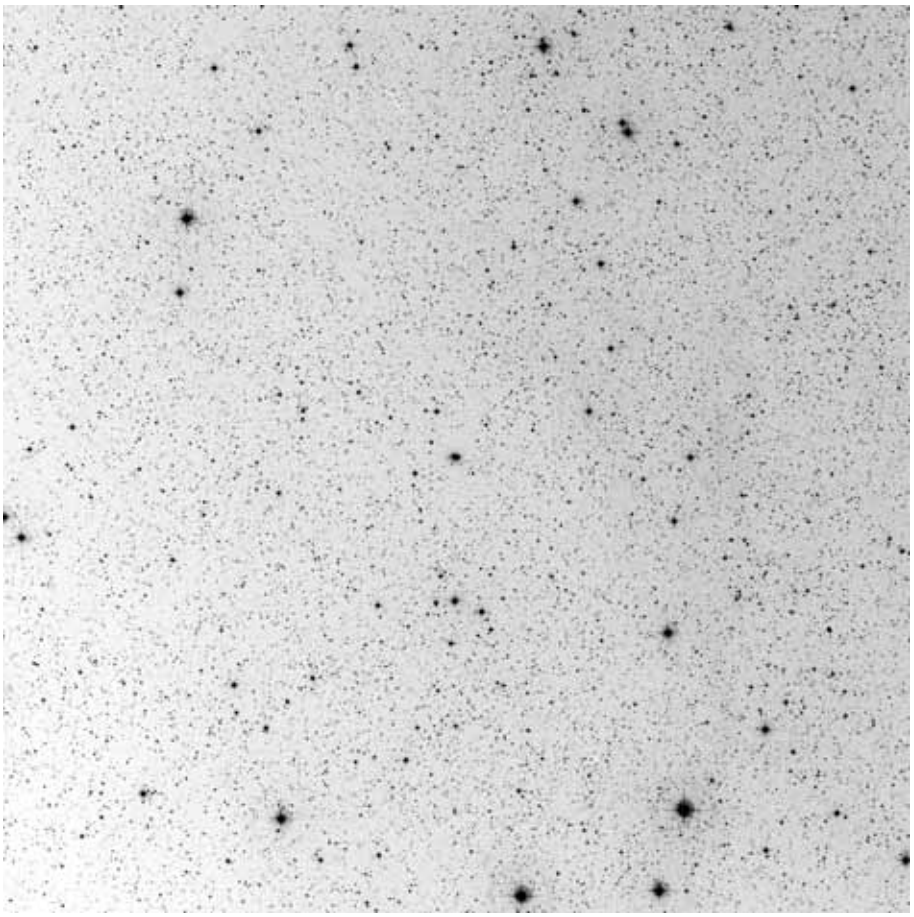
Observing notes:


2h30m
23h30m
+65°00'
+60°00'
+55°00'
Berk 59
Stock 6
Stock 5
Berk 62
NGC 663
NGC 225
NGC 7788
NGC 7790
Stock 2
Ruchbah
Cassiopeia
NGC 129
Caph
NGC 457
Achird
NGC 7789
Shedir
NGC 744
Marfak
Marfak
2h00m
1h30m
1h00m
0h30m
0h00m

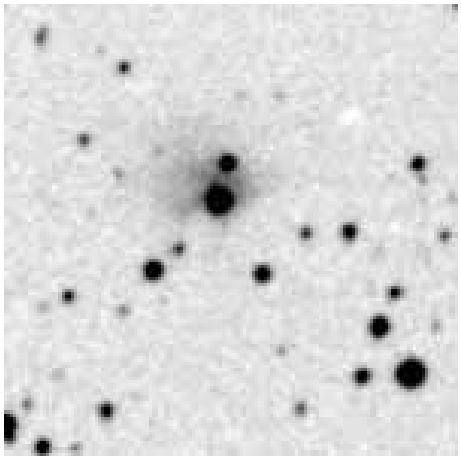

+62°00'
+61°00'
+60°00'
+59°00'
NGC 366
NGC 225
NGC 381
Cassiopeia
NGC 433
1h15m
1h00m
0h45m

Sh 2 - 186

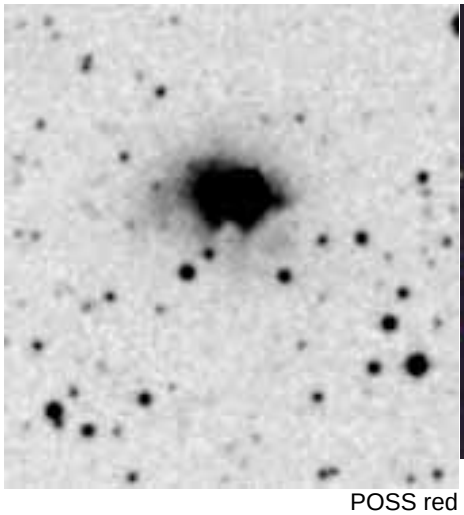
in Cassiopeia



60x60, red



POSS blue



POSS red

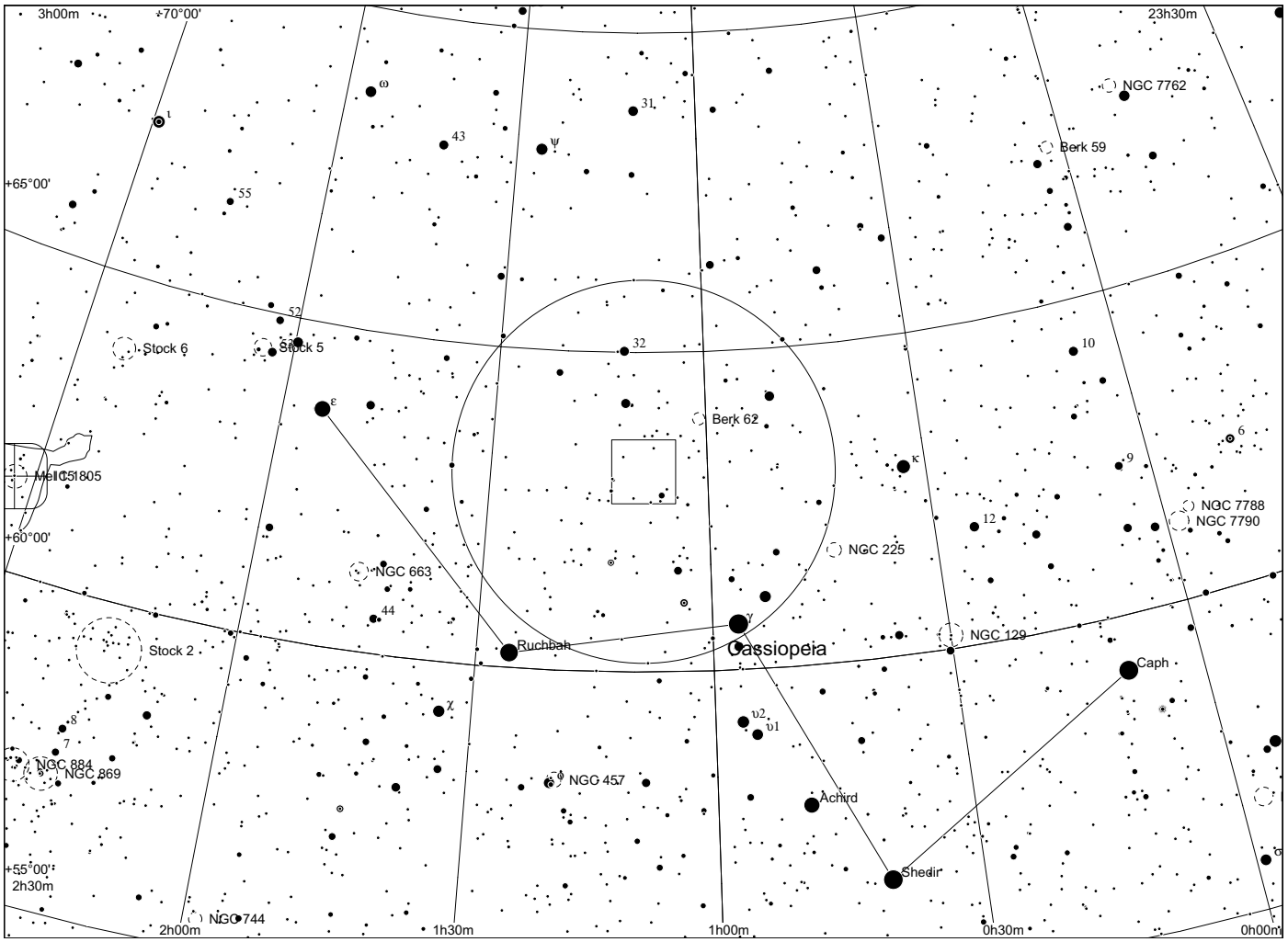


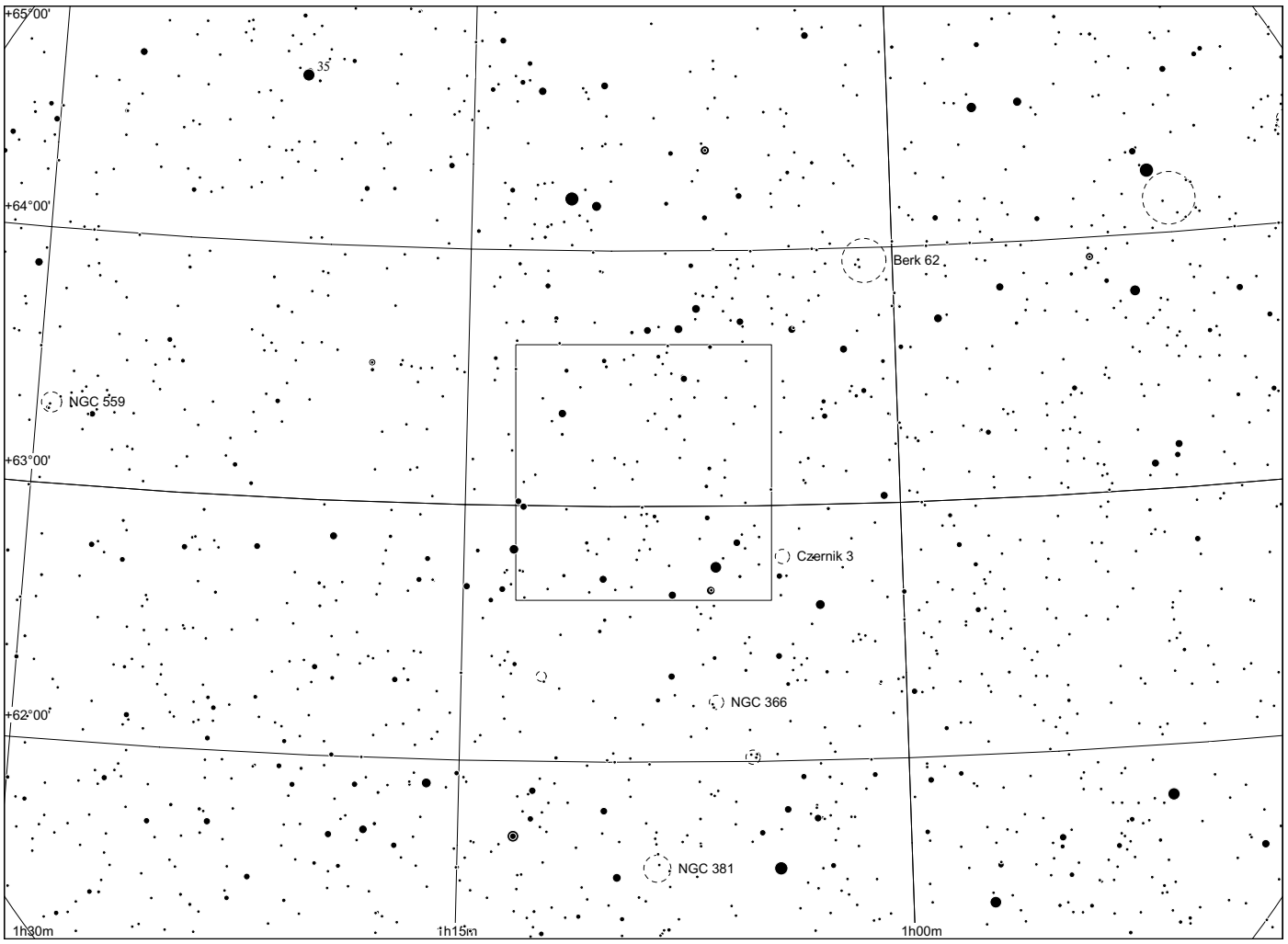
composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-186		01 08 50.7	+63 08 02	1	3	2	2

Distance: 2600 pc, Size: 0.8 pc, Source: 2003A&A...397..133R, Contains infrared cluster [BDS2003] 51.

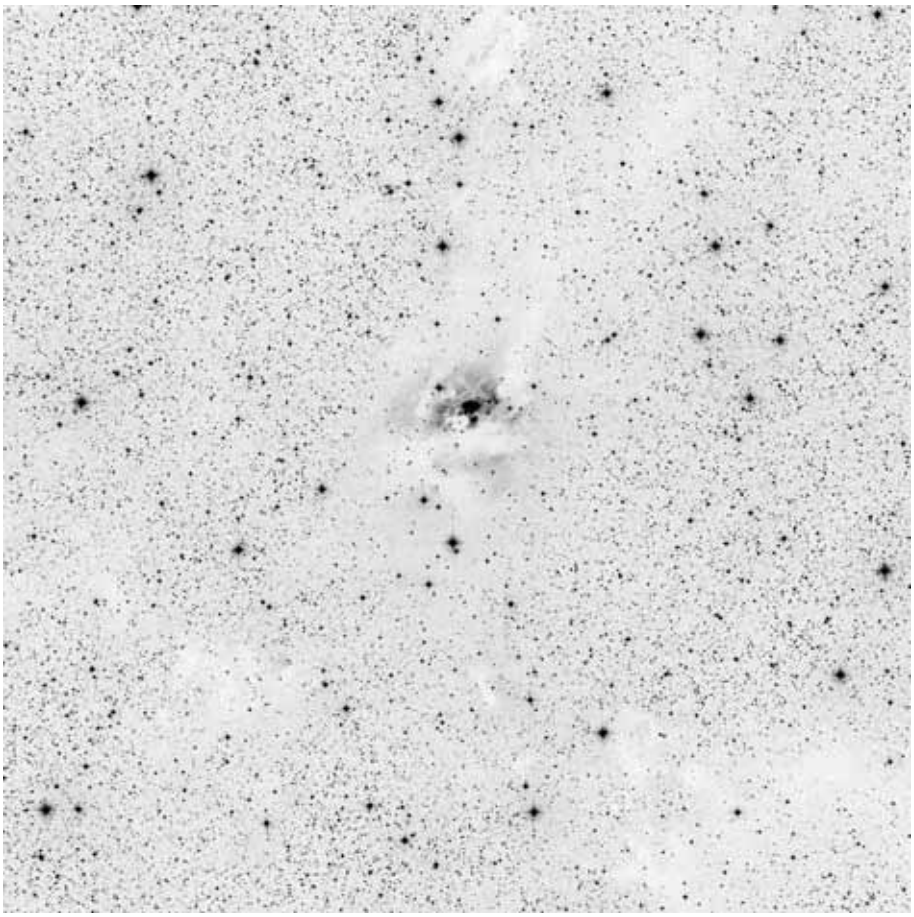
Observing notes:


3h00m
+70°00'
23h30m
NGC 7762
Berk 59
+65°00'
Stock 6
Stock 5
Berk 62
Melotte 15
+60°00'
NGC 7788
NGC 7790
NGC 225
NGC 663
Stock 2
Ruchbah
Cassiopeia
NGC 129
Caph
NGC 884
NGC 869
NGC 457
Achird
Shedir
+55°00'
2h30m
NGC 744
2h00m
1h30m
1h00m
0h30m
0h00m

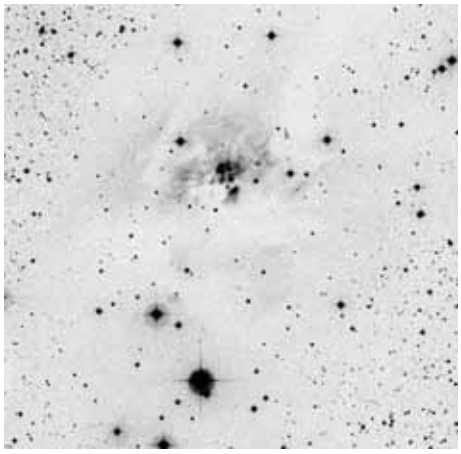

+65°00'
+64°00'
Berk 62
NGC 559
+63°00'
Czernik 3
NGC 366
+62°00'
NGC 381
1h30m
1h15m
1h00m

Sh 2 - 187

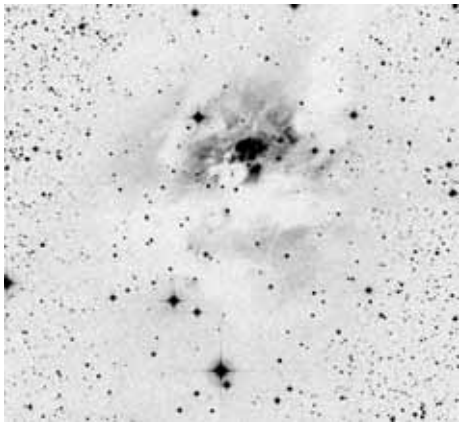
in Cassiopeia



60x60, red



POSS blue



POSS red



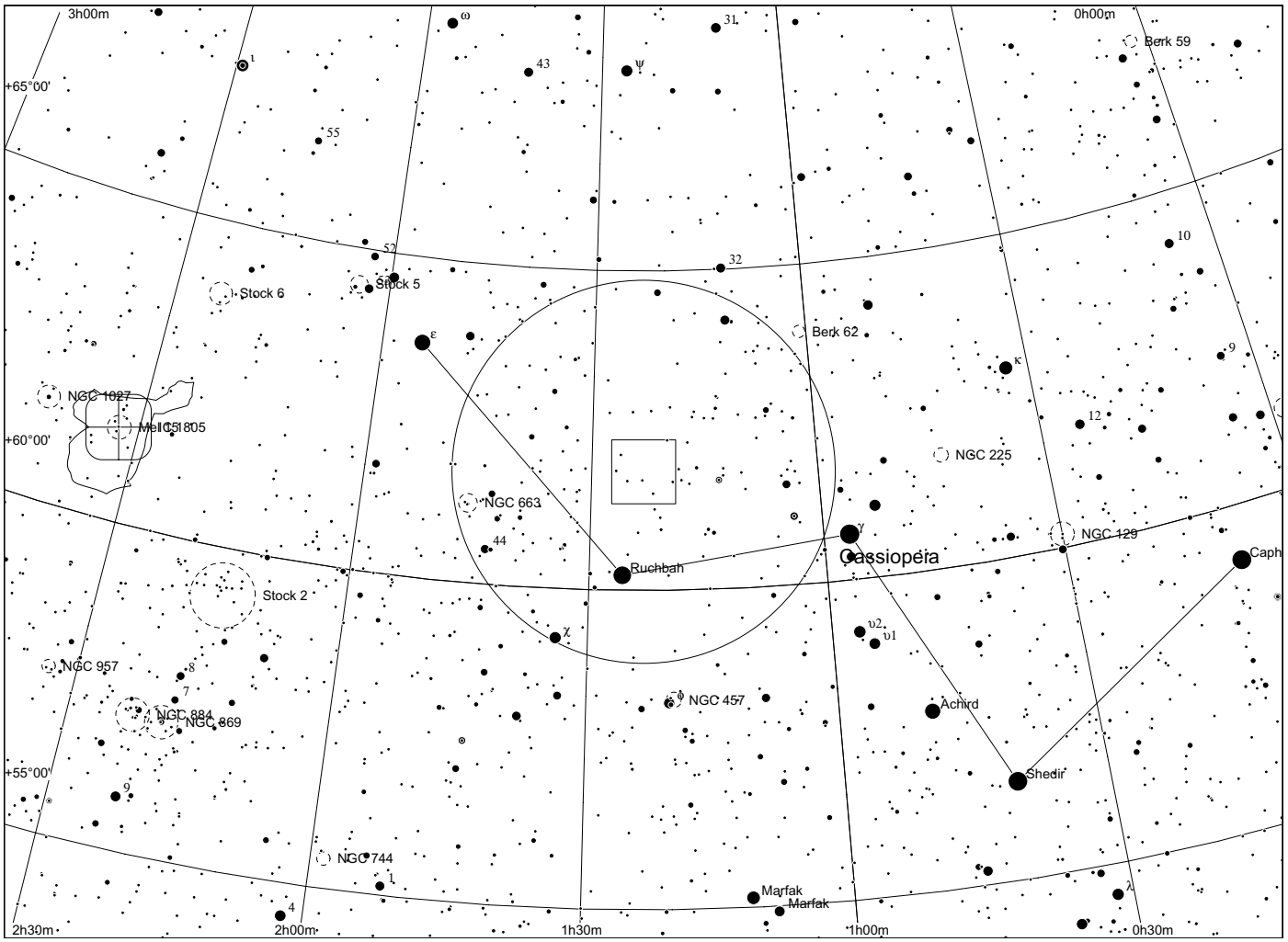
composite

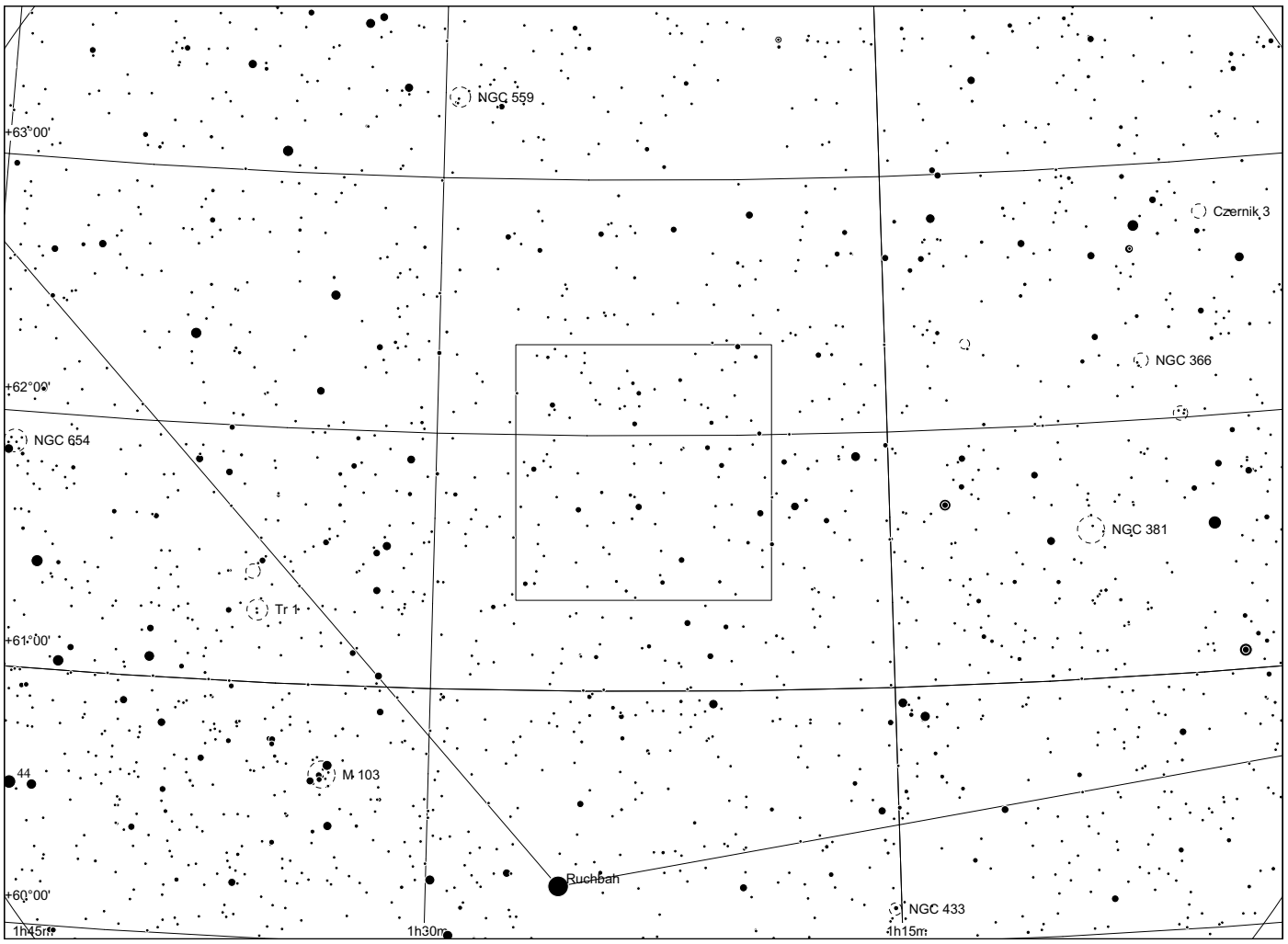
	other name	RA	dec	dia. '	F	S	B
Sh 2-187		01 23 07.0	+61 51 24	10	3	3	2

Distance: 1000 pc, Size: 2.9 pc, Source: 2001AJ....122..313J

This young (100-200 thousand years) star formation region is most likely ionised by a B0 star and is surrounded by a 4600 solar mass molecular cloud.

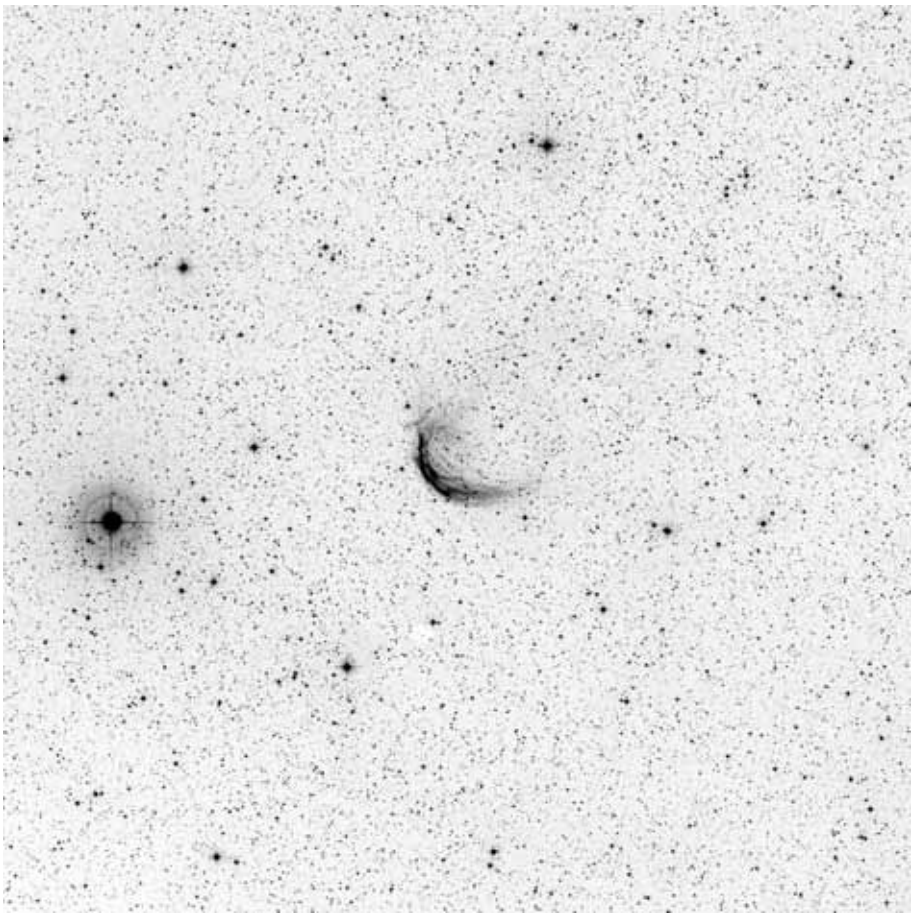
Observing notes:


3h00m
0h00m
+65°00'
+60°00'
+55°00'
2h30m
2h00m
1h30m
1h00m
0h30m
Berk 59
Stock 6
Stock 5
Berk 62
NGC 1027
Melotte 15
NGC 225
NGC 663
NGC 129
Ruchbah
Cassiopeia
Caph
Stock 2
NGC 957
NGC 884
NGC 869
NGC 457
Achird
Shedir
NGC 744
Marfak
Marfak

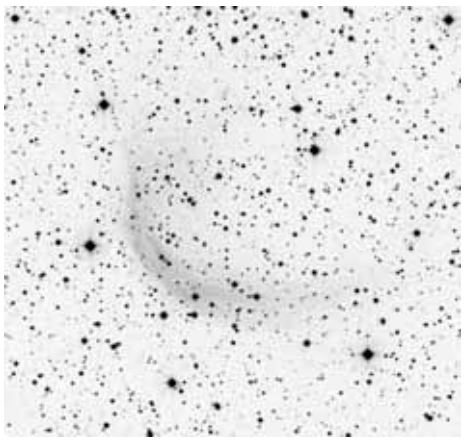

NGC 559
+63°00'
Czernik 3
NGC 366
+62°00'
NGC 654
NGC 381
Tr 1
+61°00'
M 103
Ruchbah
+60°00'
NGC 433
1h45m
1h30m
1h15m

Sh 2 - 188

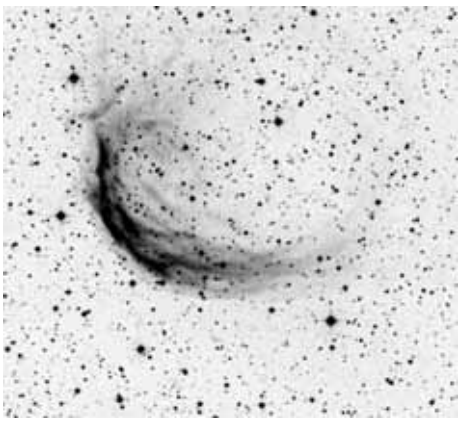
in Cassiopeia



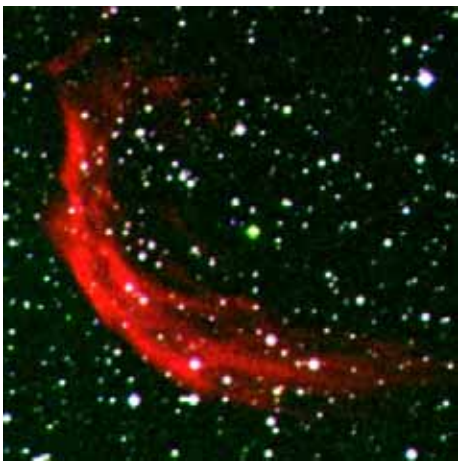
60x60, red



POSS blue



POSS red

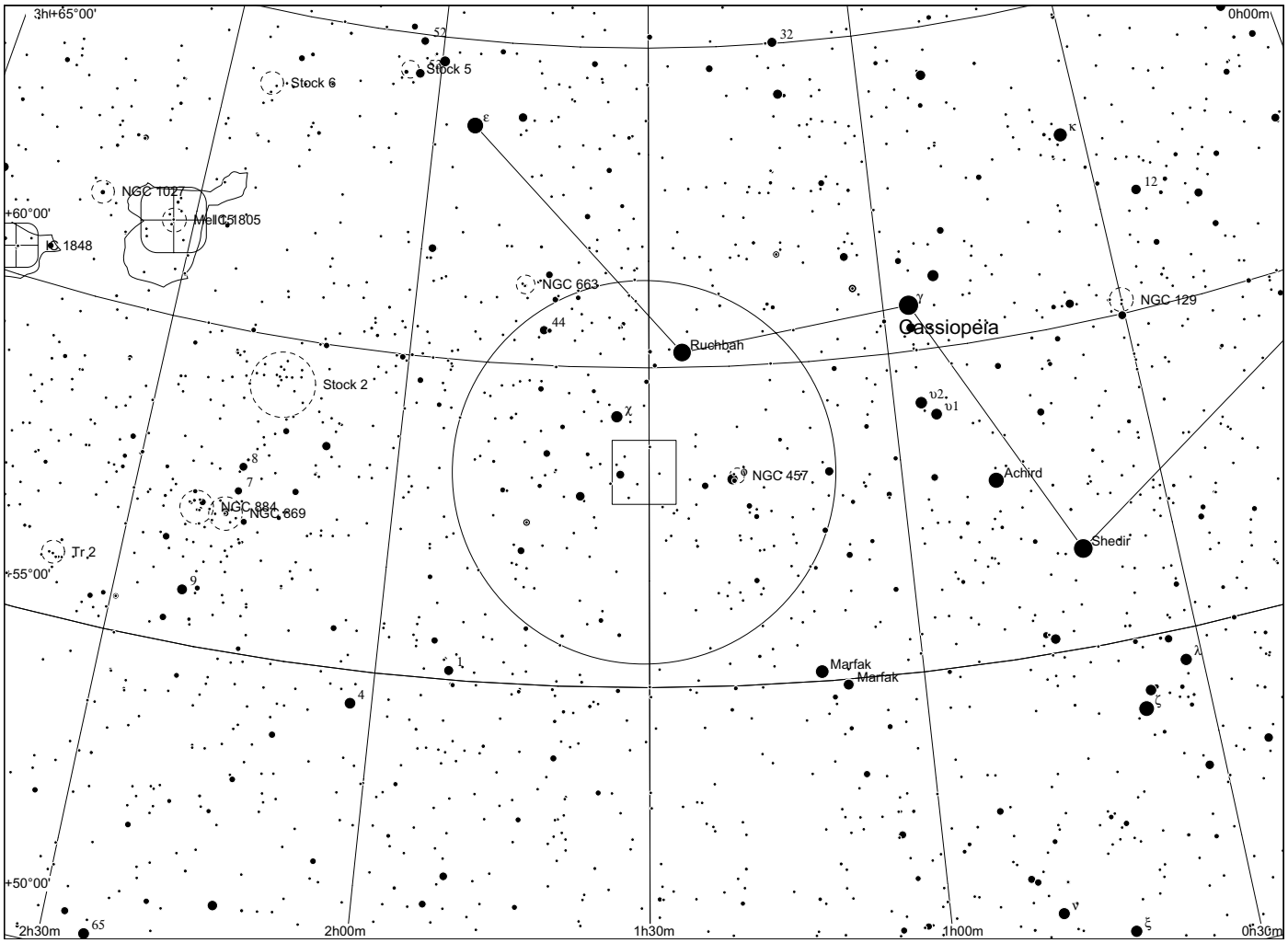


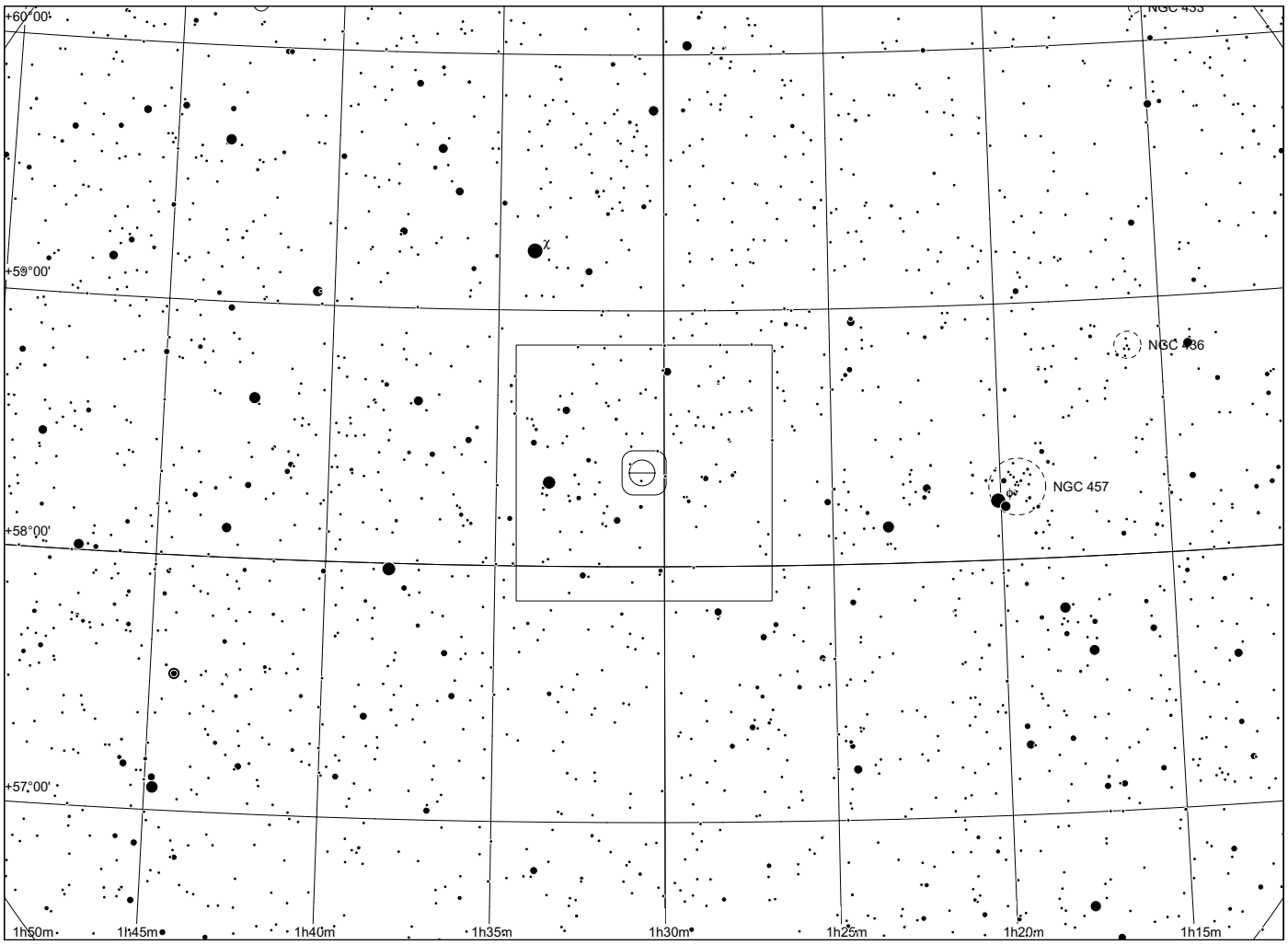
composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-188	Simeis 22	01 30 38.6	+58 22 01	9	3	3	2

This is planetary nebula Simeis 22 with a distance of 218 pc and an expansion age of 7500 years.

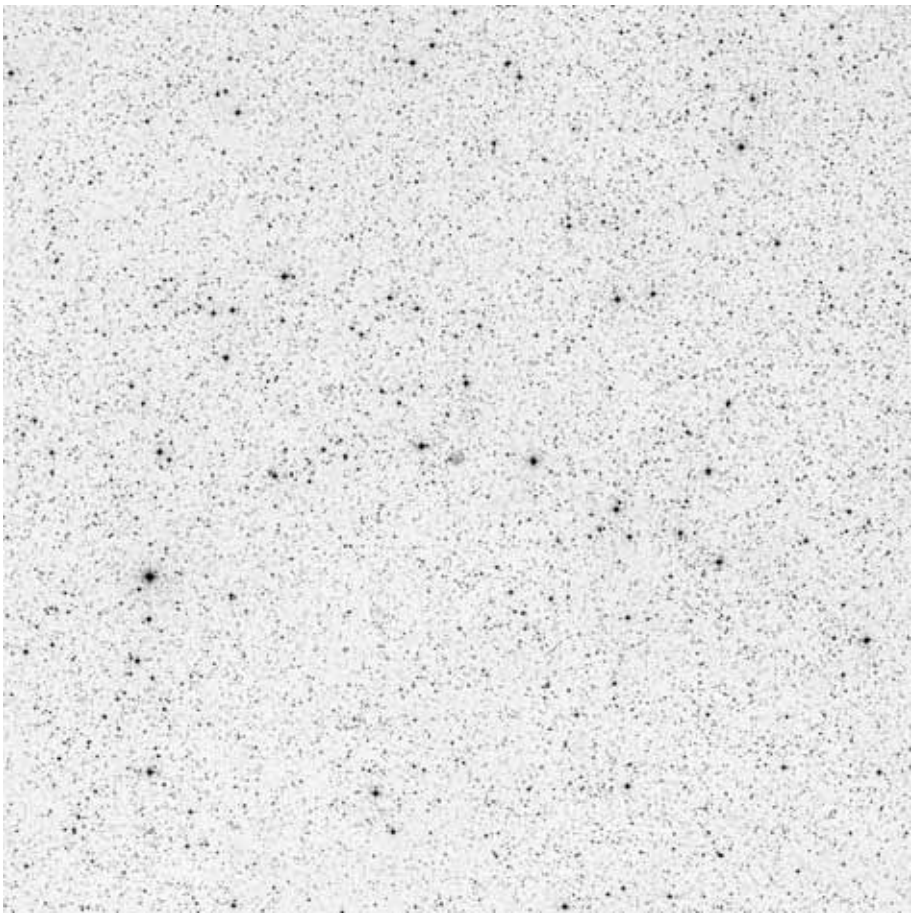
Observing notes:


3h+65°00'
0h00m
52
32
Stock 6
Stock 5
ε
κ
12
NGC 1027
Mel 15
1805
+60°00'
1848
NGC 663
γ
NGC 129
Cassiopeia
44
Ruchbah
Stock 2
χ
υ2
υ1
8
7
NGC 457
Achird
NGC 884
NGC 869
Tr 2
Shedir
+55°00'
9
1
Marfak
Marfak
λ
4
ζ
+50°00'
2h30m
65
2h00m
1h30m
1h00m
0h30m
ν
ξ

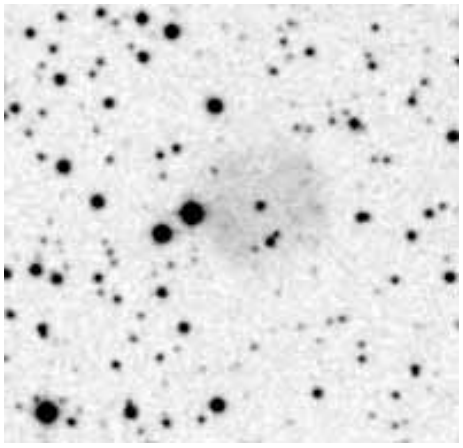

+60°00'
NGC 433
χ
+59°00'
NGC 436
NGC 457
+58°00'
+57°00'
1h50m
1h45m
1h40m
1h35m
1h30m
1h25m
1h20m
1h15m

Sh 2 - 189

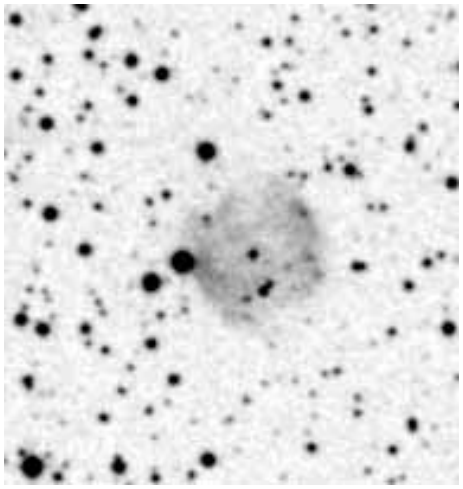
in Cassiopeia



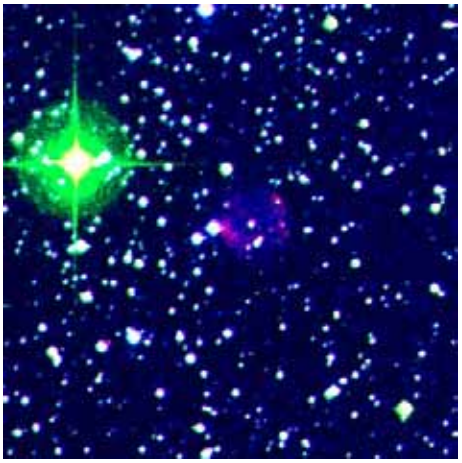
60x60, red



POSS blue



POSS red

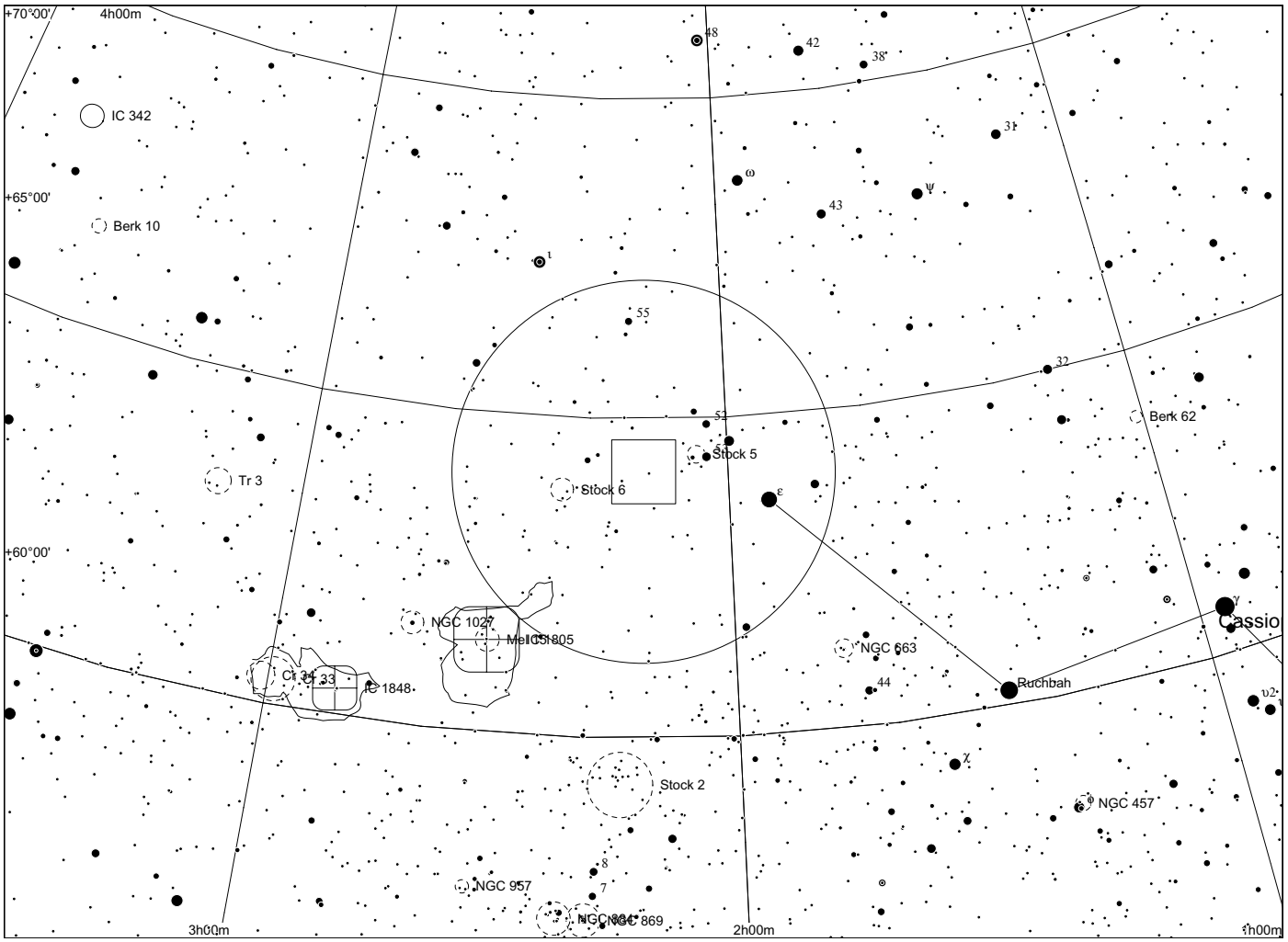


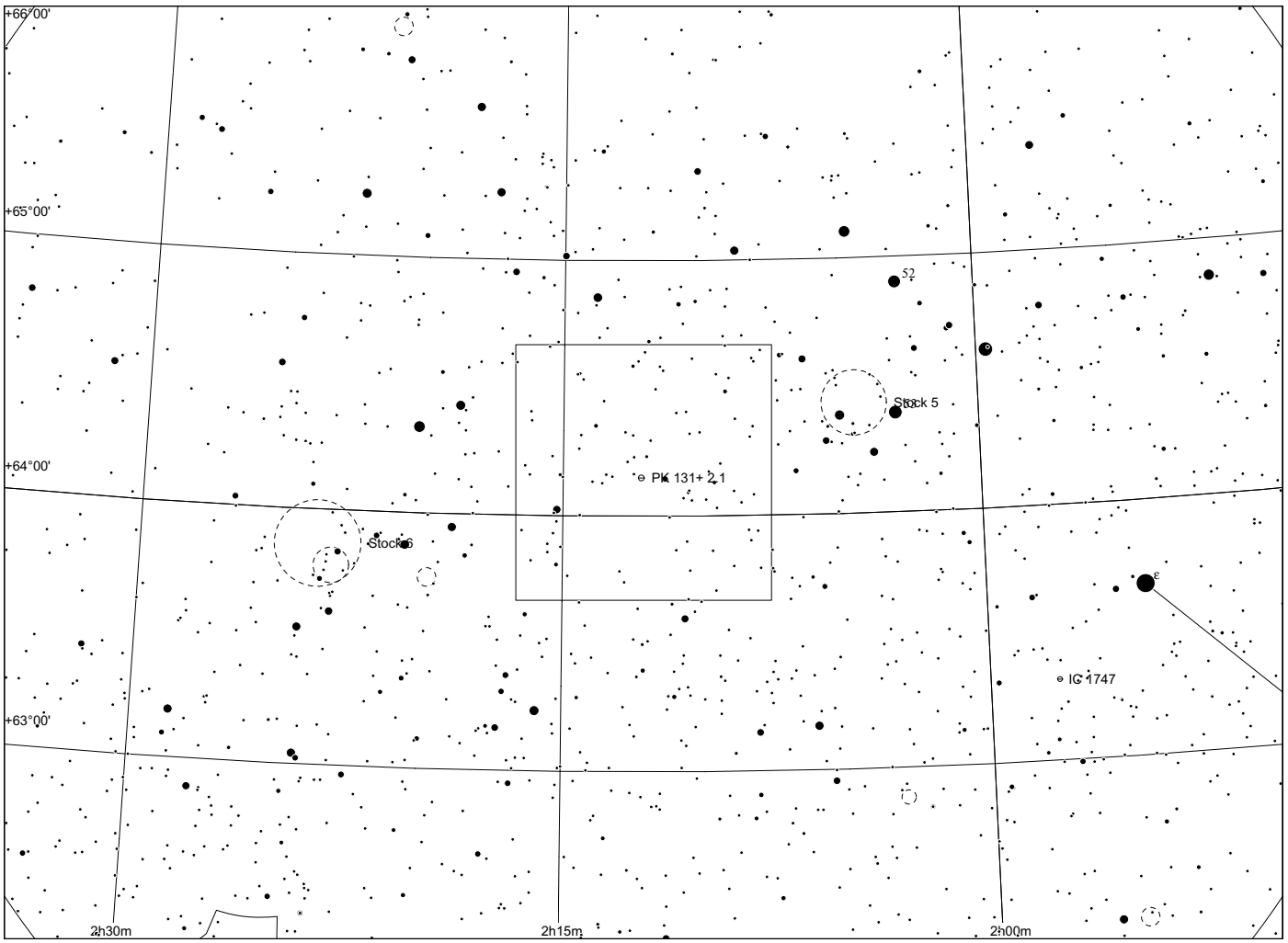
composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-189	Abell 3	02 12 07.6	+64 10 18	2	1	1	1

This faint and distant purple ball is a planetary nebula also called Abell 3 that is located at a distance of 2000 pc.

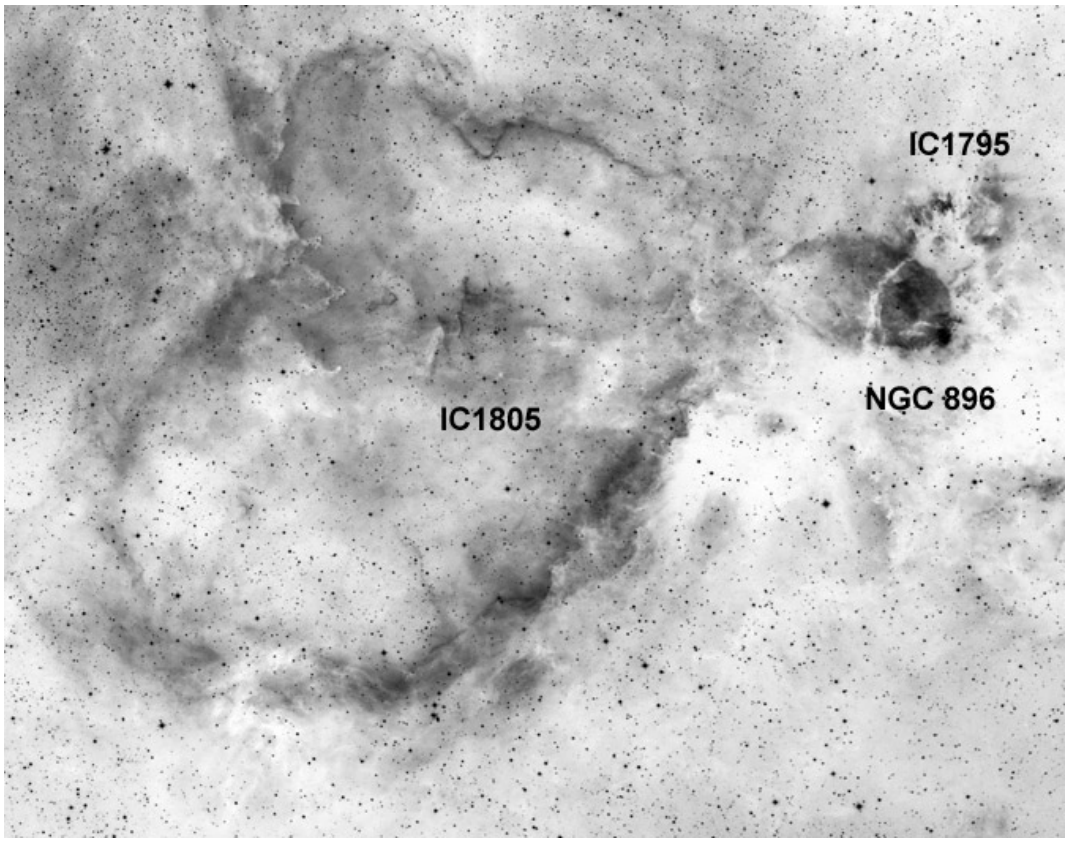
Observing notes:

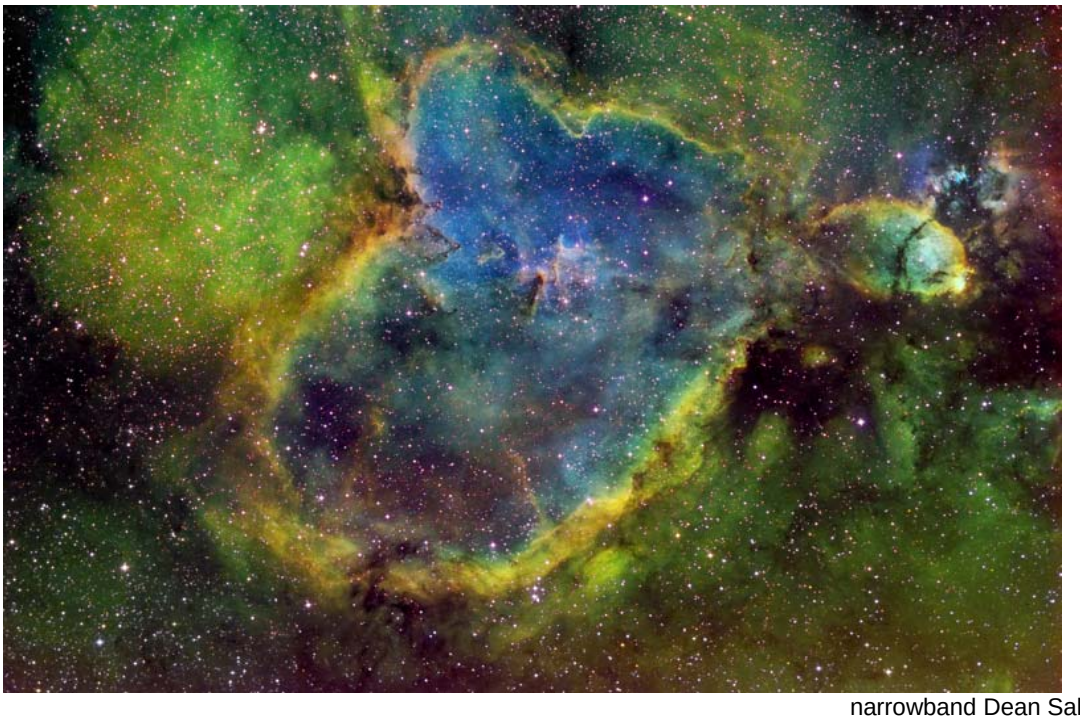

+70°00'
4h00m
IC 342
+65°00'
Berk 10
Tr 3
+60°00'
Berk 62
Stock 5
Stock 6
NGC 1027
Melotte 5
NGC 663
Cassio
Ruchbah
Cr 34
IC 1848
Stock 2
NGC 457
NGC 957
NGC 869
3h00m
2h00m
1h00m


+66°00'
+65°00'
Stock 5
+64°00'
Pk 131+2.1
Stock 6
IG 1747
+63°00'
2h30m
2h15m
2h00m

Sh 2 - 190

in Cas





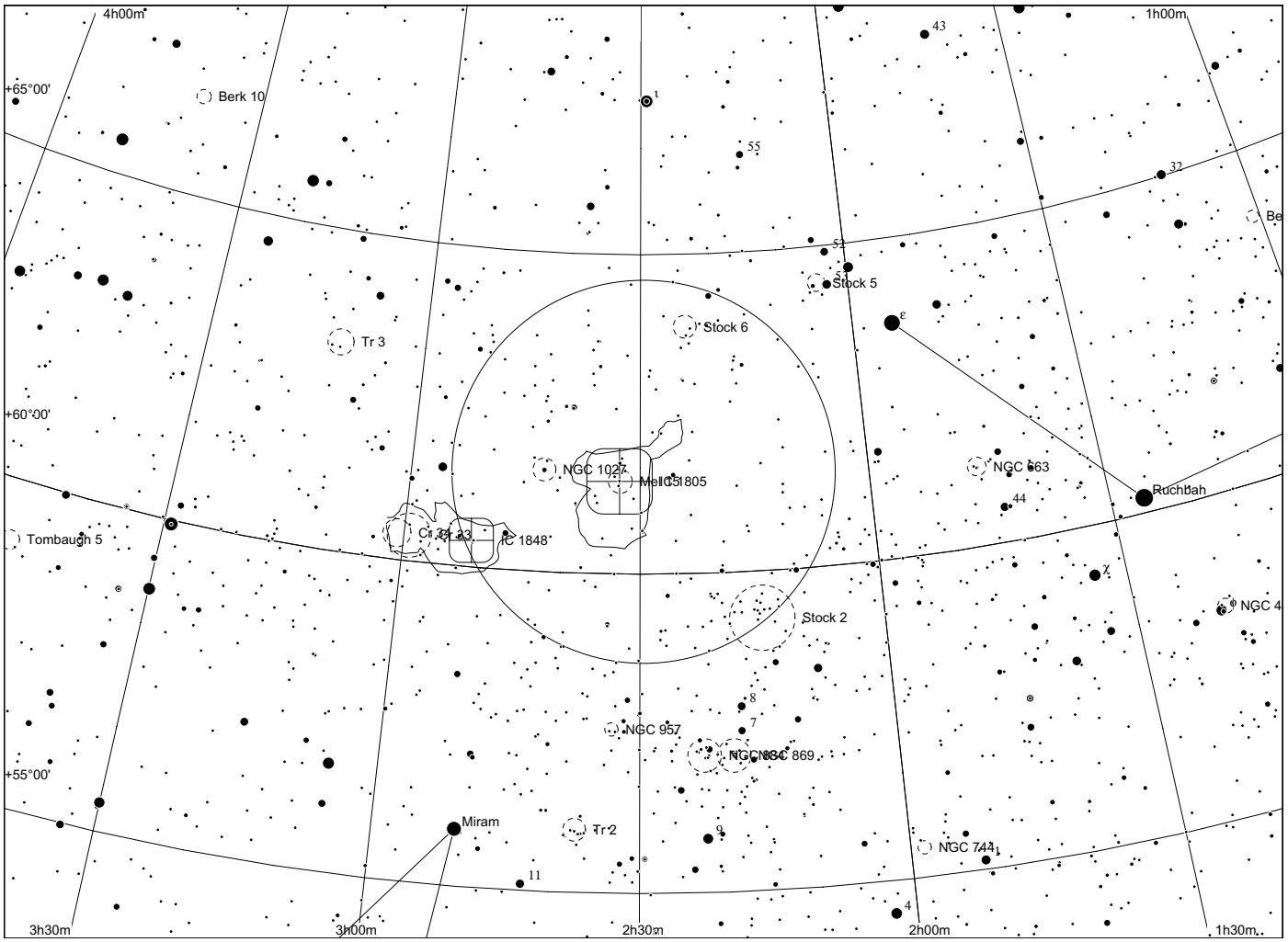
narrowband Dean Salman

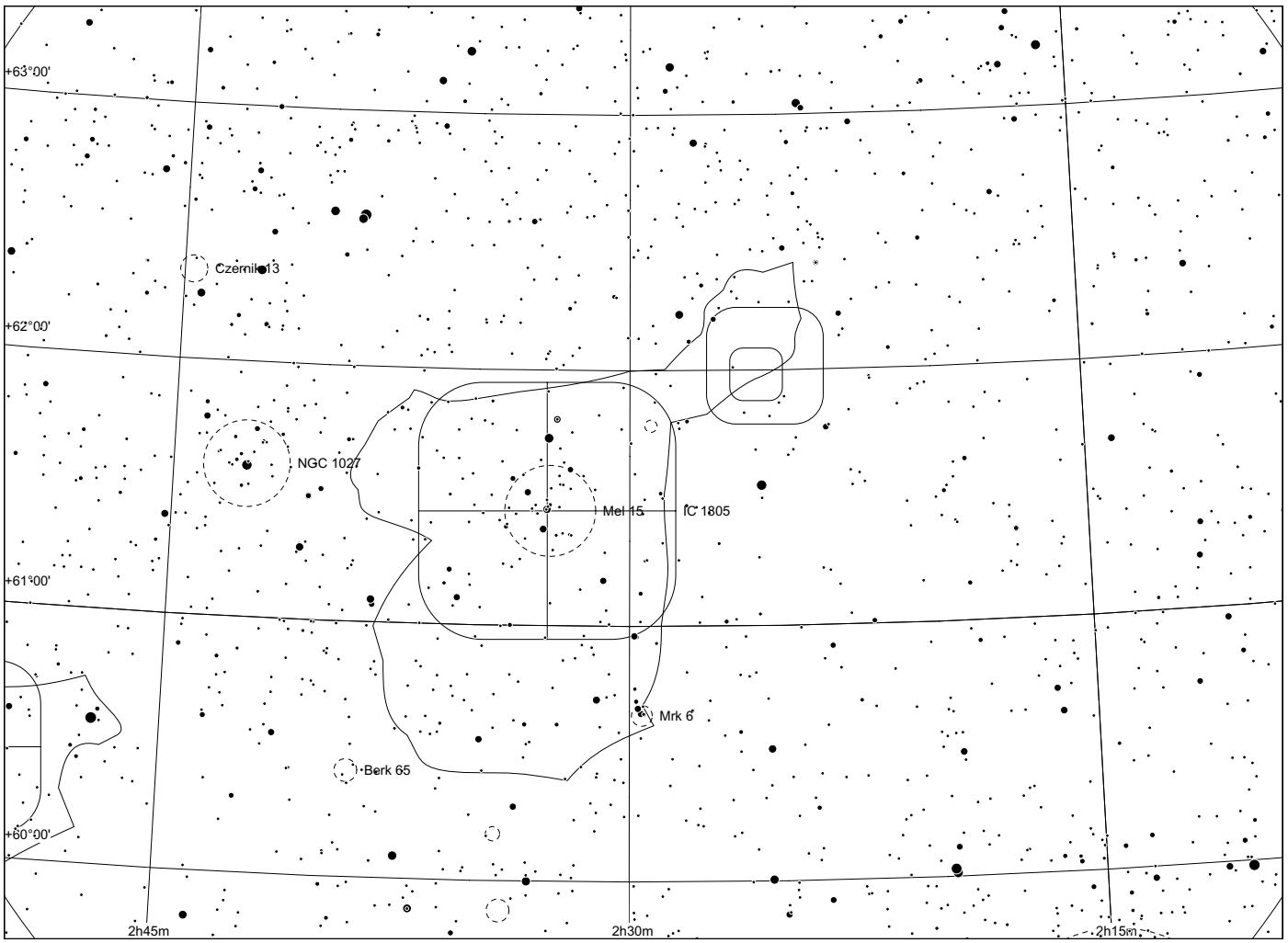
	other name	RA	dec	dia. '	F	S	B
Sh 2-190	IC 1805	02 33 22.7	+61 26 32	150	3	3	3

Distance: 2100 pc, Size: 91.6 pc, Source: 1982ApJS...49..183B

The Heart nebula is associated with the IC 1805 star cluster and the W3/W4 radio source / star formation region.

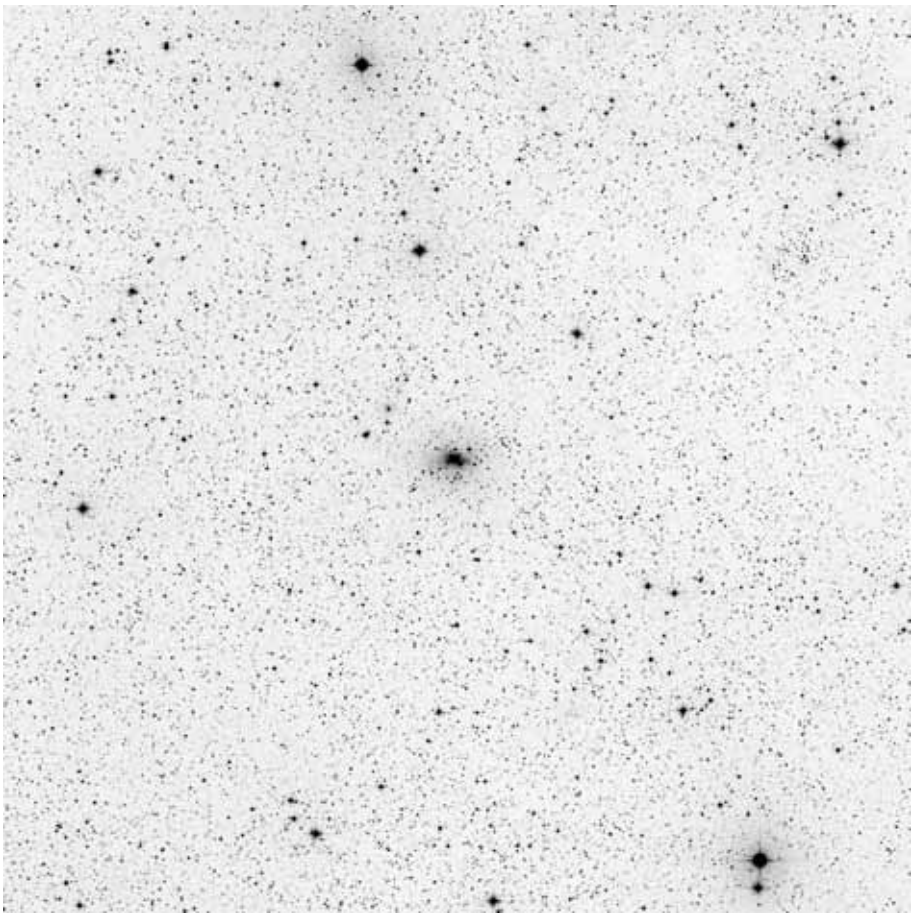
Observing notes:


4h00m
1h00m
+65°00'
Berk 10
Stock 5
Stock 6
Tr 3
+60°00'
NGC 1027
Mel 15
IC 1805
NGC 663
Ruchbah
Tombaugh 5
IC 1848
Stock 2
NGC 4
NGC 957
NGC 869
+55°00'
Miram
Tr 2
NGC 744
3h30m
3h00m
2h30m
2h00m
1h30m

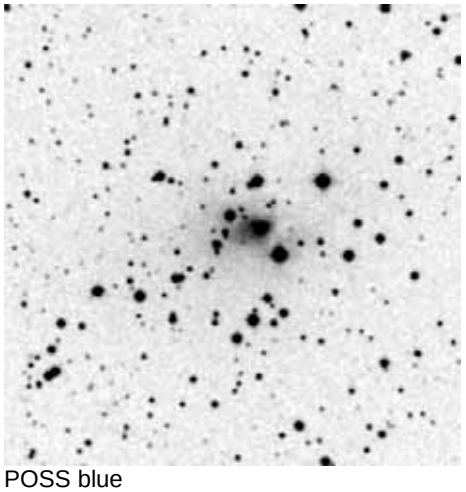

+63°00'
Czernik 13
+62°00'
NGC 1027
Mel 15
IC 1805
+61°00'
Mrk 6
Berk 65
+60°00'
2h45m
2h30m
2h15m

Sh 2 - 191

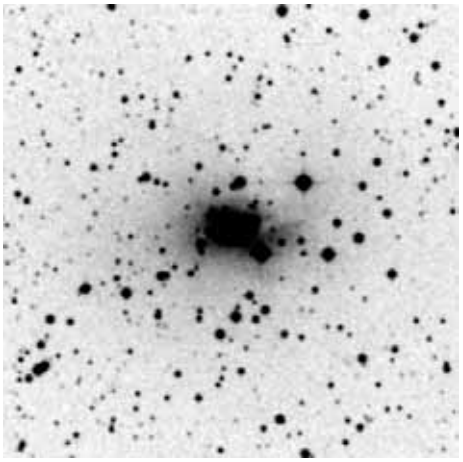
in Cassiopeia



60x60, red



POSS blue



POSS red

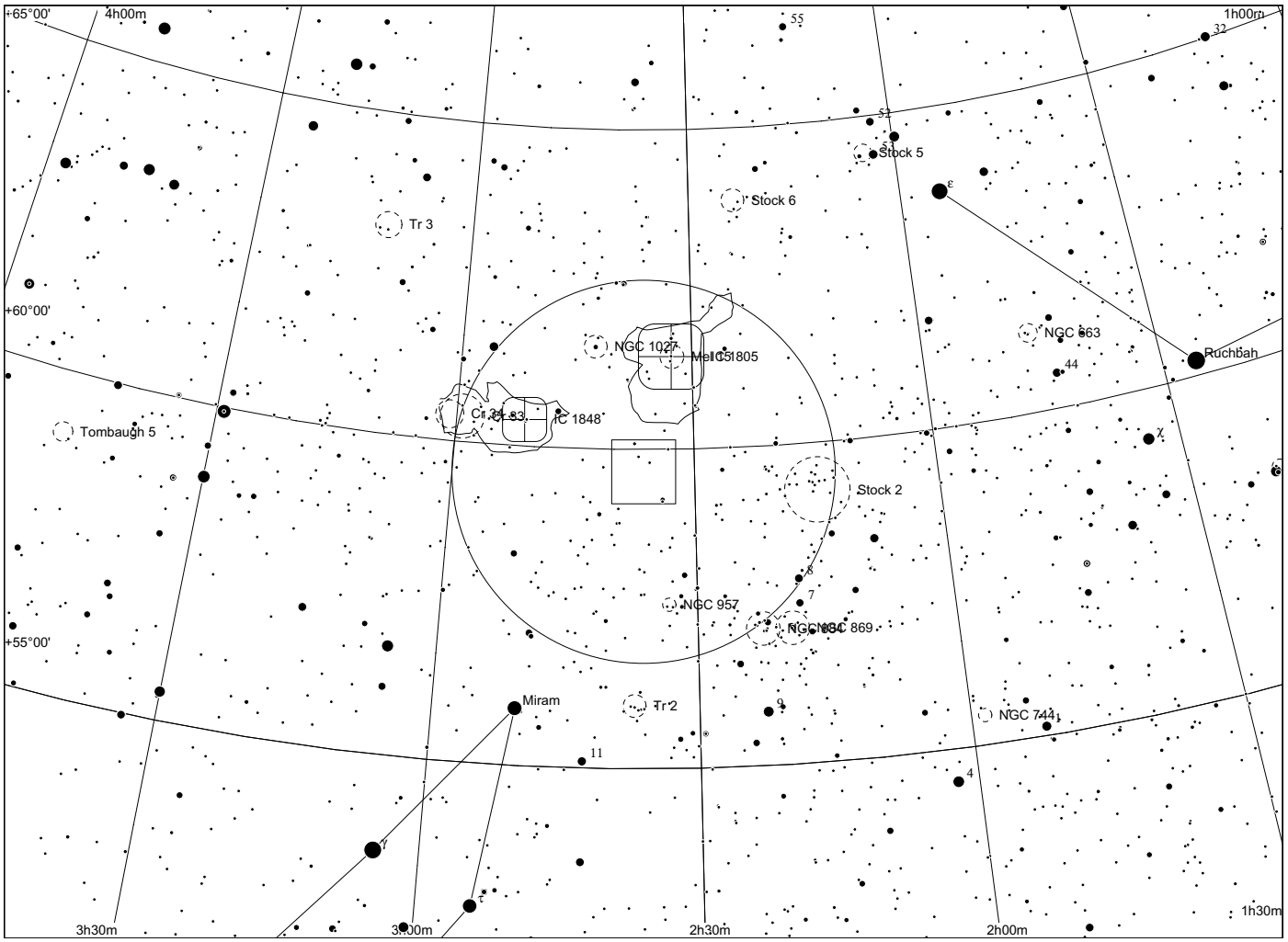


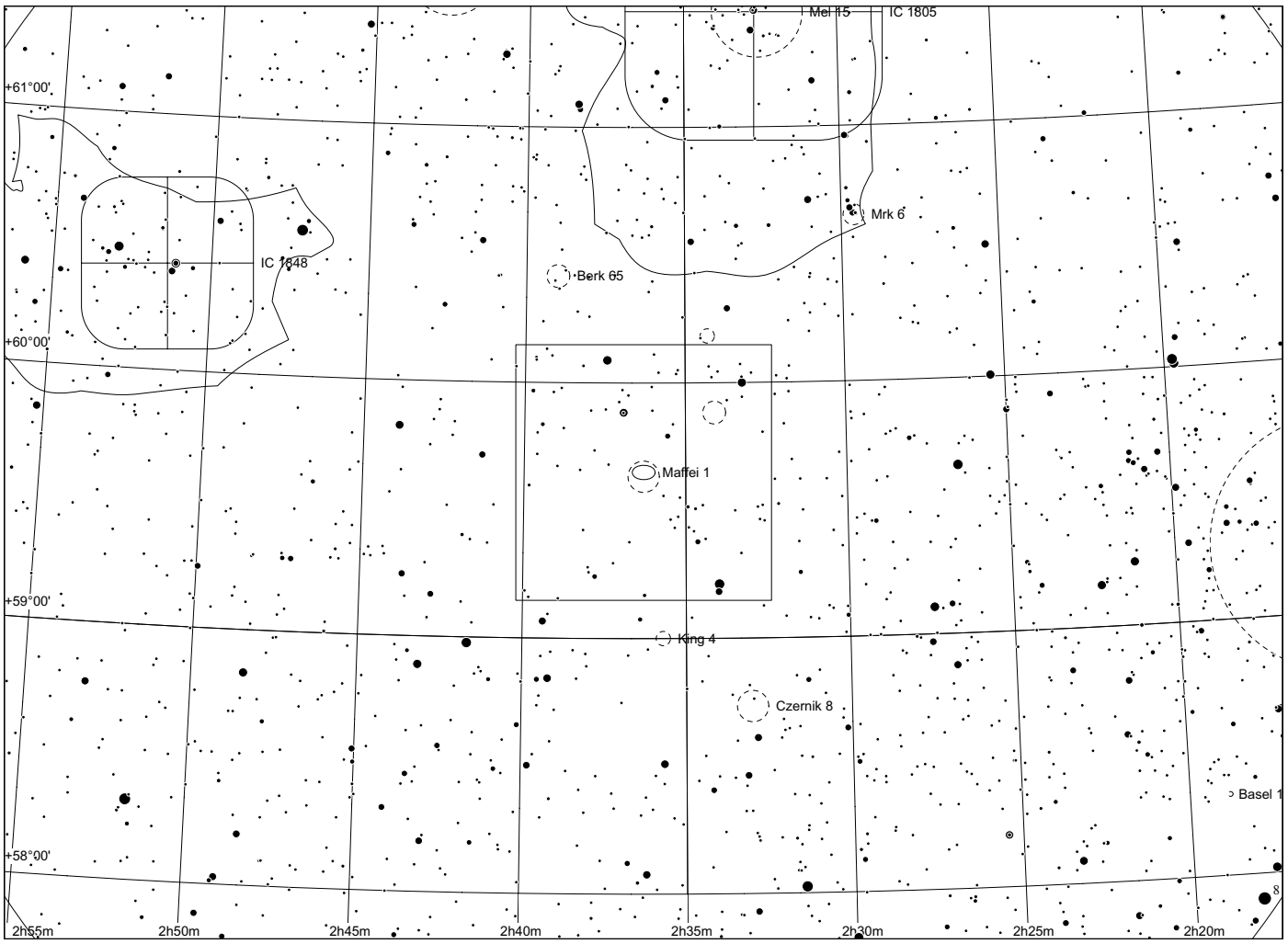
composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-191	Maffei I	02 36 38.7	+59 38 14	2	3	1	3

This is the galaxy Maffei 1.

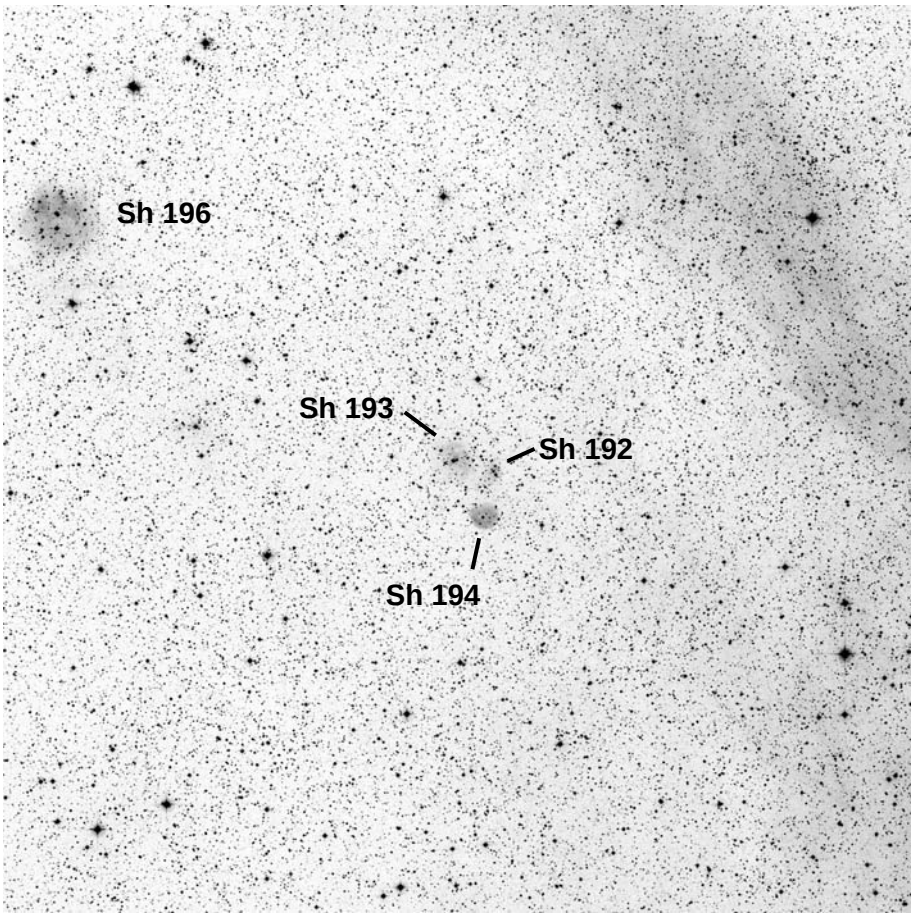
Observing notes:


+65°00'
4h00m
1h00m
55
32
52
51
Stock 5
Stock 6
Tr 3
ε
+60°00'
NGC 1027
Mel 15
IC 1805
NGC 663
Ruchbah
44
Cr 34
Cr 33
IC 1848
Tombaugh 5
χ
Stock 2
8
7
NGC 957
NGC 884
NGC 869
+55°00'
Miram
Tr 2
9
NGC 744
11
4
γ
3h30m
3h00m
2h30m
2h00m
1h30m

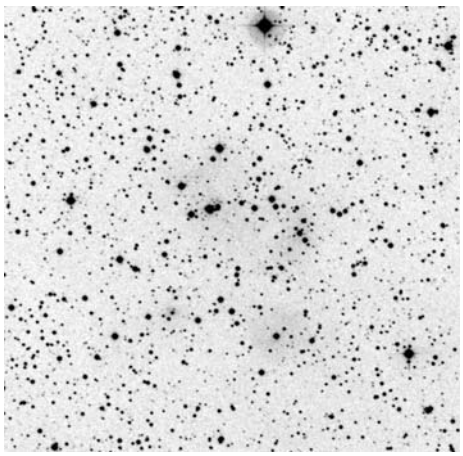

Mel 15
IC 1805
+61°00'
Mrk 6
IC 1848
Berk 65
+60°00'
Maffei 1
+59°00'
King 4
Czernik 8
Basel 1
+58°00'
2h55m
2h50m
2h45m
2h40m
2h35m
2h30m
2h25m
2h20m

Sh 2 - 192/193/194

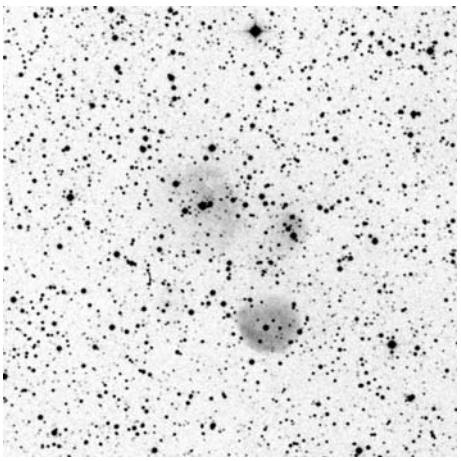
in Cassiopeia



60x60, red



POSS blue



POSS red



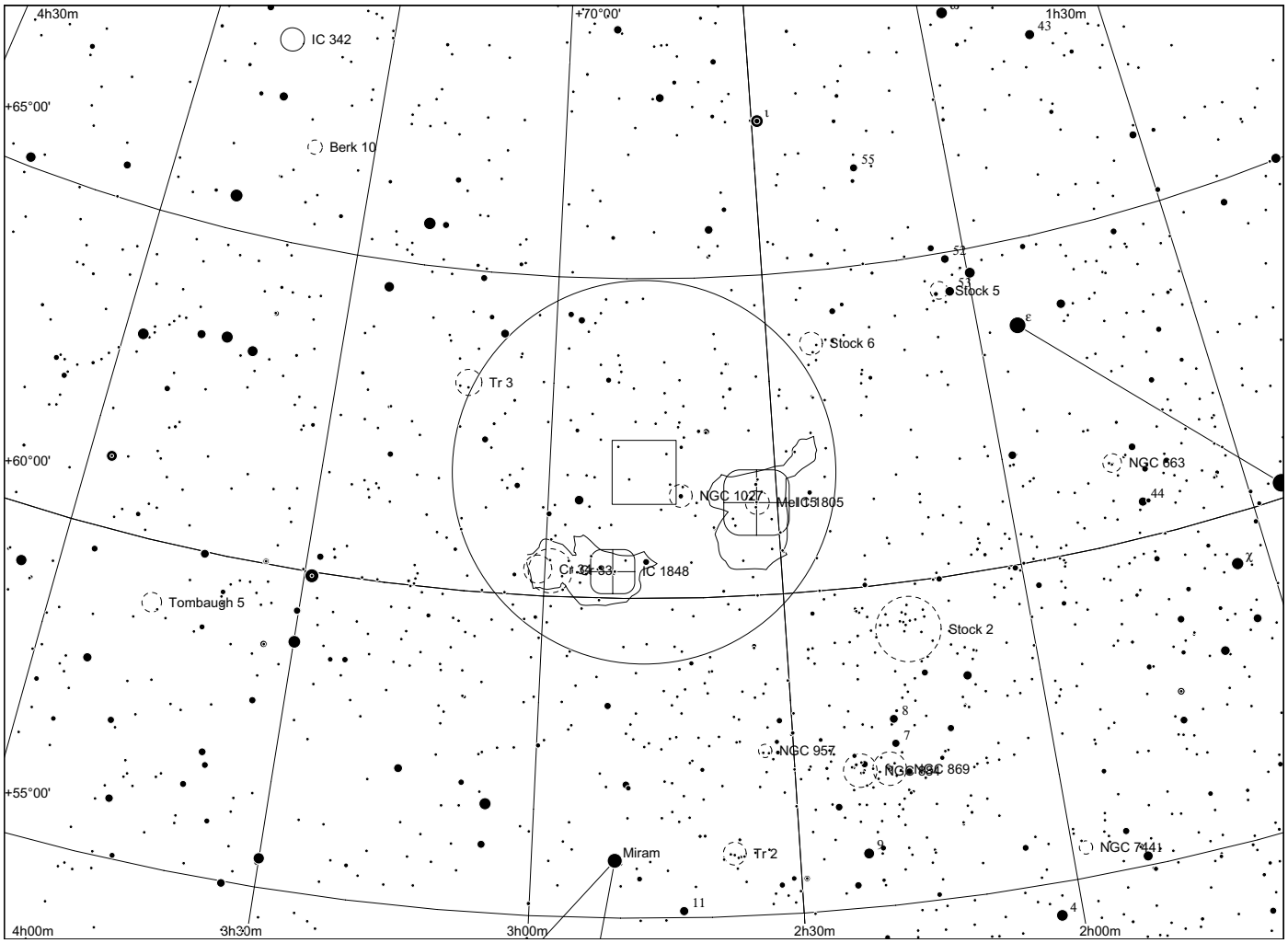
composite

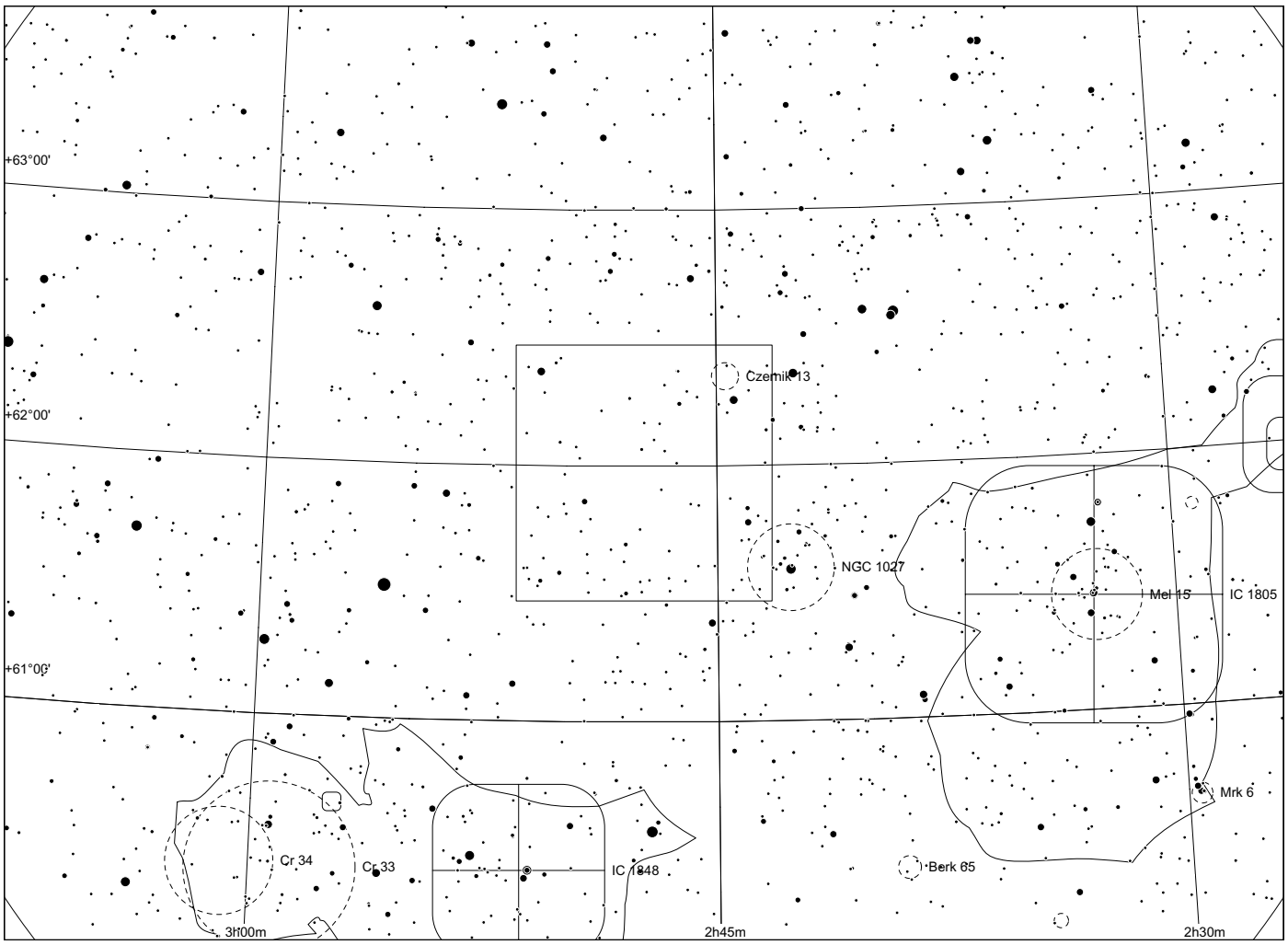
	other name	RA	dec	dia. '	F	S	B
Sh 2-192		02 47 13.3	+61 59 17	1	2	1	1
Sh 2-193		02 47 32.5	+62 00 15	2	2	1	1
Sh 2-194		02 47 19.1	+61 56 17	2	2	1	2

Distance: 3200 pc, Source: 2003A&A...397..133R

Sh 2-192, Sh 2-193 and Sh 2-194 are all near the W4 and W5 complexes.

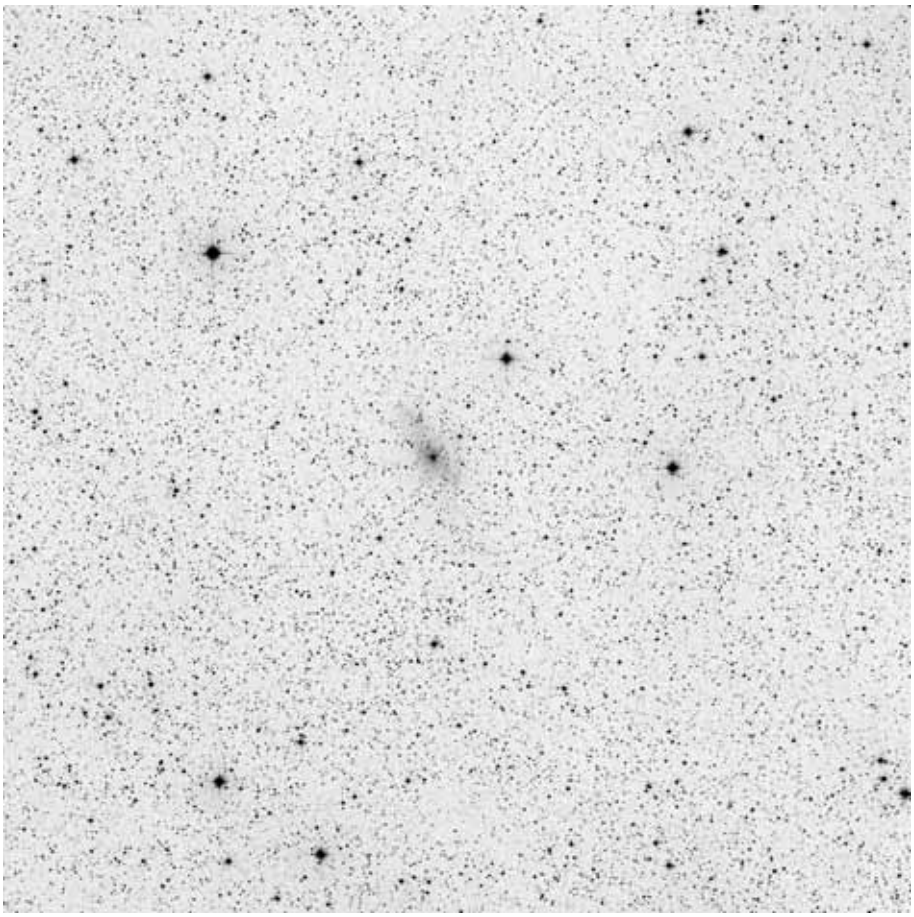
Observing notes:


4h30m
+70°00'
1h30m
IC 342
+65°00'
Berk 10
Stock 5
Stock 6
Tr 3
+60°00'
NGC 663
NGC 1027
Mel 15
IC 1805
Cr 34
Cr 33
IC 1848
Tombaugh 5
Stock 2
NGC 957
NGC 869
+55°00'
Miram
Tr 2
NGC 744
4h00m
3h30m
3h00m
2h30m
2h00m

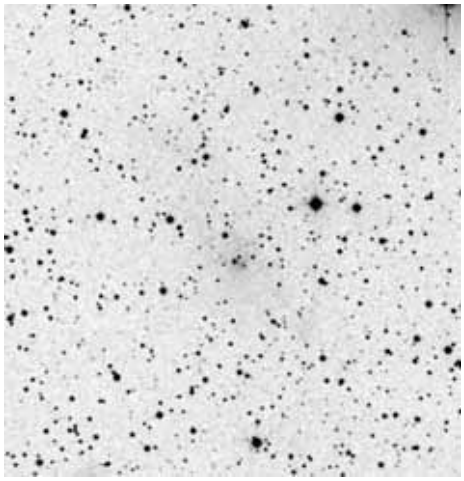

+63°00'
Czernik 13
+62°00'
NGC 1027
Mel 15
IC 1805
+61°00'
Mrk 6
Cr 34
Cr 33
IC 1848
Berk 65
3h00m
2h45m
2h30m

Sh 2 - 195/197

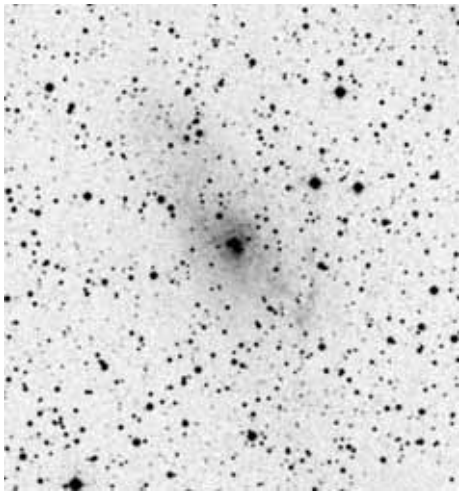
in Cassiopeia



60x60, red



POSS blue



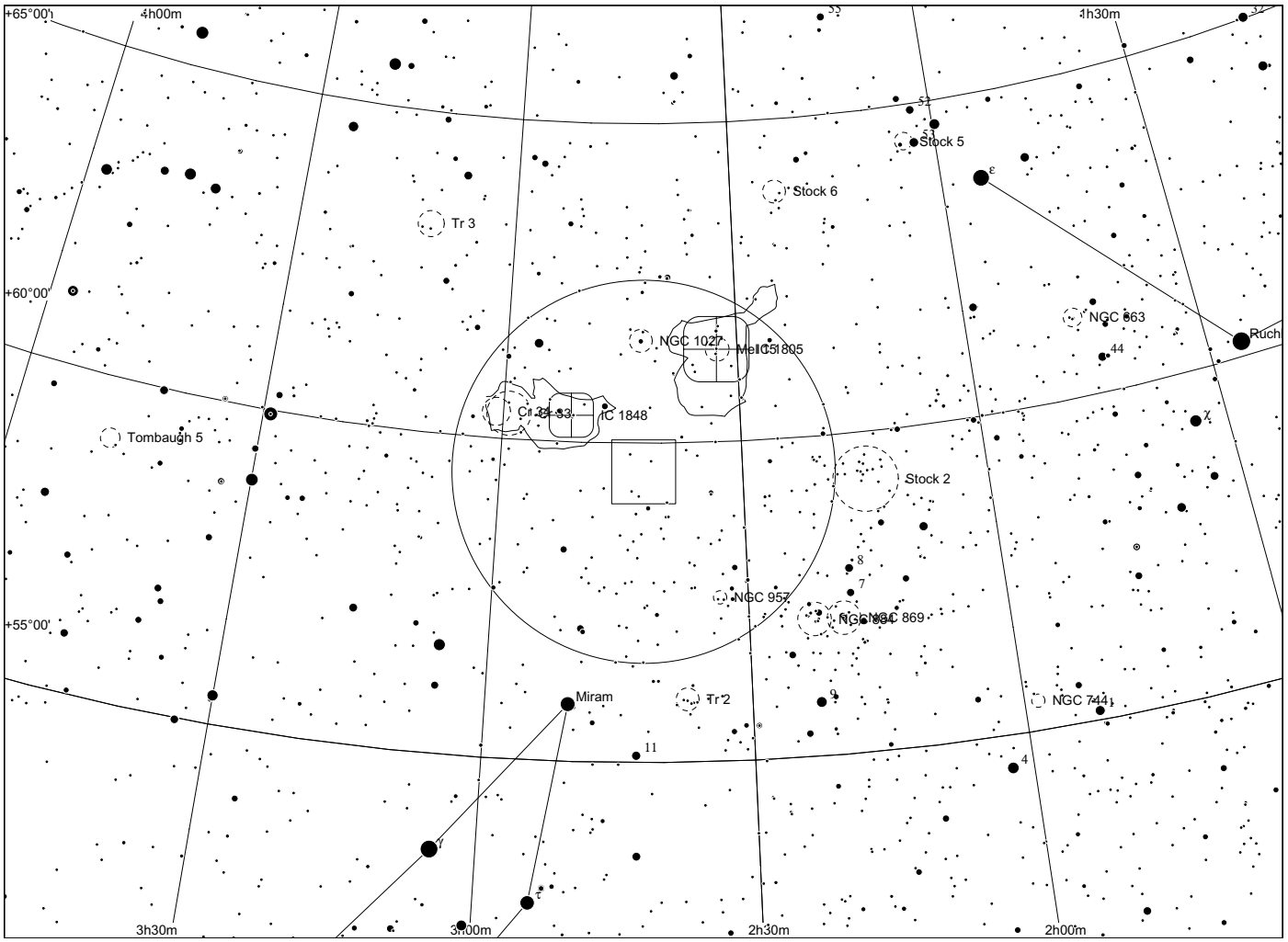
POSS red

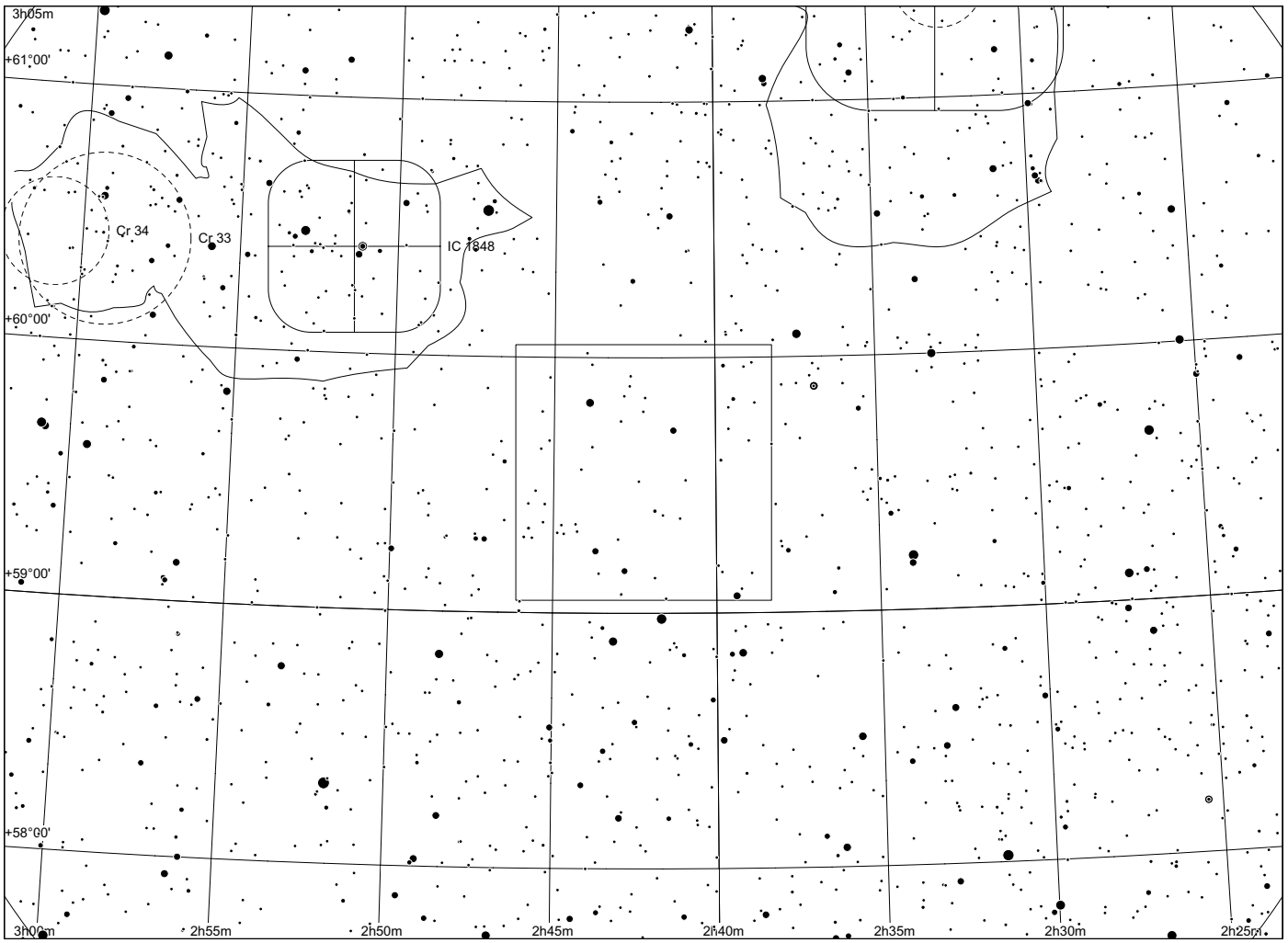


	other name	RA	dec	dia. '	F	S	B
Sh 2-195		02 40 05.1	+59 38 56	3	3	1	1
Sh 2-197	Maffei II	02 41 54.8	+59 38 46	5	3	2	1

This is Maffei II

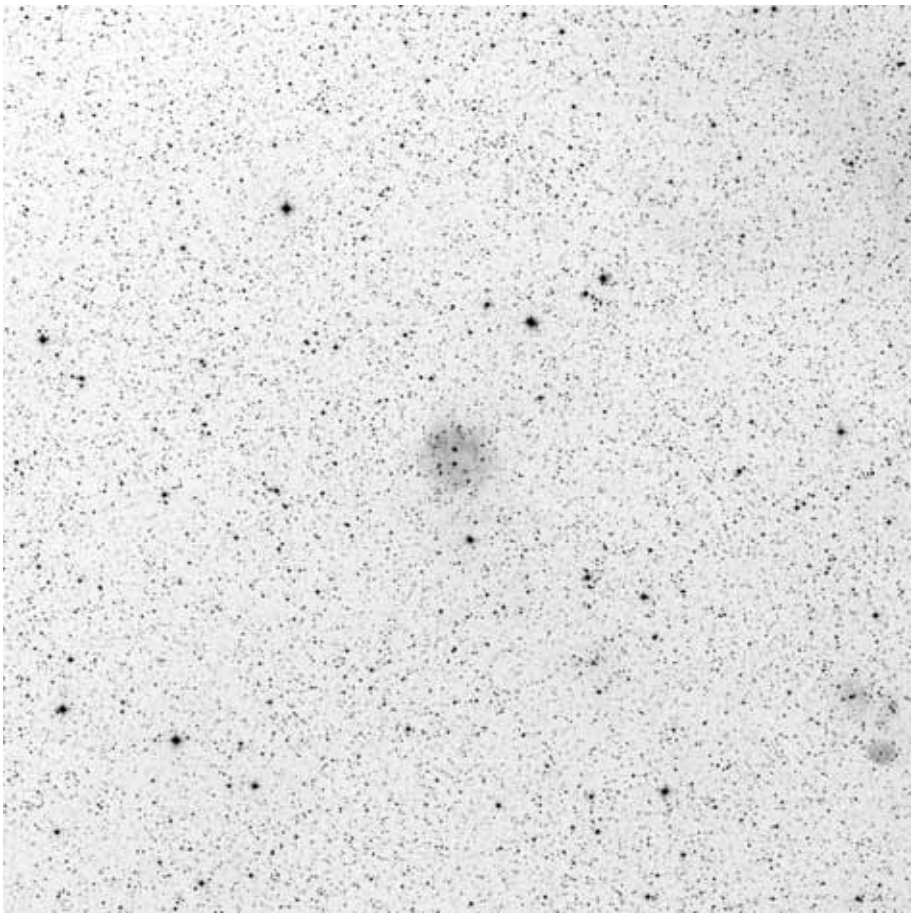
Observing notes:


+65°00'
4h00m
1h30m
Stock 5
Stock 6
Tr 3
+60°00'
NGC 663
Ruch
NGC 1027
IC 1805
Cr 33
IC 1848
Tombaugh 5
Stock 2
NGC 957
NGC 869
+55°00'
Miram
Tr 2
NGC 744
3h30m
3h00m
2h30m
2h00m

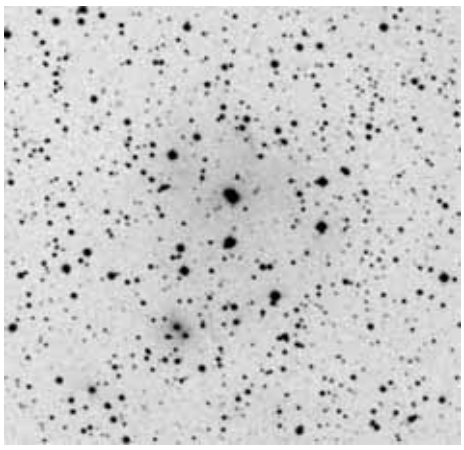

3h05m
+61°00'
Cr 34
Cr 33
IC 1848
+60°00'
+59°00'
+58°00'
3h00m
2h55m
2h50m
2h45m
2h40m
2h35m
2h30m
2h25m

Sh 2 - 196

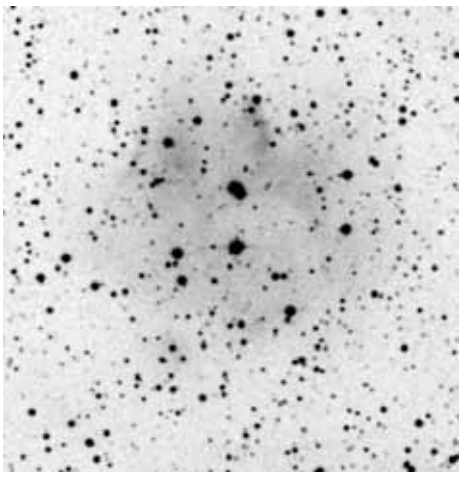
in Cassiopeia



60x60, red



POSS blue



POSS red

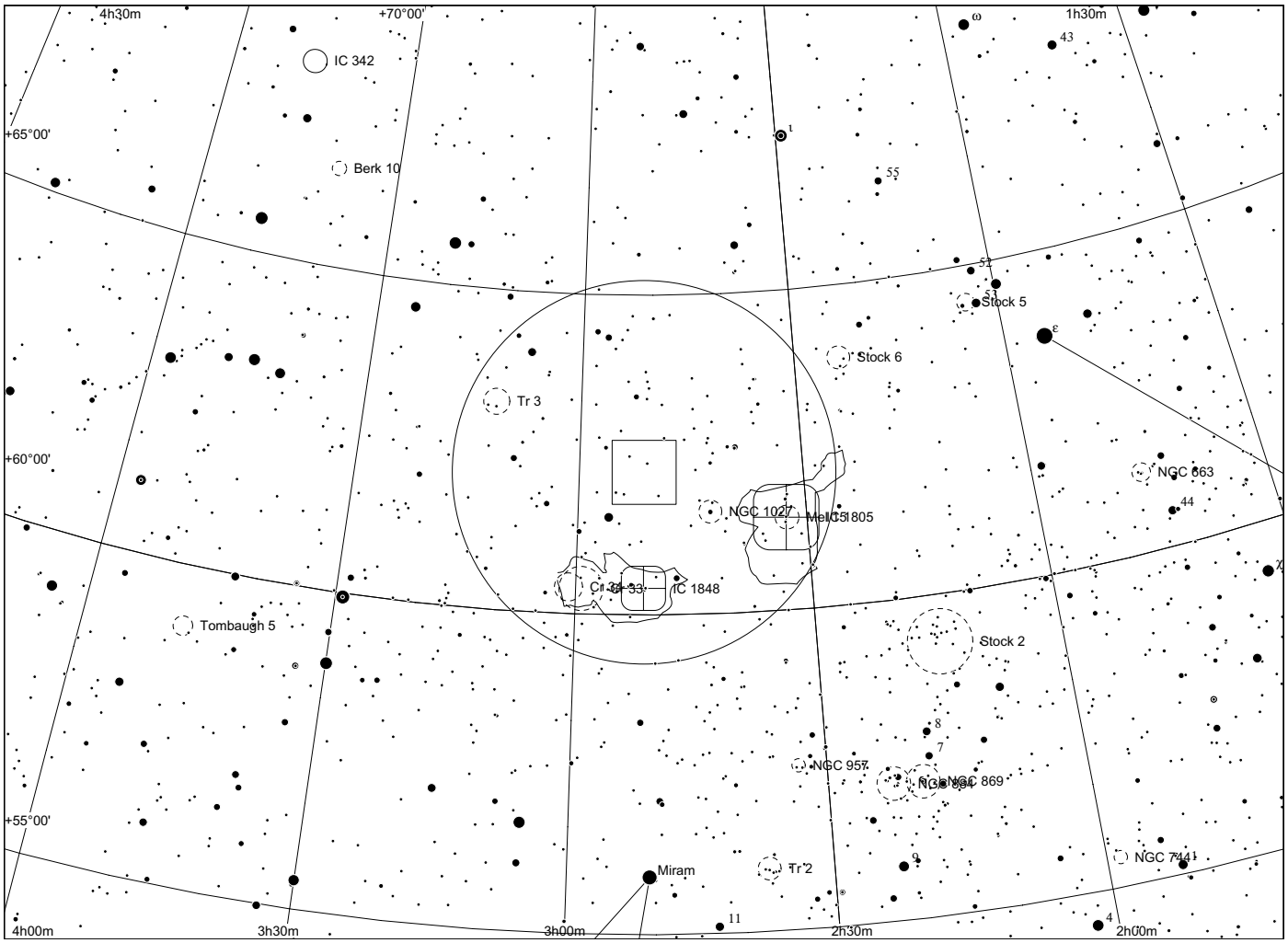
composite

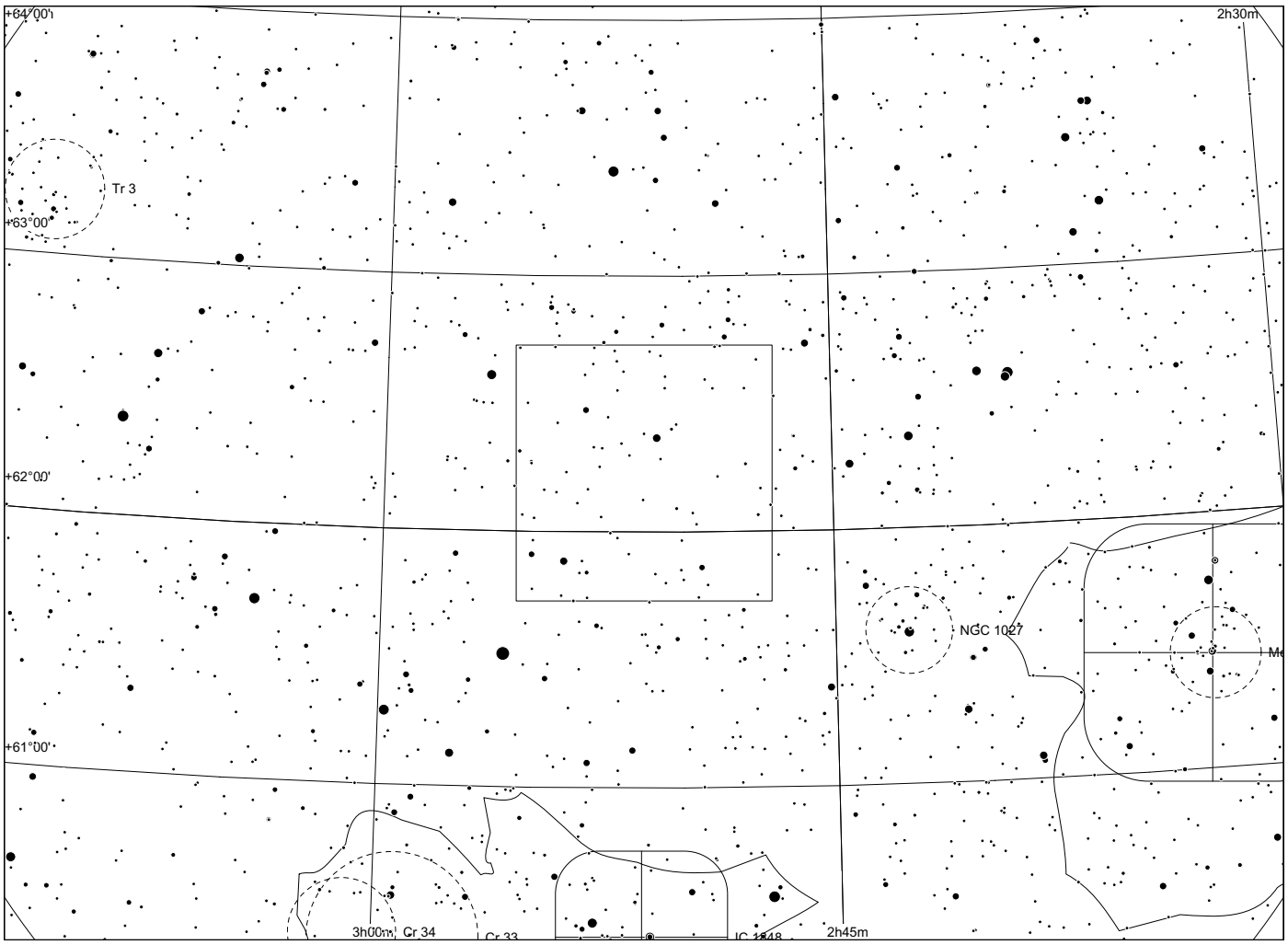
	other name	RA	dec	dia. '	F	S	B
Sh 2-196		02 51 18.8	+62 13 53	4	1	1	2

Distance: 3200 pc, Size: 3.7 pc, Source: 2003A&A...397..133R

This HII region lies between W4 and W5.

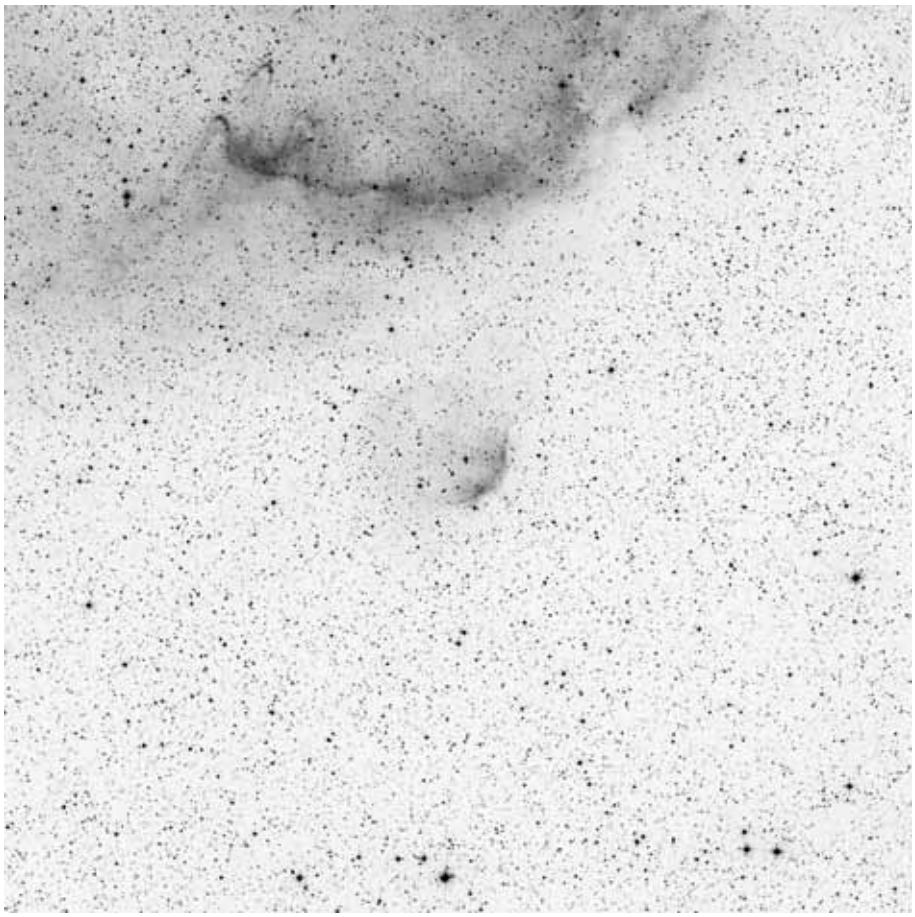
Observing notes:


4h30m
+70°00'
IC 342
+65°00'
Berk 10
1h30m
ω
43
55
52
51
Stock 5
ε
Stock 6
Tr 3
+60°00'
NGC 663
44
NGC 1027
Melotte 15
IC 1805
Cr 34
33
IC 1848
Tombaugh 5
Stock 2
8
7
NGC 957
NGC 884
NGC 869
+55°00'
Miram
Tr 2
9
NGC 7419
11
4
4h00m
3h30m
3h00m
2h30m
2h00m

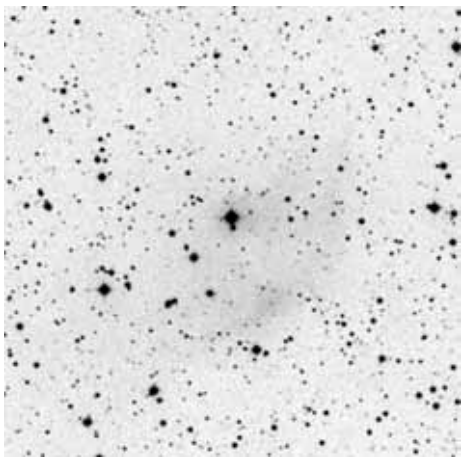

+64°00'
2h30m
Tr 3
+63°00'
+62°00'
NGC 1027
+61°00'
3h00m
Cr 34
Cr 33
IC 1848
2h45m

Sh 2 - 198

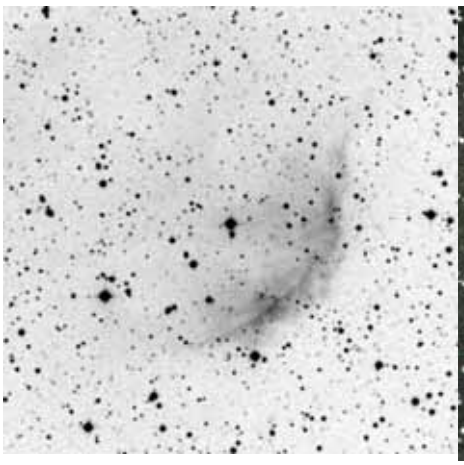
in Cassiopeia



60x60, red



POSS blue



POSS red



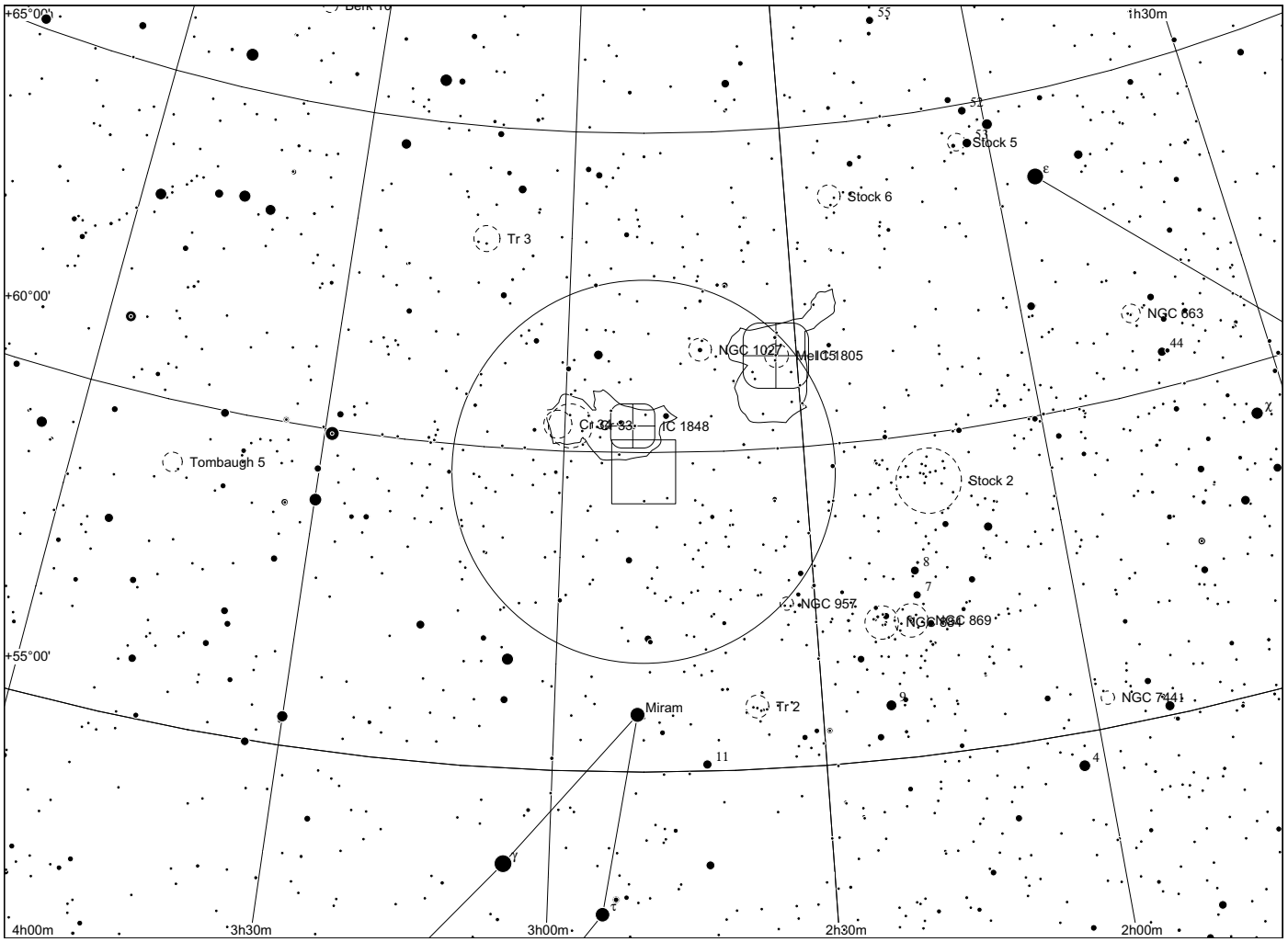
composite

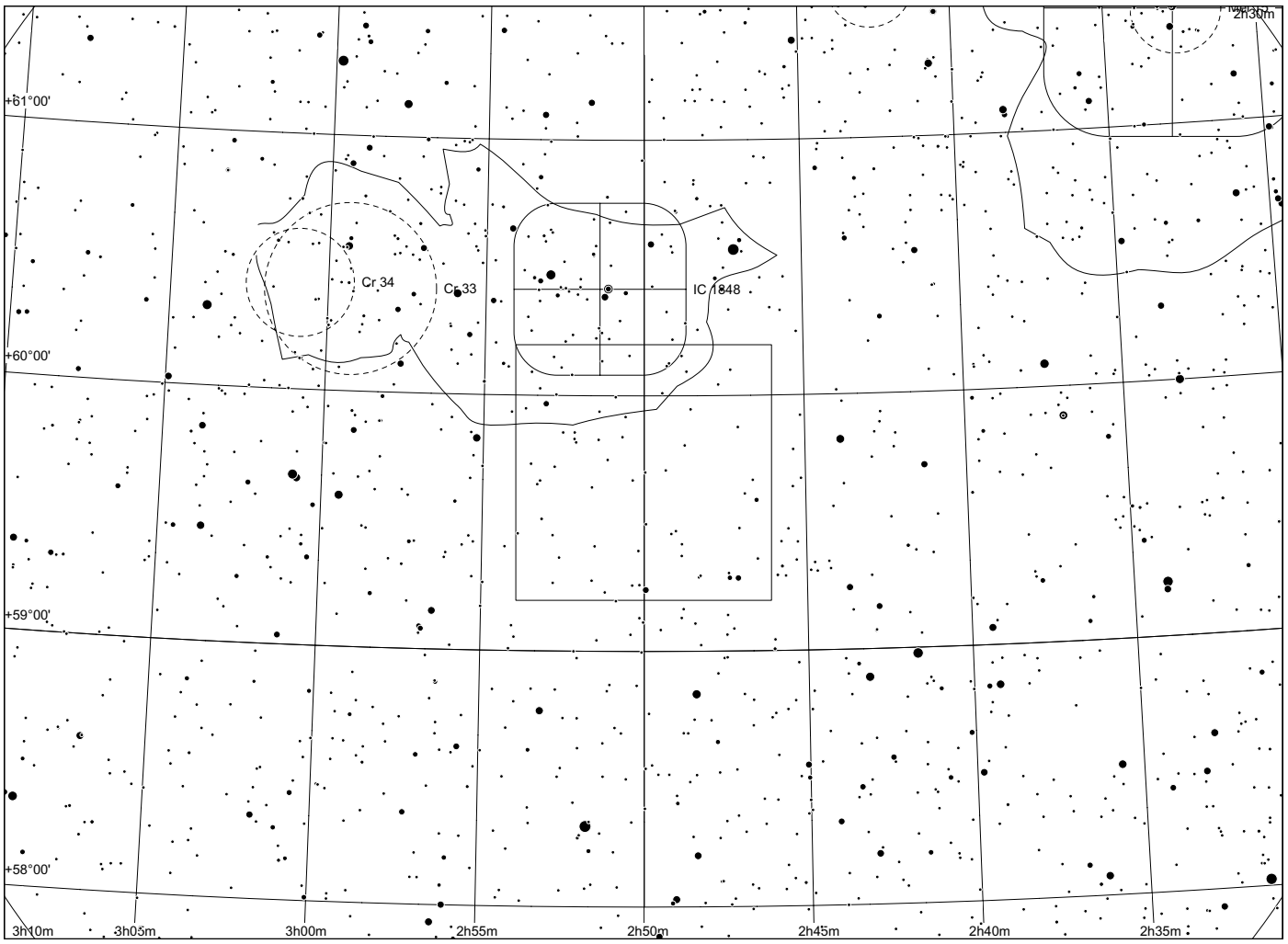
	other name	RA	dec	dia. '	F	S	B
Sh 2-198		02 50 01.0	+59 42 01	9	2	2	2

Distance: 2900 pc, Size: 7.6 pc, Source: 1982ApJS...49..183B

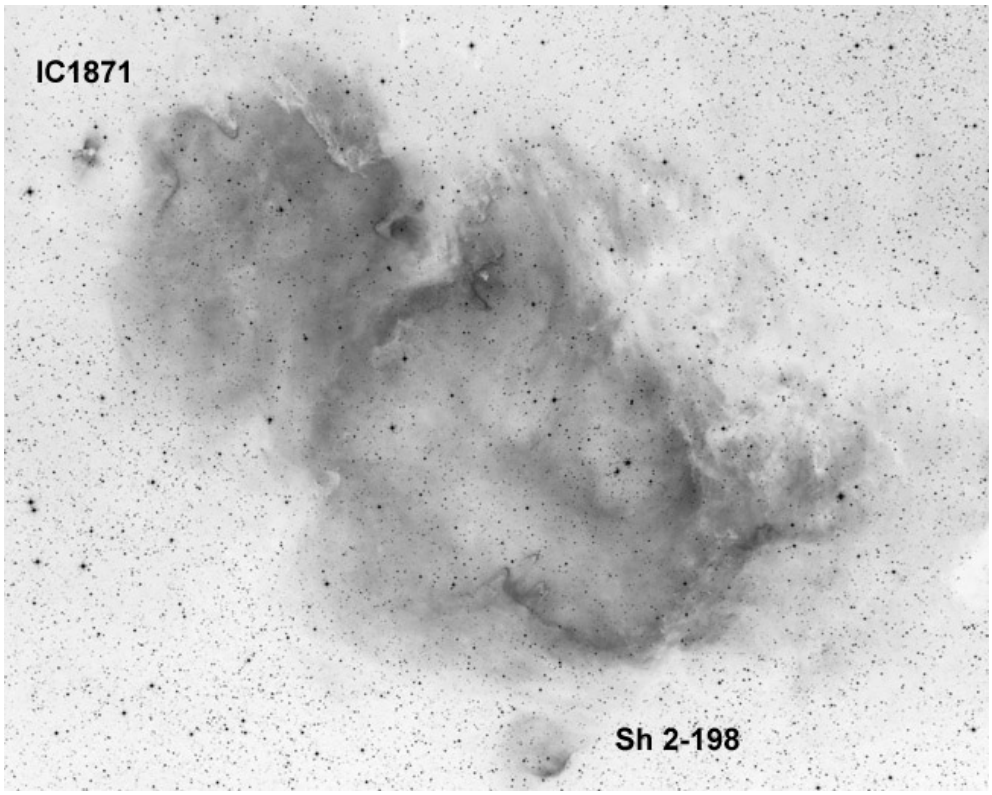
This region is located towards the south of the W5 star formation area / radio source.

Observing notes:

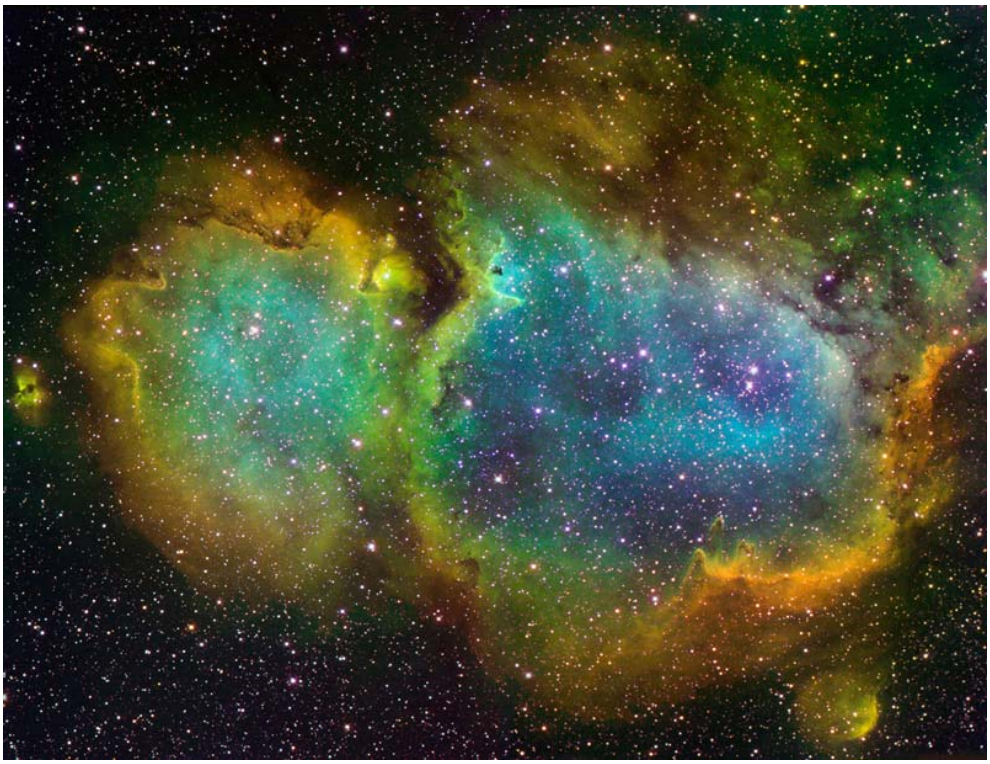

+65°00'
1h30m
55
52
51
Stock 5
Stock 6
Tr 3
+60°00'
NGC 663
44
NGC 1027
Melotte 5
IC 1805
Cr 33
IC 1848
Tombaugh 5
Stock 2
8
7
NGC 957
NGC 884
NGC 869
+55°00'
Miram
Tr 2
9
NGC 744
11
4
4h00m
3h30m
3h00m
2h30m
2h00m


2h30m
+61°00'
Cr 34
Cr 33
IC 1848
+60°00'
+59°00'
+58°00'
3h10m
3h05m
3h00m
2h55m
2h50m
2h45m
2h40m
2h35m

Sh 2 - 199 in Cassiopeia



60x60, H alpha



narrowband

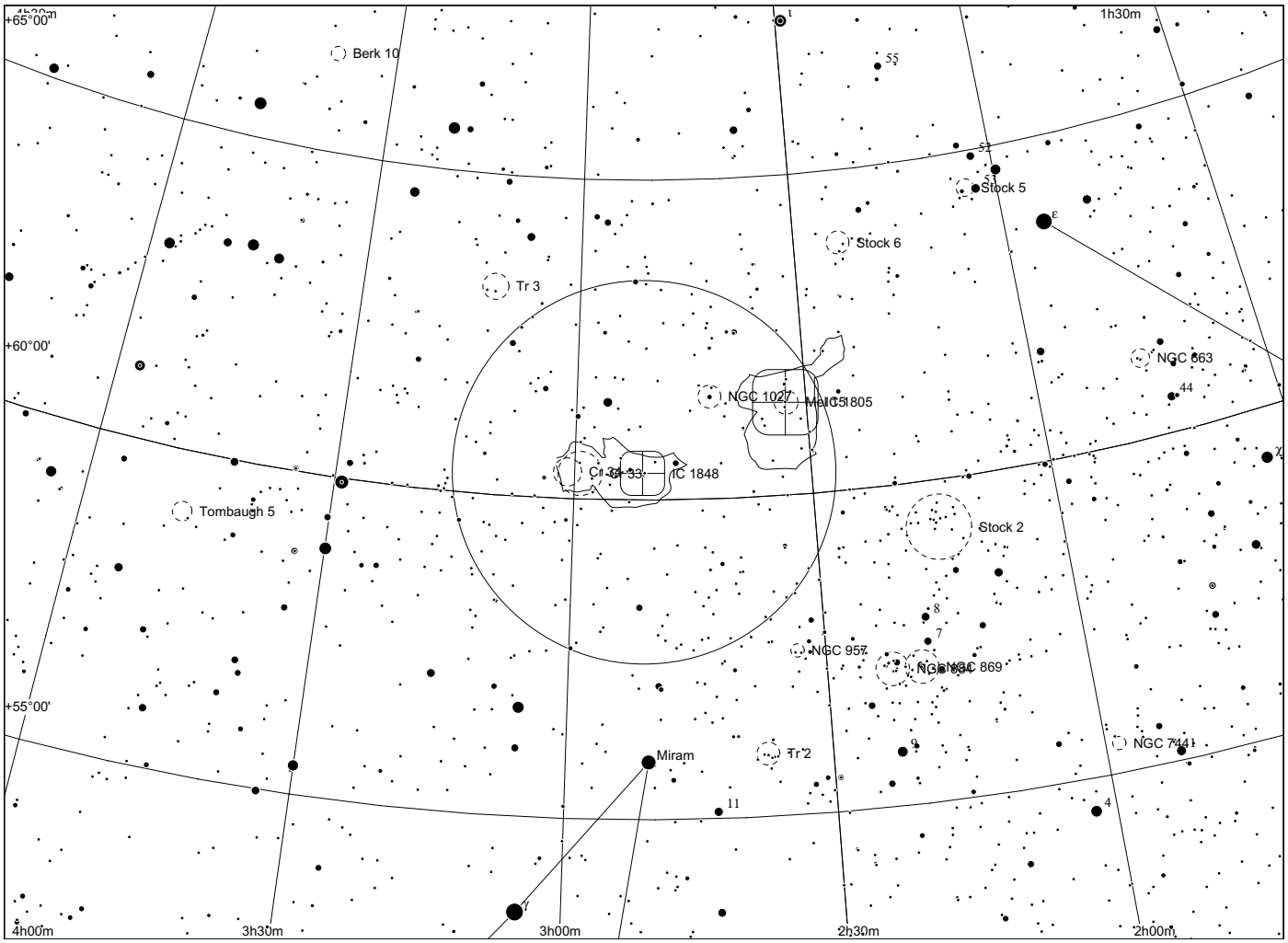
Dean Salman

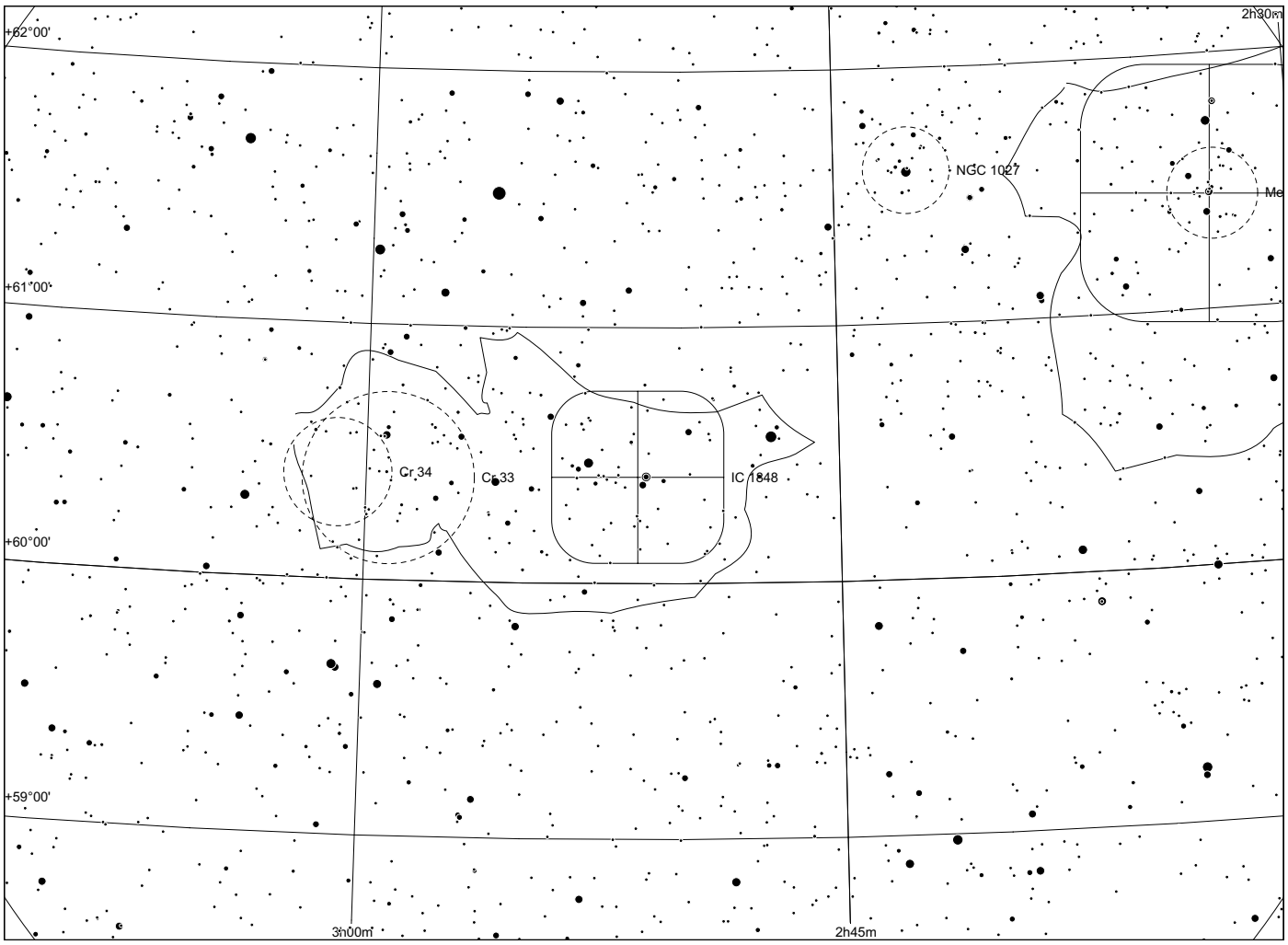
	other name	RA	dec	dia. '	F	S	B
Sh 2-199	IC 1848	02 54 32.9	+60 24 34	120	3	2	3

Distance: 2100 pc, Size: 73.3 pc, Source: 1982ApJS...49..183B

This is also called IC 1848, W5 and the Soul nebula and is a major star formation region.

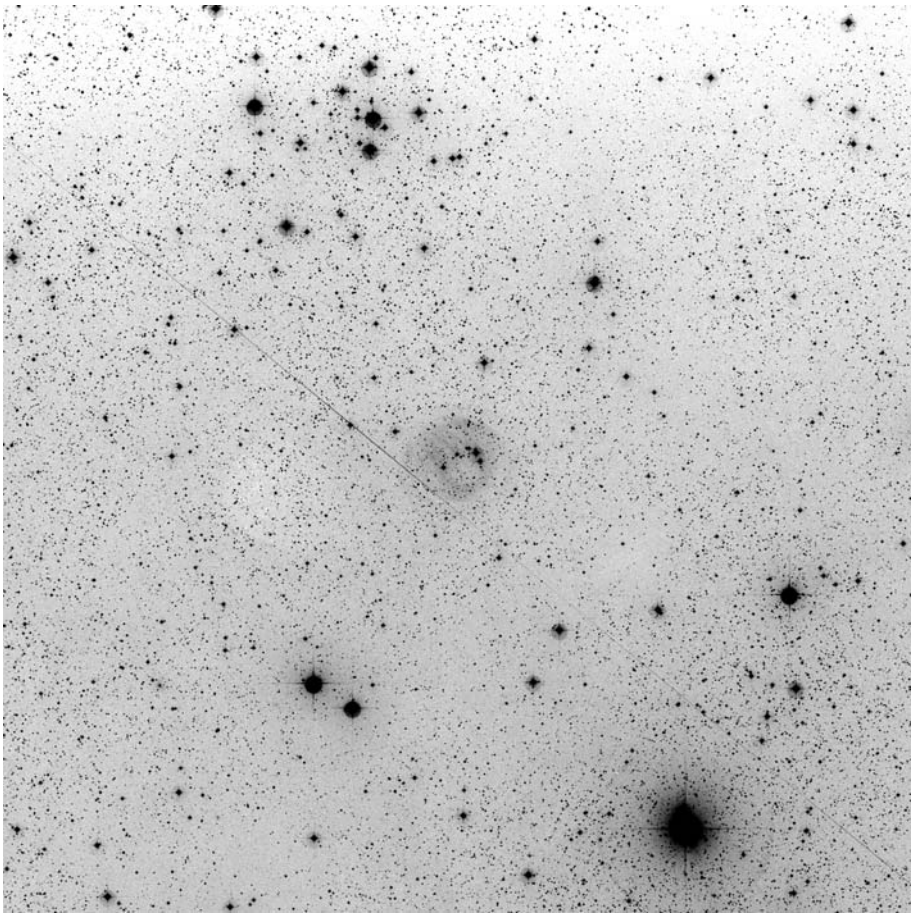
Observing notes:


+65°00'
1h30m
Berk 10
55
53
53
Stock 5
ε
Stock 6
Tr 3
+60°00'
NGC 663
NGC 1027
Mel 15
1805
44
Cr 34
33
IC 1848
Tombaugh 5
Stock 2
8
7
NGC 957
NGC 869
+55°00'
Miram
Tr 2
NGC 7
11
4
4h00m
3h30m
3h00m
2h30m
2h00m

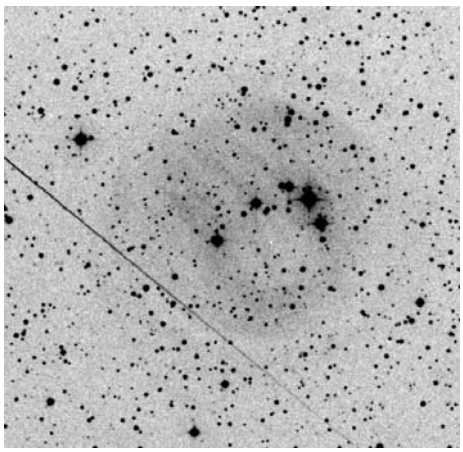

+62°00'
2h30m
NGC 1027
Me
+61°00'
Cr 34
Cr 33
IC 1848
+60°00'
+59°00'
3h00m
2h45m

Sh 2 - 200

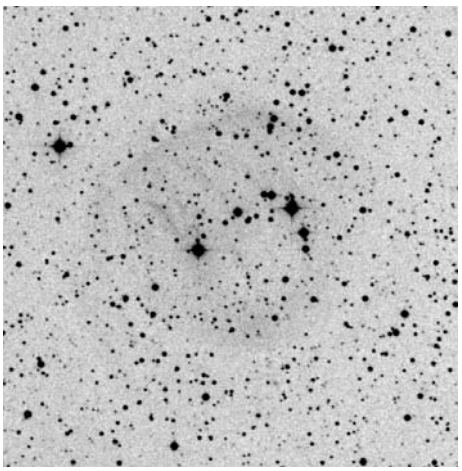
in Cassiopeia



60x60, red



POSS blue



POSS red



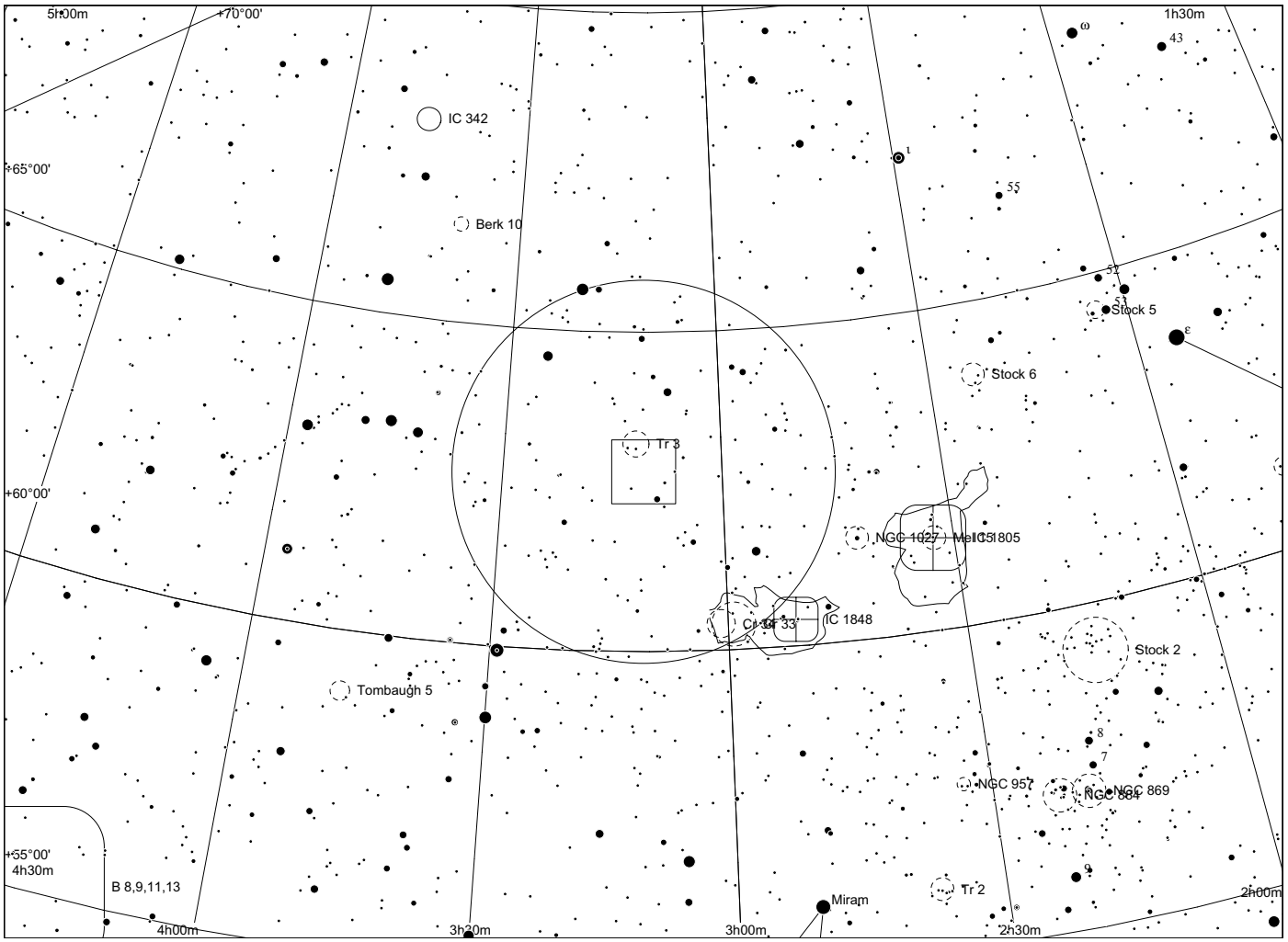
composite

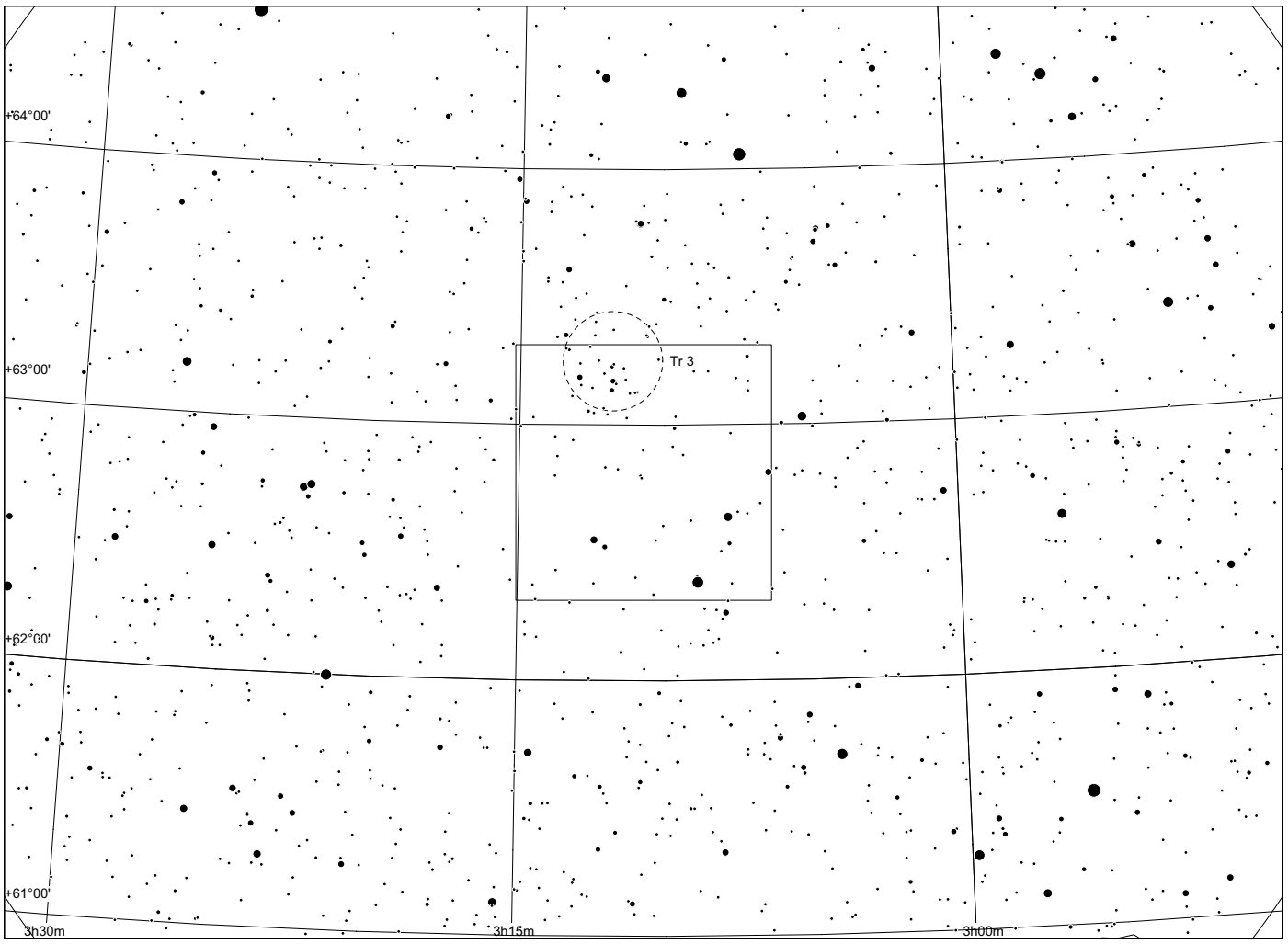
	other name	RA	dec	dia. '	F	S	B
Sh 2-200	PN HDW 2	03 10 44.7	+62 48 55	6	2	2	1

Distance: 1100 pc, Size: 1.9 pc, Source: 2003A&A...397..133R

This is the planetary nebula HDW 2.

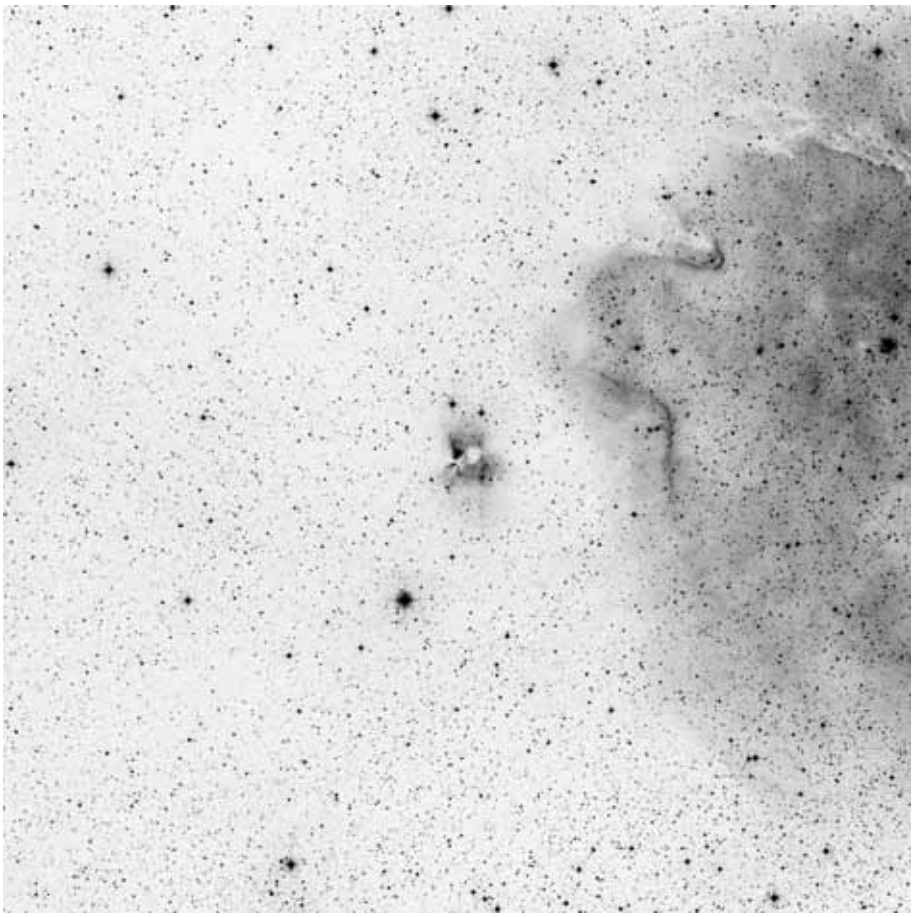
Observing notes:


5h00m
+70°00'
1h30m
IC 342
+65°00'
Berk 10
Stock 5
Stock 6
Tr 3
+60°00'
NGC 1027
Mel 15
IC 1805
IC 1848
Stock 2
Tombaugh 5
NGC 957
NGC 869
NGC 884
+55°00'
4h30m
B 8,9,11,13
Tr 2
Mirfak
2h00m
4h00m
3h30m
3h00m
2h30m

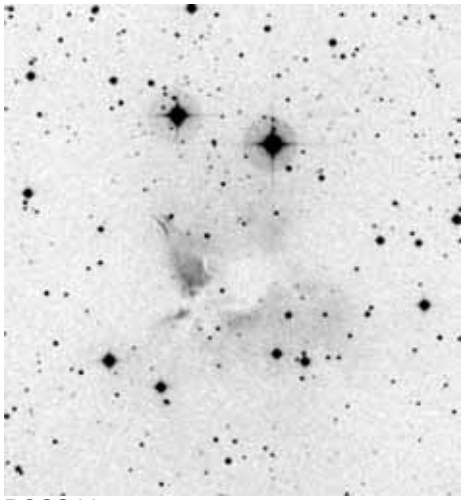

+64°00'
Tr 3
+63°00'
+62°00'
+61°00'
3h30m
3h15m
3h00m

Sh 2 - 201

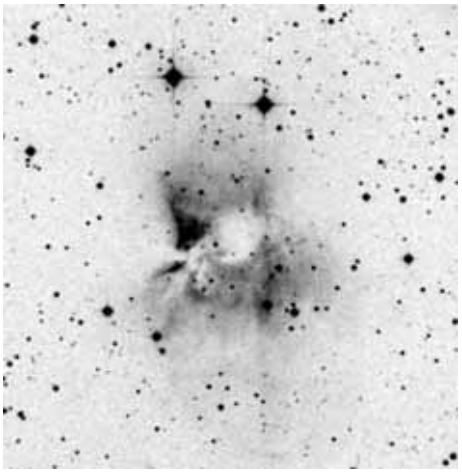
in Cassiopeia



60x60, red



POSS blue



POSS red



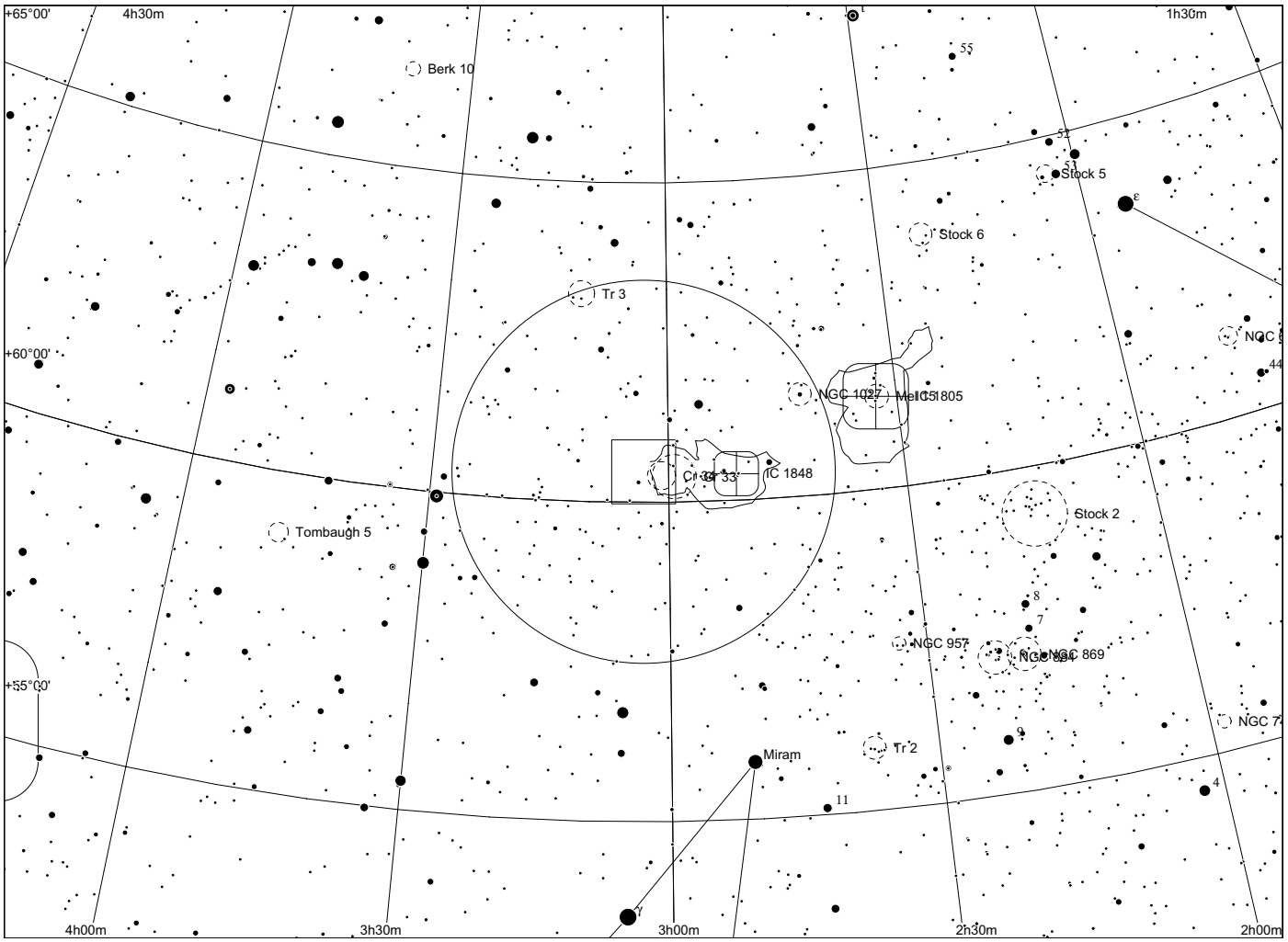
composite

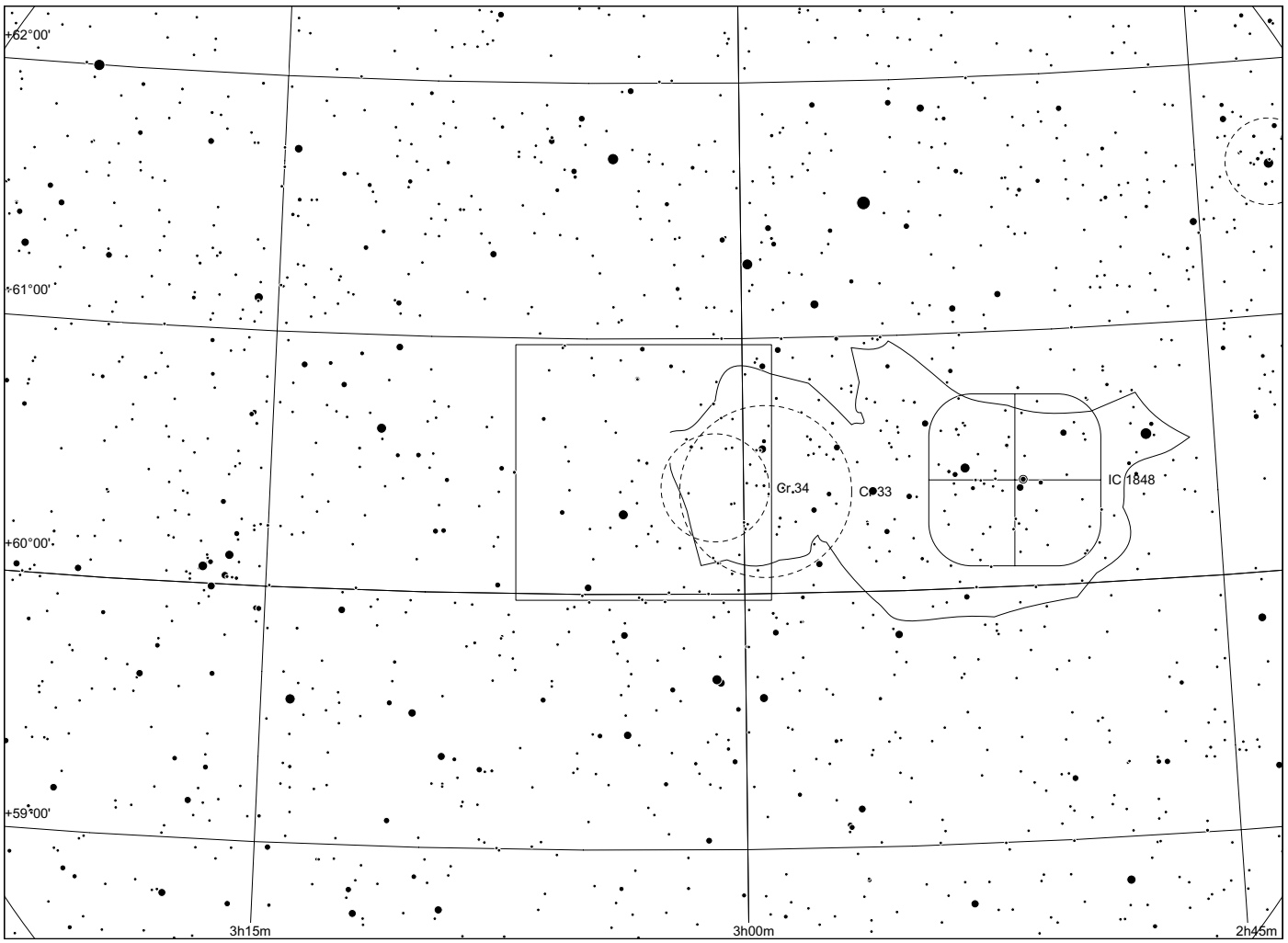
	other name	RA	dec	dia. '	F	S	B
Sh 2-201		03 03 10.3	+60 28 42	5	3	2	3

Distance: 3059 pc, Size: 3.6 pc, Source: 2003A&A...397..213P

A small HII region adjacent to the Soul nebula, Sh 2-199. The distance to this object is about 2300 pc, which puts it fairly close to Sh 2-199.

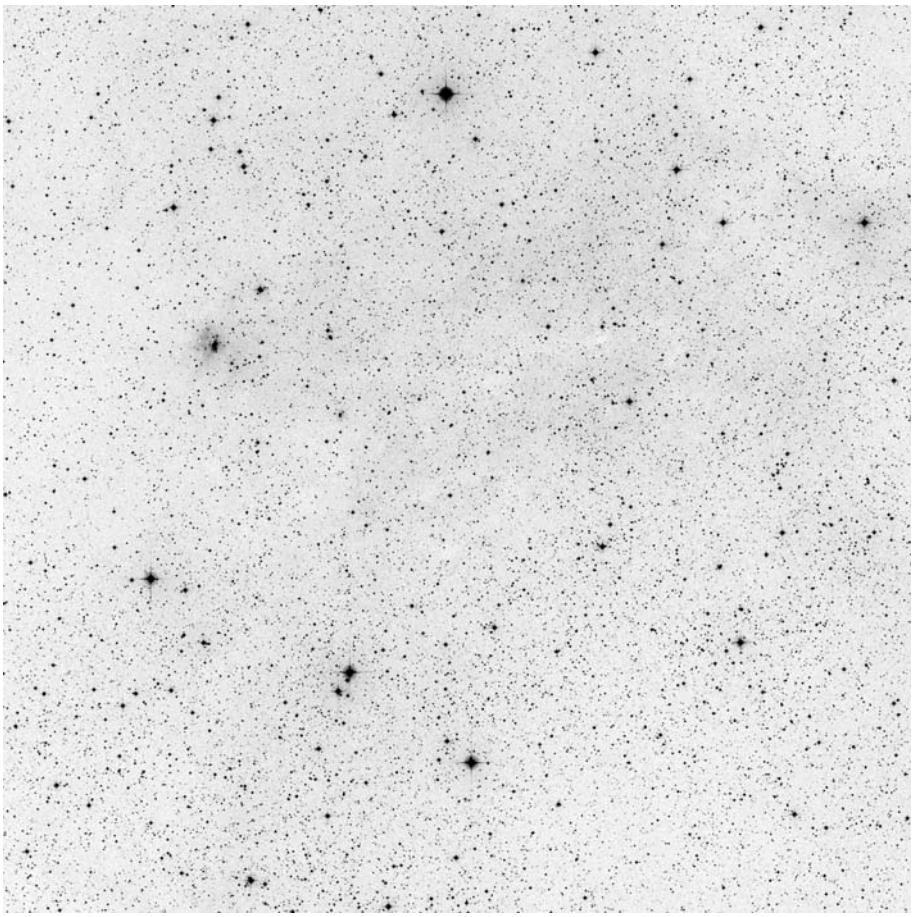
Observing notes:


+65°00'
4h30m
1h30m
Berk 10
55
52
51
Stock 5
Stock 6
Tr 3
+60°00'
NGC 1027
Mel 15
1805
Cr 33
IC 1848
Stock 2
Tombaugh 5
8
7
NGC 957
NGC 869
+55°00'
NGC 7
Tr 2
Miram
9
11
4
4h00m
3h30m
3h00m
2h30m
2h00m

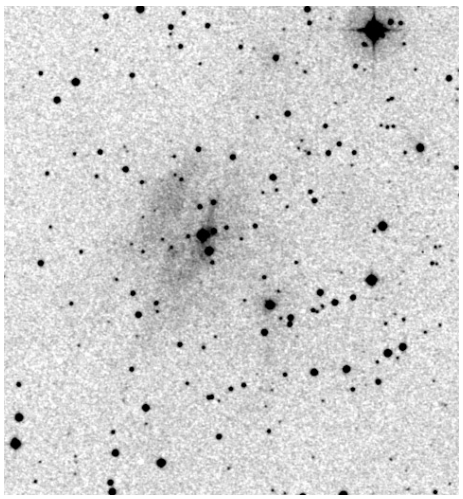

+62°00'
+61°00'
Gr 34
Cr 33
IC 1848
+60°00'
+59°00'
3h15m
3h00m
2h45m

Sh 2 - 203

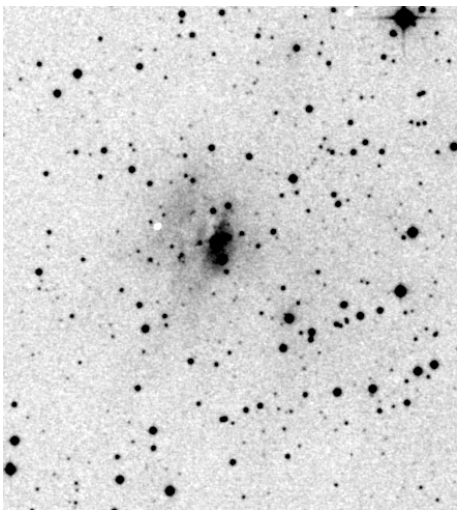
in Camelopardalis



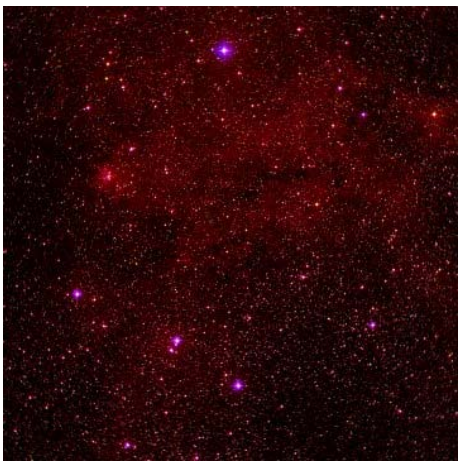
60x60, red



POSS blue



POSS red

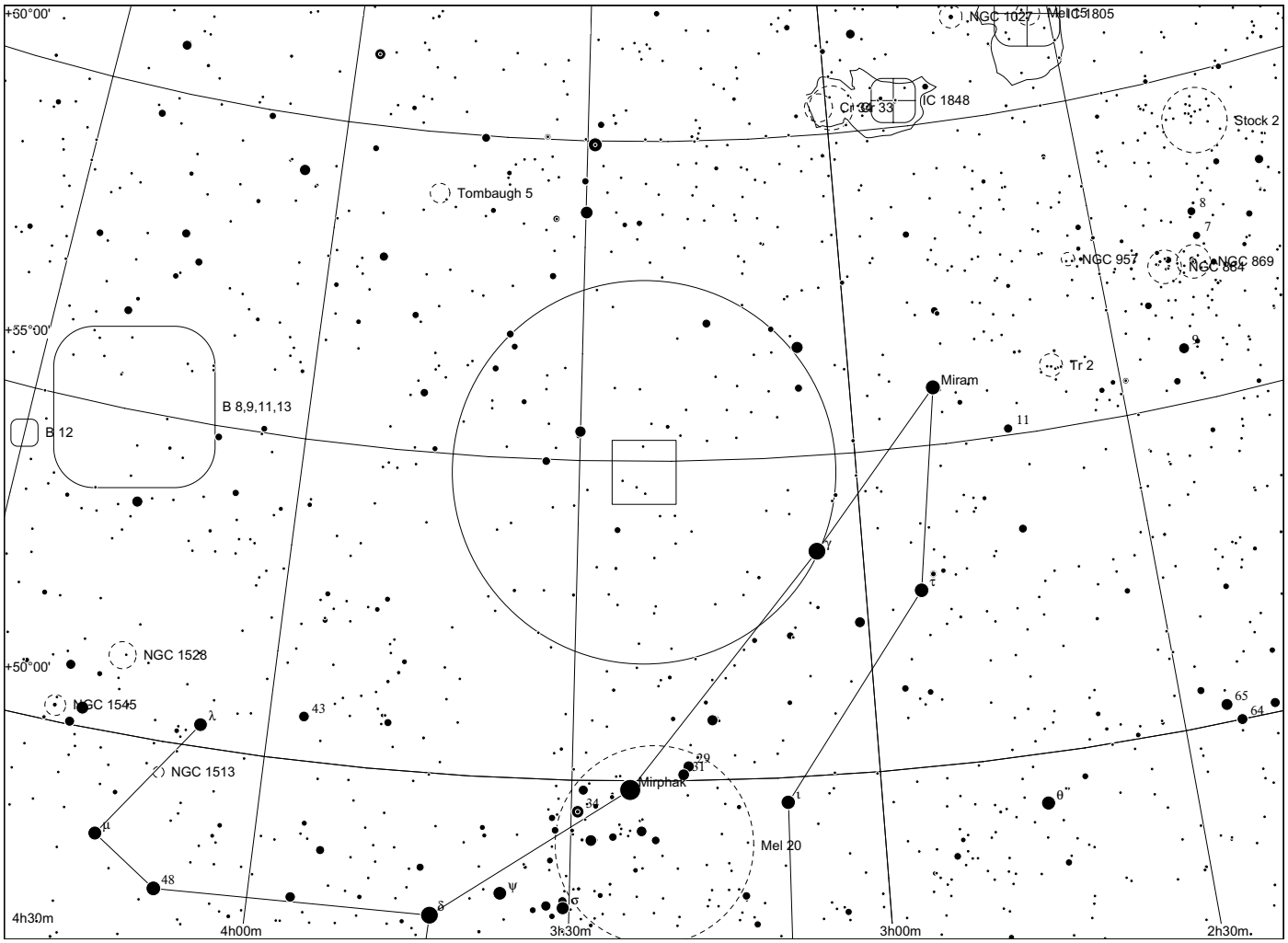


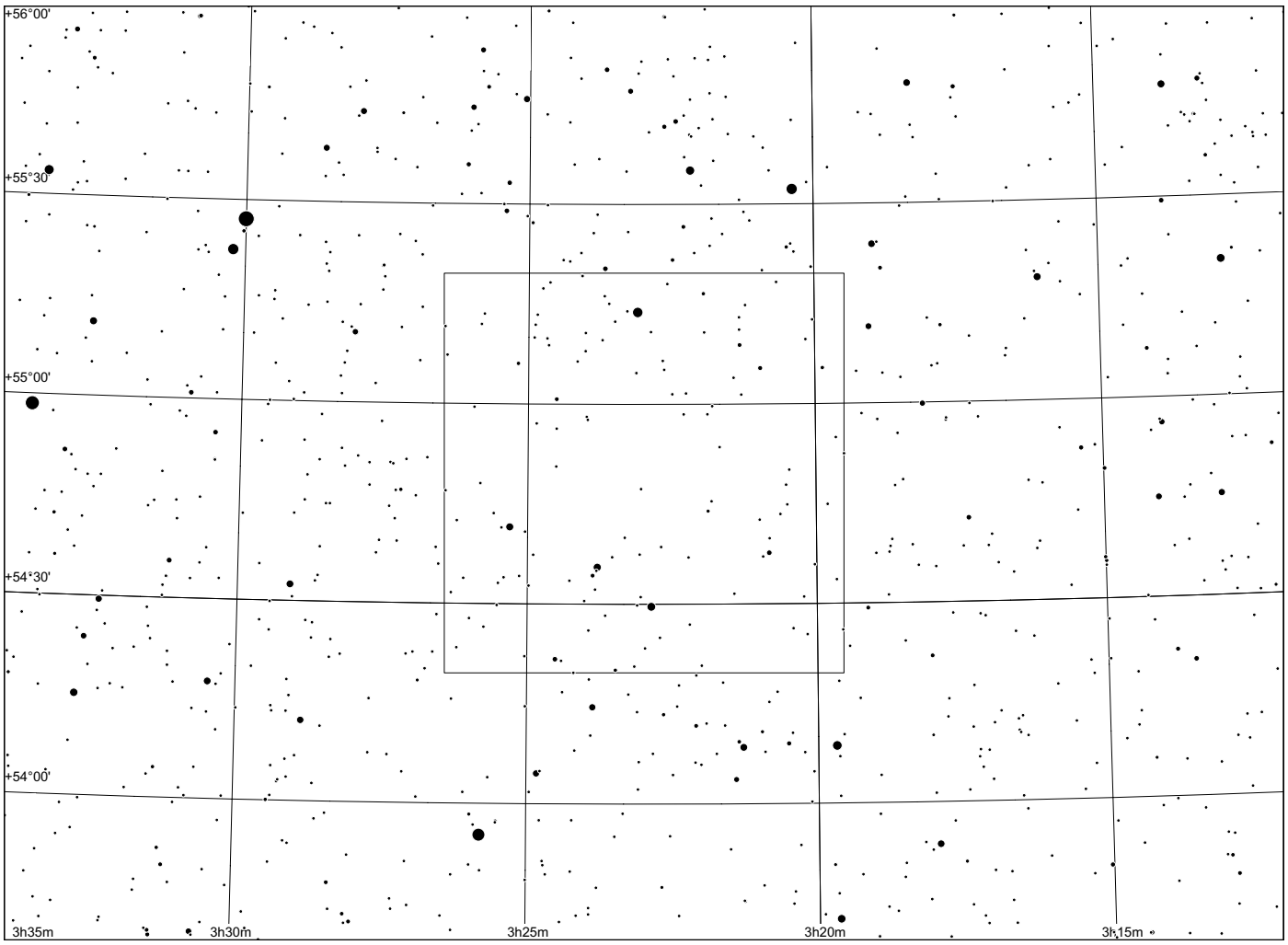
composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-203		03 22 00.3	+54 52 40	45	1	2	1

Distance: 3500 pc, Size: 45.8 pc, Source: 2003A&A...397..133R

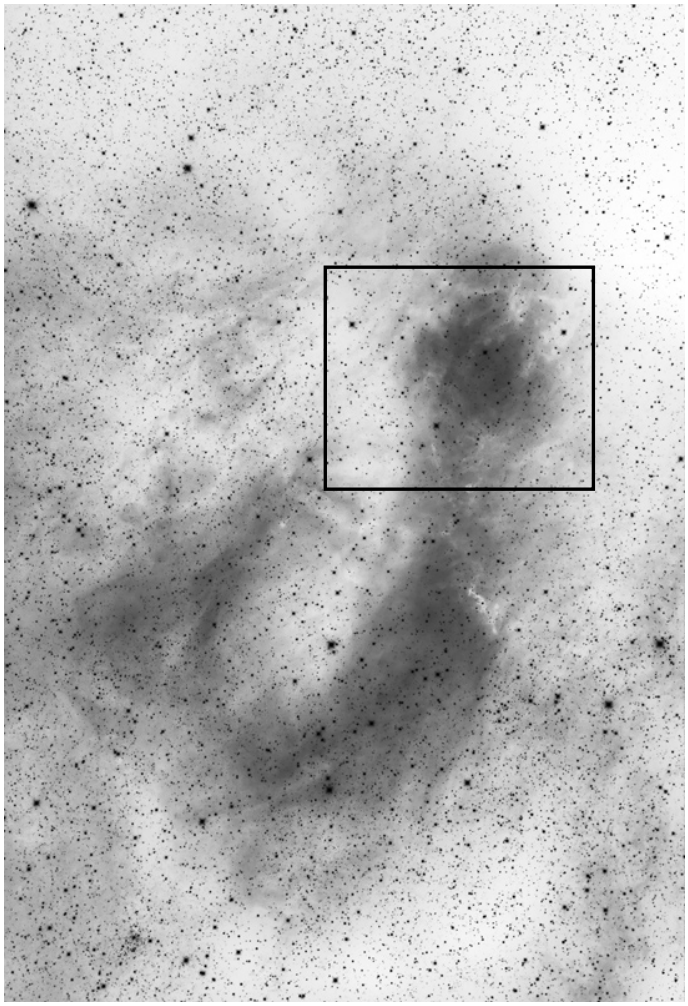
Observing notes:

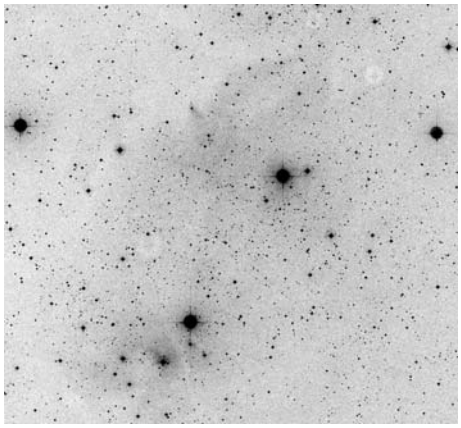

+60°00'
+55°00'
+50°00'
NGC 1027
Mel 15
1805
IC 1848
Cr 33
Stock 2
Tombaugh 5
NGC 957
NGC 869
NGC 884
Tr 2
Miram
B 8,9,11,13
B 12
NGC 1528
NGC 1545
NGC 1513
Mirphak
Mel 20
4h30m
4h00m
3h30m
3h00m
2h30m

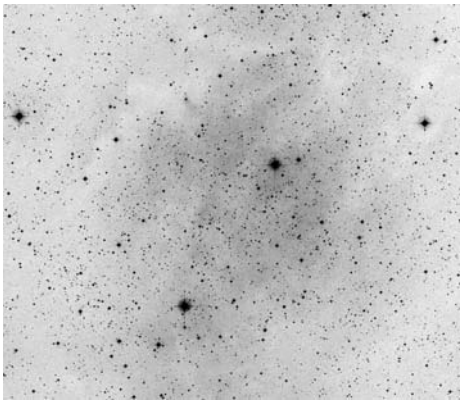

+56°00'
+55°30'
+55°00'
+54°30'
+54°00'
3h35m
3h30m
3h25m
3h20m
3h15m

Sh 2 - 205

in Camelopardalis









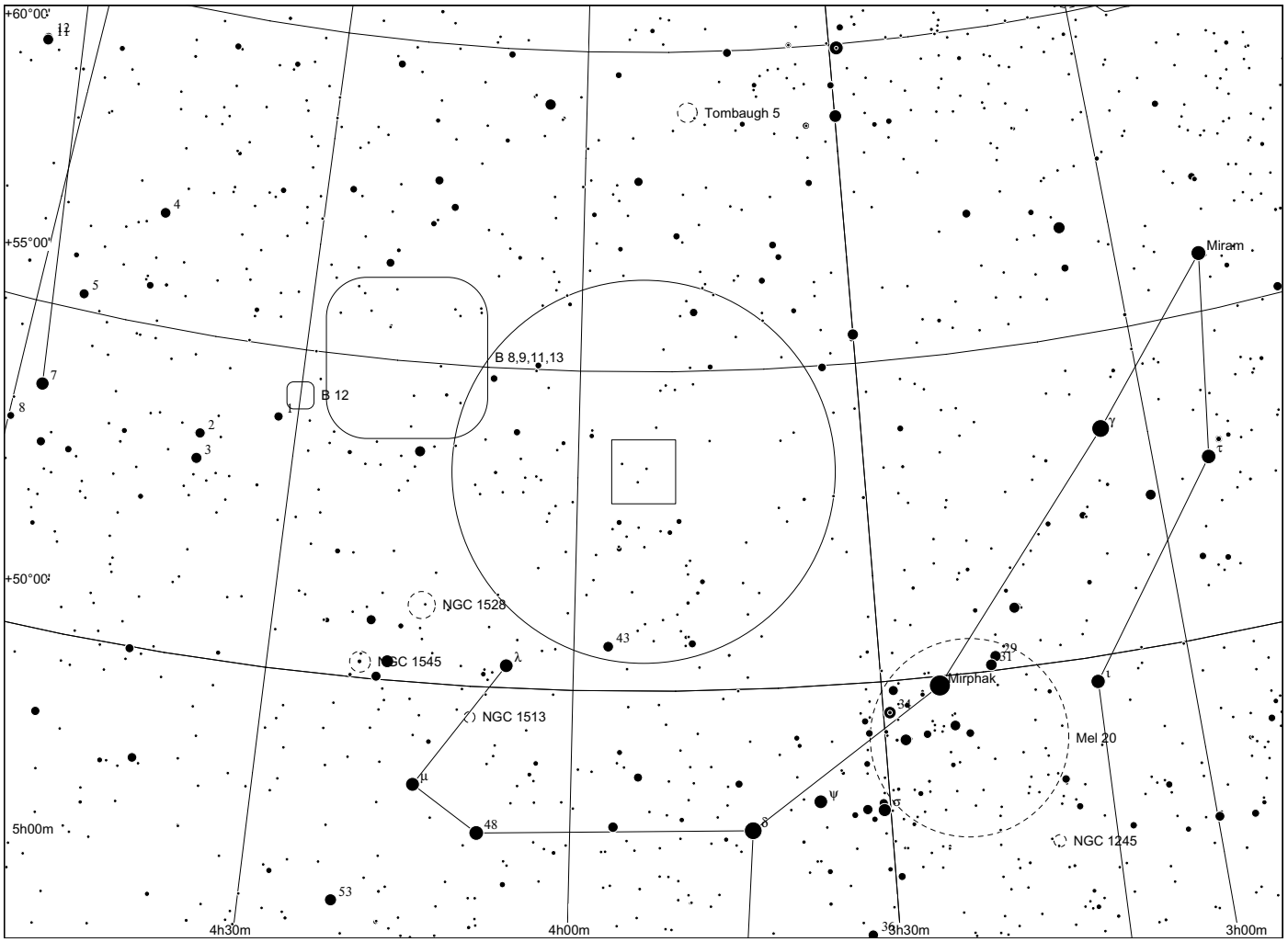
POSS blue POSS red composite

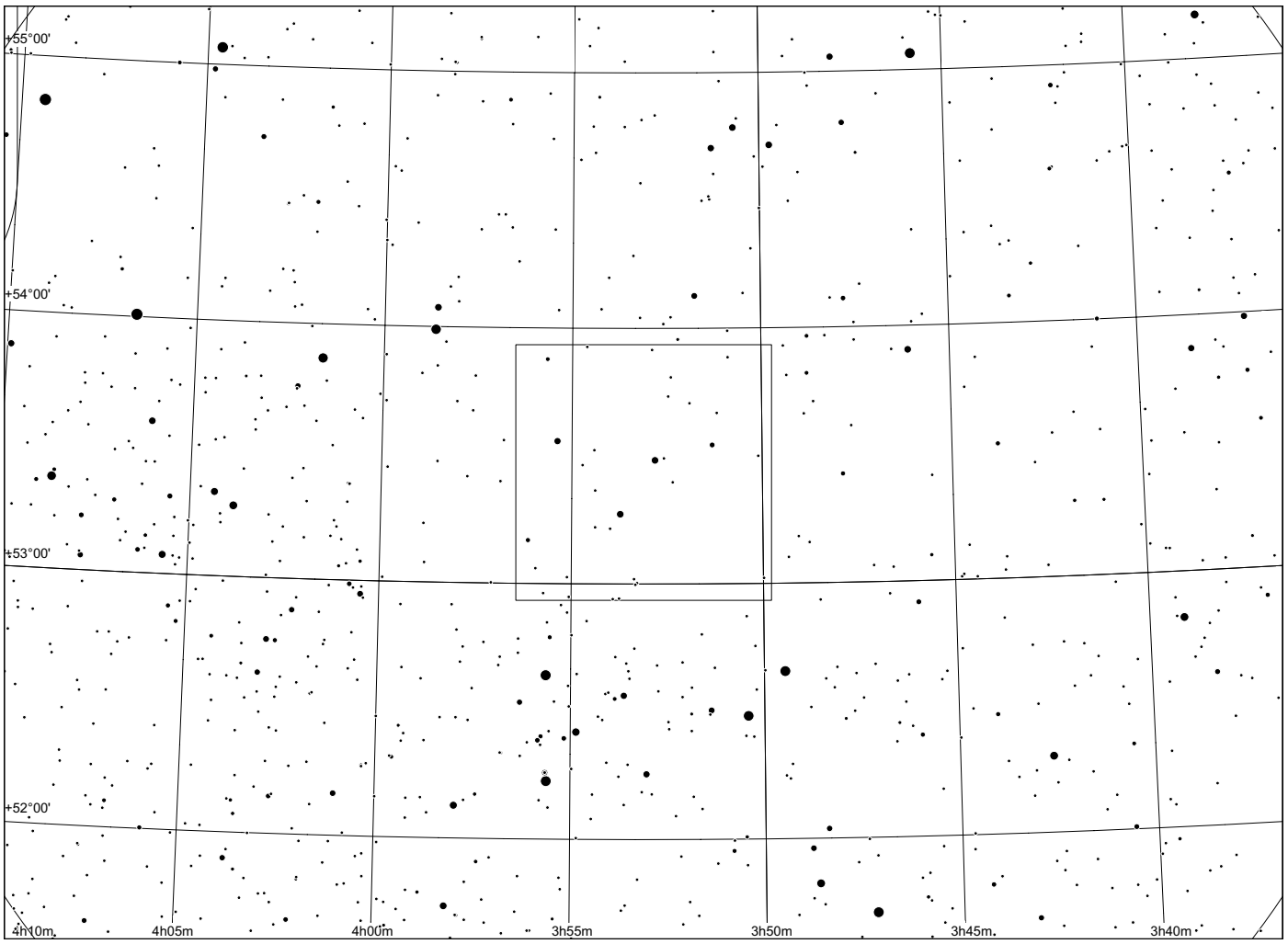
	other name	RA	dec	dia. '	F	S	B
Sh 2-205		03 56 07.7	+53 11 40	120	3	2	2

Distance: 900 pc, Size: 31.4 pc, Source: 1982ApJS...49..183B

The exciting star for this region is believed to be the O8 star HD 24451. Like Sh 2-202, this nebula lies at the edge of the Camelopardalis OB1 association.

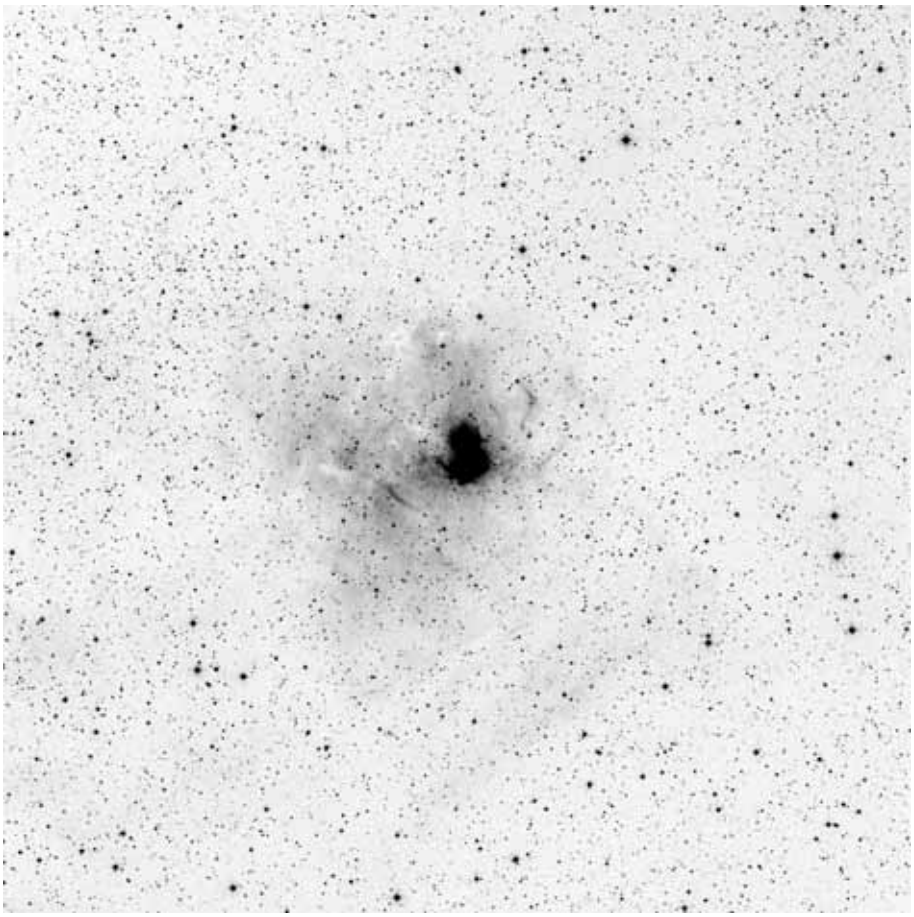
Observing notes:


+60°00'
+55°00'
+50°00'
5h00m
4h30m
4h00m
3h30m
3h00m
Tombaugh 5
Miram
B 8,9,11,13
B 12
NGC 1528
NGC 1545
NGC 1513
Mirphak
Mel 20
NGC 1245
43
48
53
36
29
31
34

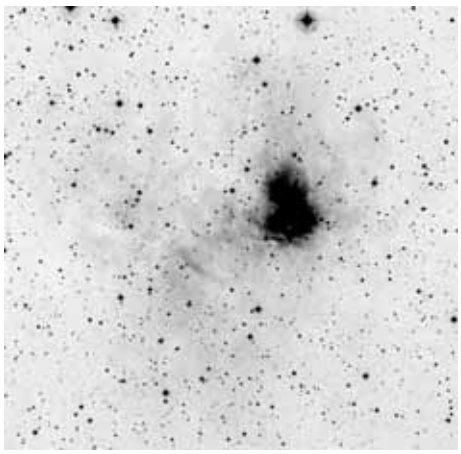

+55°00'
+54°00'
+53°00'
+52°00'
4h10m
4h05m
4h00m
3h55m
3h50m
3h45m
3h40m

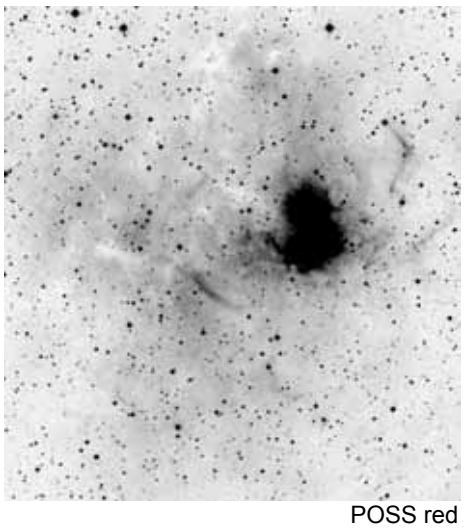
Sh 2 - 206

in Perseus



60x60, red







POSS blue

POSS red

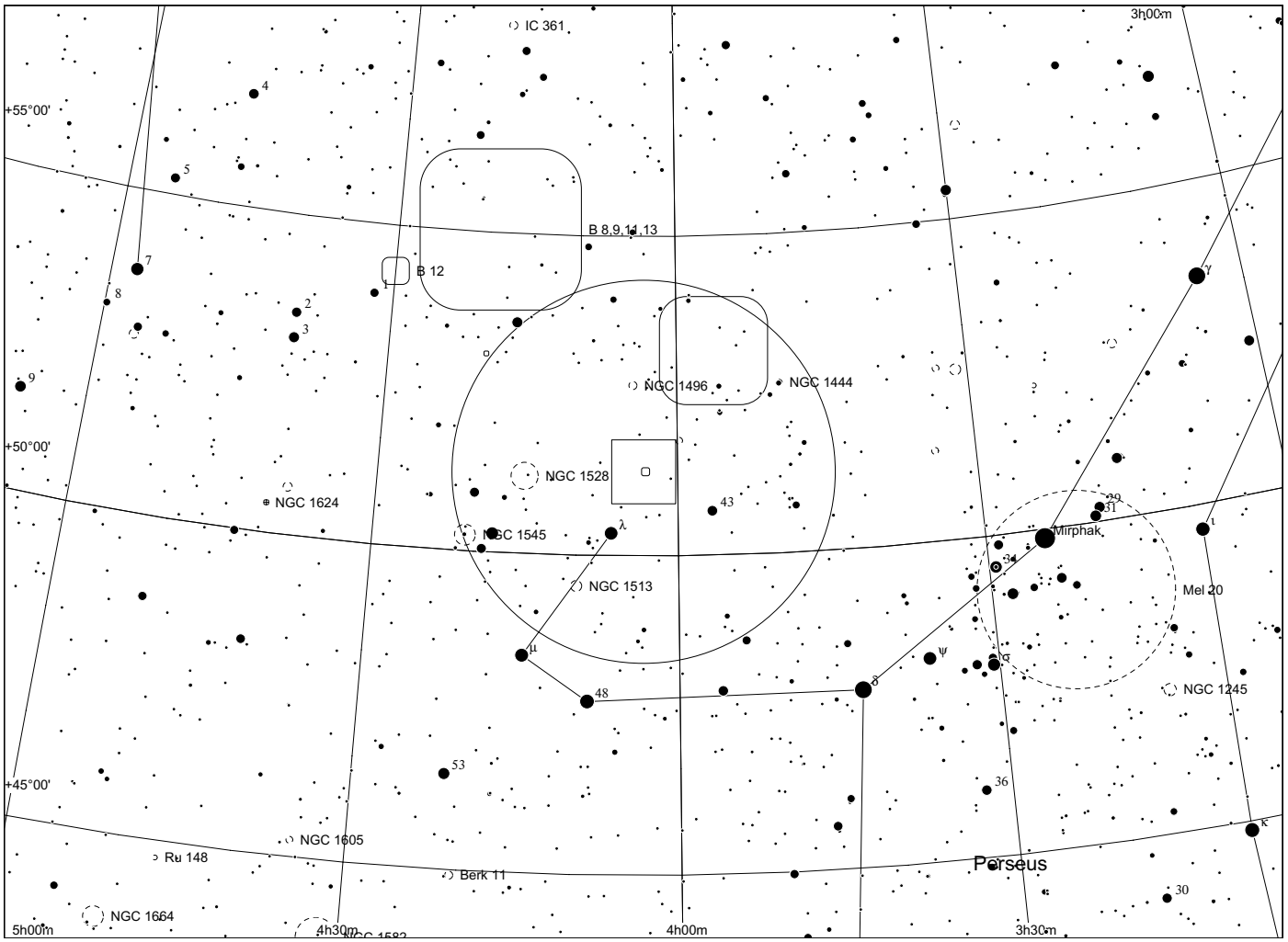
composite

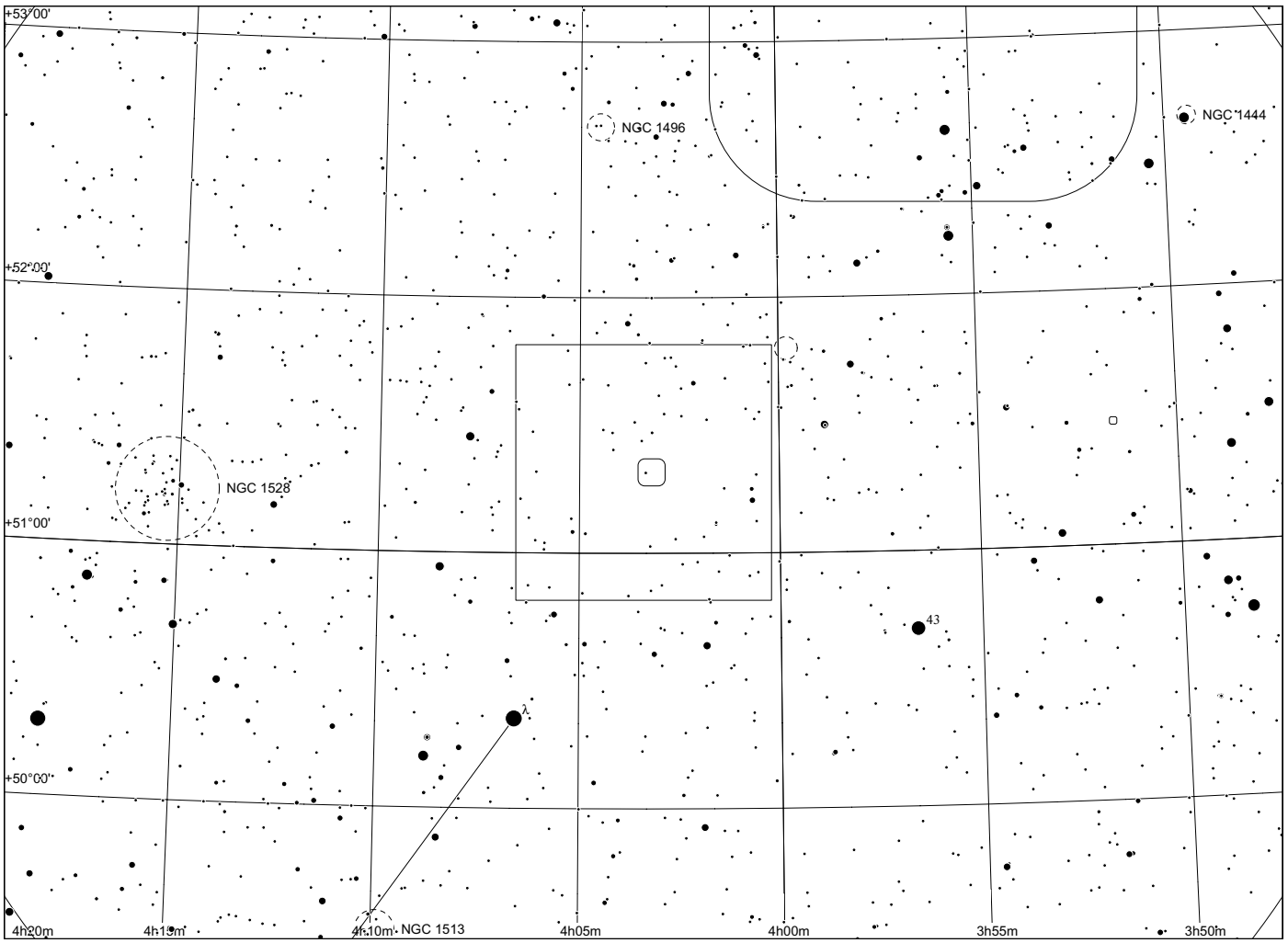
	other name	RA	dec	dia. '	F	S	B
Sh 2-206	NGC1491	04 03 13.1	+51 19 46	50	3	2	3

Distance: 3700 pc, Size: 4.4 pc, Source: 1976A&A....48...63D

NGC 1491 is an older, evolved HII region ionised by the O5 star BD +50 886.

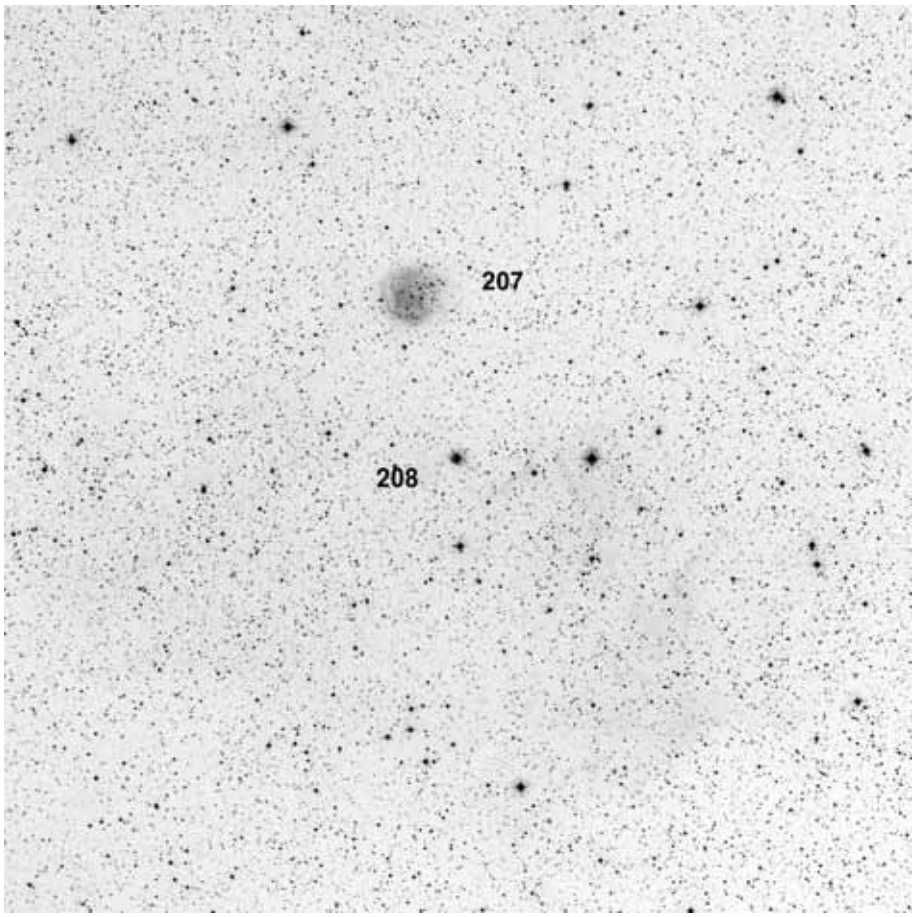
Observing notes:


IC 361
B 8,9,11,13
B 12
NGC 1496
NGC 1444
NGC 1528
NGC 1624
NGC 1545
NGC 1513
Mirphak
Mel 20
NGC 1245
NGC 1605
Ru 148
Berk 11
Perseus
NGC 1664
+55°00'
+50°00'
+45°00'
3h00m
5h00m
4h30m
4h00m
3h30m

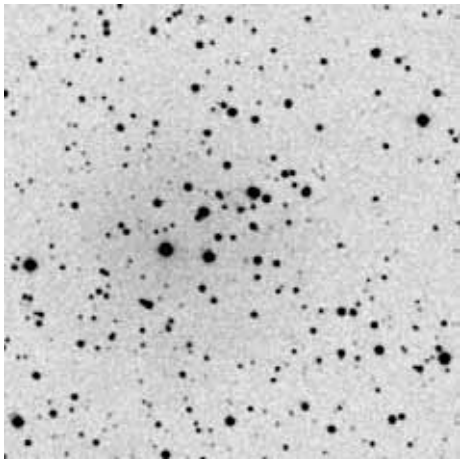

NGC 1496
NGC 1444
NGC 1528
NGC 1513
+53°00'
+52°00'
+51°00'
+50°00'
4h20m
4h15m
4h10m
4h05m
4h00m
3h55m
3h50m

Sh 2 - 207/208

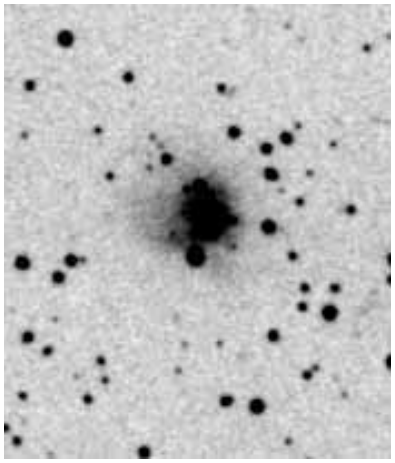
in Camelopardalis

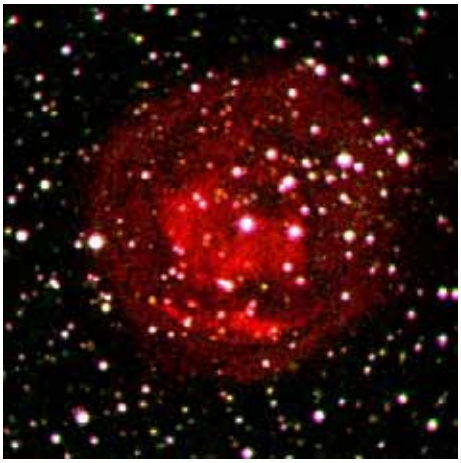


60x60, red



POSS blue





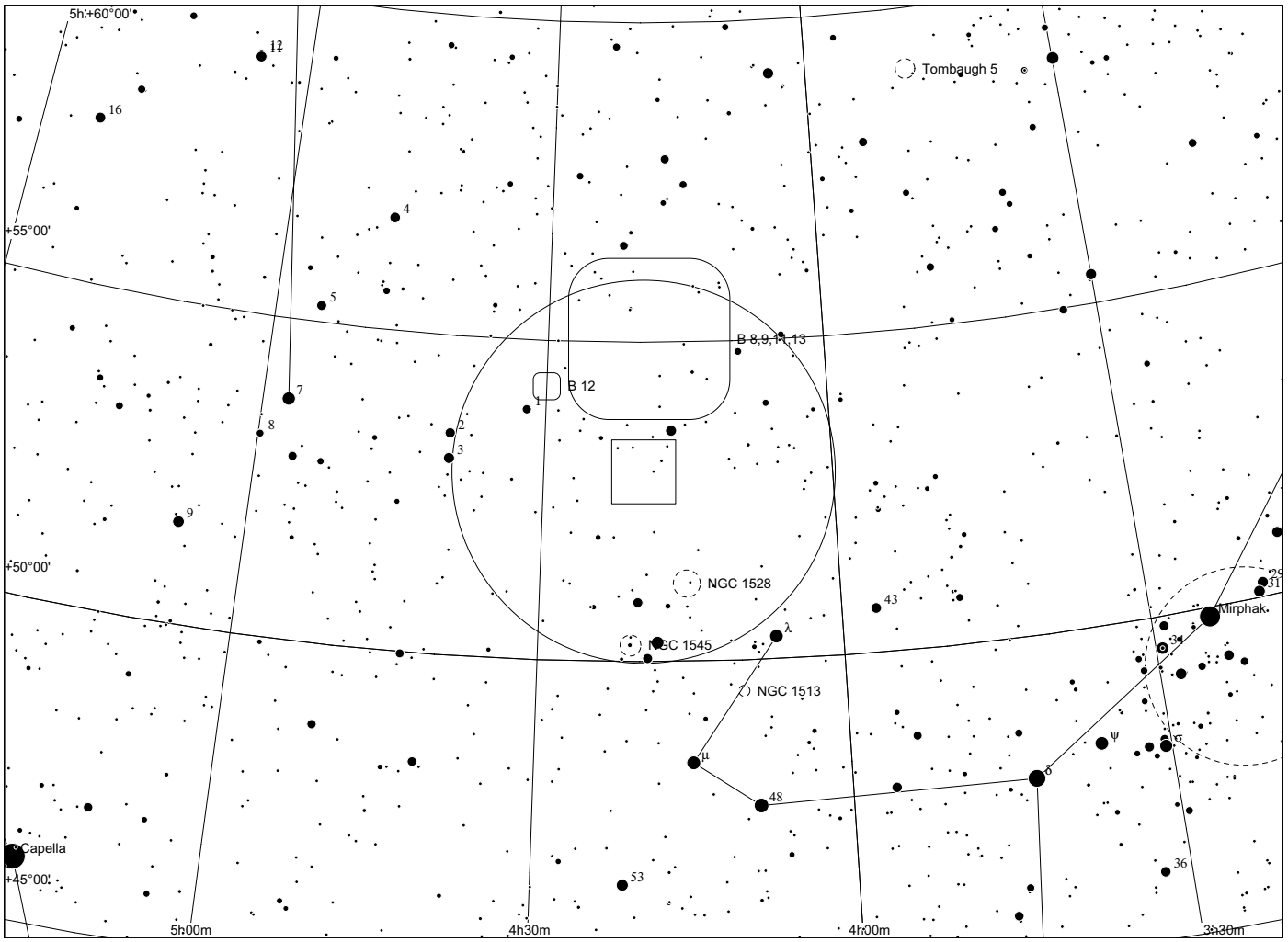
composite

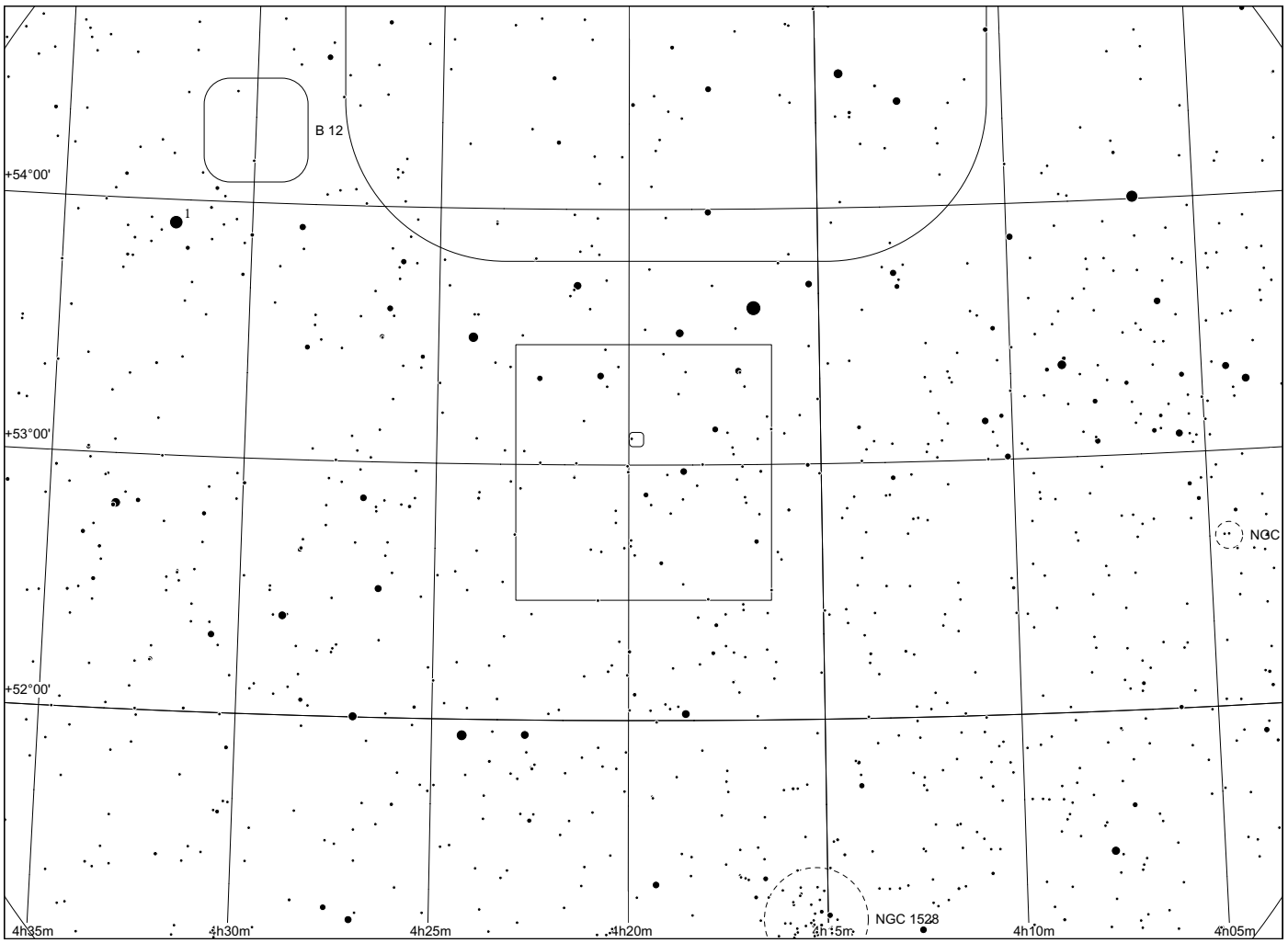
	other name	RA	dec	dia. '	F	S	B
Sh 2-207		04 20 04.0	+53 08 37	4	1	2	2
Sh 2-208	PK 151+02.1	04 19 45.5	+52 58 39	1	1	2	3

207:Distance: 3400 pc, Size: 4.0 pc, Source: 1991PASP..103..843P, Despite its appearance, this is an HII region ionised by an O9.5 IV star and not a planetary nebula.

208: Distance: 7600 pc, Size: 2.2 pc, Source: 1982ApJS...49..183B, Contains the optical cluster Waterloo 1 and the infrared cluster [BDS2003] 64.

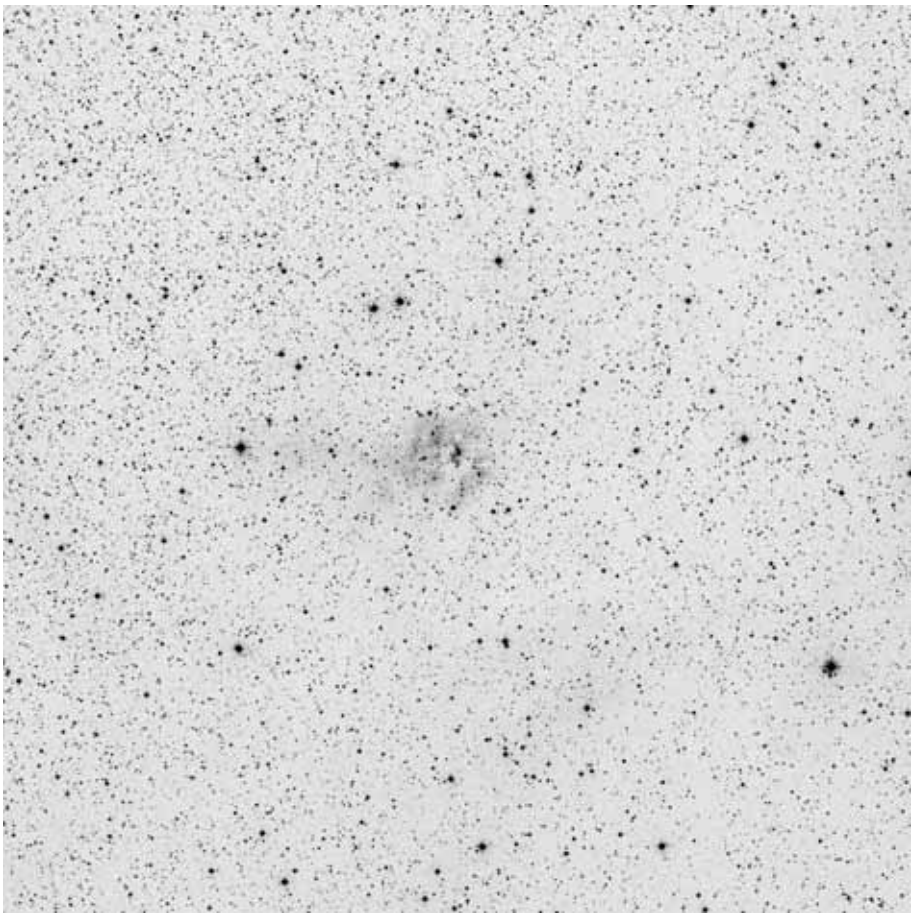
Observing notes:


5h +60°00'
Tombaugh 5
+55°00'
B 8,9,11,13
B 12
NGC 1528
+50°00'
Mirphak
NGC 1545
NGC 1513
Capella
+45°00'
5h00m
4h30m
4h00m
3h30m

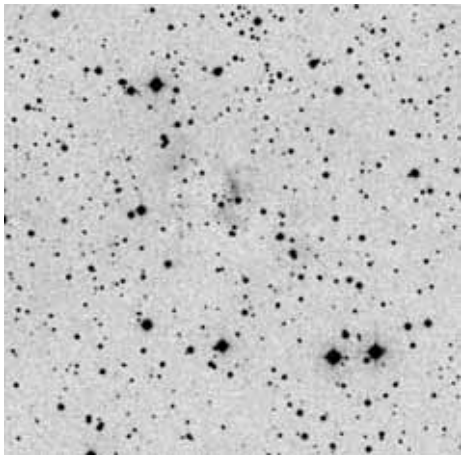

B 12
+54°00'
+53°00'
NGC
+52°00'
NGC 1528
4h35m
4h30m
4h25m
4h20m
4h15m
4h10m
4h05m

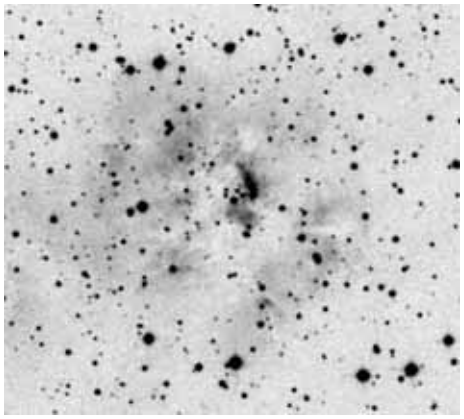
Sh 2 - 209

in Perseus



60x60, red





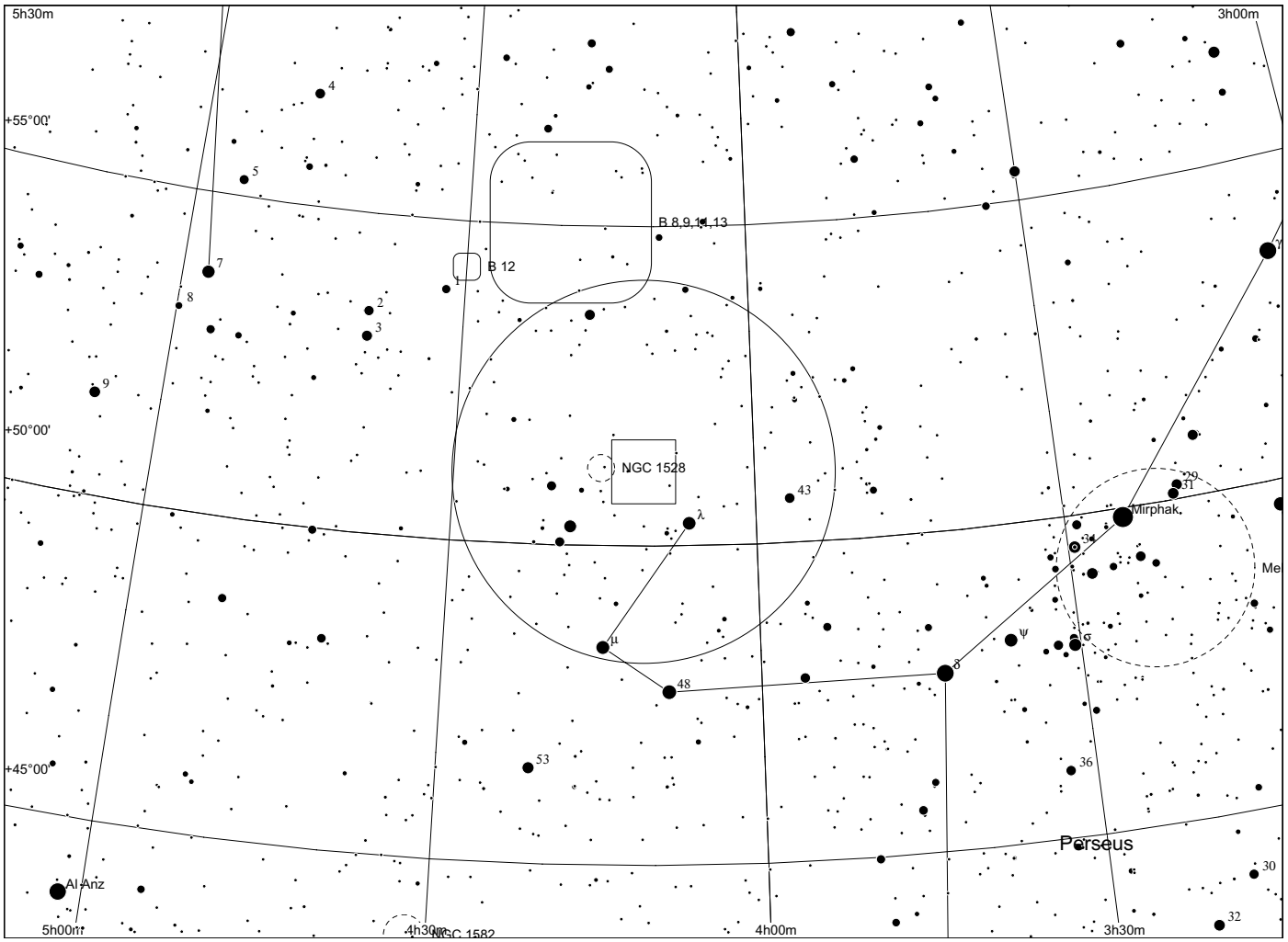


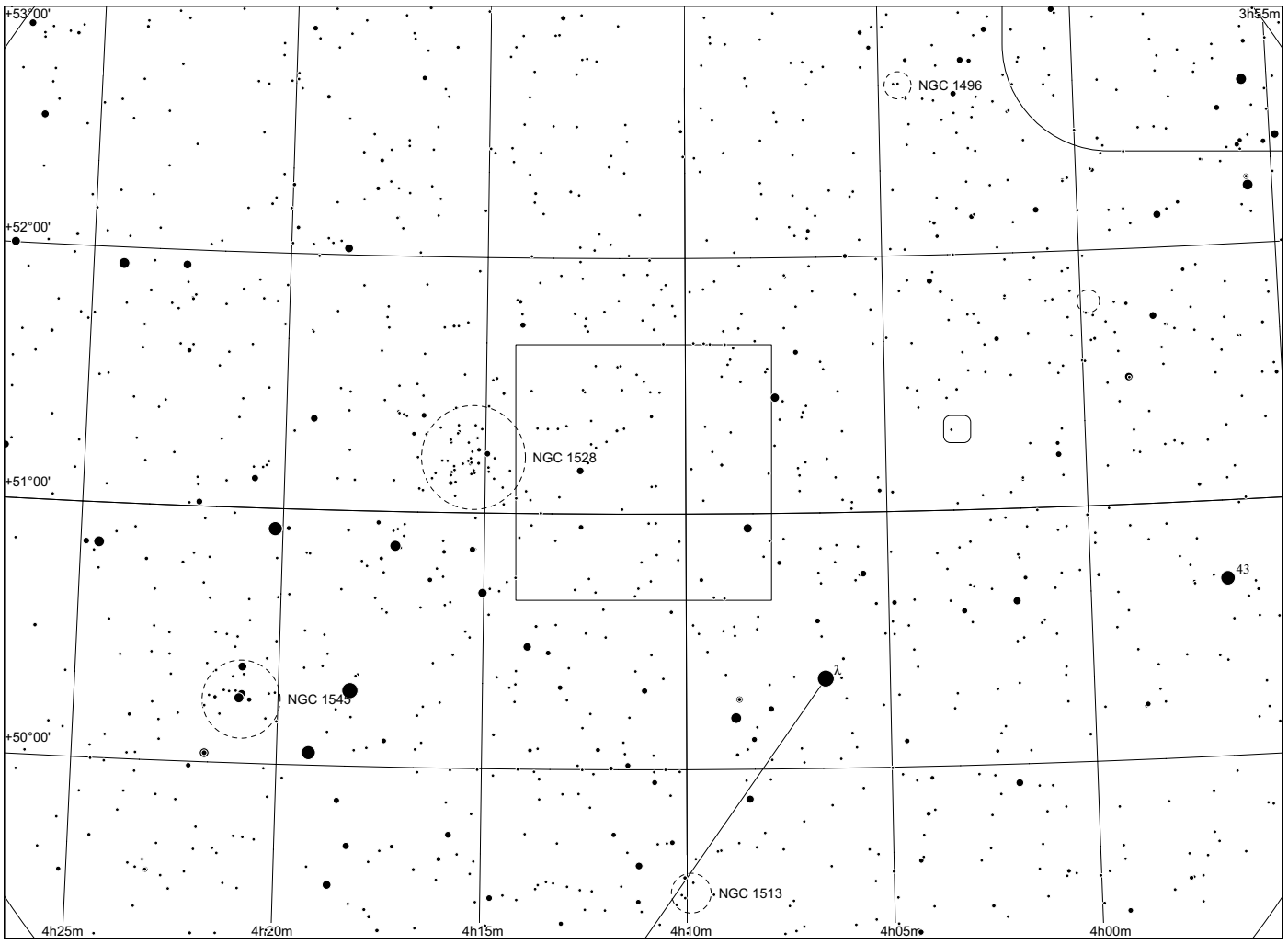
POSS blue POSS red composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-209		04 11 03.0	+51 09 47	14	3	2	2

Distance: 7816 pc, Size: 7.0 pc, Source: 2003A&A...397..213P

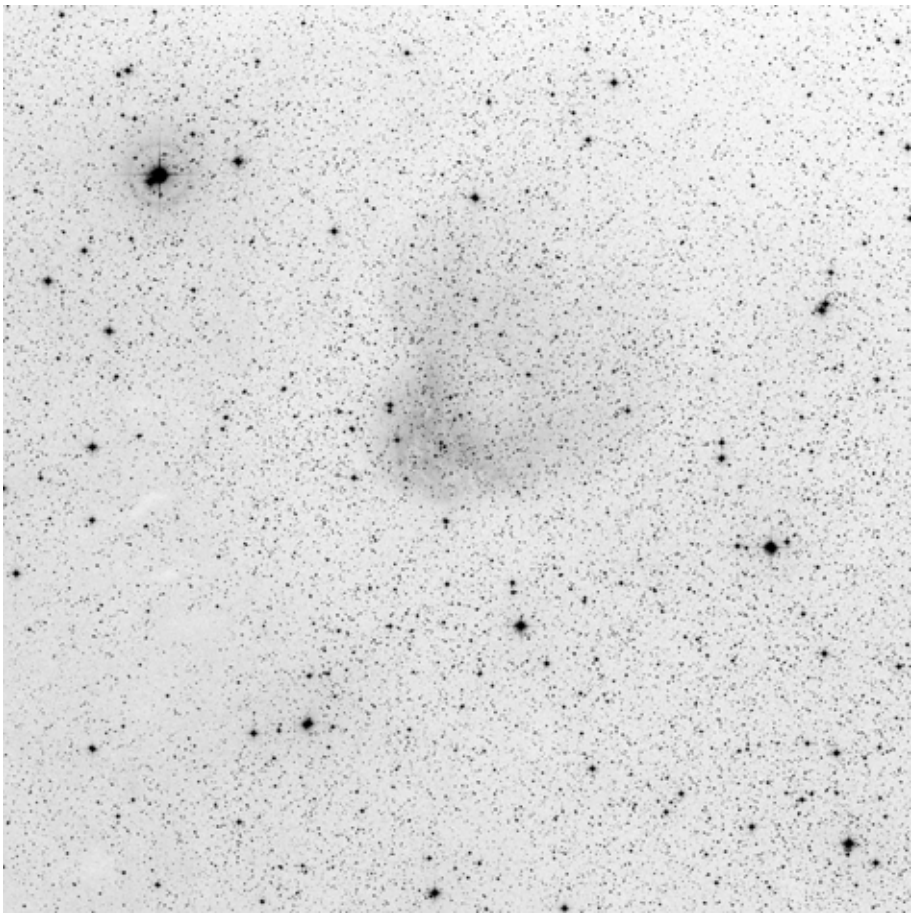
Observing notes:


5h30m
3h00m
+55°00'
+50°00'
+45°00'
B 8,9,11,13
B 12
NGC 1528
Mirphak
Perseus
Al Anz
NGC 1582
5h00m
4h30m
4h00m
3h30m

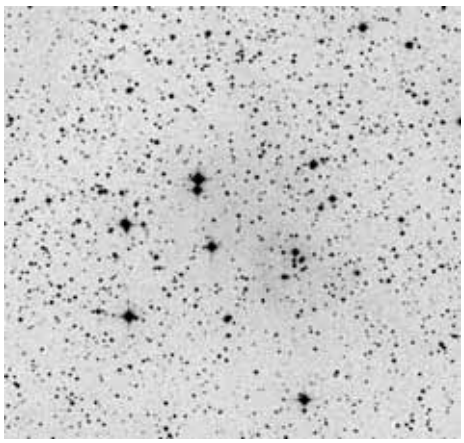

+53°00'
+52°00'
+51°00'
+50°00'
3h55m
NGC 1496
NGC 1528
NGC 1545
NGC 1513
4h25m
4h20m
4h15m
4h10m
4h05m
4h00m

Sh 2 - 210

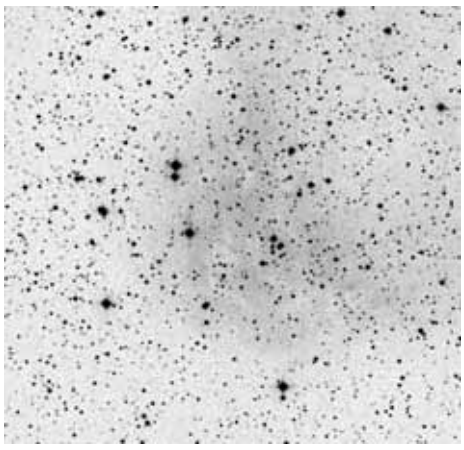
in Perseus



60x60, red



POSS blue



POSS red

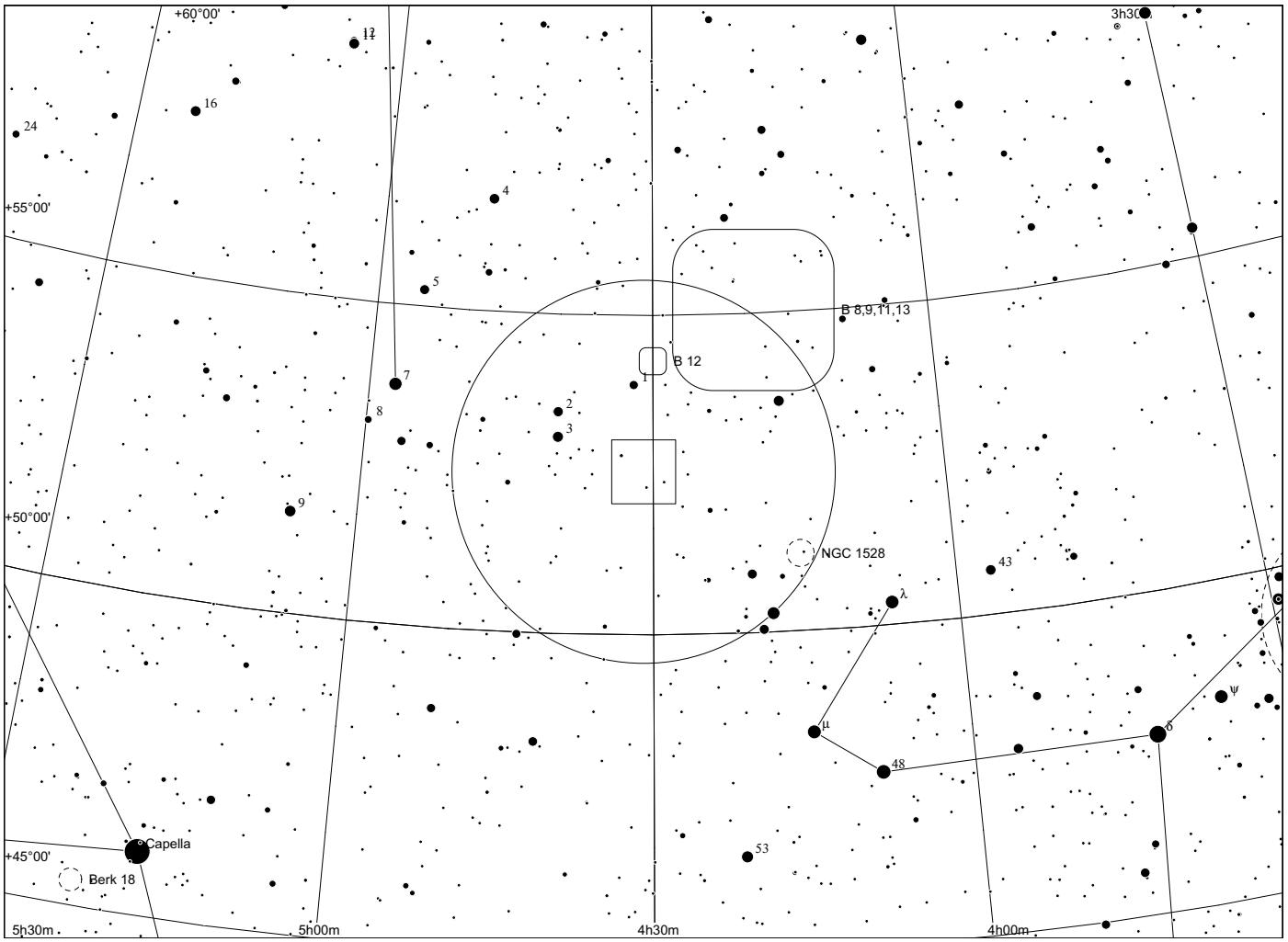


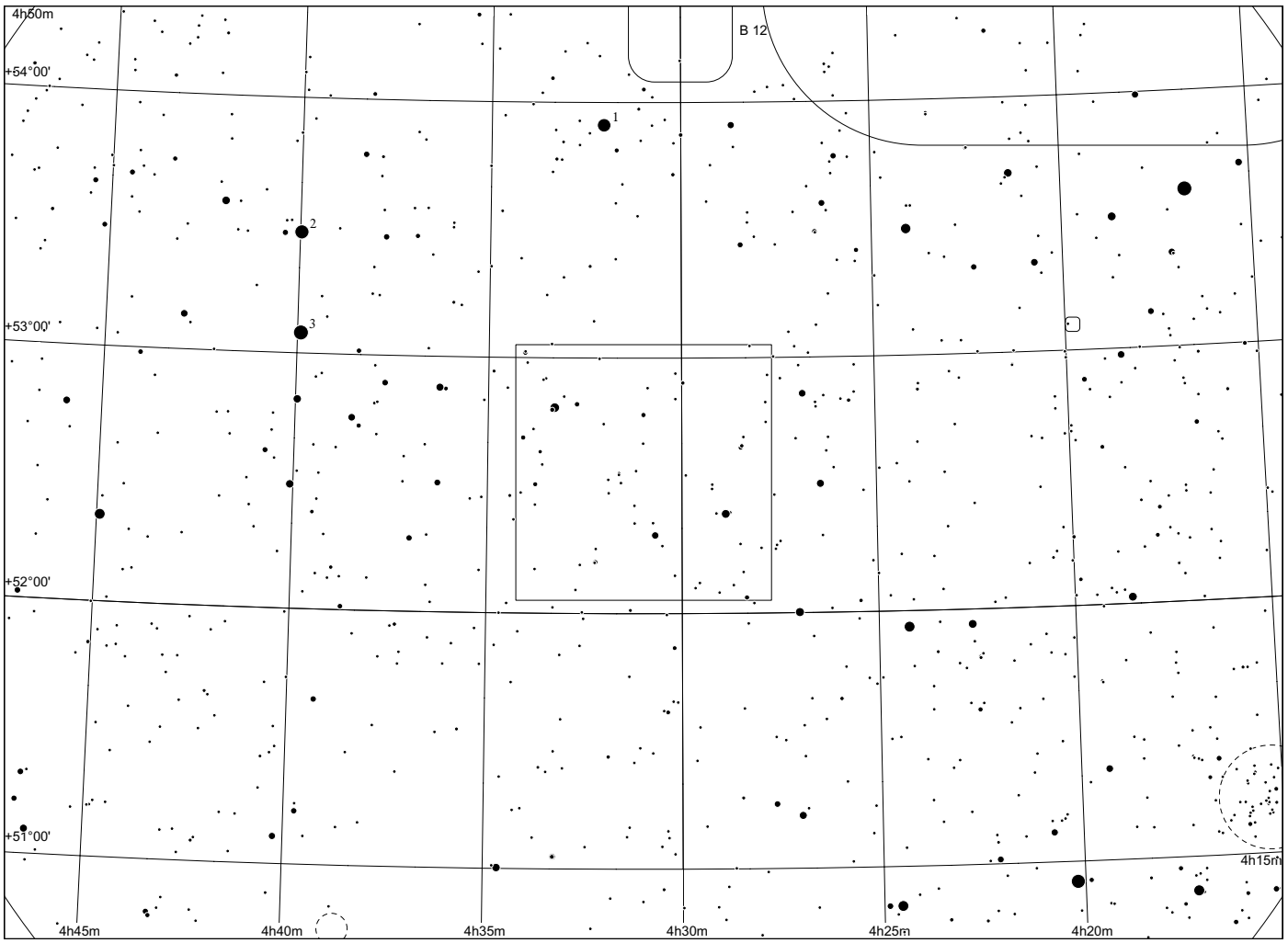
composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-210		04 30 59.0	+52 33 10	20	3	1	2

Distance: 2200 pc, Size: 12.8 pc, Source: 2003A&A...397..133R

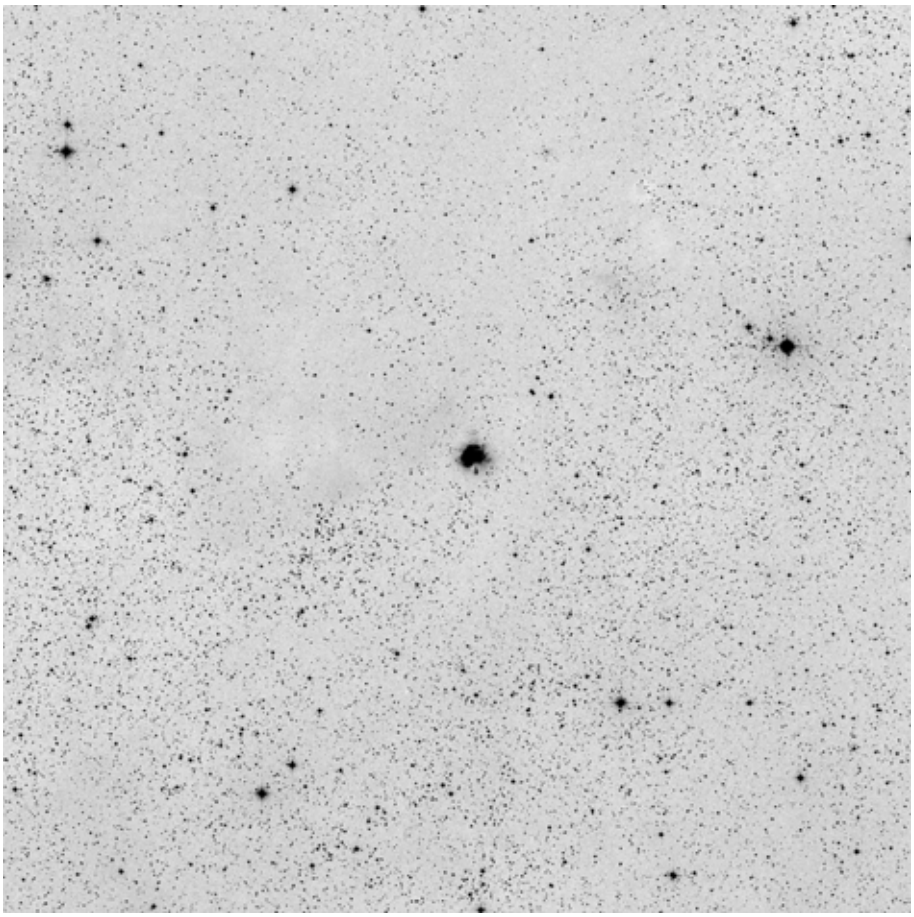
Observing notes:


+60°00'
3h30m
11
16
24
+55°00'
4
5
B 8,9,11,13
B 12
7
8
2
3
+50°00'
9
NGC 1528
43
λ
ψ
μ
ο
48
53
Capella
+45°00'
Berk 18
5h30m
5h00m
4h30m
4h00m

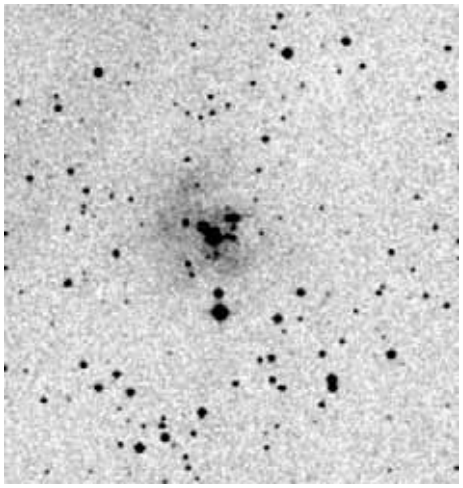

4h50m
B 12
+54°00'
1
2
3
+53°00'
+52°00'
+51°00'
4h15m
4h45m
4h40m
4h35m
4h30m
4h25m
4h20m

Sh 2 - 211

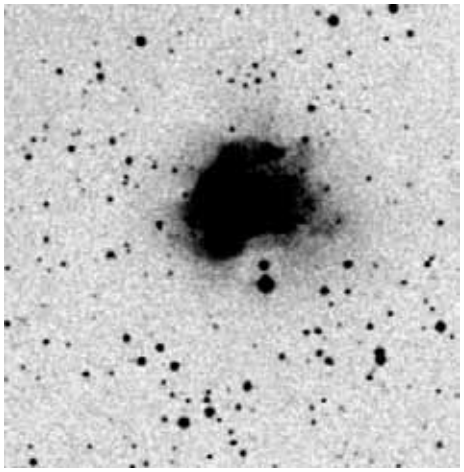
in Perseus



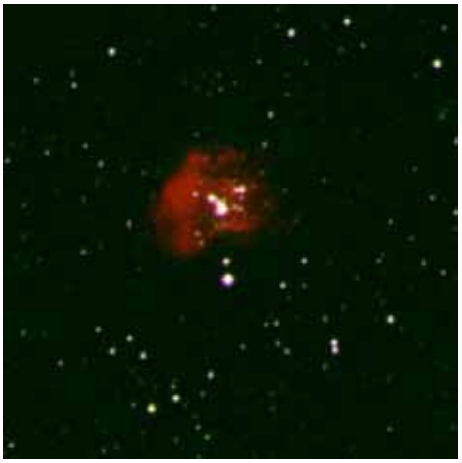
60x60, red



POSS blue



POSS red



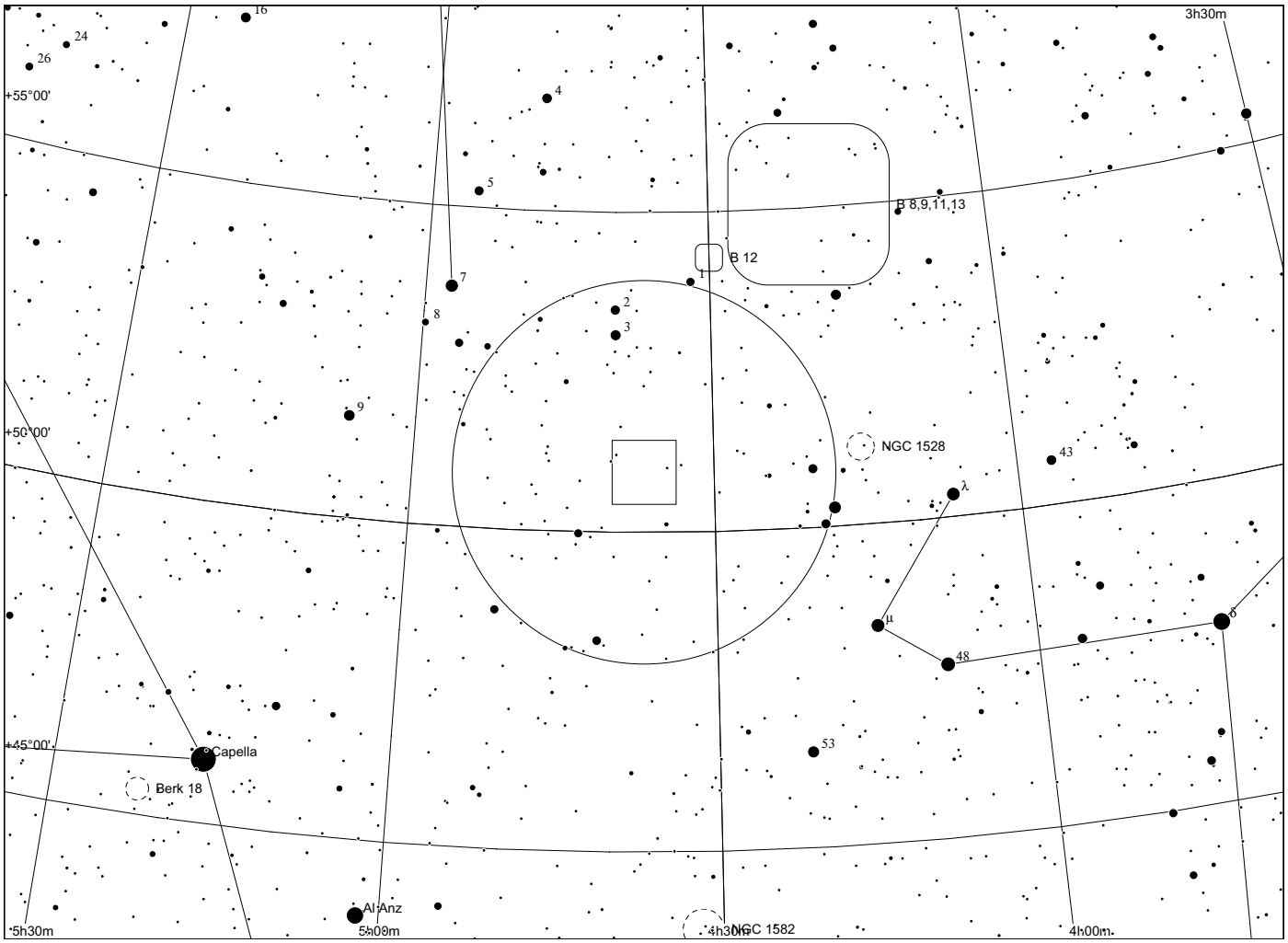
composite

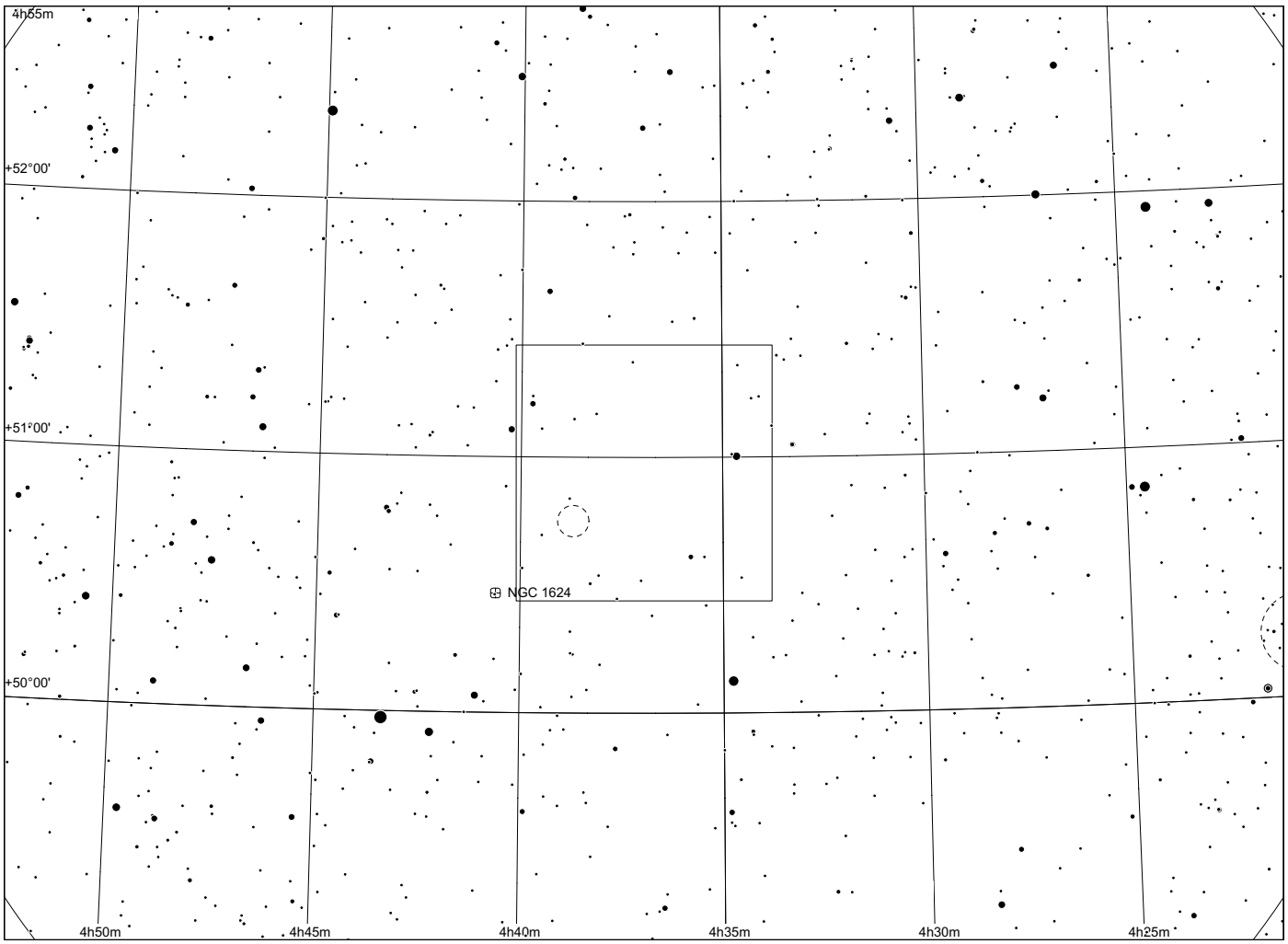
	other name	RA	dec	dia. '	F	S	B
Sh 2-211		04 36 57.3	+50 56 22	2	3	2	3

Distance: 5154 pc, Size: 5.7 pc, Source: 2003A&A...397..213P

Contains infrared cluster [BDS2003] 66 and may be embedded in the same CO cloud as Sh 2-212.

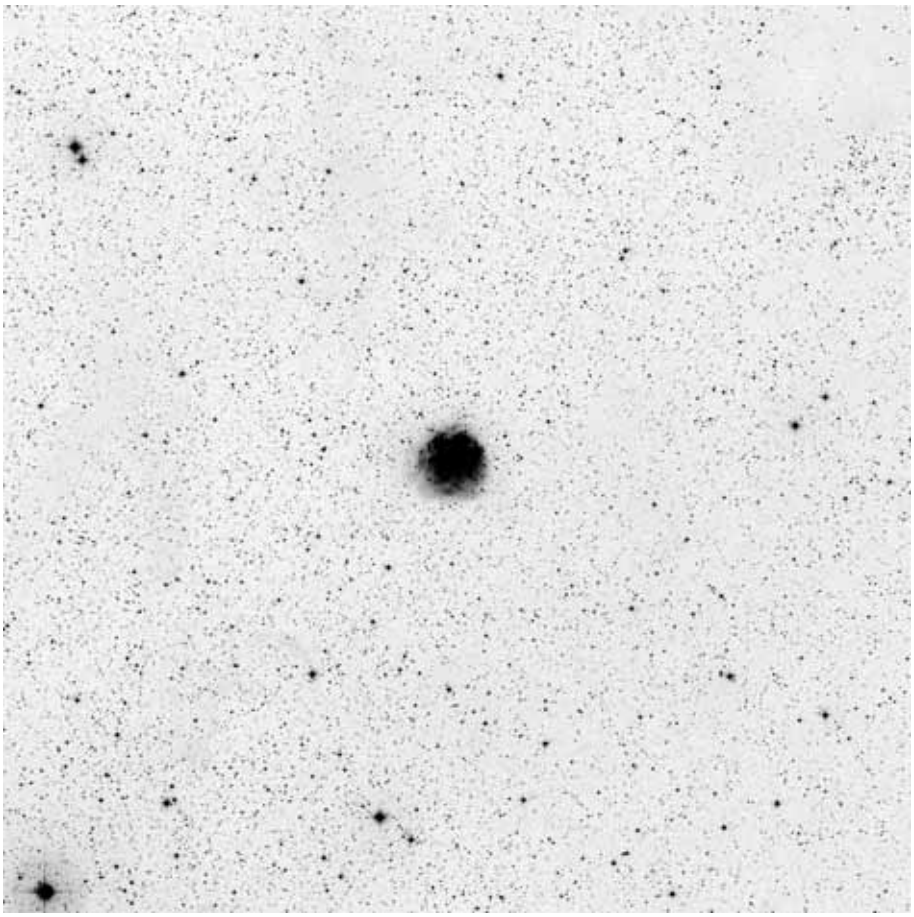
Observing notes:


3h30m
+55°00'
+50°00'
+45°00'
5h30m
5h00m
4h30m
4h00m
B 8,9,11,13
B 12
NGC 1528
NGC 1582
Capella
Berk 18
Al Anz
16
24
26
4
5
7
8
2
3
1
9
43
λ
μ
δ
48
53

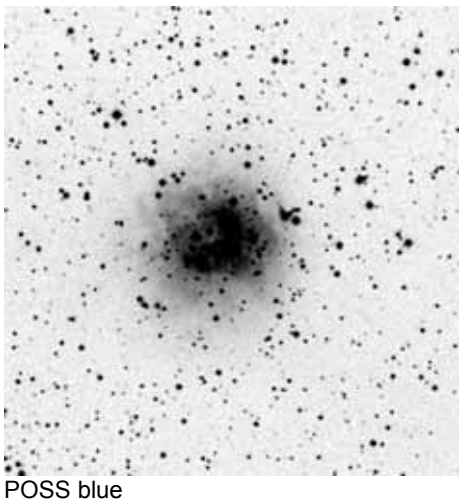

4h55m
+52°00'
+51°00'
+50°00'
NGC 1624
4h50m
4h45m
4h40m
4h35m
4h30m
4h25m

Sh 2 - 212

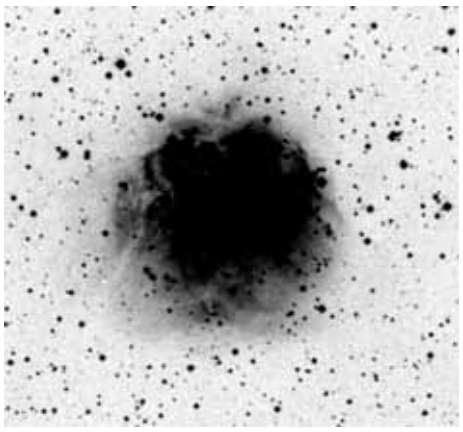
in Perseus



60x60, red



POSS blue



POSS red



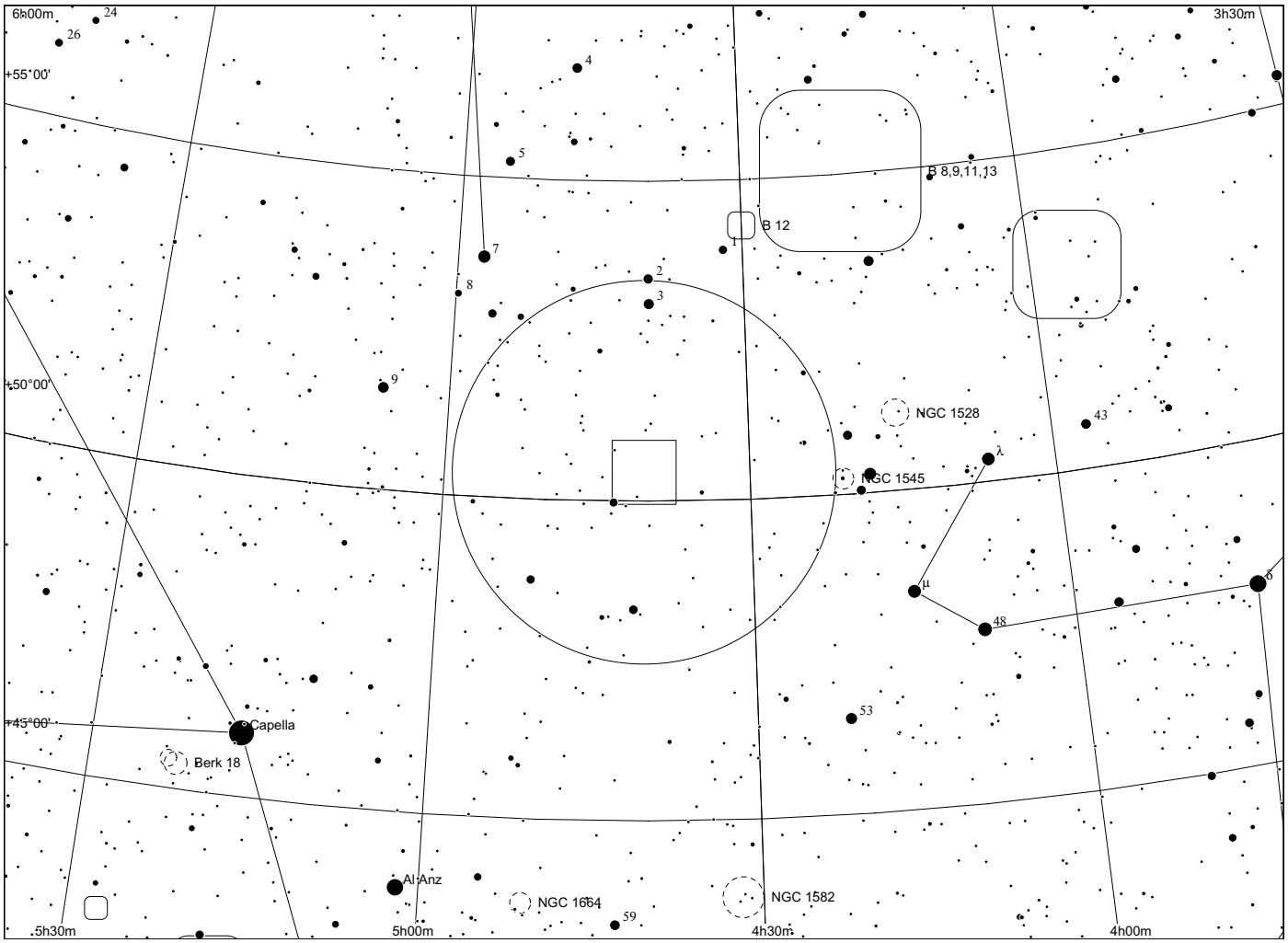
composite

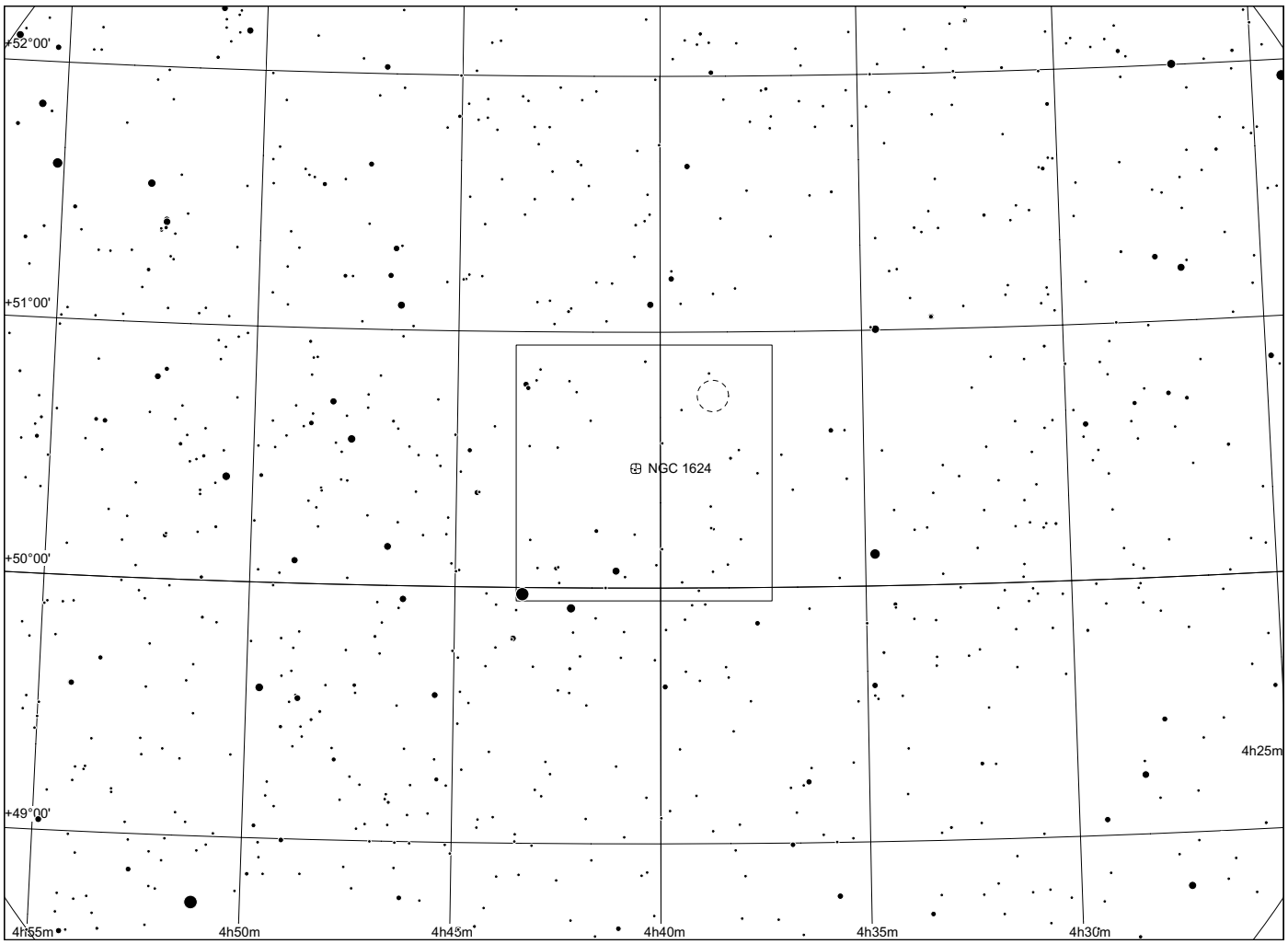
	other name	RA	dec	dia. '	F	S	B
Sh 2-212	NGC1624	04 40 37.3	+50 22 52	5	1	2	3

Distance: 6593 pc, Size: 18.2 pc, Source: 2003A&A...397..213P

Contains the star cluster NGC 1624 and may be embedded in the same CO cloud as Sh 2-211.

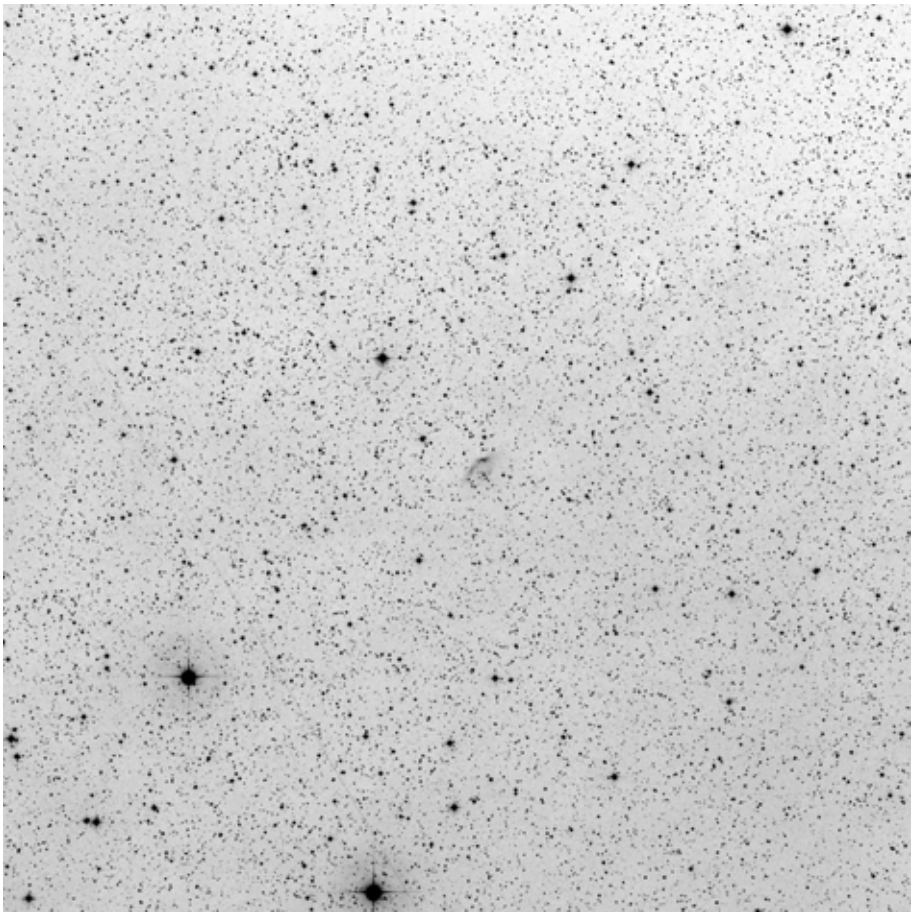
Observing notes:


6h00m
3h30m
+55°00'
+50°00'
+45°00'
B 8,9,11,13
B 12
NGC 1528
NGC 1545
Capella
Berk 18
Al Anz
NGC 1664
NGC 1582
5h30m
5h00m
4h30m
4h00m

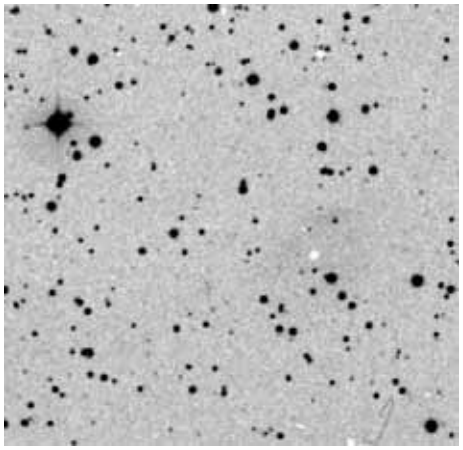

+52°00'
+51°00'
+50°00'
+49°00'
NGC 1624
4h25m
4h55m
4h50m
4h45m
4h40m
4h35m
4h30m

Sh 2 - 215

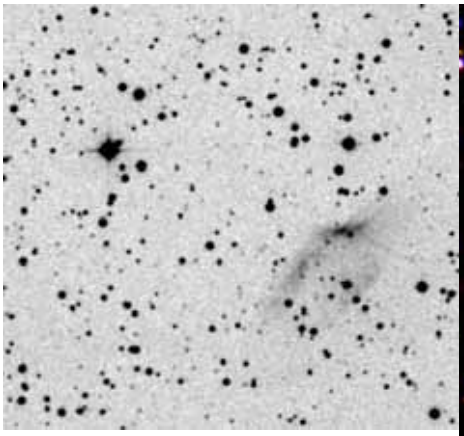
in Perseus



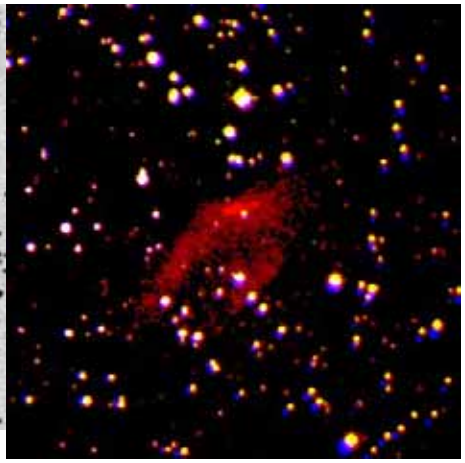
60x60, red



POSS blue



POSS red

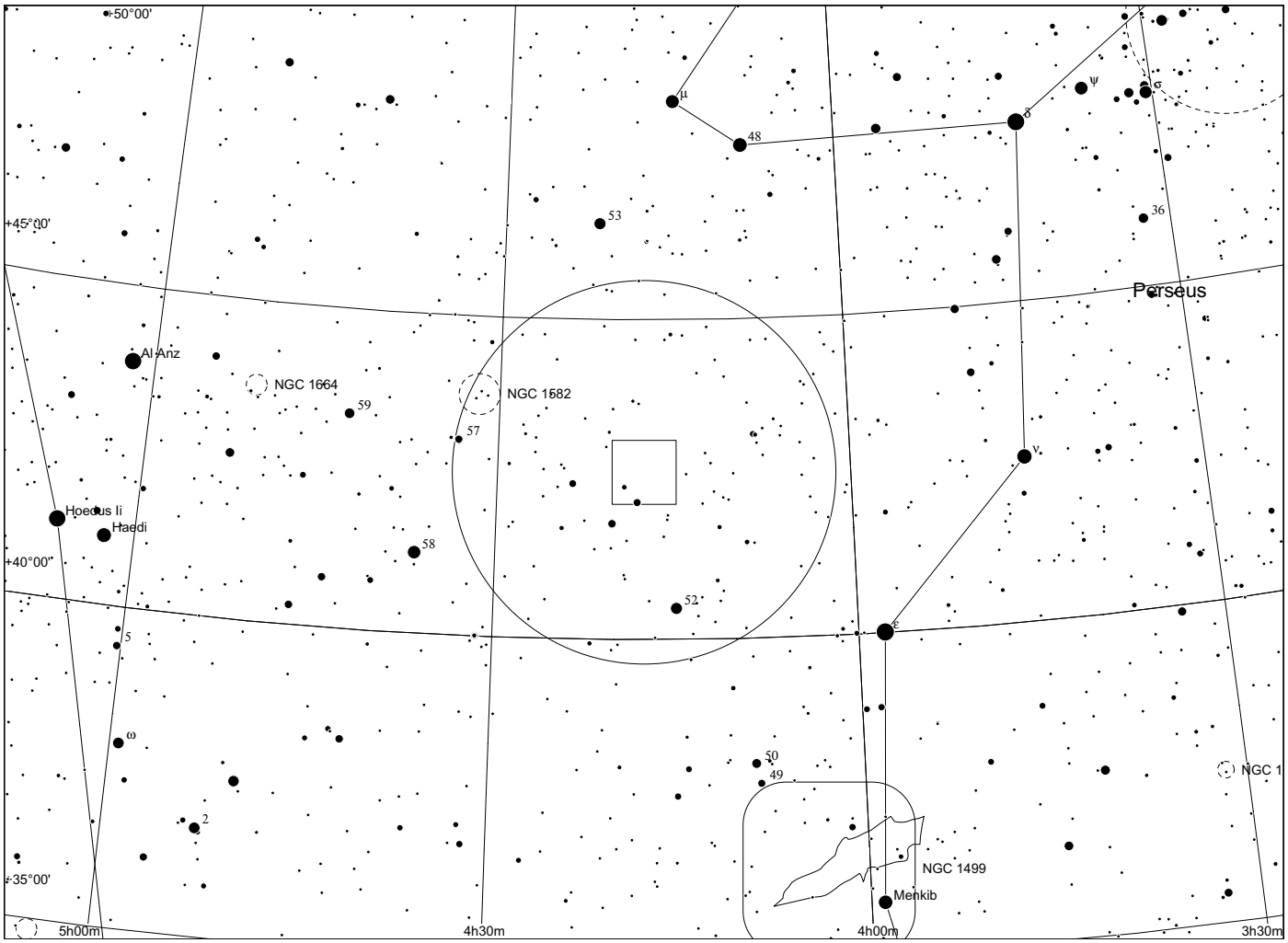


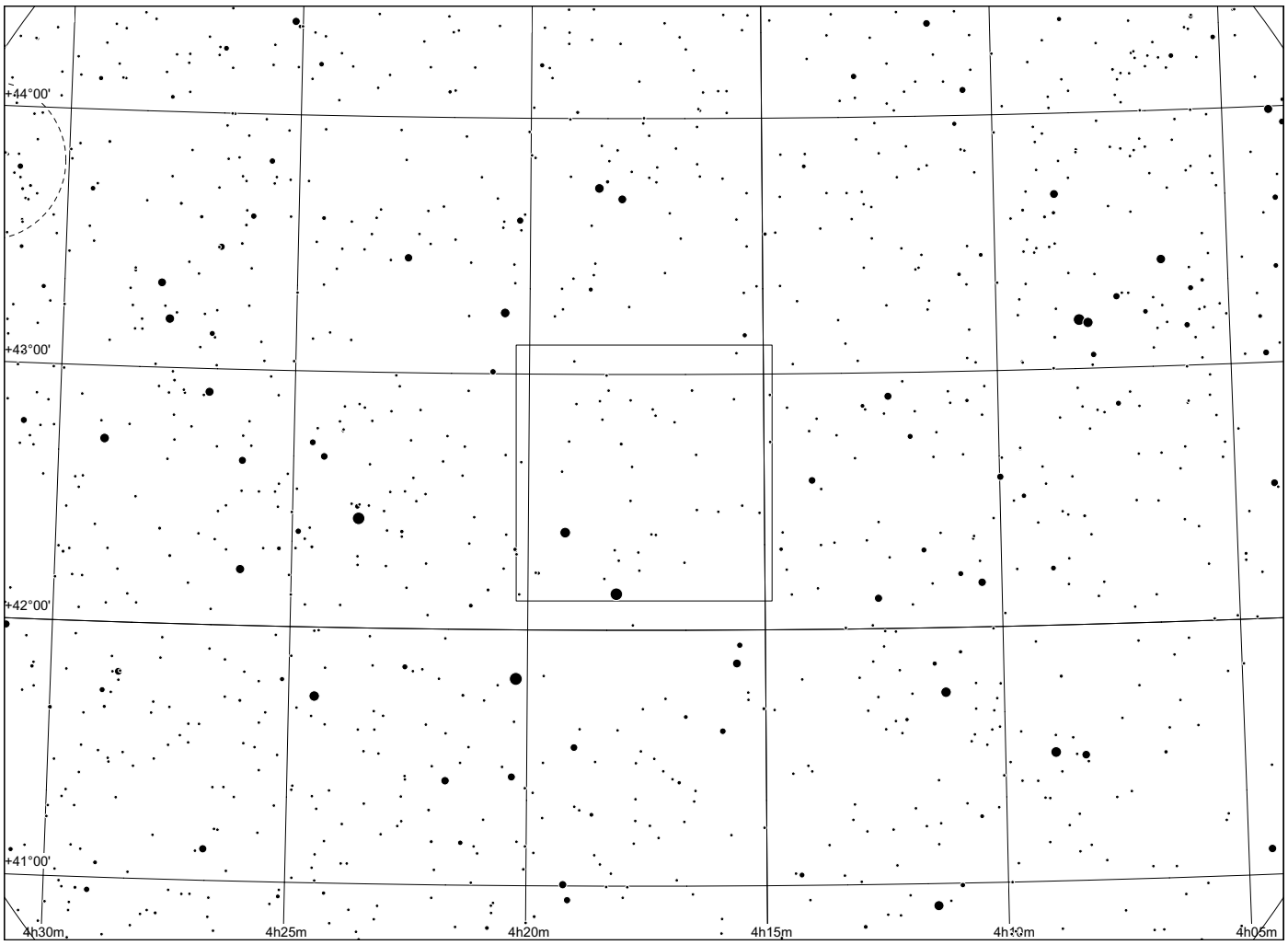
composite

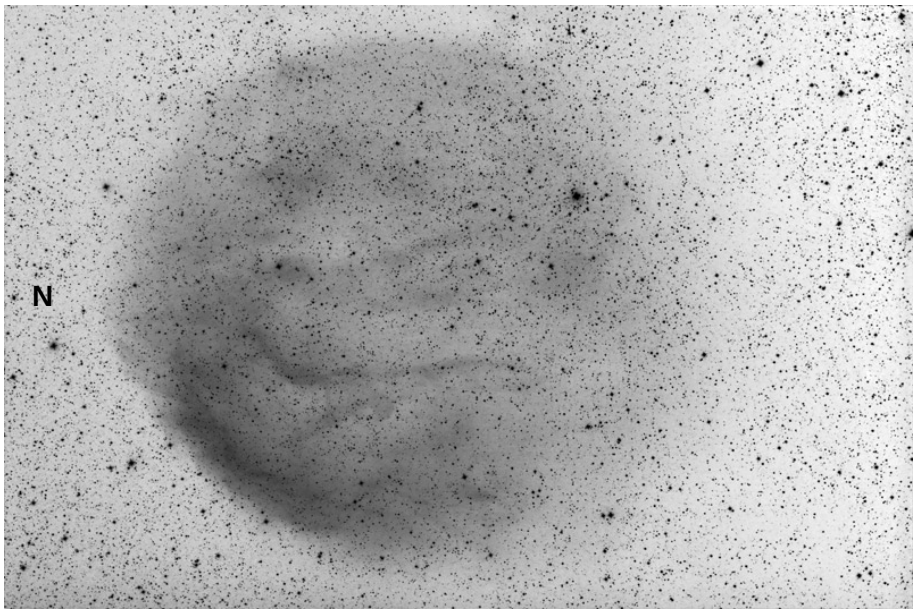
	other name	RA	dec	dia. '	F	S	B
Sh 2-215		04 17 32.8	+42 36 54	2	3	2	2

Distance: 200 pc, Size: 0.1 pc, Source: 2003A&A...397..133R

Observing notes:


+50°00'
+45°00'
+40°00'
+35°00'
μ
48
δ
ψ
σ
53
36
Perseus
Al Anz
NGC 1664
59
NGC 1582
57
ν
Hoedus II
Haedi
58
52
ε
5
ω
50
49
NGC 1
2
NGC 1499
Menkib
5h00m
4h30m
4h00m
3h30m


+44°00'
+43°00'
+42°00'
+41°00'
4h30m
4h25m
4h20m
4h15m
4h10m
4h05m





Sh 2 - 216

in Perseus

80'x120' north to the right

H alpha and narrowband

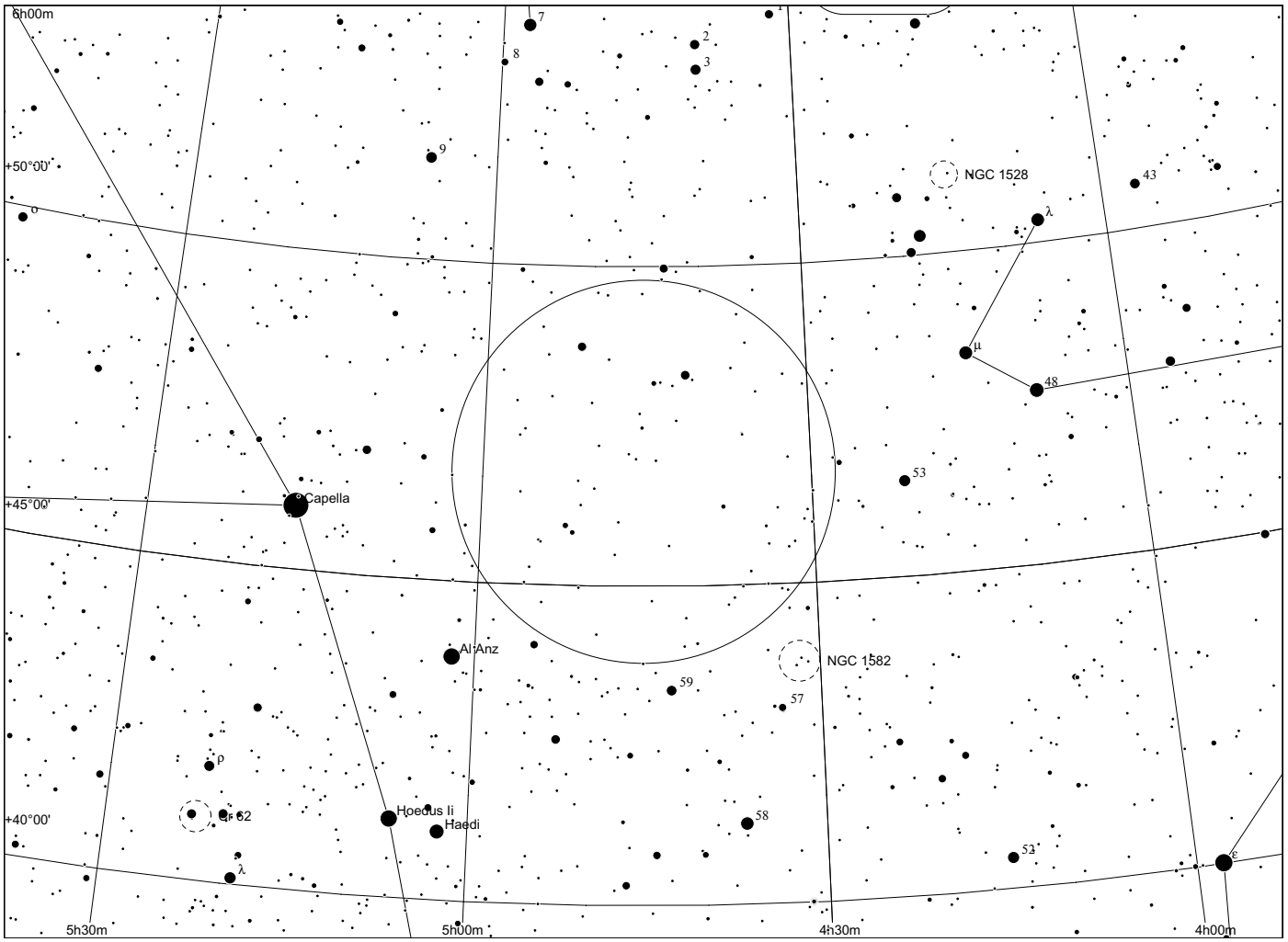
by Dean Salman

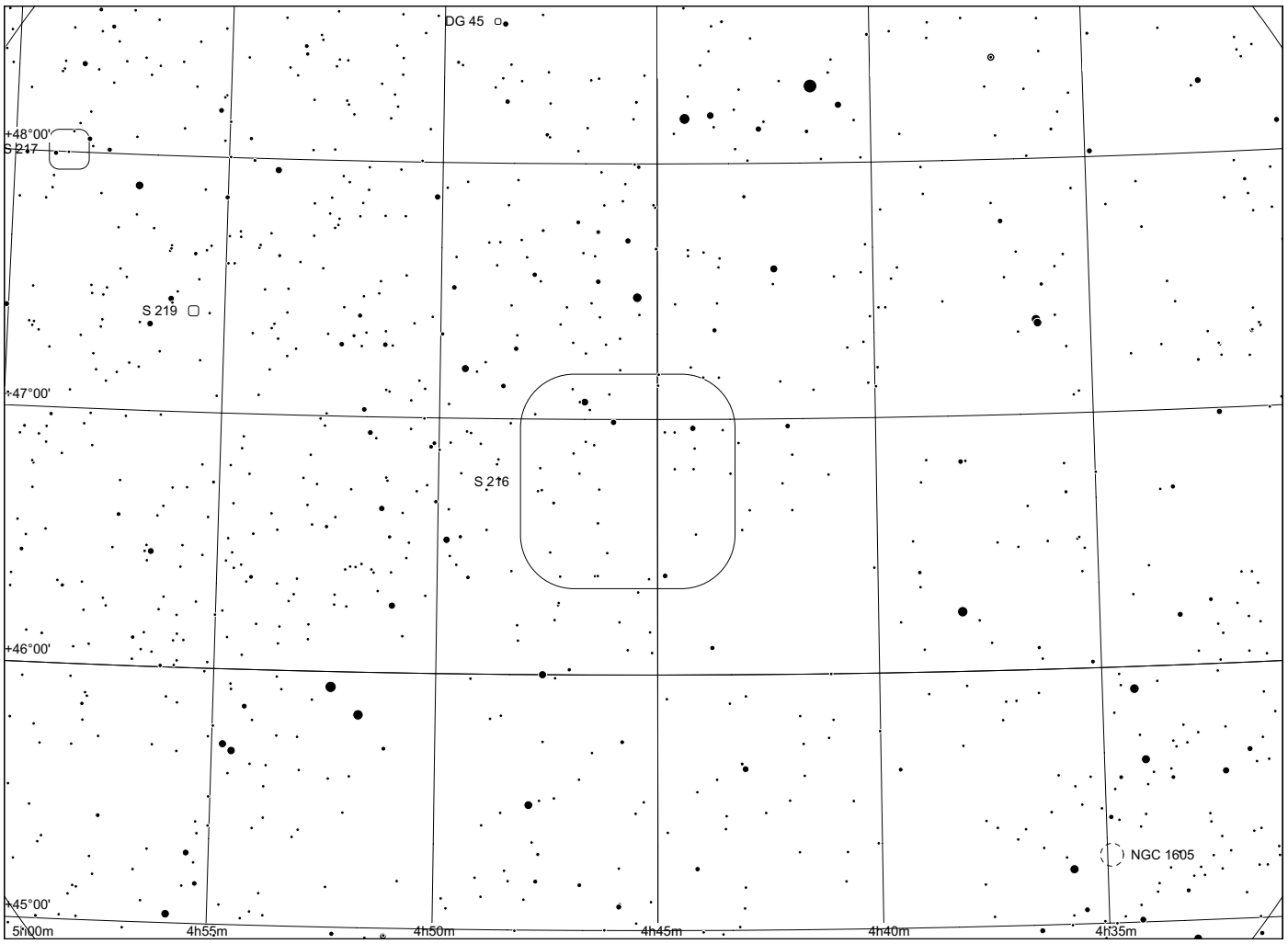
	other name	RA	dec	dia. '	F	S	B
Sh 2-216	Simeiz 288	04 44 56.9	+46 49 15	80	3	2	2

Distance: 120 pc, Size: 2.8 pc, Source: 1995ApJ...447..257T

This is the closest known planetary nebula and one of the oldest.

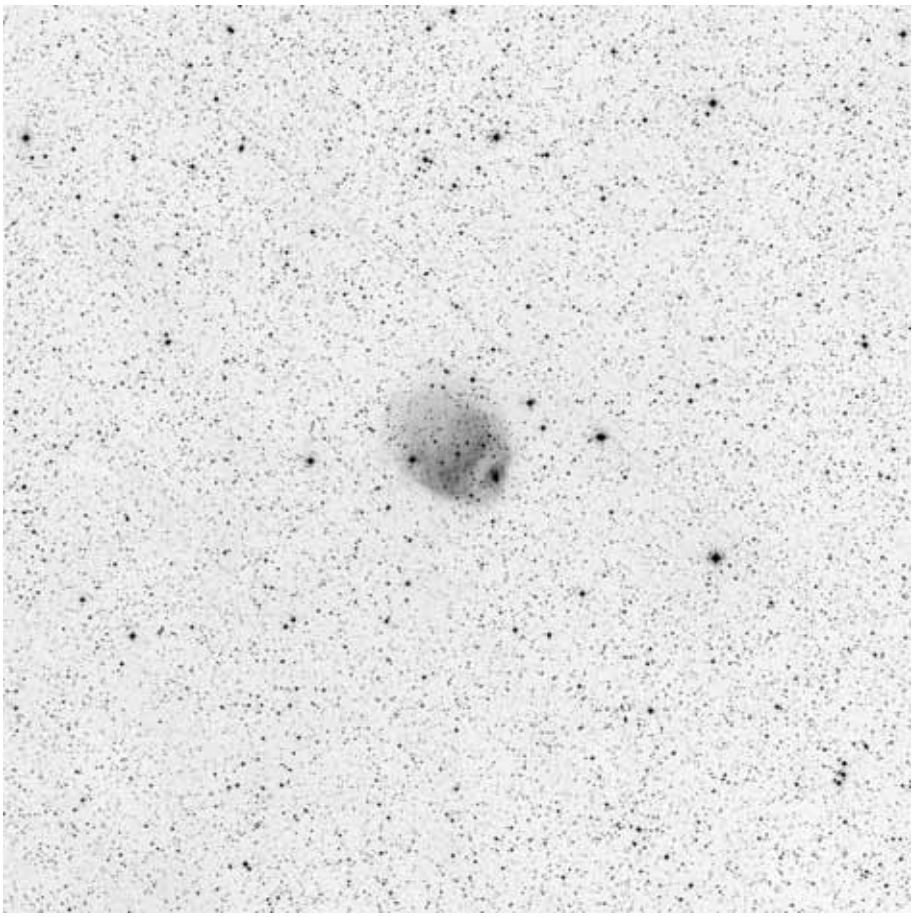
Observing notes:


6h00m
+50°00'
+45°00'
+40°00'
5h30m
5h00m
4h30m
4h00m
NGC 1528
NGC 1582
Capella
Al Anz
Hoedus Ii
Haedi
7
8
2
3
9
43
λ
μ
48
53
59
57
58
52
ε
ρ
λ

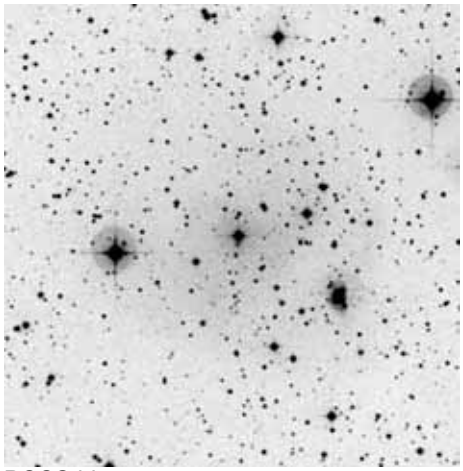

DG 45
+48°00'
S 217
S 219
+47°00'
S 216
+46°00'
NGC 1605
+45°00'
5h00m
4h55m
4h50m
4h45m
4h40m
4h35m

Sh 2 - 217

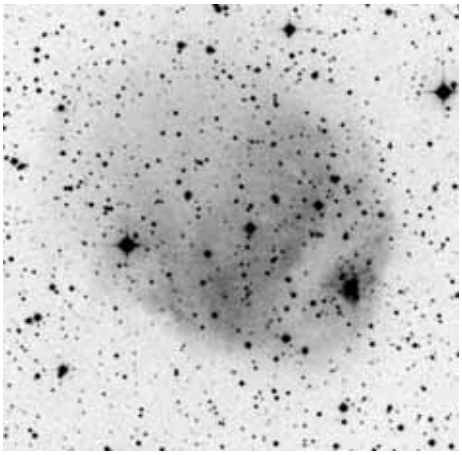
in Auriga



60x60, red



POSS blue



POSS red



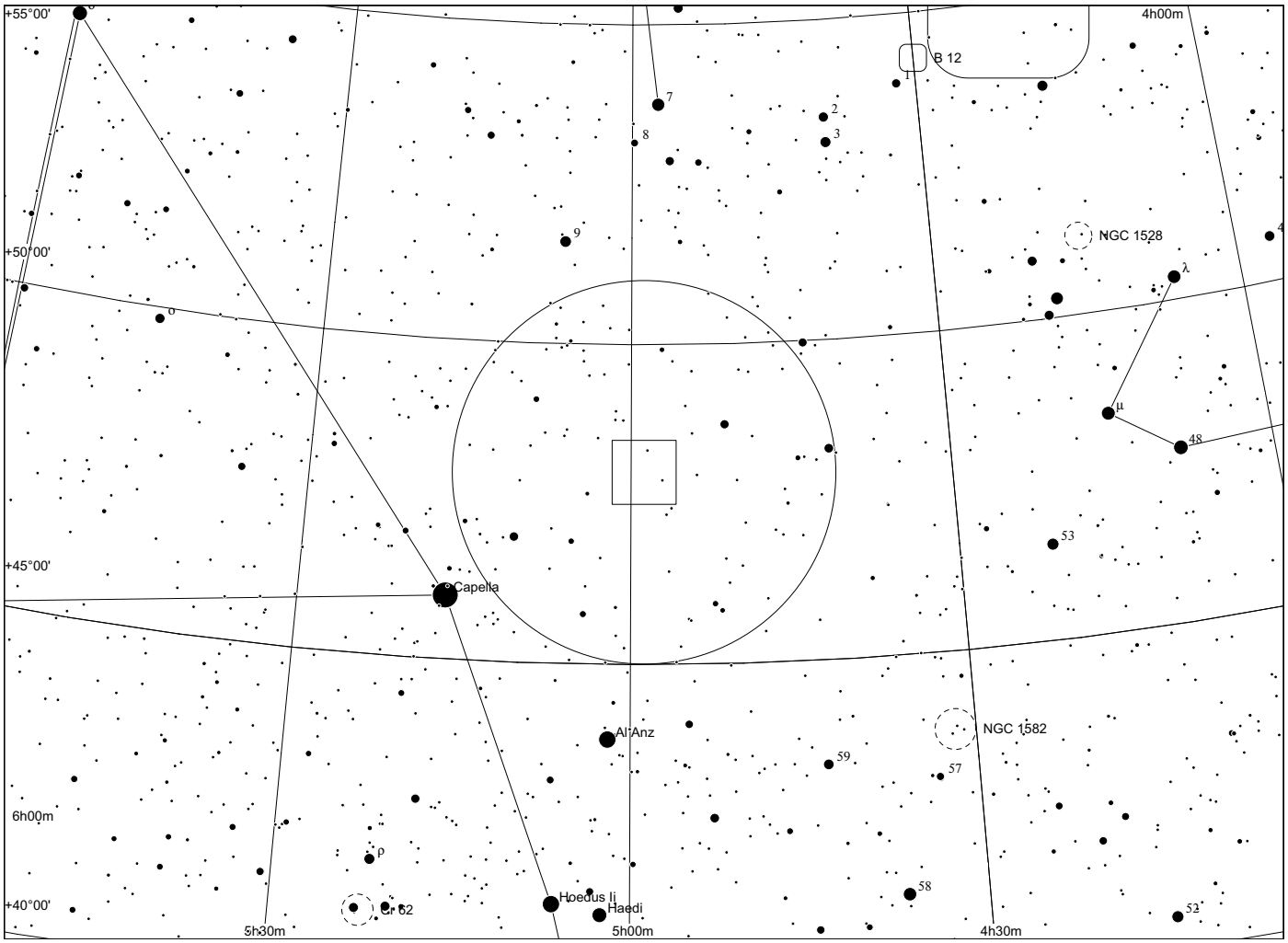
composite

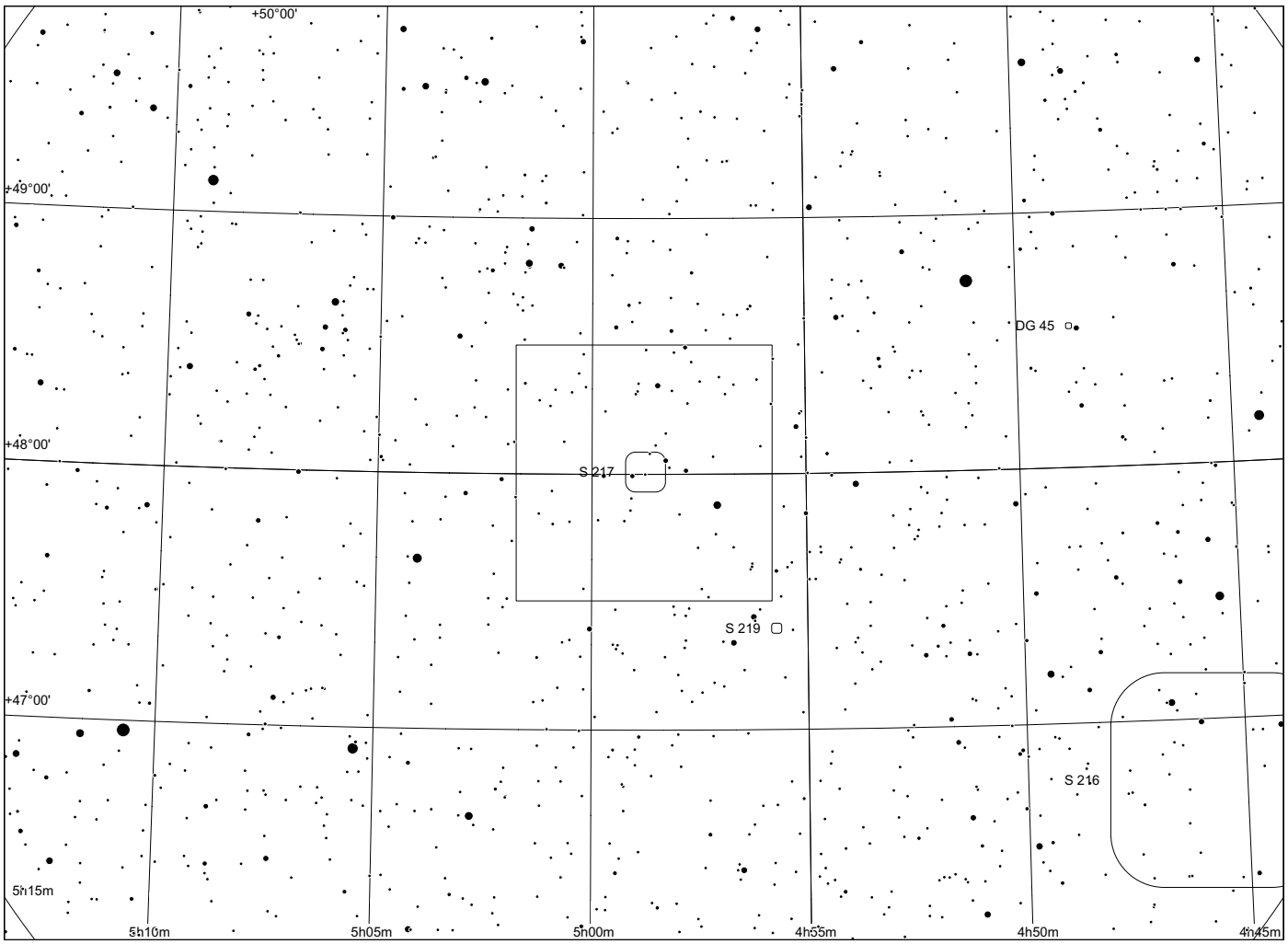
	other name	RA	dec	dia. '	F	S	B
Sh 2-217		04 58 47.1	+48 00 20	9	2	2	2

Distance: 5200 pc, Size: 13.6 pc, Source: 1982ApJS...49..183B

Sh 2-217 contains 4100 solar masses of material.

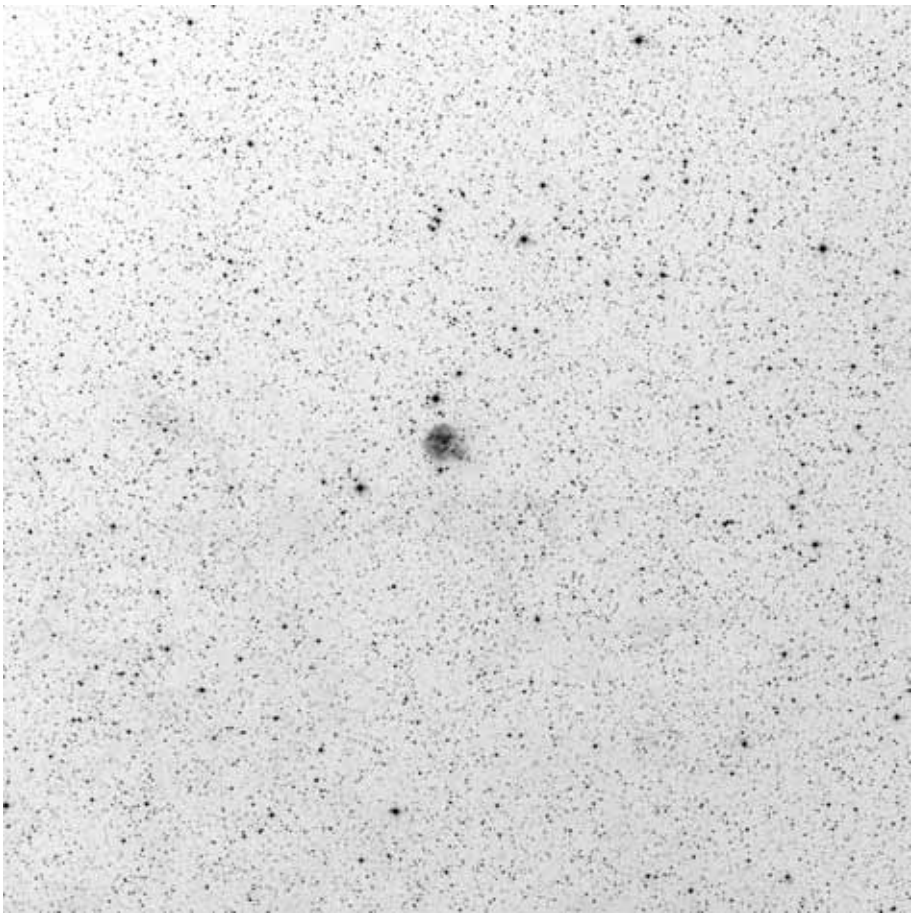
Observing notes:


+55°00'
+50°00'
+45°00'
+40°00'
4h00m
6h00m
5h30m
5h00m
4h30m
B 12
NGC 1528
λ
μ
48
53
Capella
Al Anz
NGC 1582
59
57
58
52
ρ
Cr 62
Hoedus Ii
Haedi

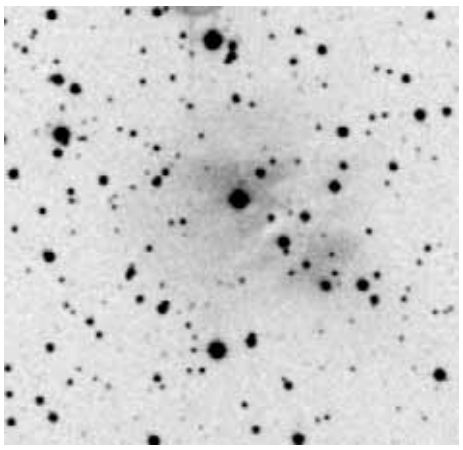

+50°00'
+49°00'
+48°00'
+47°00'
5h15m
5h10m
5h05m
5h00m
4h55m
4h50m
4h45m
DG 45
S 217
S 219
S 216

Sh 2 - 219

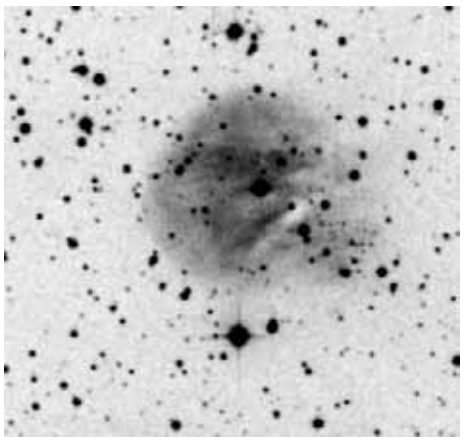
in Auriga



60x60, red



POSS blue



POSS red



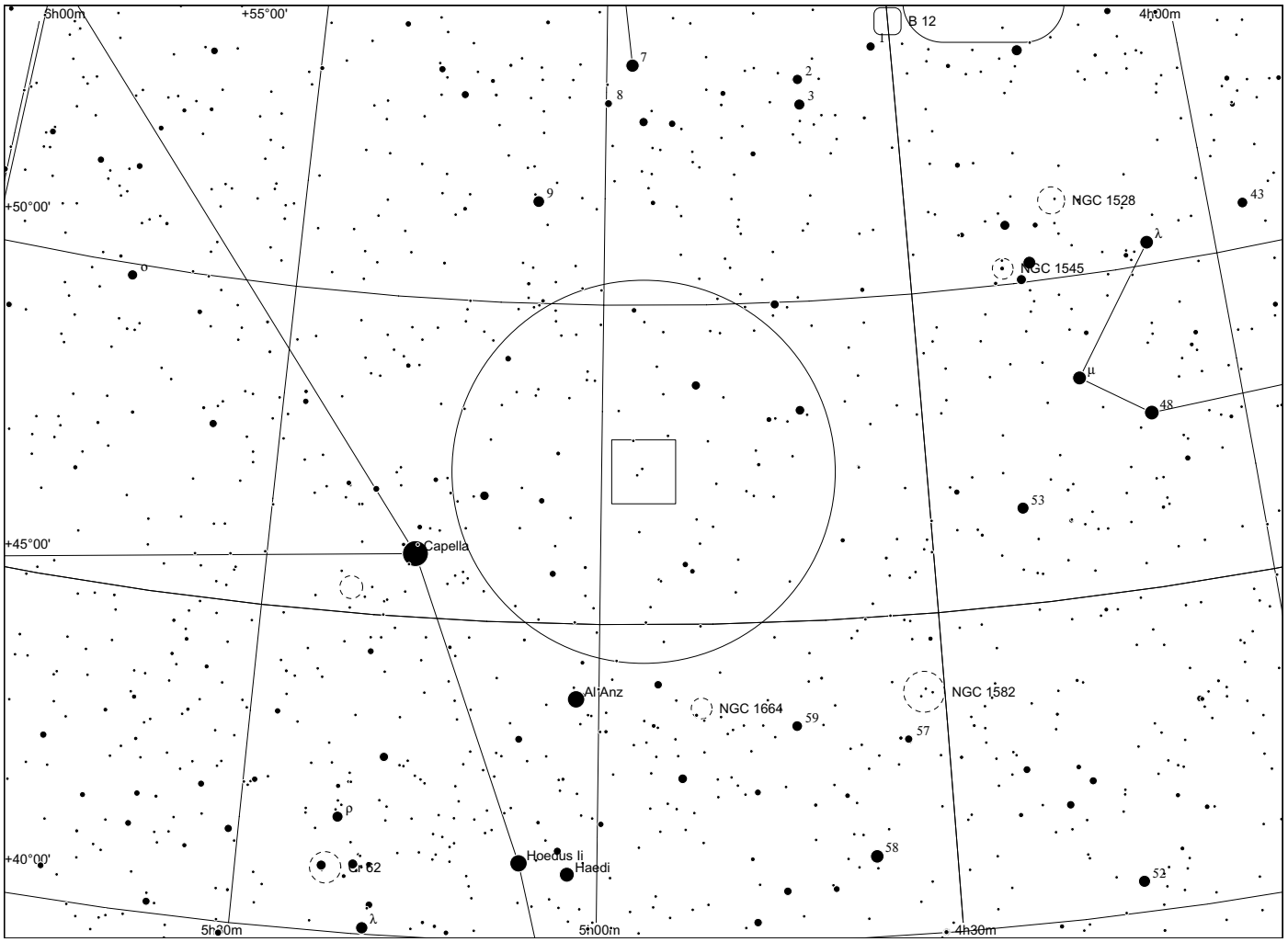
composite

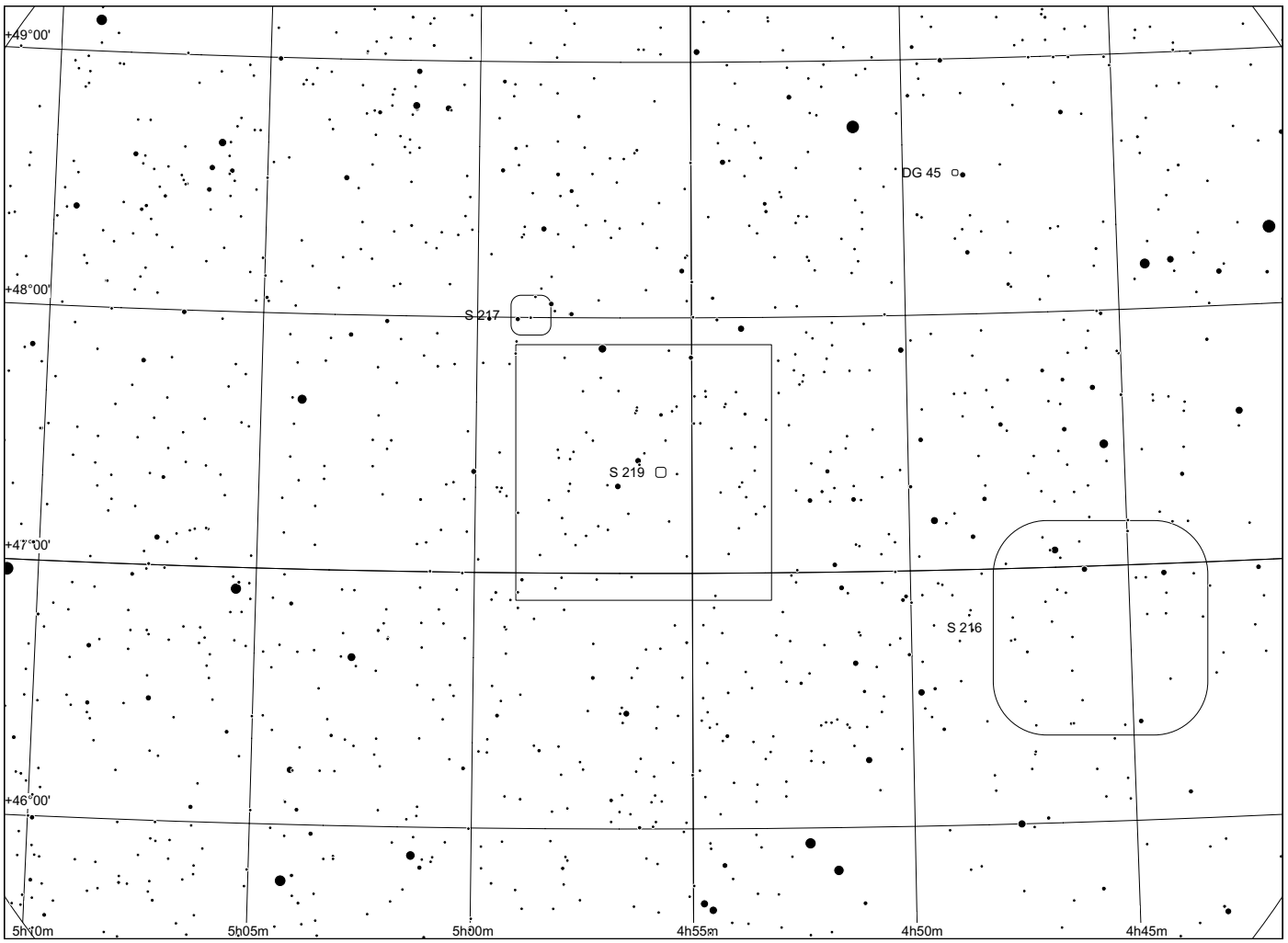
	other name	RA	dec	dia. '	F	S	B
Sh 2-219		04 56 07.3	+47 23 43	3	2	2	3

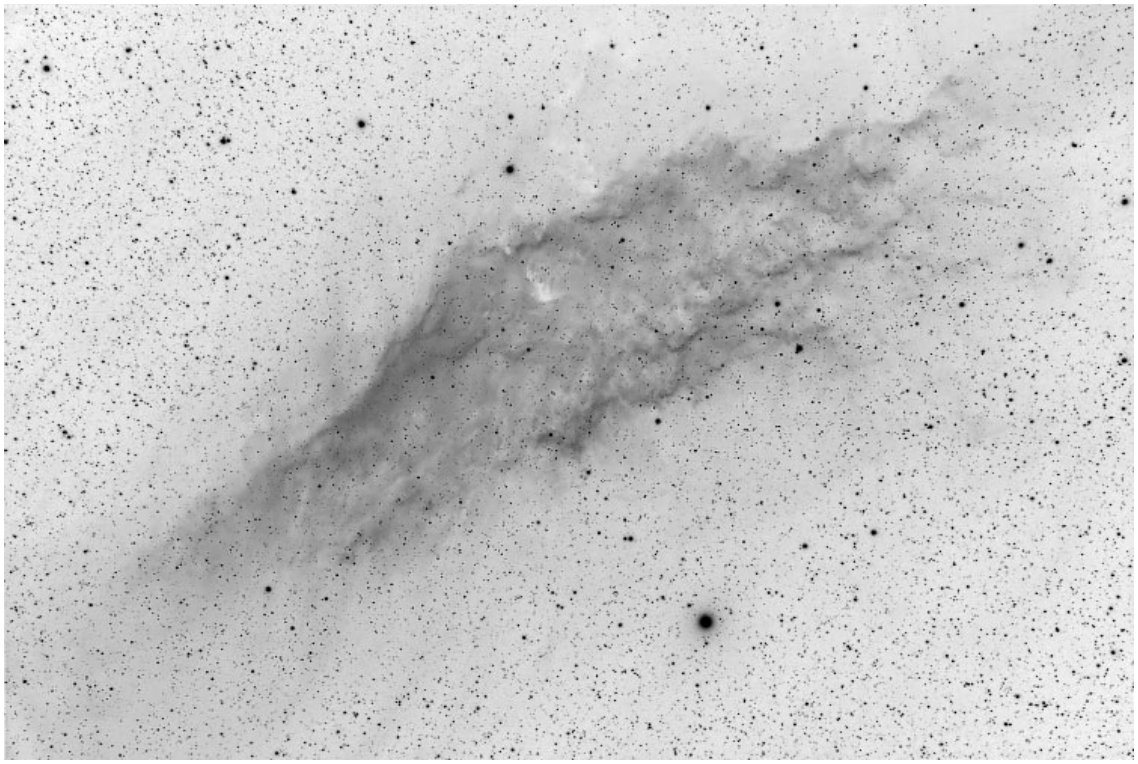
Distance: 4200 pc, Size: 3.7 pc, Source: 1982ApJS...49..183B

Sh 2-219 is ionised by a B0 V star, Sh 2-219 no. 194, in an embedded star cluster.

Observing notes:


5h00m
+55°00'
B 12
4h00m
7
8
2
3
9
+50°00'
NGC 1528
43
λ
NGC 1545
μ
48
53
+45°00'
Capella
Al Anz
NGC 1664
59
57
NGC 1582
ρ
+40°00'
Hoedus Ii
Haedi
58
52
λ
5h30m
5h00m
4h30m


+49°00'
DG 45
+48°00'
S 217
S 219
+47°00'
S 216
+46°00'
5h10m
5h05m
5h00m
4h55m
4h50m
4h45m



Sh 2 - 220 in Perseus

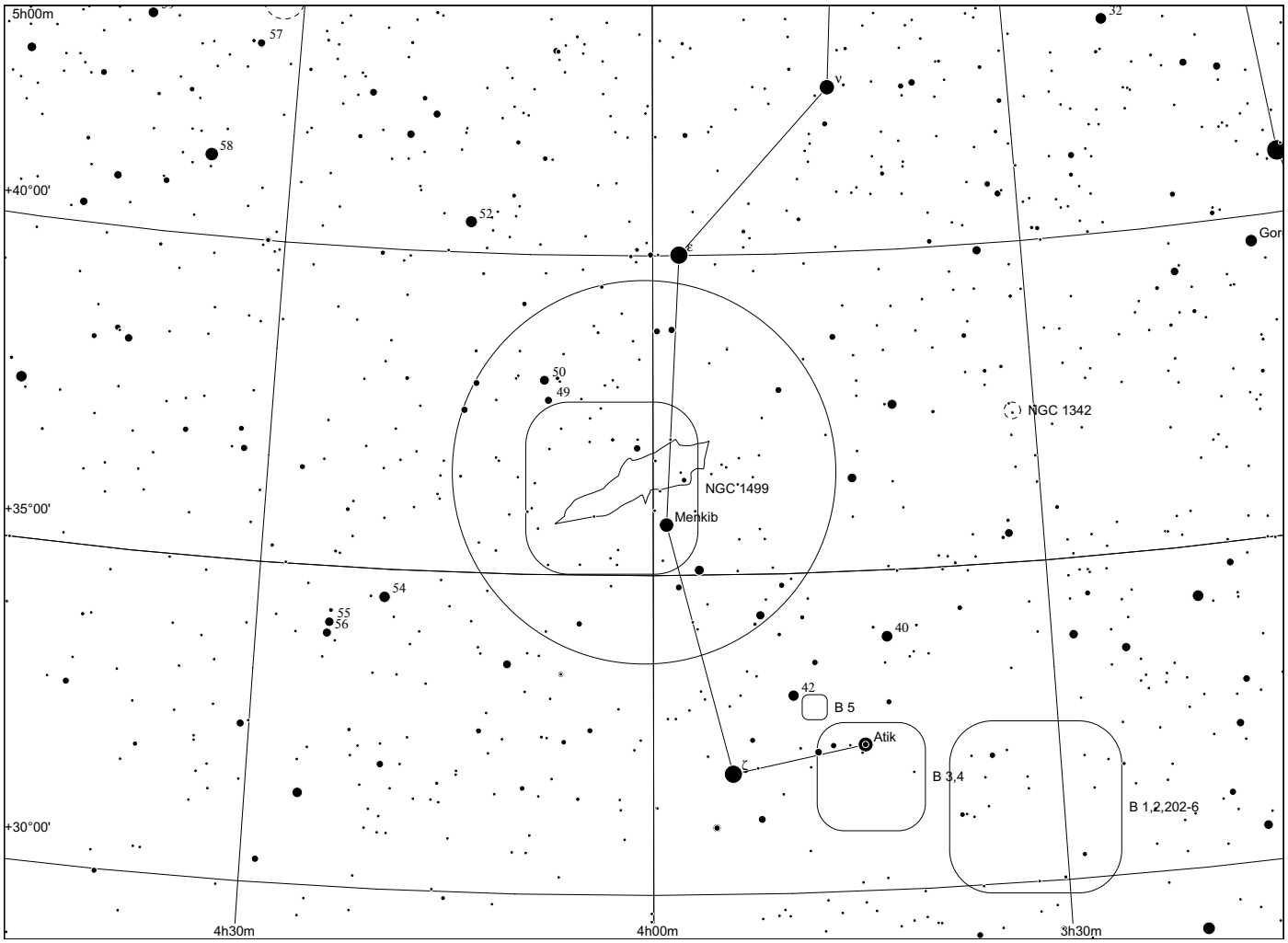
H alpha

	other name	RA	dec	dia. '	F	S	B
Sh 2-220	NGC1499	04 00 37.5	+36 37 02	320	3	2	3

Distance: 400 pc, Size: 37.3 pc, Source: 1982ApJS...49..183B

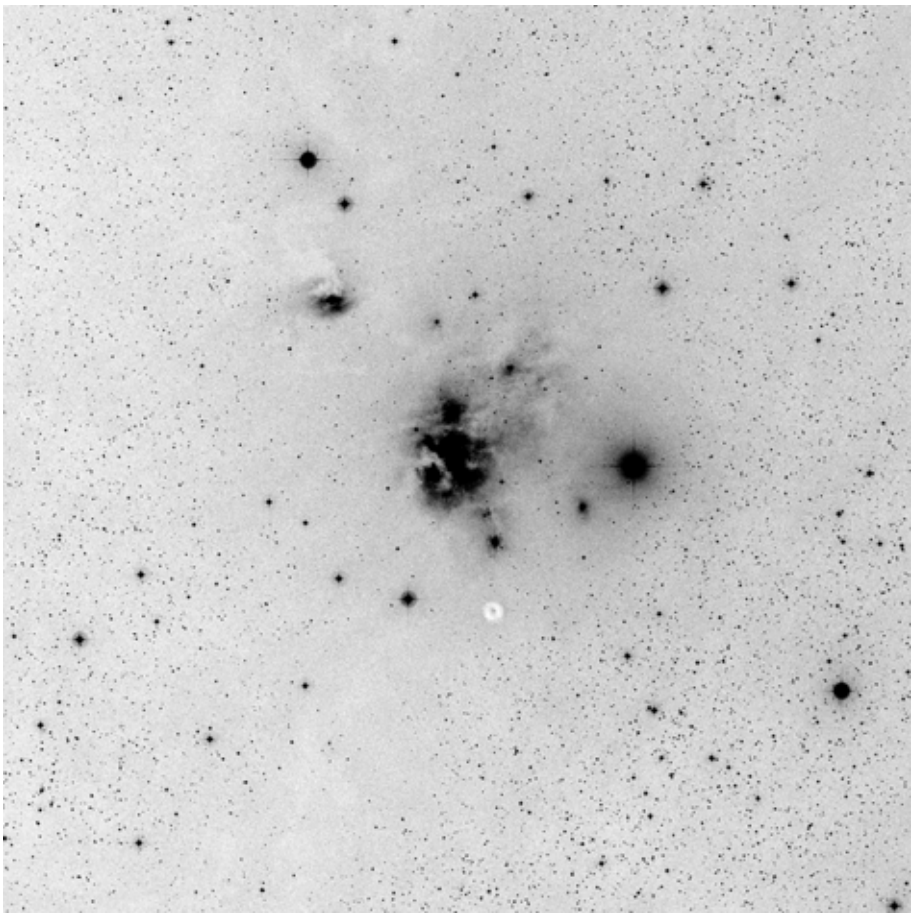
This is the California nebula (NGC 1499), which glows from radiation released from the O 7.5 III star Xi Persei in the Perseus OB2 association, which is part of the Gould Belt, our local region of the Milky Way.

Observing notes:

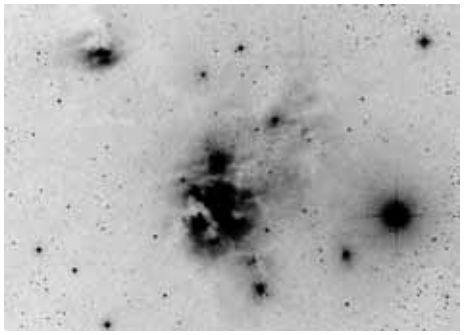

5h00m
57
58
+40°00'
52
ν
ε
Gor
50
49
NGC 1342
NGC 1499
+35°00'
Menkib
54
55
56
40
42
B 5
Atik
ζ
B 3,4
B 1,2,202-6
+30°00'
4h30m
4h00m
3h30m

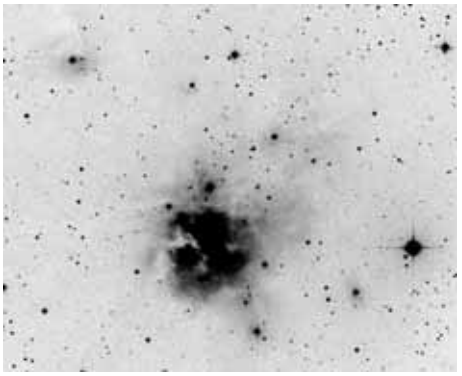
Sh 2 - 222

in Perseus



60x60, blue







POSS blue

POSS red

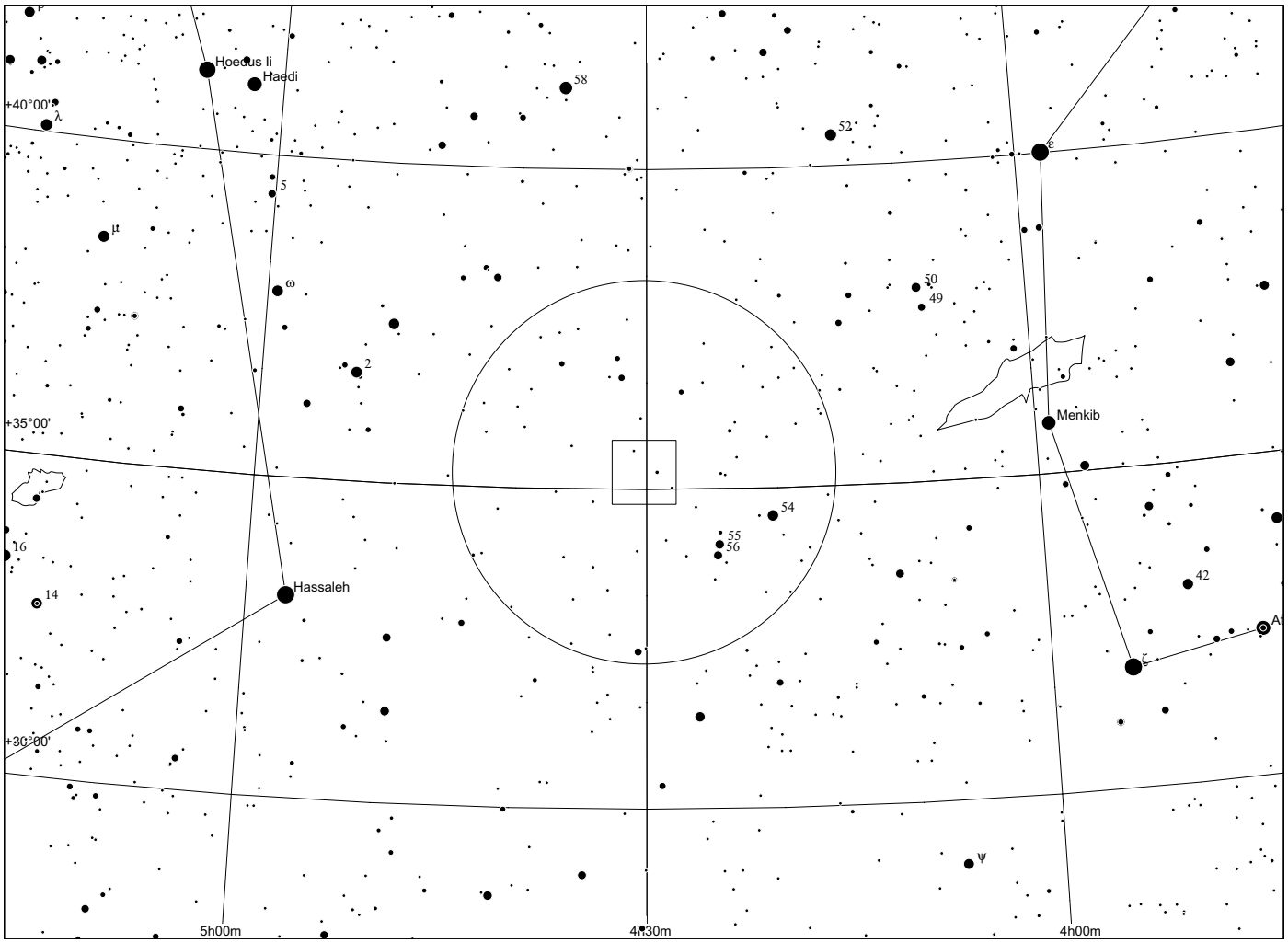
composite

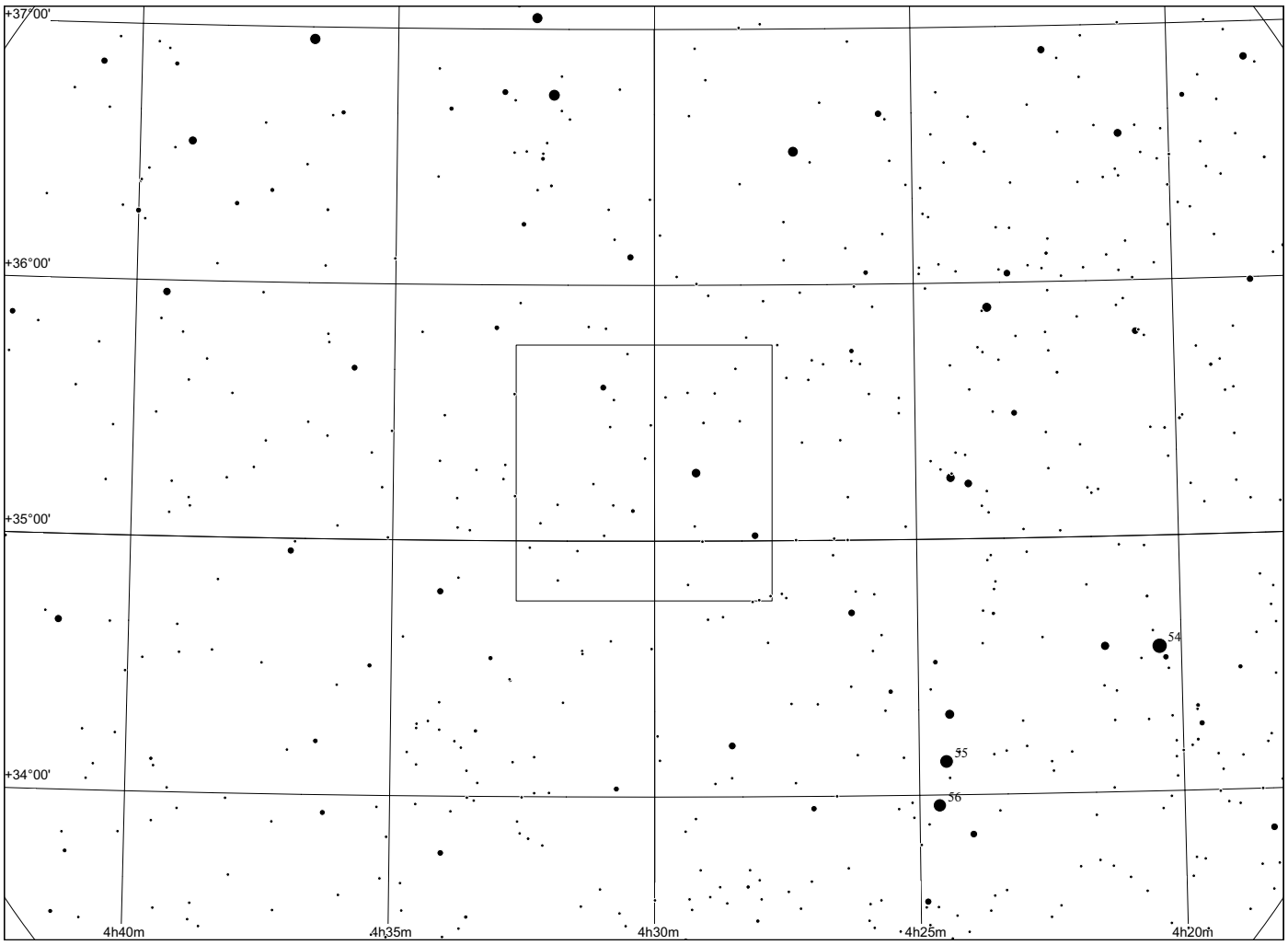
	other name	RA	dec	dia. '	F	S	B
Sh 2-222	NGC1579	04 30 09.2	+35 16 13	6	3	2	3

Distance: 800 pc, Size: 1.4 pc, Source: 1982ApJS...49..183B

Also called NGC 1579, this dusty reflection nebula contains a cluster of about 5 bright B class stars and 35 other stars. The cluster is dominated by the massive young star LkHα 101.

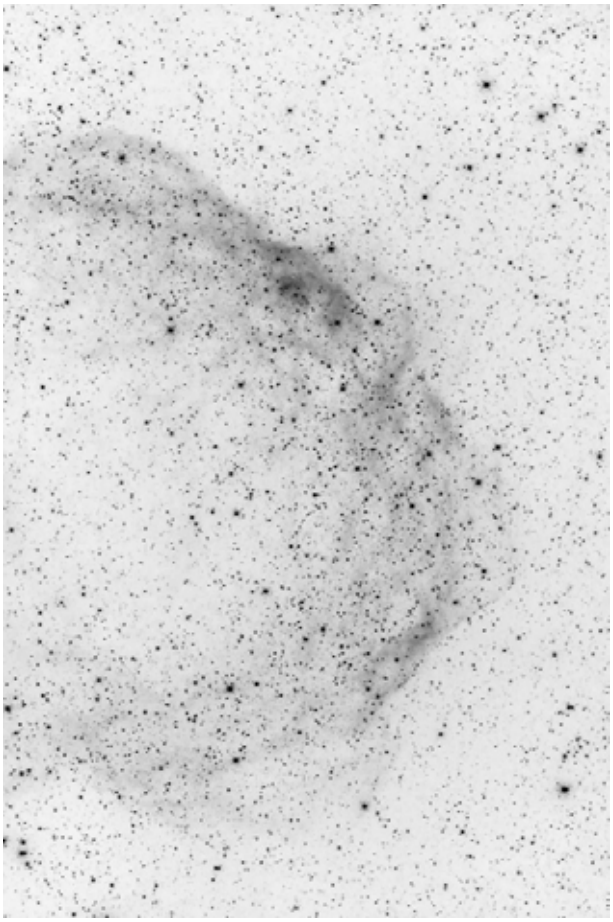
Observing notes:

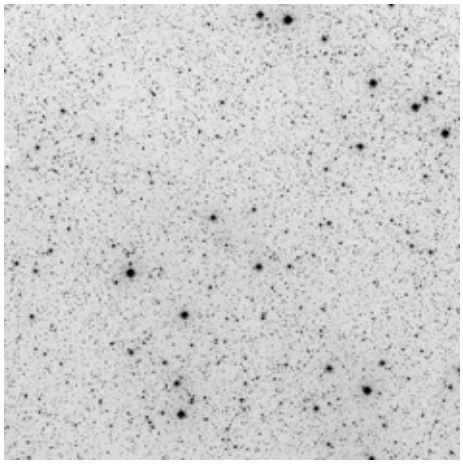

Hoedus Ii
Haedi
58
+40°00'
λ
52
ε
5
μ
ω
50
49
2
+35°00'
Menkib
54
55
56
16
42
14
Hassaleh
At
+30°00'
ψ
5h00m
4h30m
4h00m


+37°00'
+36°00'
+35°00'
54
55
+34°00'
56
4h40m
4h35m
4h30m
4h25m
4h20m

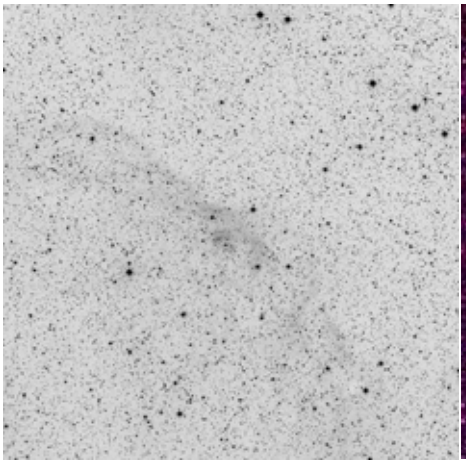
Sh 2 - 223

in Auriga

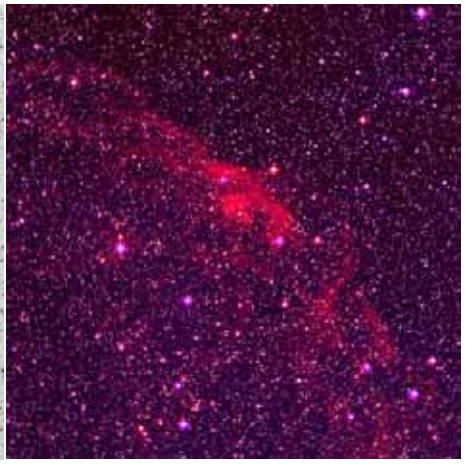




POSS blue



POSS red



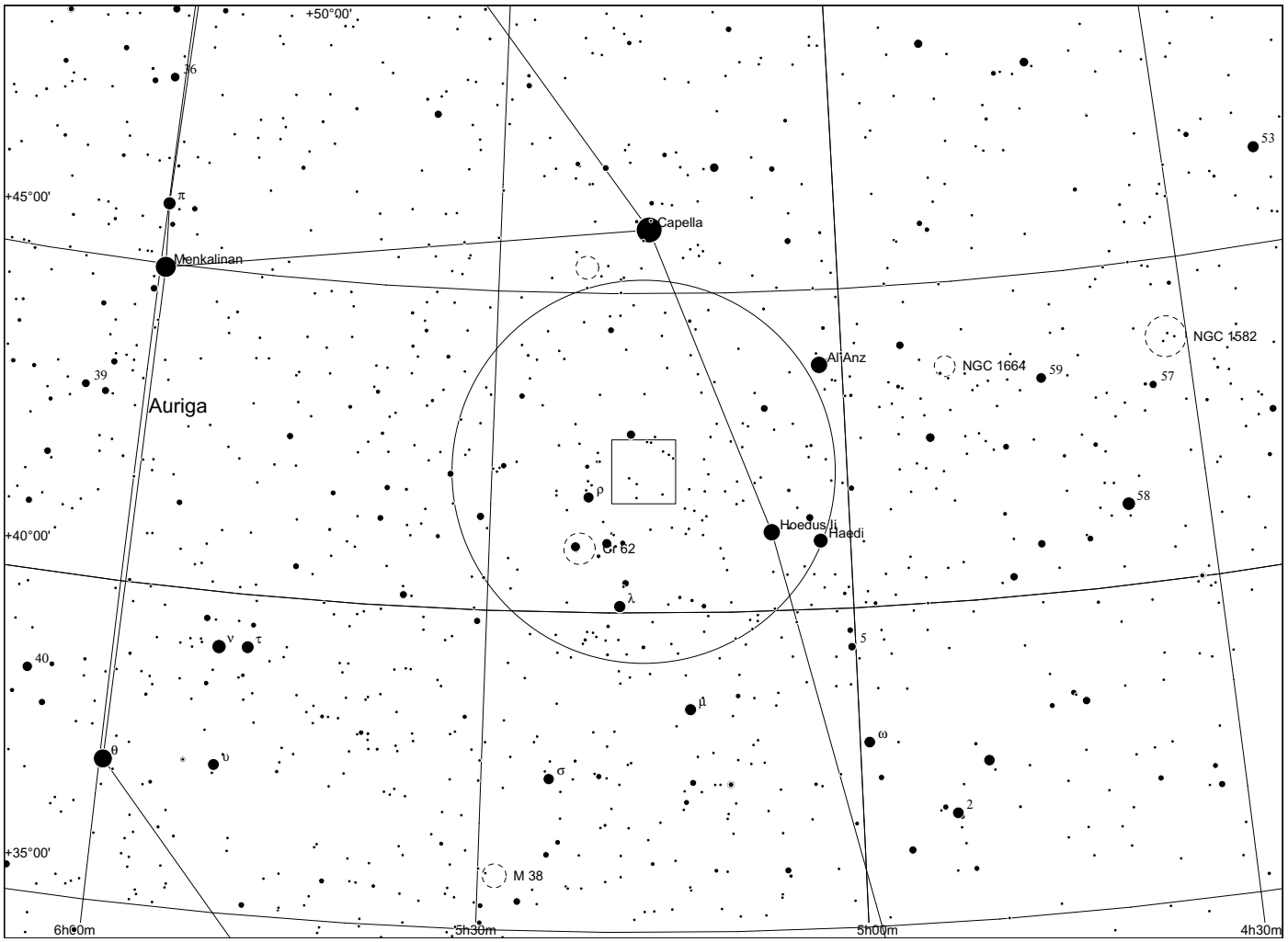
composite

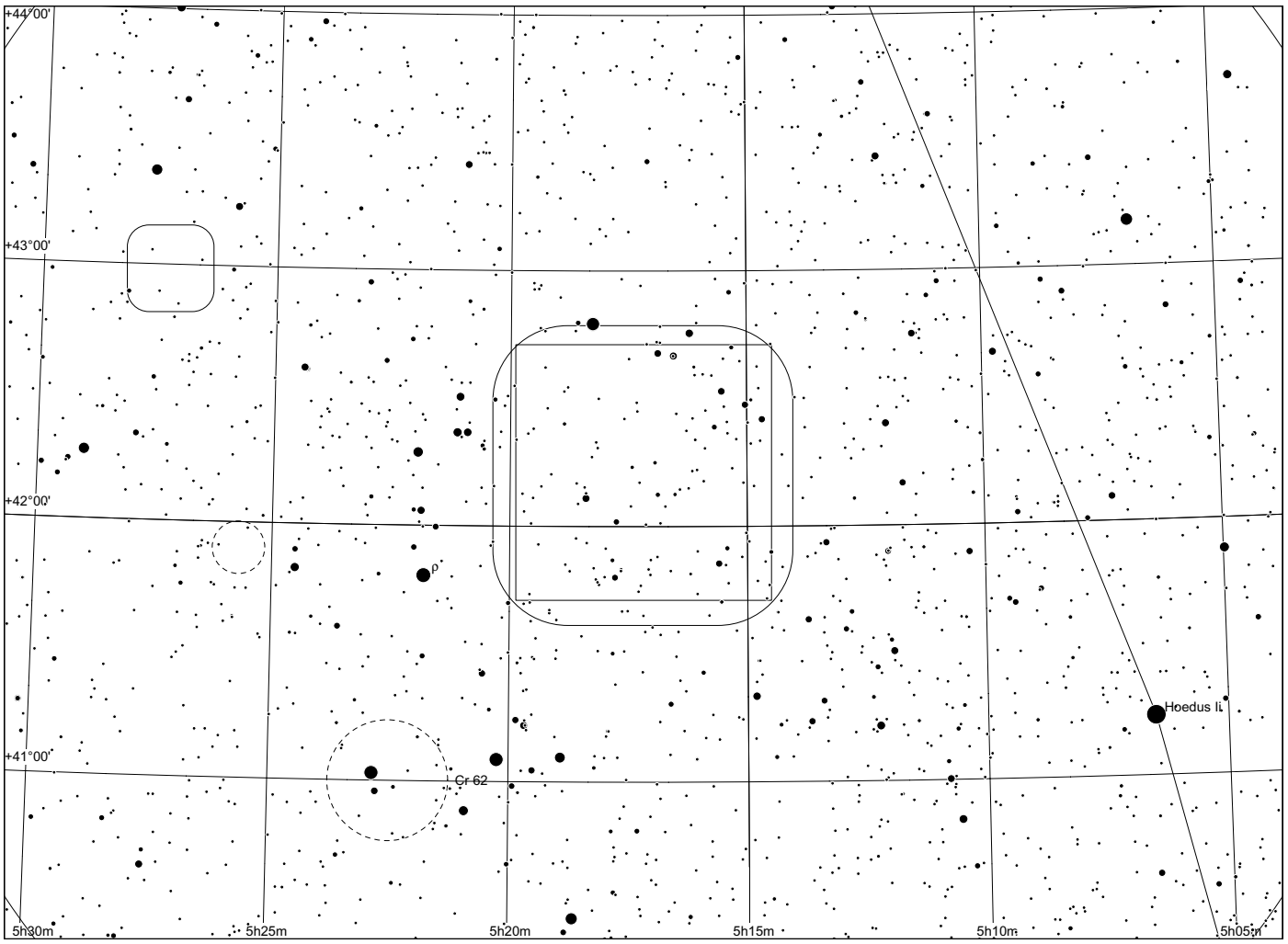
	other name	RA	dec	dia. '	F	S	B
Sh 2-223		05 17 11.1	+42 12 43	70	3	2	2

Distance: 8000 pc, Size: 162.9 pc, Source: 1986MNRAS.221..809R

This is the supernova remnant SNR 166.2+02.5

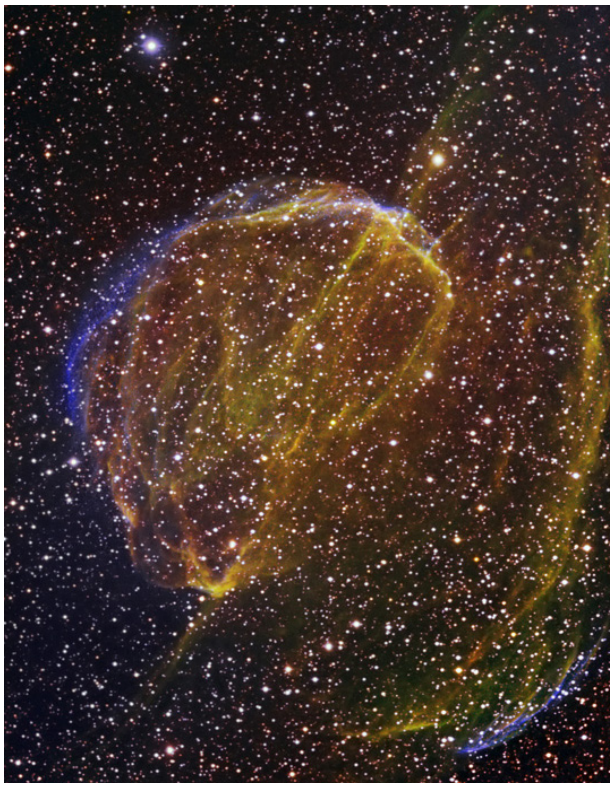
Observing notes:

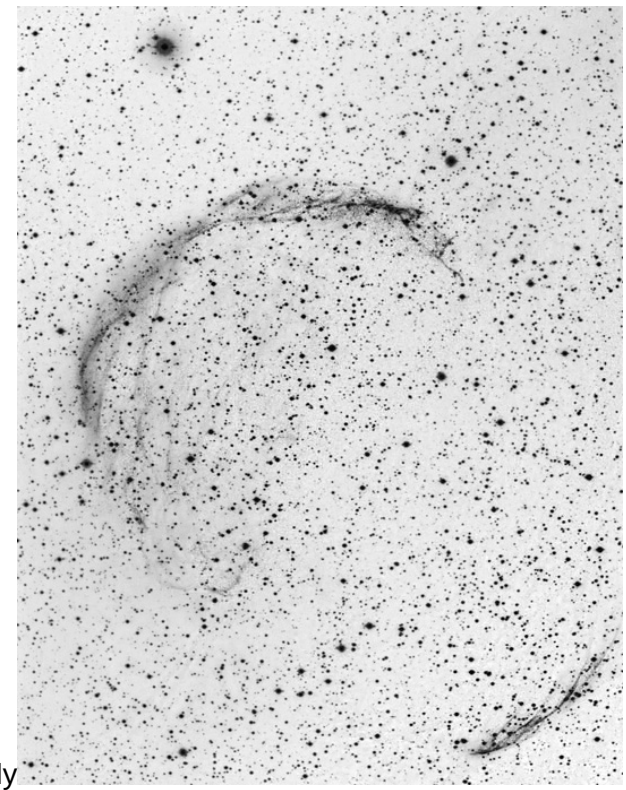

+50°00'
+45°00'
+40°00'
+35°00'
36
π
Menkalinan
Capella
53
NGC 1582
Al Anz
NGC 1664
59
57
39
Auriga
ρ
58
Hoedus II
Haedi
Cr 62
λ
5
40
ν
τ
μ
θ
υ
ω
σ
2
M 38
6h00m
5h30m
5h00m
4h30m


+44°00'
+43°00'
+42°00'
+41°00'
ρ
Hoedus II
Cr 62
5h30m
5h25m
5h20m
5h15m
5h10m
5h05m

Sh 2 - 224

in Auriga





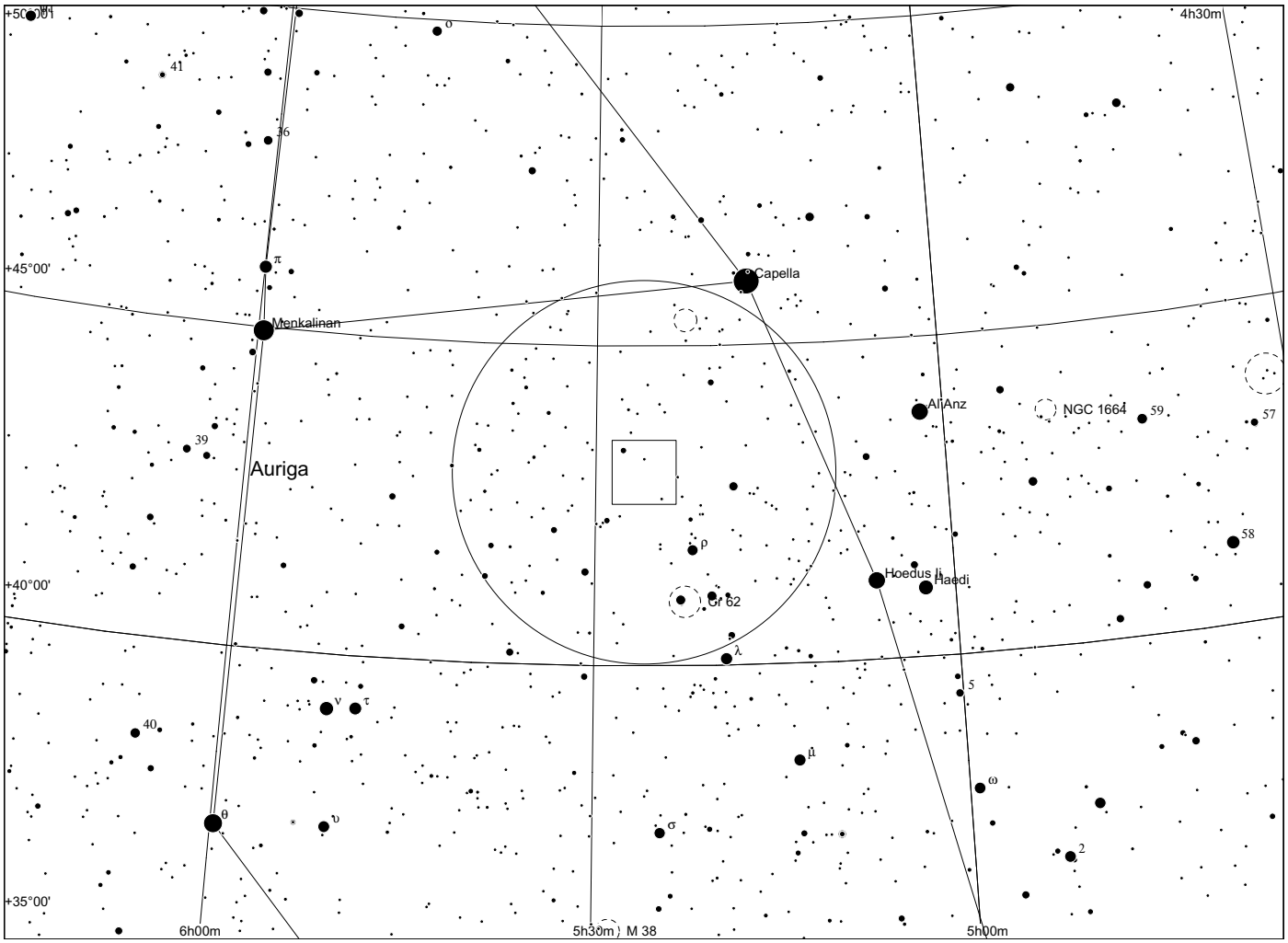
OIII only narrowband Dean Salman

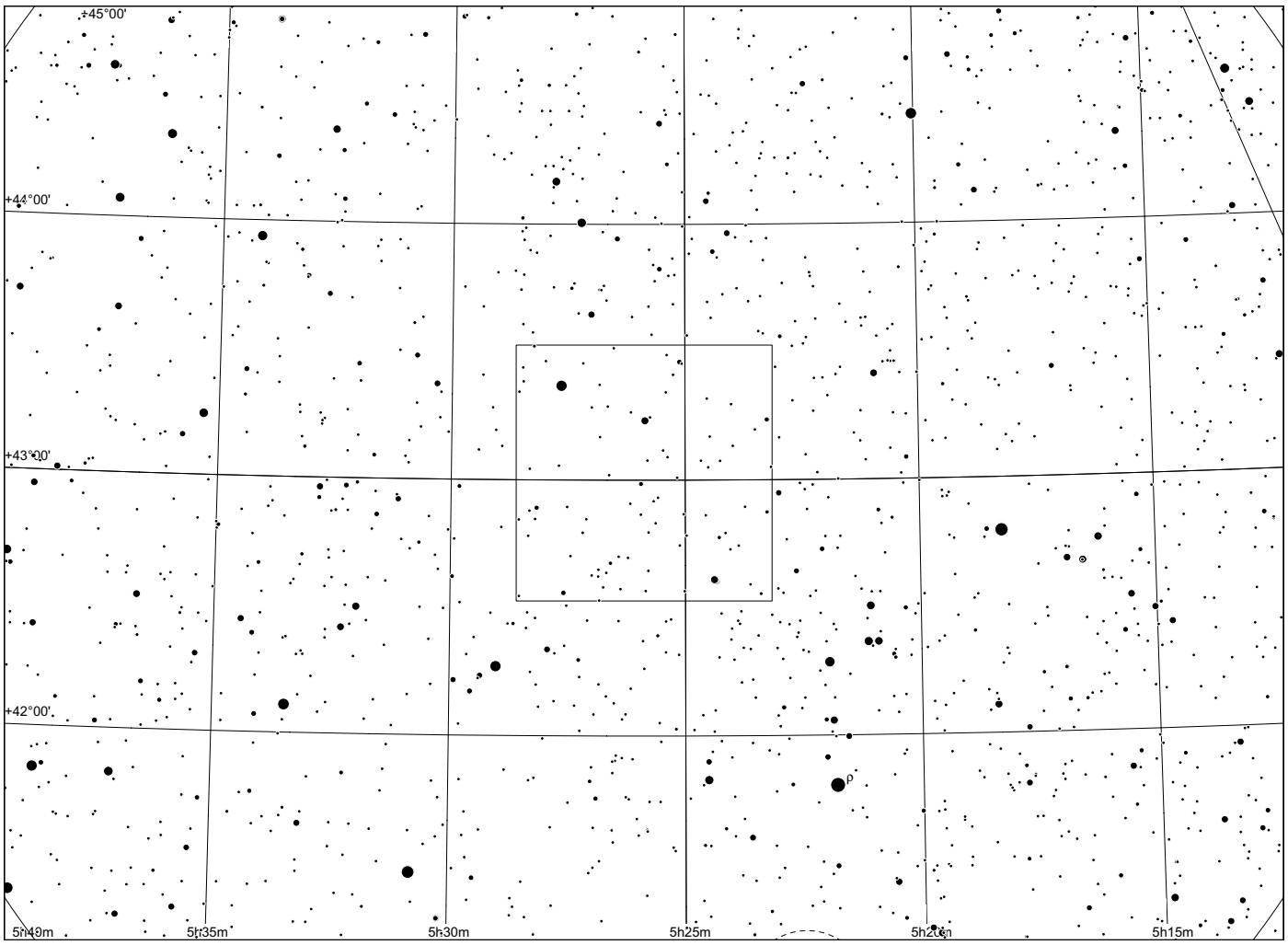
	other name	RA	dec	dia. '	F	S	B
Sh 2-224		05 27 15.2	+42 58 16	30	3	3	2

Distance: 4500 pc, Size: 72.0 pc, Source: 2004BASI...32..335G

This is the supernova remnant SNR G166.1 +4.4

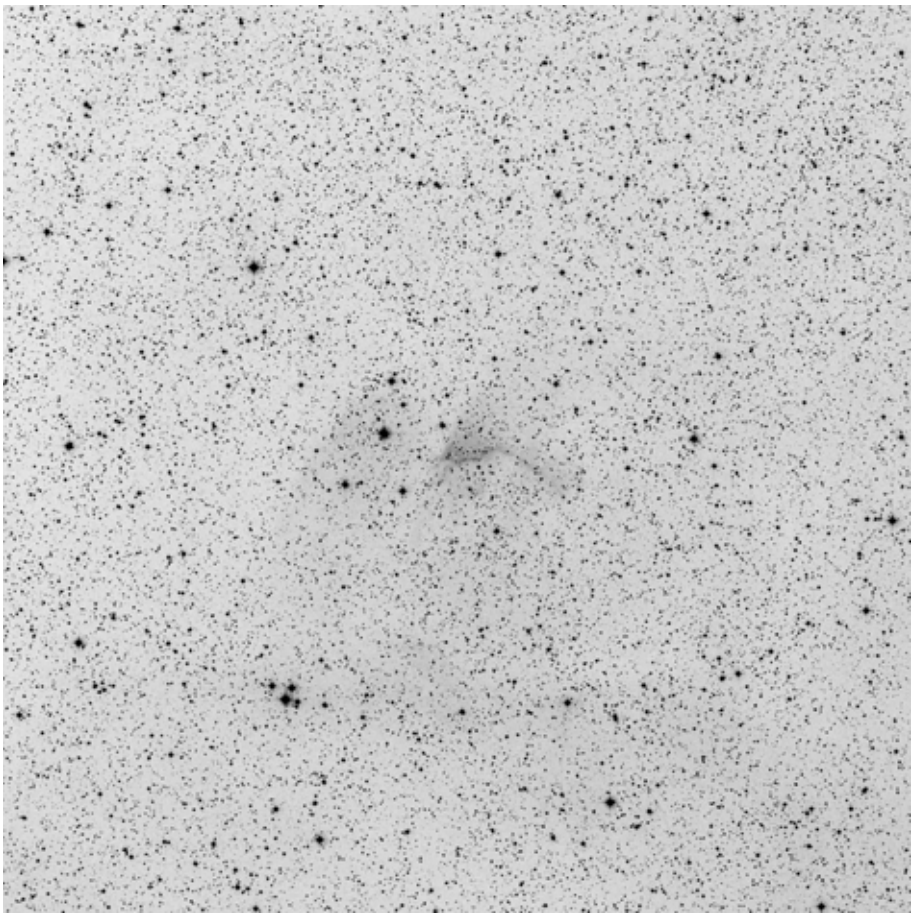
Observing notes:


+50°00'
4h30m
41
36
π
+45°00'
Capella
Menkalinan
Al Anz
NGC 1664
59
57
39
Auriga
58
ρ
Hoedus II
Haedi
+40°00'
Cr 62
λ
5
ν
τ
40
μ
ω
θ
υ
σ
2
+35°00'
6h00m
5h30m
M 38
5h00m

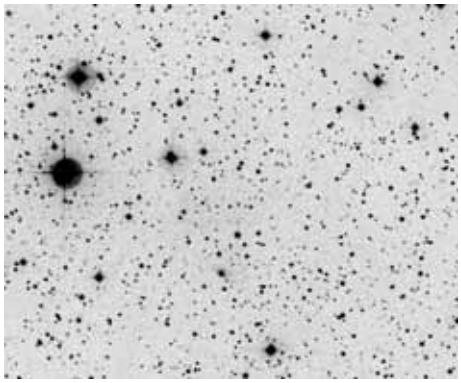

+45°00'
+44°00'
+43°00'
+42°00'
ρ
5h40m
5h35m
5h30m
5h25m
5h20m
5h15m

Sh 2 - 225

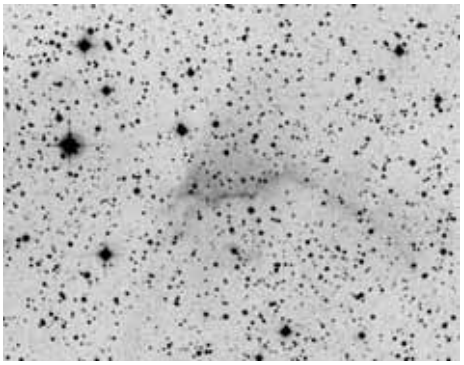
in Auriga



60x60, red



POSS blue



POSS red

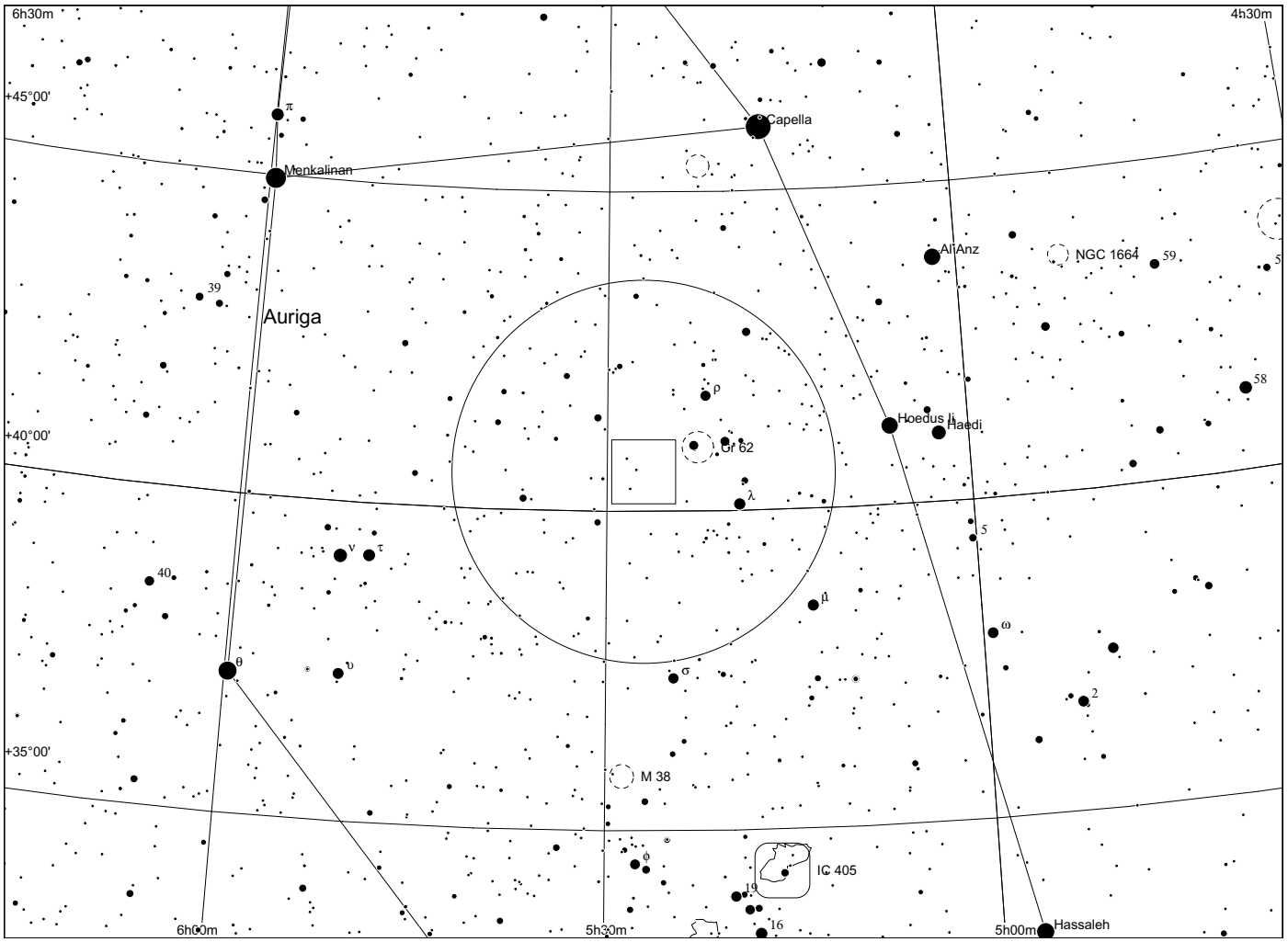


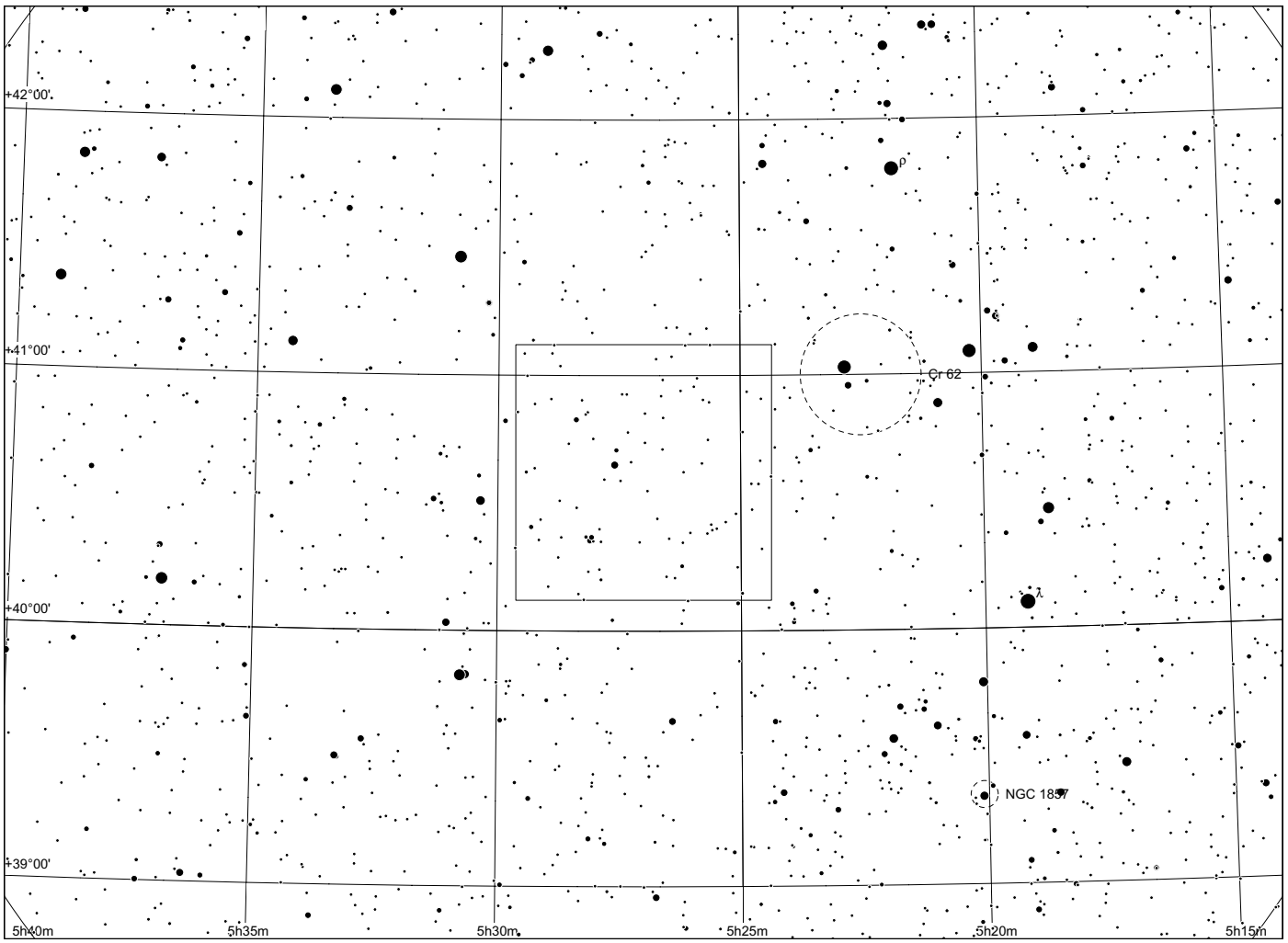
composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-225		05 27 00.3	+40 37 17	10	3	2	2

Distance: 3700 pc, Size: 10.8 pc, Source: 1982ApJS...49..183B

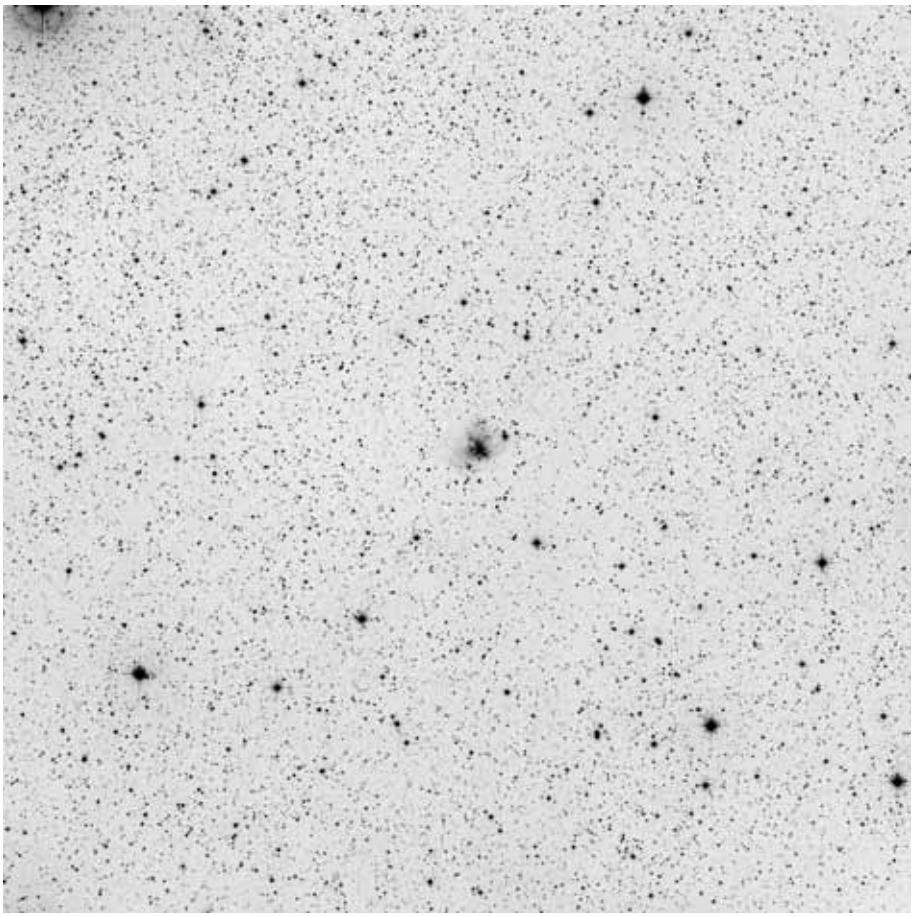
Observing notes:


6h30m
4h30m
+45°00'
π
Capella
Menkalinan
Al Anz
NGC 1664
59
5
39
Auriga
58
ρ
Hoedus II
Haedi
+40°00'
Cr 62
λ
5
ν
τ
40
μ
ω
θ
υ
σ
2
+35°00'
M 38
φ
IC 405
19
16
6h00m
5h30m
5h00m
Hassaleh

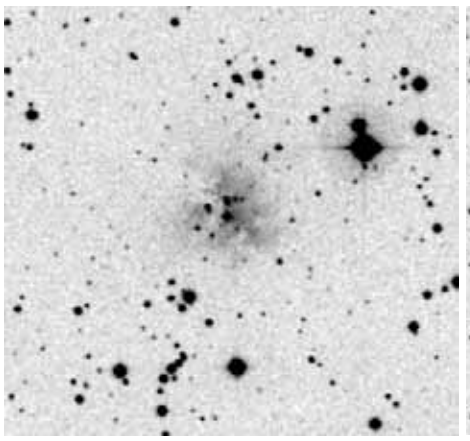

+42°00'
ρ
+41°00'
Cr 62
λ
+40°00'
NGC 1857
+39°00'
5h40m
5h35m
5h30m
5h25m
5h20m
5h15m

Sh 2 - 226

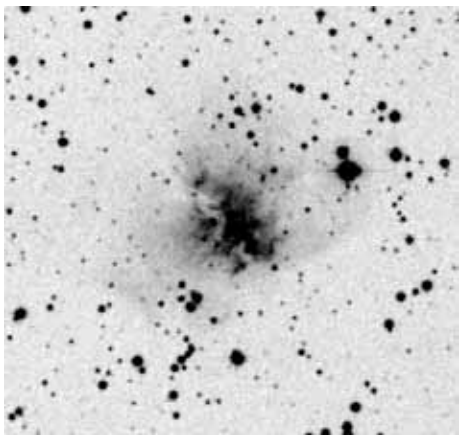
in Auriga



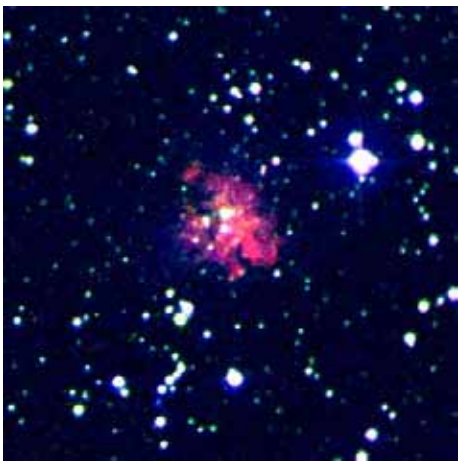
60x60, red



POSS blue



POSS red

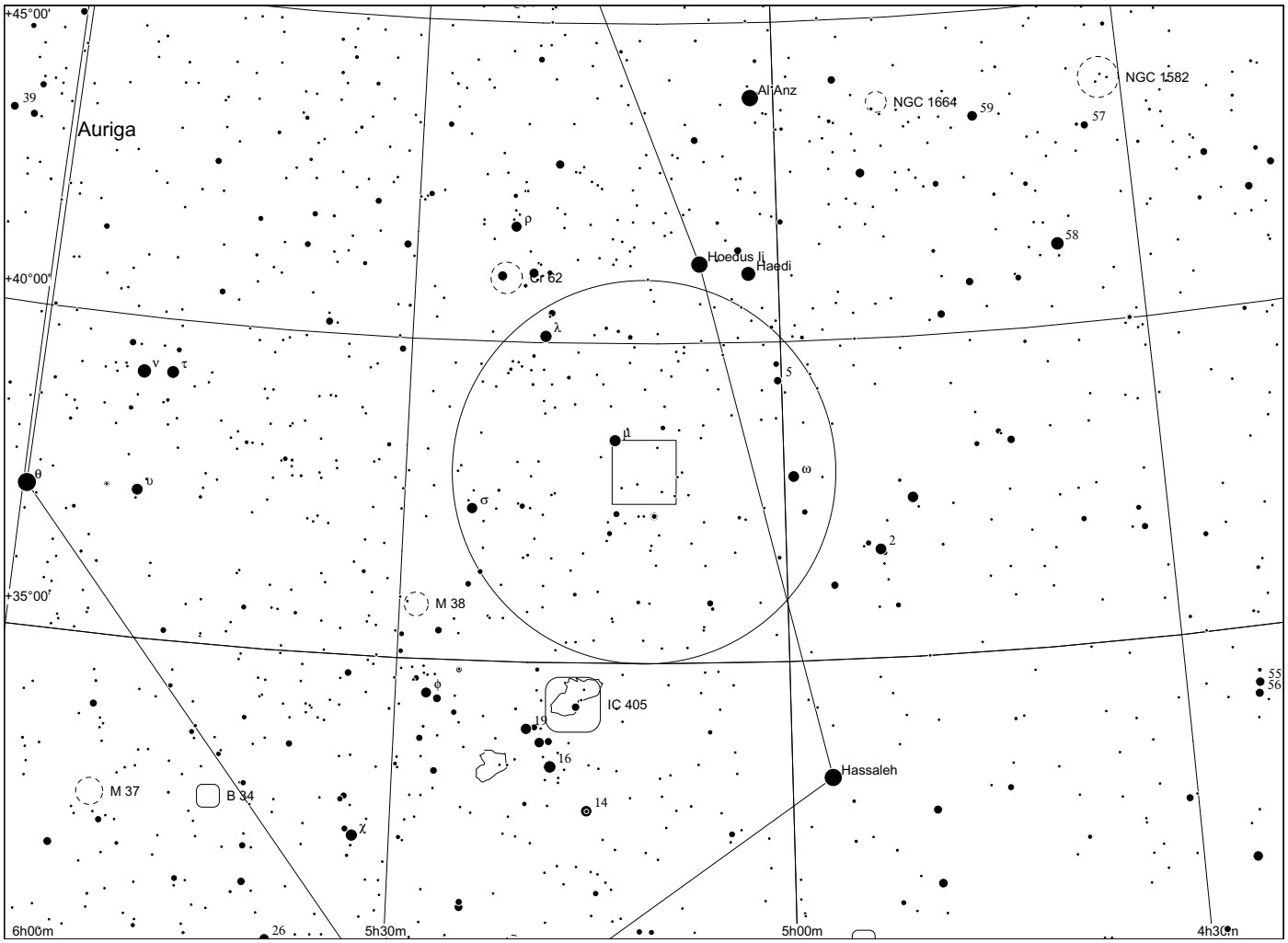


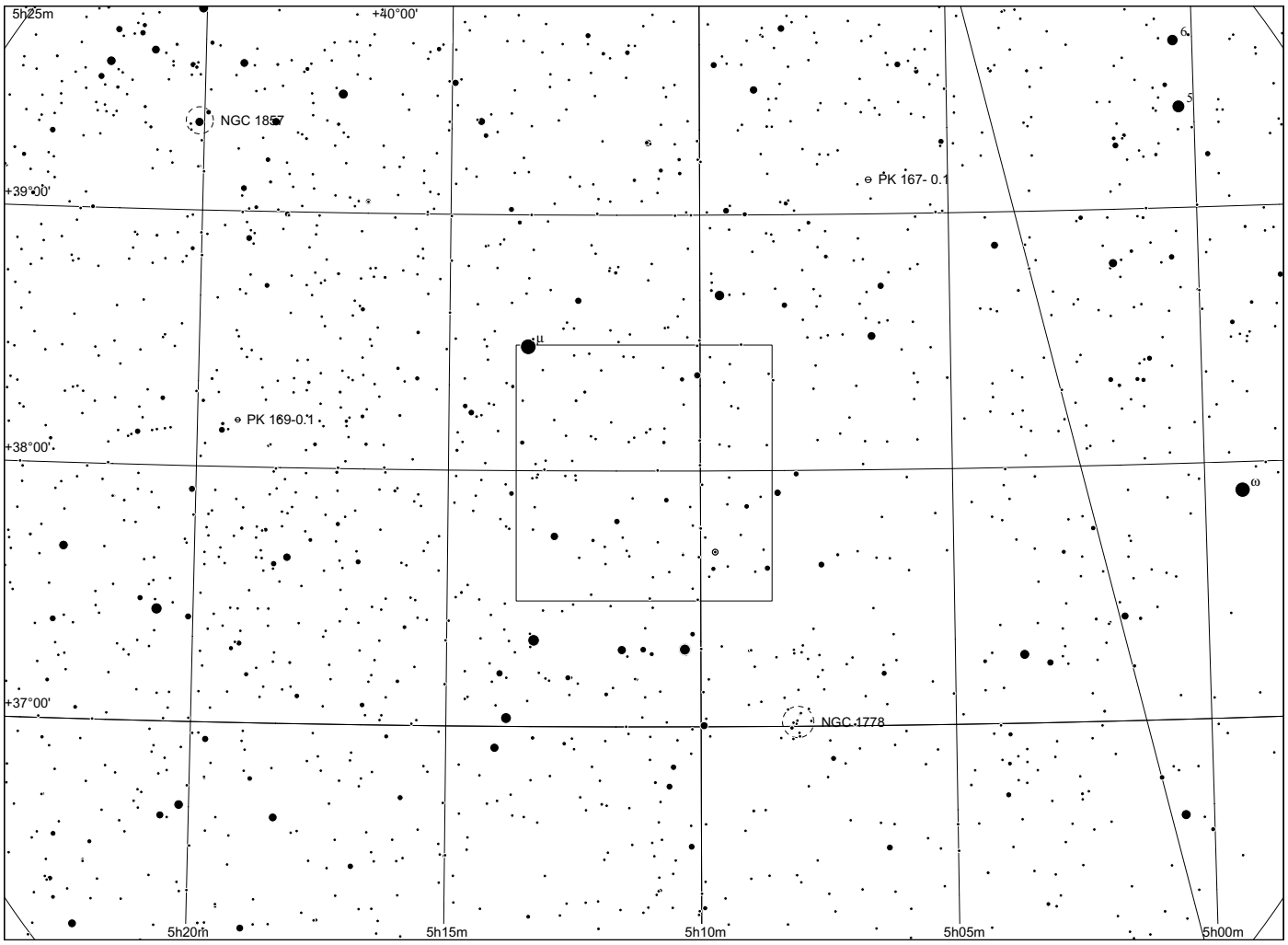
composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-226		05 11 06.6	+37 59 33	3	3	2	3

Distance: 4200 pc, Size: 3.7 pc, Source: 2003A&A...397..133R

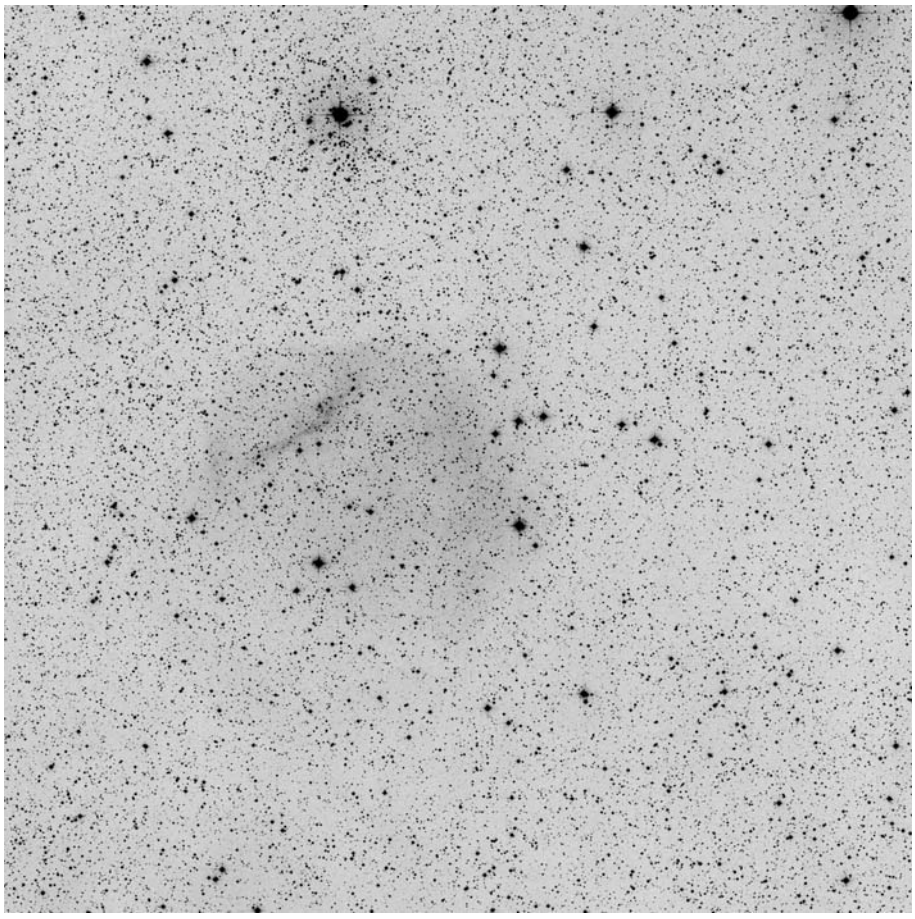
Observing notes:


+45°00'
+40°00'
+35°00'
Auriga
39
Al'Anz
NGC 1664
59
57
NGC 1582
58
ρ
Cr 62
Hoedus Ii
Haedi
λ
ν
τ
5
μ
θ
υ
ω
σ
2
M 38
φ
55
56
IC 405
19
16
Hassaleh
M 37
B 34
14
χ
26
6h00m
5h30m
5h00m
4h30m

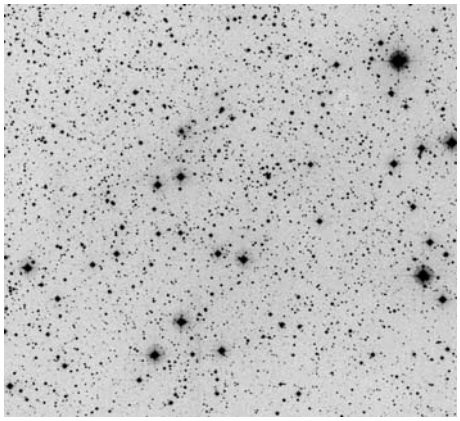

5h25m
+40°00'
+39°00'
+38°00'
+37°00'
NGC 1857
PK 167- 0.1
6
5
μ
PK 169-0.1
ω
NGC 1778
5h20m
5h15m
5h10m
5h05m
5h00m

Sh 2 - 227

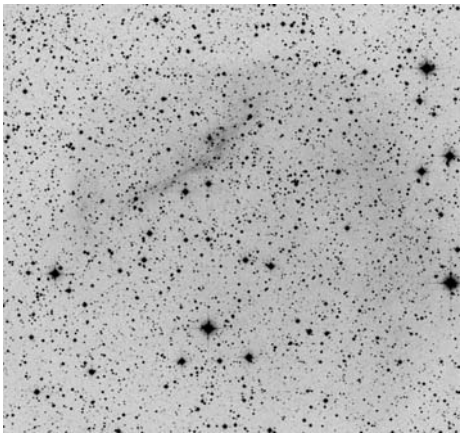
in Auriga



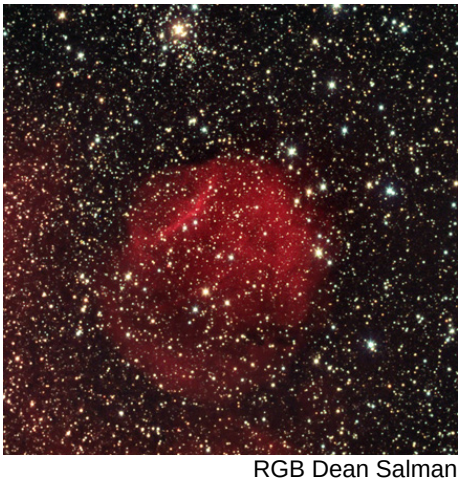
60x60, red



POSS blue



POSS red

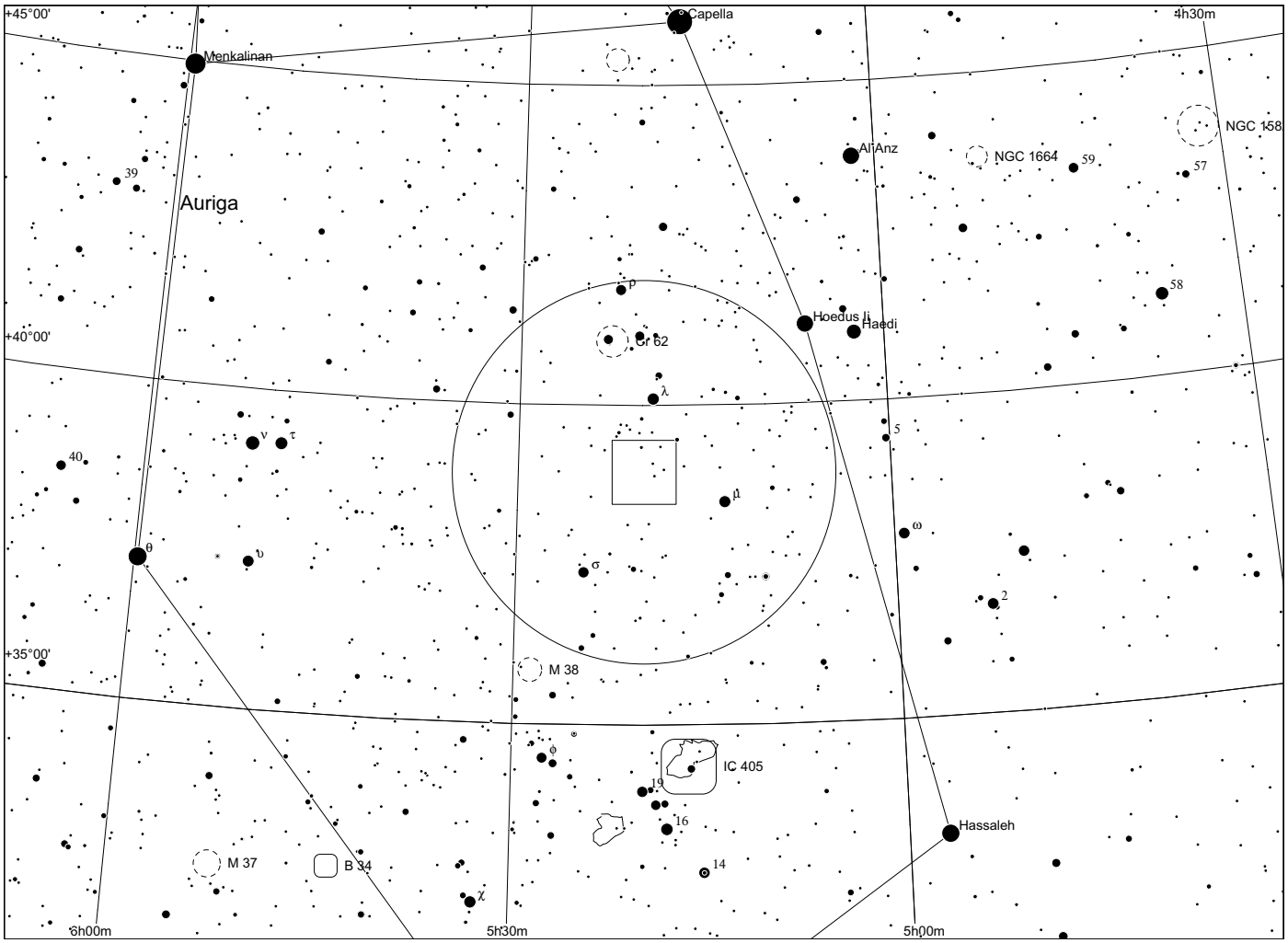


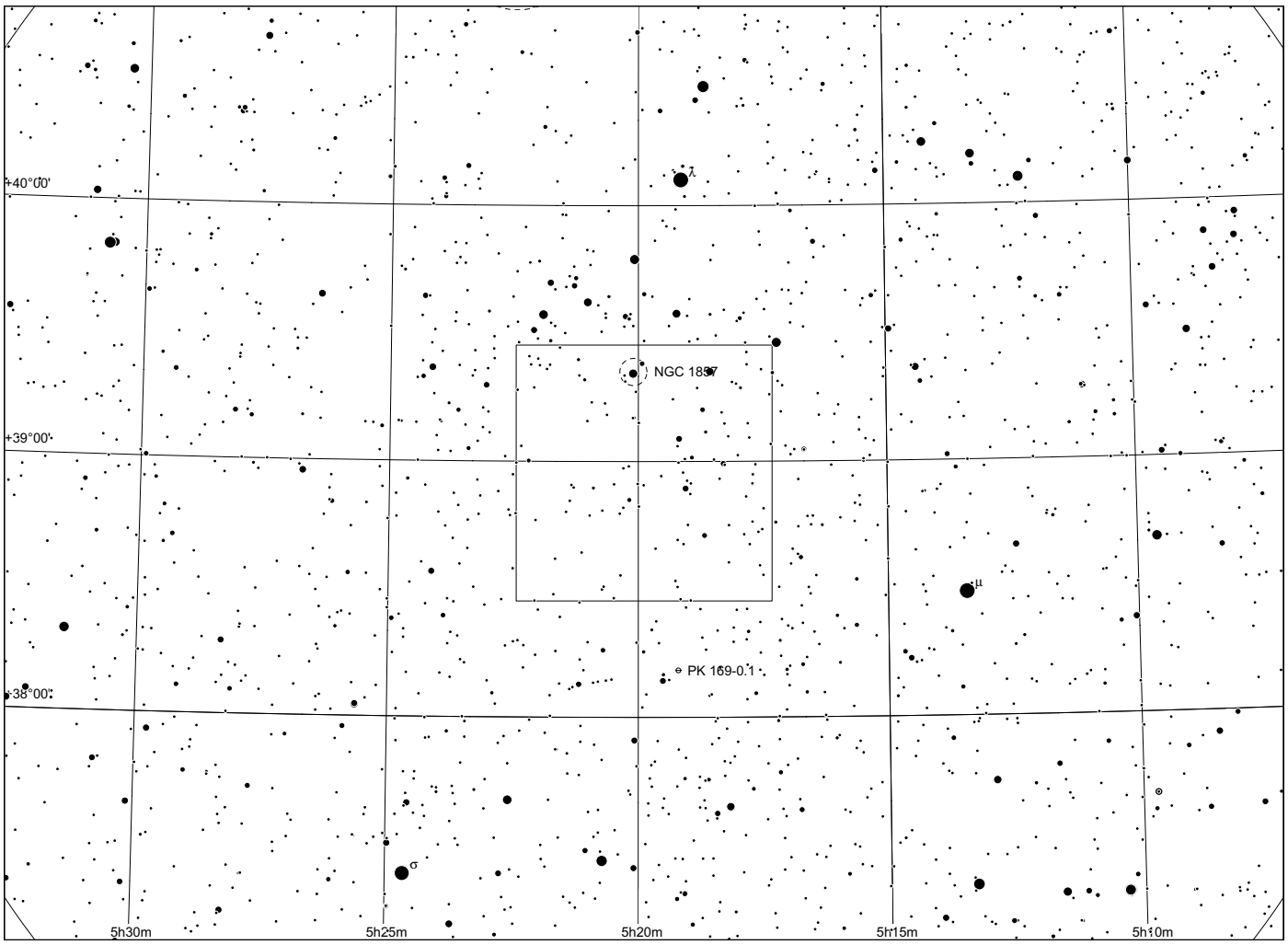
RGB Dean Salman

	other name	RA	dec	dia. '	F	S	B
Sh 2-227		05 19 52.8	+38 57 19	20	3	2	2

Distance: 4300 pc, Size: 25.0 pc, Source: 1982ApJS...49..183B

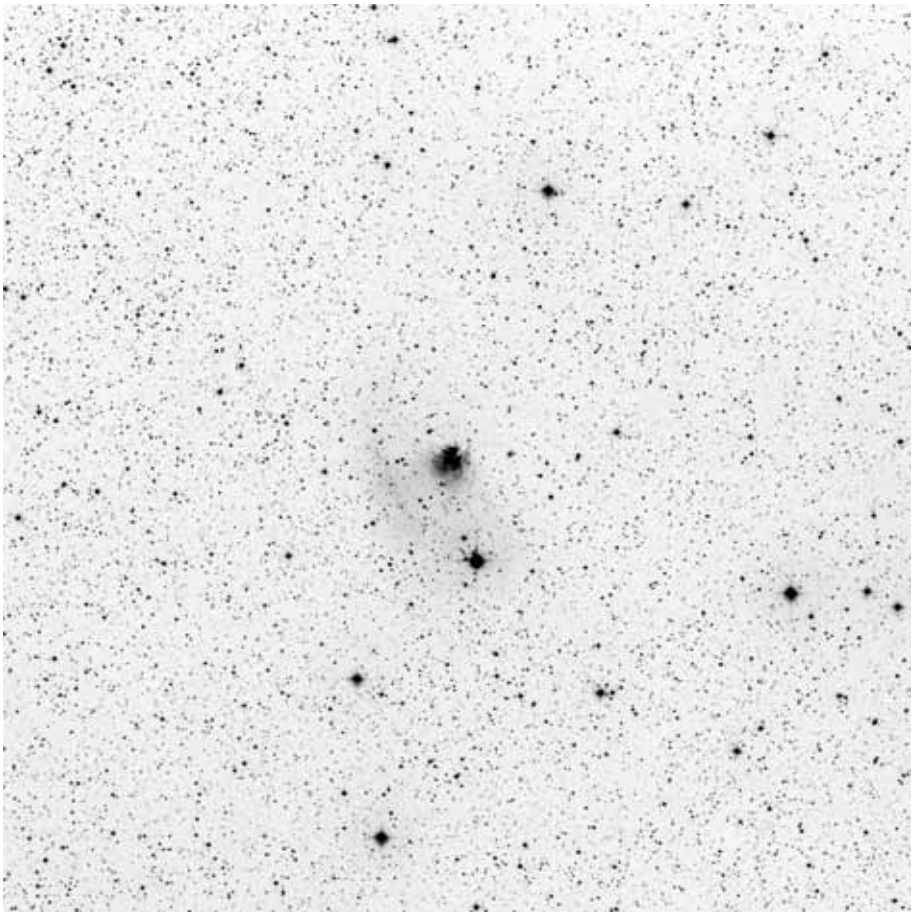
Observing notes:


+45°00'
Capella
4h30m
Menkalinan
NGC 1582
Al Anz
NGC 1664
59
57
39
Auriga
58
Hoedus II
Haedi
+40°00'
Cr 62
λ
5
40
ν
τ
μ
ω
θ
υ
σ
2
+35°00'
M 38
φ
IC 405
19
16
Hassaleh
M 37
B 34
14
χ
6h00m
5h30m
5h00m

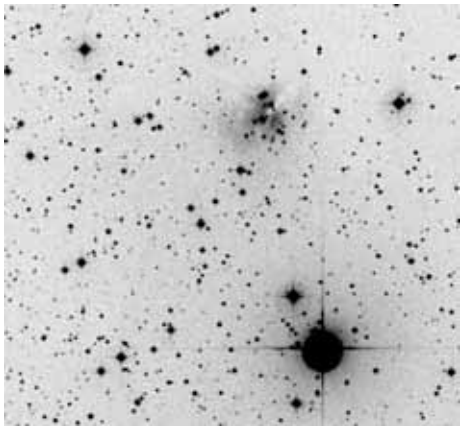

+40°00'
λ
NGC 1857
+39°00'
μ
PK 169-0.1
+38°00'
σ
5h30m
5h25m
5h20m
5h15m
5h10m

Sh 2 - 228

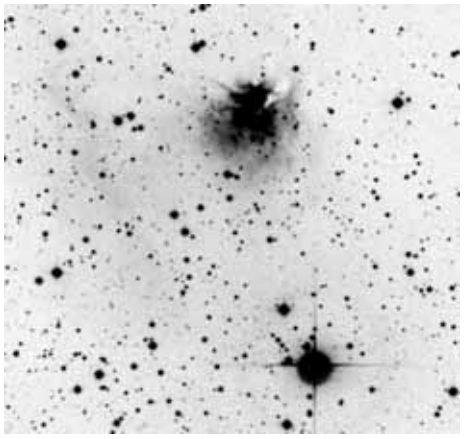
in Auriga



60x60, red



POSS blue



POSS red



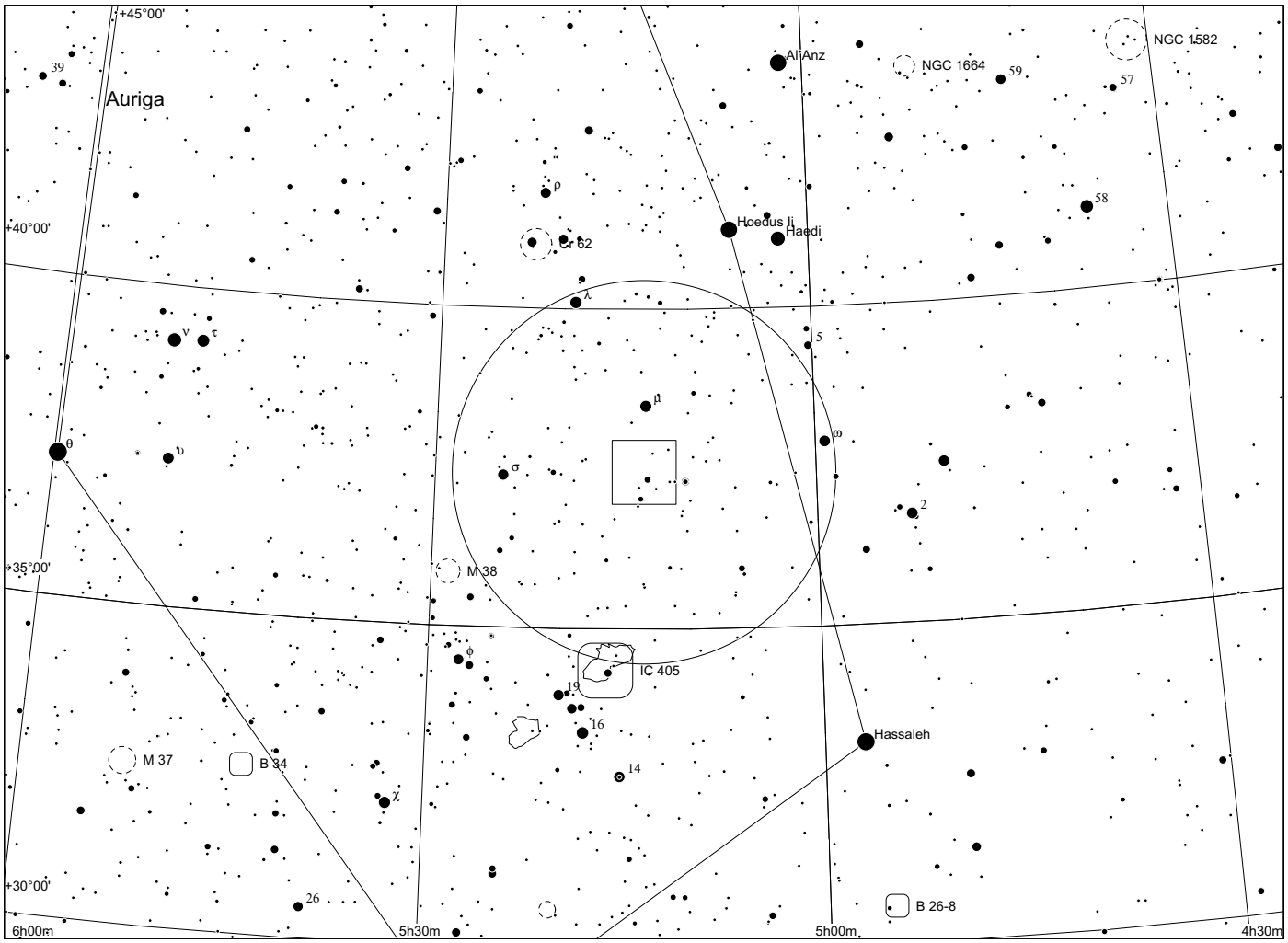
composite

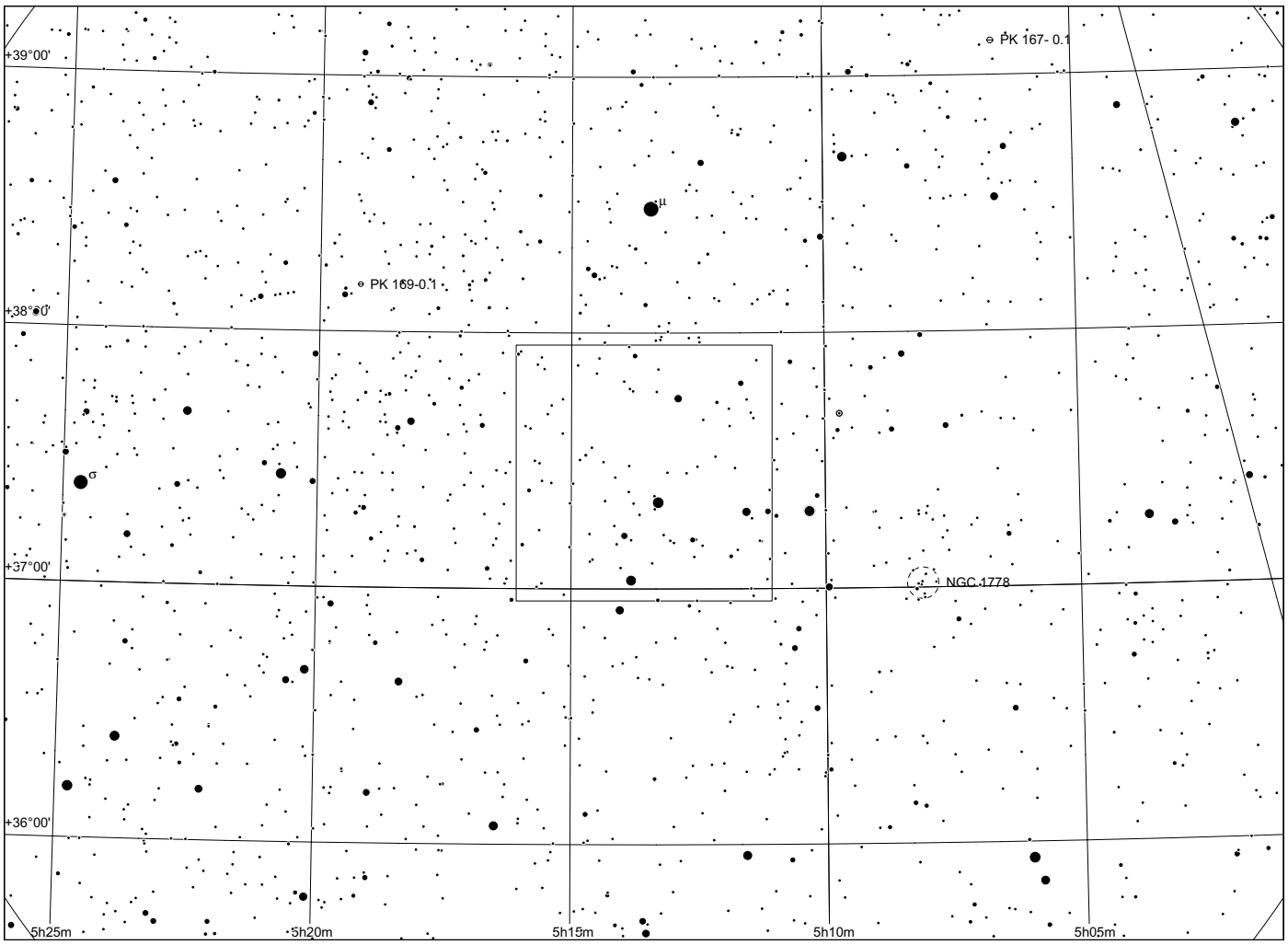
	other name	RA	dec	dia. '	F	S	B
Sh 2-228		05 13 34.7	+37 27 12	8	3	2	3

Distance: 7926 pc, Size: 9.2 pc, Source: 2003A&A...397..213P

Sh 2-228 contains the massive infrared star cluster [IBP2002] CC01. (This is misidentified in SIMBAD as a possible globular cluster.) The 1800 solar mass cluster is 1 to 2 million years old, and the surrounding field stars about 5-6 million years old.

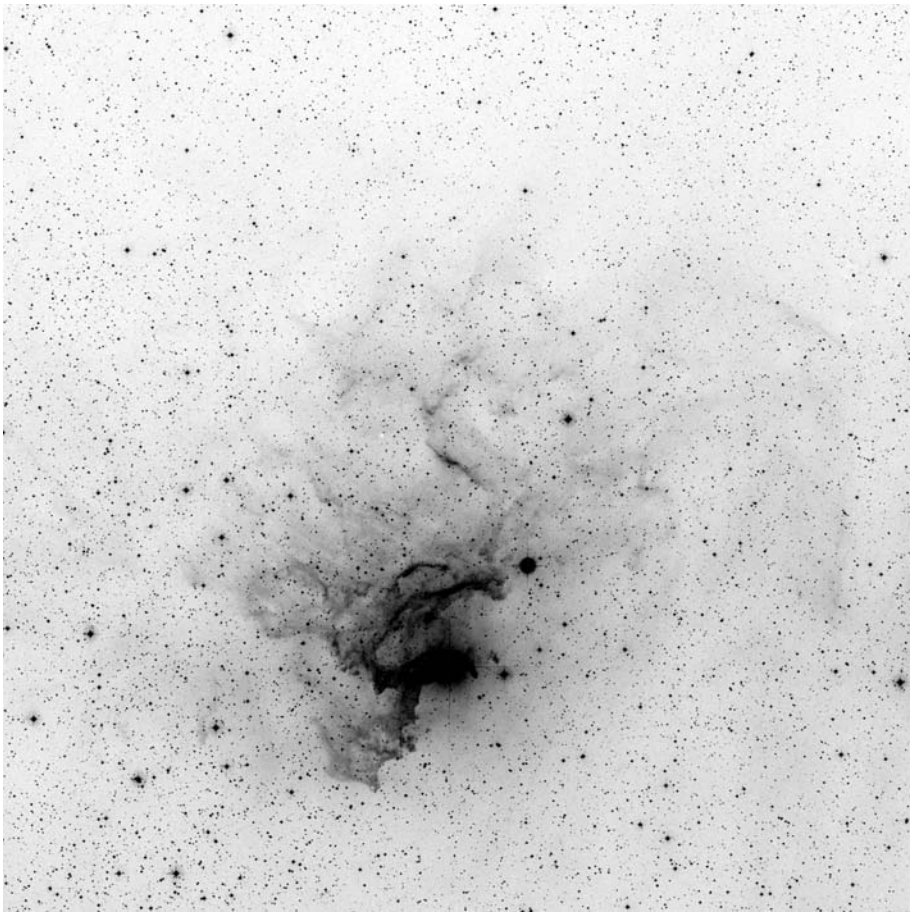
Observing notes:


+45°00'
Auriga
39
Al'Anz
NGC 1582
NGC 1664
59
57
58
+40°00'
Cr 62
Hoedus Ii
Haedi
5
2
+35°00'
M 38
IC 405
19
16
Hassaleh
M 37
B 34
14
+30°00'
26
B 26-8
6h00m
5h30m
5h00m
4h30m

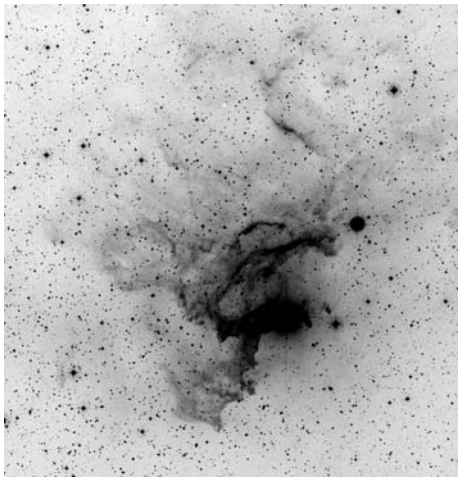

PK 167- 0.1
+39°00'
PK 169-0.1
+38°00'
+37°00'
NGC 1778
+36°00'
5h25m
5h20m
5h15m
5h10m
5h05m

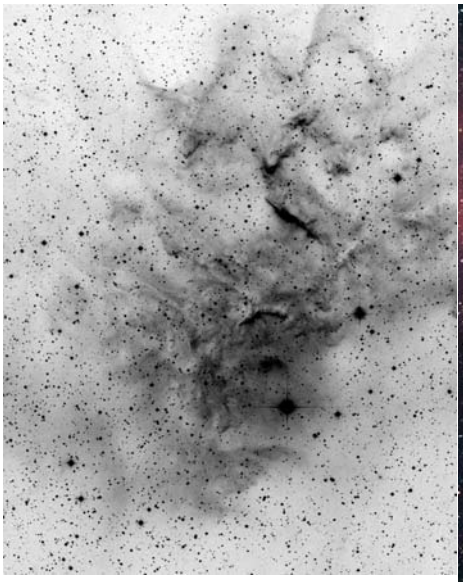
Sh 2 - 229

in Auriga



60x60, blue







POSS blue

POSS red

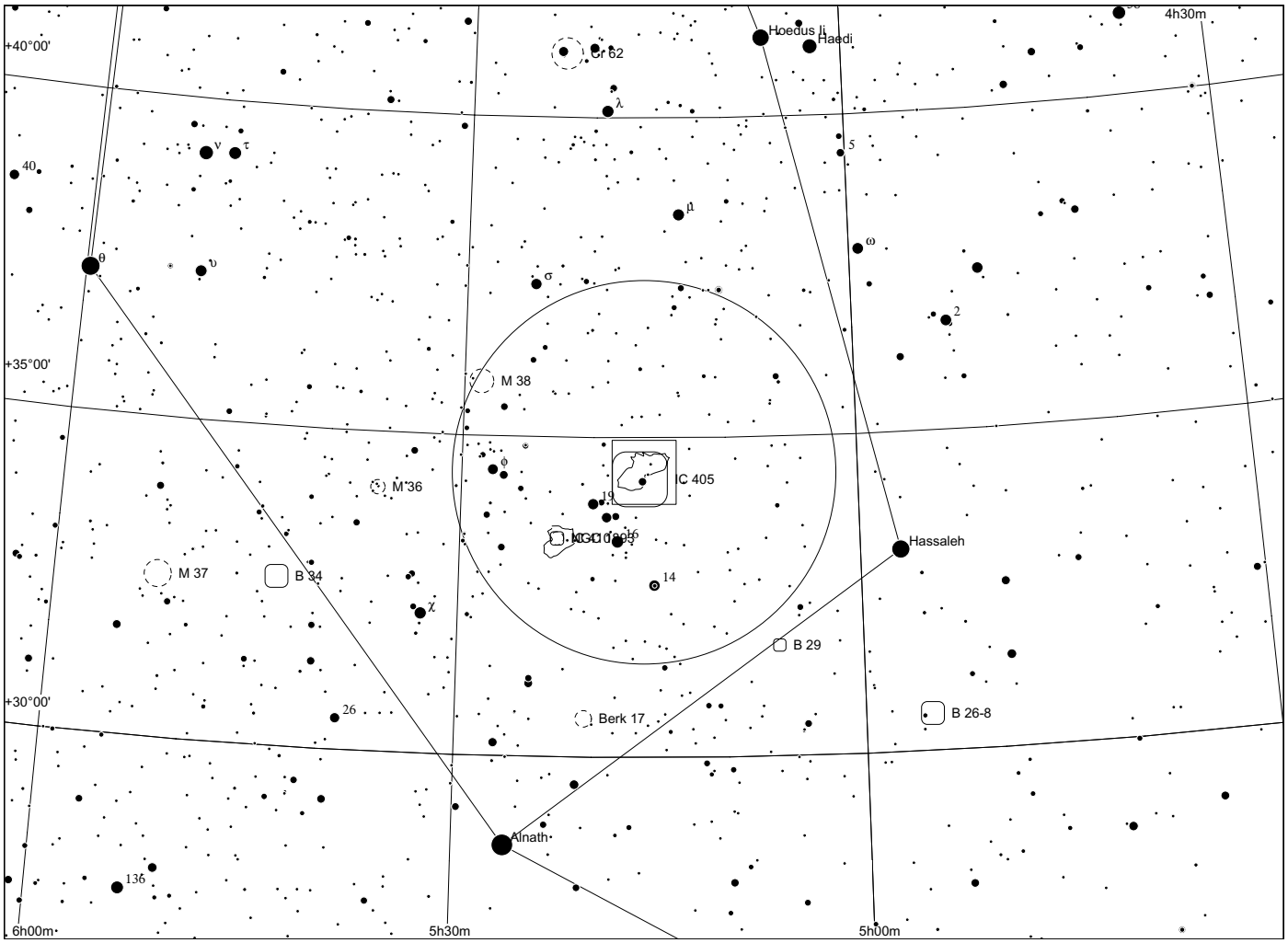
RGB Dean Salman

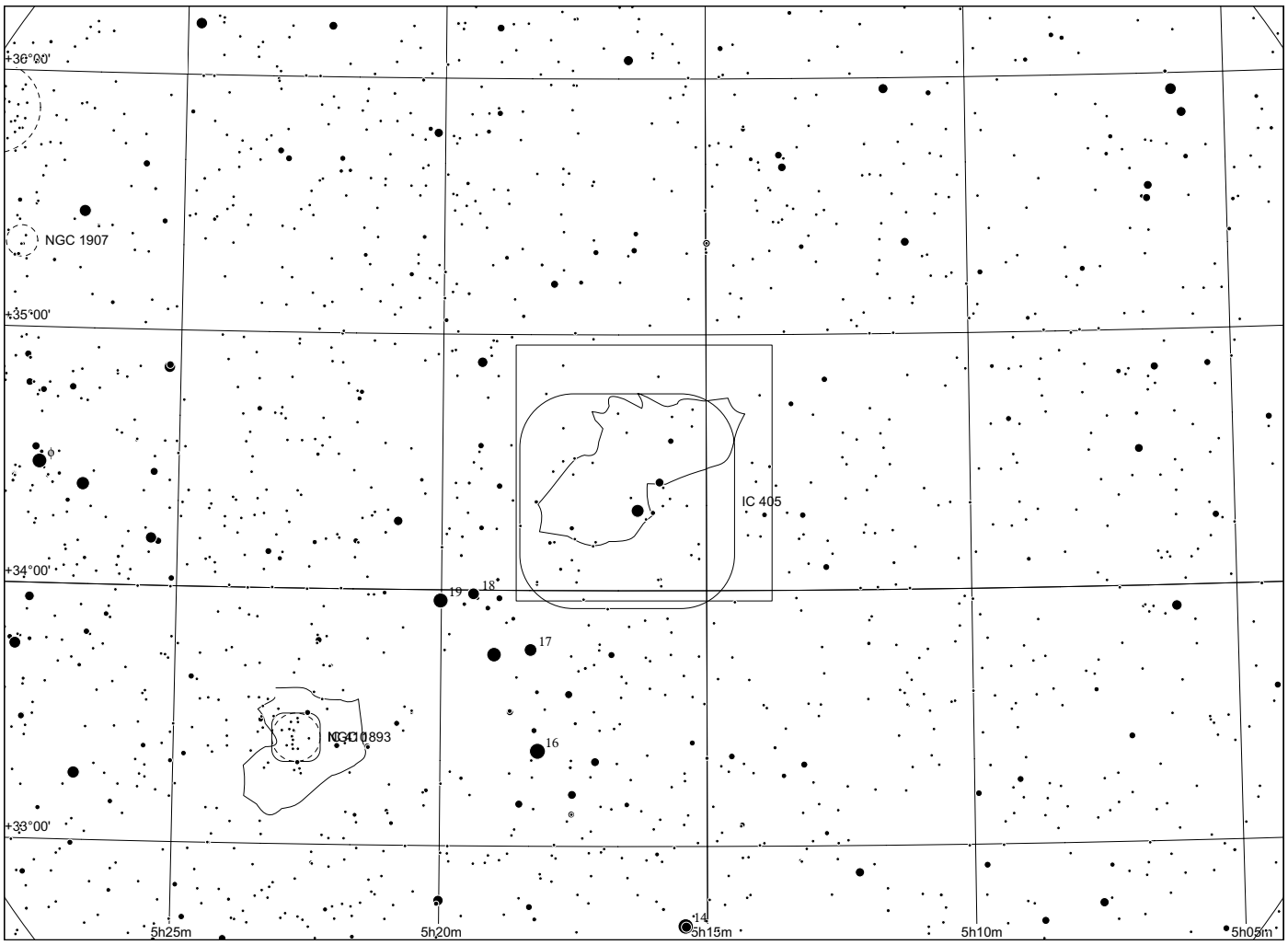
	other name	RA	dec	dia. '	F	S	B
Sh 2-229	IC 405, Flaming Star N., LBN 795	05 16 18.6	+34 27 48	65	3	2	3

Distance: 510 pc, Size: 9.6 pc, Source: 1982ApJS...49..183B

The Flaming Star nebula, IC 405, is excited by the runaway O9.5Ve star AE Aurigae, which is believed to have been knocked out of Orion's Trapezium cluster by an interstellar collision about 2.5 million years ago..

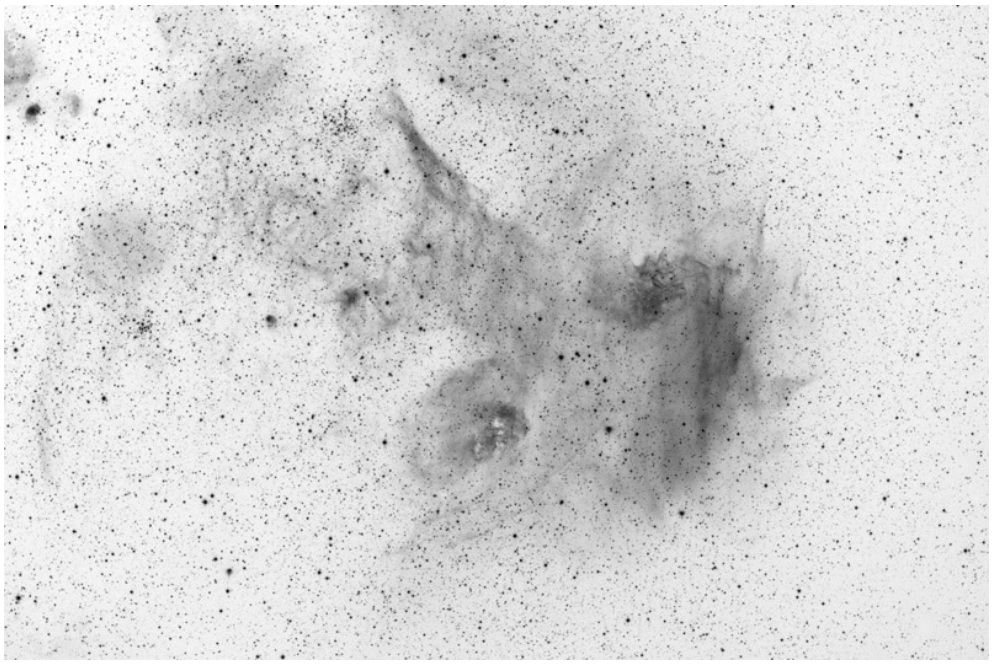
Observing notes:


4h30m
+40°00'
Hoedus Ii
Haedi
Cr 52
λ
ν
τ
40
5
μ
ω
θ
υ
σ
2
+35°00'
M 38
φ
M 36
IC 405
19
16
NGC 1893
Hassaleh
M 37
B 34
14
χ
B 29
+30°00'
26
Berk 17
B 26-8
Alnath
136
6h00m
5h30m
5h00m

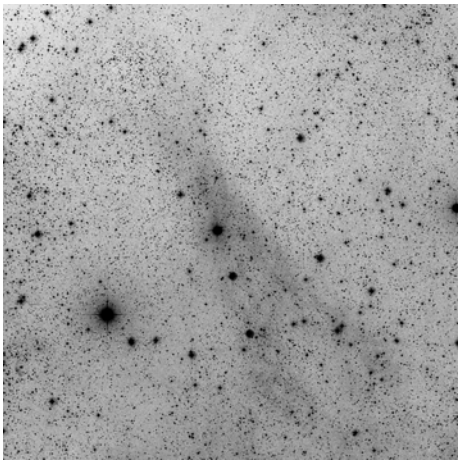

+36°00'
NGC 1907
+35°00'
φ
IC 405
+34°00'
19
18
17
NGC 1893
16
+33°00'
14
5h25m
5h20m
5h15m
5h10m
5h05m

Sh 2 - 230

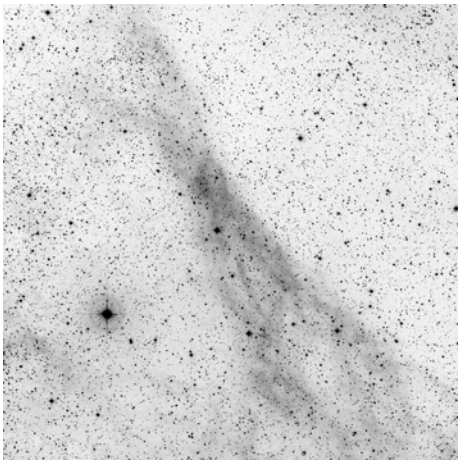
in Auriga



H alpha by Dean Salman
www.sharplesscatalog.com



POSS blue



POSS red



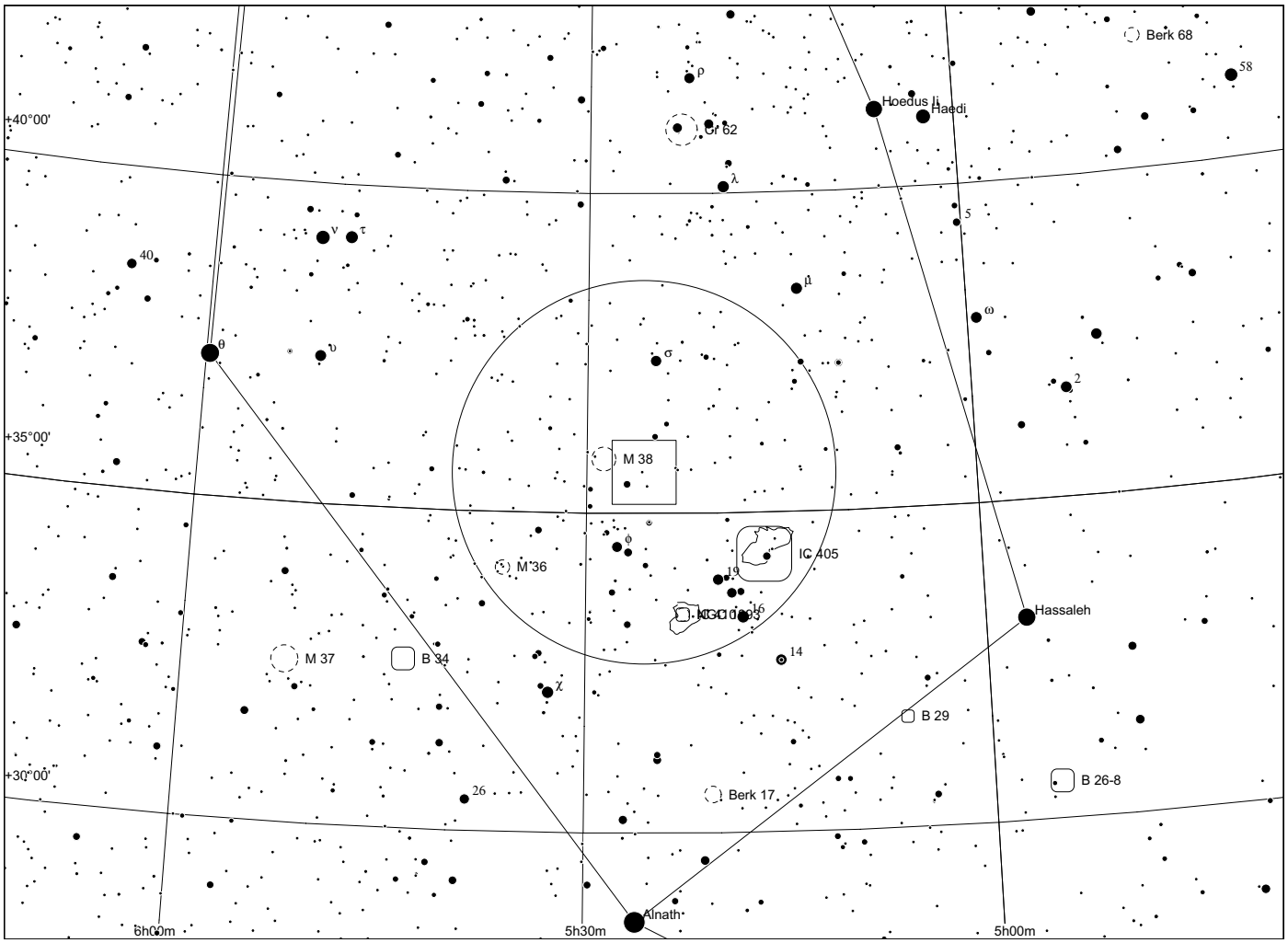
RGB Dean Salman

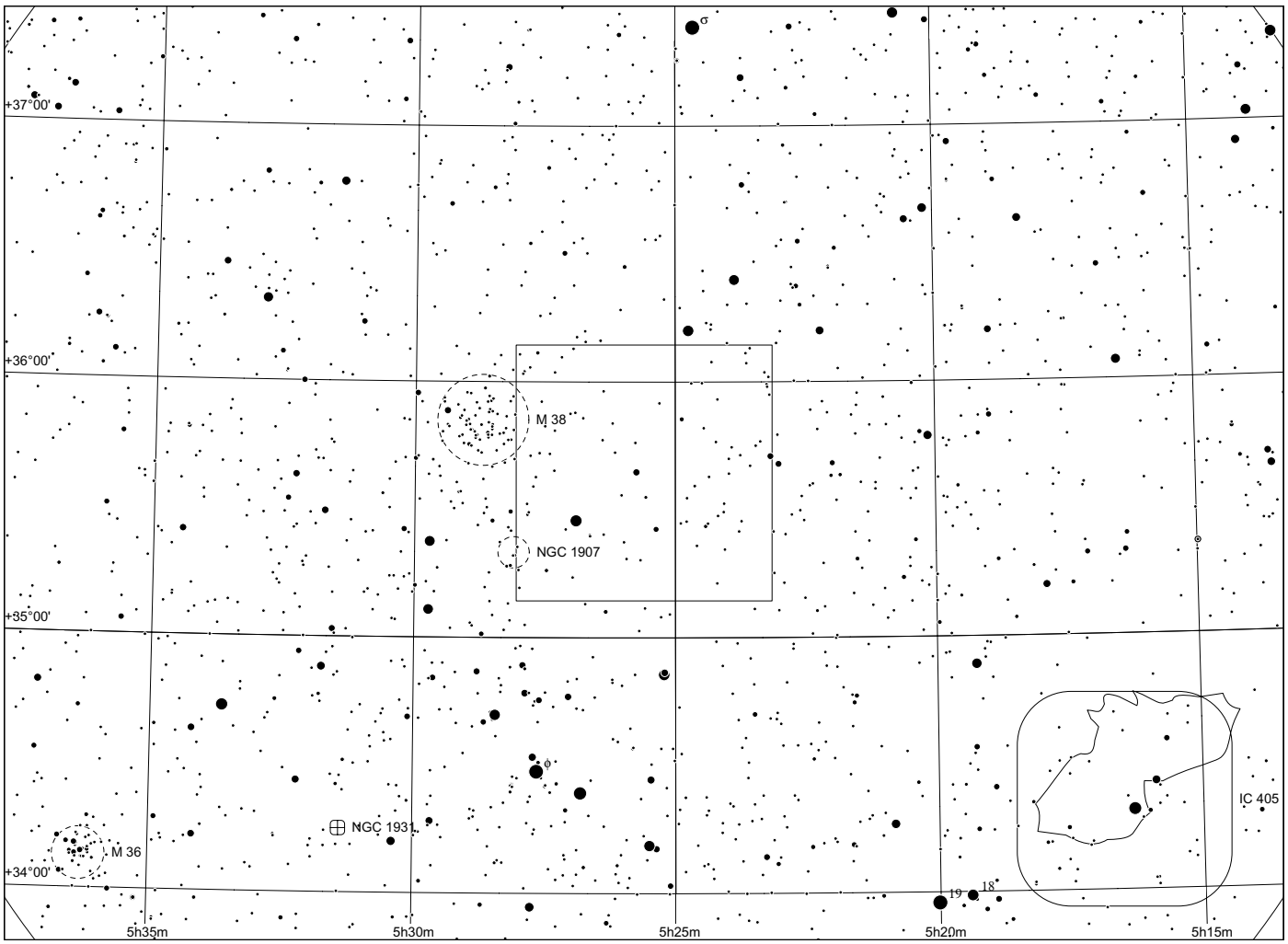
	other name	RA	dec	dia. '	F	S	B
Sh 2-230		05 22 30.3	+34 07 55	300	3	2	2

Distance: 3200 pc, Size: 279.4 pc, Source: 1999A&A...348..600P

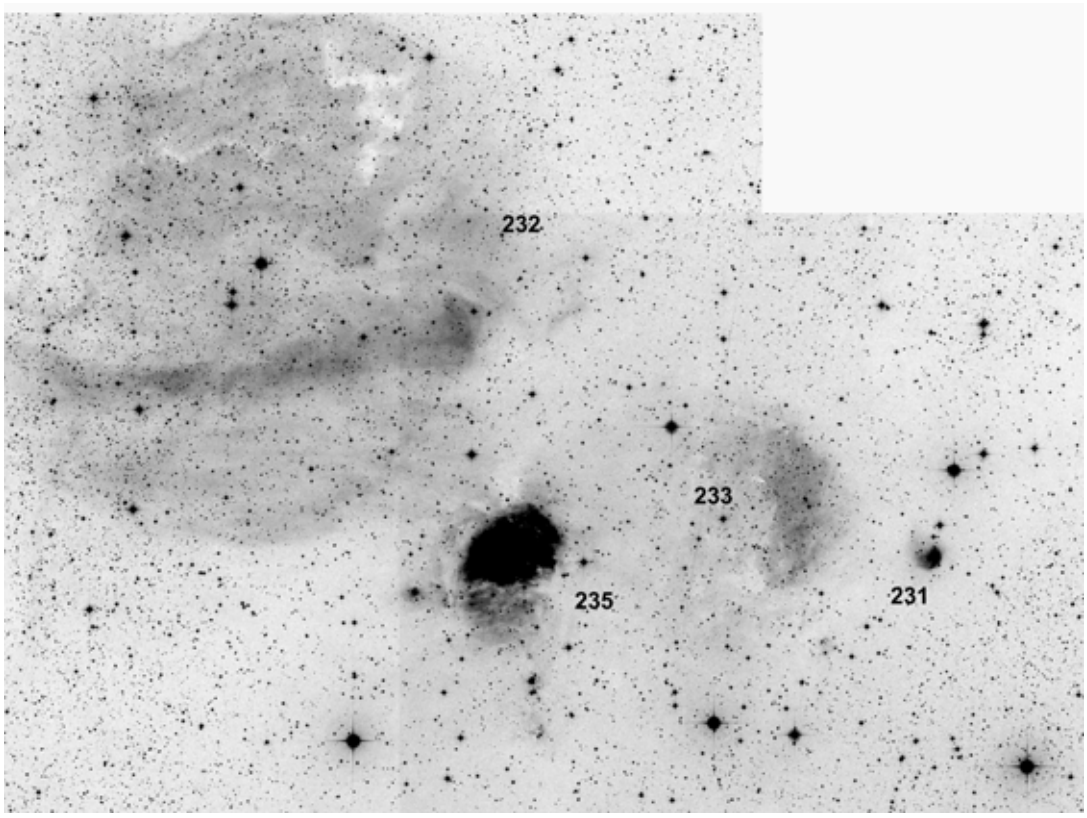
This enormous nebula appears to surround the Auriga OB2 association in the outer galaxy.

Observing notes:

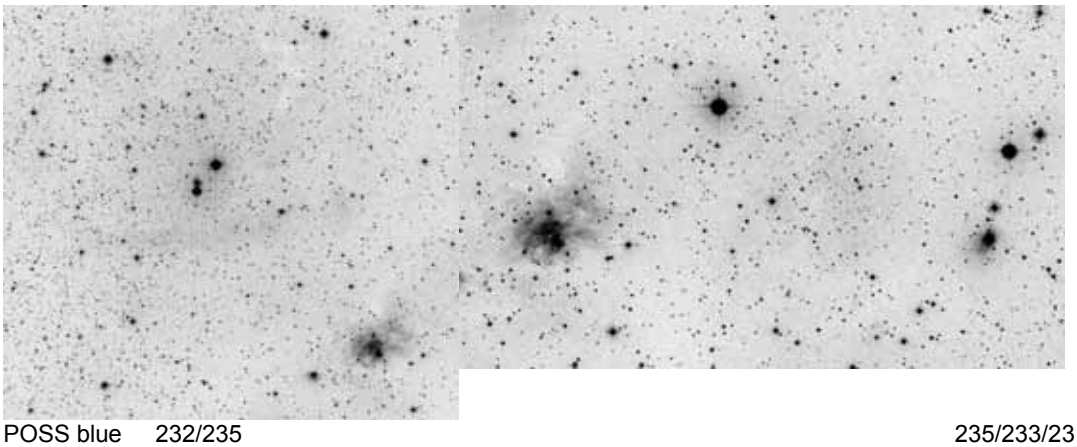

Berk 68
58
Hoedus II
Haedi
+40°00'
Cr 62
p
λ
5
ν
τ
40
μ
ω
θ
υ
σ
2
+35°00'
M 38
M 36
φ
IC 405
19
NGC 1893
16
Hassaleh
M 37
B 34
14
χ
B 29
+30°00'
26
Berk 17
B 26-8
Alnath
6h00m
5h30m
5h00m


σ
+37°00'
+36°00'
M 38
NGC 1907
+35°00'
φ
IC 405
NGC 1931
M 36
+34°00'
19
18
5h35m
5h30m
5h25m
5h20m
5h15m

Sh 2 - 231 /232/233/235 in Auriga



100x60, red



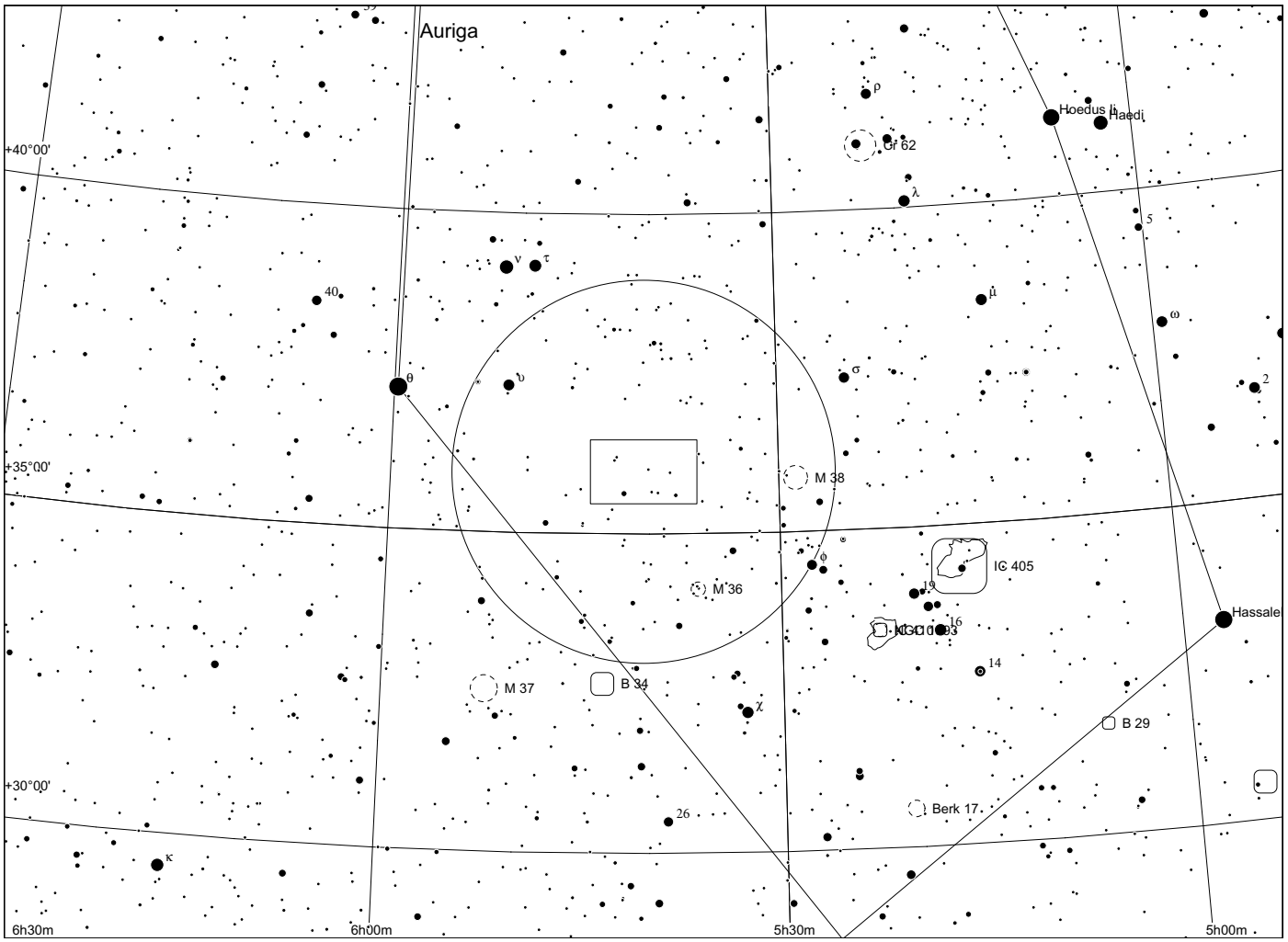
POSS blue 232/235 235/233/231

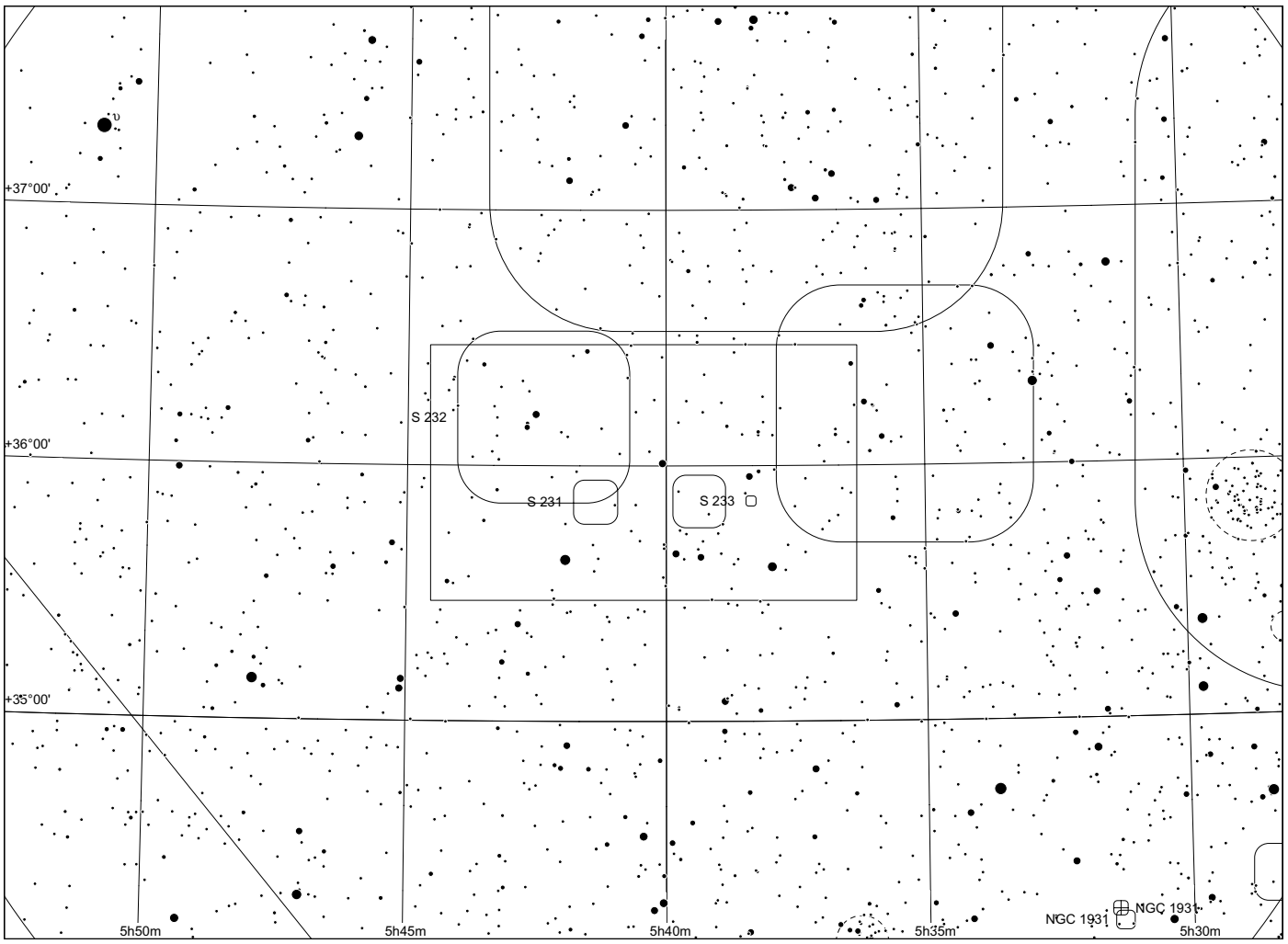
	other name	RA	dec	dia. '	F	S	B
Sh 2-231		05 39 18.9	+35 55 30	12	3	1	2
Sh 2-232		05 42 26.4	+36 12 03	40	2	2	2
Sh 2-233		05 38 42.6	+35 47 35	2	3	2	2
Sh 2-235		05 41 00.8	+35 51 15	10	3	2	3

Distance: 1800 pc, Source: 1996ApJ...463..630H

There is a giant molecular cloud containing Sh 2-231, Sh 2-232, Sh 2-233, and Sh 2-235 that is at a distance of about 1800 pc.

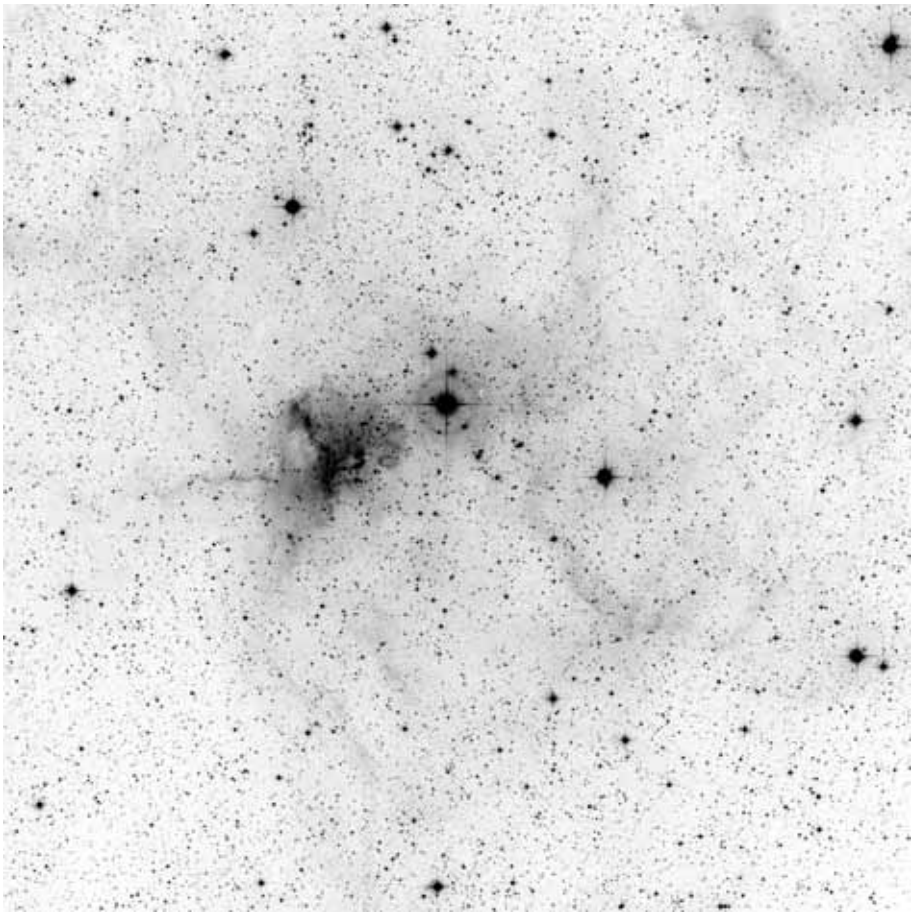
Observing notes:


Auriga
Hoedus II
Haedi
Cr 62
M 38
M 36
IC 405
NGC 1893
Hassale
M 37
B 34
B 29
Berk 17
+40°00'
+35°00'
+30°00'
6h30m
6h00m
5h30m
5h00m

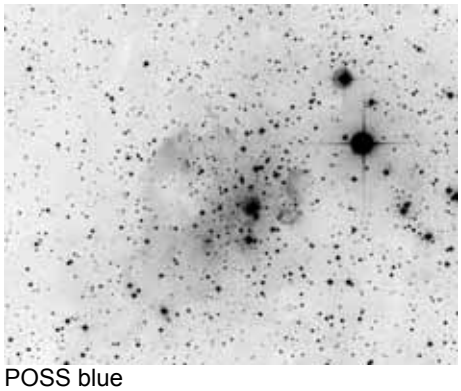

S 232
S 231
S 233
NGC 1931
+37°00'
+36°00'
+35°00'
5h50m
5h45m
5h40m
5h35m
5h30m

Sh 2 - 234

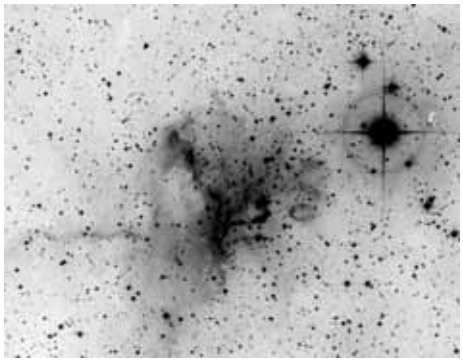
in Auriga



60x60, red



POSS blue



POSS red

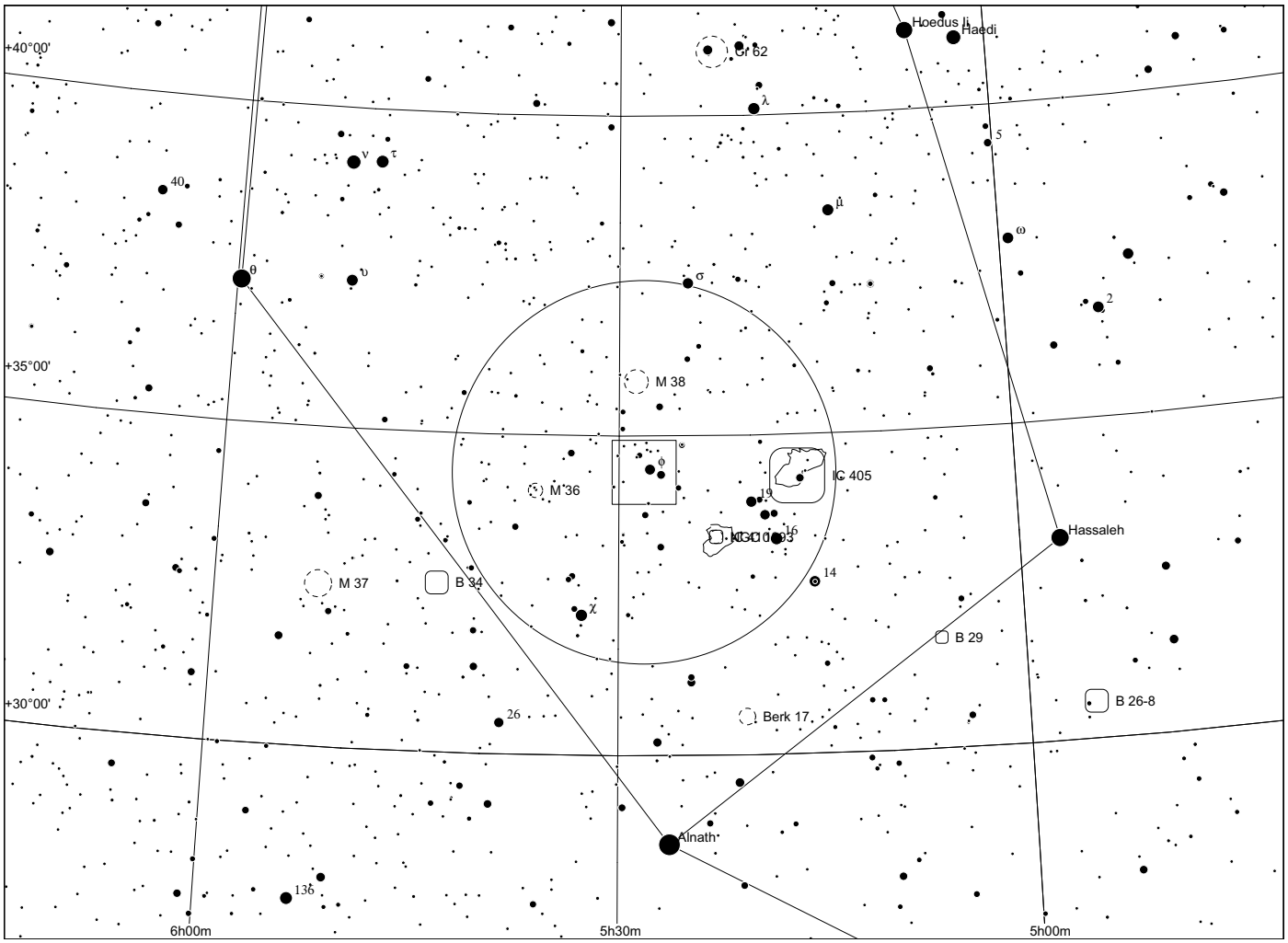


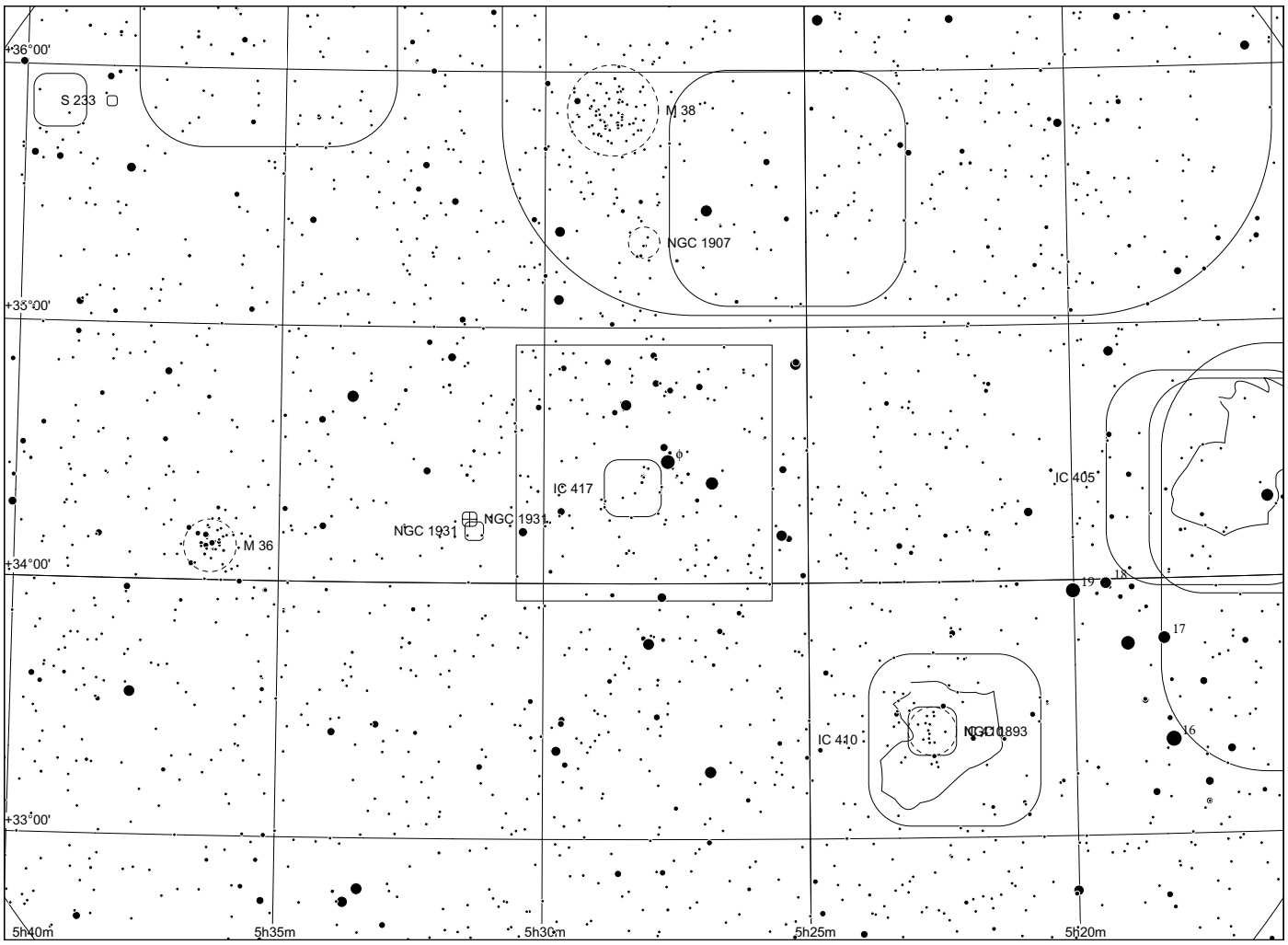
	other name	RA	dec	dia. '	F	S	B
Sh 2-234	IC 417	05 28 07.0	+34 26 06	12	3	2	3

Distance: 2300 pc, Size: 8.0 pc, Source: 1982ApJS...49..183B

This is IC 417, sometimes called the Spider nebula. Sharpless 2-234 and 2-237 are together sometimes called the Spider and the Fly.

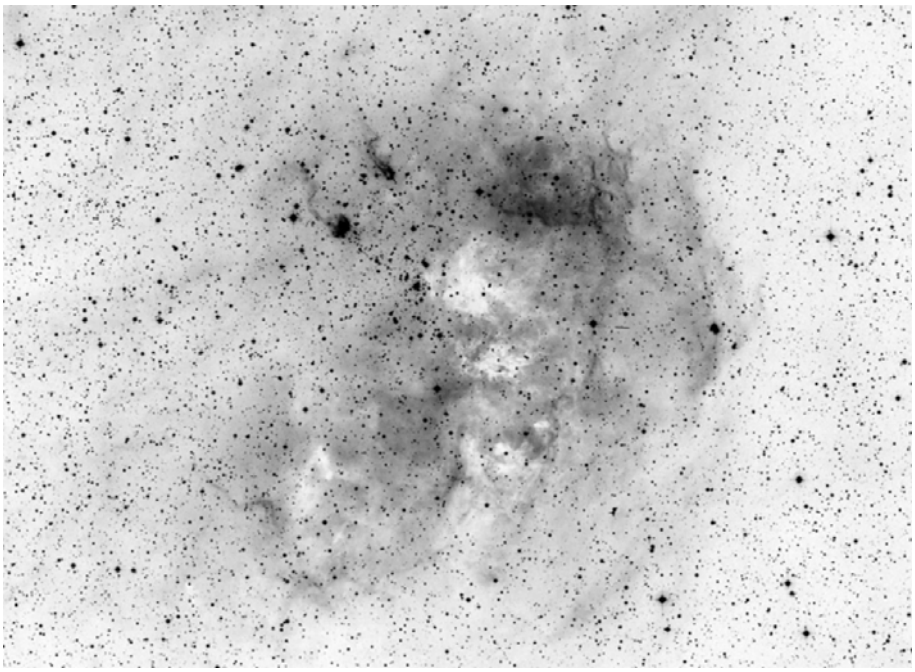
Observing notes:

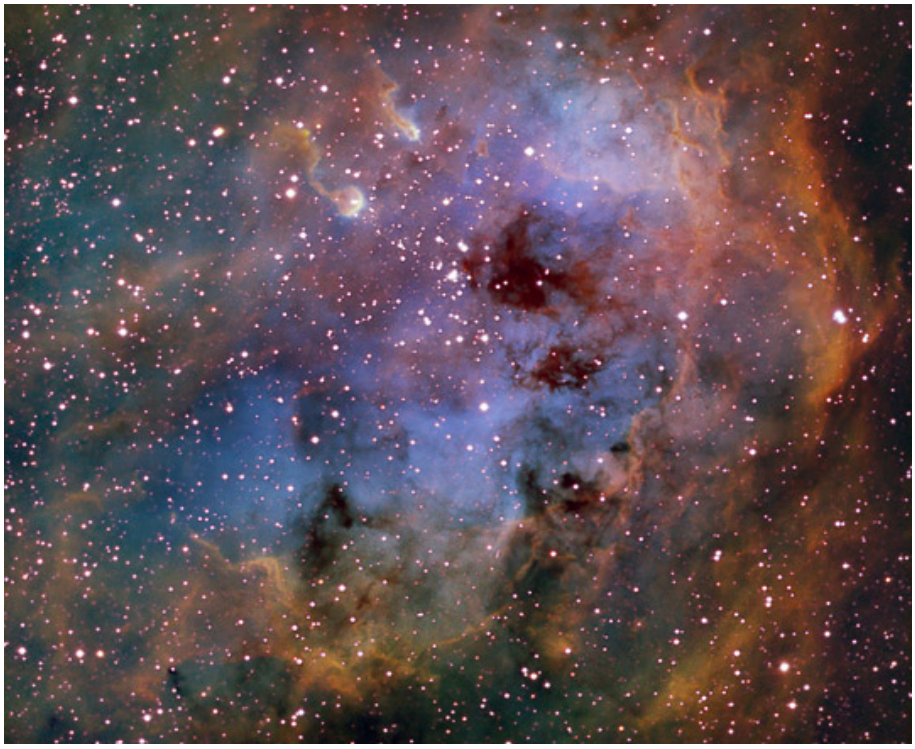

Hoedus II
Haedi
Cr 62
λ
5
ν
τ
40
μ
ω
θ
υ
σ
2
+40°00'
+35°00'
M 38
φ
M 36
IC 405
19
NGC 1893
16
Hassaleh
M 37
B 34
14
χ
B 29
+30°00'
26
Berk 17
B 26-8
Alnath
13
6h00m
5h30m
5h00m


+36°00'
S 233
M 38
NGC 1907
+35°00'
φ
IC 417
IC 405
NGC 1931
NGC 1931
M 36
+34°00'
19
18
17
IC 410
NGC 1893
16
+33°00'
5h40m
5h35m
5h30m
5h25m
5h20m

Sh 2 - 236

in Auriga





40x60, red

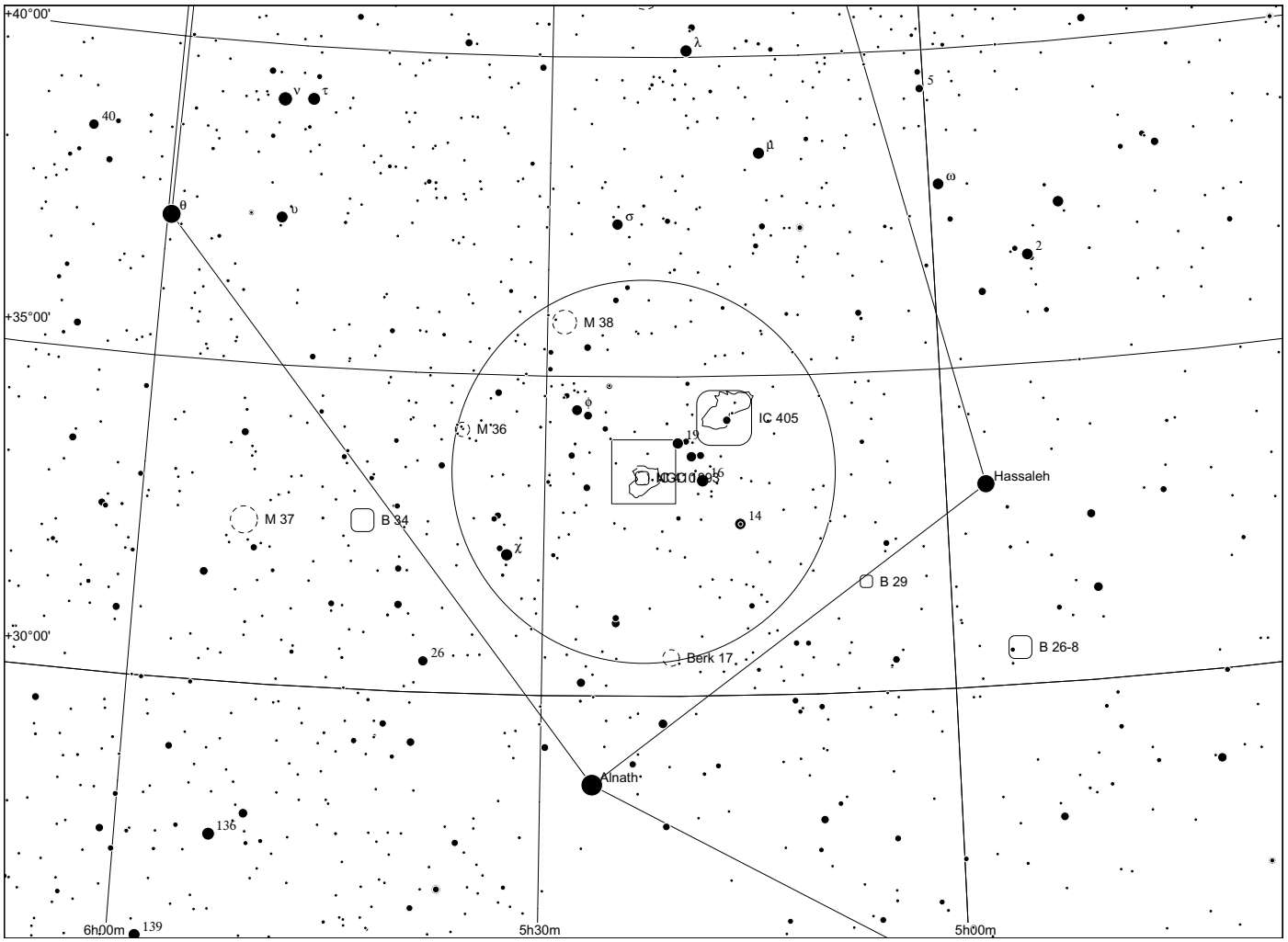
and narrowband
Dean Salman
www.sharplesscatalog.com

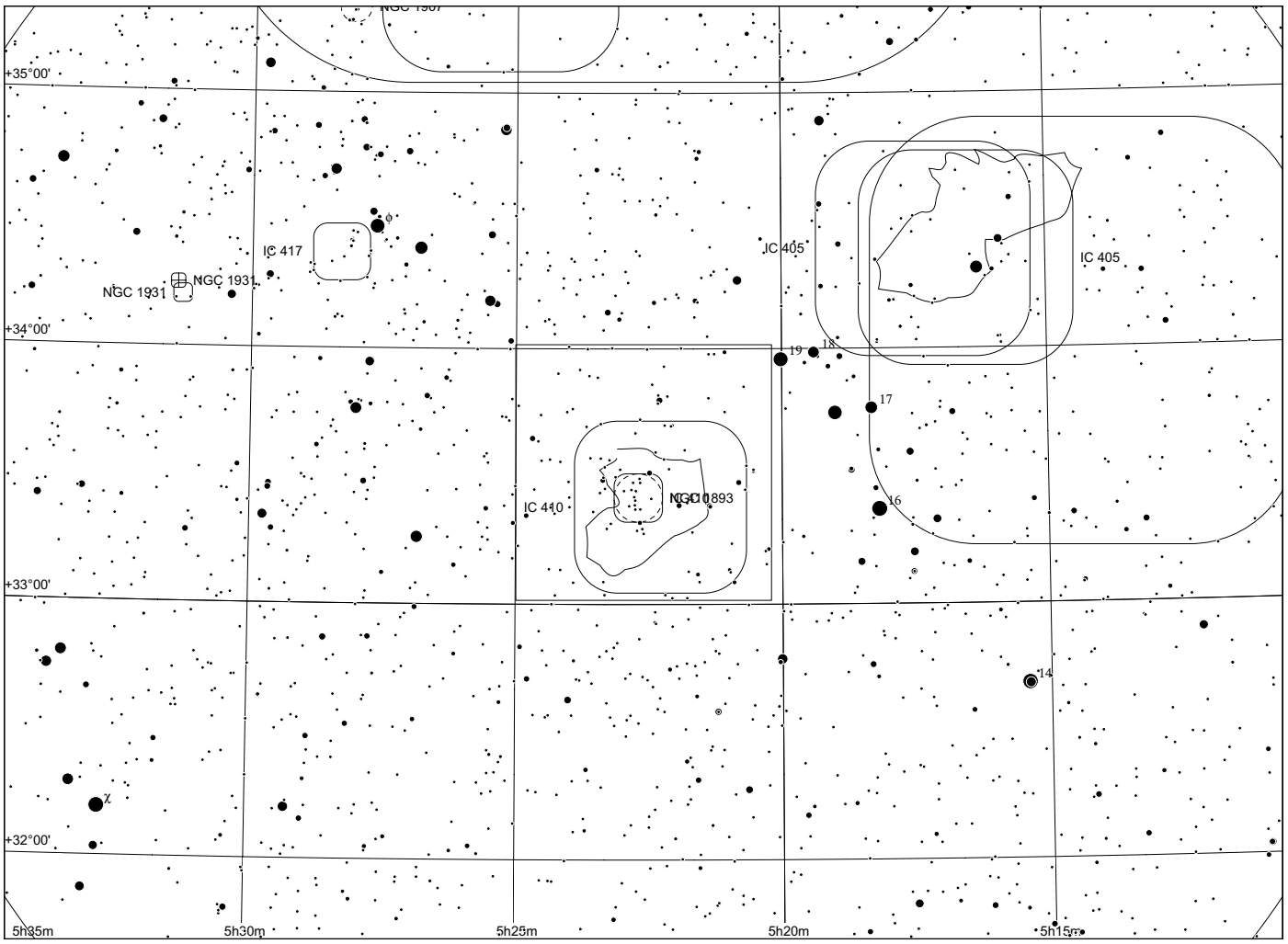
	other name	RA	dec	dia. '	F	S	B
Sh 2-236	IC 410	05 22 33.0	+33 21 54	55	3	2	3

Distance: 3200 pc, Size: 51.2 pc, Source: 1982ApJS...49..183B

Lying at the core of the Aur OB2 association, IC 410 (associated with the radio source W8) surrounds the star cluster NGC 1893 and is sometimes called the Tadpole nebula because of tadpole like structures visible in detailed images of the nebula. Since estimates put the distance of NGC 1893 at 4300, 4800, 6000 and 6025 pc, the current distance estimate for this nebula probably needs to be fixed. The Diaz et. al. star cluster catalog has 6000 pc for NGC 1893, so probably best to use that.

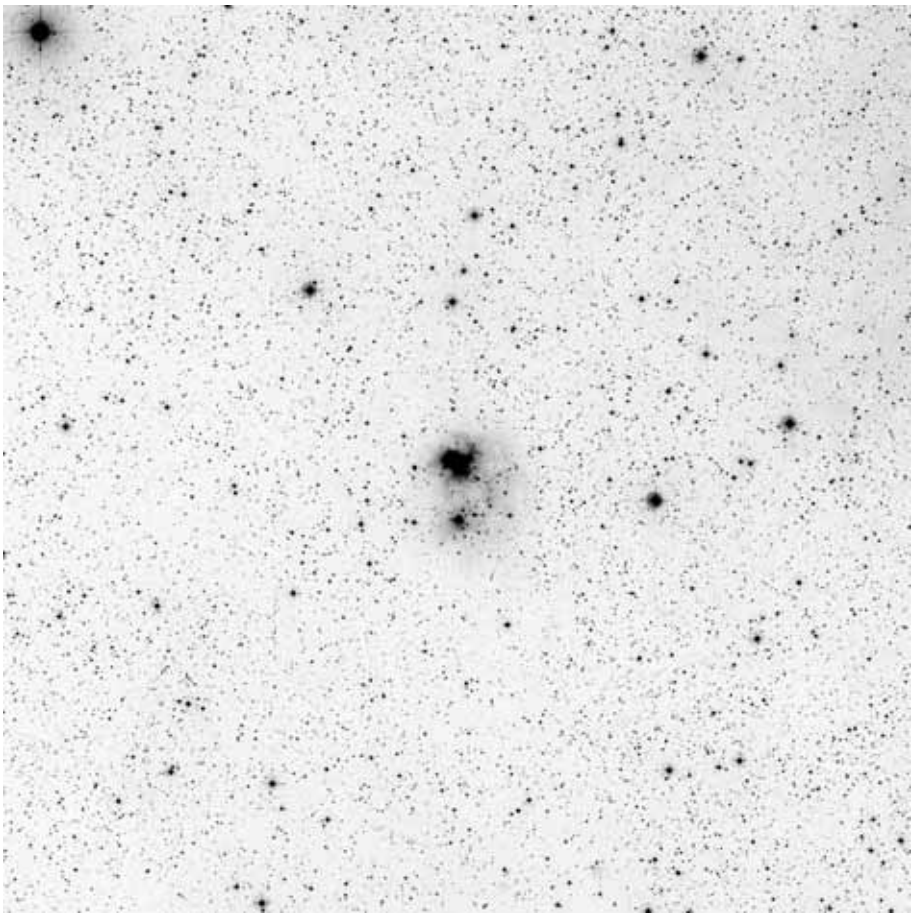
Observing notes:


+40°00'
+35°00'
+30°00'
6h00m
5h30m
5h00m
M 38
M 36
M 37
B 34
IC 405
NGC 10893
Hassaleh
B 29
B 26-8
Berk 17
Alnath
40
5
2
14
26
136
139

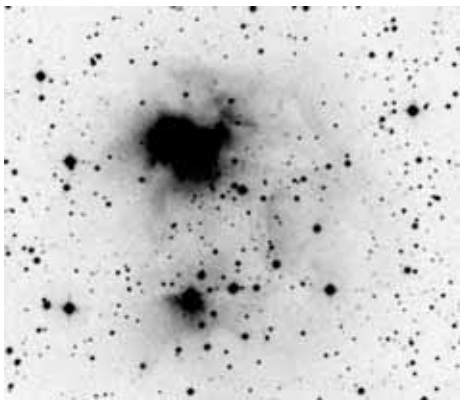

+35°00'
+34°00'
+33°00'
+32°00'
5h35m
5h30m
5h25m
5h20m
5h15m
IC 417
NGC 1931
NGC 1931
IC 405
IC 405
IC 410
NGC 10893
19
18
17
16
14

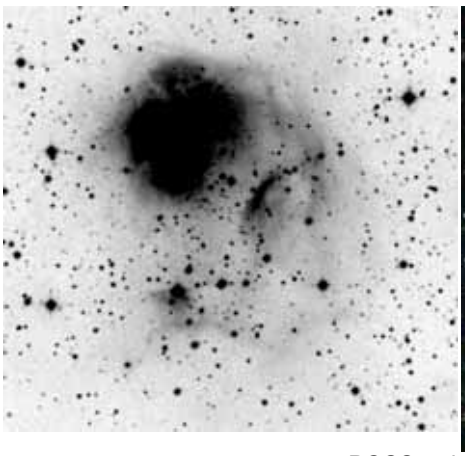
Sh 2 - 237

in Auriga



60x60, blue





POSS blue



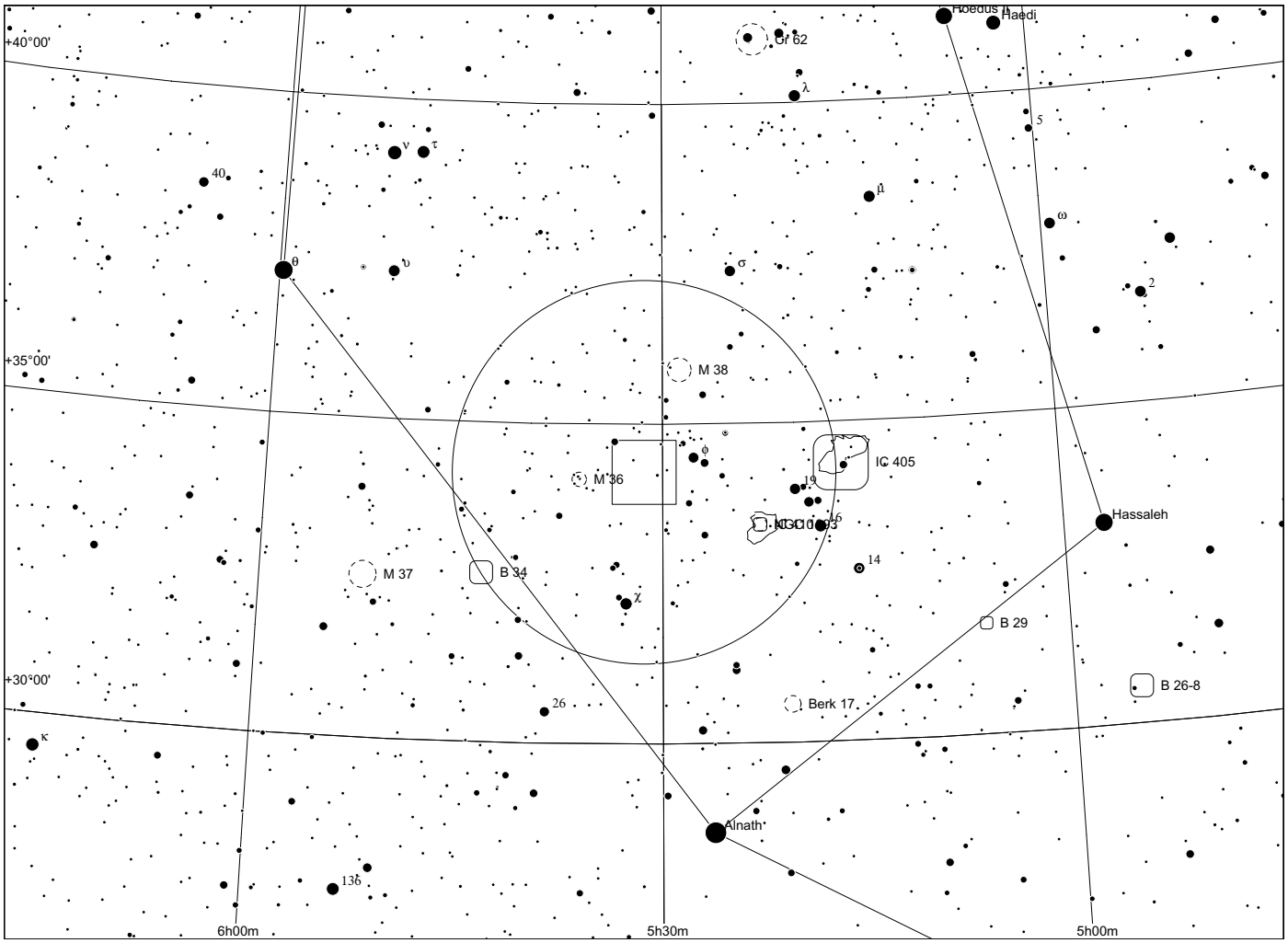
POSS red

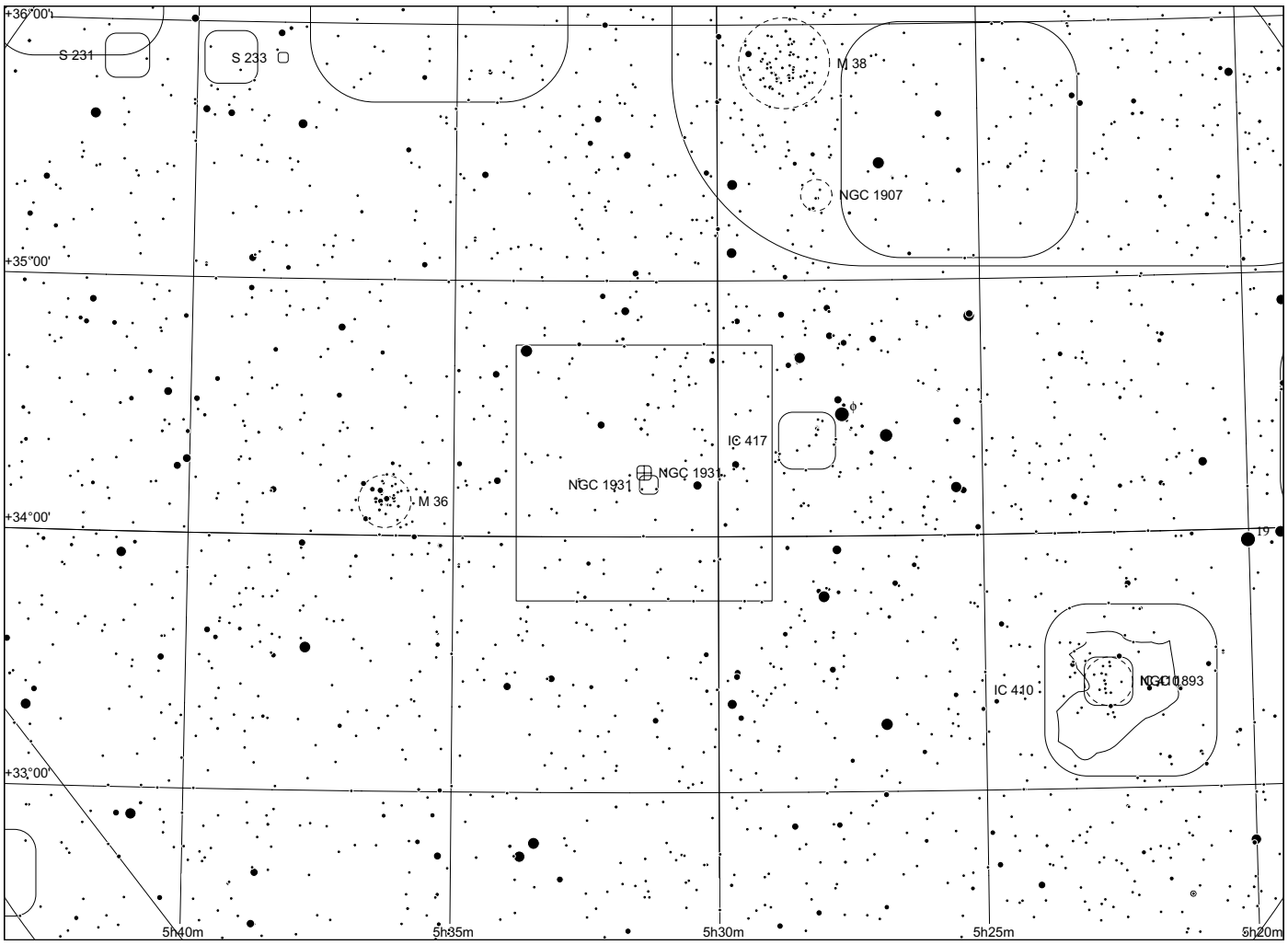
	other name	RA	dec	dia. '	F	S	B
Sh 2-237	NGC1931	05 31 24.8	+34 16 38	7	3	2	3

Distance: 1800 pc, Size: 3.7 pc, Source: 1982ApJS...49..183B

Sometimes called the Fly nebula, this surrounds open cluster NGC 1931. Sharpless 2-234 and 2-237 are together sometimes called the Spider and the Fly.

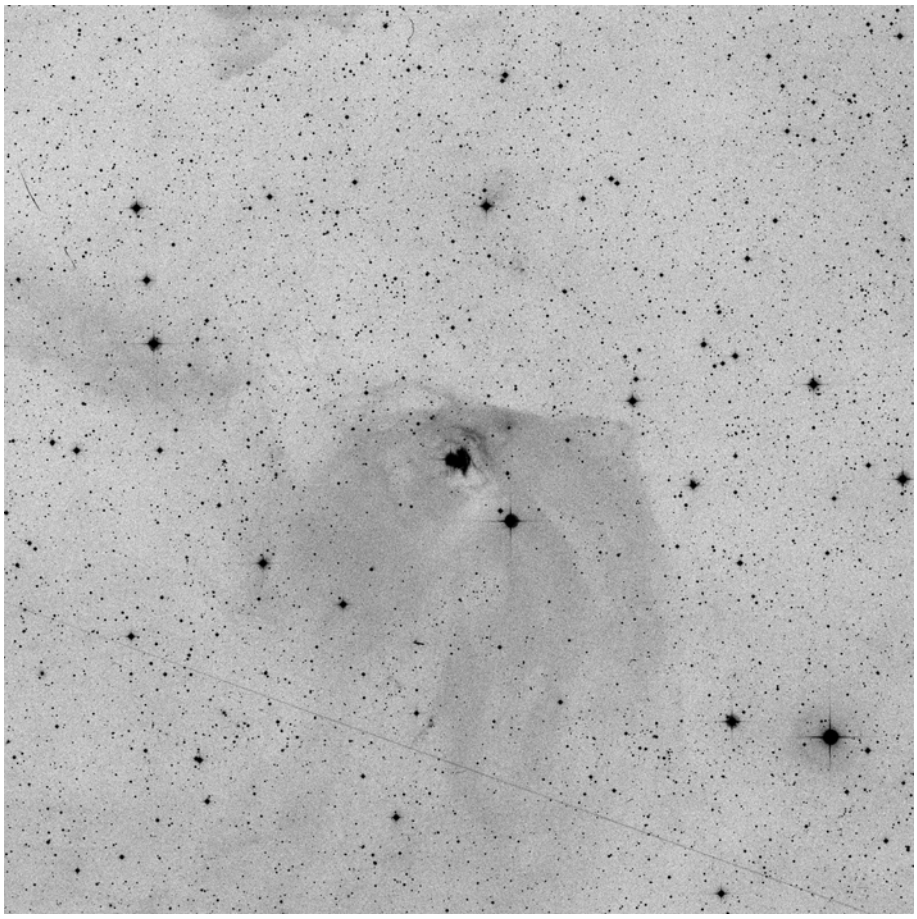
Observing notes:


Hoedus II
Haedi
Cr 62
λ
5
ν
τ
40
μ
ω
θ
υ
σ
2
+40°00'
+35°00'
M 38
φ
IC 405
M 36
19
NGC 1893
16
Hassaleh
14
M 37
B 34
χ
B 29
+30°00'
B 26-8
26
Berk 17
κ
Alnath
136
6h00m
5h30m
5h00m


+36°00'
S 231
S 233
M 38
NGC 1907
+35°00'
φ
IC 417
NGC 1931
NGC 1931
M 36
+34°00'
19
IC 410
NGC 1893
+33°00'
5h40m
5h35m
5h30m
5h25m
5h20m

Sh 2 - 238

in Taurus



60x60, red



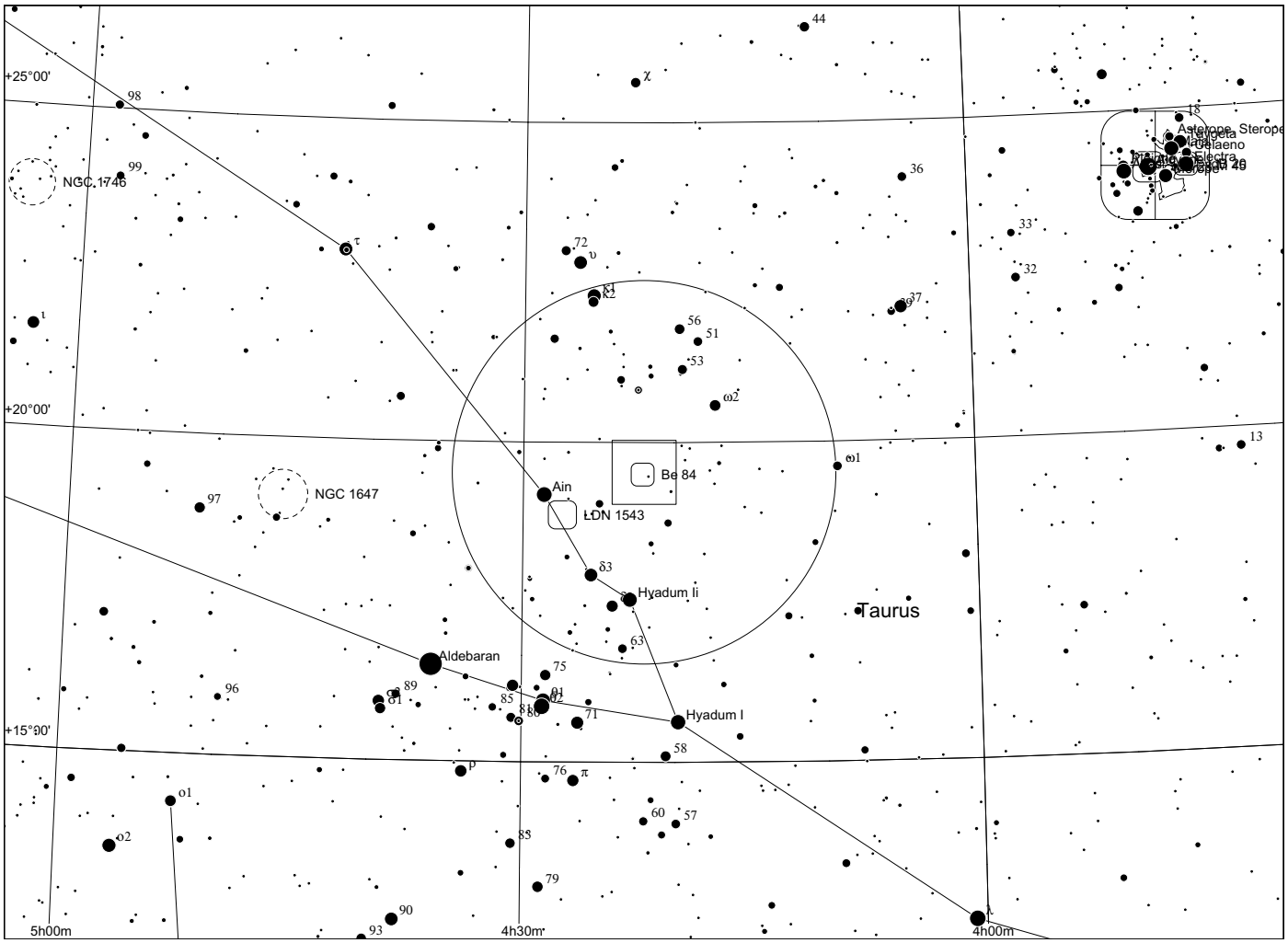
composite
Johannes Schedler
panther-observatory.com

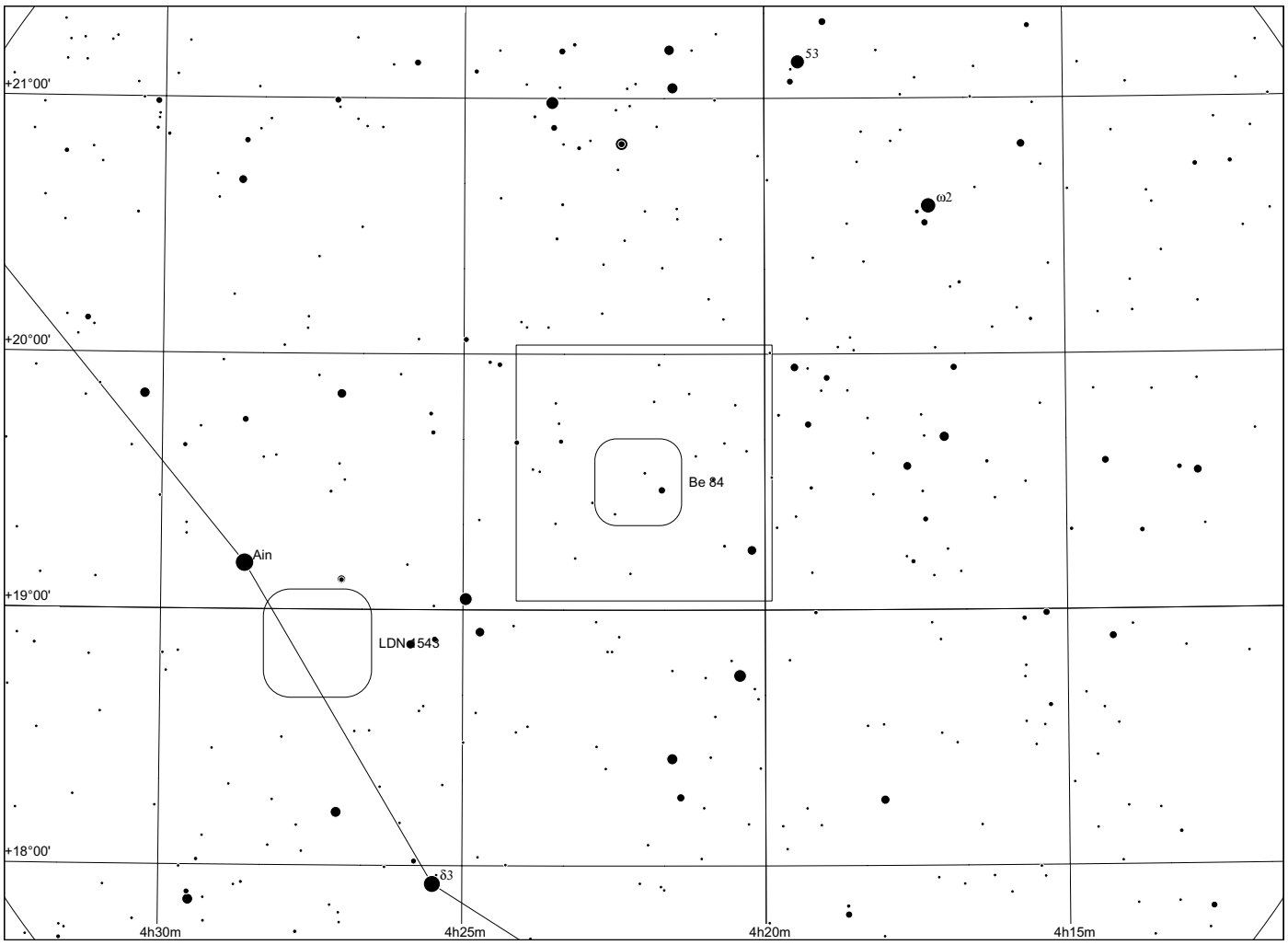
	other name	RA	dec	dia. '	F	S	B
Sh 2-238	NGC1554/1555	04 21 49.2	+19 32 16	1	3	2	3

Distance: 140 pc, Size: 0.0 pc, Source: 2003PASP..115..334M

Hind's nebula (NGC 1555) is a Herbig-Haro object associated with the T Tauri young star nebula.

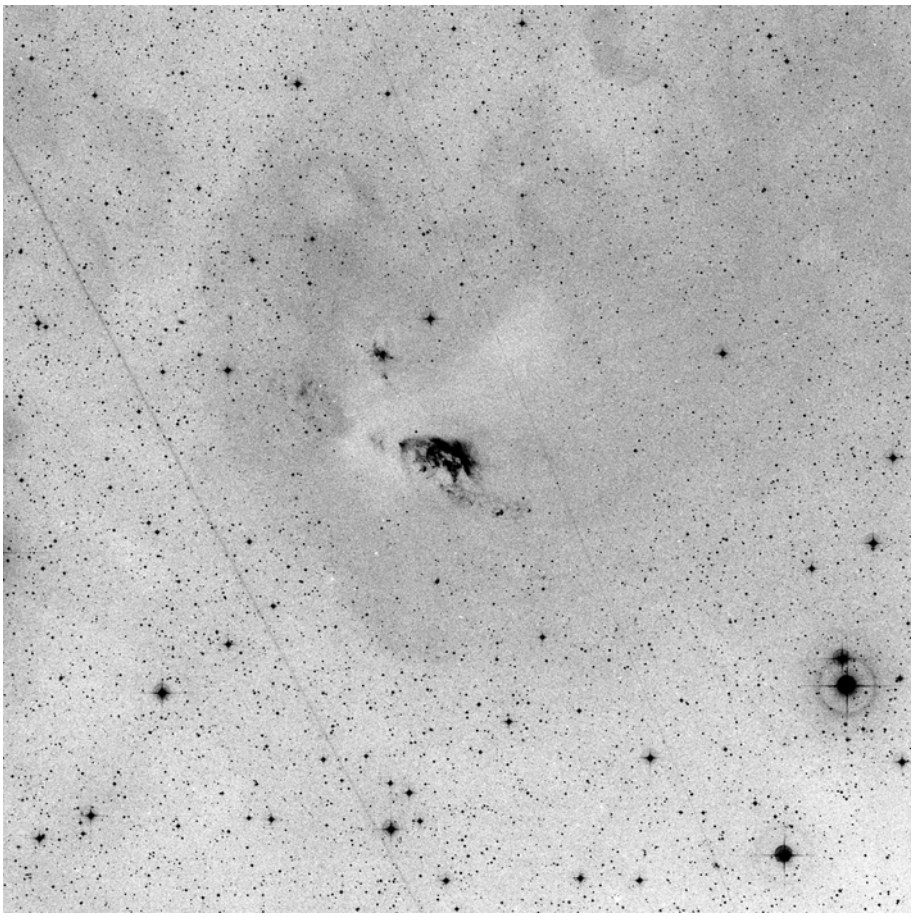
Observing notes:


+25°00'
+20°00'
+15°00'
5h00m
4h30m
4h00m
NGC 1746
NGC 1647
Be 84
Ain
LDN 1543
Hyadum Ii
Hyadum I
Aldebaran
Taurus
Asterope
Sterope
Celaeno
Electra
44
98
99
36
33
32
72
56
51
53
37
13
97
96
89
85
71
58
76
60
57
83
79
90
93

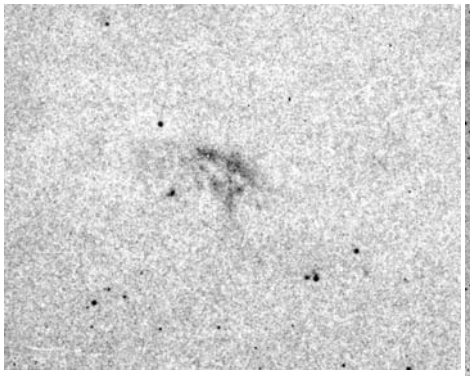

+21°00'
+20°00'
+19°00'
+18°00'
4h30m
4h25m
4h20m
4h15m
53
Be 84
Ain
LDN 1543

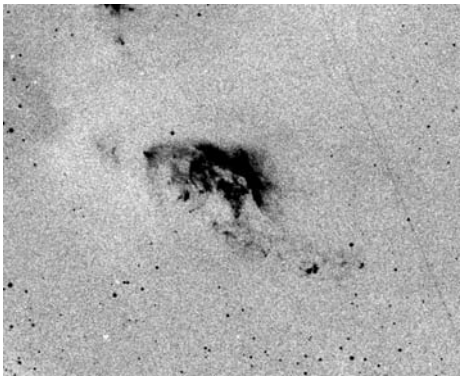
Sh 2 - 239

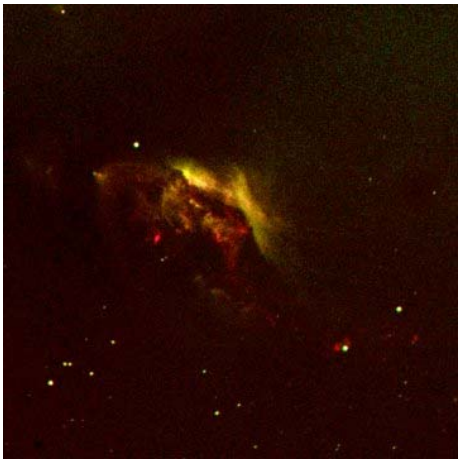
in Taurus



60x60, red







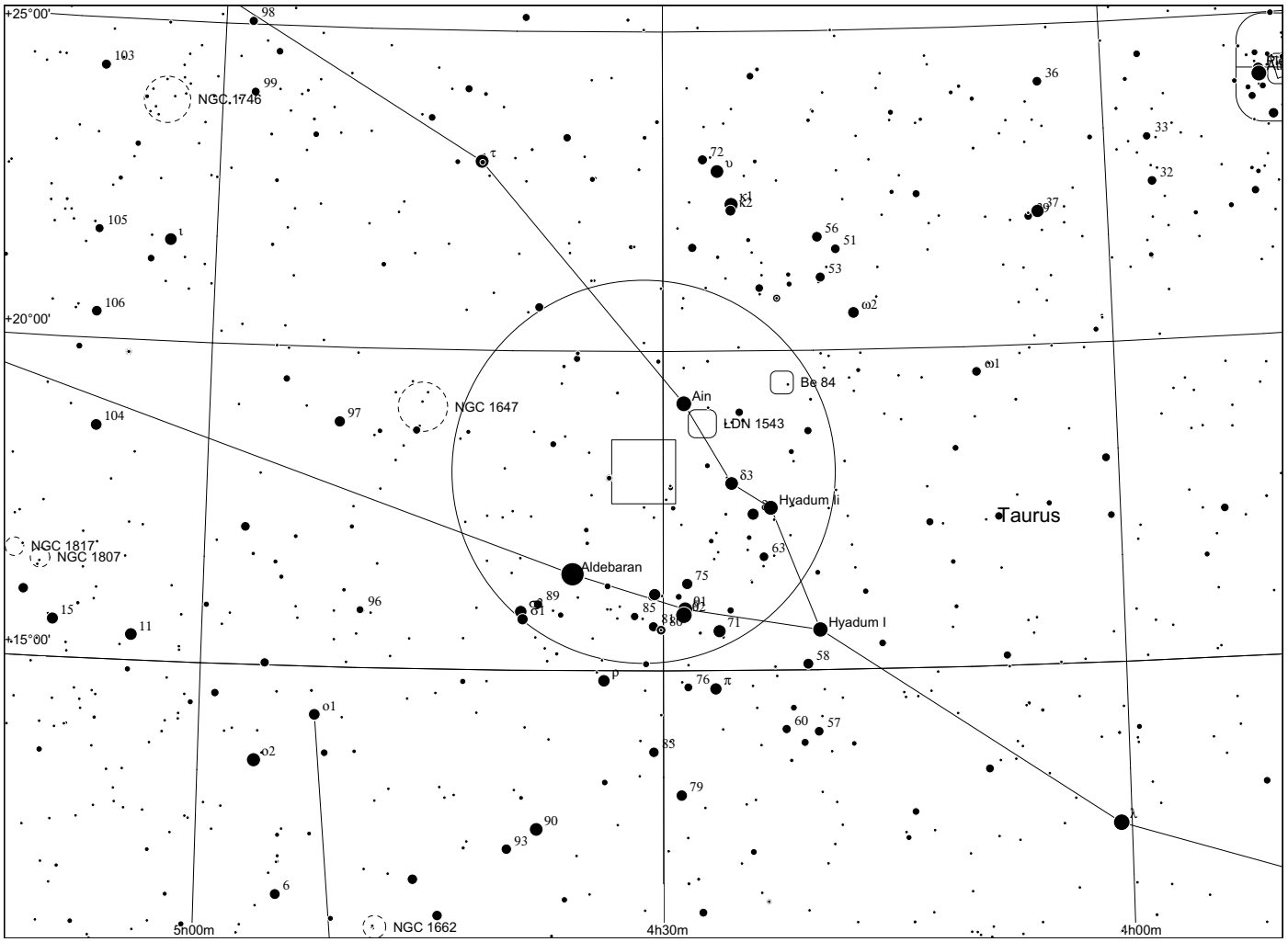
POSS blue POSS red composite

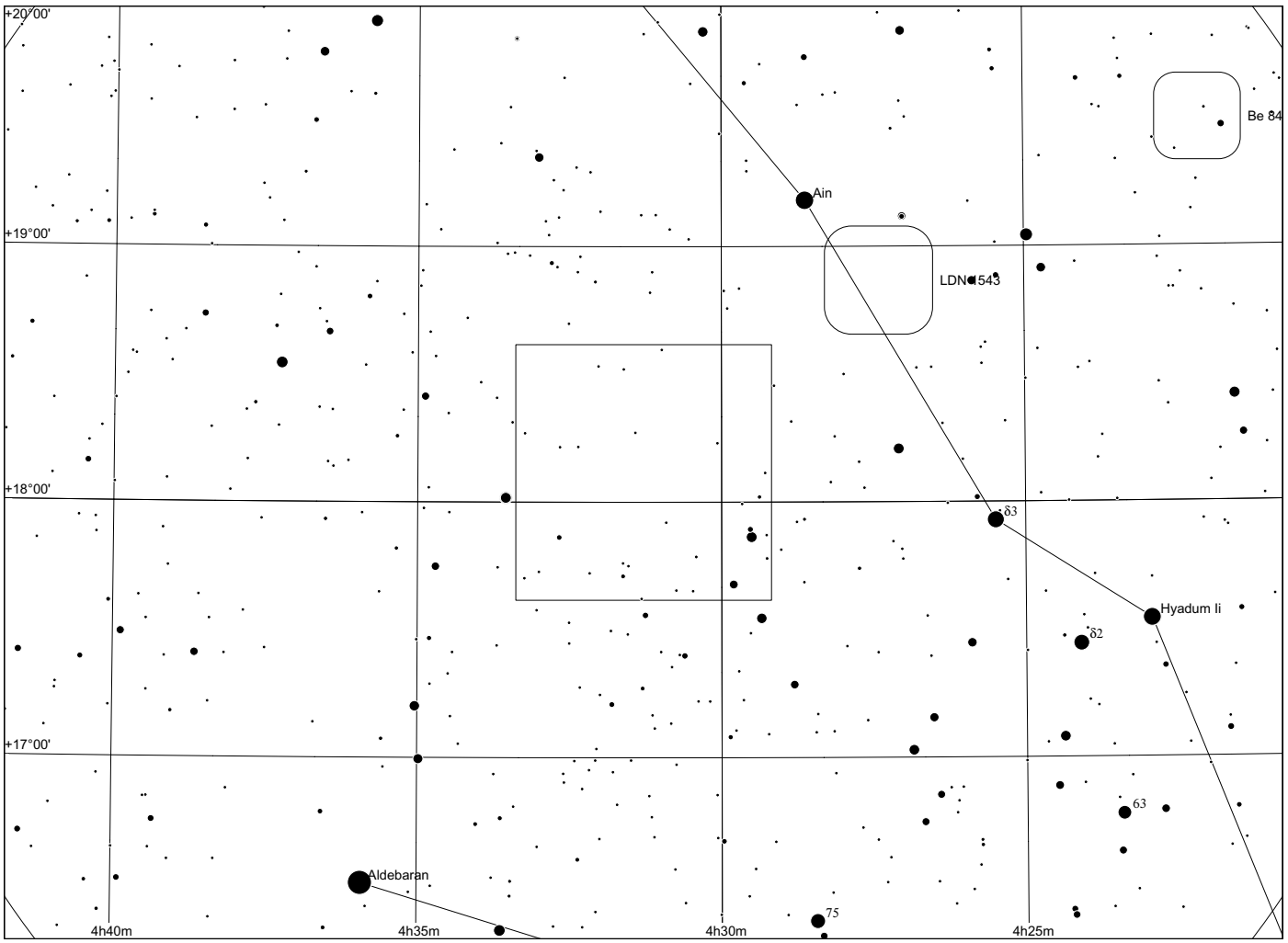
	other name	RA	dec	dia. '	F	S	B
Sh 2-239		04 31 16.9	+18 07 00	5	3	2	2

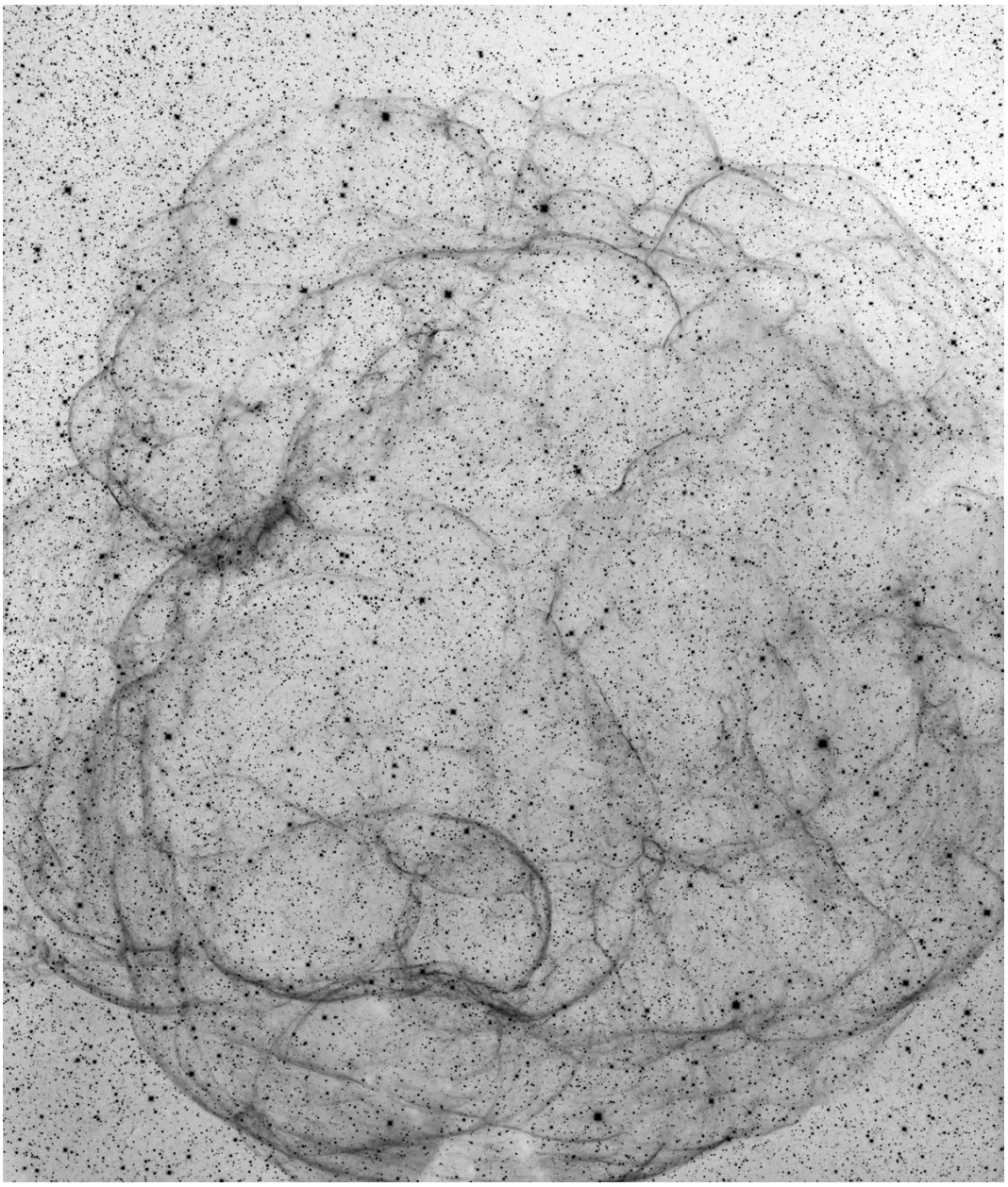
Distance: 140 pc, Size: 0.2 pc, Source: 1976ApJ...206..443K

Sh 2-239 is a reflection nebula or a Herbig-Haro object embedded in a dust cloud. It is located near the star T Tauri

Observing notes:


+25°00'
+20°00'
+15°00'
NGC 1746
NGC 1647
NGC 1817
NGC 1807
NGC 1662
Ain
LDN 1543
Be 84
Hyadum Ii
Hyadum I
Aldebaran
Taurus
98
103
99
105
106
104
97
96
15
11
36
33
32
72
υ
κ1
κ2
56
51
53
ω2
ω1
δ3
63
75
89
85
71
58
76
π
ο1
ο2
60
57
79
90
93
6
5h00m
4h30m
4h00m


+20°00'
+19°00'
+18°00'
+17°00'
Be 84
Ain
LDN 1543
δ3
Hyadum Ii
δ2
63
Aldebaran
75
4h40m
4h35m
4h30m
4h25m



Sh 2 - 240 in Taurus/Auriga

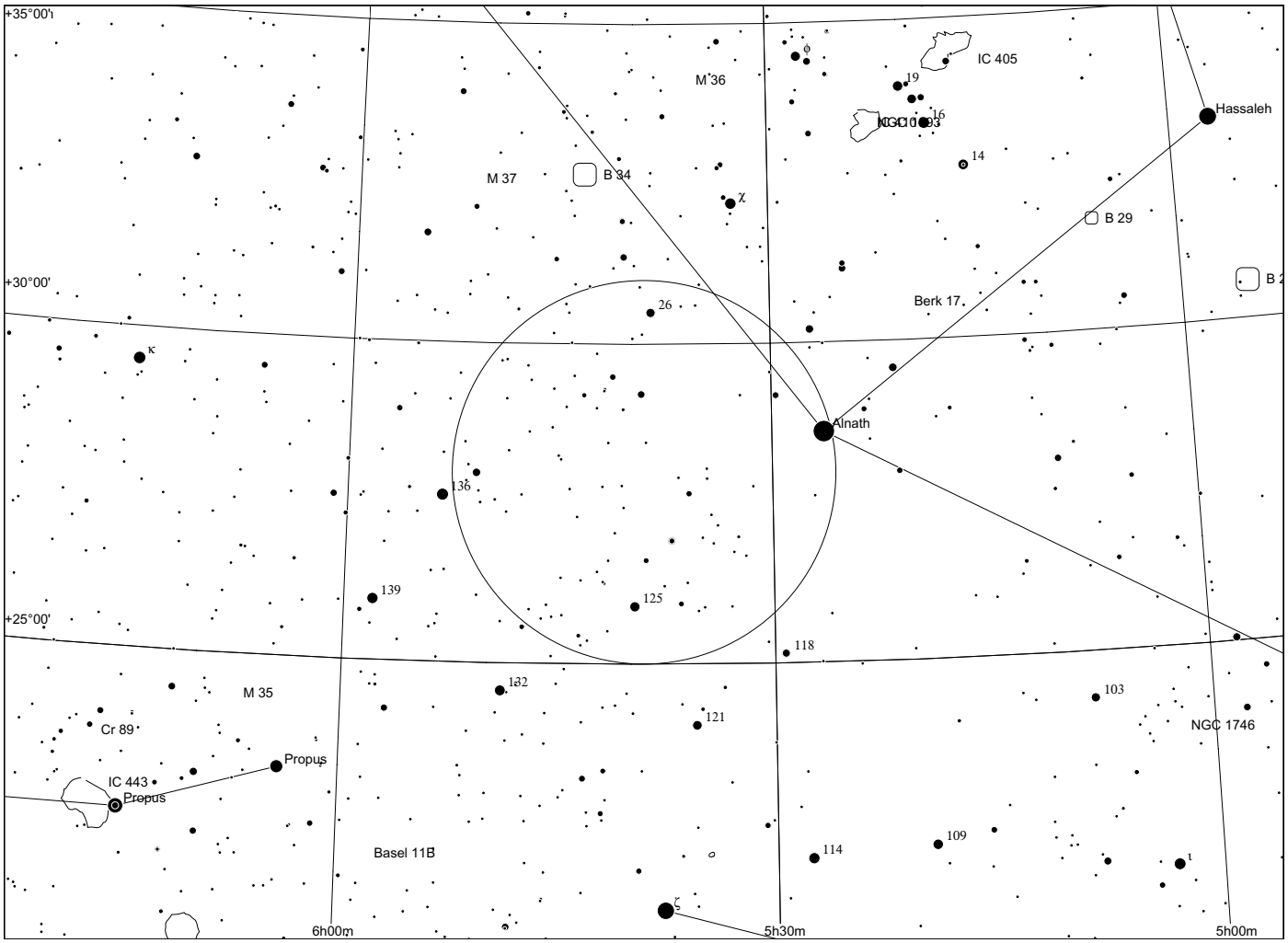
H alpha
Dean Salman
sharplesscatalog.com

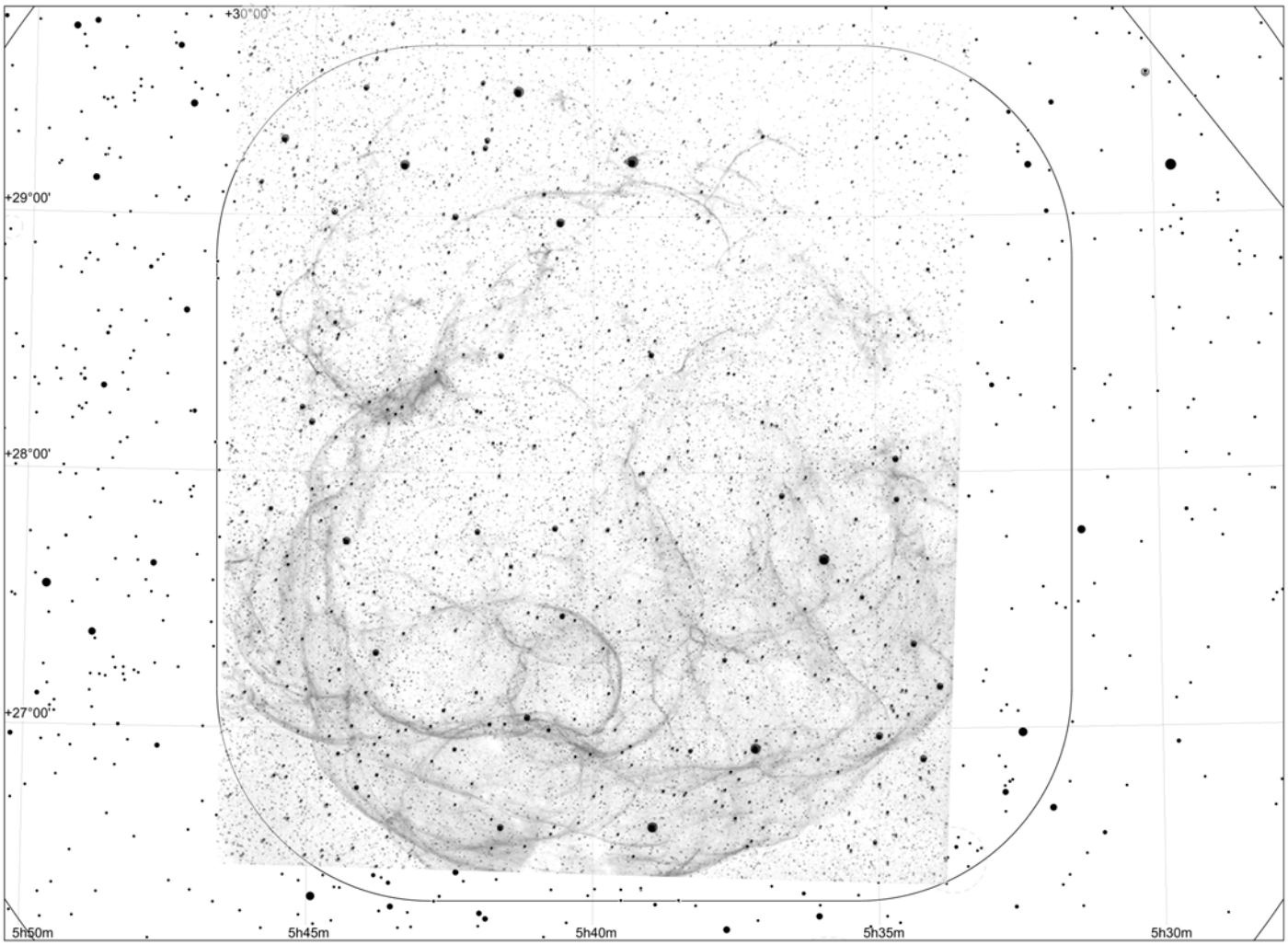
	other name	RA	dec	dia. '	F	S	B
Sh 2-240	Simeiz 147 SNR	05 41 00.2	+28 06 14	180	1	3	2

Distance: 800 pc, Size: 41.9 pc, Source: 1982ApJS...49..183B

This is the supernova remnant Simeis 147 = SNR 180.0-01.7.

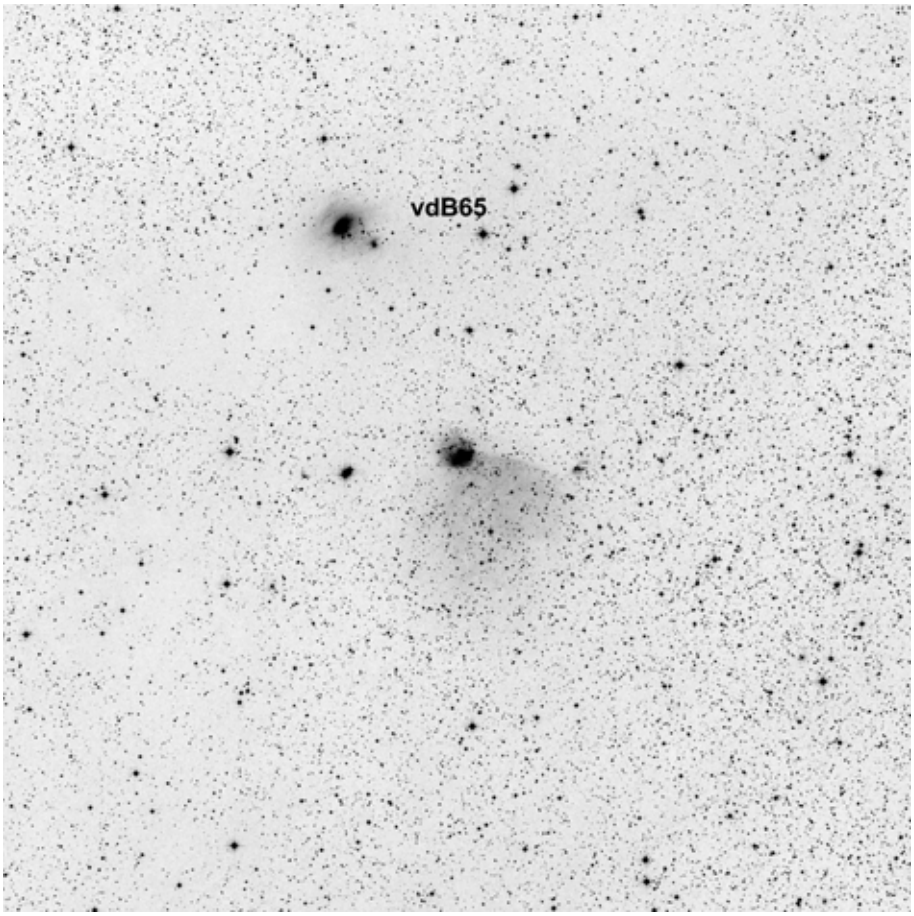
Observing notes:


+35°00'
+30°00'
+25°00'
M 36
IC 405
19
16
14
Hassaleh
M 37
B 34
χ
B 29
Berk 17
26
κ
Alnath
136
139
125
118
M 35
132
103
121
Cr 89
NGC 1746
Propus
IC 443
Propus
Basel 11B
114
109
ι
ζ
6h00m
5h30m
5h00m

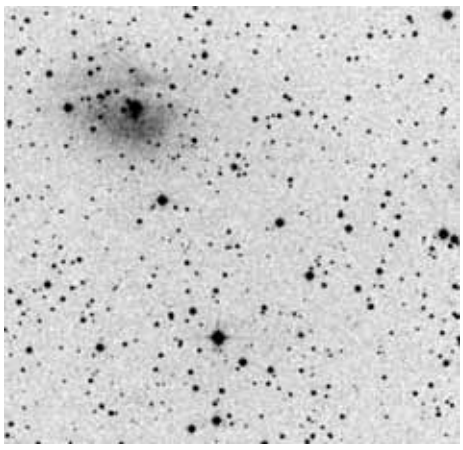

+30°00'
+29°00'
+28°00'
+27°00'
5h50m
5h45m
5h40m
5h35m
5h30m

Sh 2 - 241

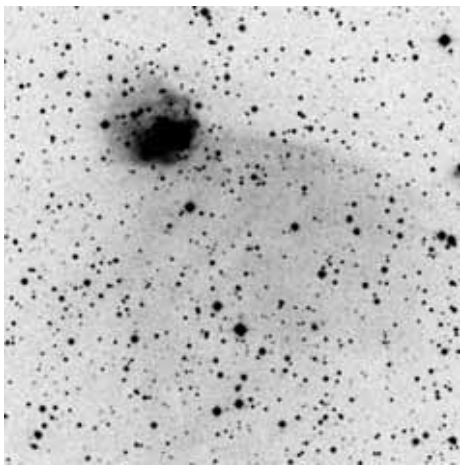
in Auriga



60x60, red



POSS blue



POSS red



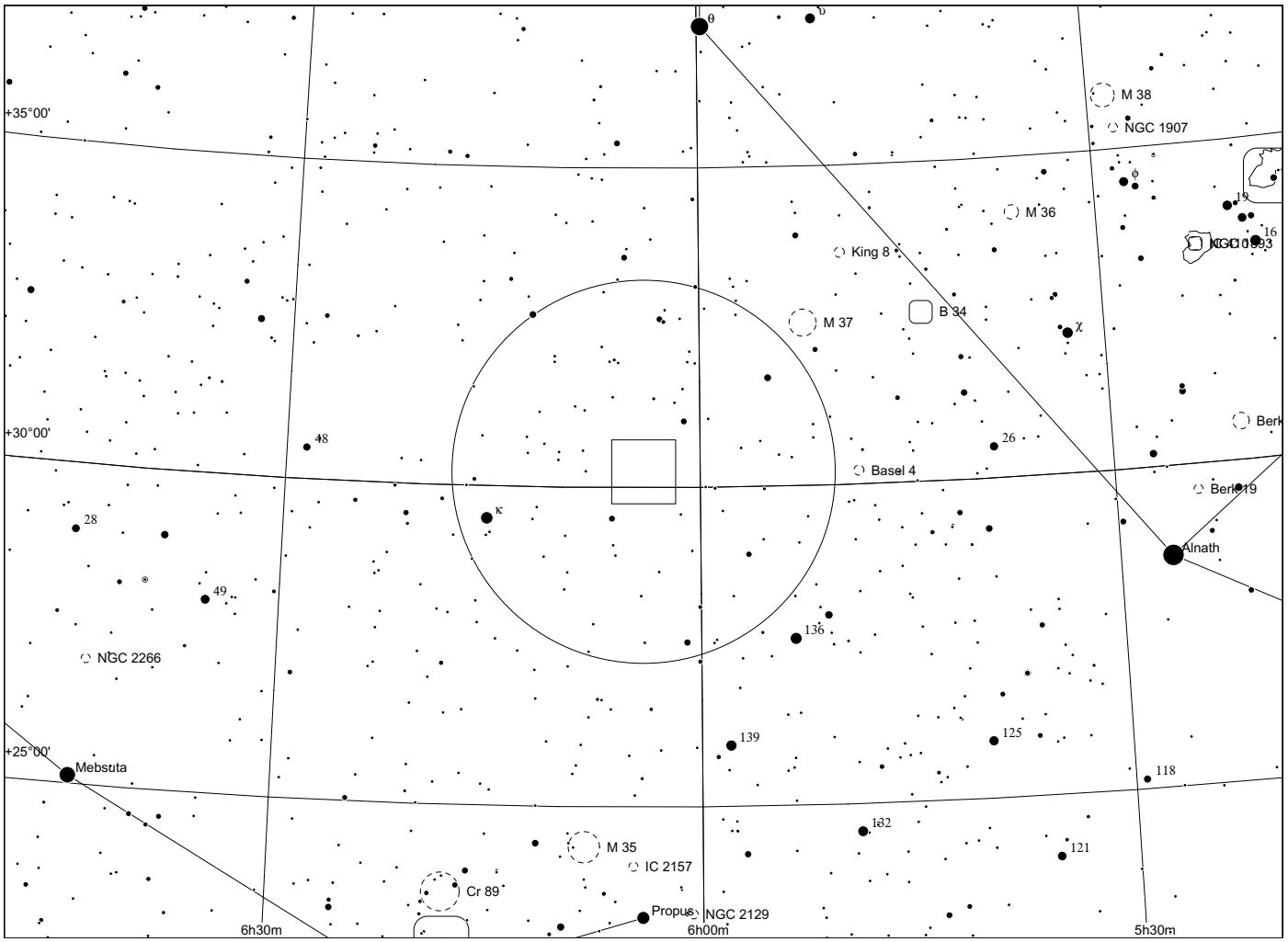
composite

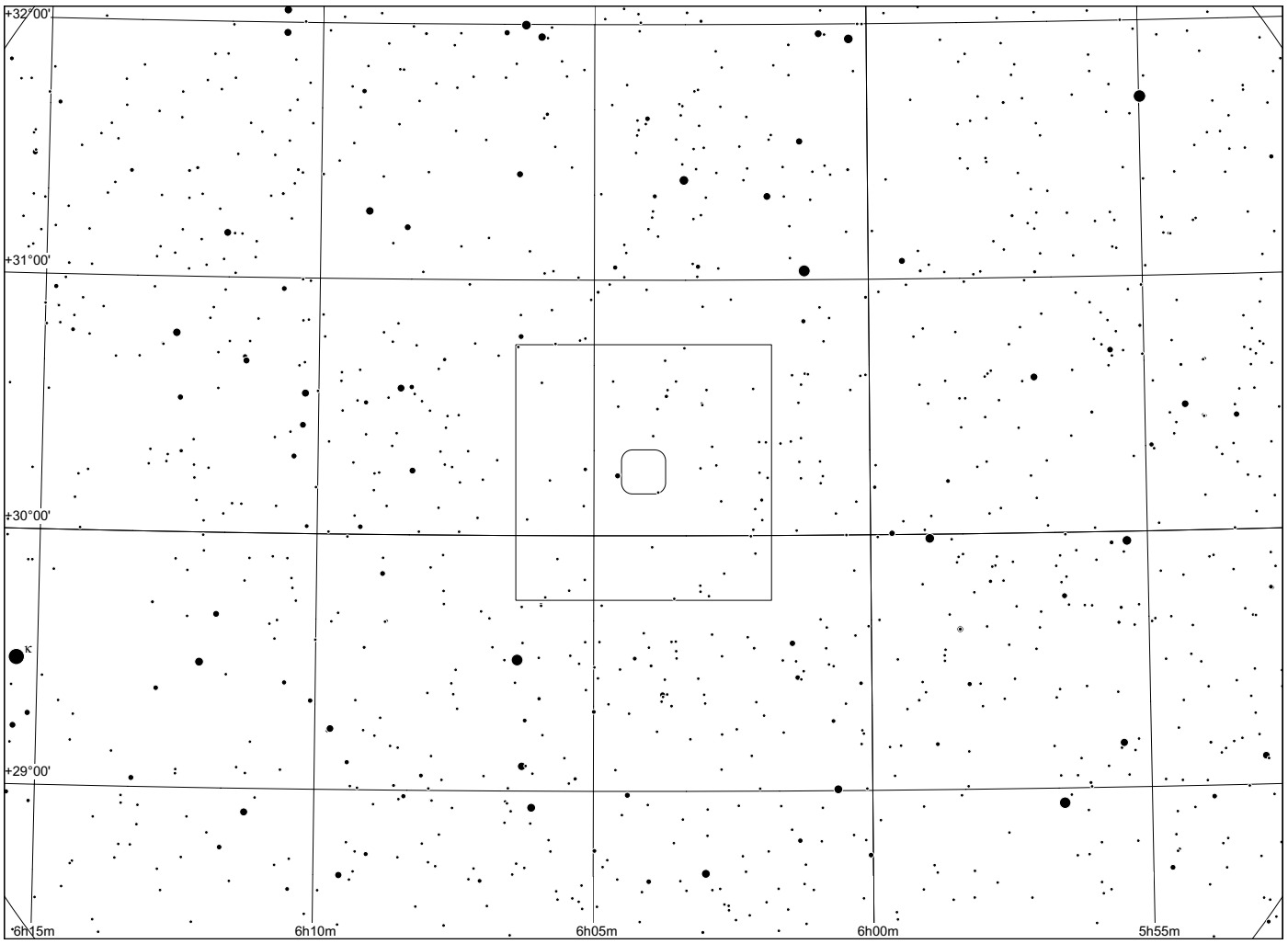
	other name	RA	dec	dia. '	F	S	B
Sh 2-241		06 04 06.7	+30 14 52	10	3	2	3

Distance: 4700 pc, Size: 13.7 pc, Source: 1982ApJS...49..183B

The exciting star for this nebula is the O9V star LS V +30 31. The nebula is a blister on the side of a molecular cloud at 5300 +/- 1100 parsecs. This field also contains the reflection nebula vdB 65 at 1100 parsecs, which is a completely unrelated object.

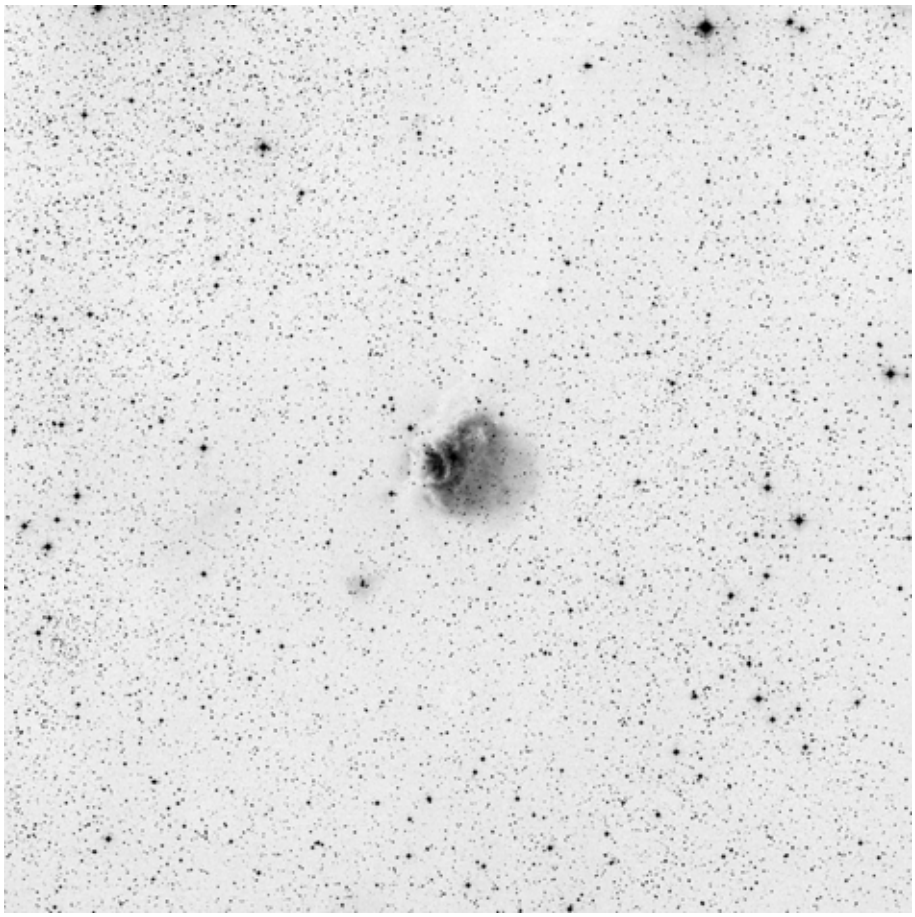
Observing notes:


θ
υ
M 38
NGC 1907
φ
19
M 36
16
King 8
NGC 1893
M 37
B 34
χ
+35°00'
+30°00'
48
26
Basel 4
Berk 19
κ
28
Alnath
49
136
NGC 2266
139
125
+25°00'
Mebsuta
118
132
121
M 35
IC 2157
Cr 89
Propus
NGC 2129
6h30m
6h00m
5h30m

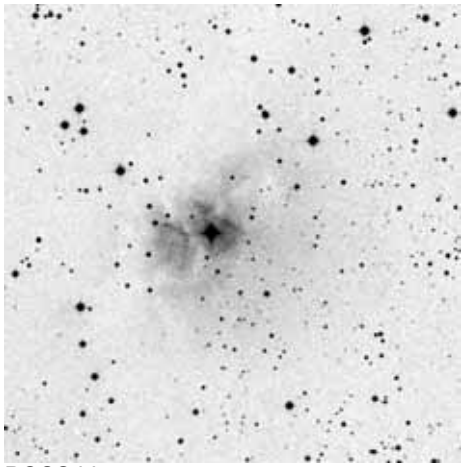

+32°00'
+31°00'
+30°00'
κ
+29°00'
6h15m
6h10m
6h05m
6h00m
5h55m

Sh 2 - 242

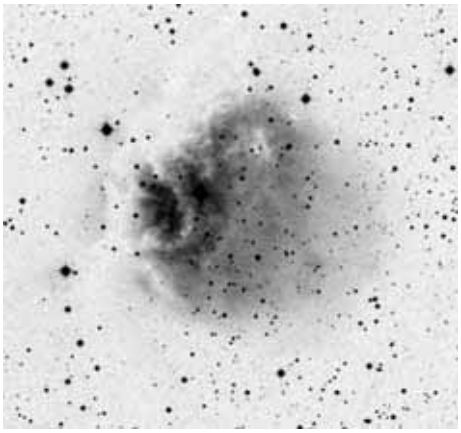
in Taurus



60x60, red



POSS blue



POSS red



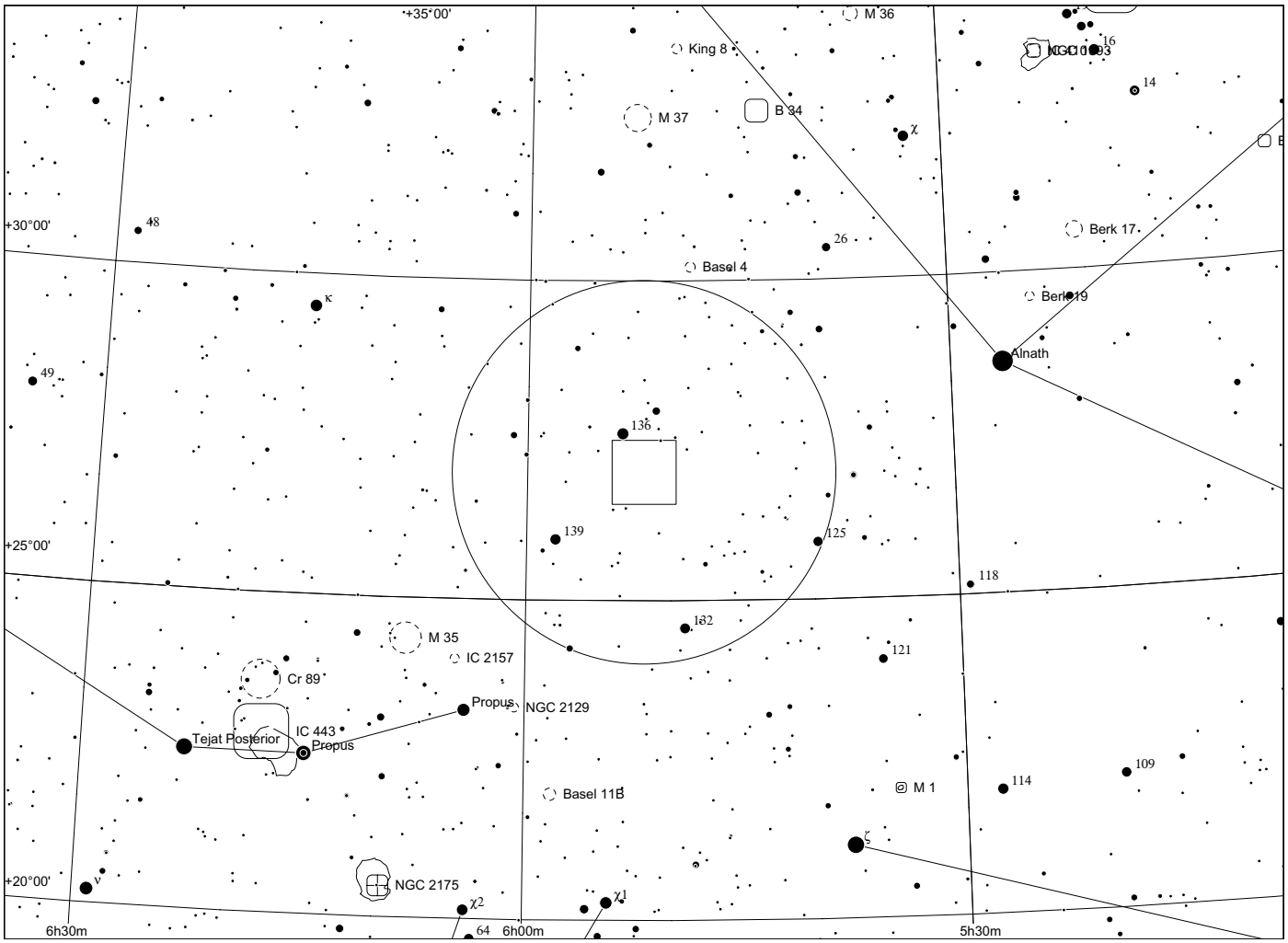
composite

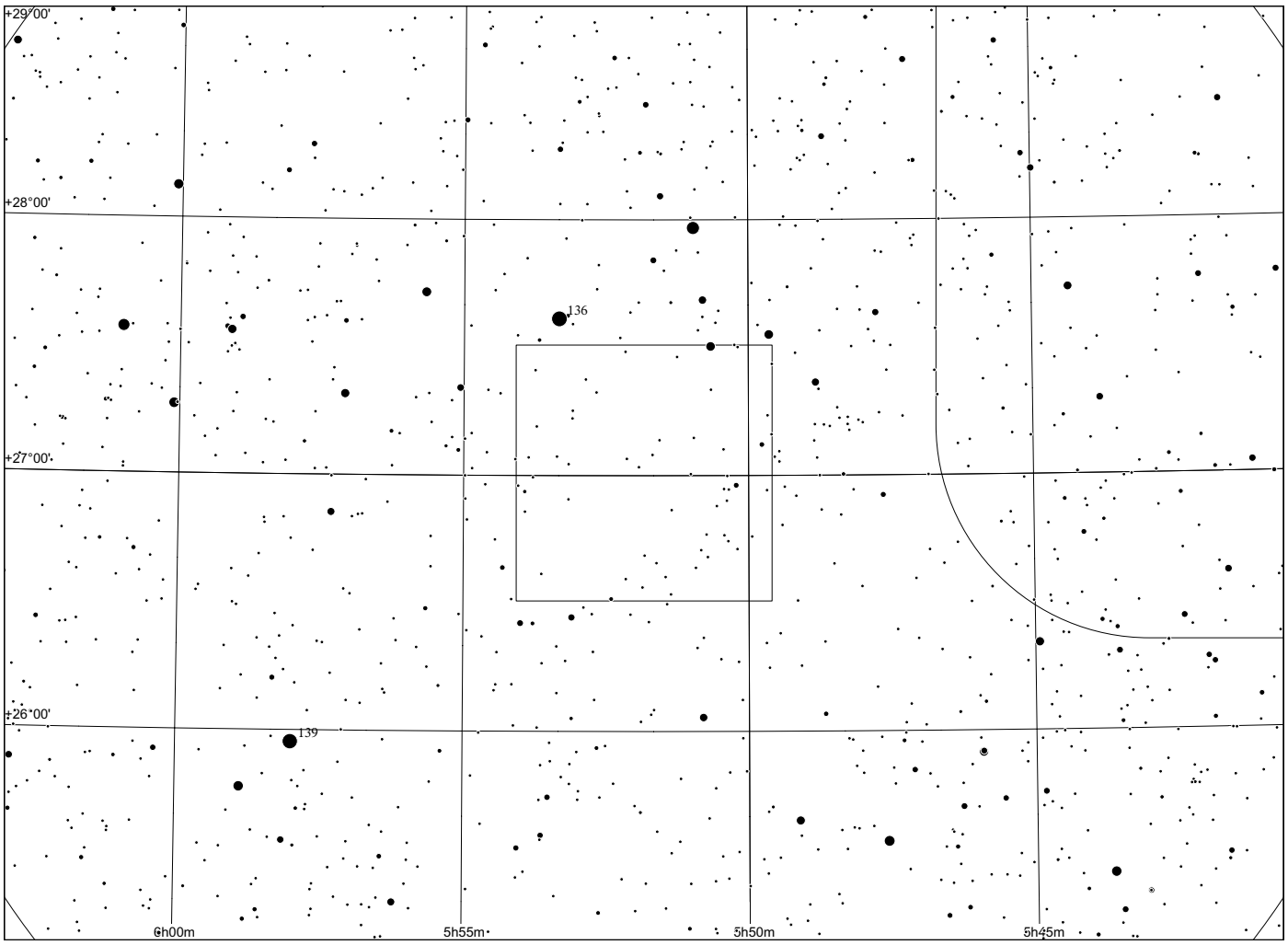
	other name	RA	dec	dia. '	F	S	B
Sh 2-242		05 51 50.7	+27 00 38	7	1	2	2

Distance: 2100 pc, Size: 4.3 pc, Source: 1982ApJS...49..183B

This HII region is excited by a B0V star and appears to lie at a distance of 2700 parsecs.

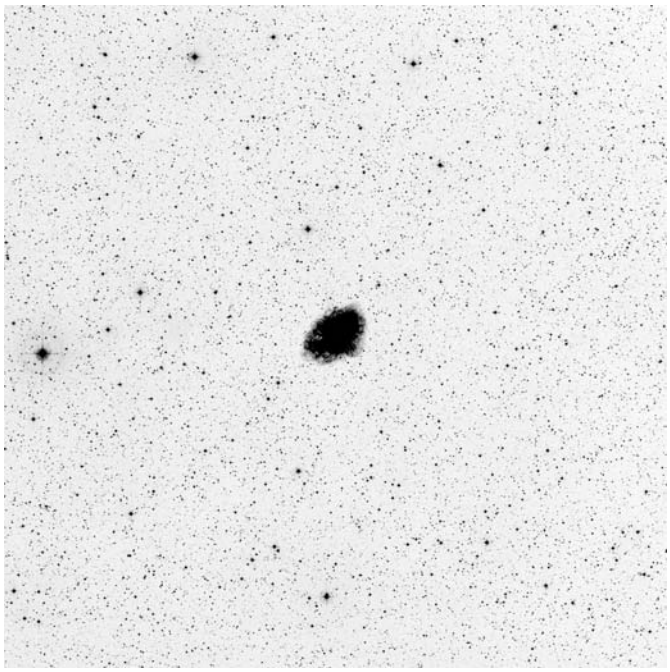
Observing notes:


+35°00'
M 36
King 8
M 37
B 34
χ
16
14
+30°00'
48
26
Berk 17
Basel 4
κ
Berk 19
Alnath
49
136
139
125
+25°00'
118
182
M 35
IC 2157
121
Cr 89
Propus
NGC 2129
Tejat Posterior
IC 443
Prepus
109
114
M 1
Basel 11B
ζ
+20°00'
ν
NGC 2175
χ2
χ1
64
6h30m
6h00m
5h30m


+29°00'
+28°00'
136
+27°00'
+26°00'
139
6h00m
5h55m
5h50m
5h45m

Sh 2 - 244

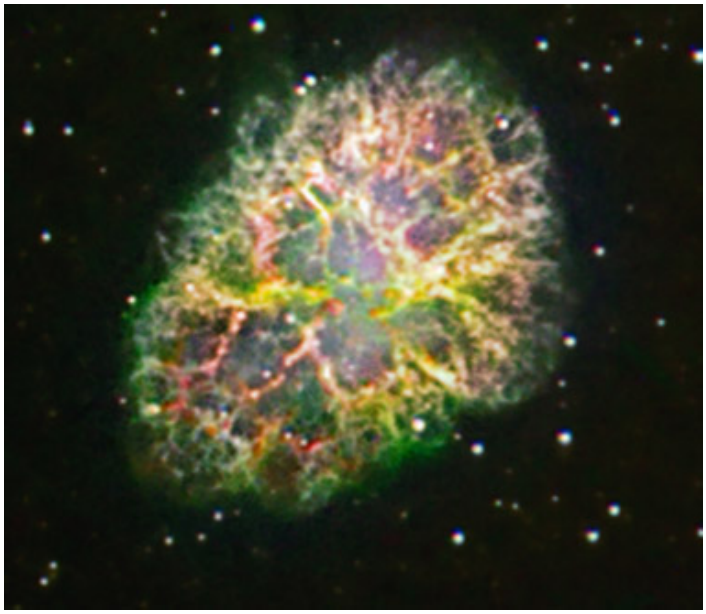
in Taurus



60x60, red



composite



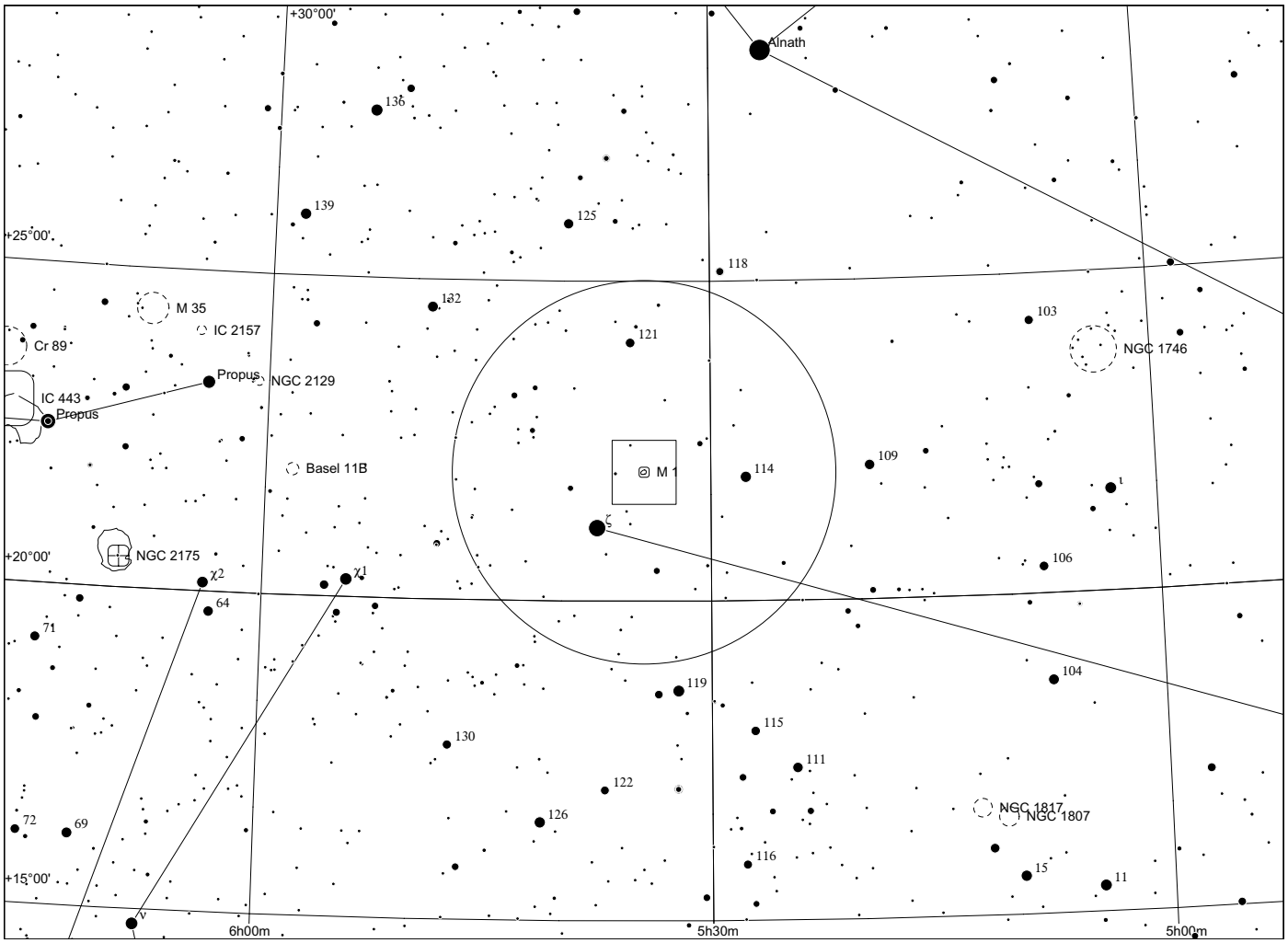
narrowband, Dean Salman

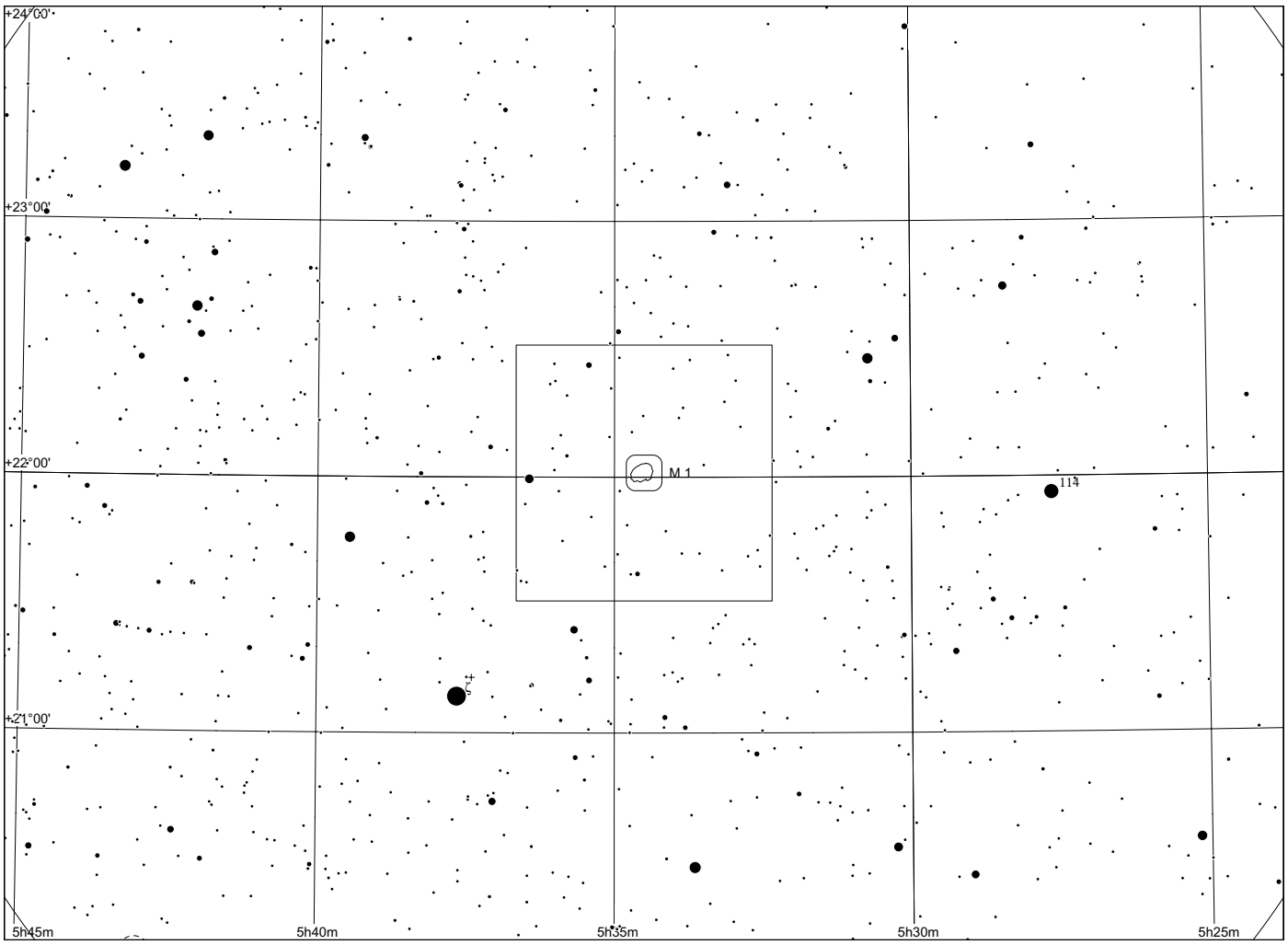
	other name	RA	dec	dia. '	F	S	B
Sh 2-244	M1 = NGC1952 = Crab Nebula	05 34 30.4	+21 57 09	5	2	3	3

Distance: 1930 pc, Size: 2.8 pc, Source: 1973PASP...85..579T

This is the Crab nebula supernova remnant.

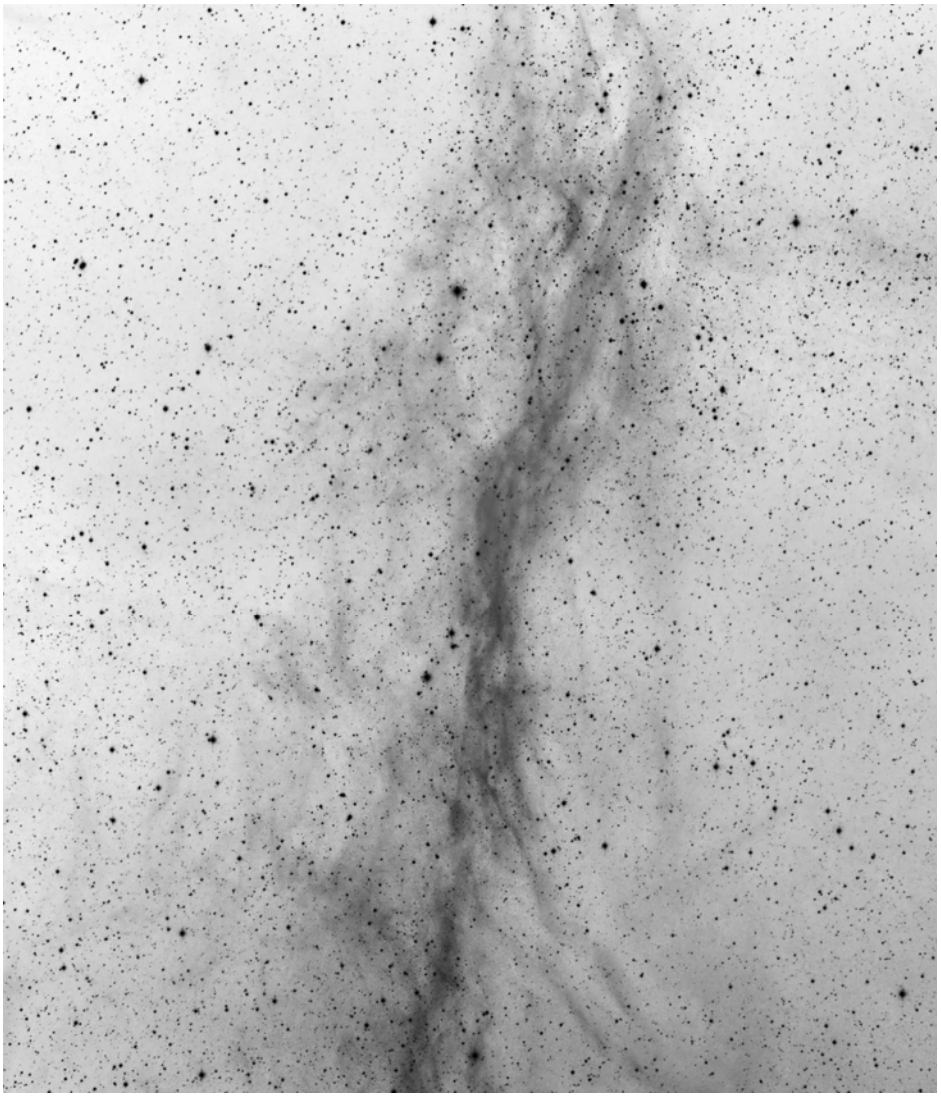
Observing notes:


+30°00'
+25°00'
+20°00'
+15°00'
Alnath
136
139
125
118
M 35
IC 2157
Cr 89
132
121
103
NGC 1746
Propus
NGC 2129
IC 443
Propus
Basel 11B
M 1
114
109
ζ
NGC 2175
χ2
χ1
64
71
106
104
119
115
130
111
122
126
72
69
NGC 1817
NGC 1807
116
15
11
6h00m
5h30m
5h00m


+24°00'
+23°00'
+22°00'
+21°00'
M 1
114
5h45m
5h40m
5h35m
5h30m
5h25m

Sh 2 - 245

in Taurus



H alpha 8x10°

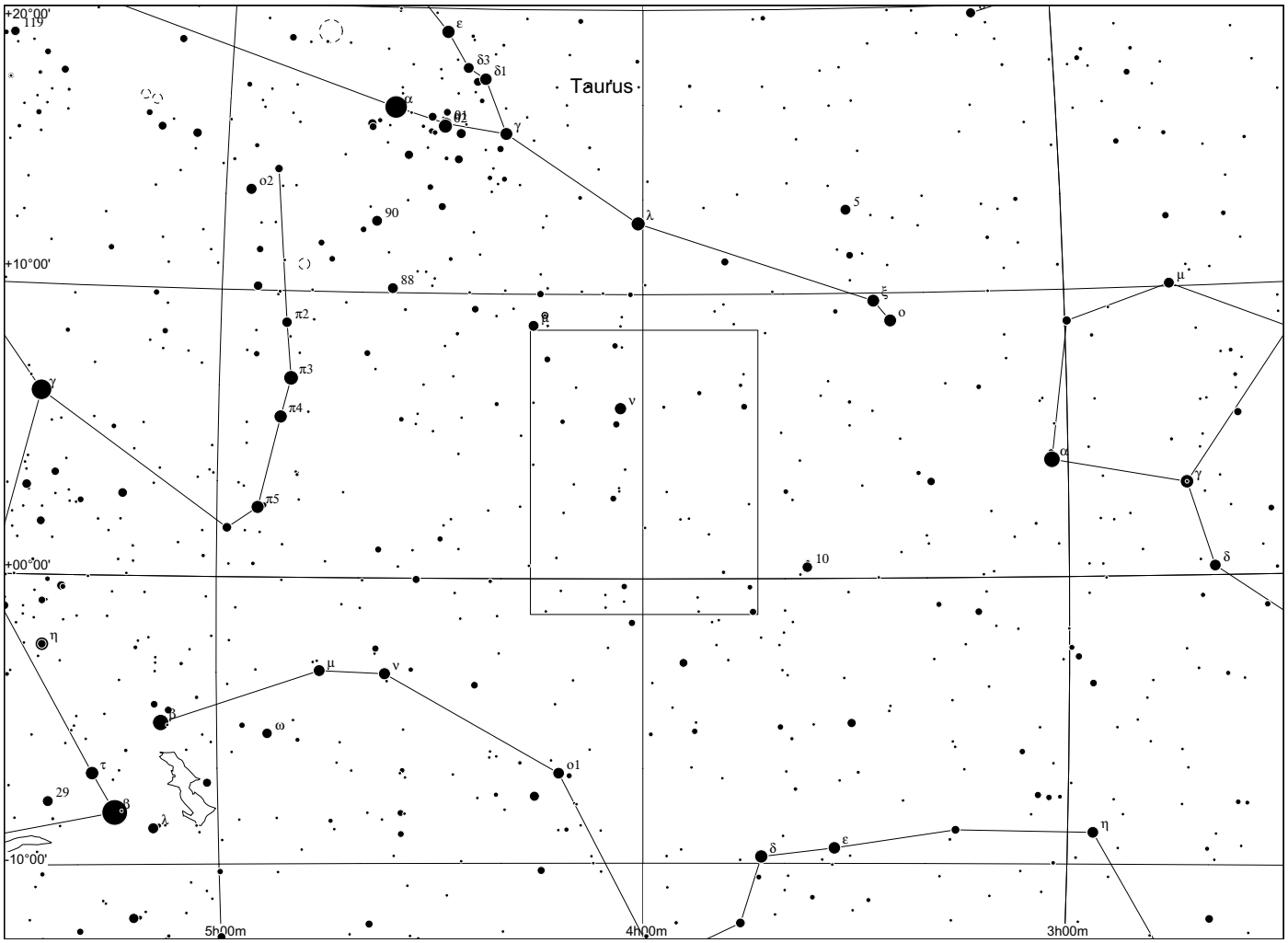
Dean Salman,
sharplesscatalog.com

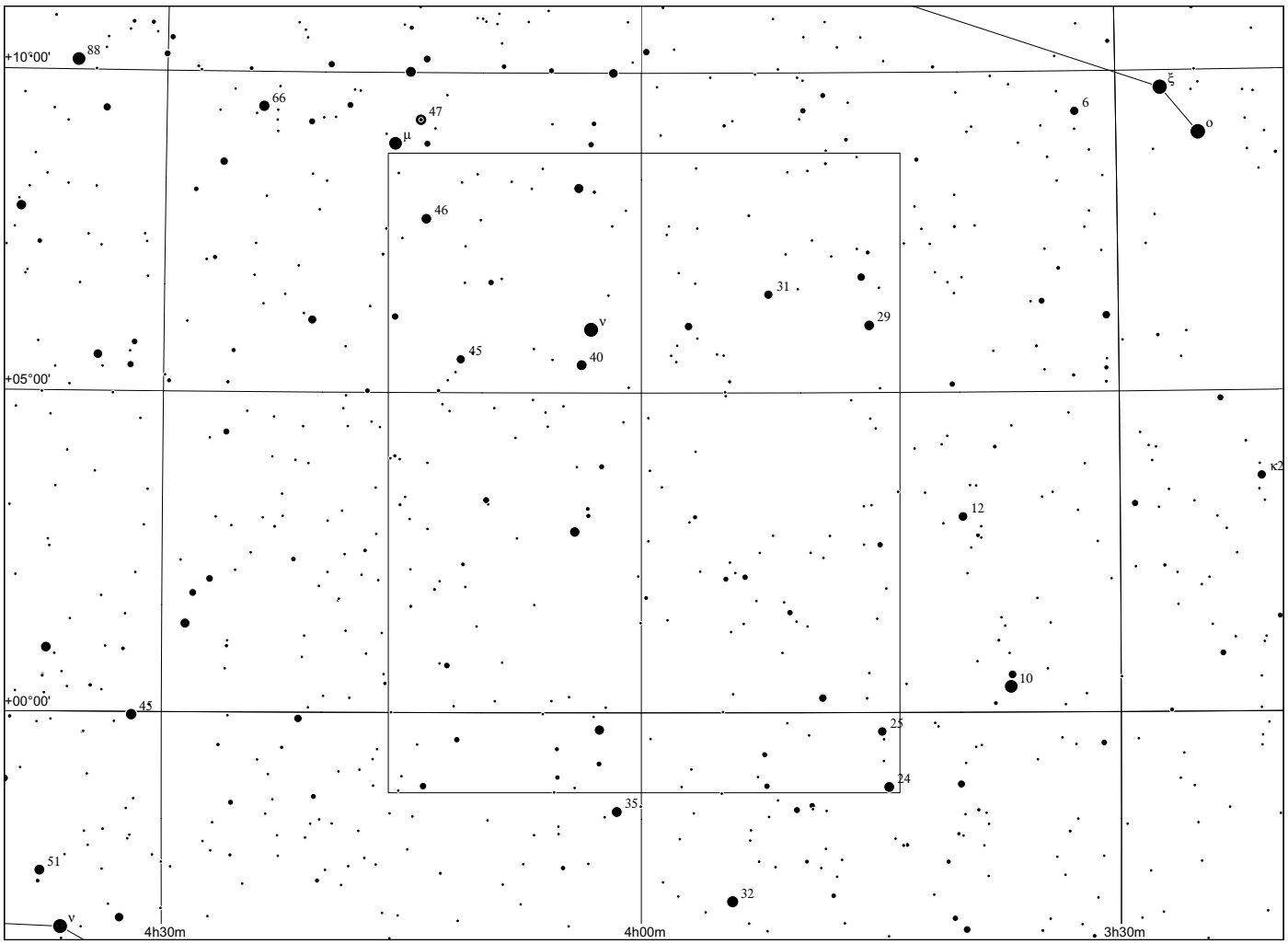
	other name	RA	dec	dia. '	F	S	B
Sh 2-245		04 02 32.8	+04 07 42	720	3	2	2

Distance: 210 pc, Size: 44.1 pc, Source: 1982ApJS...49..183B

May be connected to the Barnard Loop, Sh 2-276. Part of the Eridanus loop.

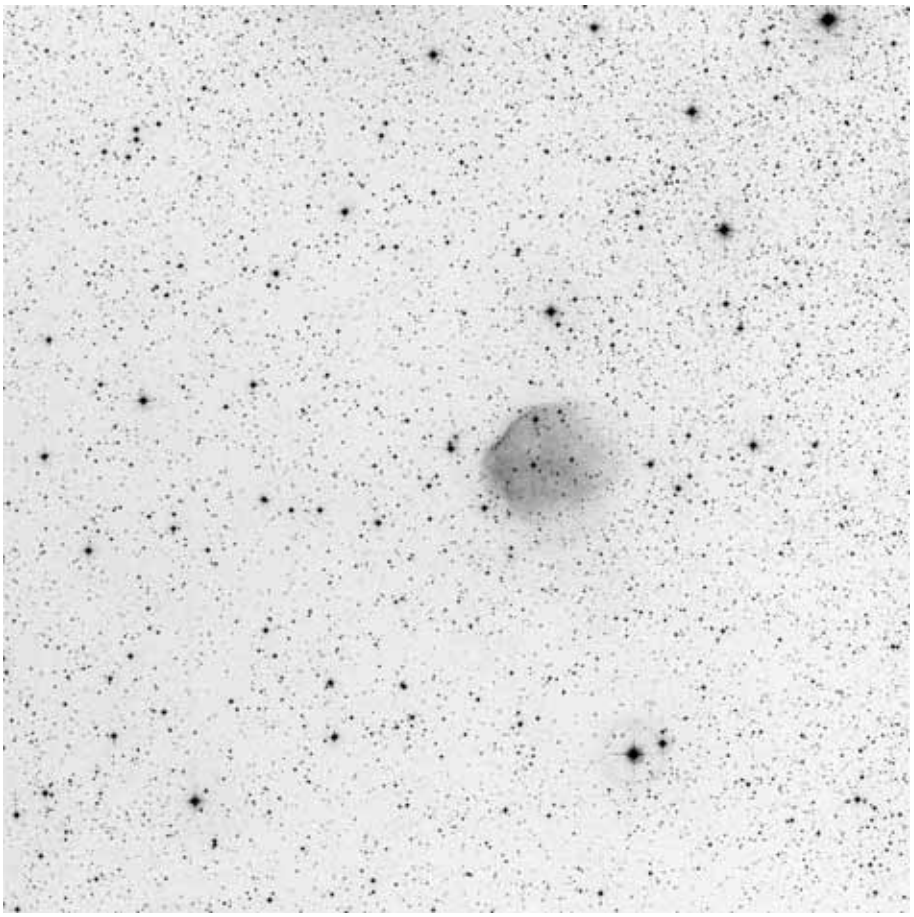
Observing notes:


Taurus
+20°00'
+10°00'
+00°00'
-10°00'
5h00m
4h00m
3h00m
119
ε
δ3
δ1
α
θ1
θ2
γ
ο2
90
λ
5
88
ξ
ο
μ
π2
β
π3
ν
γ
π4
π5
α
γ
δ
10
η
μ
ν
β
ω
τ
ο1
29
β
λ
δ
ε
η

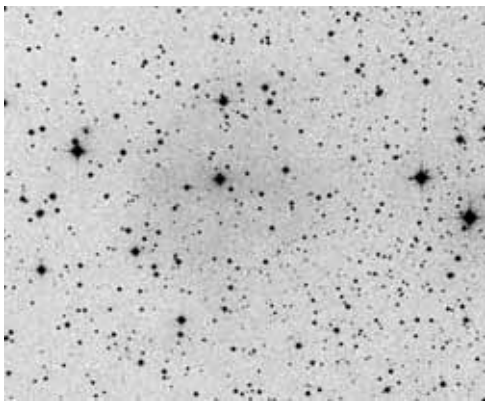

+10°00'
+05°00'
+00°00'
4h30m
4h00m
3h30m
88
66
47
μ
ξ
ο
6
46
31
29
ν
45
40
κ2
12
10
45
25
24
35
51
32
ν

Sh 2 - 247

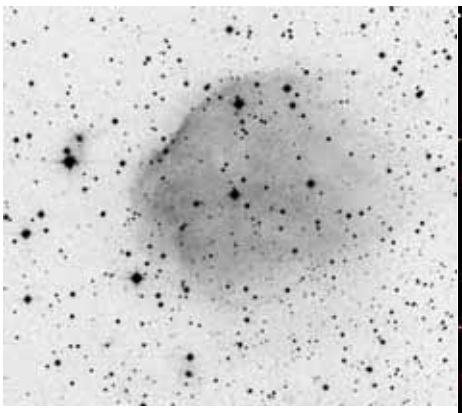
in Gemini



60x60, red



POSS blue



POSS red



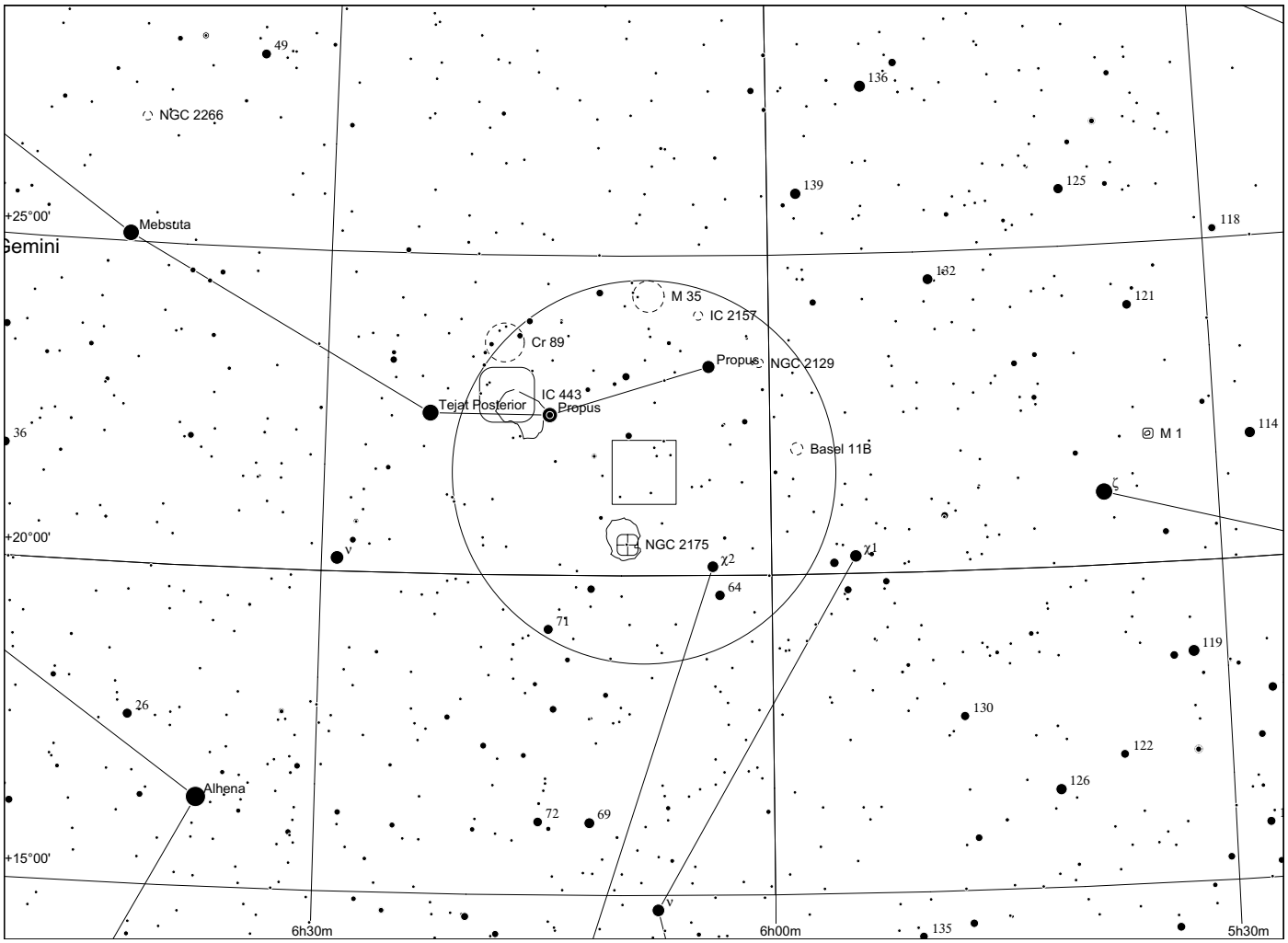
composite

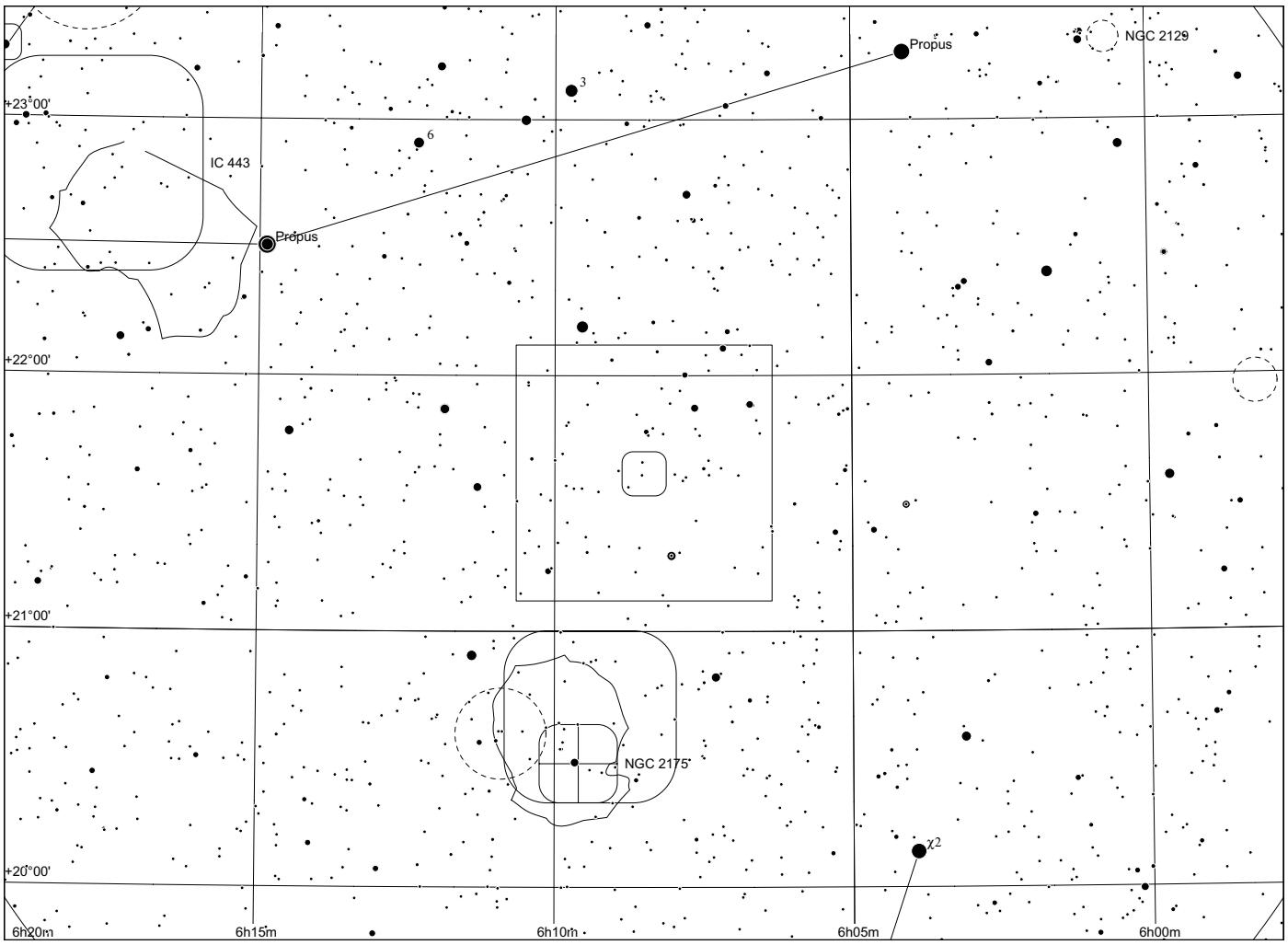
	other name	RA	dec	dia. '	F	S	B
Sh 2-247		06 08 30.2	+21 37 12	9	1	1	2

Distance: 2000 pc, Size: 5.2 pc, Source: 1995ApJ...445..246C

The Sh 2-247 molecular cloud is part of the Gem OB1 complex, contains 37 thousand solar masses at a distance of 2200 pc and appears to be physically connected through CO filaments with Sh 2-252. The exciting star is LS V 21 27 (B0 III star).

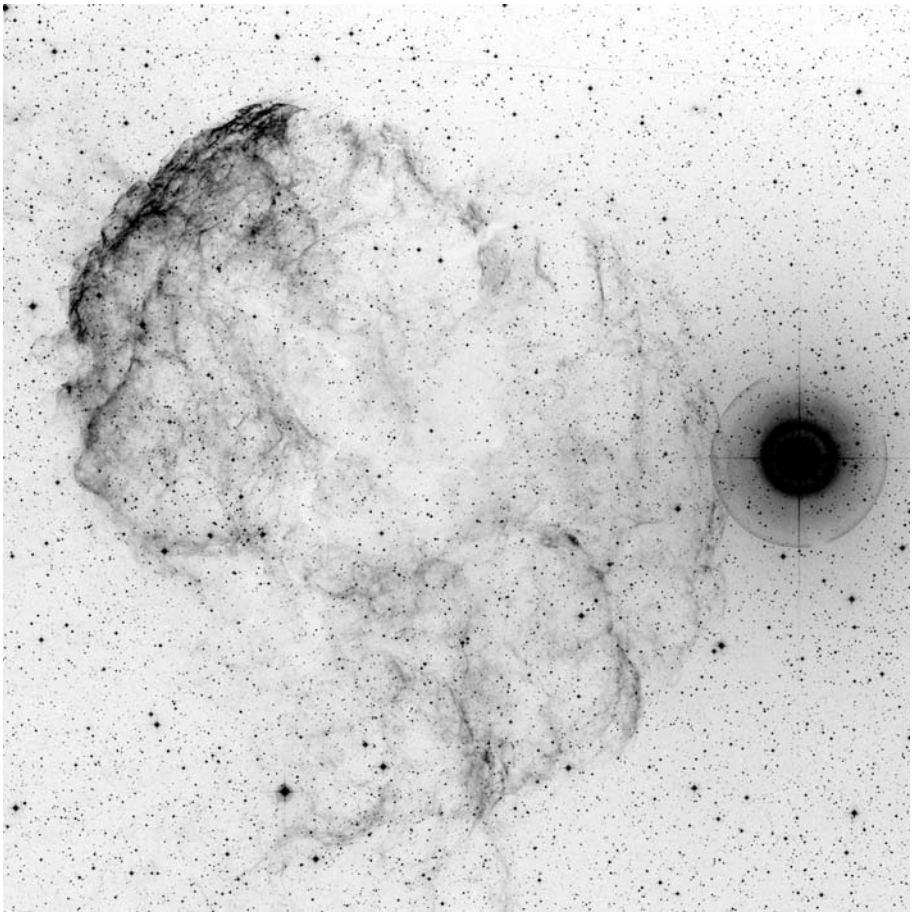
Observing notes:


49
NGC 2266
136
139
125
118
+25°00'
Mebsuta
Gemini
132
121
M 35
IC 2157
Cr 89
Propus
NGC 2129
IC 443
Tejat Posterior
Propus
36
Basel 11B
M 1
114
ζ
+20°00'
NGC 2175
ν
χ2
χ1
64
71
119
26
130
122
126
Alhena
72
69
+15°00'
ν
6h30m
6h00m
135
5h30m

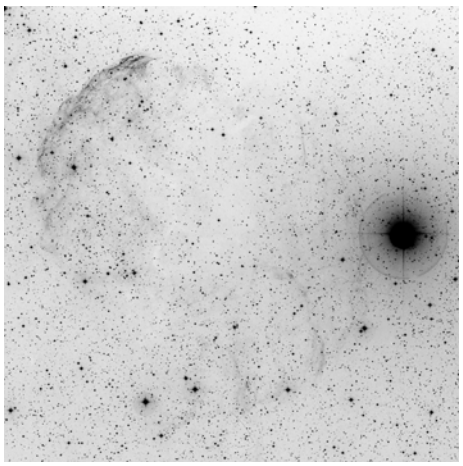

Propus
NGC 2129
3
+23°00'
6
IC 443
Propus
+22°00'
+21°00'
NGC 2175
χ2
+20°00'
6h20m
6h15m
6h10m
6h05m
6h00m

Sh 2 - 248

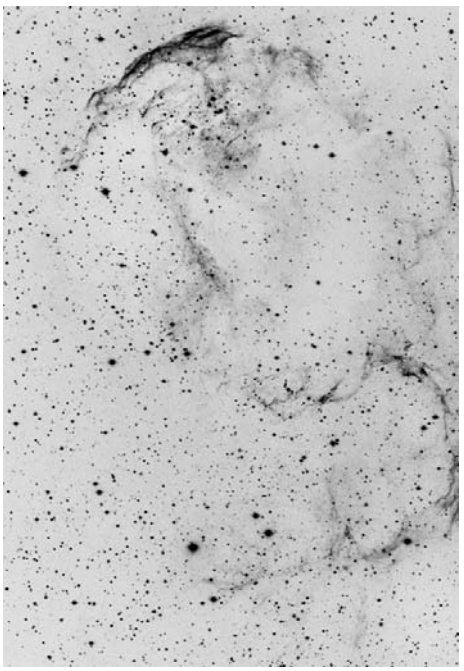
in Gemini



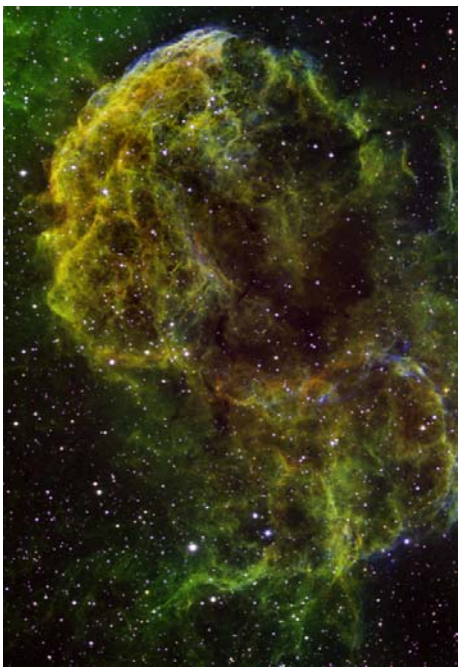
60x60, red



POSS blue



OIII



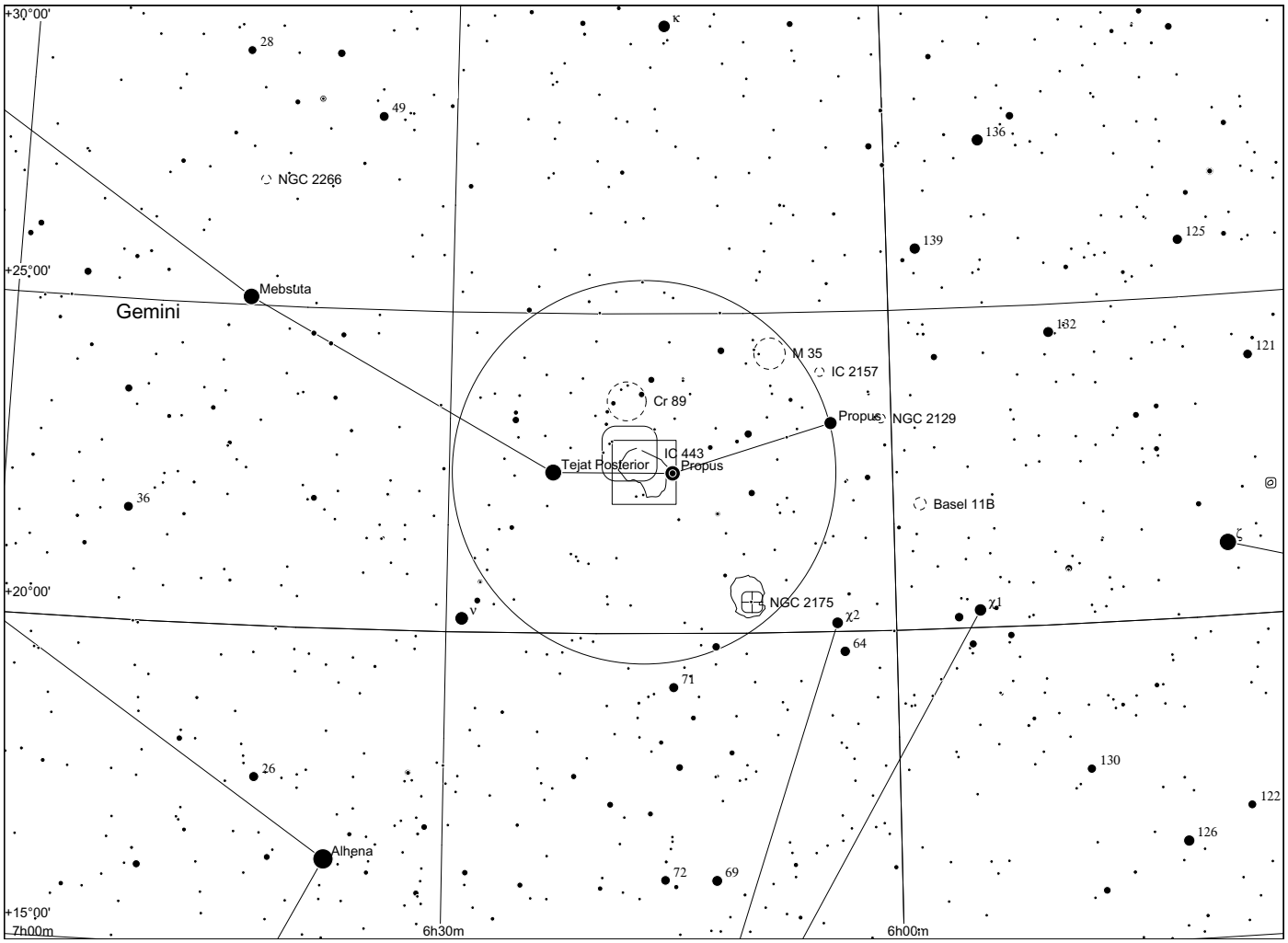
narrowband, Dean Salman

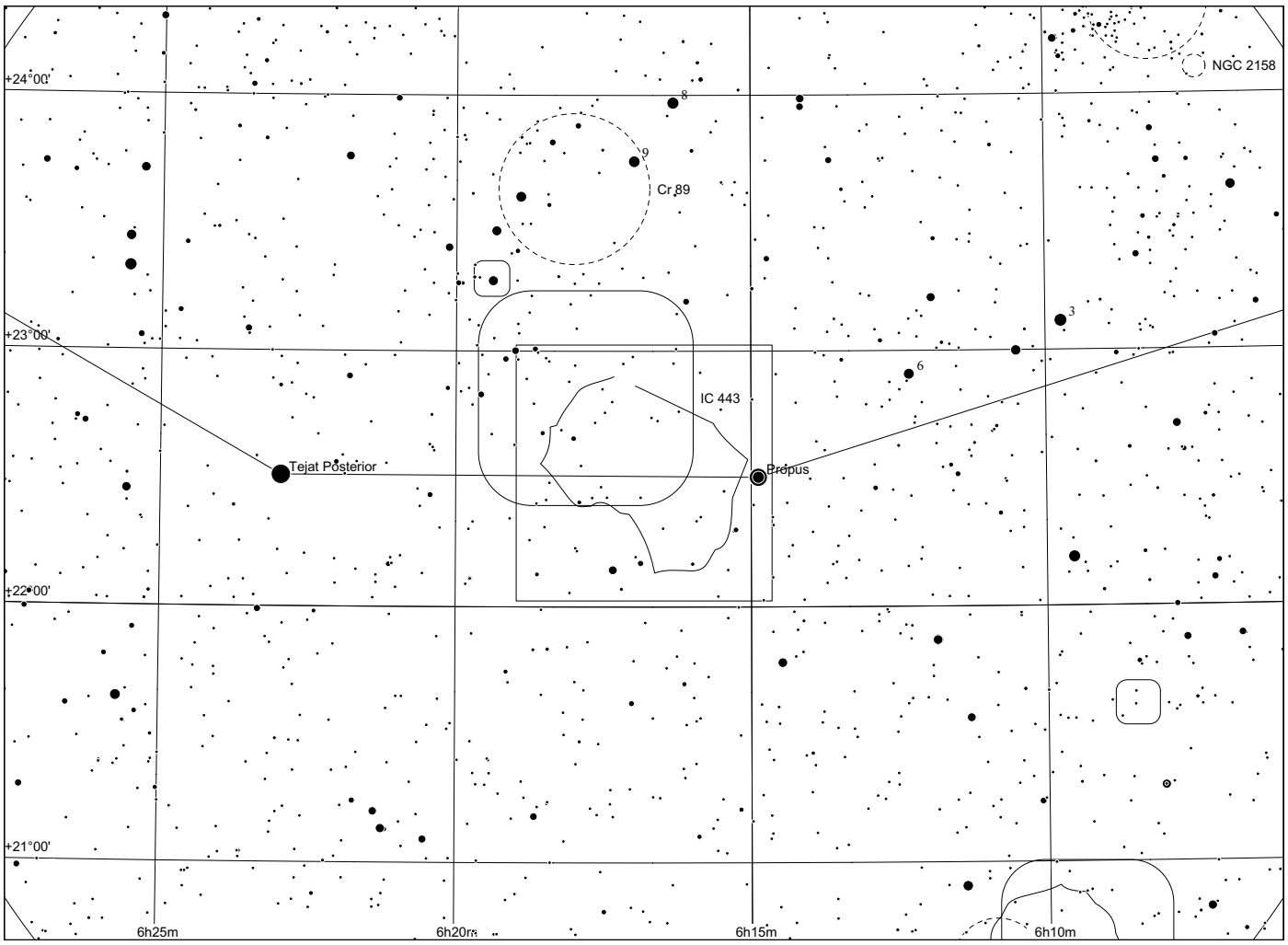
	other name	RA	dec	dia. '	F	S	B
Sh 2-248	IC 443:	06 16 38.4	+22 30 01	50	2	3	3

Distance: 1500 pc, Size: 21.8 pc, Source: 2005ApJ...624L..41B

This is the Jellyfish nebula, the 3000-year-old Gem A supernova remnant (SNR 189.1+03.0), also called IC 443.

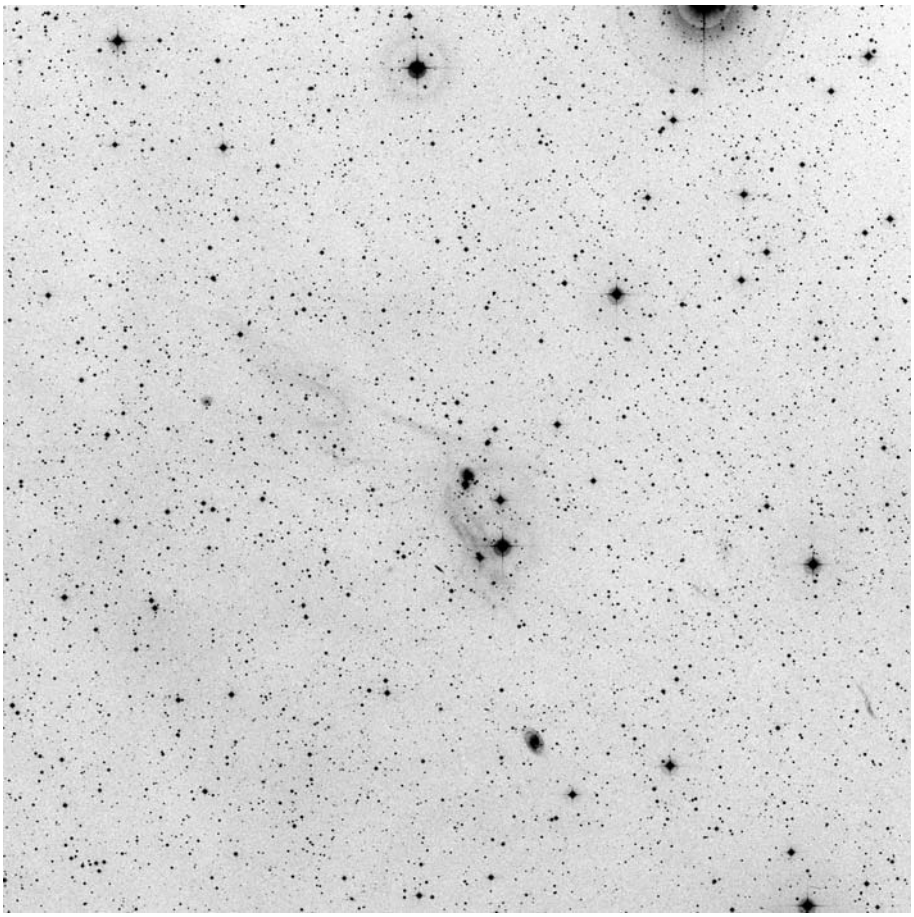
Observing notes:


+30°00'
+25°00'
+20°00'
+15°00'
7h00m
6h30m
6h00m
Gemini
Mebsuta
NGC 2266
M 35
IC 2157
Cr 89
Propus
NGC 2129
IC 443
Tejat Posterior
Basel 11B
NGC 2175
Alhena
28
49
136
139
125
182
121
36
26
71
64
130
122
126
72
69

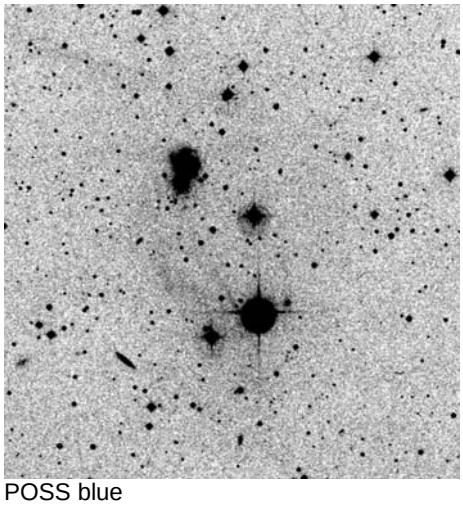

+24°00'
+23°00'
+22°00'
+21°00'
6h25m
6h20m
6h15m
6h10m
NGC 2158
Cr 89
IC 443
Tejat Posterior
Propus
8
9
3
6

Sh 2 - 250

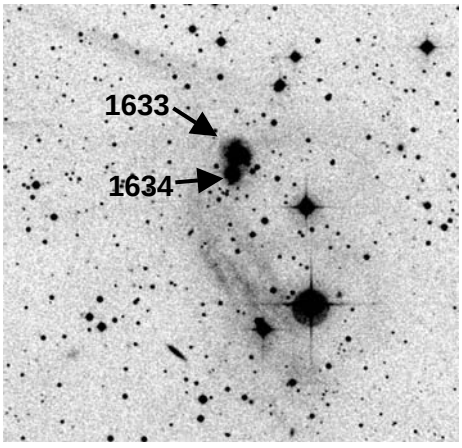
in Taurus



60x60, red



POSS blue

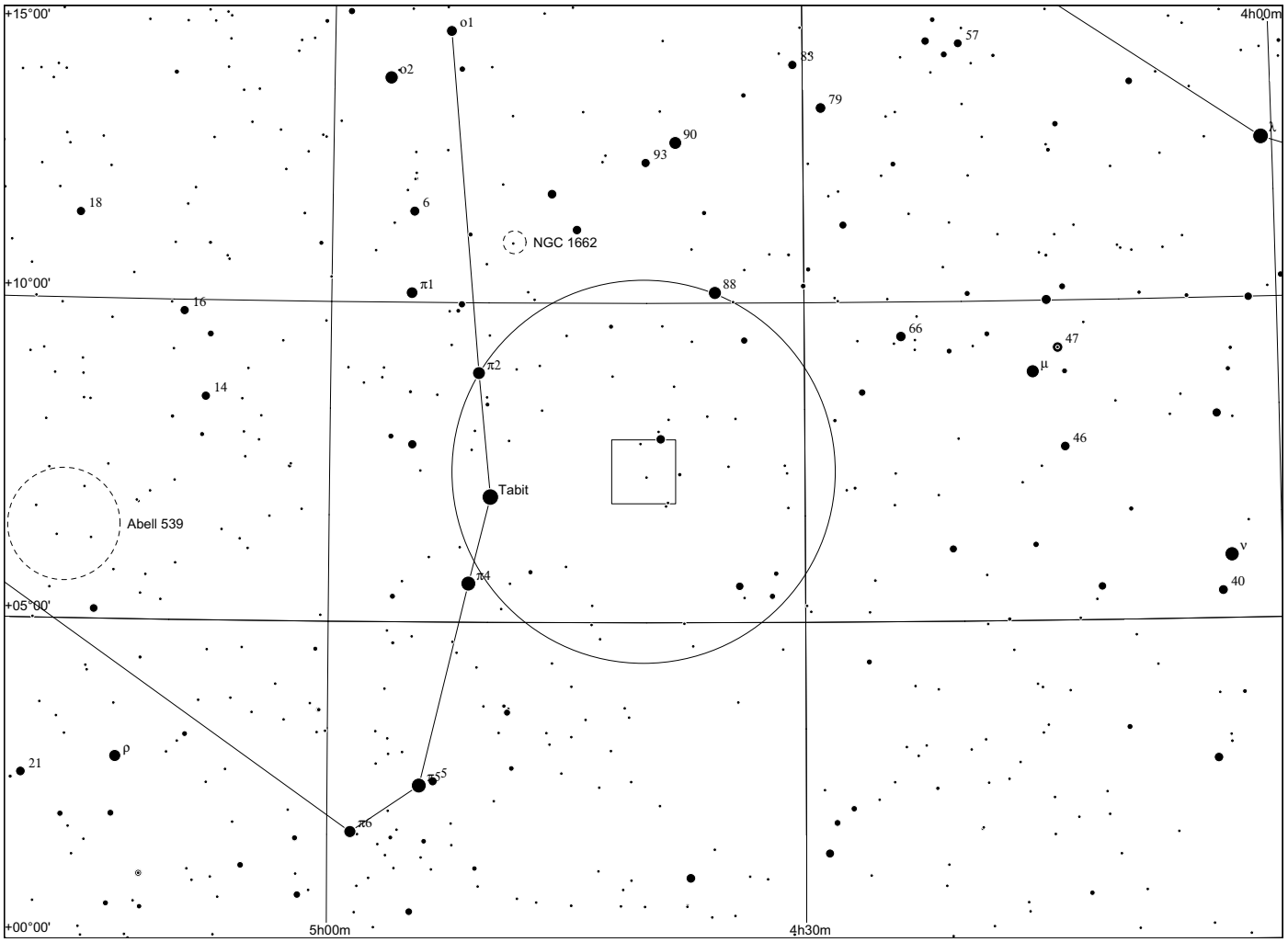


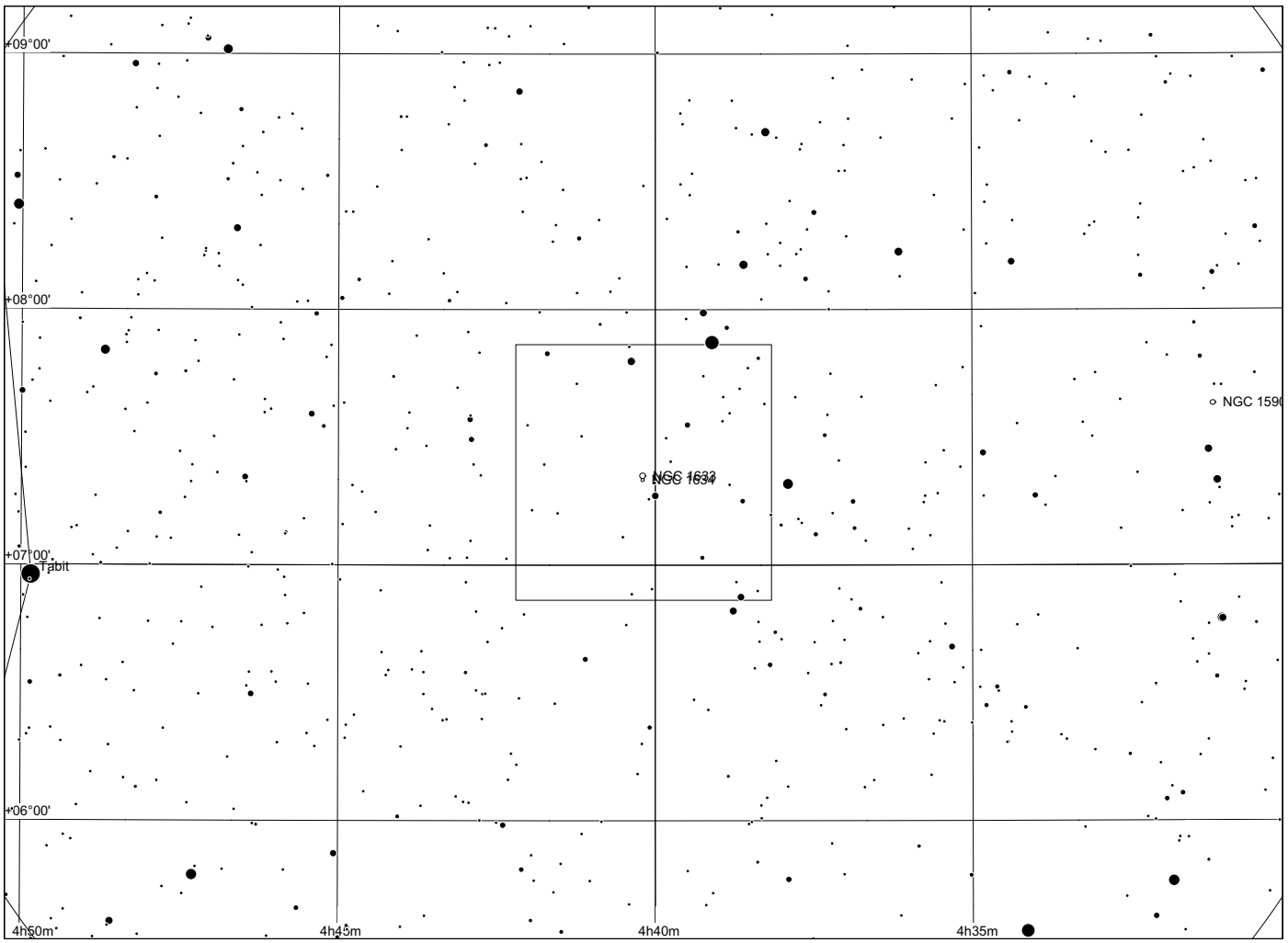
POSS red

composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-250	near NGC1633/1634 (galaxies)	04 40 10.8	+07 21 47	10	3	2	1

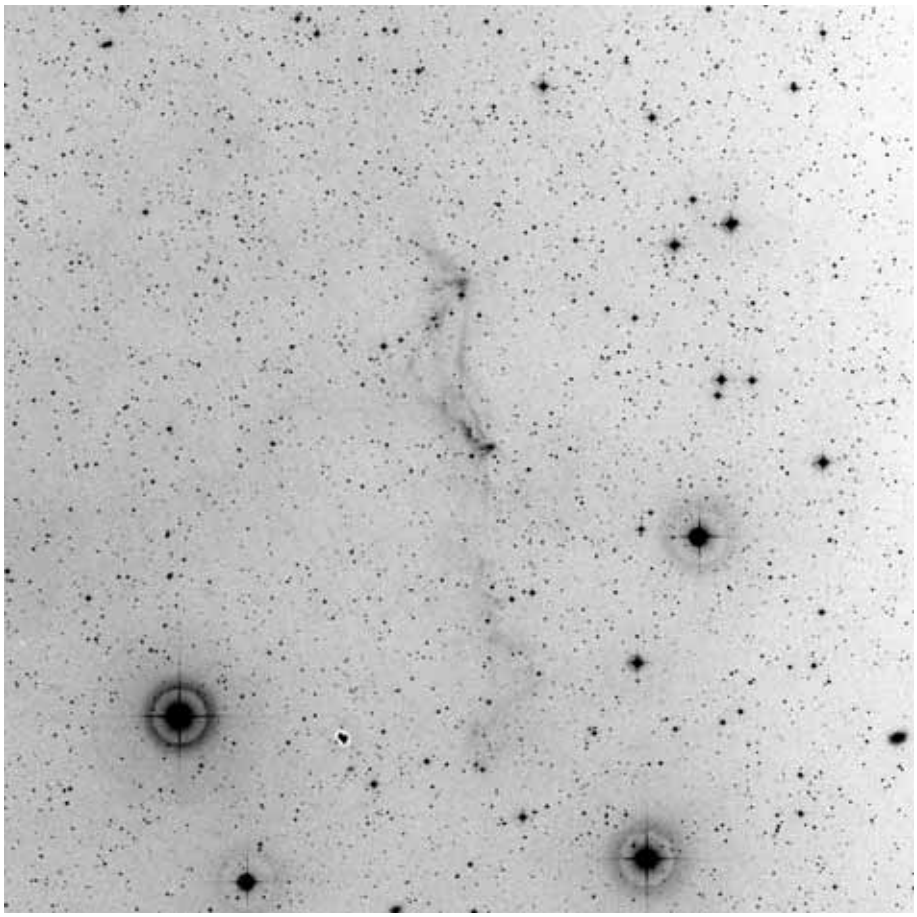
Observing notes:


+15°00'
+10°00'
+05°00'
+00°00'
4h00m
5h00m
4h30m
o1
o2
57
83
79
90
93
18
6
NGC 1662
π1
88
16
66
47
μ
π2
14
46
Tabit
Abell 539
ν
40
π4
ρ
21
π5
π6

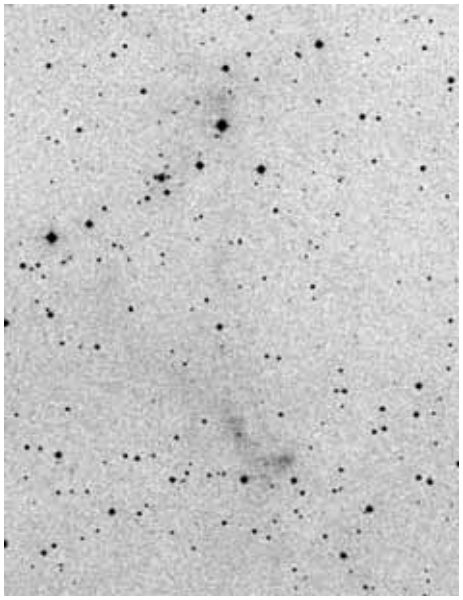

+09°00'
+08°00'
+07°00'
+06°00'
4h50m
4h45m
4h40m
4h35m
NGC 1590
NGC 1633
NGC 1634
Tabit

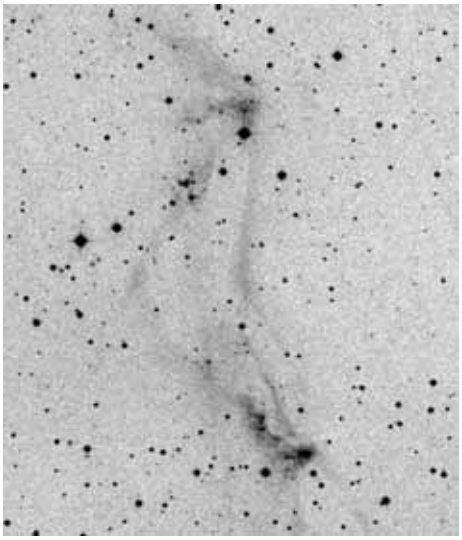
Sh 2 - 251

in Taurus



60x60, red







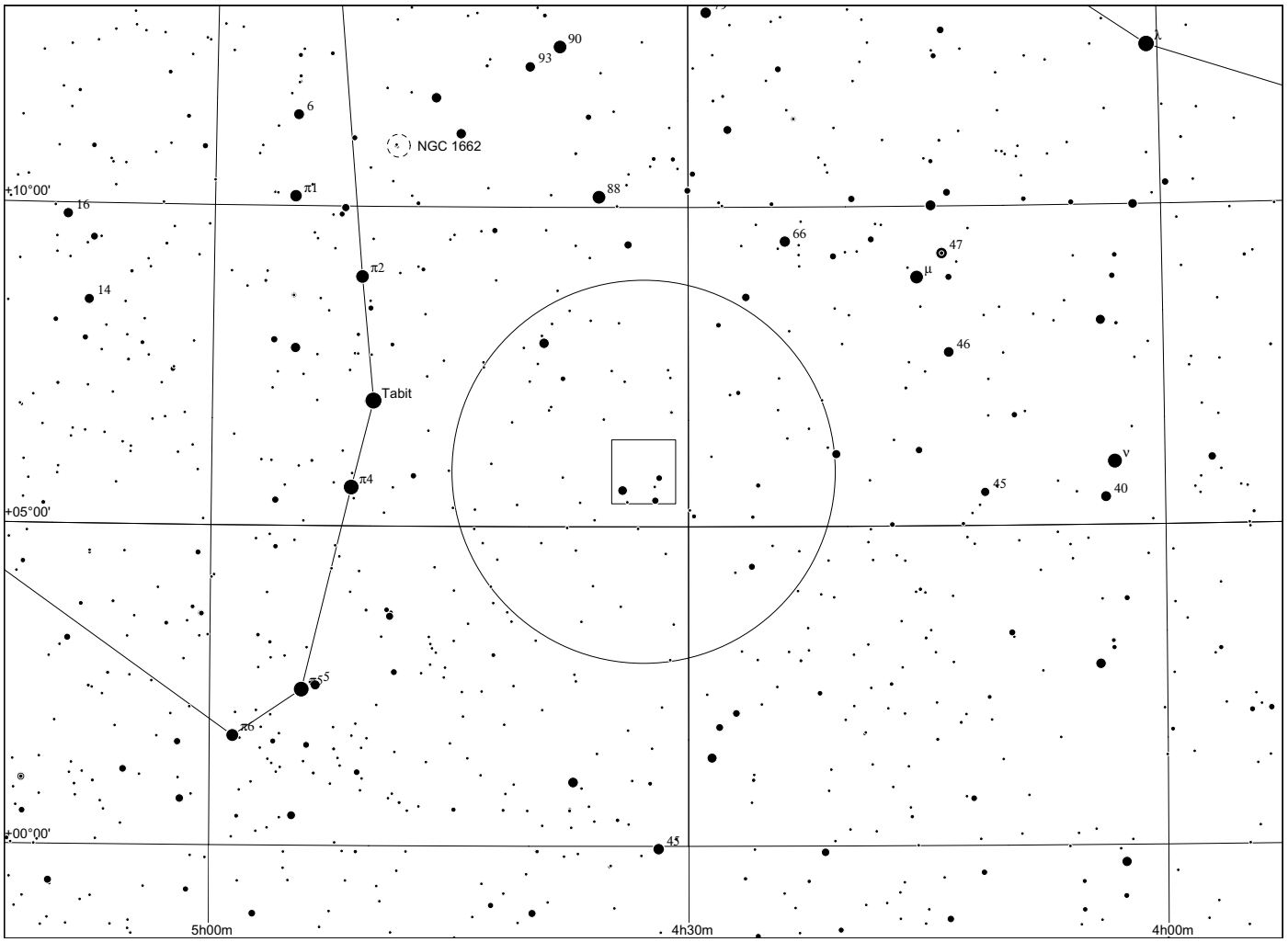
POSS blue

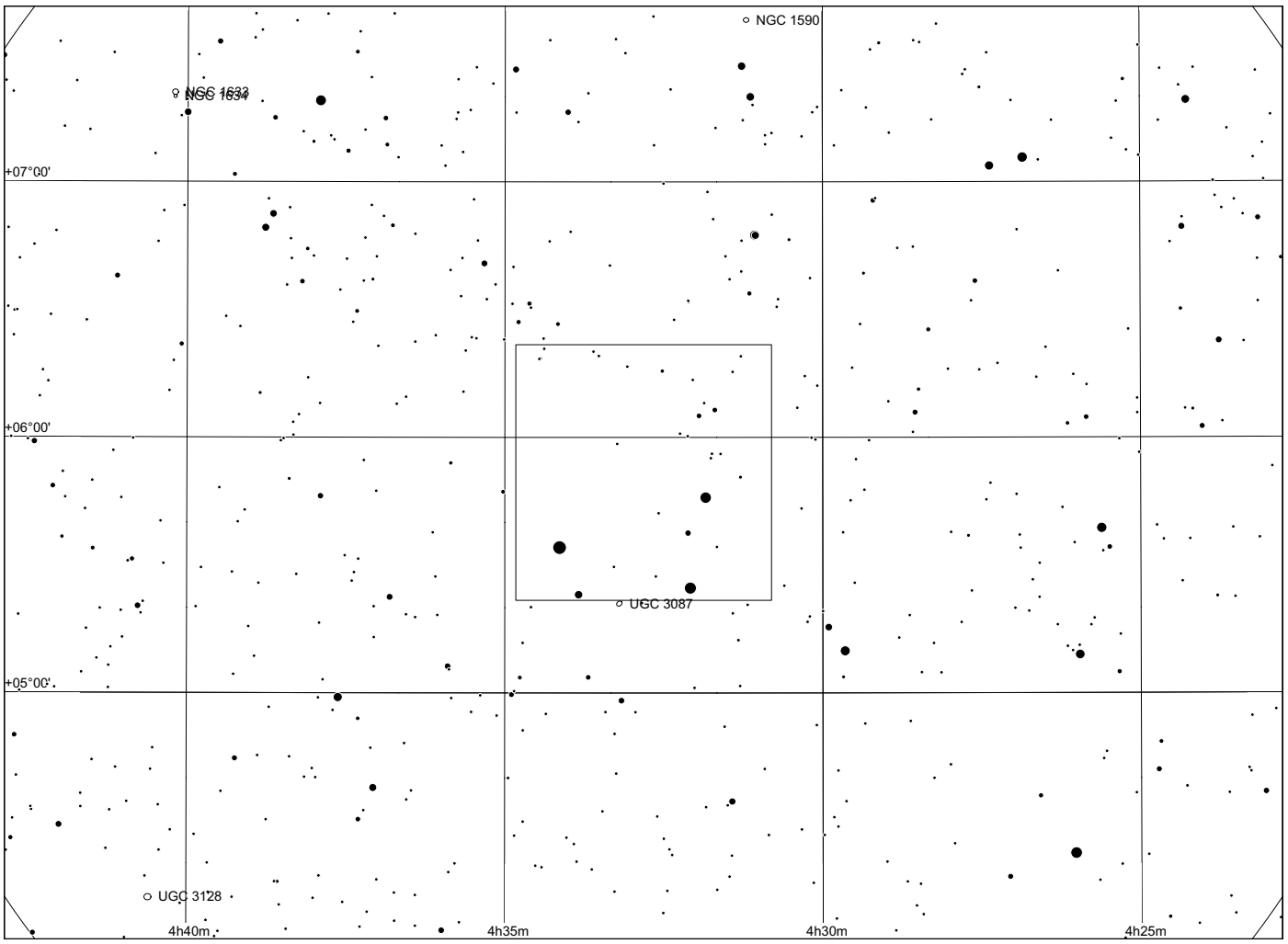
POSS red

composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-251		04 32 49.0	+05 51 46	35	3	3	1

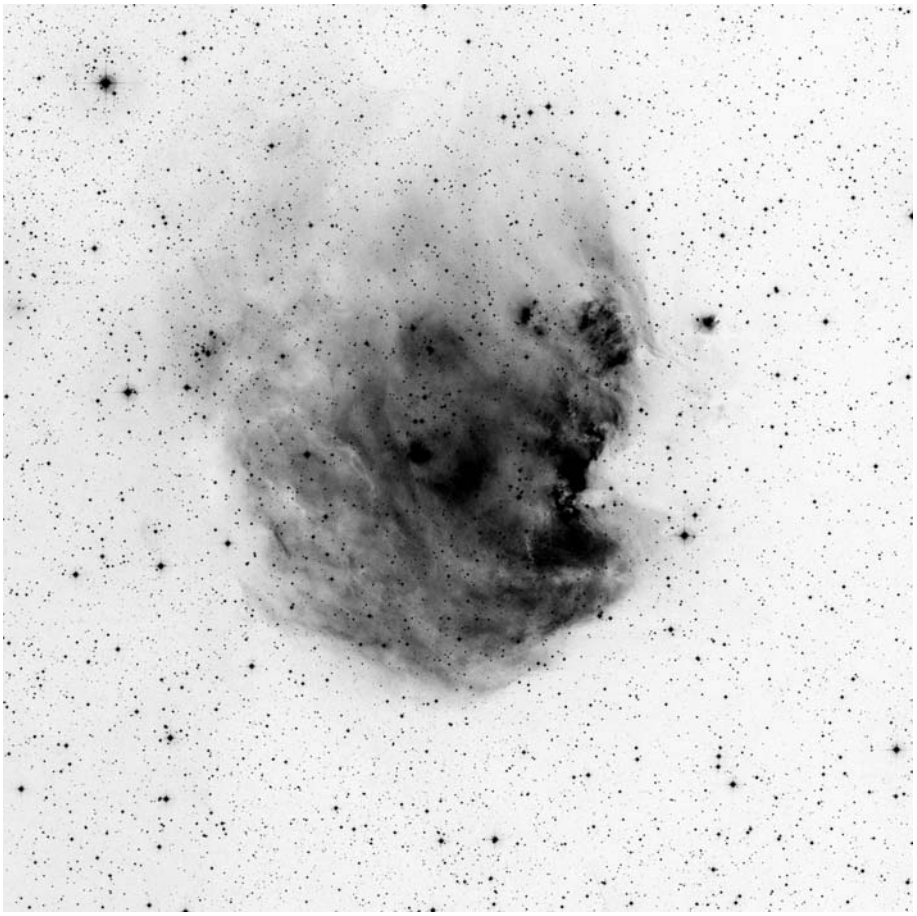
Observing notes:


NGC 1662
Tabit
π1
π2
π4
π5
π6
16
14
6
90
93
88
66
47
μ
46
45
40
ν
λ
+10°00'
+05°00'
+00°00'
5h00m
4h30m
4h00m

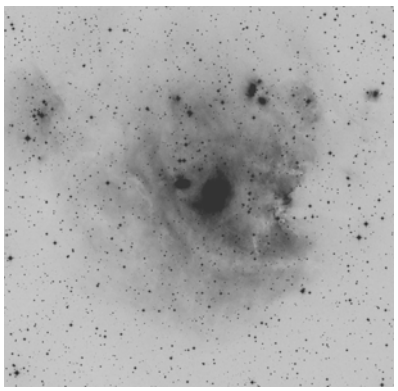

NGC 1590
NGC 1633
NGC 1634
UGC 3087
UGC 3128
+07°00'
+06°00'
+05°00'
4h40m
4h35m
4h30m
4h25m

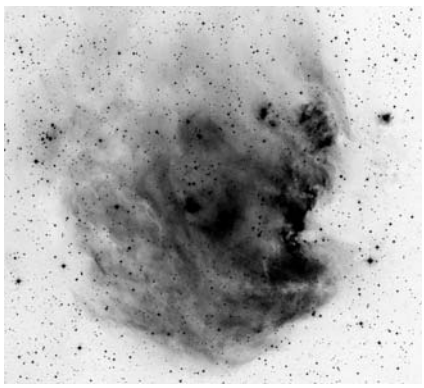
Sh 2 - 252

in Orion



60x60, red







POSS blue

POSS red

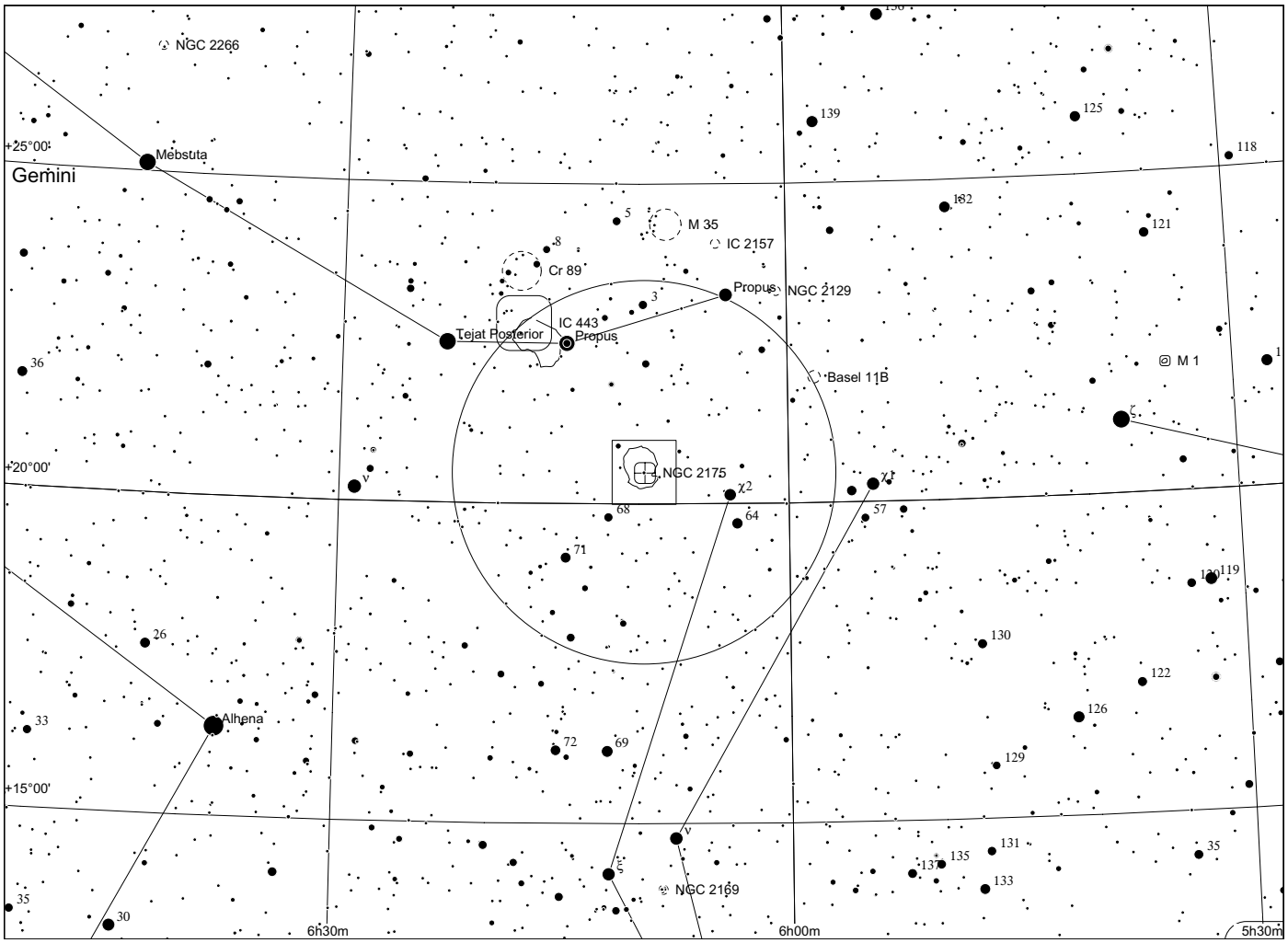
narrowband, Dean Salman, sharplesscatalog.com

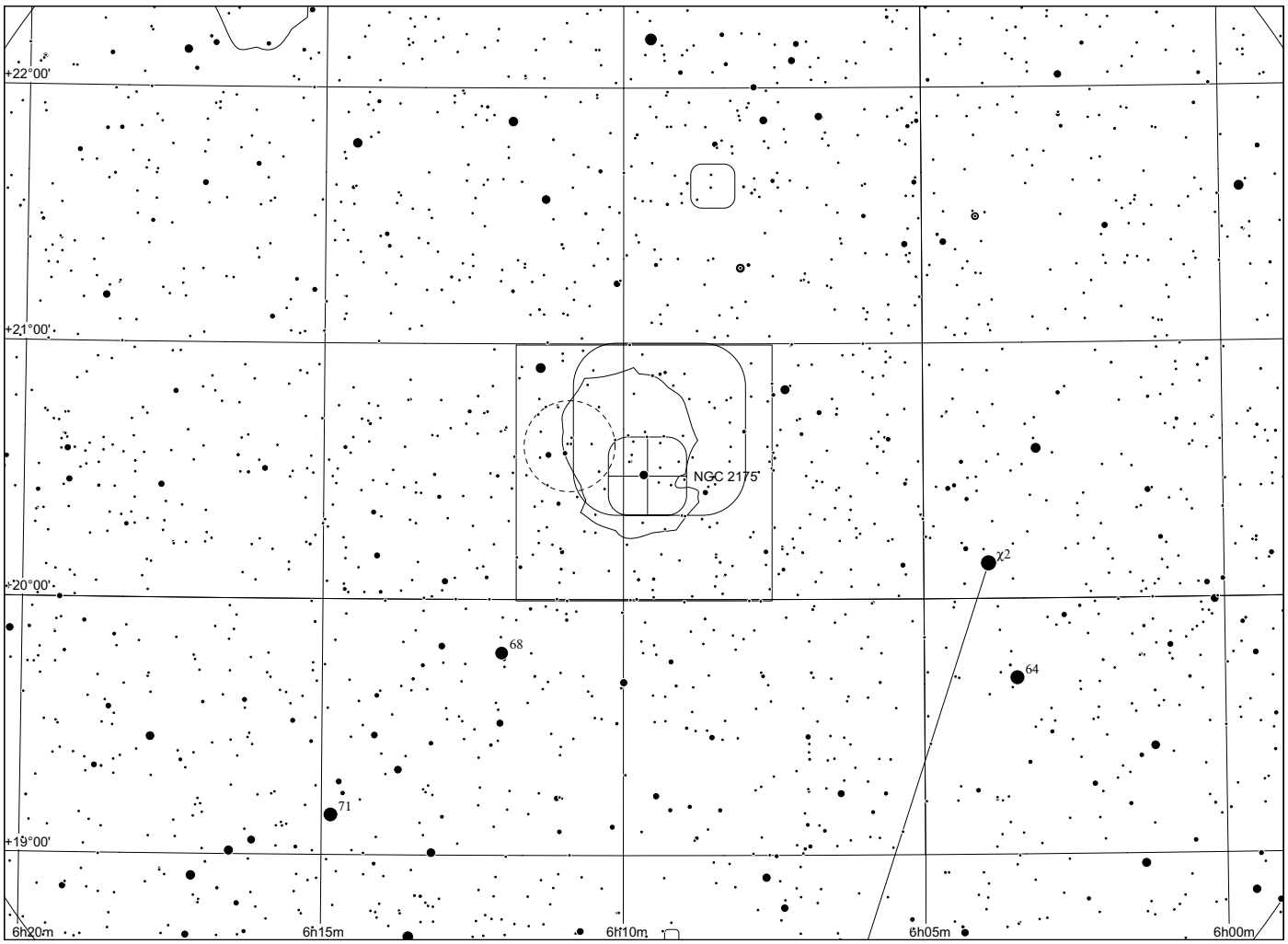
	other name	RA	dec	dia. '	F	S	B
Sh 2-252	NGC2174/2175/IC 2159	06 09 38.7	+20 30 01	40	3	2	3

Distance: 2000 pc, Size: 23.3 pc, Source: 1995ApJ...445..246C

The Monkey Nebula (also called the Monkey's Head Nebula) surrounds the NGC 2175 star cluster in the depths of the Gemini giant molecular clouds.

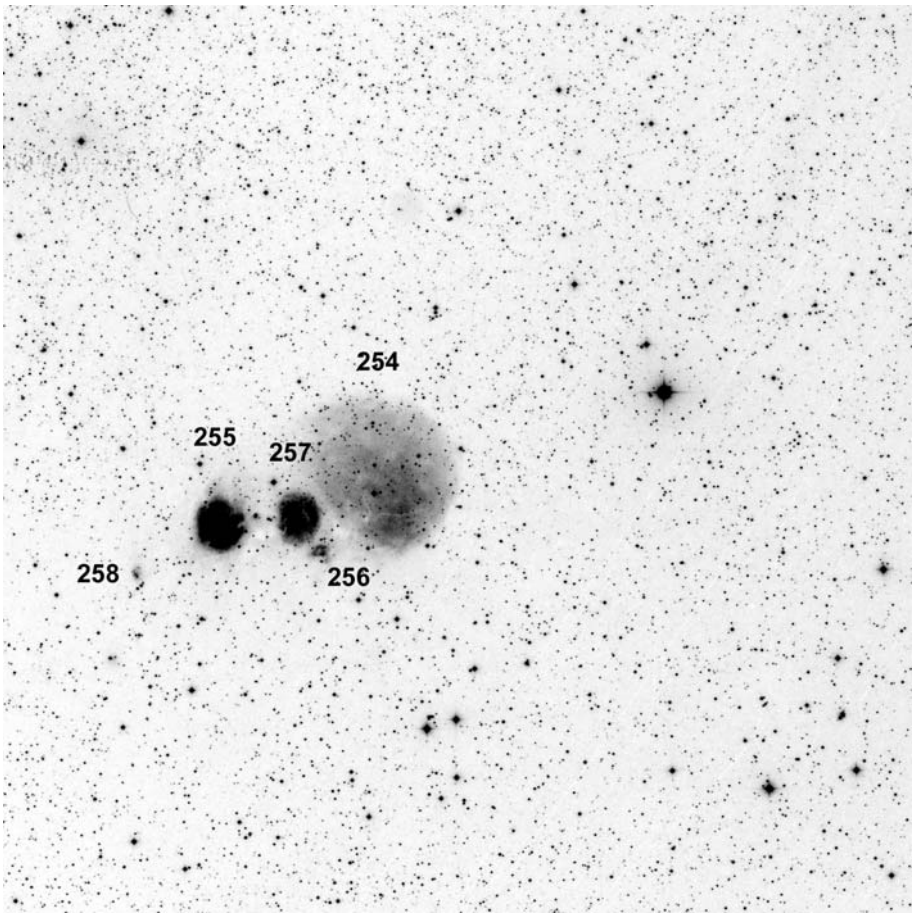
Observing notes:


NGC 2266
Gemini
+25°00'
Mebsuta
M 35
IC 2157
Cr 89
Propus
NGC 2129
IC 443
Tejat Posterior
Propus
Basel 11B
M 1
+20°00'
NGC 2175
χ2
χ1
Alhena
+15°00'
NGC 2169
6h30m
6h00m
5h30m


+22°00'
+21°00'
NGC 2175
+20°00'
χ2
+19°00'
6h20m
6h15m
6h10m
6h05m
6h00m

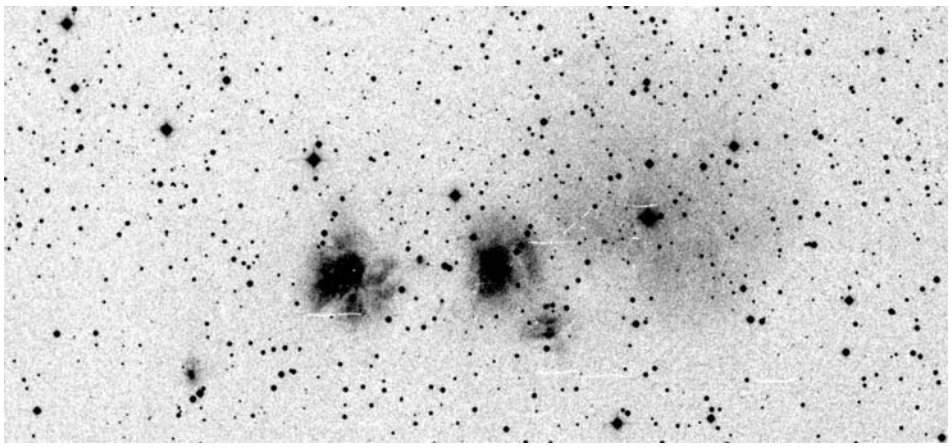
Sh 2 - 254-258

in Orion



60x60, red







POSS blue

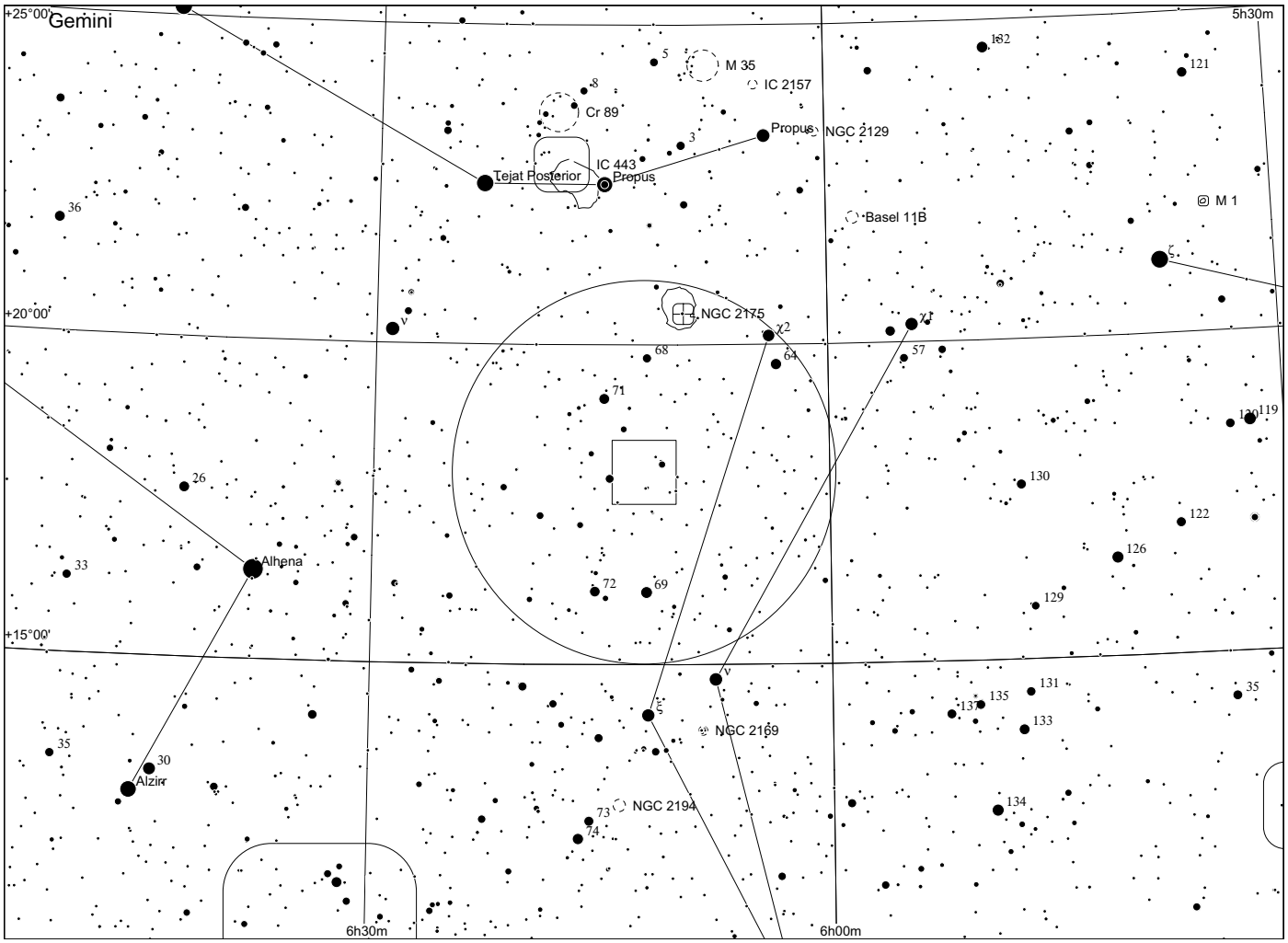
narrow band Dean Salman

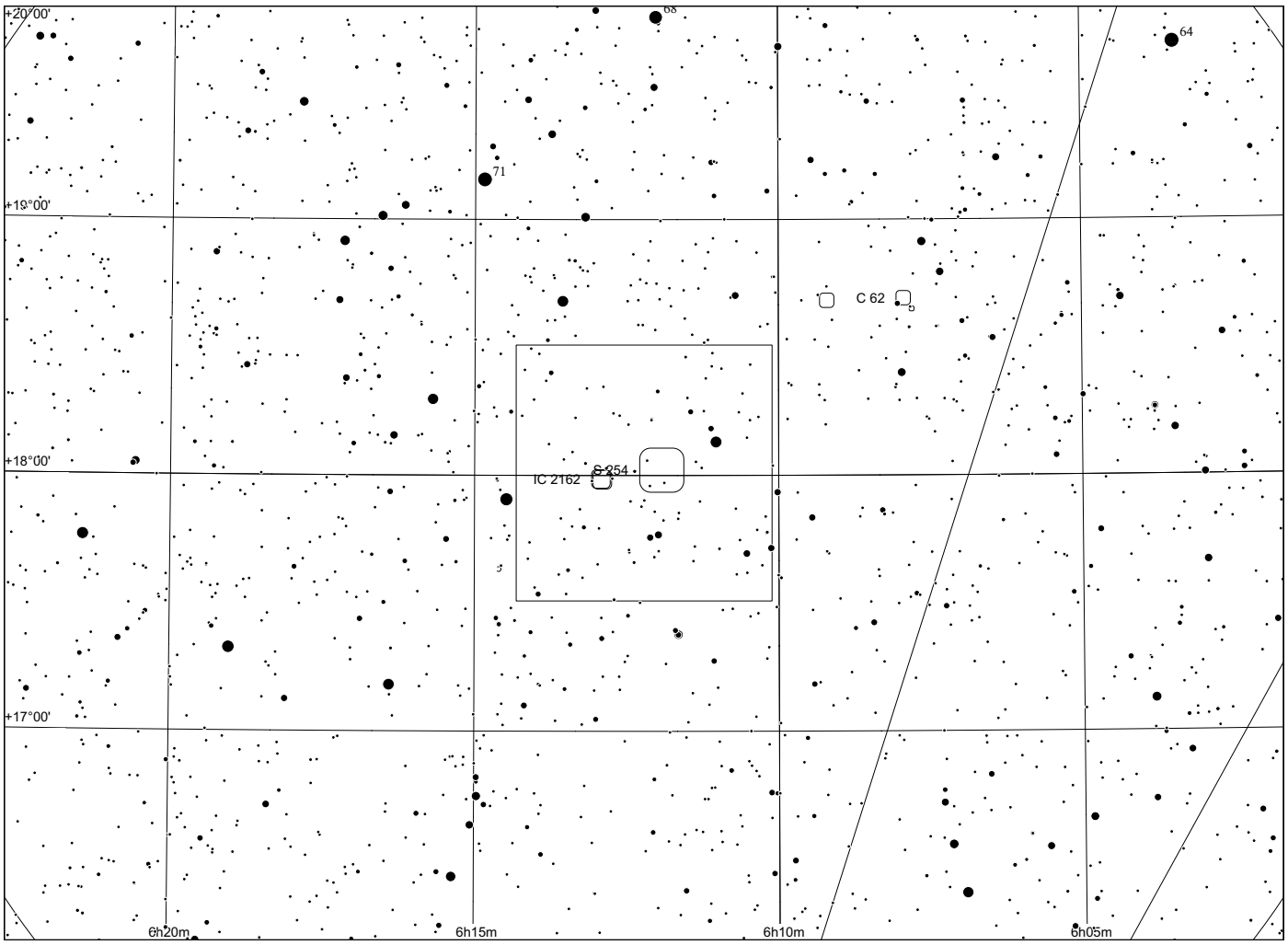
	other name	RA	dec	dia. '	F	S	B
Sh 2-254		06 12 20.5	+18 02 37	11	2	2	2
Sh 2-255		06 13 08.4	+17 58 31	3	1	2	3
Sh 2-256		06 12 38.3	+17 56 35	1	3	2	2
Sh 2-257	IC 2162	06 12 50.4	+17 58 33	3	1	2	3
Sh 2-258		06 13 32.3	+17 55 27	1	3	2	2

Distance: 2000 pc, Source: 1995ApJ...445..246C

A molecular cloud with 27 thousand solar masses surrounds the Sh 2-254 to Sh 2-258 HII and star formation region.

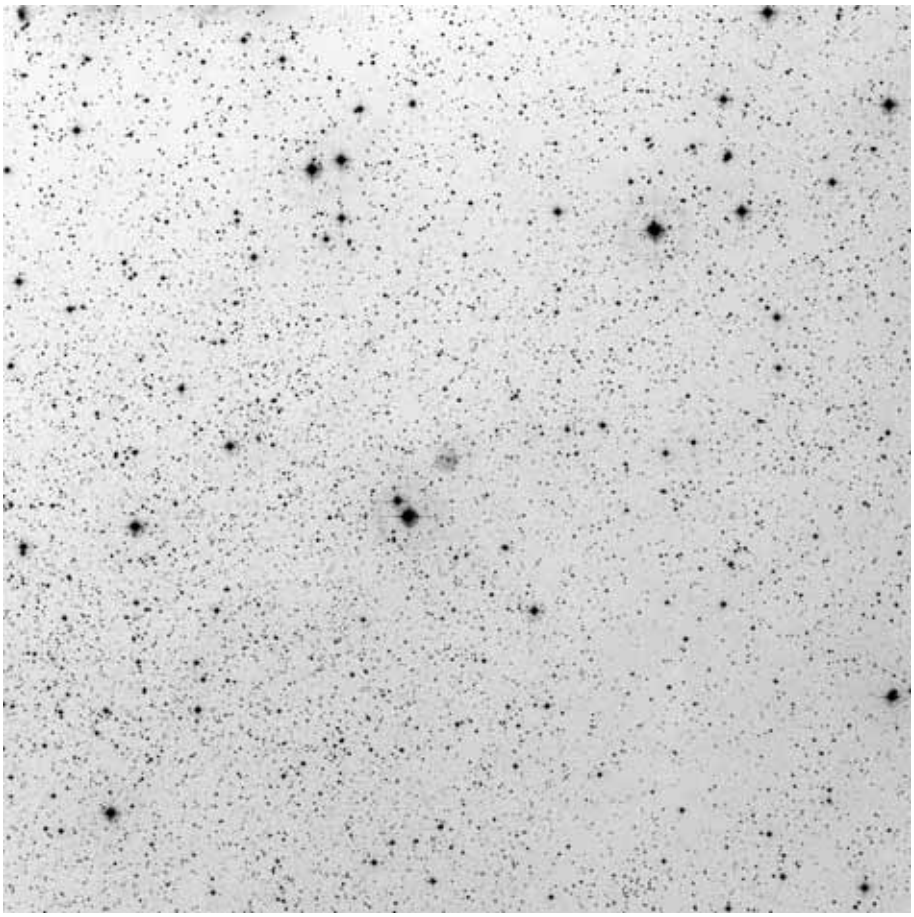
Observing notes:


Gemini
+25°00'
+20°00'
+15°00'
5h30m
6h30m
6h00m
M 35
IC 2157
Cr 89
Propus
NGC 2129
IC 443
Tejat Posterior
Propus
Basel 11B
M 1
NGC 2175
Alhena
Alzir
NGC 2169
NGC 2194

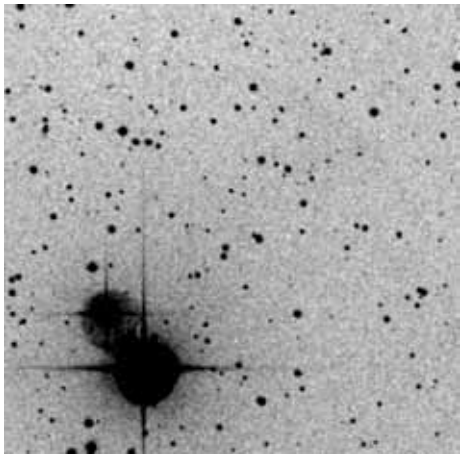

+20°00'
+19°00'
+18°00'
+17°00'
6h20m
6h15m
6h10m
6h05m
C 62
IC 2162
C 254

Sh 2 - 259

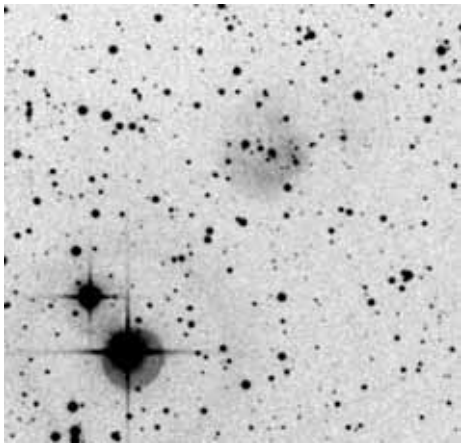
in Orion



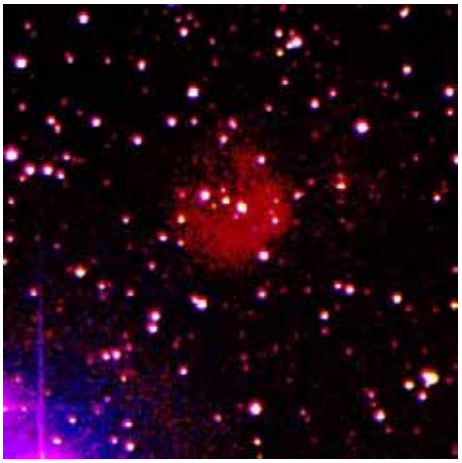
60x60, red



POSS blue



POSS red



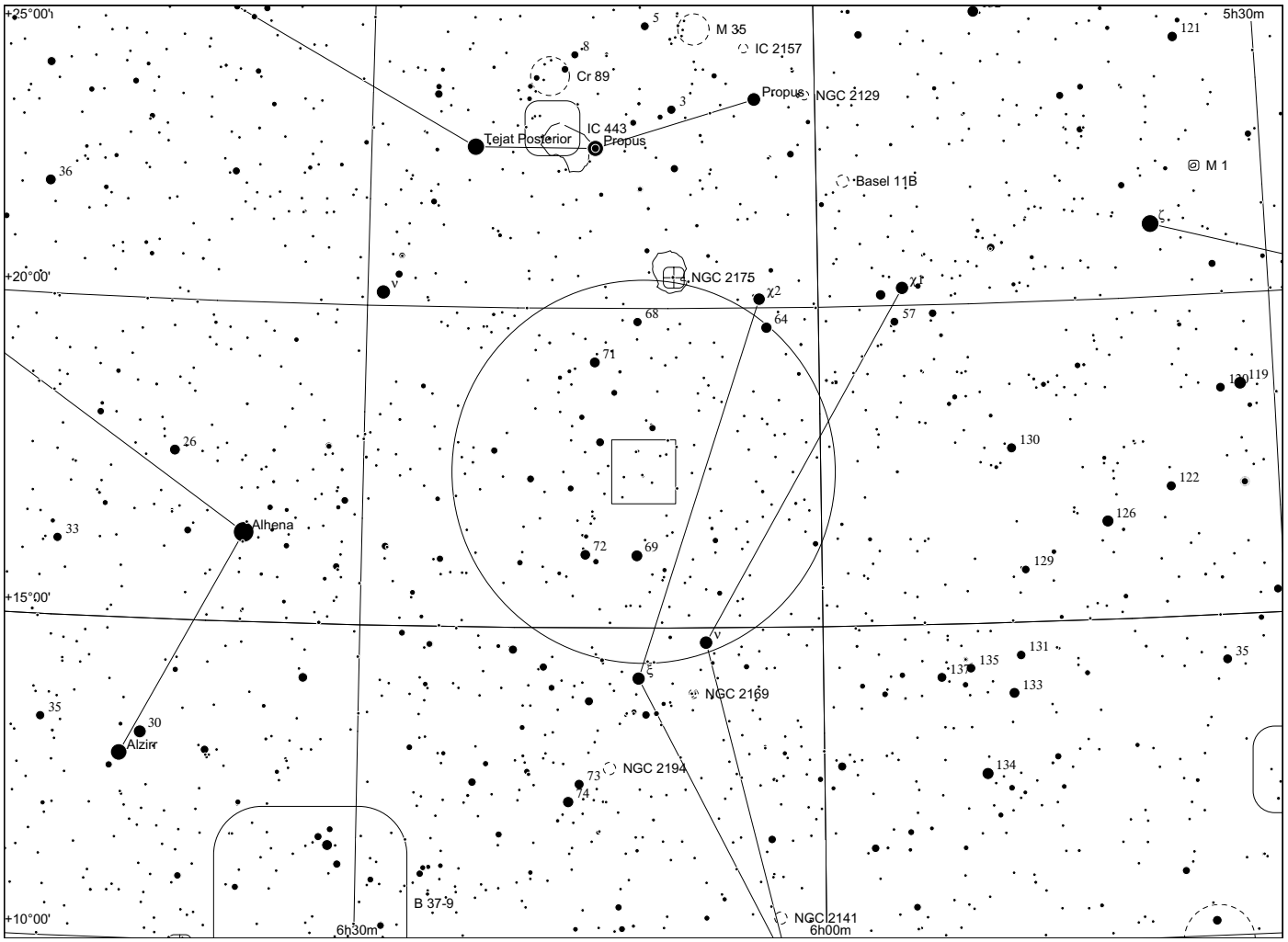
composite

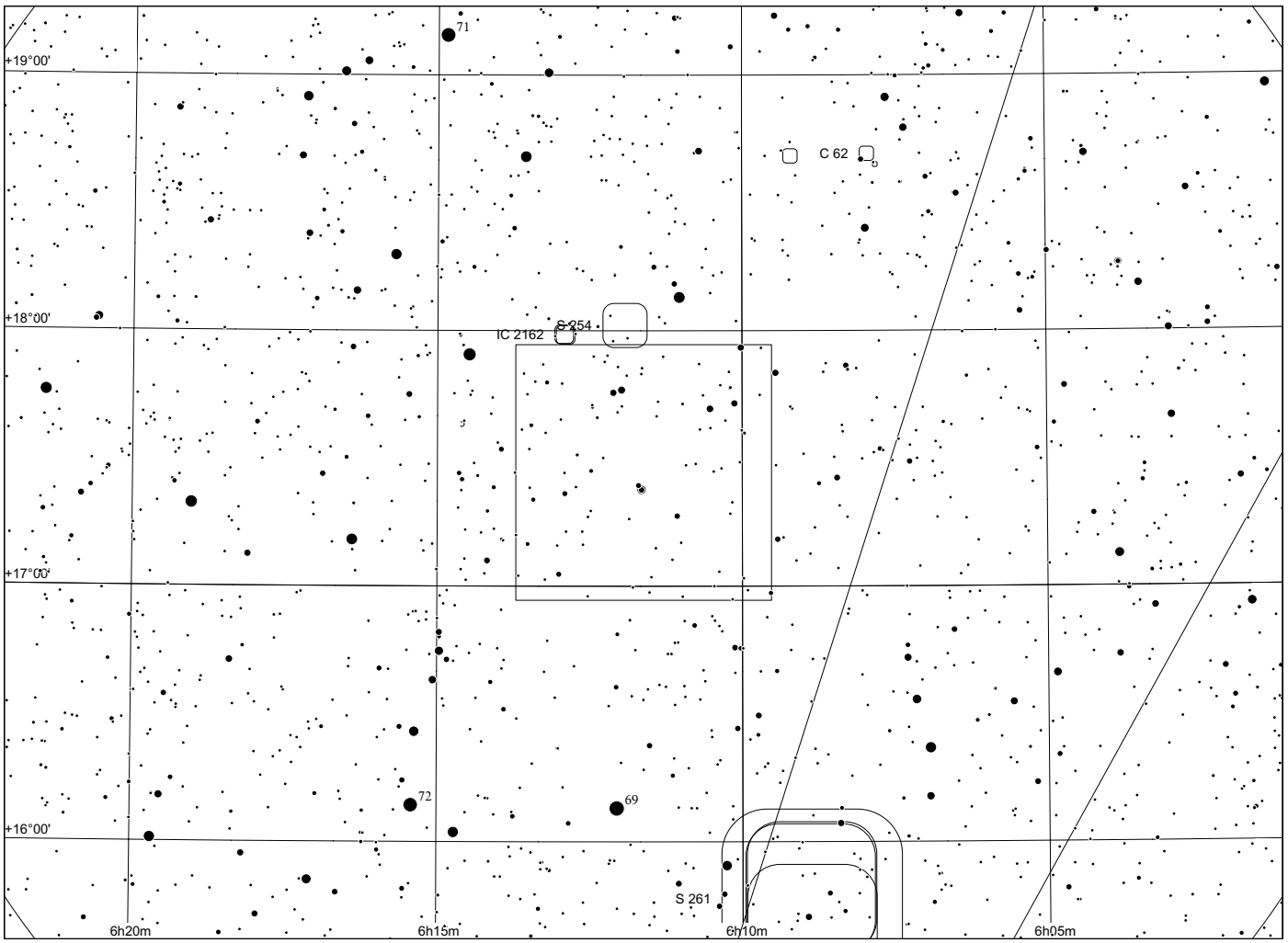
	other name	RA	dec	dia. '	F	S	B
Sh 2-259		06 11 36.7	+17 26 44	2	1	1	1

Distance: 8300 pc, Size: 4.8 pc, Source: 1982ApJS...49..183B

This is in the direction of the Gem OB1 molecular clouds but its distance seems to make it a background object. It is centred around a B1 V star.

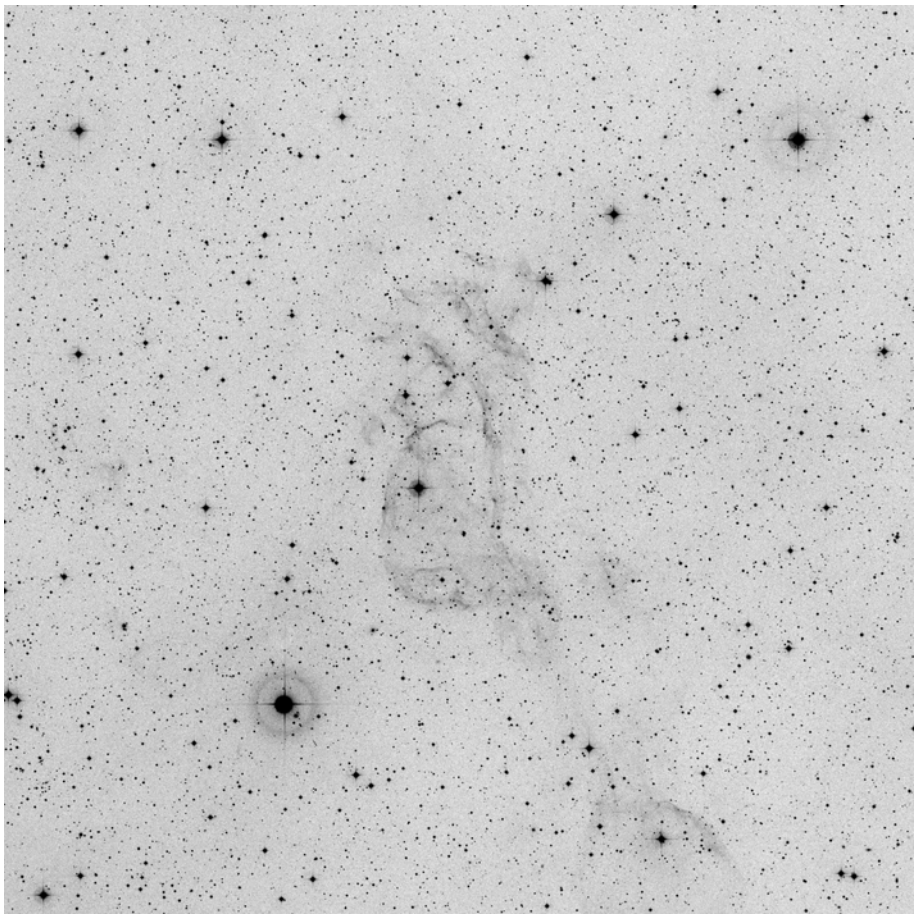
Observing notes:


+25°00'
+20°00'
+15°00'
+10°00'
5h30m
6h30m
6h00m
M 35
IC 2157
Cr 89
Propus
NGC 2129
IC 443
Prepus
Tejat Posterior
Basel 11B
M 1
NGC 2175
Alhena
Alzir
NGC 2169
NGC 2194
B 37-9
NGC 2141

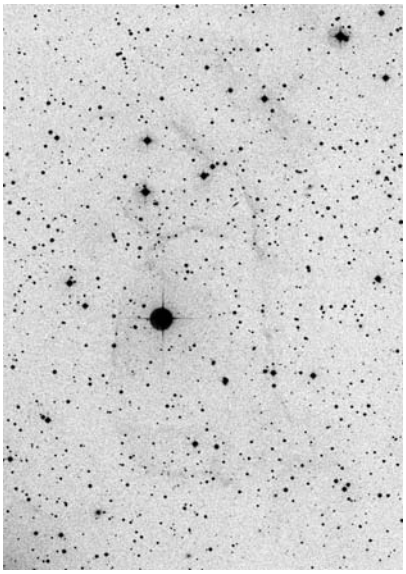

+19°00'
+18°00'
+17°00'
+16°00'
C 62
IC 2162
S 254
S 261
6h20m
6h15m
6h10m
6h05m

Sh 2 - 260

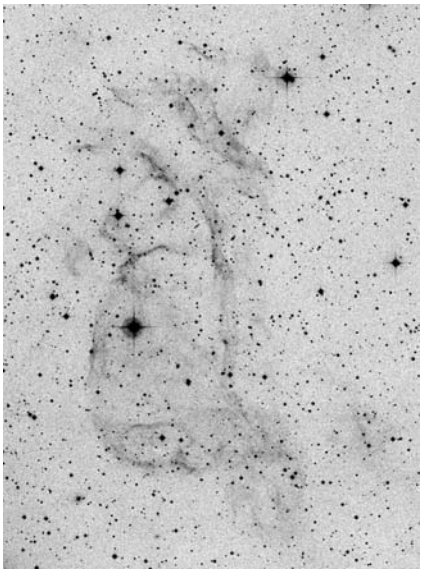
in Orion



60x60, red



POSS blue



POSS red

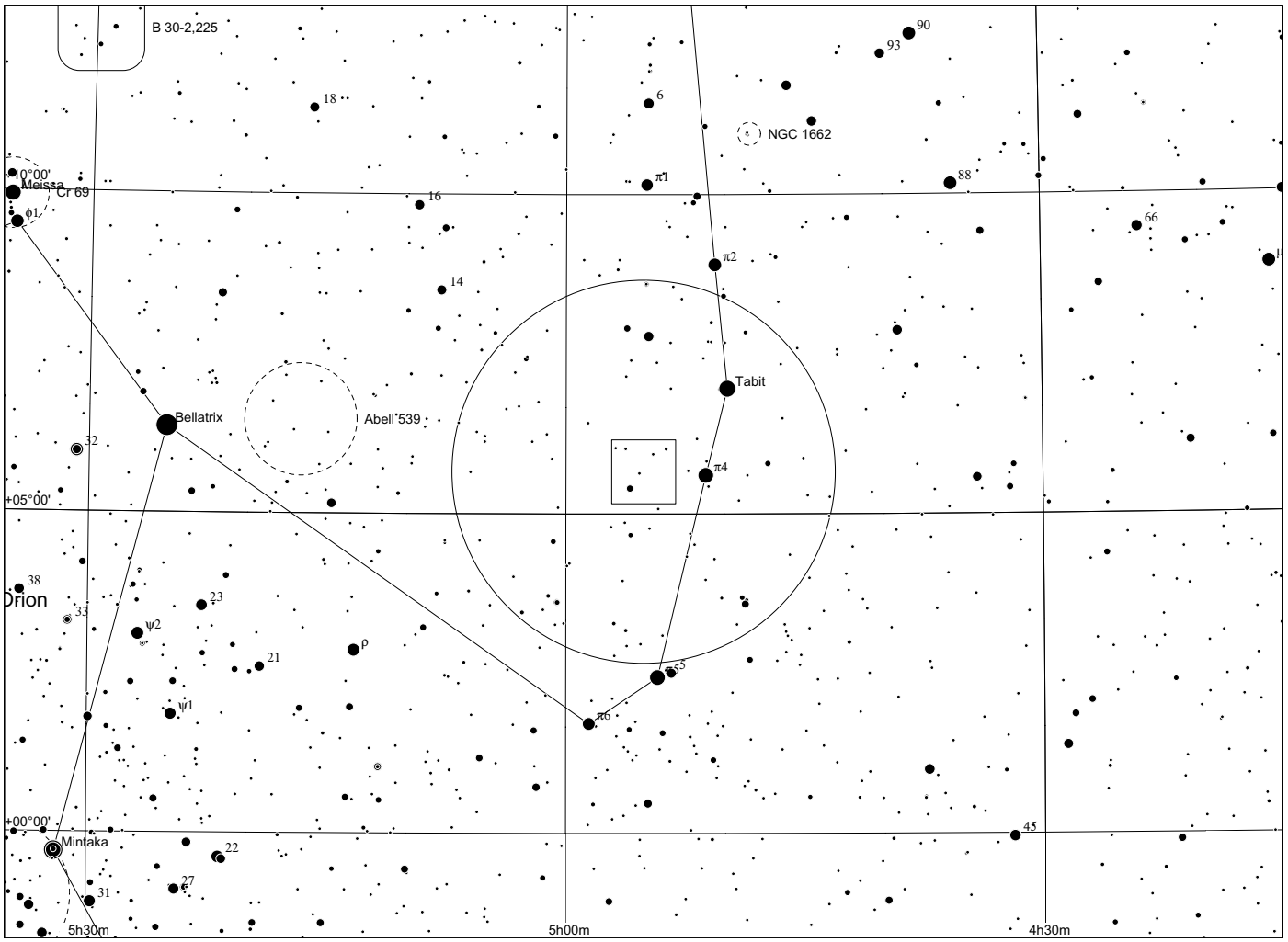


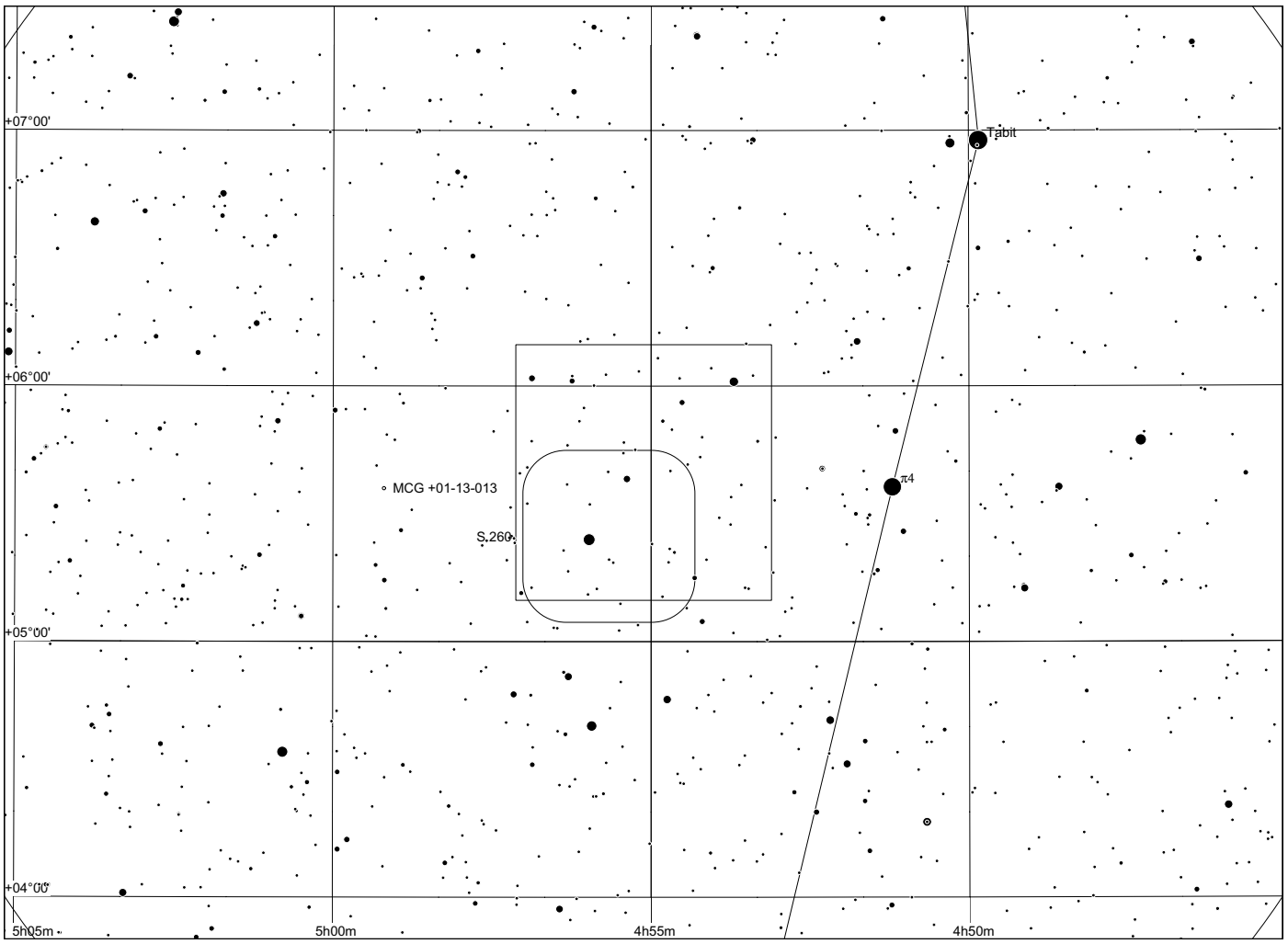
RGB Dean Salman

	other name	RA	dec	dia. '	F	S	B
Sh 2-260		04 55 07.0	+05 39 43	22	3	3	1

This red filamentary nebulosity is in the general direction of the Taurus dark cloud. It is most likely associated with the Lambda Orionis ring (Sh 2-264).

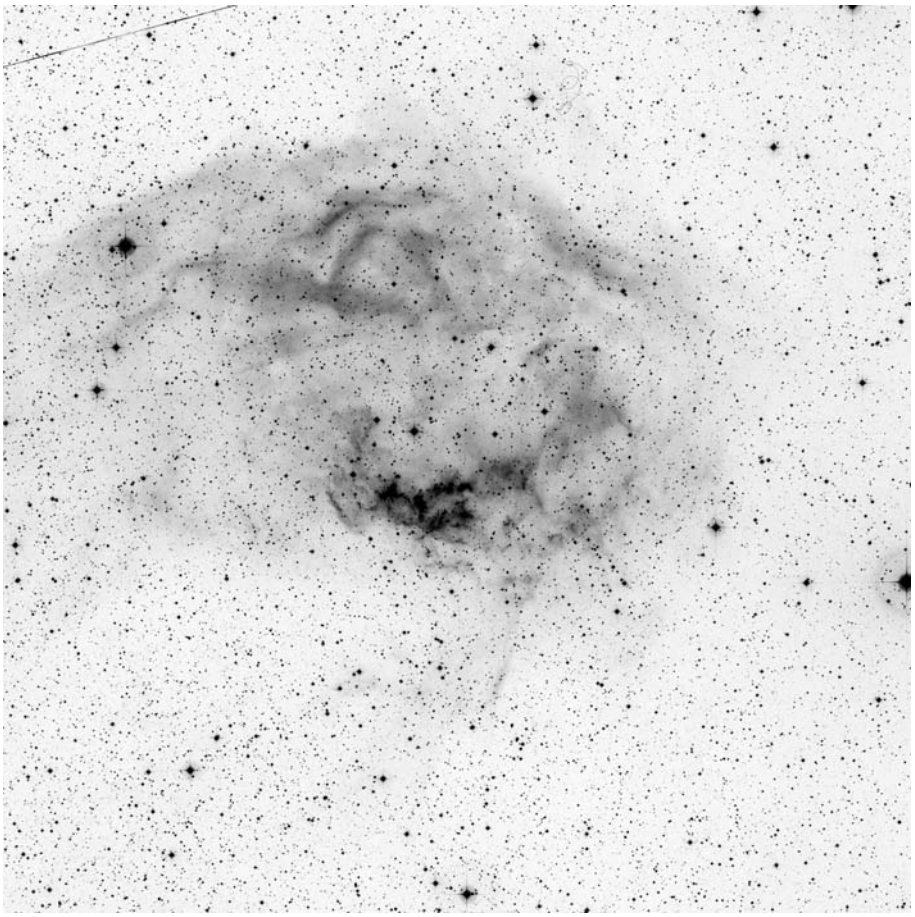
Observing notes:


B 30-2,225
90
93
18
6
NGC 1662
+10°00'
Meissa
Cr 69
φ1
π1
88
16
66
π2
14
Tabit
Bellatrix
Abell 539
32
π4
+05°00'
38
Orion
33
23
ψ2
ρ
21
π5
ψ1
π6
+00°00'
Mintaka
45
22
27
31
5h30m
5h00m
4h30m

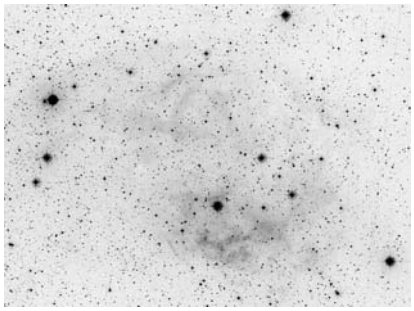

+07°00'
Tabit
+06°00'
MCG +01-13-013
π4
S 260
+05°00'
+04°00'
5h05m
5h00m
4h55m
4h50m

Sh 2 - 261

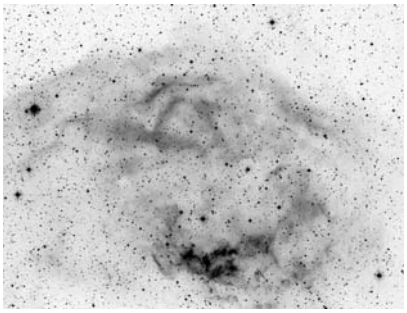
in Orion



60x60, red



POSS blue



POSS red



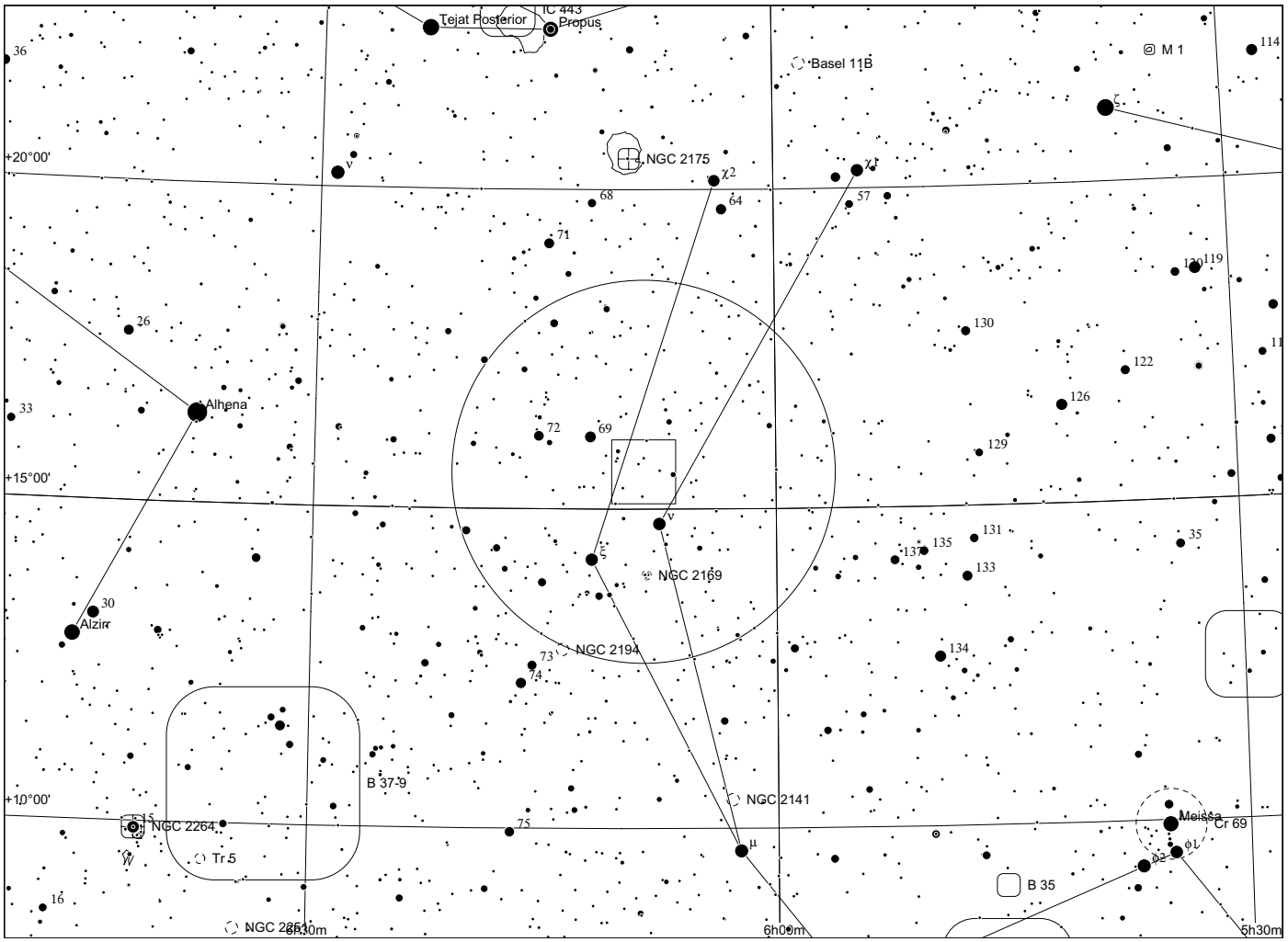
narrowband, Dean Salman, sharplesscatalog.com

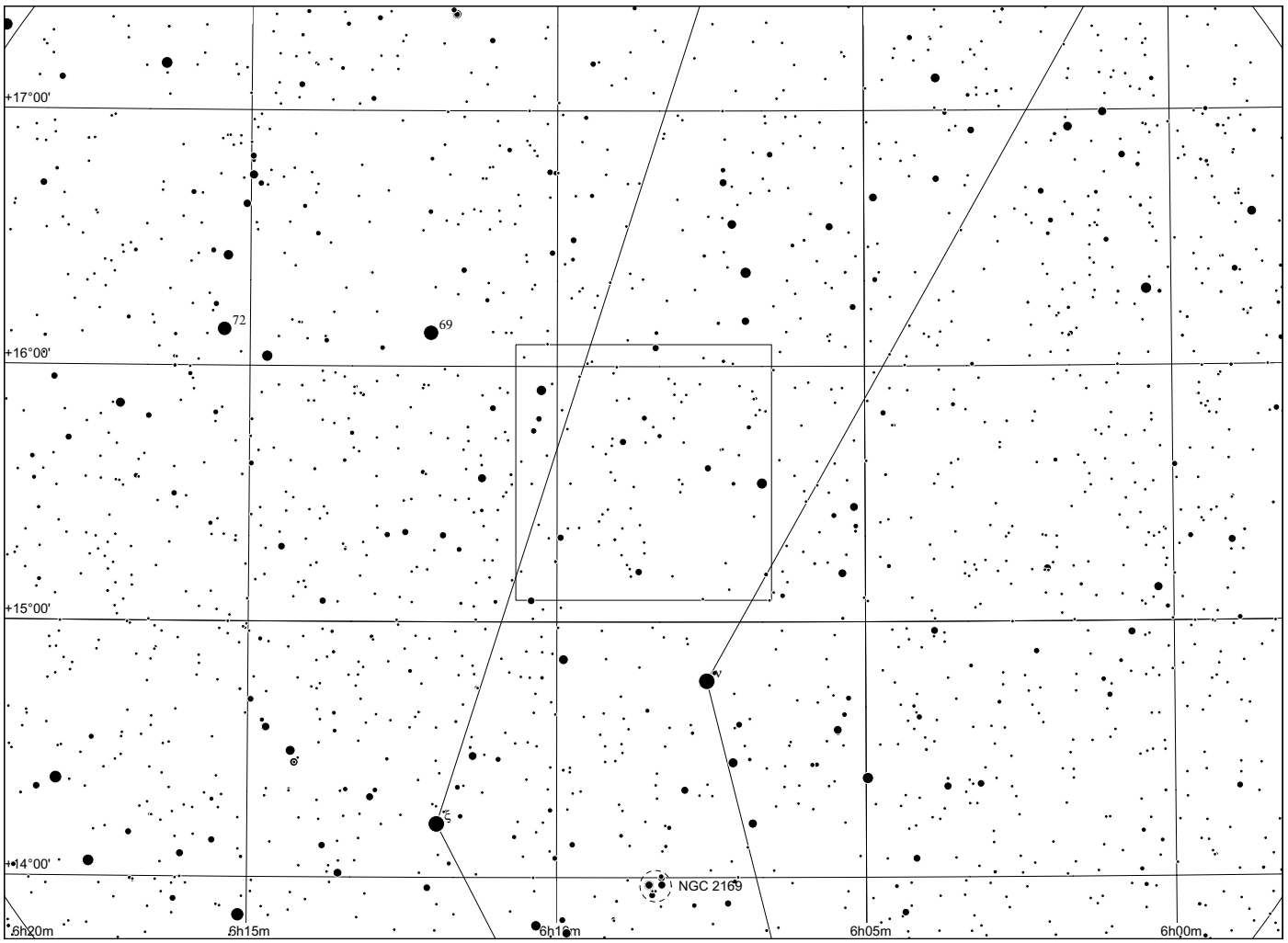
	other name	RA	dec	dia. '	F	S	B
Sh 2-261		06 08 56.6	+15 48 07	45	3	2	2

Distance: 1000 pc, Size: 13.1 pc, Source: 1987A&A...171..216C

This is Lower's nebula and appears to be ionised by the O7.5V runaway star HD 41997.

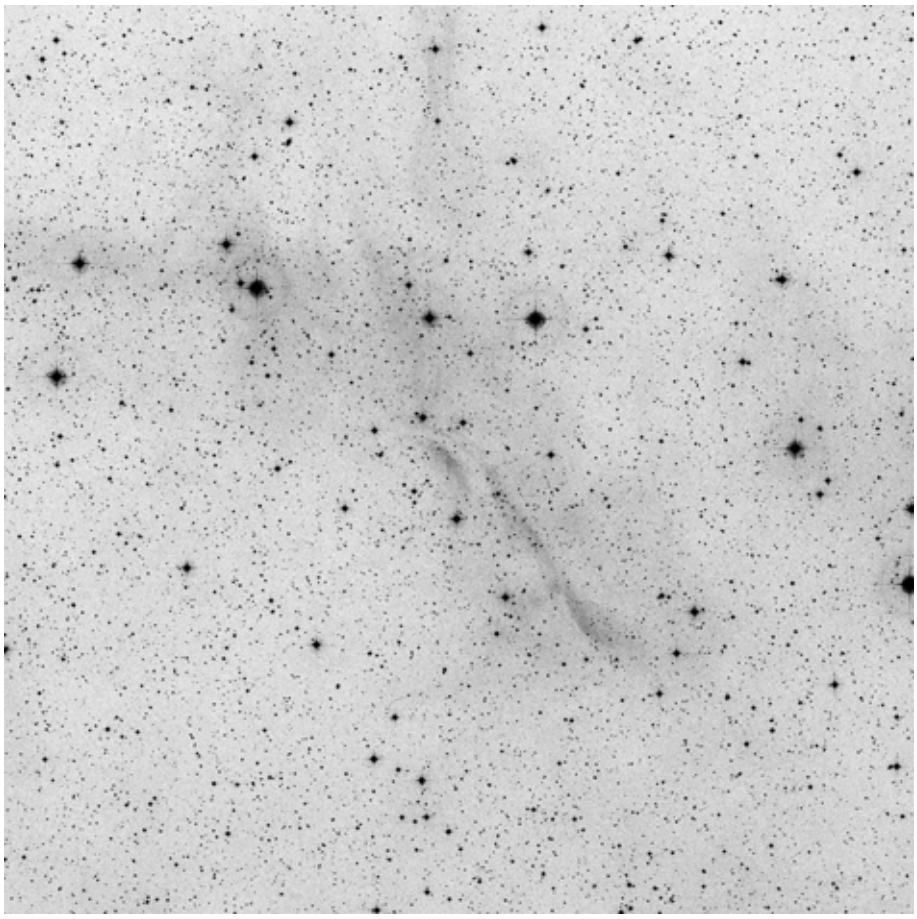
Observing notes:


Tejat Posterior
IC 443
Propus
Basel 11B
M 1
NGC 2175
Alhena
Alzirr
NGC 2169
NGC 2194
B 37-9
NGC 2264
Tr 5
NGC 2141
Meissa
Cr 69
B 35
NGC 2244
+20°00'
+15°00'
+10°00'
6h30m
6h00m
5h30m

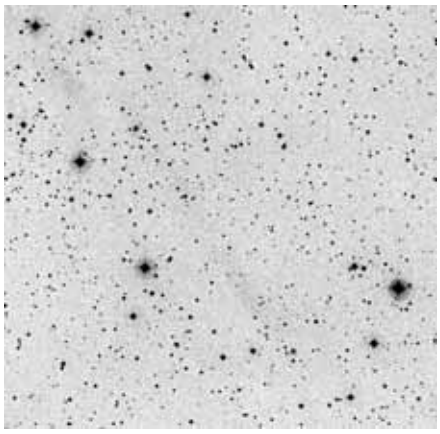

+17°00'
+16°00'
+15°00'
+14°00'
NGC 2169
6h20m
6h15m
6h10m
6h05m
6h00m

Sh 2 - 262

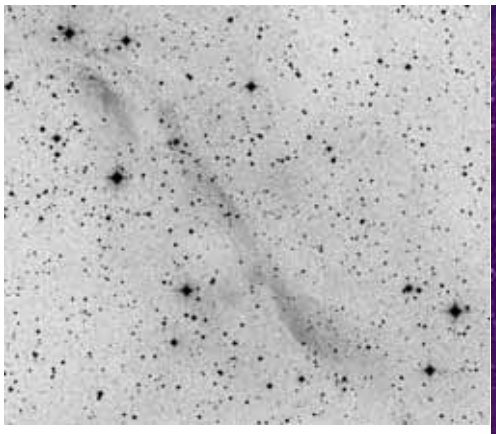
in Orion



60x60, red



POSS blue



POSS red



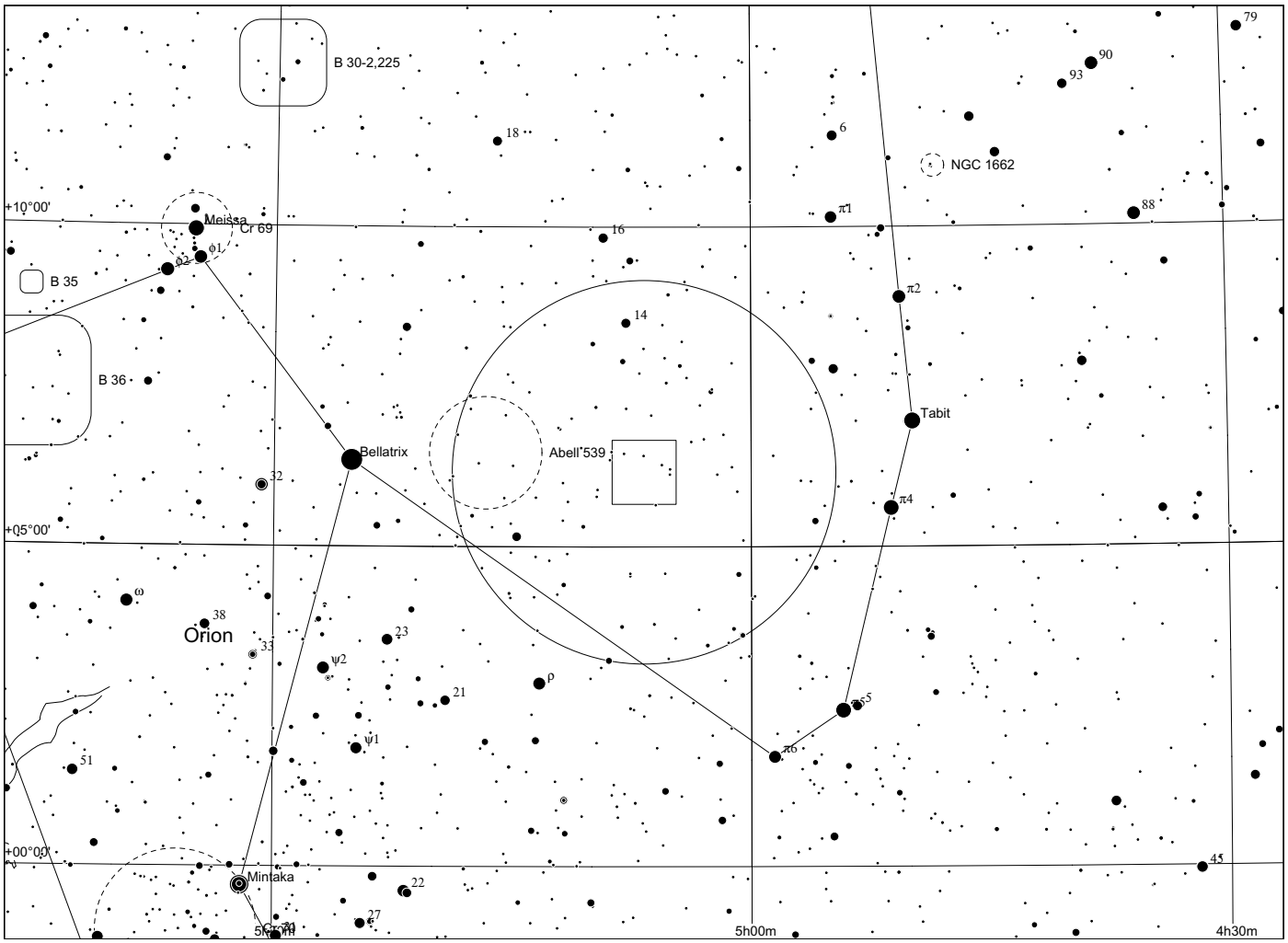
composite

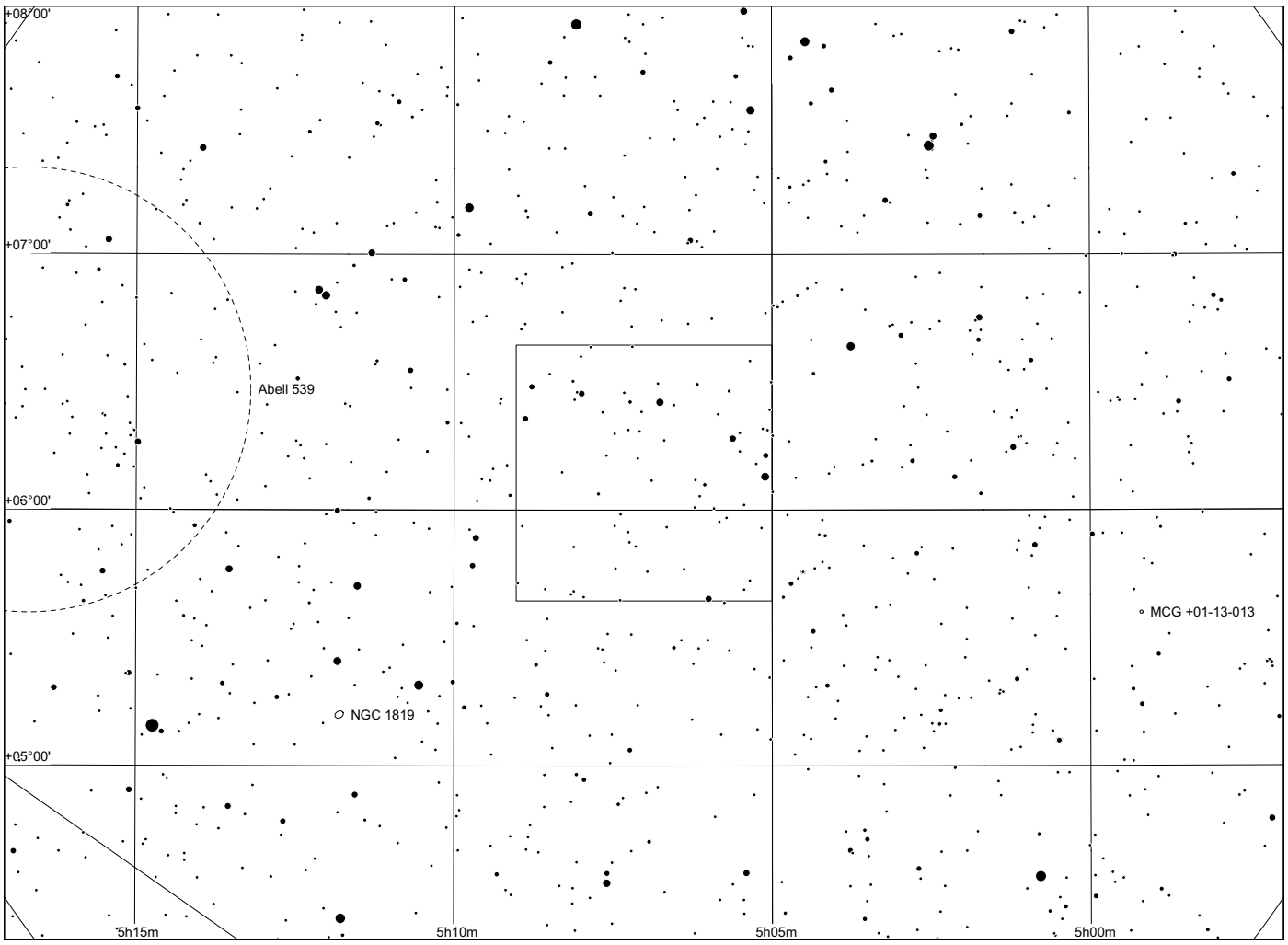
	other name	RA	dec	dia. '	F	S	B
Sh 2-262		05 06 44.7	+06 10 04	20	3	2	1

Distance: 900 pc, Size: 5.2 pc, Source: 2003A&A...397..133R

This nebula is most likely associated with the Lambda Orionis ring (Sh 2-264).

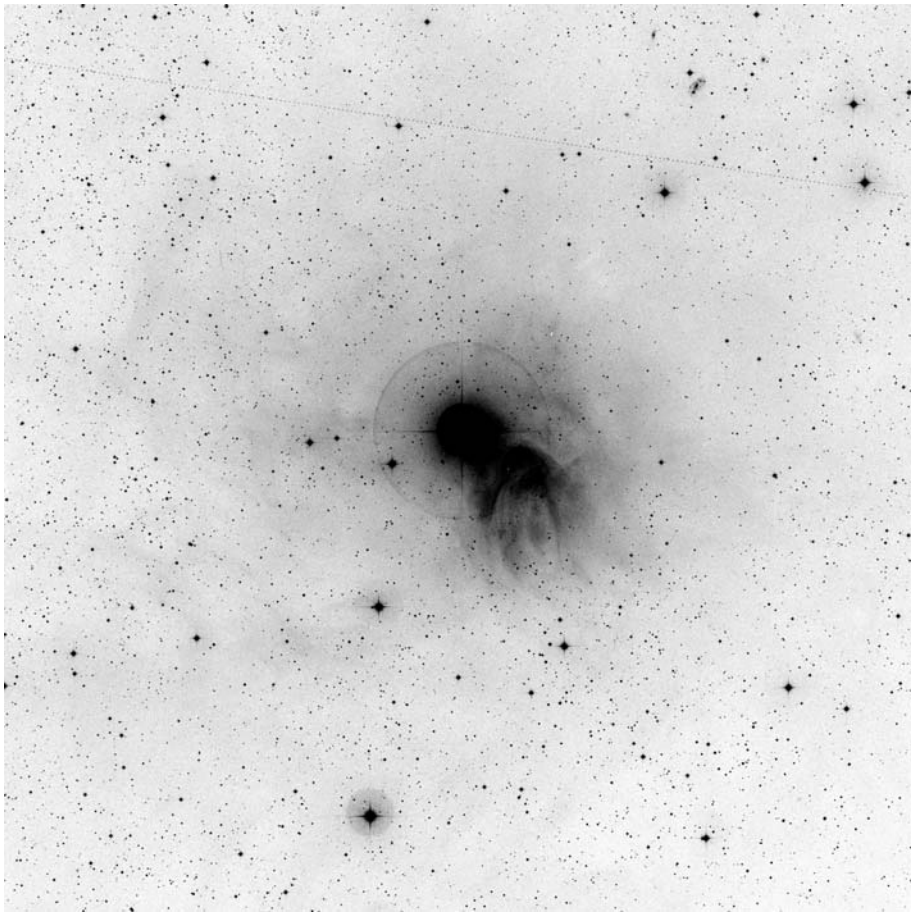
Observing notes:


B 30-2,225
NGC 1662
Meissa
Cr 69
B 35
B 36
Bellatrix
Abell 539
Tabit
Orion
Mintaka
+10°00'
+05°00'
+00°00'
5h00m
4h30m

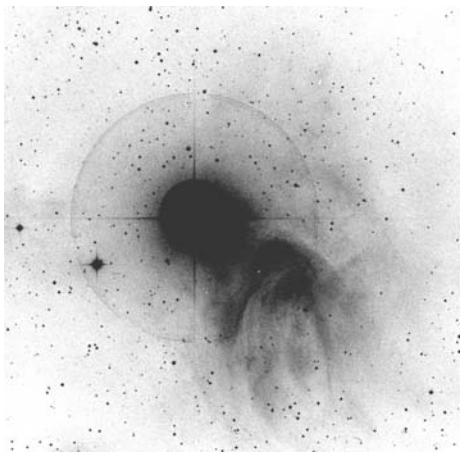

Abell 539
NGC 1819
MCG +01-13-013
+08°00'
+07°00'
+06°00'
+05°00'
5h15m
5h10m
5h05m
5h00m

Sh 2 - 263

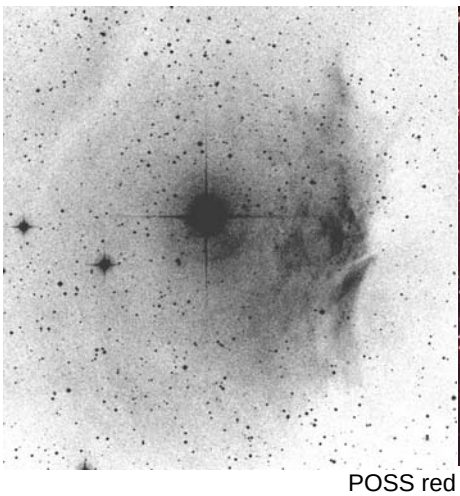
in Orion



60x60, red



POSS blue



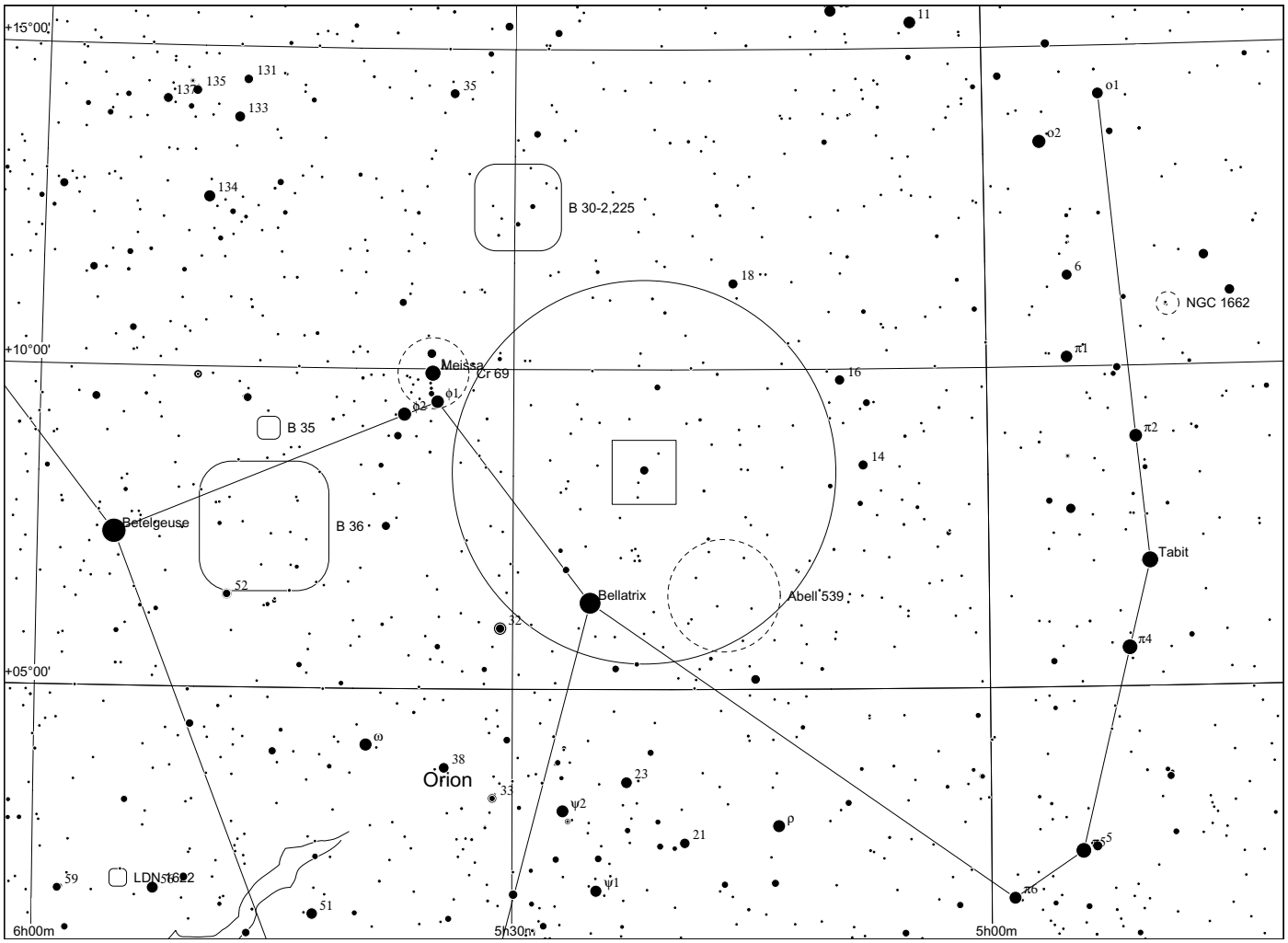
POSS red

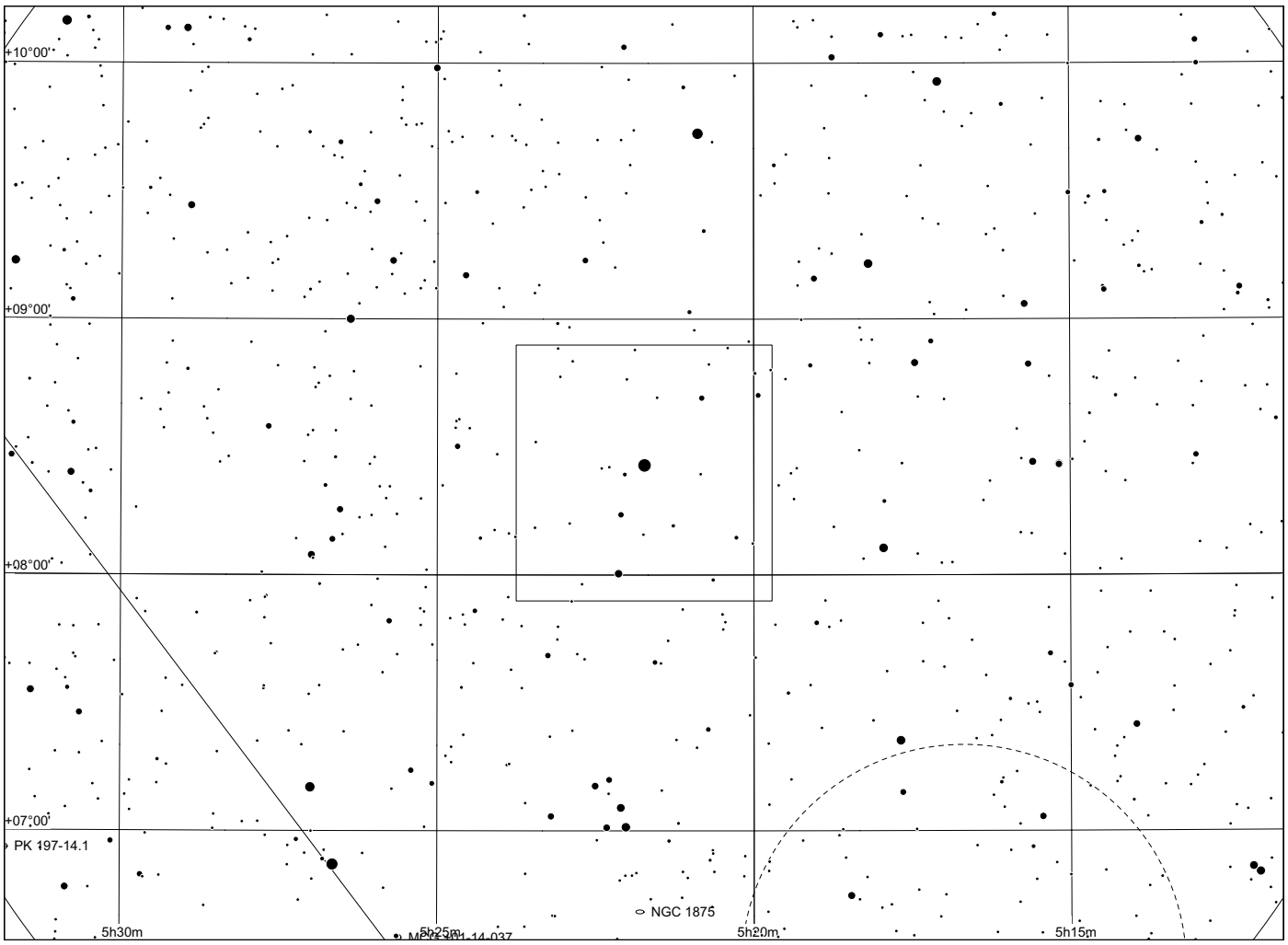


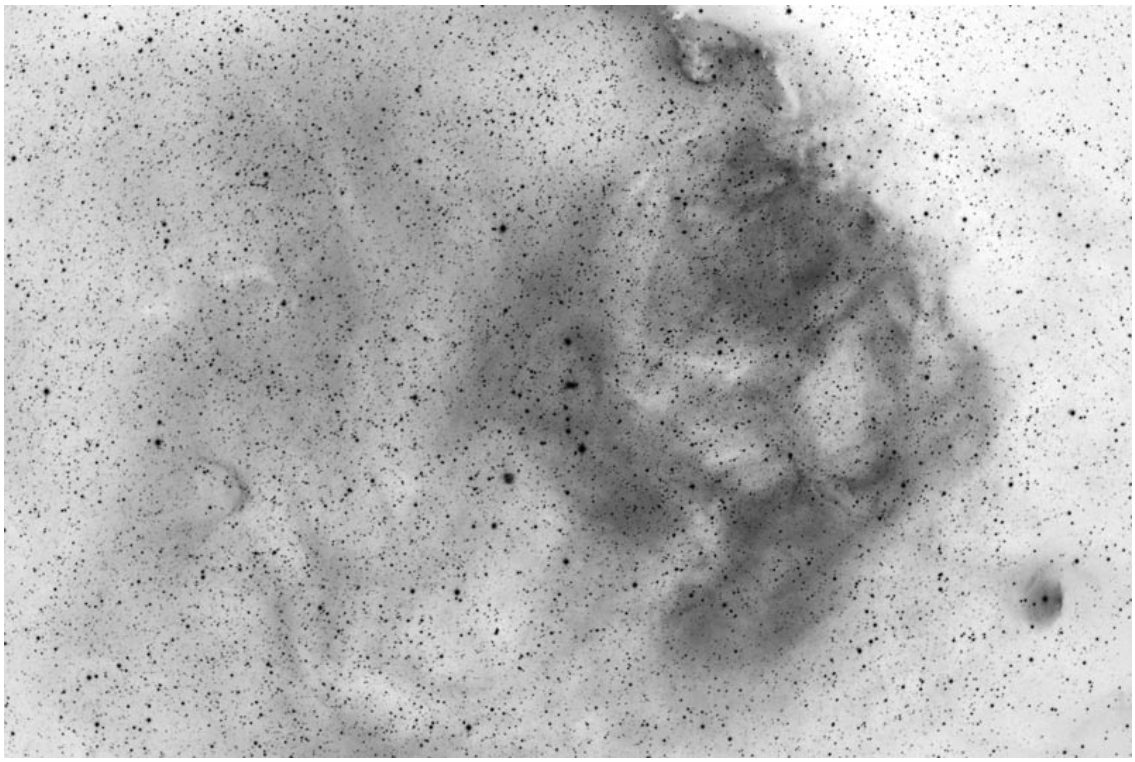
RGB Dean Salman

	other name	RA	dec	dia. '	F	S	B
Sh 2-263		05 21 44.4	+08 23 56	22	2	2	2

Observing notes:


+15°00'
+10°00'
+05°00'
6h00m
5h30m
5h00m
B 30-2,225
B 35
B 36
Meissa
Cr 69
Betelgeuse
Bellatrix
Abell 539
Orion
NGC 1662
Tabit
LDN 1622
11
35
131
135
137
133
134
18
16
14
52
32
38
33
23
21
59
51
o1
o2
6
π1
π2
π4
π5
π6
ω
ψ1
ψ2
ρ


+10°00'
+09°00'
+08°00'
+07°00'
PK 197-14.1
NGC 1875
5h30m
5h25m
5h20m
5h15m



Sh 2 - 264

in Orion

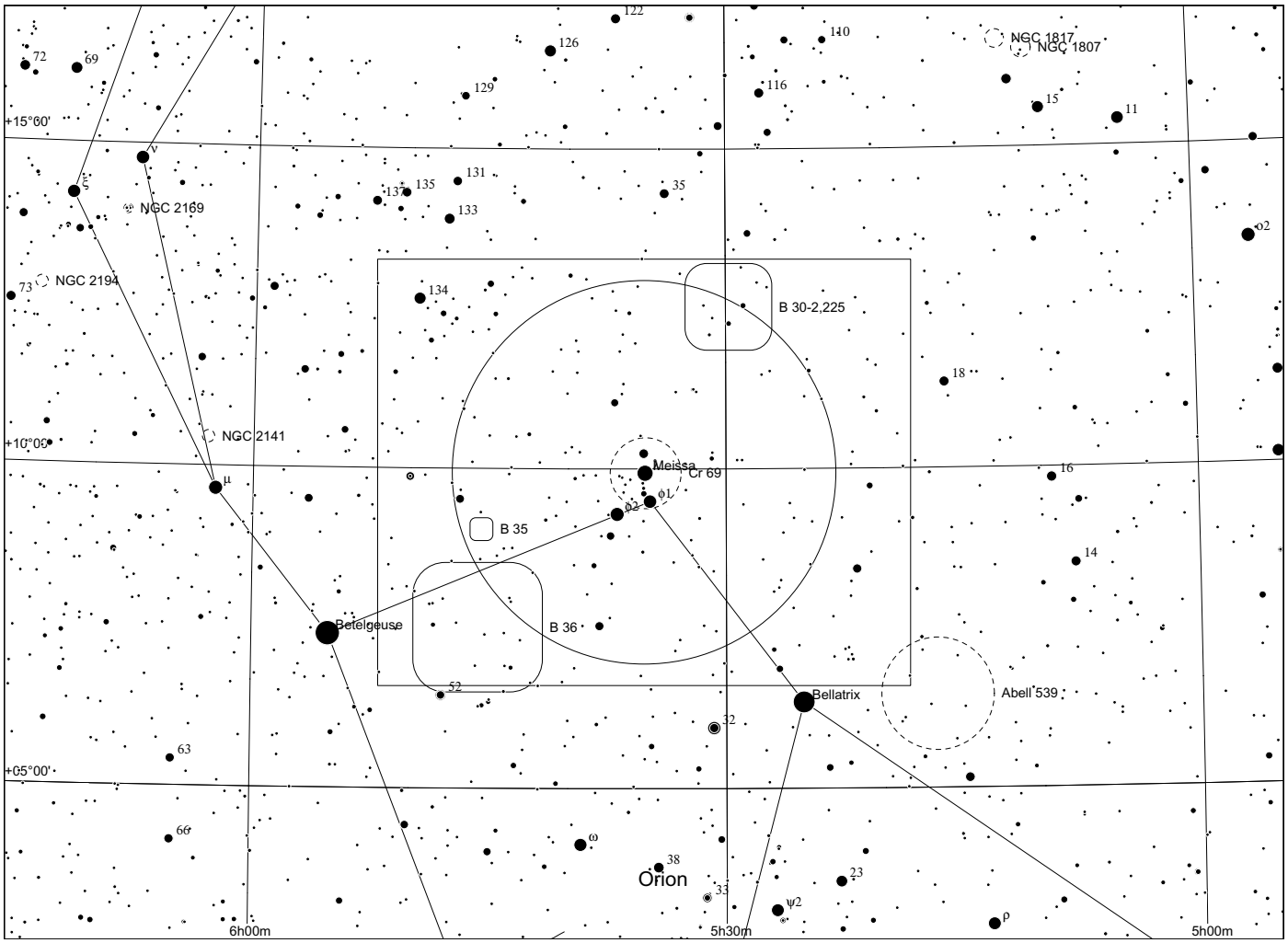
8°x6° H alpha
Dean Salman

	other name	RA	dec	dia. '	F	S	B
Sh 2-264		05 35 12.3	+09 56 00	390	1	1	2

Distance: 400 pc, Size: 45.4 pc, Source: 1982ApJS...49..183B

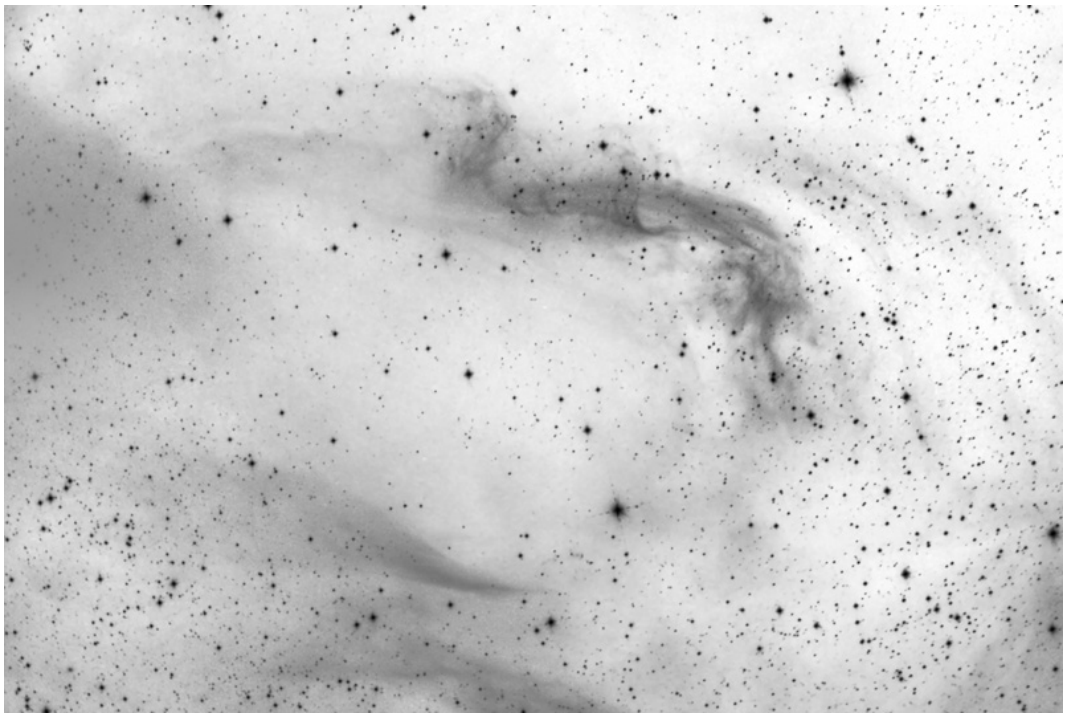
Sh 2-264 is ionised by the O8 III subgiant star Lambda Orionis, and to a lesser extent, the 11 B stars near to it. The region around Lambda Orionis is dominated by a ring of molecular clouds whose structure can perhaps best be explained by a supernova very close to the star about 1 million years ago.

Observing notes:


NGC 1817
NGC 1807
NGC 2169
NGC 2194
NGC 2141
B 30-2,225
Meissa
Cr 69
B 35
B 36
Betelgeuse
Bellatrix
Abell 539
Orion
+15°60'
+10°05'
+05°00'
6h00m
5h30m
5h00m

Sh 2 - 265

in Orion



H alpha, Dean Salman

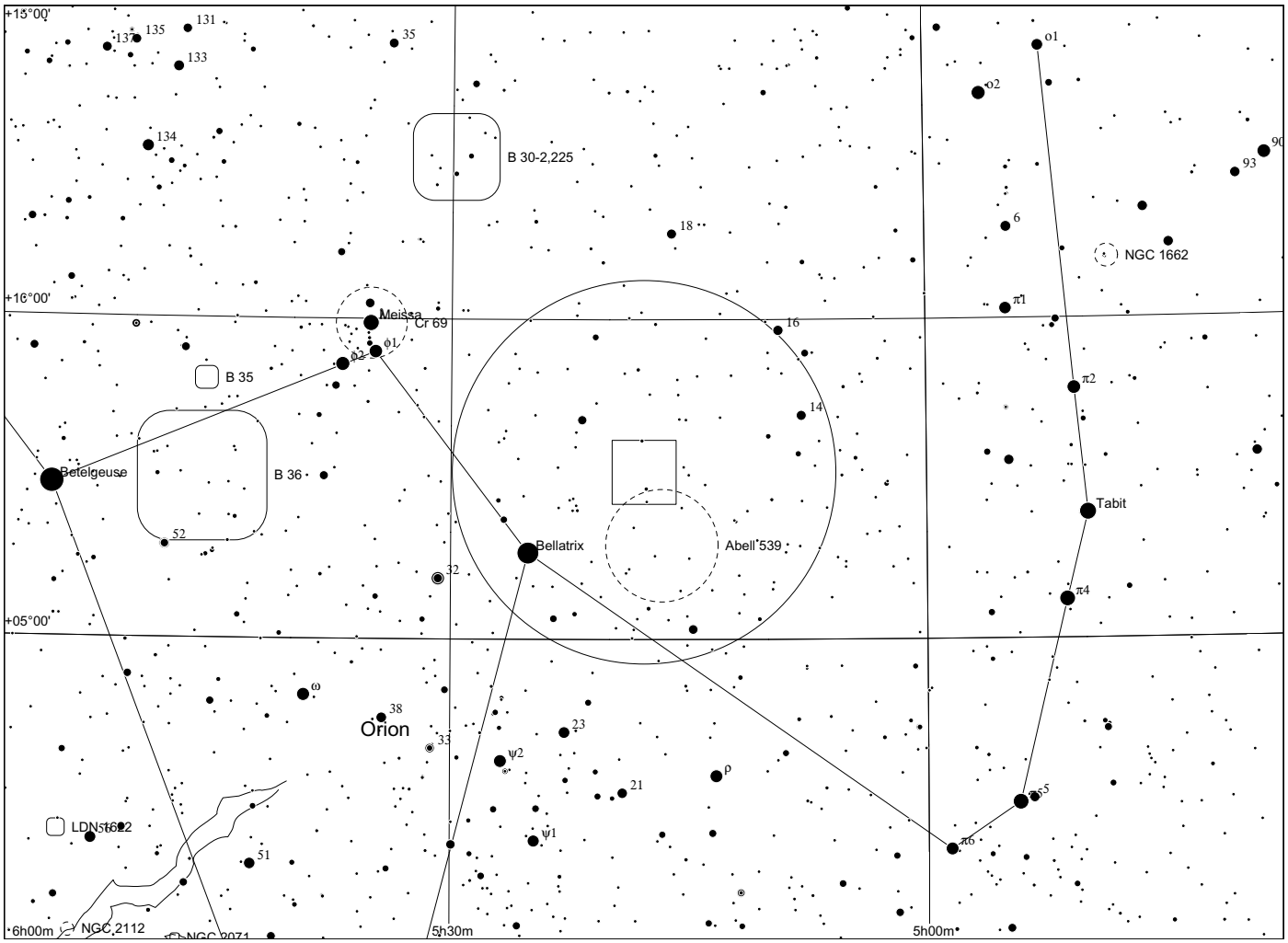


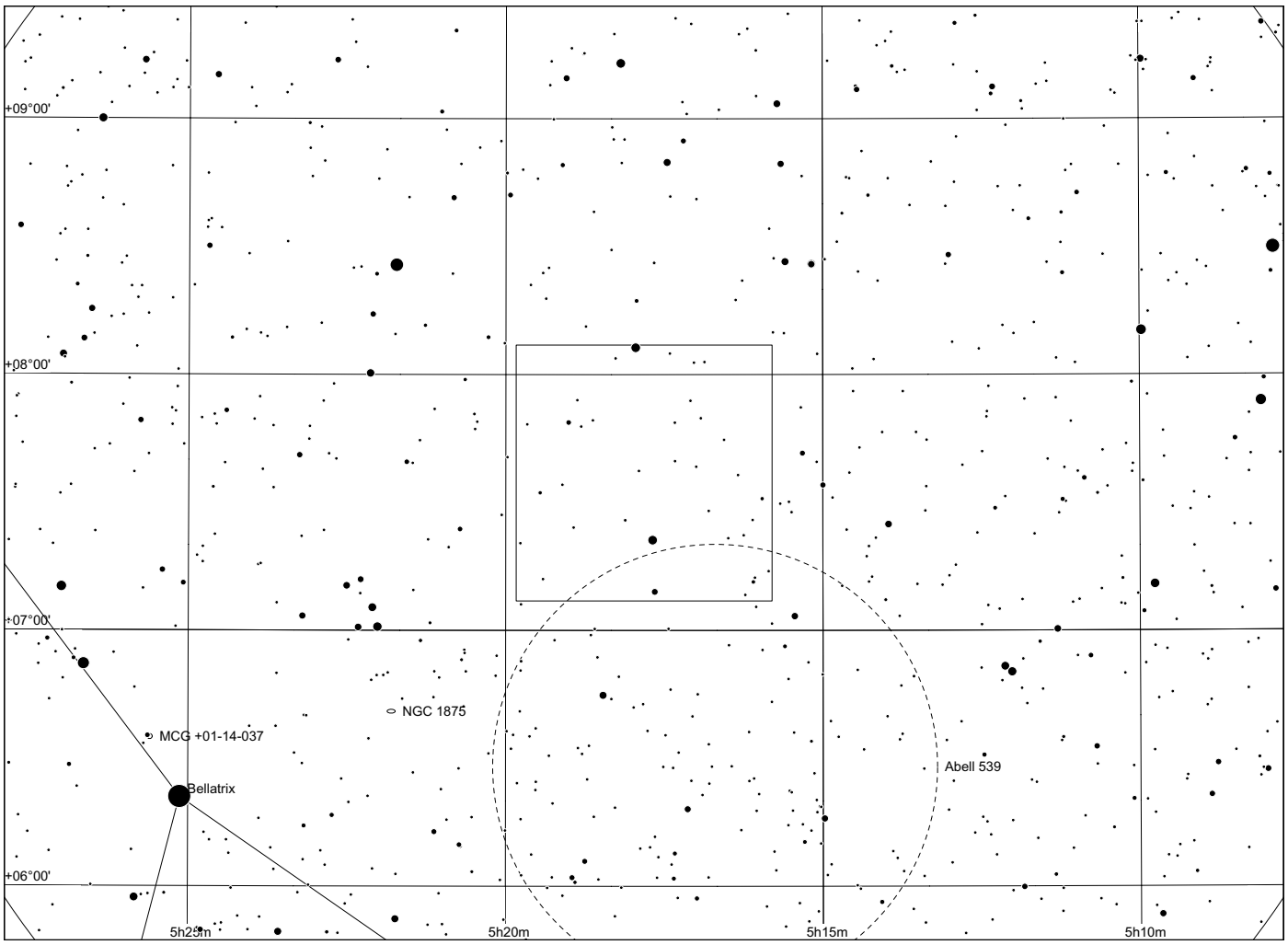
	other name	RA	dec	dia. '	F	S	B
Sh 2-265		05 18 36.3	+07 26 23	70	3	2	2

Distance: 400 pc, Size: 8.1 pc, Source: 2000A&A...357.1001L

This diffuse HII region is part of the B223 section in the southern part of the Lambda Orionis ring (most of which forms the huge Sh 2-264 HII region). However, Sh 2-265 is not ionised by Lambda Orionis itself. Instead it is probably ionised by stars in the Ori OB1b association.

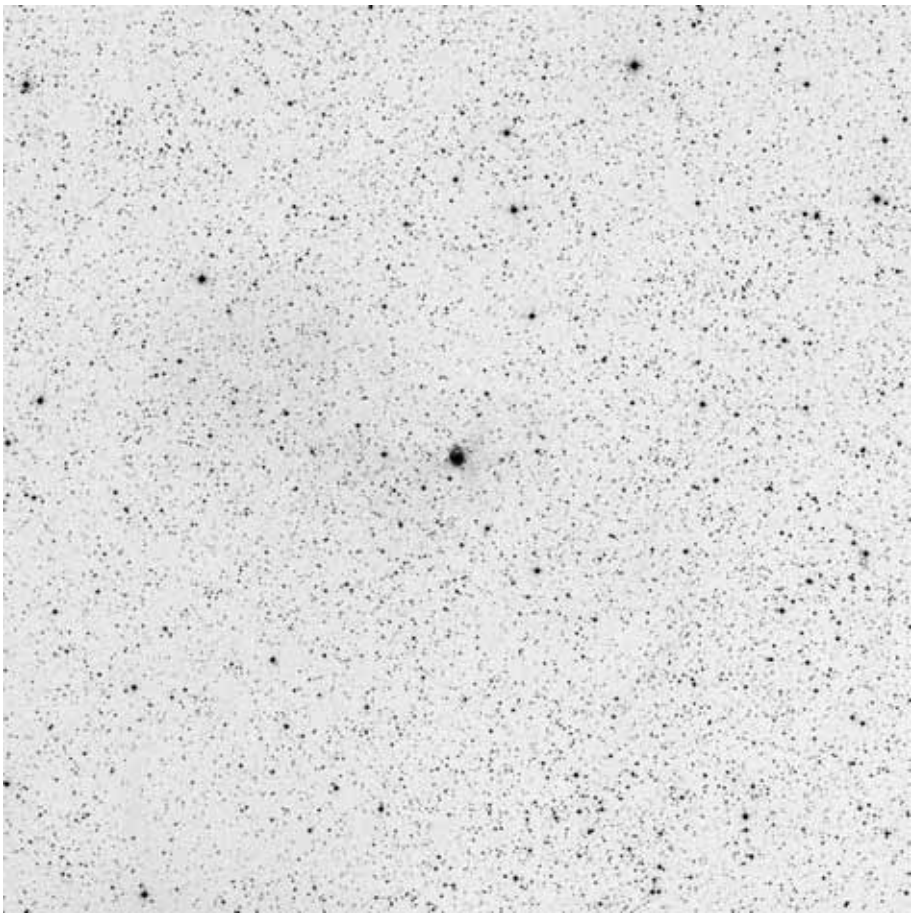
Observing notes:


+15°00'
+10°00'
+05°00'
6h00m
5h30m
5h00m
B 30-2,225
B 35
B 36
Meissa
Cr 69
Betelgeuse
Bellatrix
Abell 539
Tabit
NGC 1662
Orion
LDN 1622
NGC 2112
NGC 2071
137
135
131
133
35
134
18
16
14
52
32
38
33
23
21
51
o1
o2
6
93
π1
π2
π4
π5
π6
ω
ψ1
ψ2
ρ

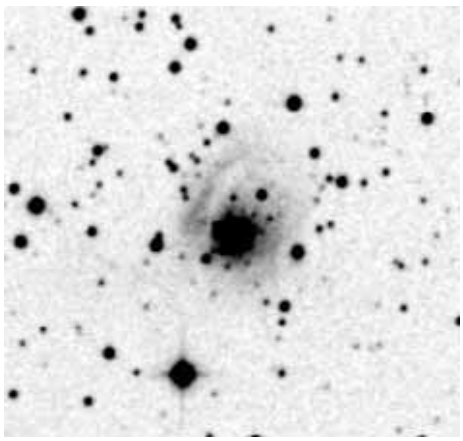

+09°00'
+08°00'
+07°00'
+06°00'
5h25m
5h20m
5h15m
5h10m
NGC 1875
MCG +01-14-037
Bellatrix
Abell 539

Sh 2 - 266

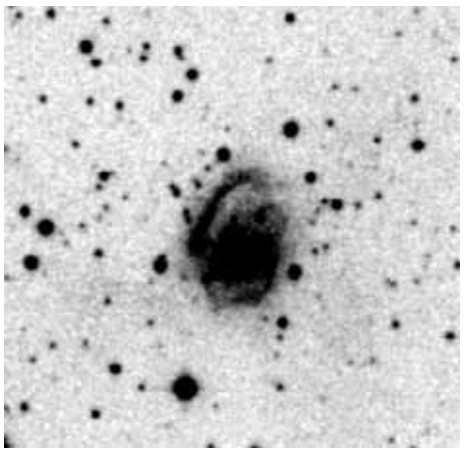
in Orion



60x60, red



POSS blue



POSS red



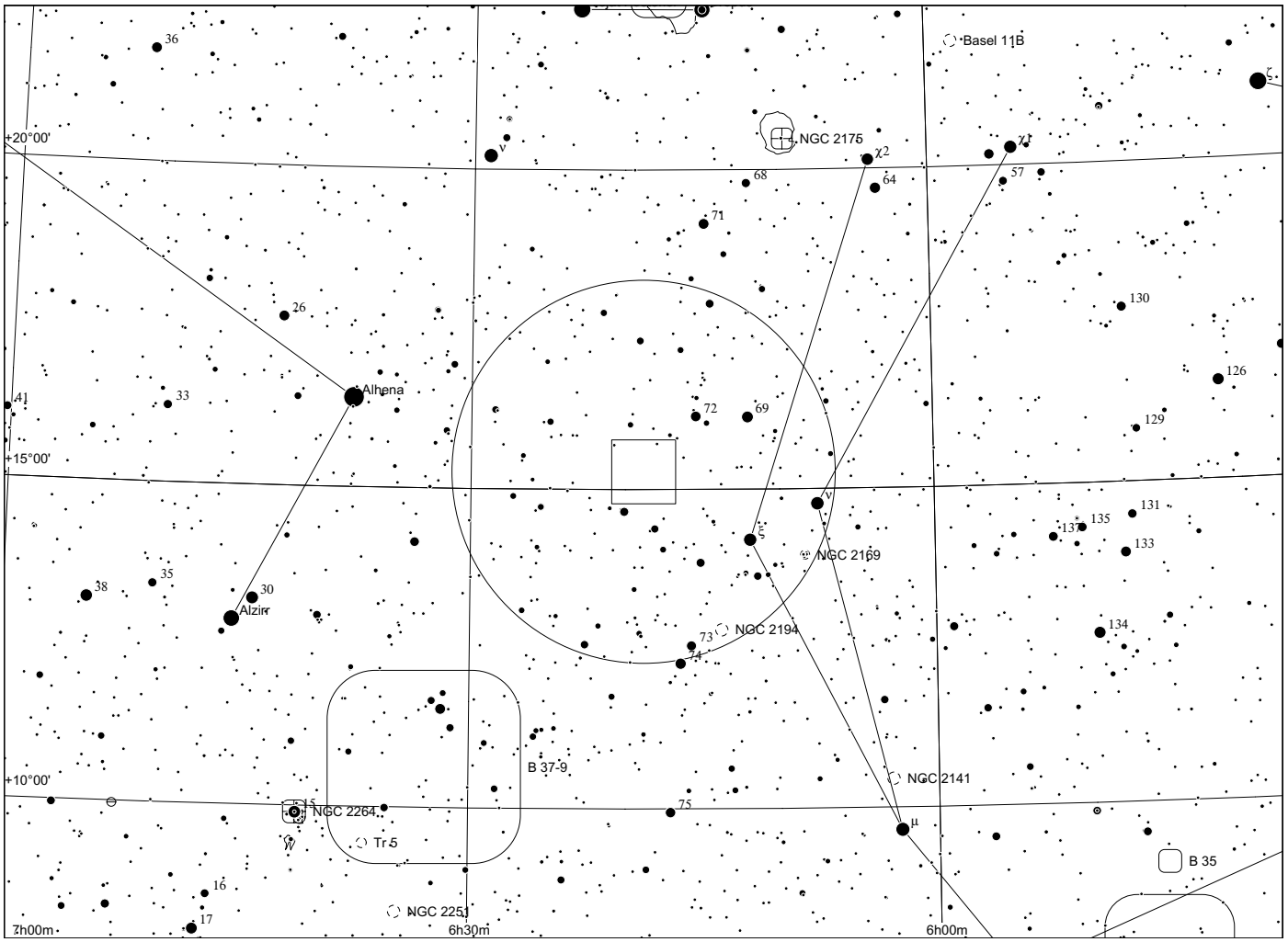
composite

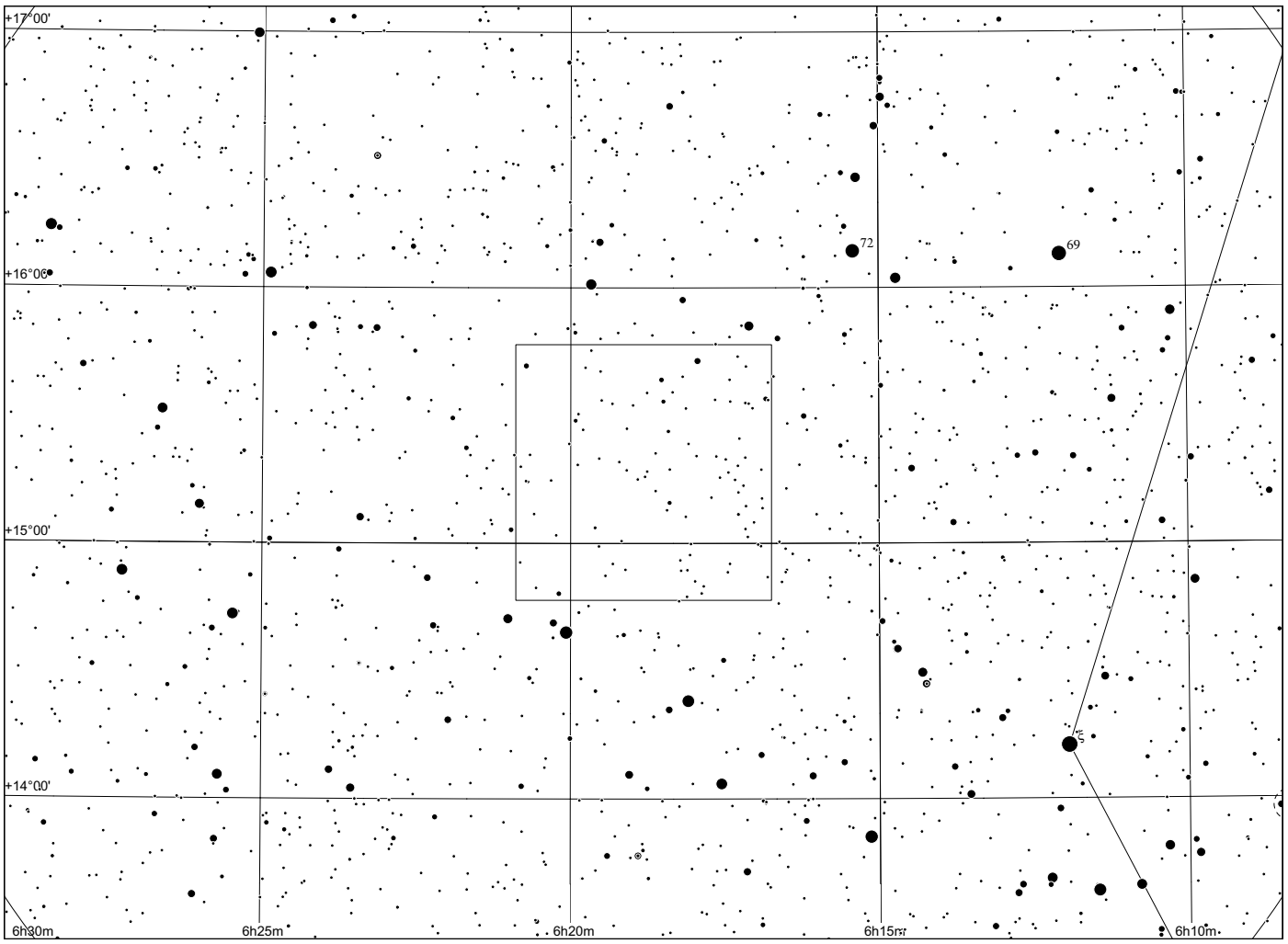
	other name	RA	dec	dia. '	F	S	B
Sh 2-266		06 18 48.9	+15 16 40	1	2	2	3

Distance: 6000 pc, Size: 1.7 pc, Source: 1998MNRAS.298..185E

This may be a ring nebula surrounding its central star, the Be class supergiant MWC 137.

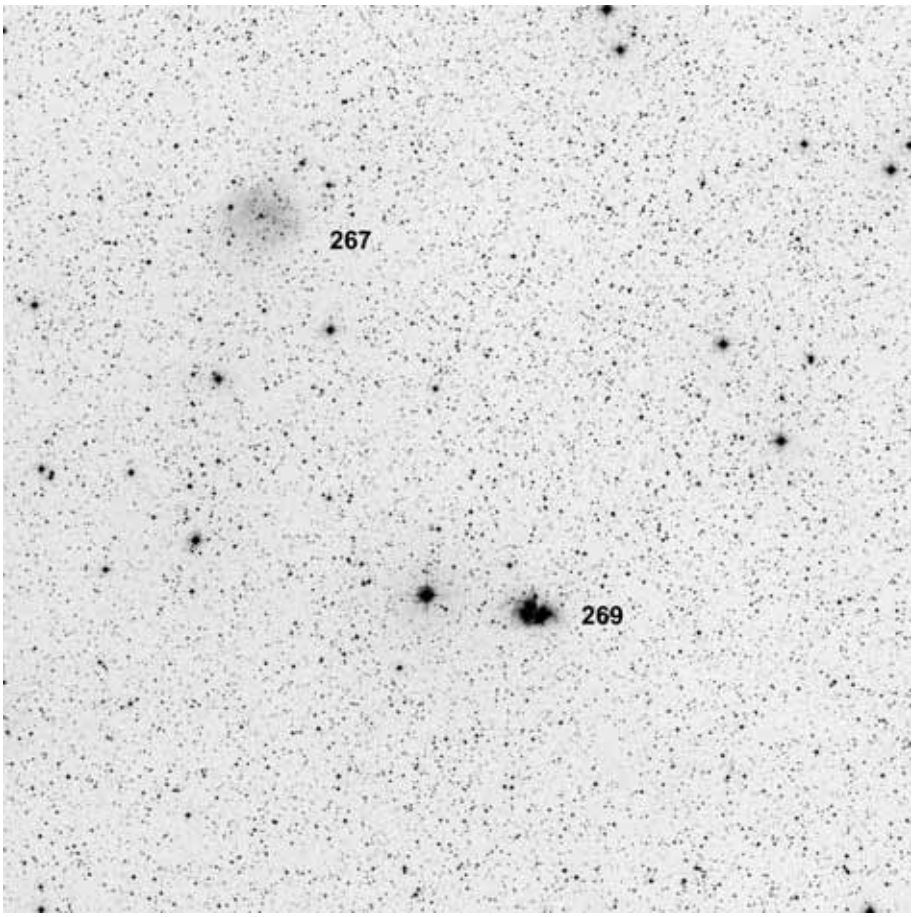
Observing notes:


Basel 11B
NGC 2175
+20°00'
+15°00'
+10°00'
Alhena
Alzirr
NGC 2169
NGC 2194
B 37-9
NGC 2141
NGC 2264
Tr 5
NGC 2251
B 35
7h00m
6h30m
6h00m

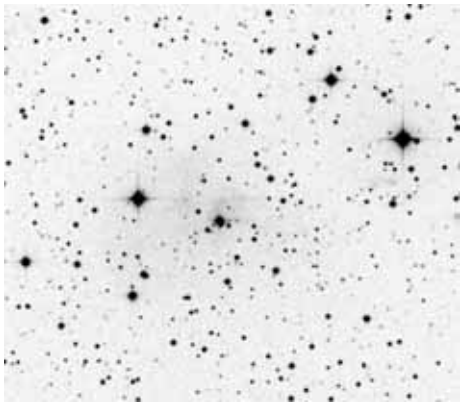

+17°00'
+16°00'
+15°00'
+14°00'
6h30m
6h25m
6h20m
6h15m
6h10m

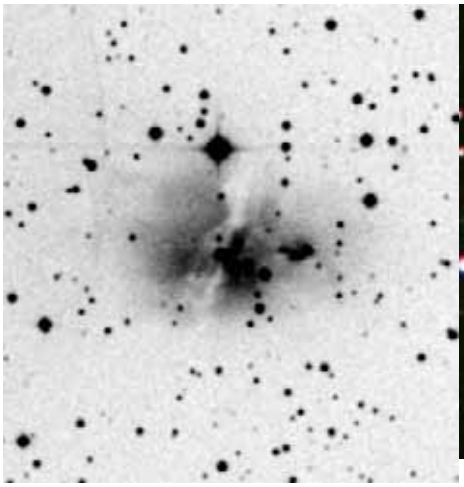
Sh 2 - 267/269

in Orion



60x60, red







POSS blue 267 269 composite

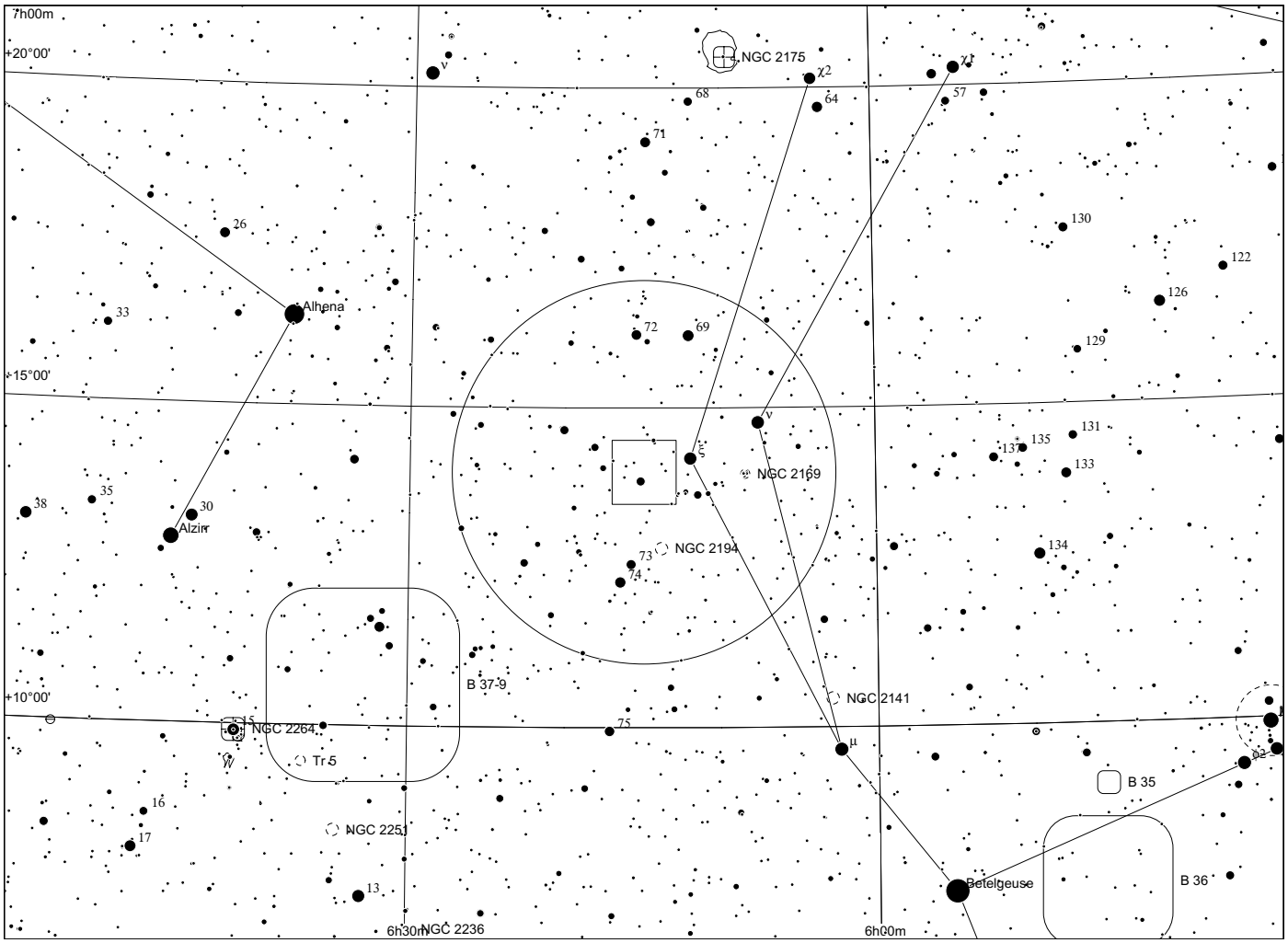
	other name	RA	dec	dia. '	F	S	B
Sh 2-267	LBN 875 = PK 196-01.1	06 15 52.7	+14 16 06	4	1	1	2
Sh 2-269		06 14 34.1	+13 49 18	4	3	2	3

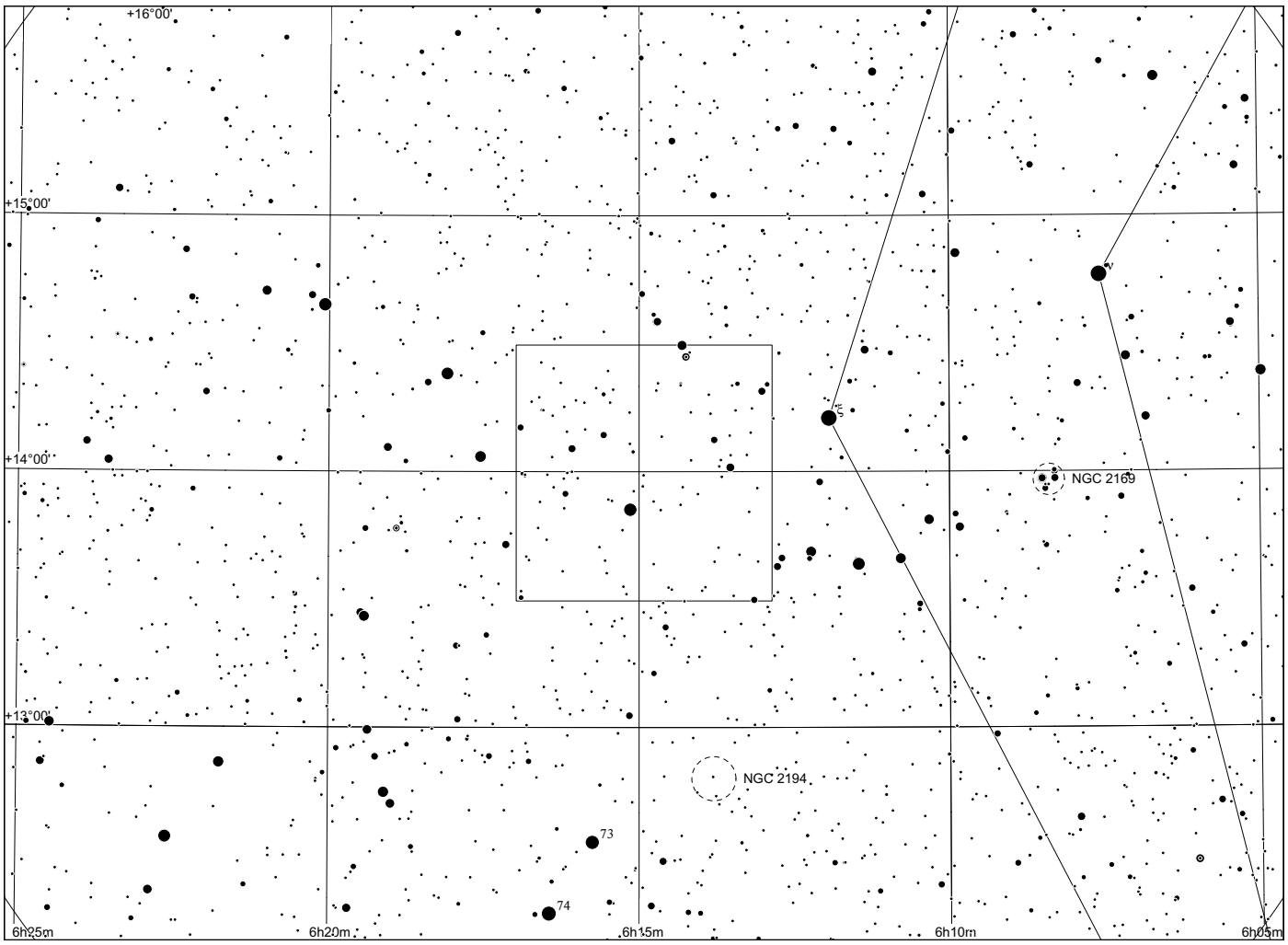
267: Distance: 4500 pc, Size: 5.2 pc, Source: 1987AJ.....94.1062L

269: Distance: 3800 pc, Size: 3.9 pc, Source: 1997ApJ...478..271G

Sh 2-269 lies in front of a 8700 solar mass giant molecular cloud. It is bisected by a dust lane and is ionised by two stars in the western side of the nebula. One is a B0.5 V star, the other is visible only in the infrared and appears to be either O8 or O9.5.

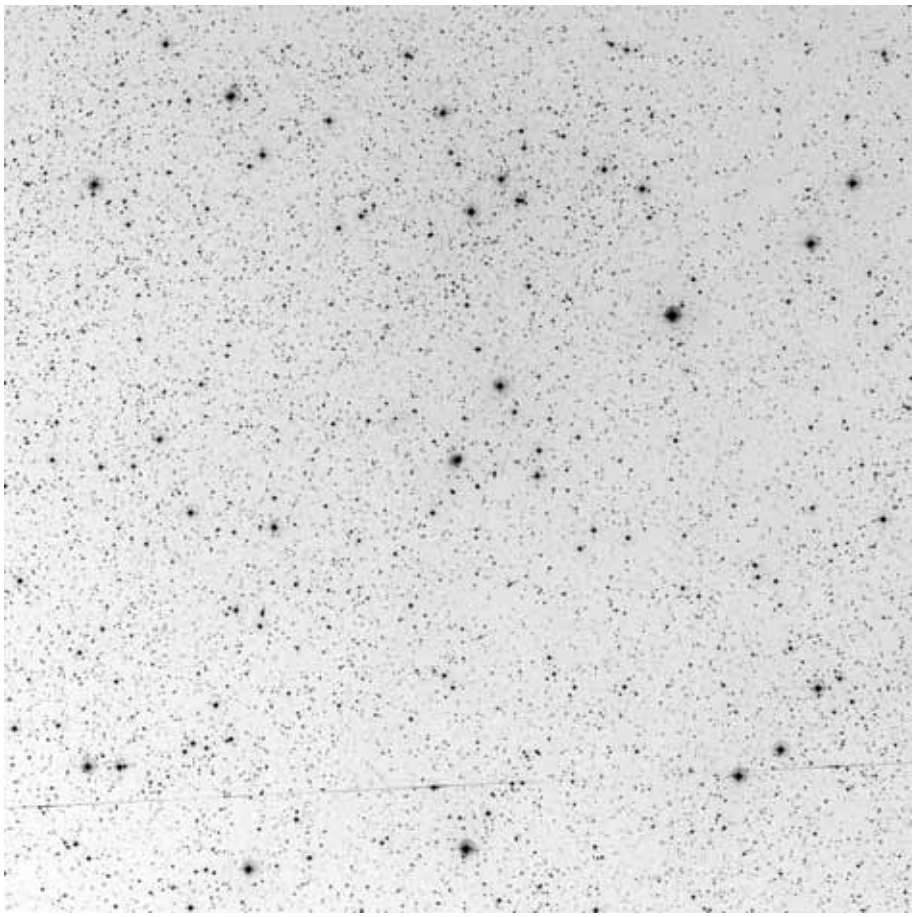
Observing notes:


7h00m
+20°00'
+15°00'
+10°00'
NGC 2175
χ2
χ1
ν
68
64
57
71
26
130
122
126
33
Alhena
72
69
129
ξ
ν
131
135
137
133
NGC 2169
38
35
30
Alzir
73
NGC 2194
74
134
B 37-9
NGC 2141
NGC 2264
75
μ
Tr 5
B 35
16
17
NGC 2251
13
Betelgeuse
B 36
6h30m
NGC 2236
6h00m

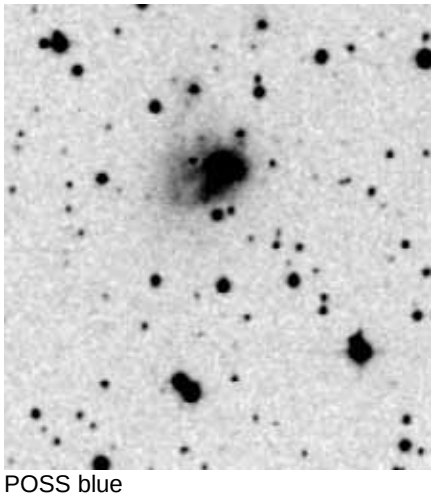

+16°00'
+15°00'
+14°00'
+13°00'
ν
ξ
NGC 2169
NGC 2194
73
74
6h25m
6h20m
6h15m
6h10m
6h05m

Sh 2 - 270

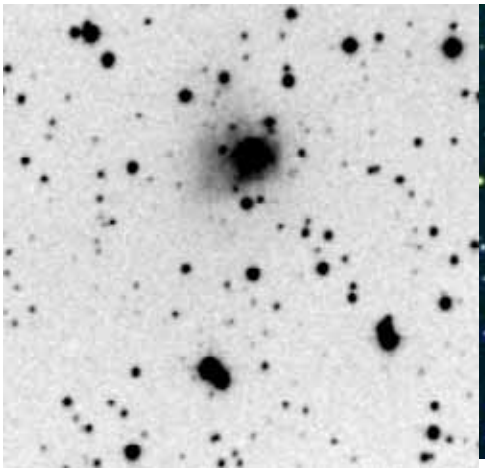
in Orion



60x60, blue



POSS blue



POSS red

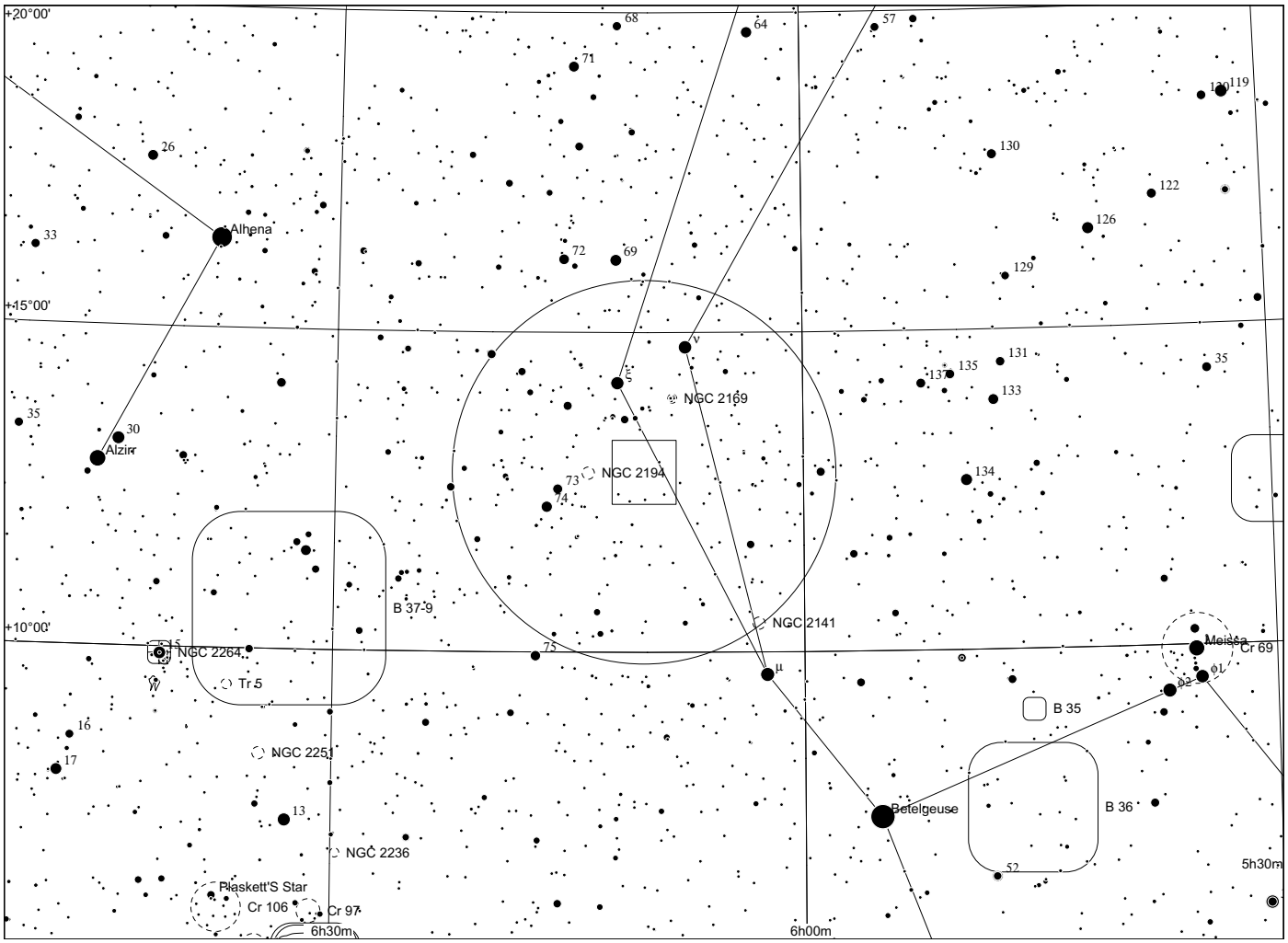


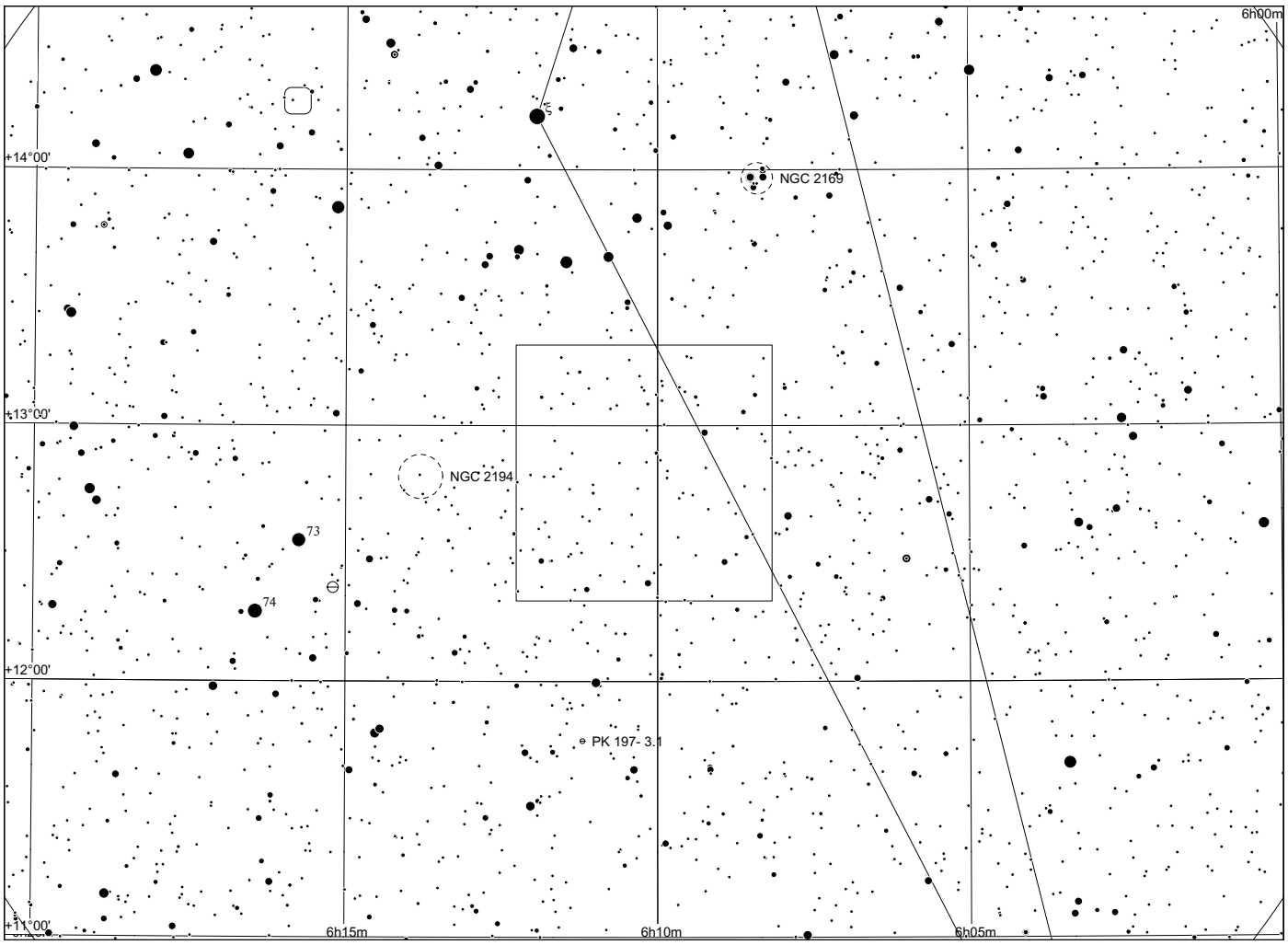
composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-270		06 10 12.9	+12 48 55	1	3	2	3

Distance: 6800 pc, Size: 2.0 pc, Source: 2003A&A...397..133R

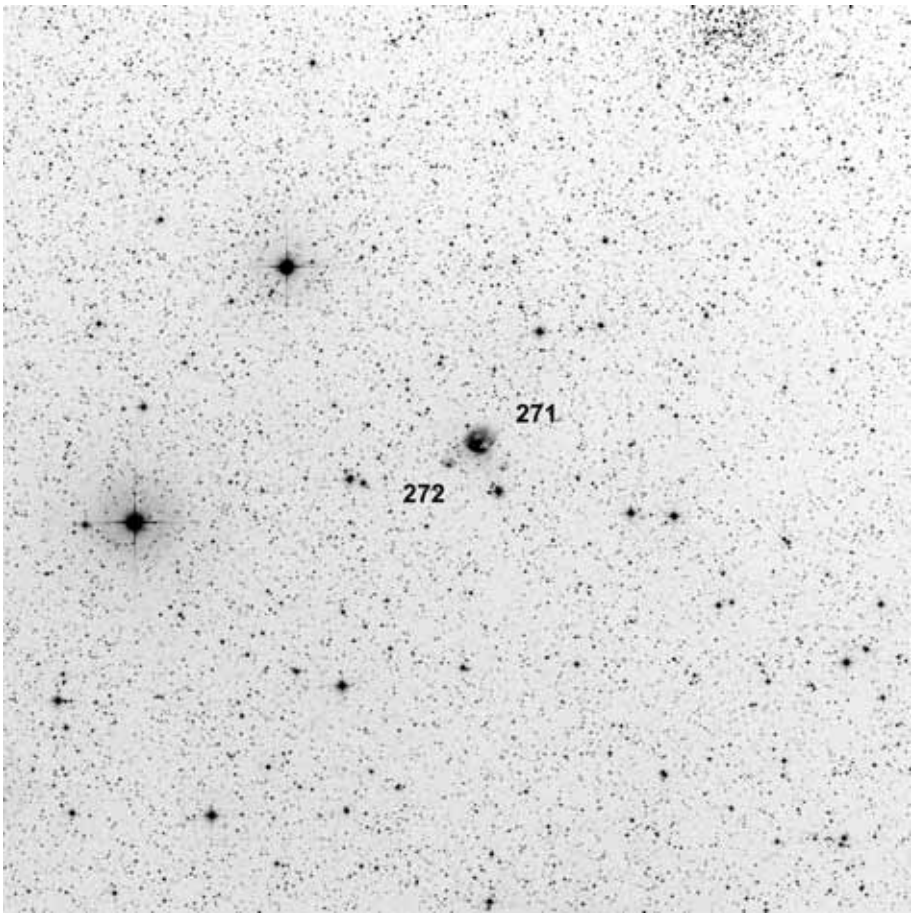
Observing notes:


+20°00'
+15°00'
+10°00'
Alhena
Alzir
NGC 2169
NGC 2194
B 37-9
NGC 2264
Tr 5
NGC 2251
NGC 2236
Plaskett'S Star
Cr 106
Cr 97
6h30m
NGC 2141
Meissa
Cr 69
B 35
B 36
Betelgeuse
5h30m
6h00m

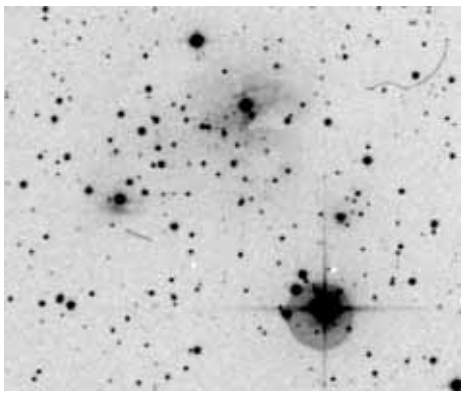

6h00m
+14°00'
+13°00'
+12°00'
+11°00'
NGC 2169
NGC 2194
PK 197- 3.1
6h15m
6h10m
6h05m

Sh 2 - 271/272

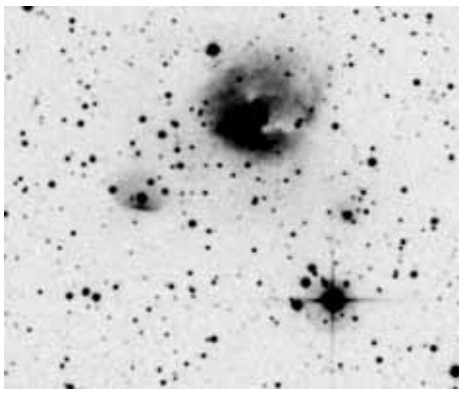
in Orion



60x60, red



POSS blue



POSS red



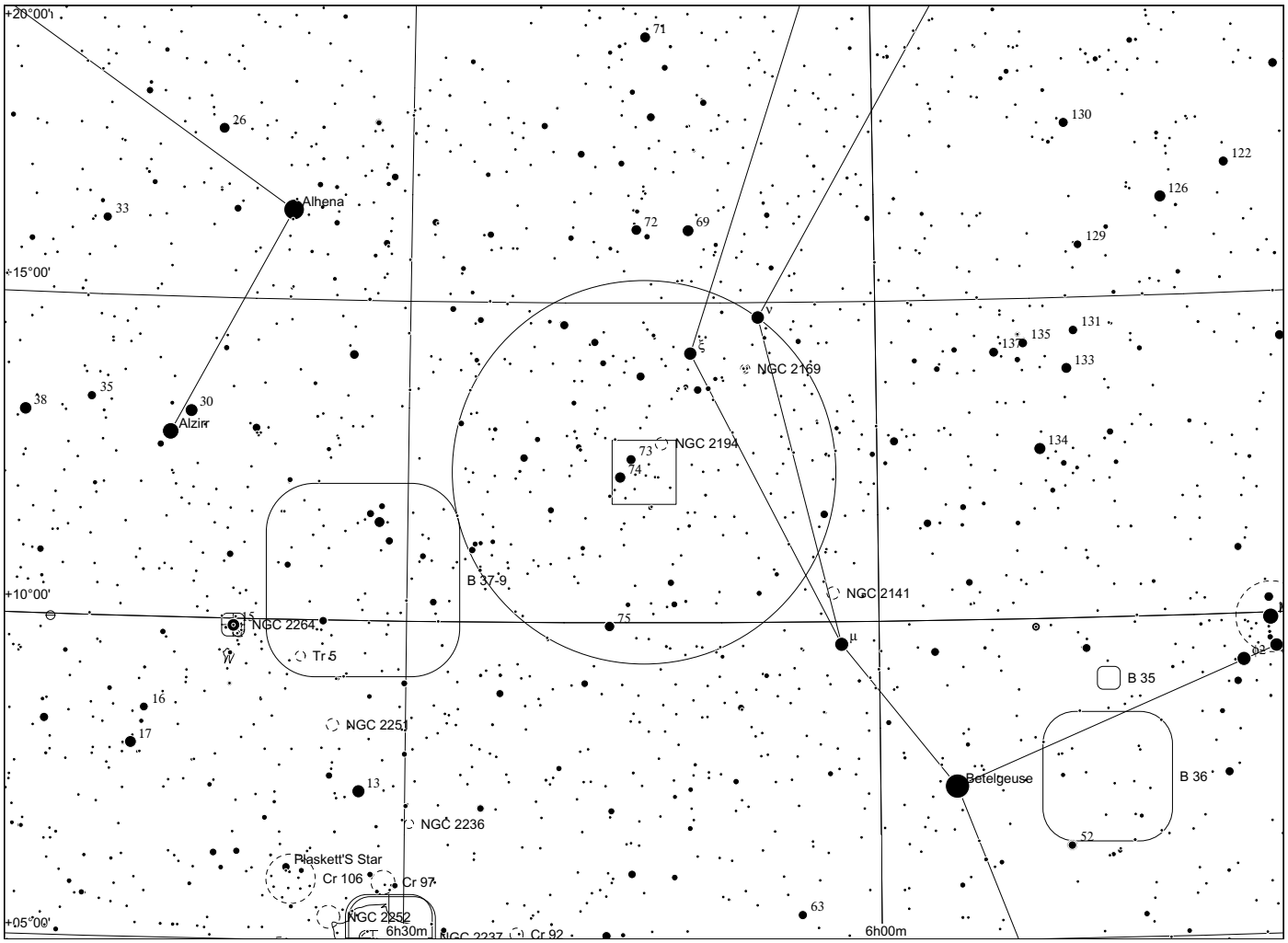
composite

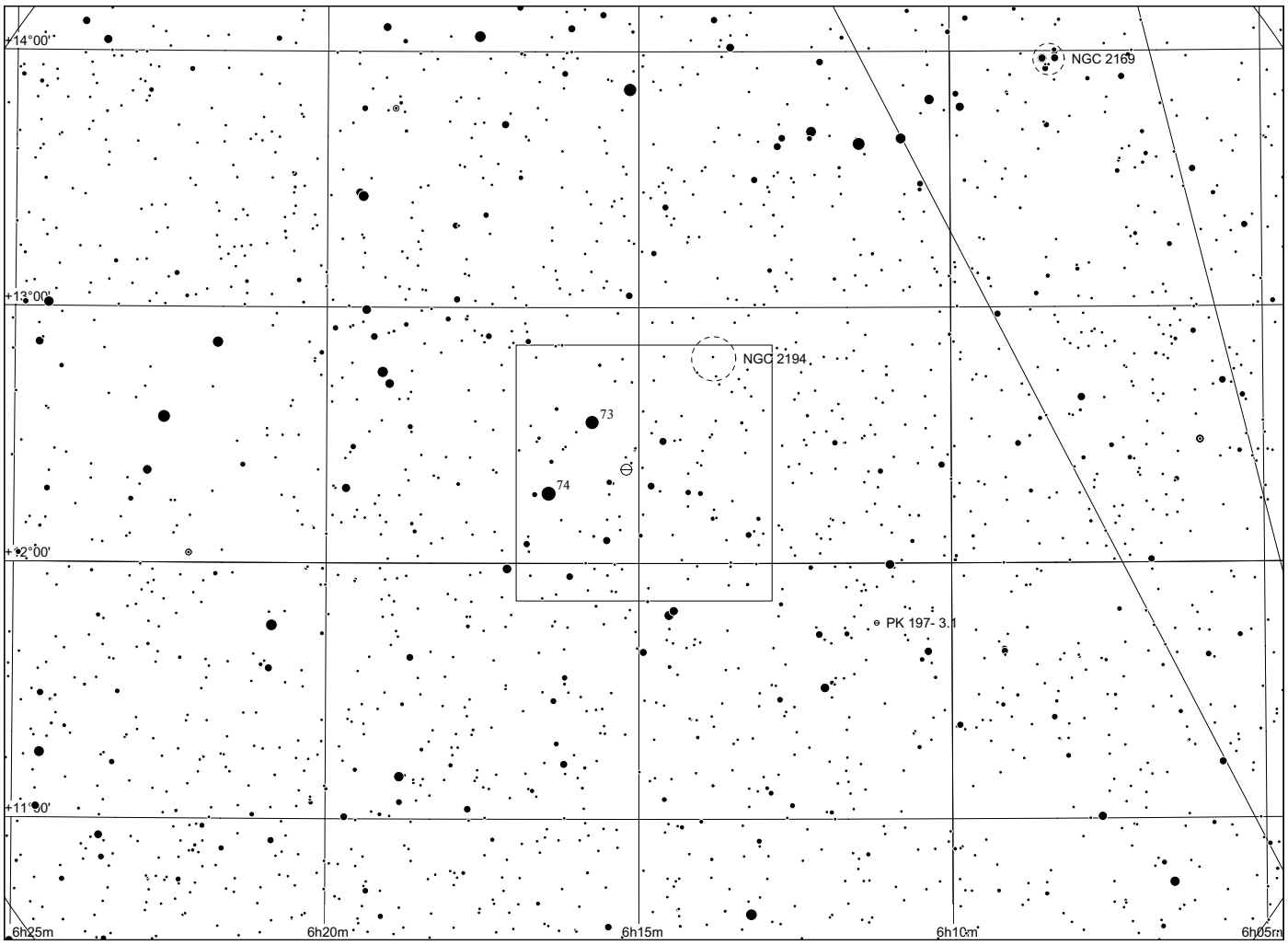
	other name	RA	dec	dia. '	F	S	B
Sh 2-271	PK 197-02.1	06 14 54.3	+12 21 14	2	1	2	3
Sh 2-272		06 15 00.3	+12 20 14	1	2	1	2

Distance: 4800 pc, Source: 1982ApJS...49..183B

Includes infrared cluster [BDS 2003] 82. There is confusion in the literature about whether this is an HII region or planetary nebula.

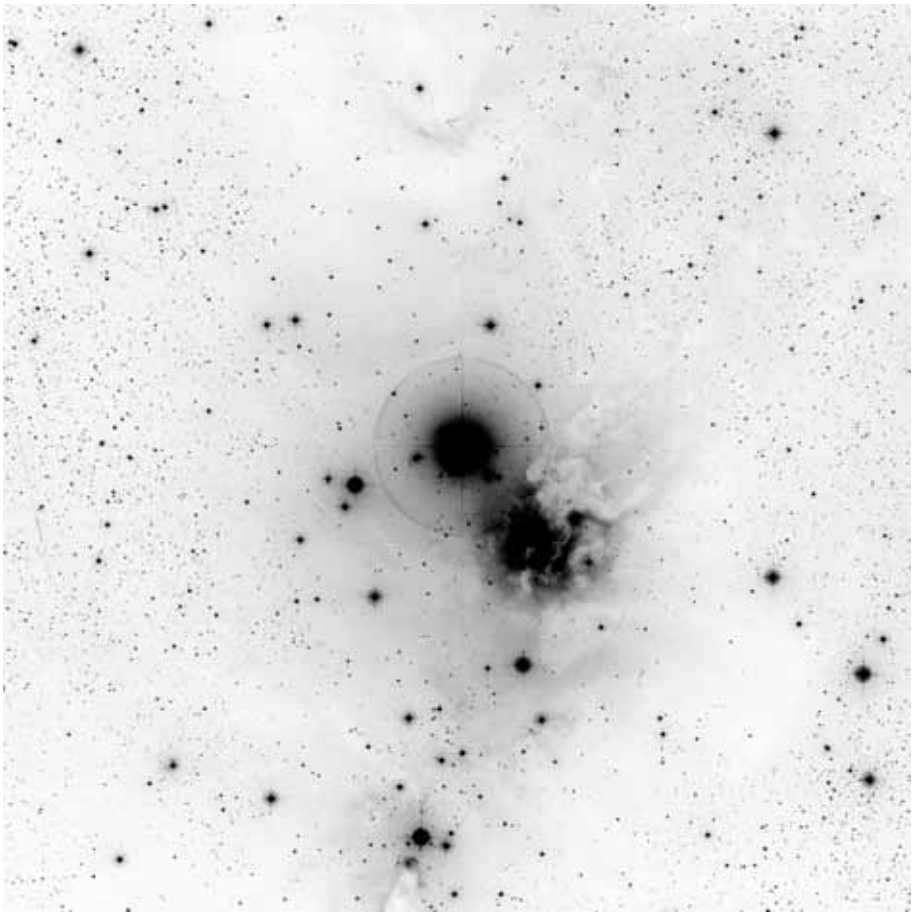
Observing notes:


+20°00'
+15°00'
+10°00'
+05°00'
6h30m
6h00m
Alhena
Alzir
NGC 2169
NGC 2194
B 37-9
NGC 2141
NGC 2264
Tr 5
NGC 2251
NGC 2236
Plaskett'S Star
Cr 106
Cr 97
NGC 2252
Cr 92
Betelgeuse
B 35
B 36
71
26
33
72
69
130
122
126
129
131
135
137
133
38
35
30
73
74
134
75
16
17
13
52
63


+14°00'
+13°00'
+12°00'
+11°00'
6h25m
6h20m
6h15m
6h10m
6h05m
NGC 2169
NGC 2194
73
74
PK 197- 3.1

Sh 2 - 273

in Monoceros



60x60, blue



POSS blue

POSS red

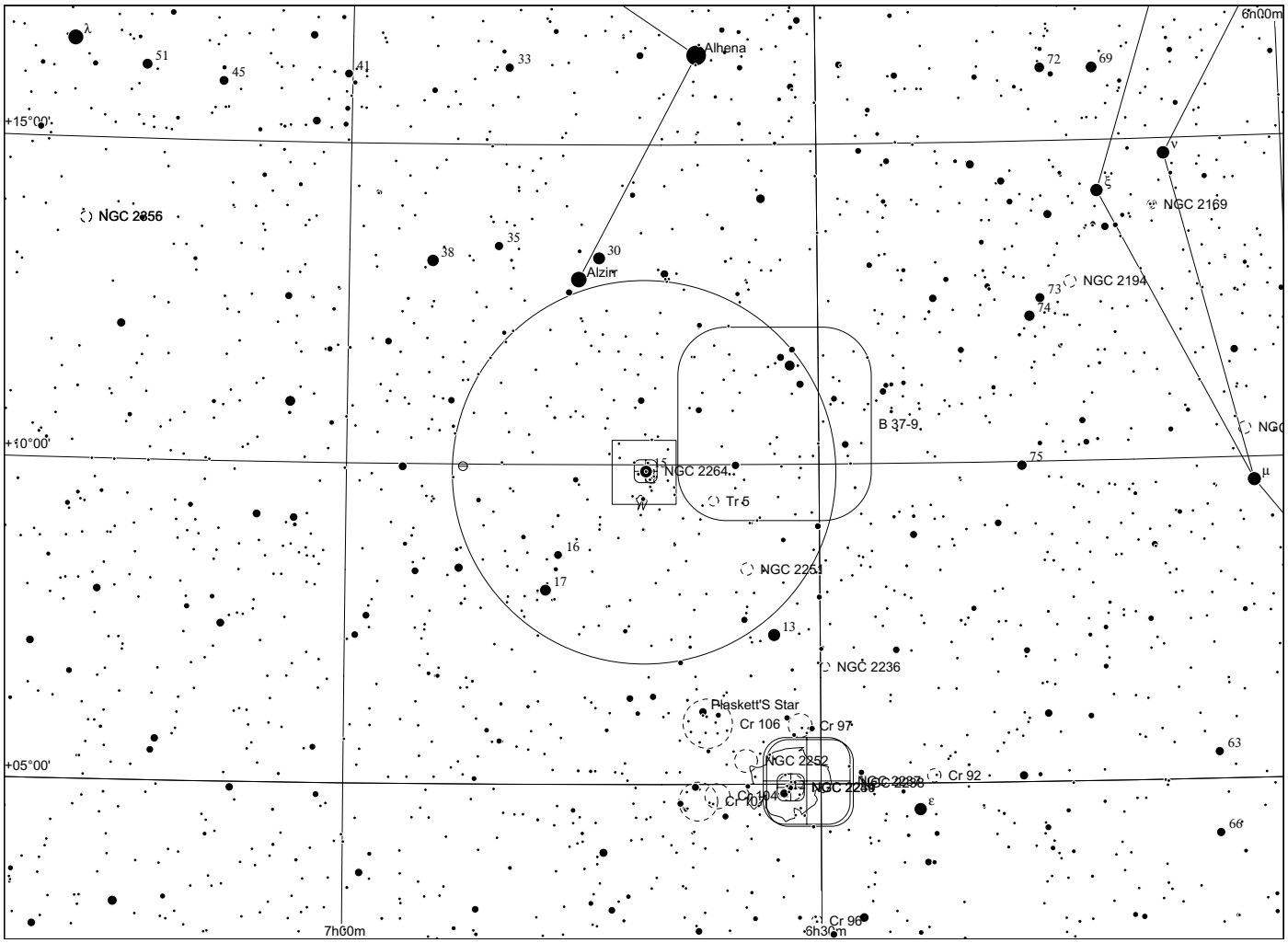
composite

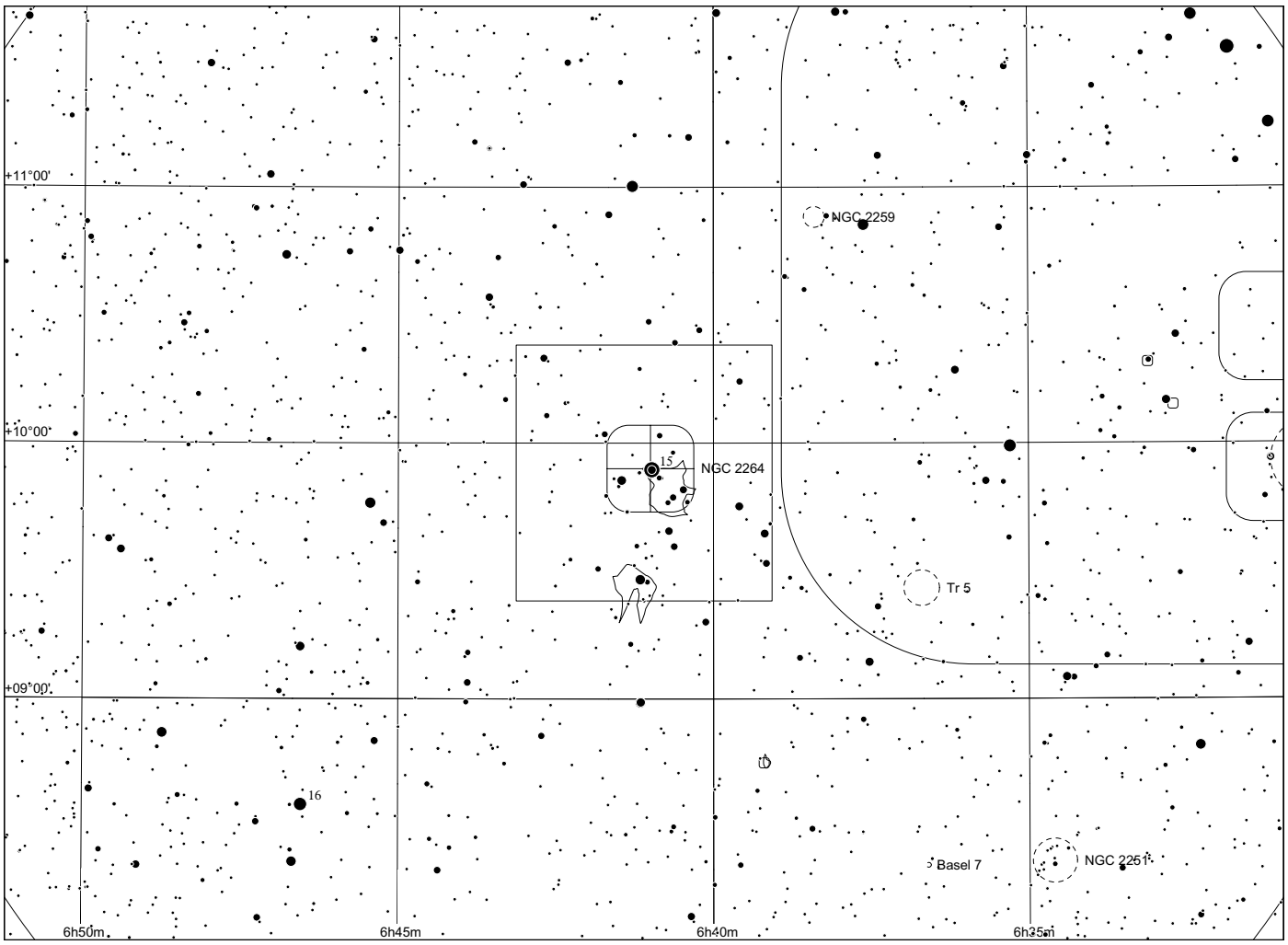
	other name	RA	dec	dia. '	F	S	B
Sh 2-273	NGC2264 = Christmas Tree	06 40 48.3	+09 54 28	250	3	2	3

Distance: 800 pc, Size: 58.2 pc, Source: 1982ApJS...49..183B

The Fox Fur nebula is associated with the star cluster NGC 2264, dominated by the O7Ve multiple star system S Monocerotis (usually abbreviated to S Mon). This region also includes the famous Cone nebula, visible at the bottom of the image.

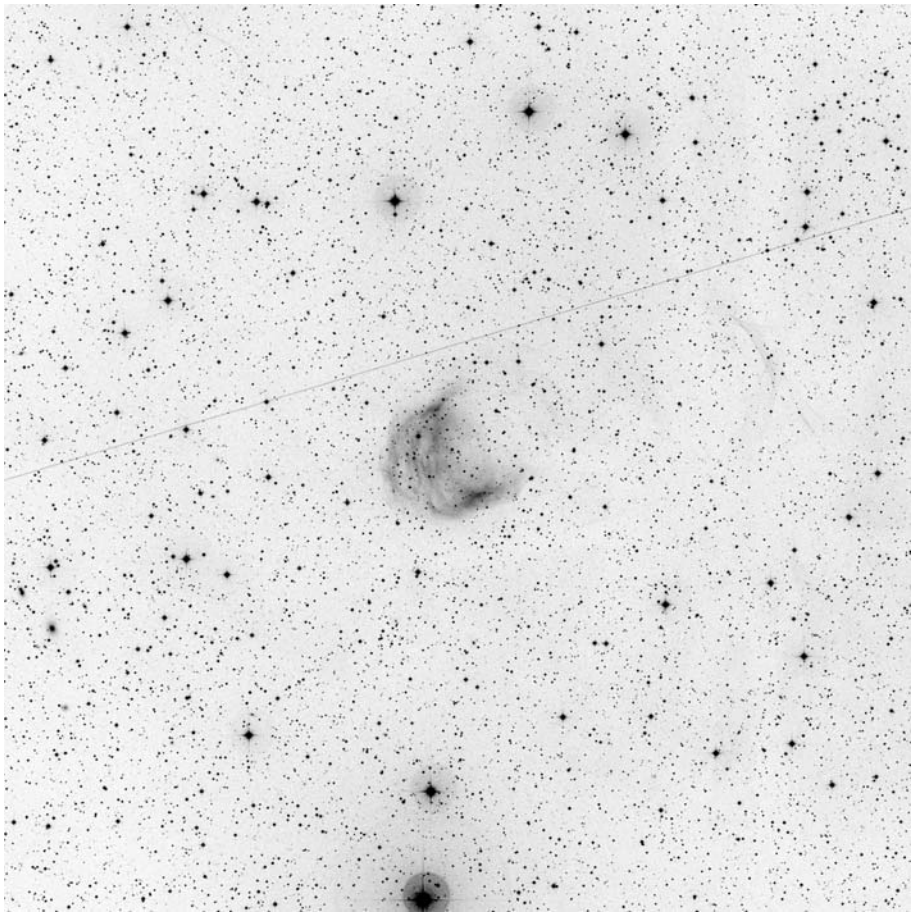
Observing notes:


6h00m
Alhena
+15°00'
NGC 2356
NGC 2169
Alzirr
NGC 2194
B 37-9
+10°00'
NGC 2264
Tr 5
NGC 2251
NGC 2236
Plaskett'S Star
Cr 106
Cr 97
+05°00'
NGC 2252
Cr 92
Cr 104
Cr 107
Cr 96
7h00m
6h30m


+11°00'
NGC 2259
+10°00'
NGC 2264
Tr 5
+09°00'
Basel 7
NGC 2251
6h50m
6h45m
6h40m
6h35m

Sh 2 - 274

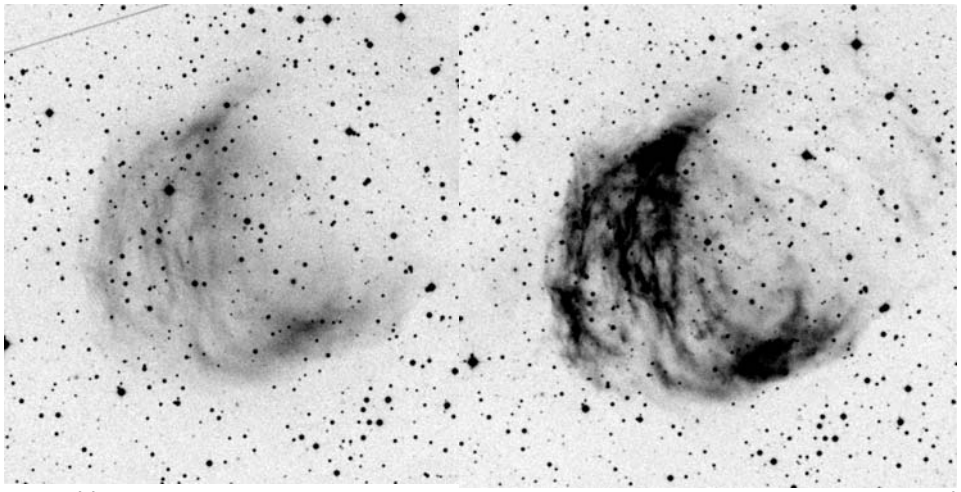
in Gemini



60x60, blue

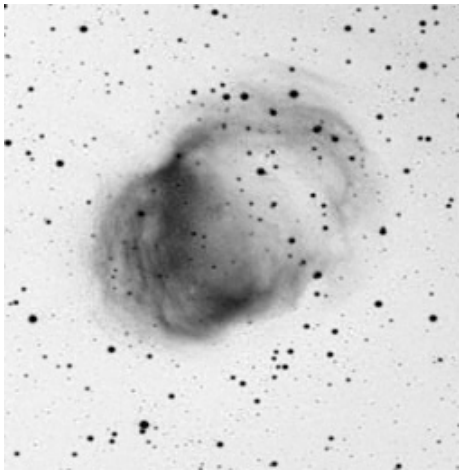


narrowband Dean Salman



POSS blue

POSS red

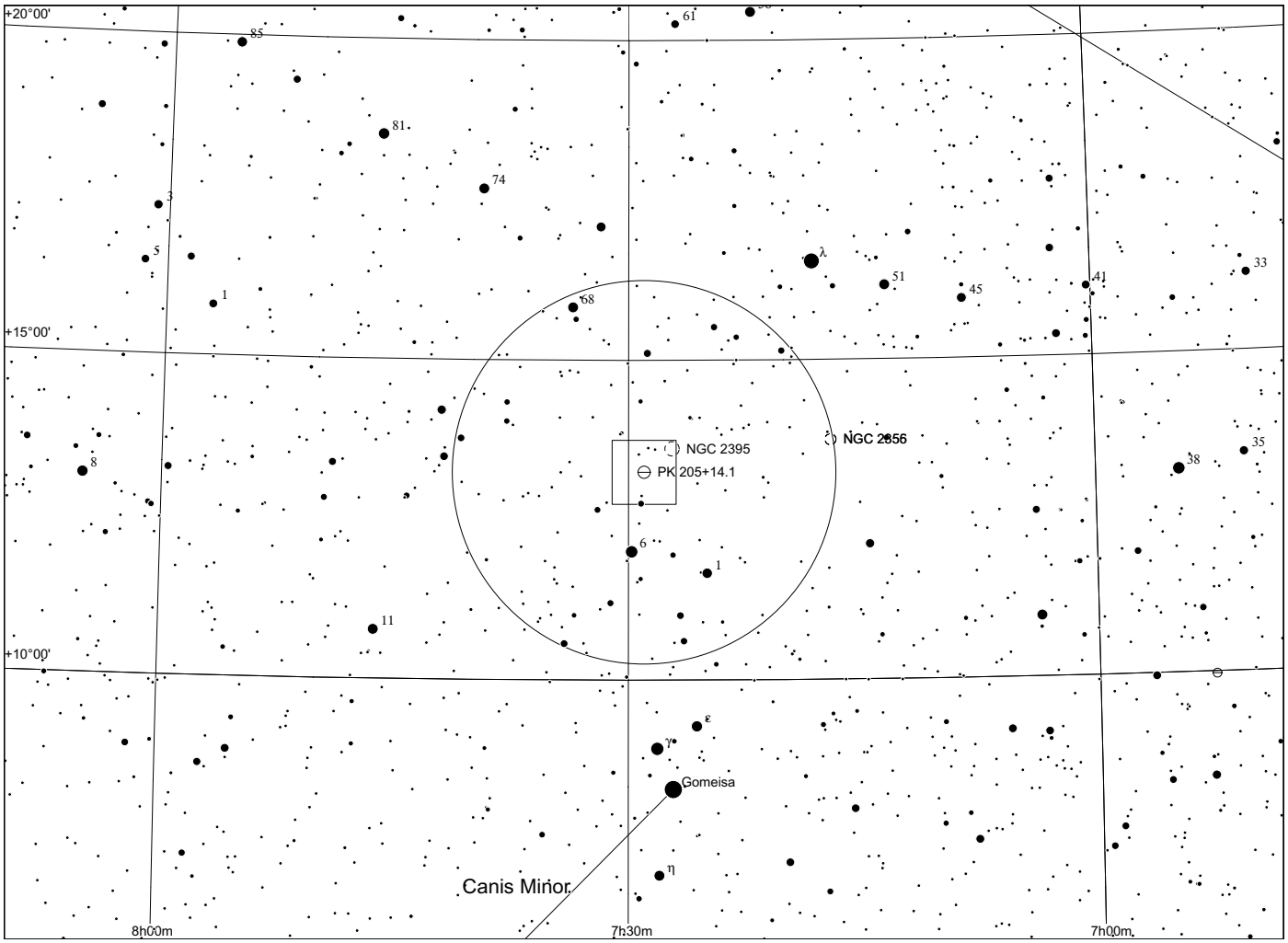


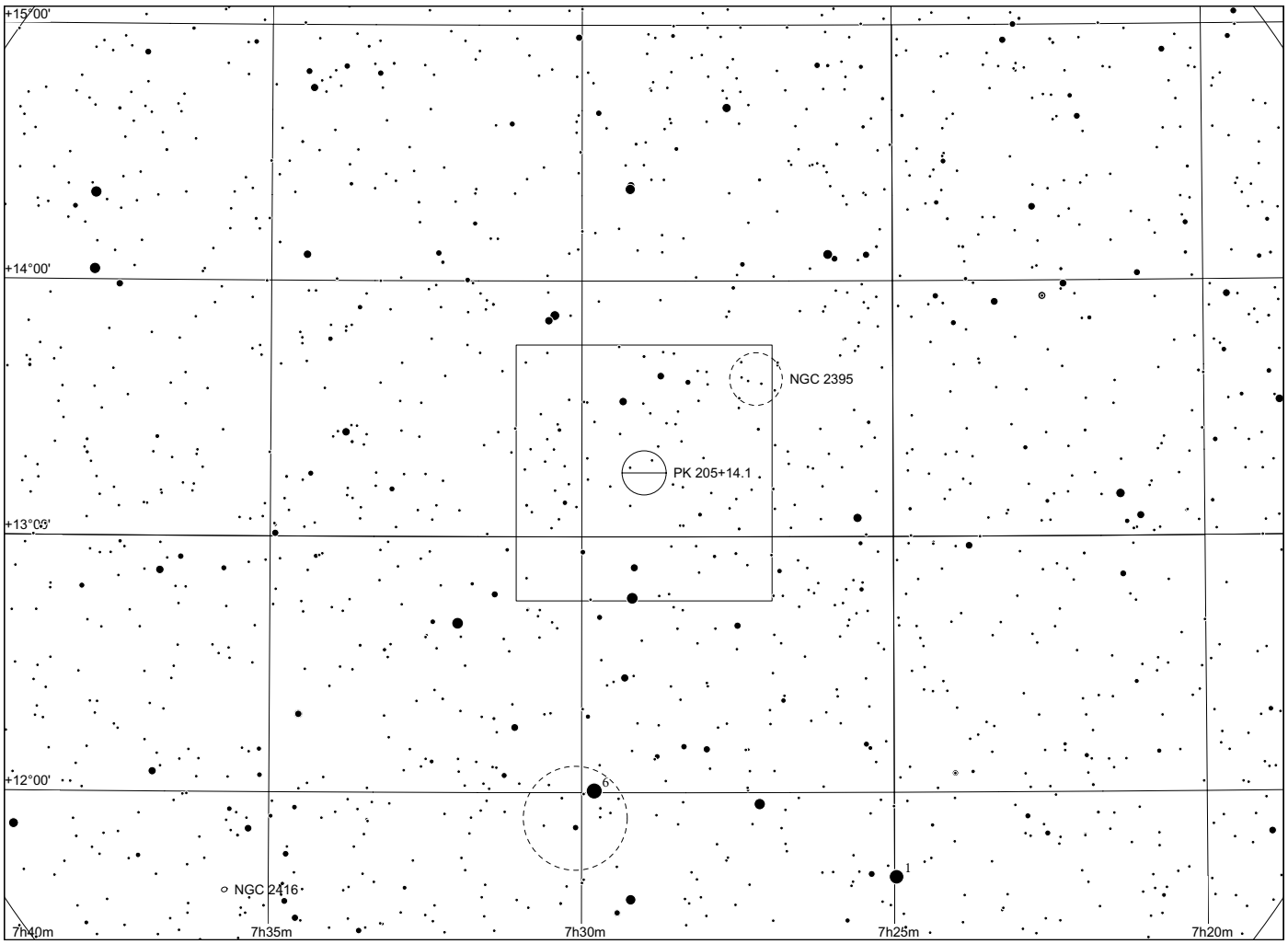
OIII

	other name	RA	dec	dia. '	F	S	B
Sh 2-274	Abell 21	07 29 06.4	+13 15 43	8	3	3	3

The Medusa nebula, Abell 21, is a planetary nebula located at a distance of about 188 pc and is 8800 years old.

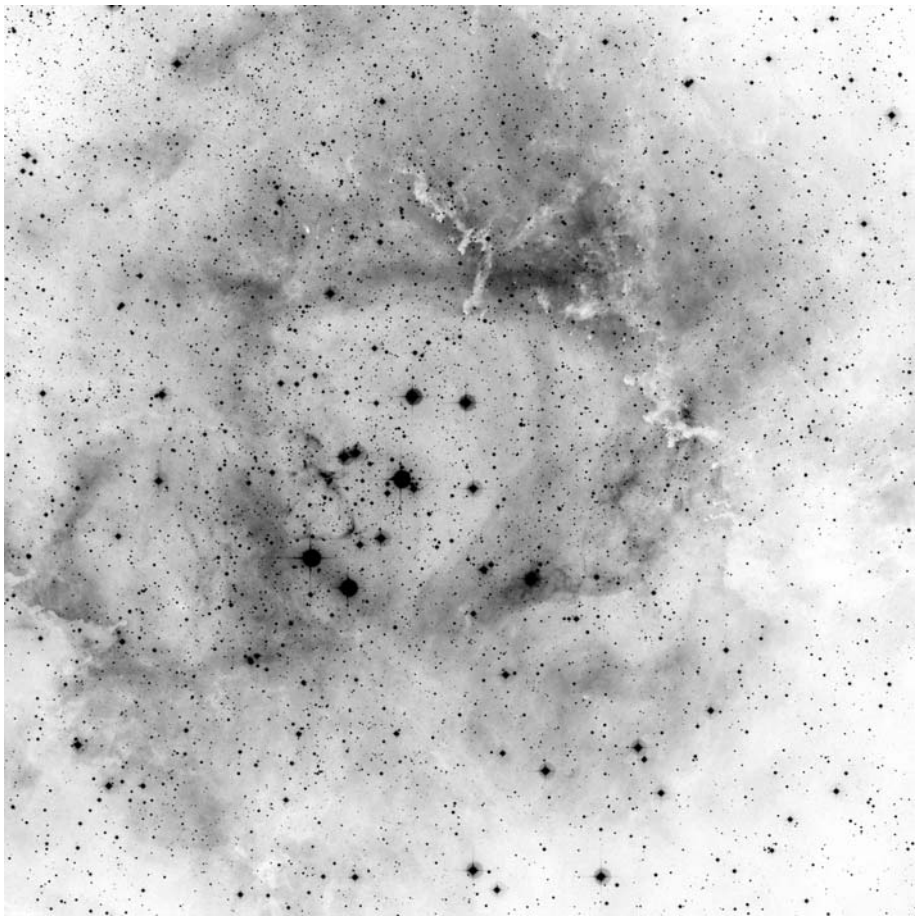
Observing notes:


+20°00'
+15°00'
+10°00'
85
61
81
74
3
5
1
68
λ
51
45
41
33
NGC 2395
PK 205+14.1
NGC 2656
8
35
38
6
1
11
ε
γ
Gomeisa
η
Canis Minor
8h00m
7h30m
7h00m


+15°00'
+14°00'
+13°00'
+12°00'
NGC 2395
PK 205+14.1
6
1
NGC 2416
7h40m
7h35m
7h30m
7h25m
7h20m

Sh 2 - 275

in Monoceros



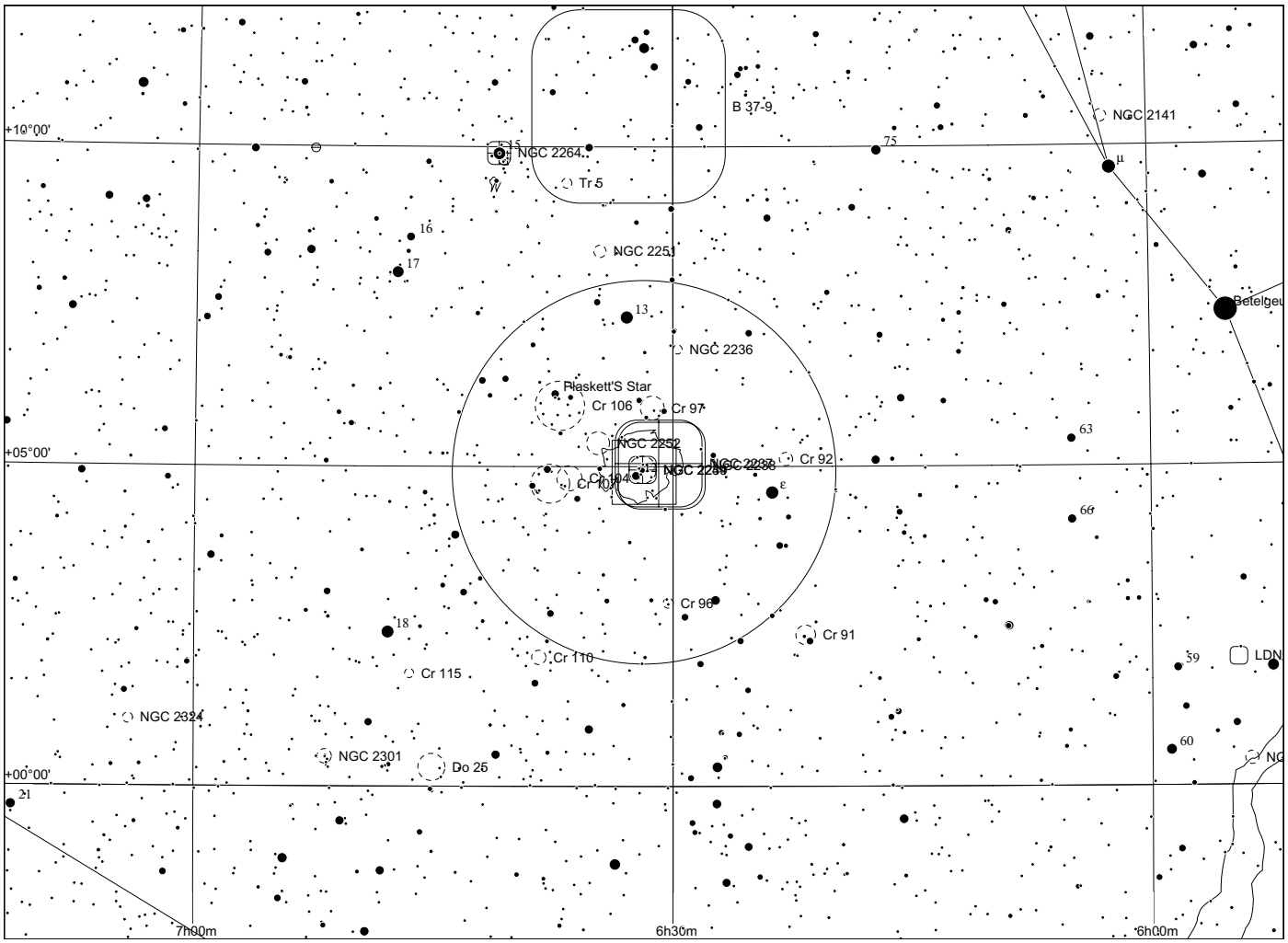
60x60, red

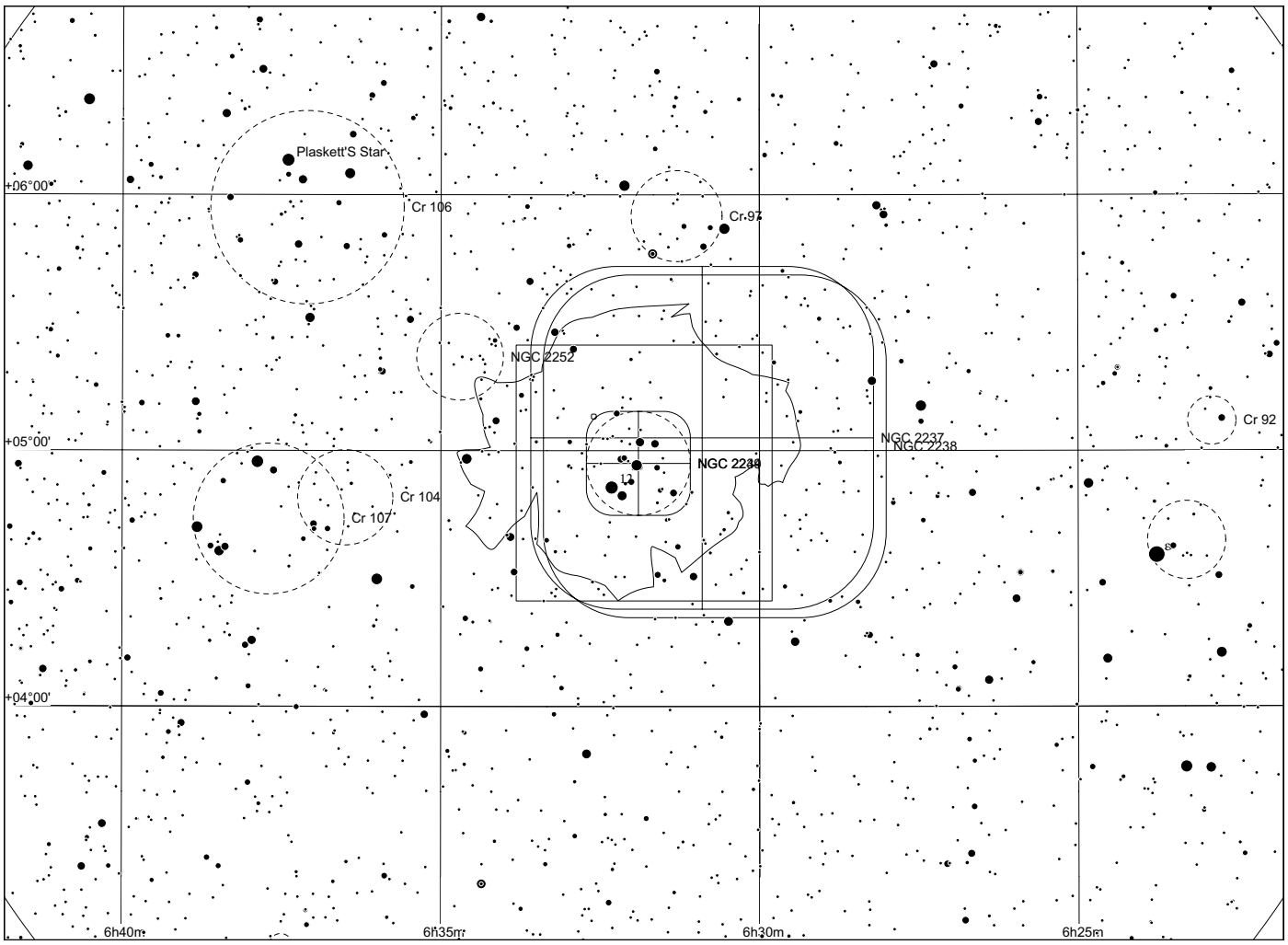


narrowband, Dean Salman

	other name	RA	dec	dia. '	F	S	B
Sh 2-275	NGC2246 = Rosette Nebula	06 31 42.5	+04 55 47	100	1	2	3

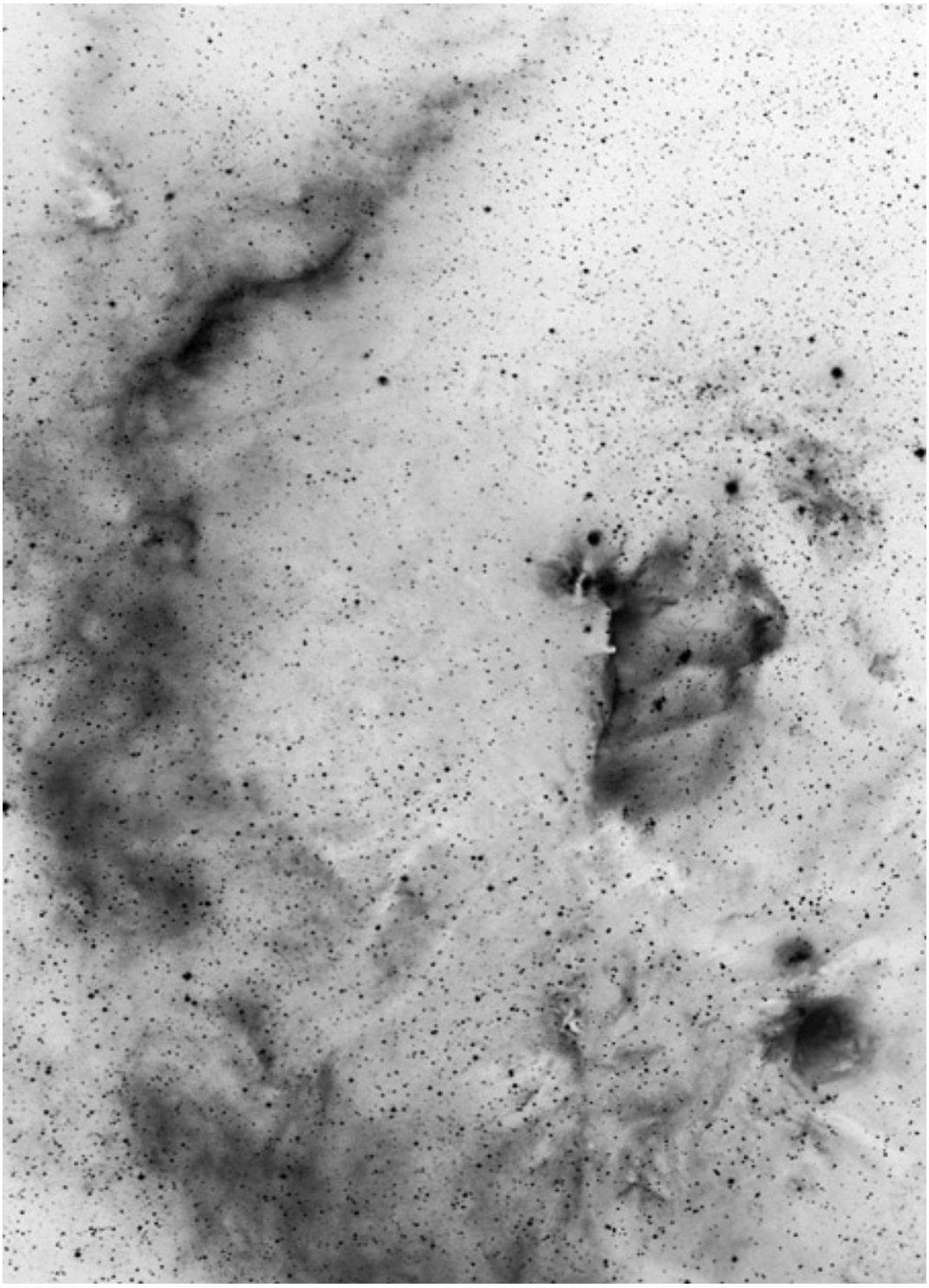
Observing notes:


B 37-9
NGC 2141
+10°00'
NGC 2264
Tr 5
75
μ
16
17
NGC 2251
Betelgeu
13
NGC 2236
Plaskett'S Star
Cr 106
Cr 97
63
+05°00'
NGC 2252
NGC 2237
NGC 2238
Cr 92
Cr 104
NGC 2239
ε
66
Cr 96
18
Cr 91
Cr 110
39
LDN
Cr 115
NGC 2324
60
NGC 2301
Do 25
+00°00'
21
7h00m
6h30m
6h00m


Plaskett'S Star
+06°00'
Cr 106
Cr 97
NGC 2252
Cr 92
+05°00'
NGC 2237
NGC 2238
NGC 2239
Cr 104
Cr 107
+04°00'
6h40m
6h35m
6h30m
6h25m

Sh 2 - 276

in Orion



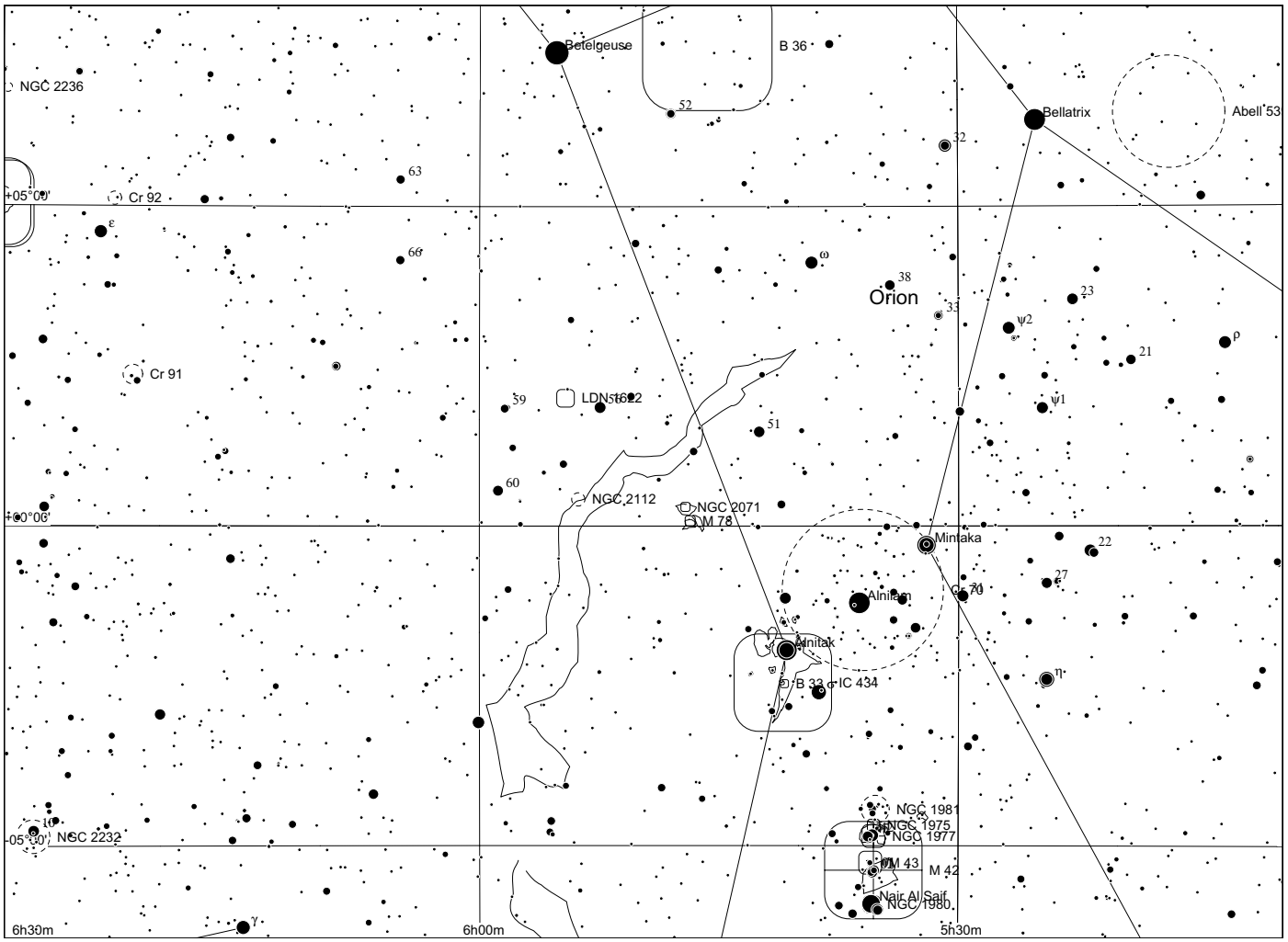
H alpha Dean Salman

	other name	RA	dec	dia. '	F	S	B
Sh 2-276	Barnard's Loop	05 27 28.1	-03 57 55	1200	2	2	2

Distance: 159 pc, Size: 56.1 pc, Source: 2005A&A...430..523W

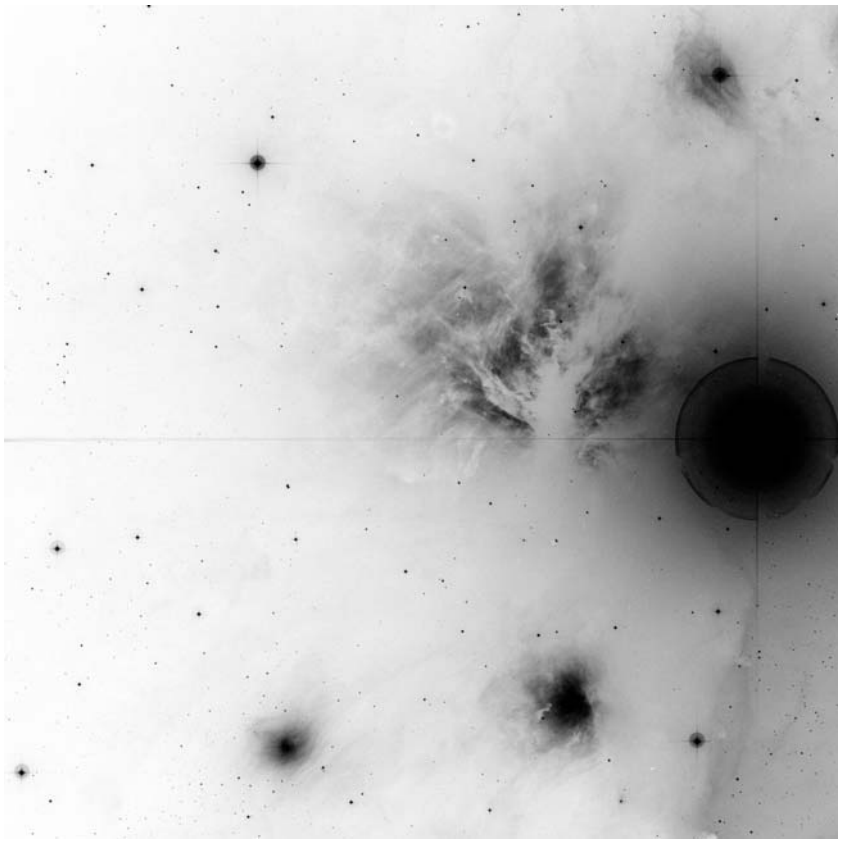
The largest nebula in apparent diameter in the Sharpless catalog is Barnard's loop, the ionised gas that makes up the nearest portion of the Orion Eridanus bubble. It is considerably closer than the gas that makes up the main portion of the Orion molecular clouds.

Observing notes:


Betelgeuse
B 36
NGC 2236
52
Bellatrix
Abell 53
32
63
+05°00'
Cr 92
ε
66
ω
38
Orion
33
23
ψ2
ρ
21
Cr 91
39
LDN 1622
ψ1
51
60
NGC 2112
NGC 2071
M 78
+00°00'
Mintaka
22
27
Alnilam
70
Alnitak
B 33
IC 434
η
NGC 1981
NGC 1975
NGC 1977
-05°30'
NGC 2232
M 43
M 42
Nair Al Saif
NGC 1980
6h30m
6h00m
5h30m

Sh 2 - 277

in Orion





60x60, blue

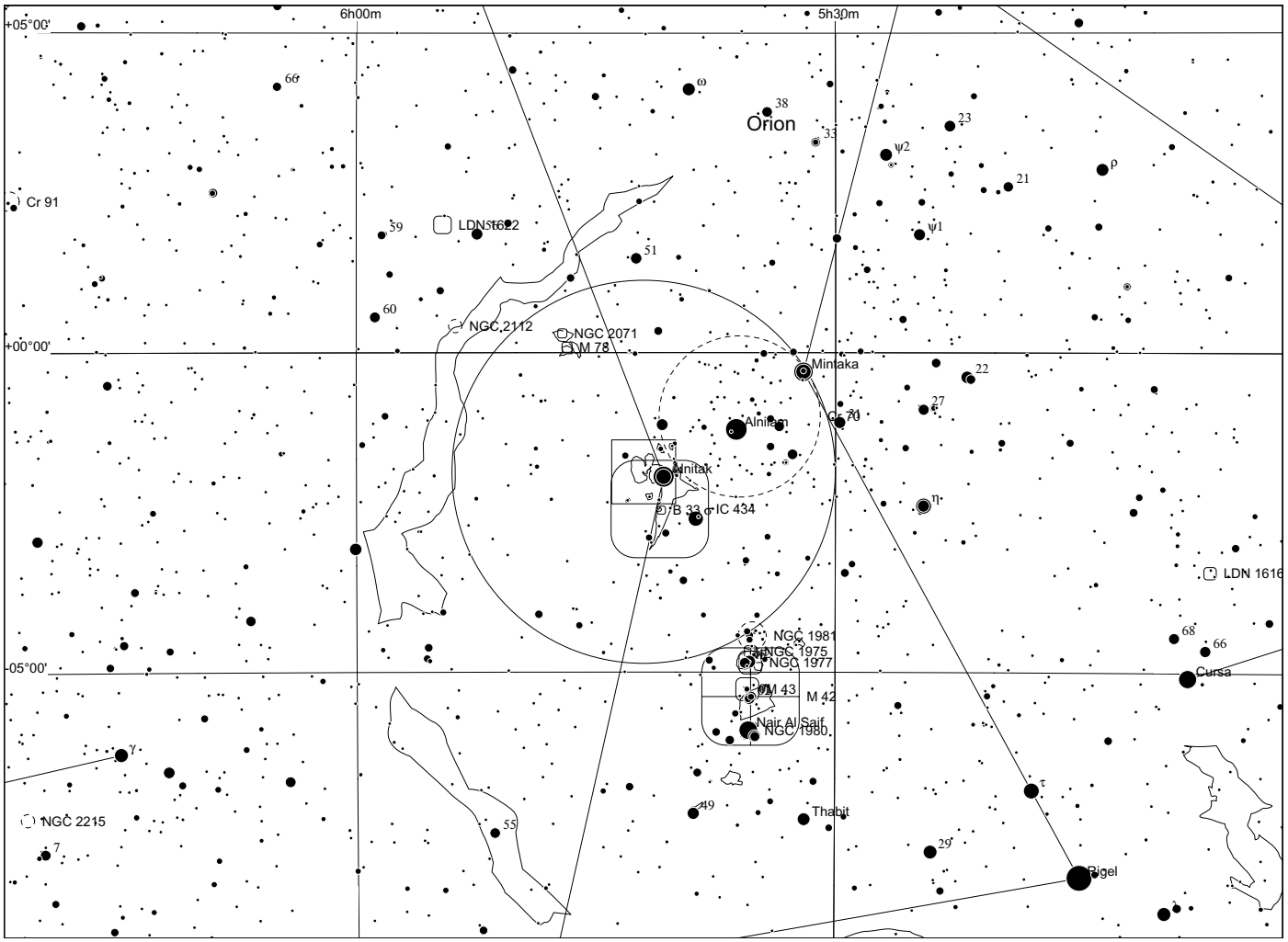
RGB Dean Salman

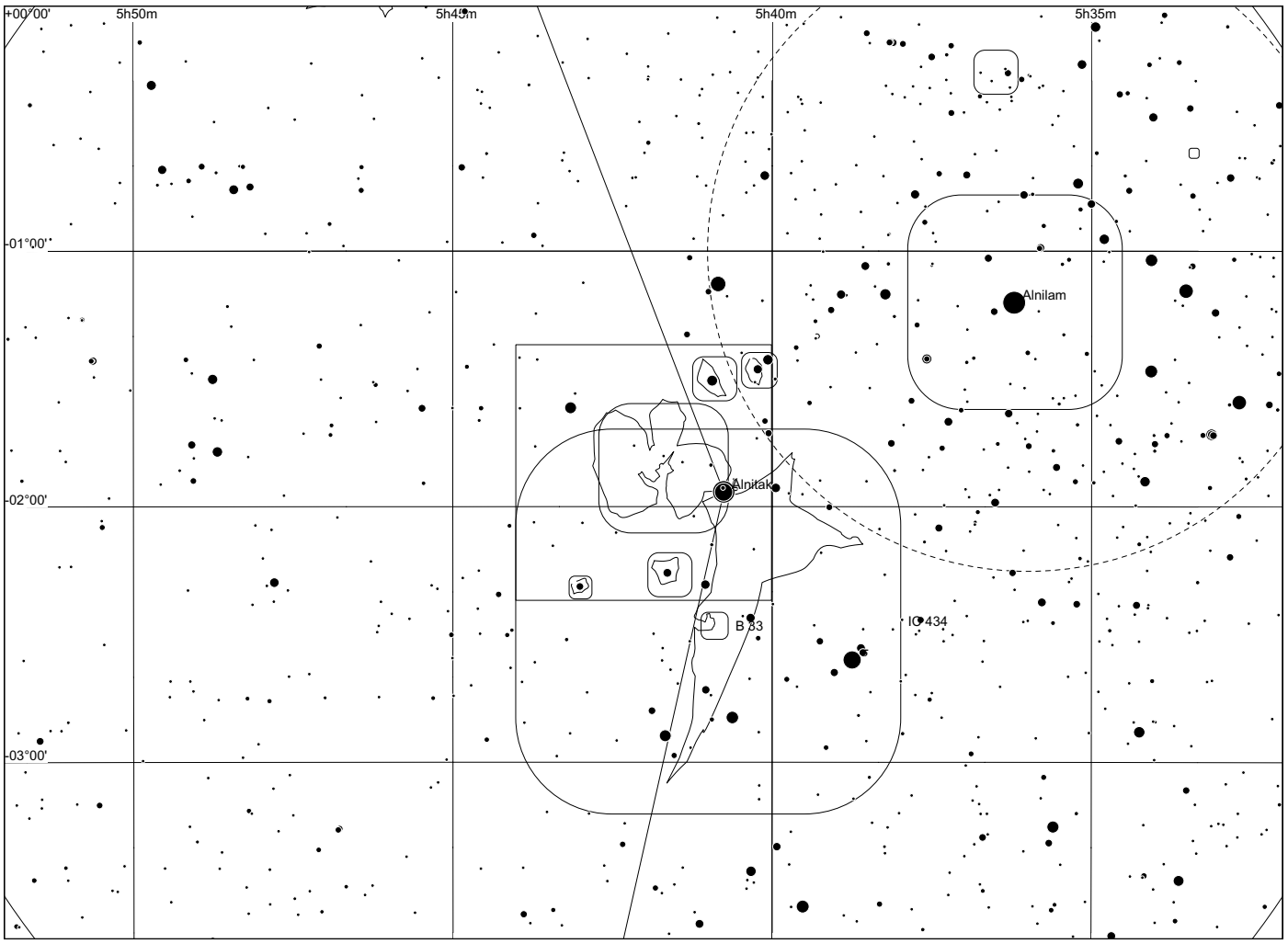
	other name	RA	dec	dia. '	F	S	B
Sh 2-277	IC 434 or NGC2024?	05 40 42.9	-02 26 49	120	3	2	3

Distance: 500 pc, Size: 17.5 pc, Source: 1982ApJS...49..183B

This is NGC 2024, the Flame nebula, illuminated by the O9.5Ib star Alnitak (Zeta Orionis), the eastern-most star in Orion's belt.

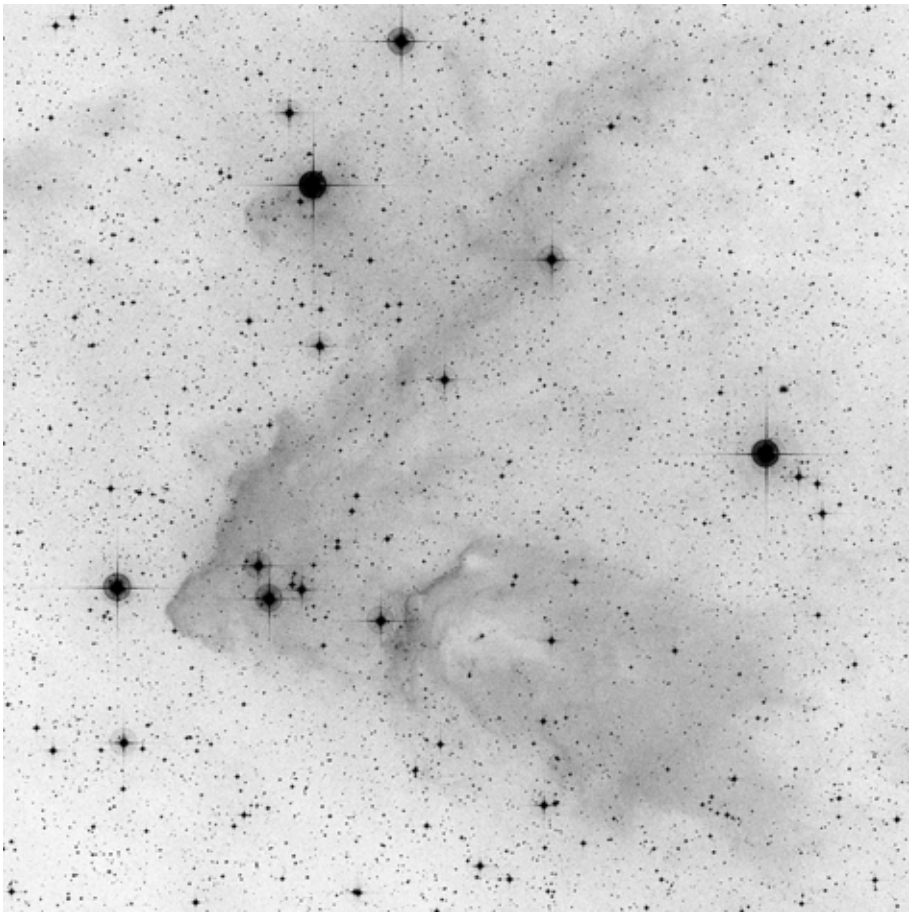
Observing notes:


6h00m
5h30m
+05°00'
+00°00'
-05°00'
Orion
Cr 91
LDN 1622
NGC 2112
NGC 2071
M 78
Mintaka
Alnilam
Cr 70
Alnitak
B 33
IC 434
LDN 1616
NGC 1981
NGC 1975
NGC 1977
M 43
M 42
Nair Al Saif
NGC 1980
NGC 2215
Thabit
Rigel
Cursa

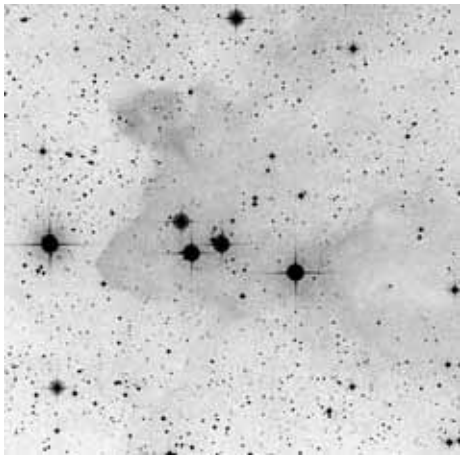

+00°00'
5h50m
5h45m
5h40m
5h35m
-01°00'
-02°00'
-03°00'
Alnilam
Alnitak
B 33
IC 434

Sh 2 - 278

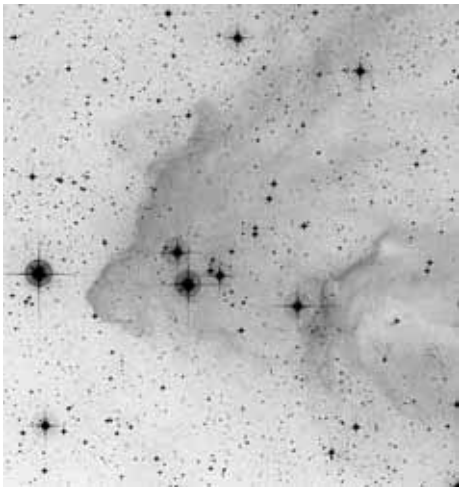
in Orion



60x60, red



POSS blue



POSS red



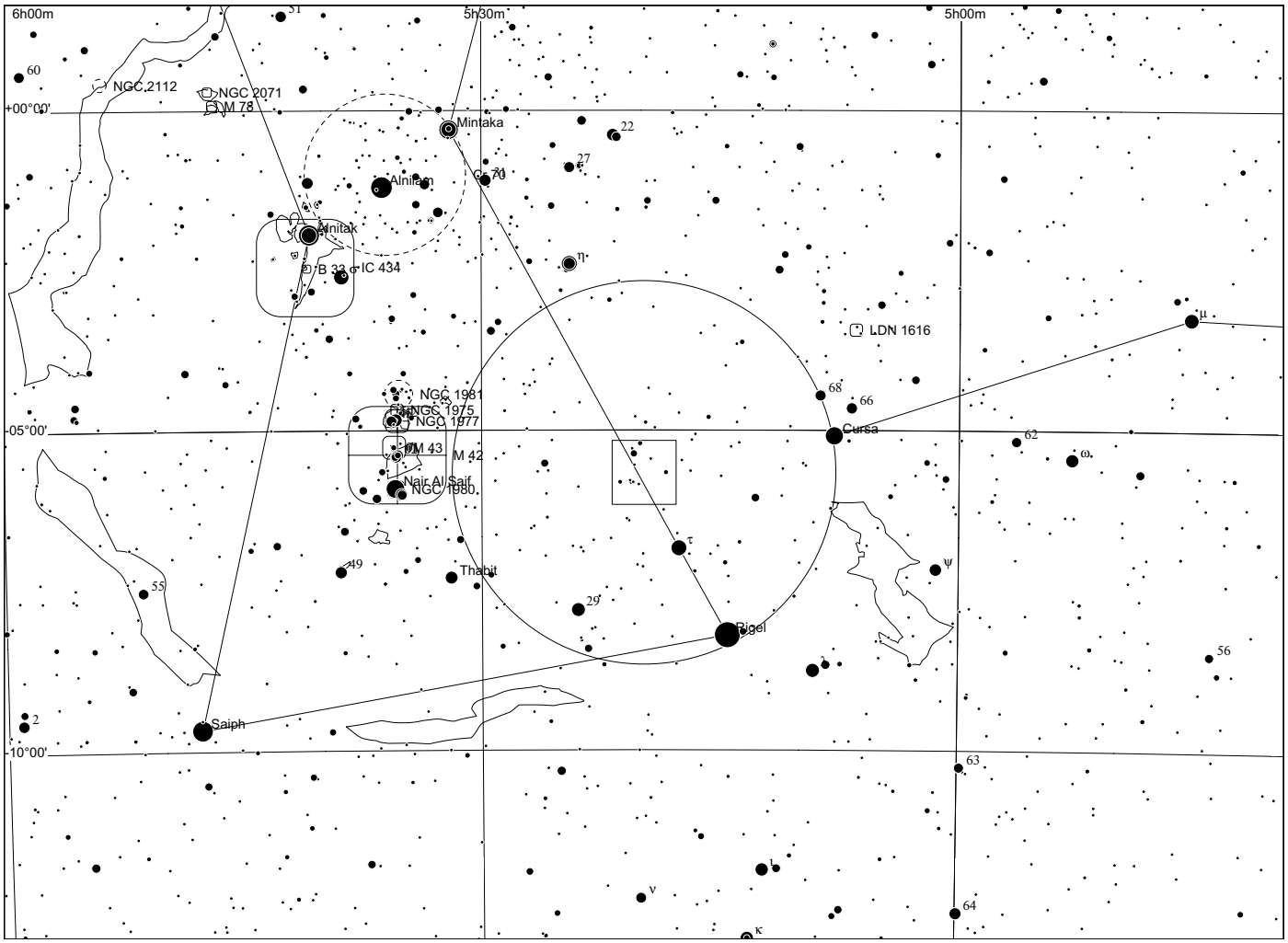
composite

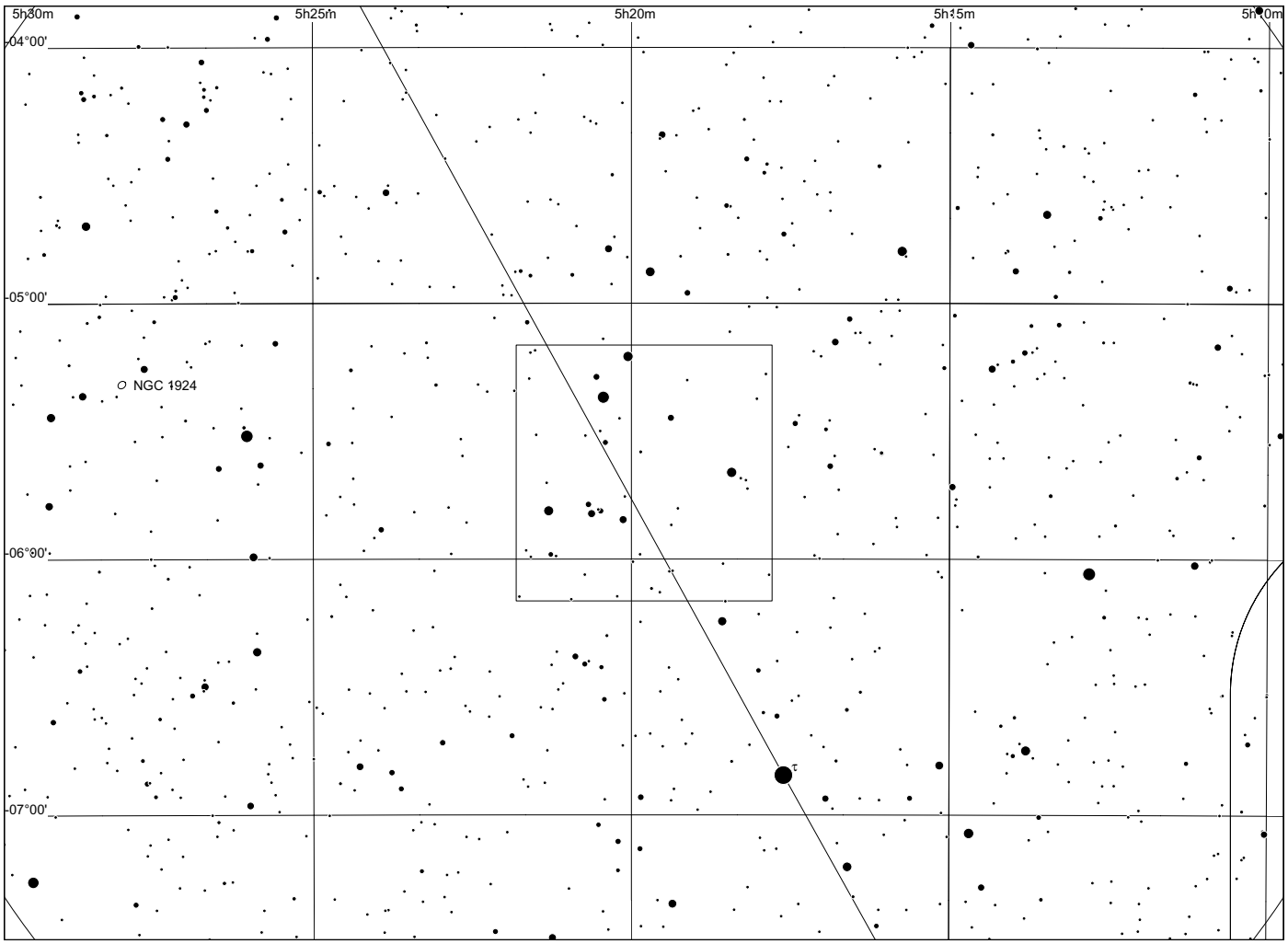
	other name	RA	dec	dia. '	F	S	B
Sh 2-278		05 19 48.2	-05 39 49	50	3	2	2

Distance: 500 pc, Size: 7.3 pc, Source: 1982ApJS...49..183B

This is the high latitude cloud MBM 110.

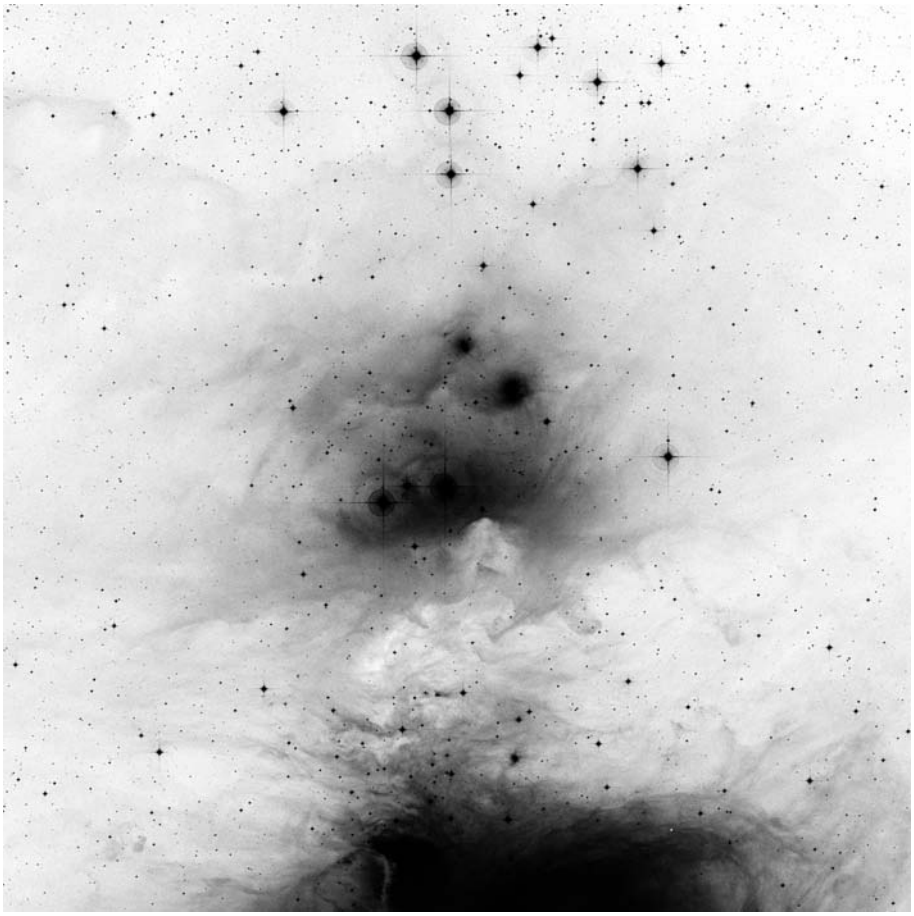
Observing notes:


6h00m
5h30m
5h00m
+00°00'
-05°00'
-10°00'
NGC 2112
NGC 2071
M 78
Mintaka
Alnilam
Alnitak
B 33
IC 434
LDN 1616
NGC 1981
NGC 1975
NGC 1977
M 43
M 42
Nair Al Saif
NGC 1980
Thabit
Cursa
Rigel
Saiph
60
51
22
27
70
η
μ
68
66
62
ω
τ
ψ
49
55
29
56
2
63
ν
64
κ


5h30m
5h25m
5h20m
5h15m
5h10m
-04°00'
-05°00'
-06°00'
-07°00'
NGC 1924
τ

Sh 2 - 279

in Orion



60x60, red



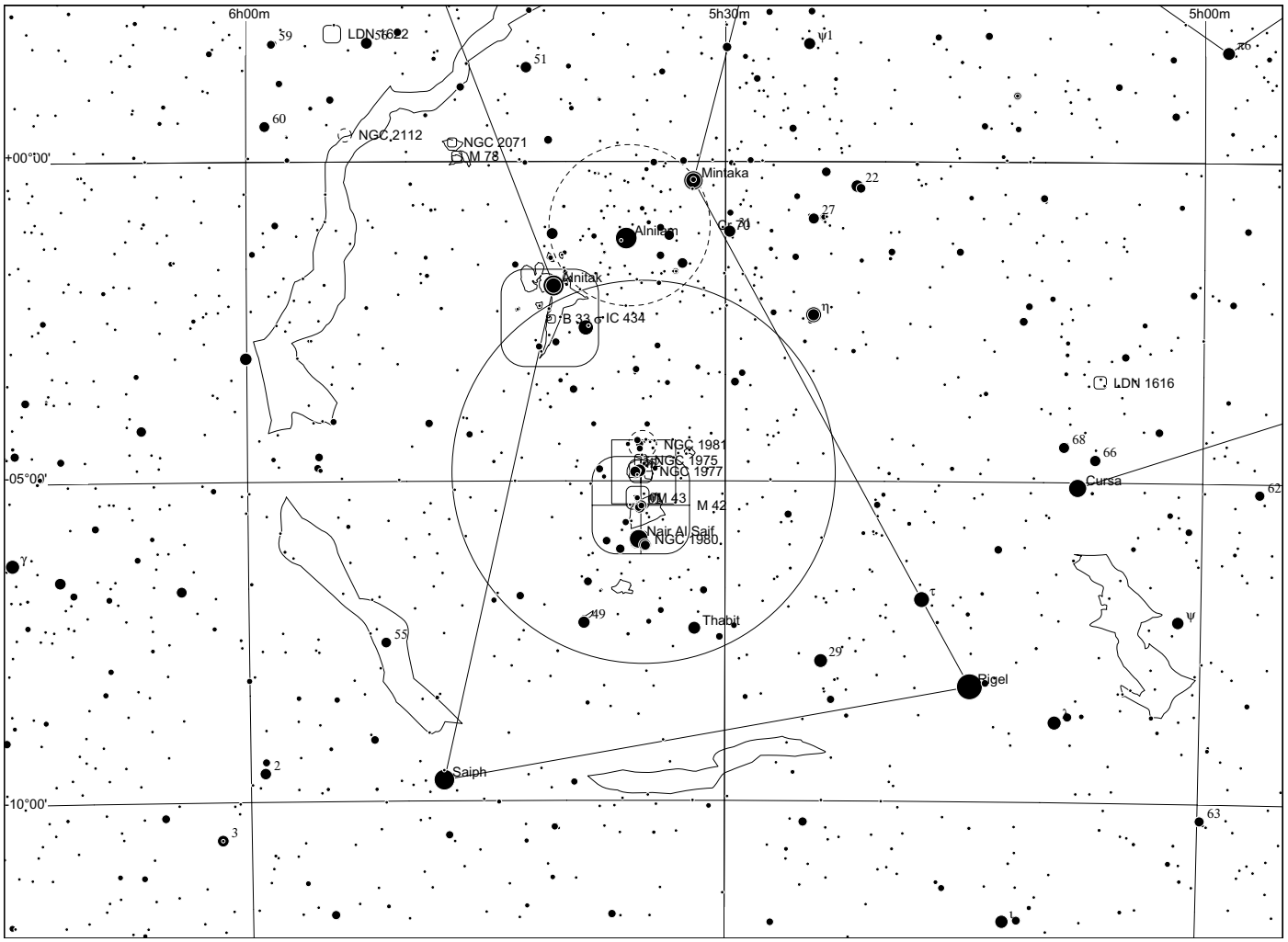
RGB Dean Salman

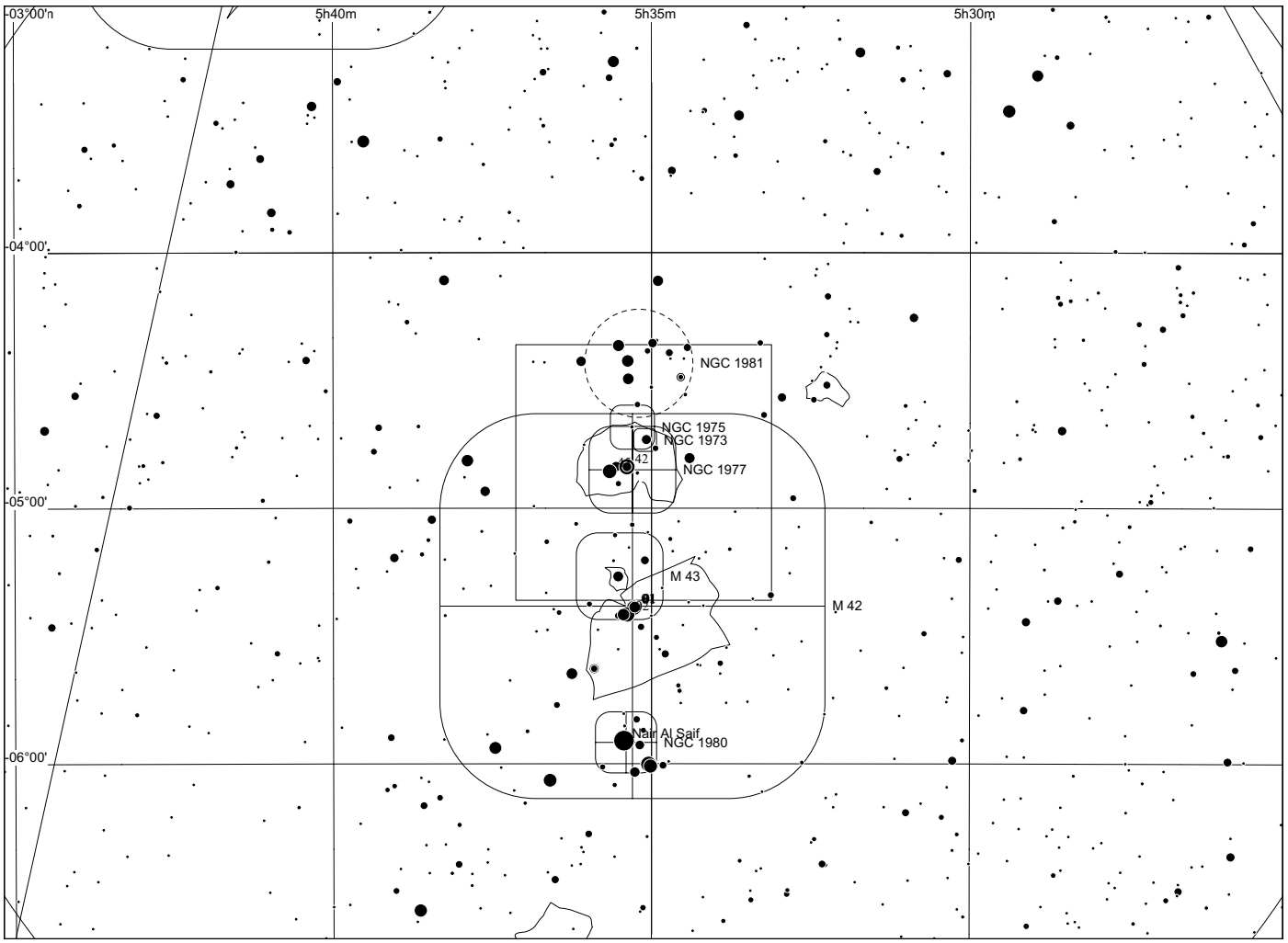
	other name	RA	dec	dia. '	F	S	B
Sh 2-279	NGC1973/1975/1977	05 35 20.1	-04 48 03	20	3	2	3

Distance: 500 pc, Size: 2.9 pc, Source: 1982ApJS...49..183B

This nebulosity is associated with the Orion complex star cluster and molecular cloud NGC 1977. Running Man.

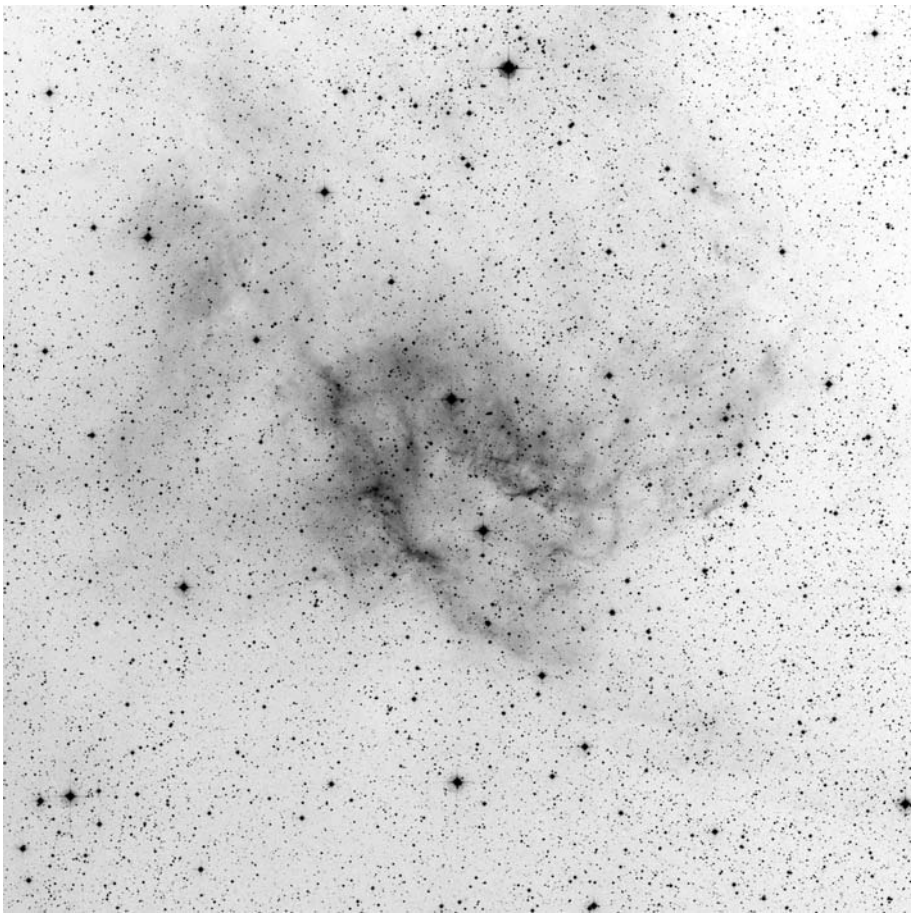
Observing notes:


6h00m
5h30m
5h00m
+00°00'
-05°00'
-10°00'
LDN 1622
NGC 2112
NGC 2071
M 78
Mintaka
Alnilam
Alnitak
B 33
IC 434
LDN 1616
NGC 1981
NGC 1975
NGC 1977
M 43
M 42
Nair Al Saif
NGC 1980
Thabit
Cursa
Rigel
Saiph

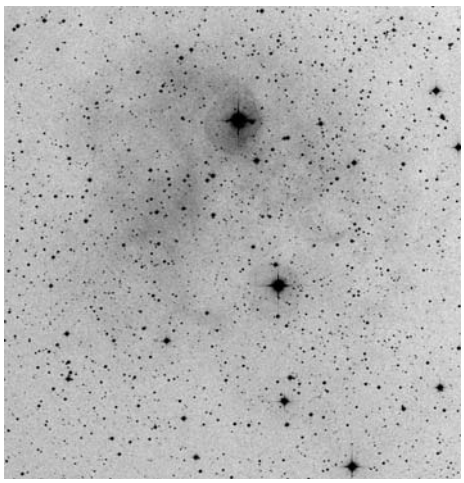

-03°00'n
5h40m
5h35m
5h30m
-04°00'
-05°00'
-06°00'
NGC 1981
NGC 1975
NGC 1973
NGC 1977
M 43
M 42
Nair Al Saif
NGC 1980

Sh 2 - 280

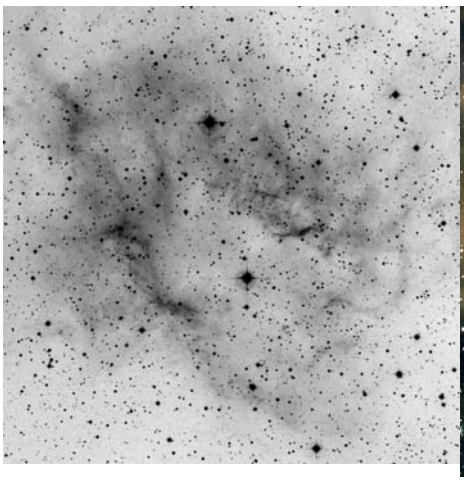
in Monoceros



60x60, red



POSS blue



POSS red



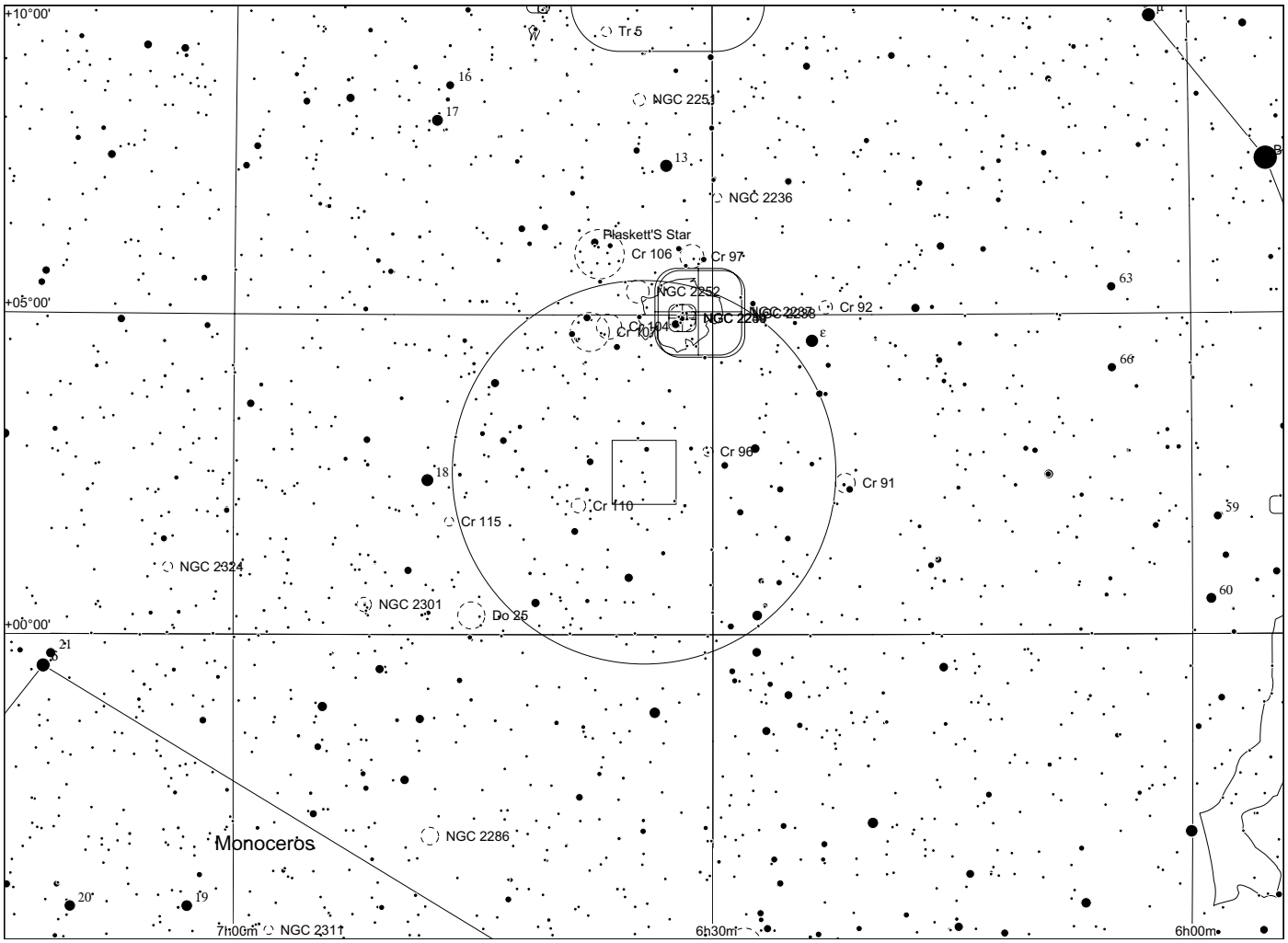
narrowband Dean Salman

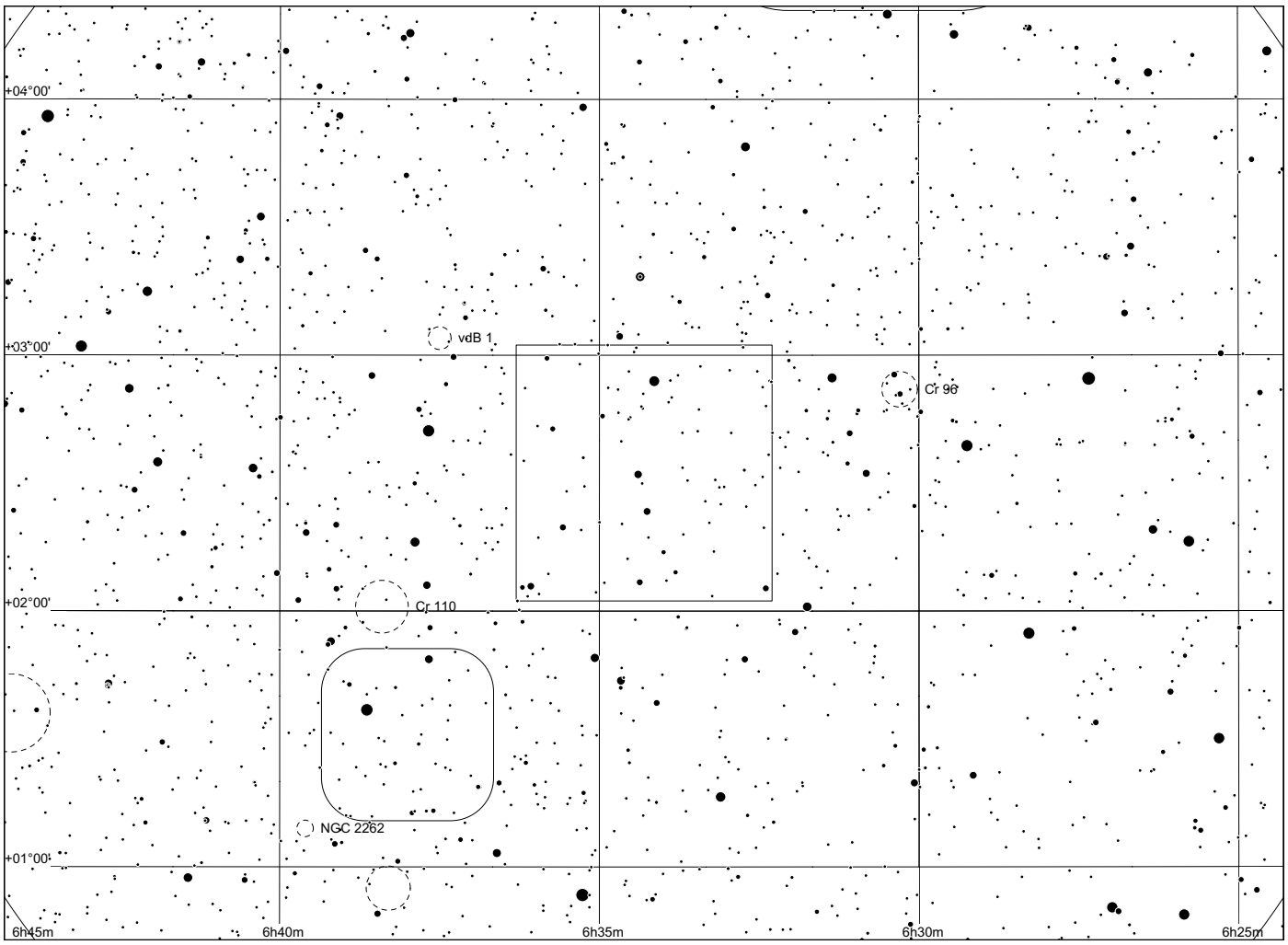
	other name	RA	dec	dia. '	F	S	B
Sh 2-280		06 34 18.7	+02 32 23	40	3	2	2

Distance: 1700 pc, Size: 19.8 pc, Source: 1982ApJS...49..183B

The exciting star for this HII region is HD 46573.

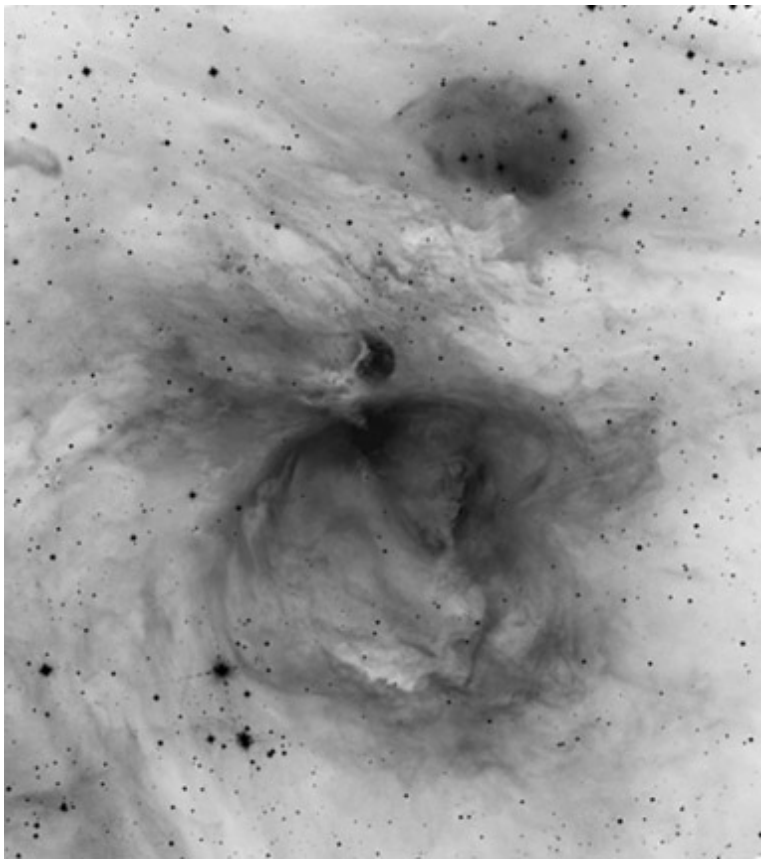
Observing notes:


+10°00'
+05°00'
+00°00'
Tr 5
NGC 2251
NGC 2236
Plaskett'S Star
Cr 106
Cr 97
NGC 2252
NGC 2238
NGC 2239
Cr 92
Cr 107
Cr 104
Cr 96
Cr 91
Cr 110
Cr 115
NGC 2324
NGC 2301
Do 25
Monocerōs
NGC 2286
NGC 2311
7h00m
6h30m
6h00m


+04°00'
+03°00'
+02°00'
+01°00'
vdB 1
Cr 96
Cr 110
NGC 2262
6h45m
6h40m
6h35m
6h30m
6h25m

Sh 2 - 281

in Orion



H alpha



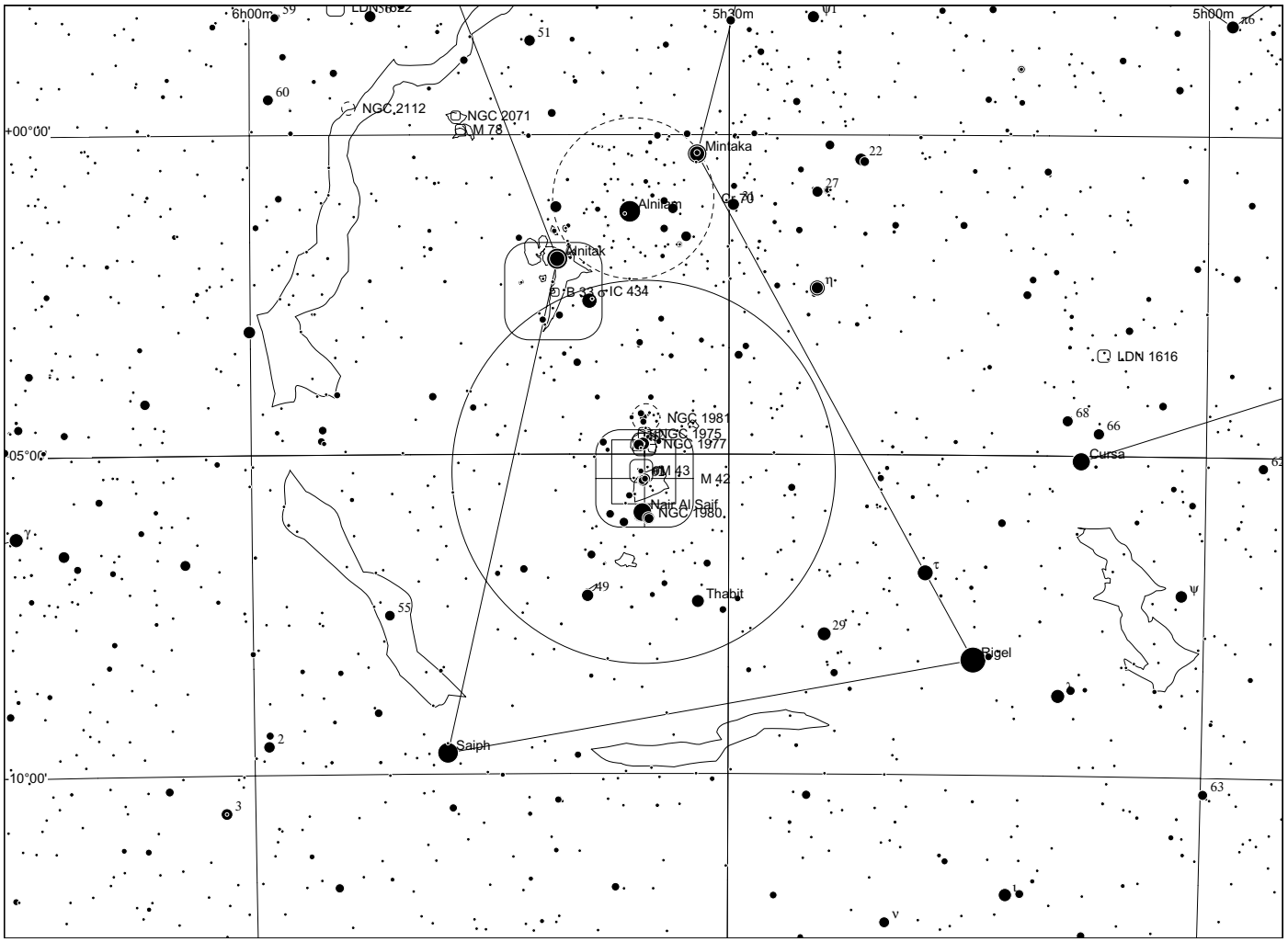
narrowband, Dean Salman

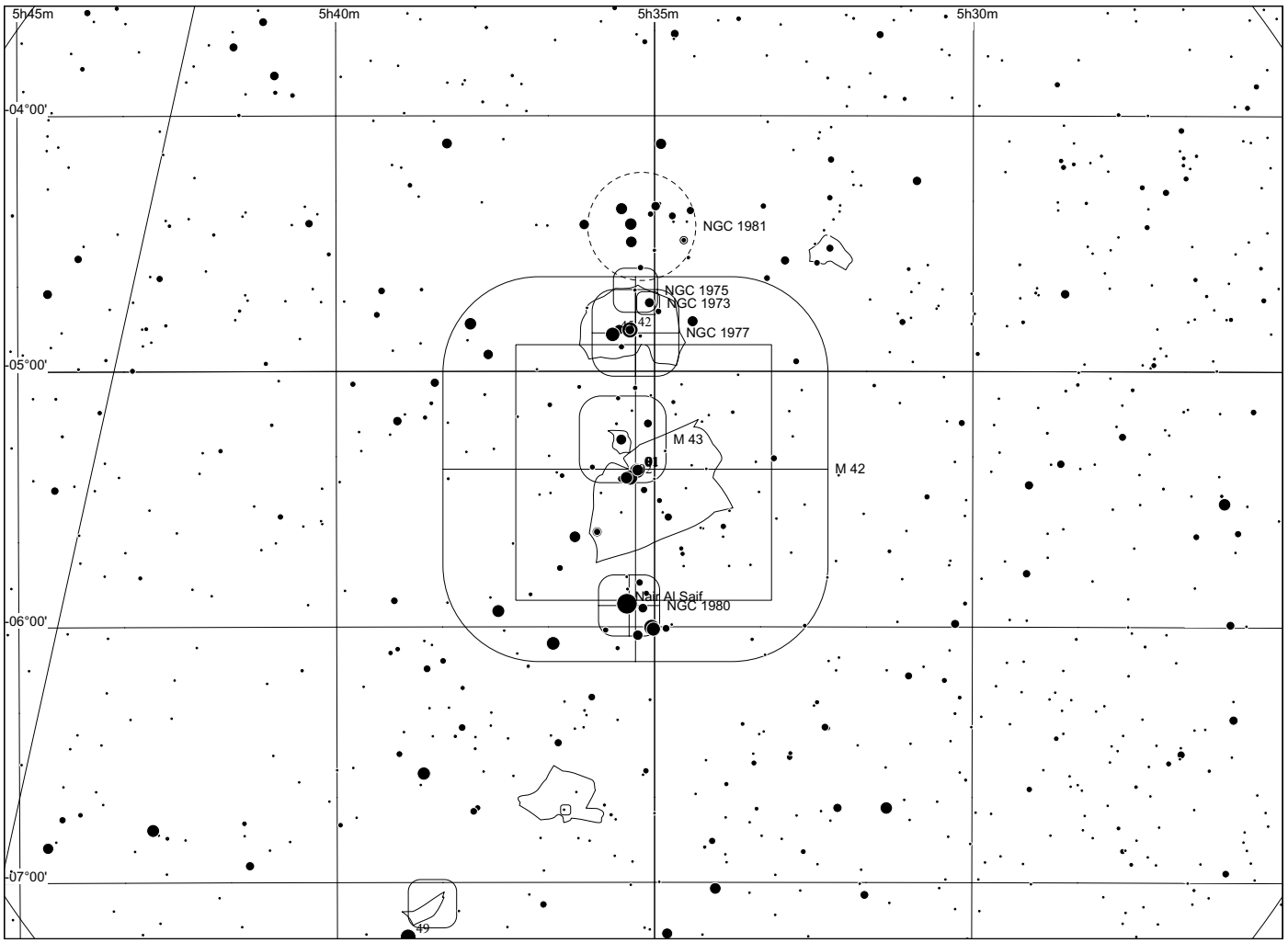
	other name	RA	dec	dia. '	F	S	B
Sh 2-281	M42/43 = Orion Nebula	05 34 54.4	-05 28 00	60	3	2	3

Distance: 500 pc, Size: 8.7 pc,Source: 1982ApJS...49..183B

This is the Orion nebula.

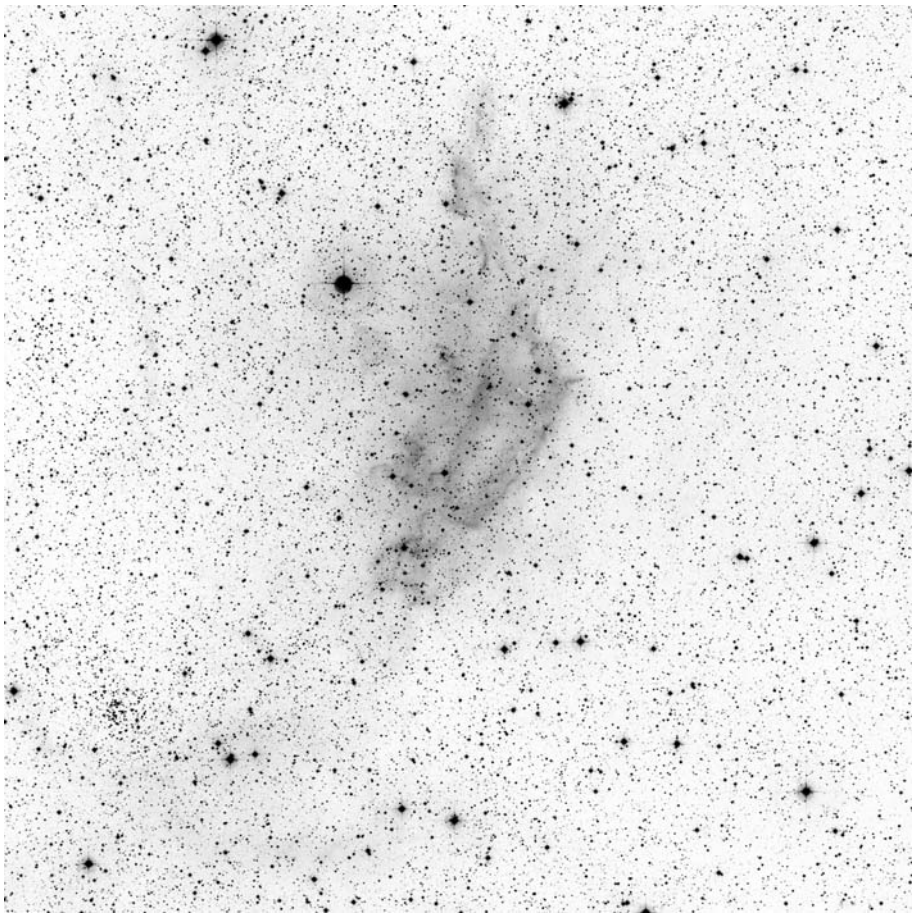
Observing notes:


6h00m
5h30m
5h00m
+00°00'
05°00'
10°00'
NGC 2112
NGC 2071
M 78
Mintaka
Alnilam
Alnitak
B 33
IC 434
LDN 1616
NGC 1981
NGC 1975
NGC 1977
M 43
M 42
Nair Al Saif
NGC 1980
Thabit
Rigel
Cursa
Saiph

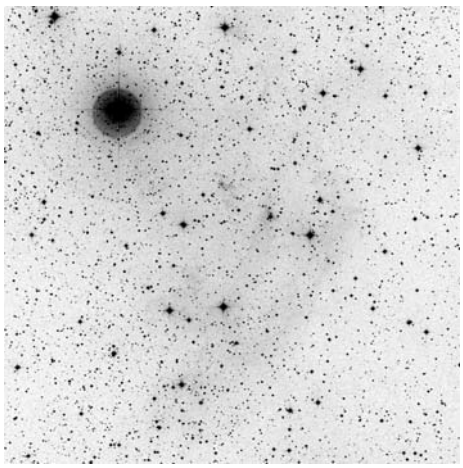

5h45m
5h40m
5h35m
5h30m
04°00'
05°00'
06°00'
07°00'
NGC 1981
NGC 1975
NGC 1973
NGC 1977
M 43
M 42
Nair Al Saif
NGC 1980

Sh 2 - 282

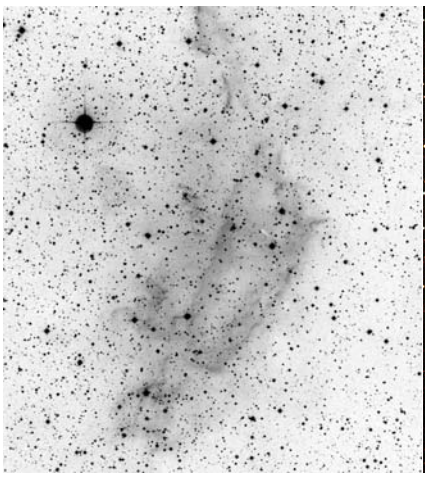
in Monoceros



60x60, red



POSS blue



POSS red



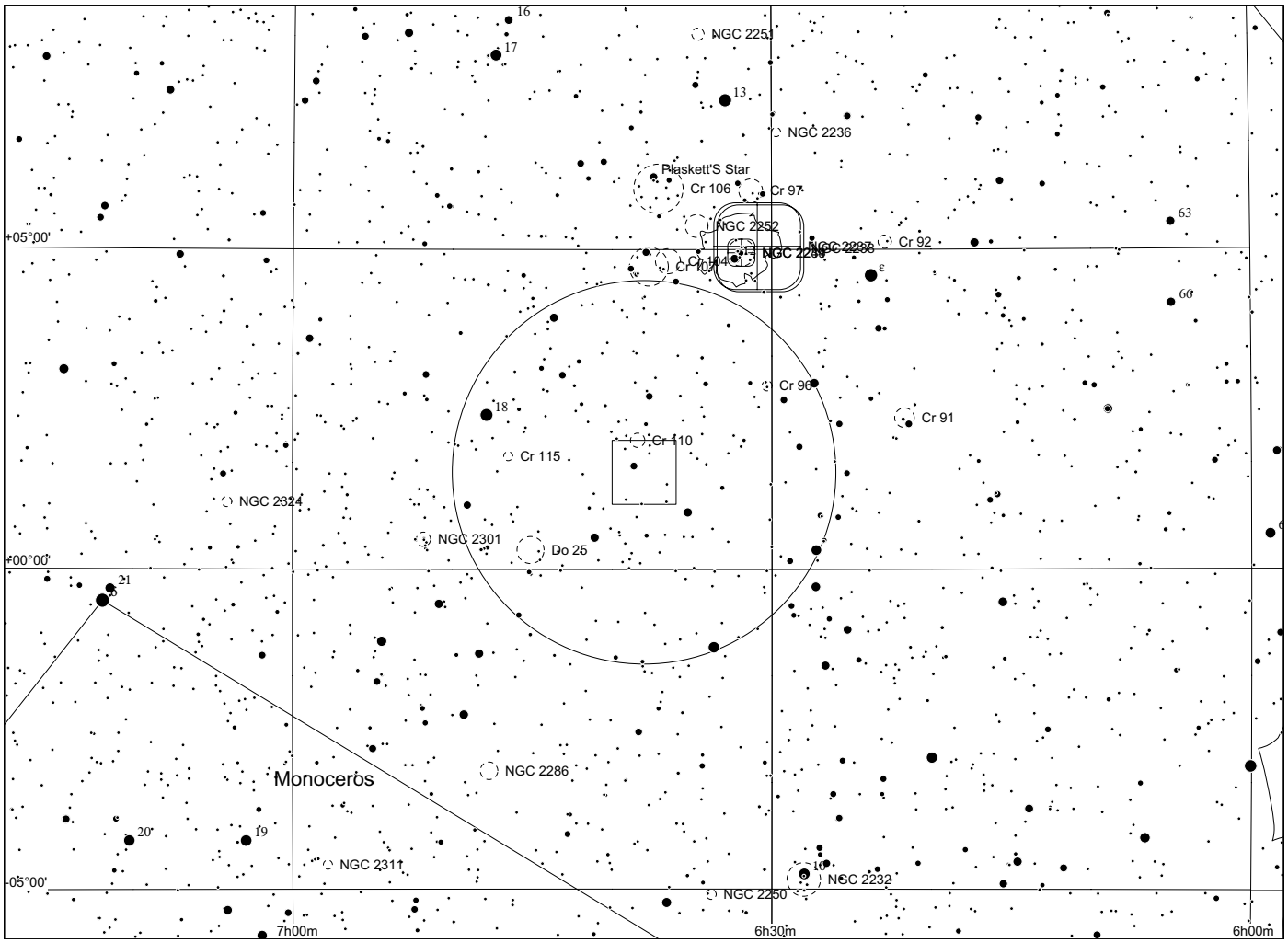
RGB Dean Salman

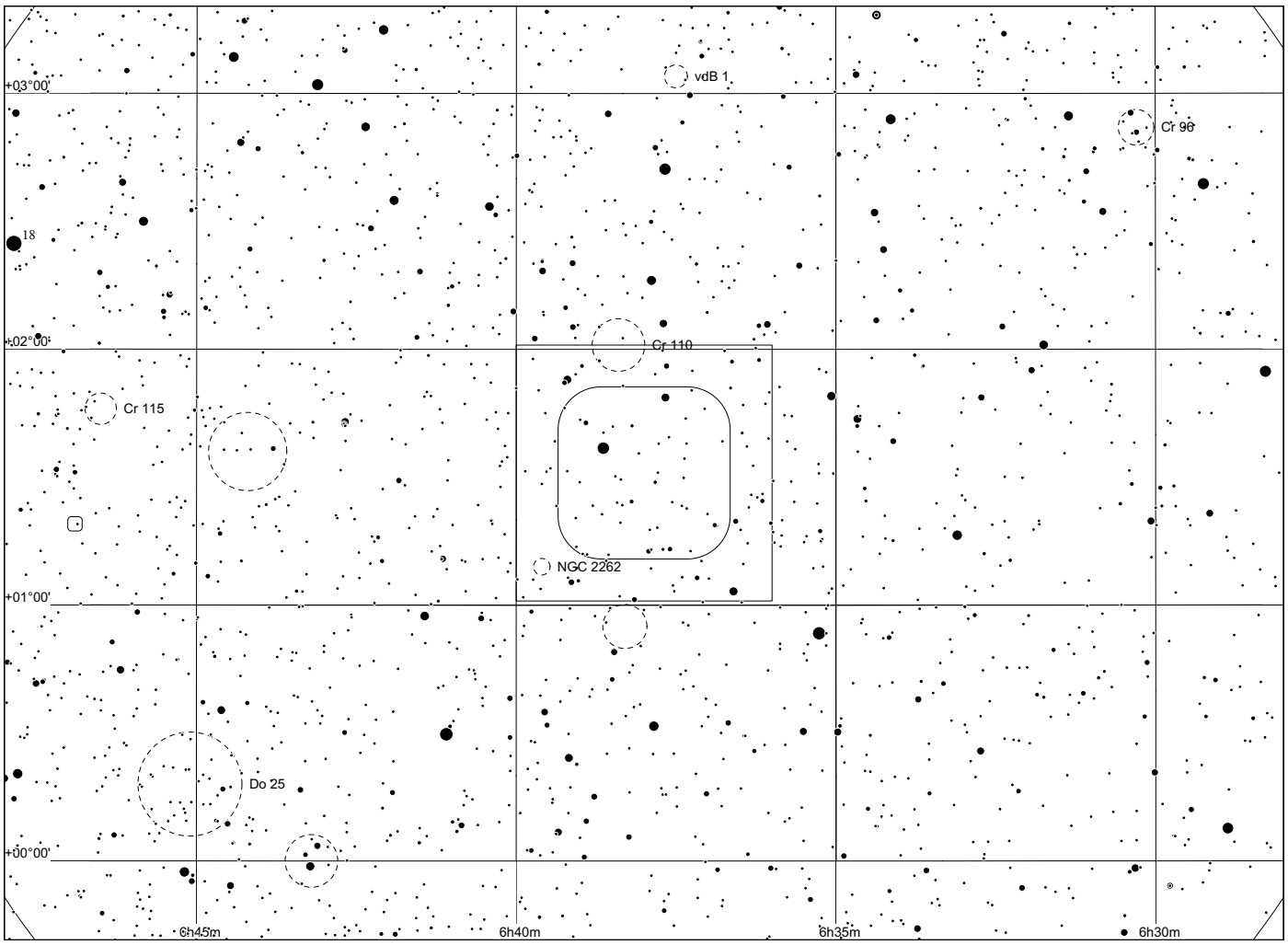
	other name	RA	dec	dia. '	F	S	B
Sh 2-282		06 37 58.5	+01 30 51	35	3	2	2

Distance: 1500 pc, Size: 15.3 pc, Source: 1982ApJS...49..183B

The exciting star of this HII region, HD 47432 (the bright star in the upper part of the image), is located at a distance of 1250 pc and is probably a member of the Mon OB2 association (whose distance is usually given as 1550 pc). The HII region contains a system of eight cometary globules.

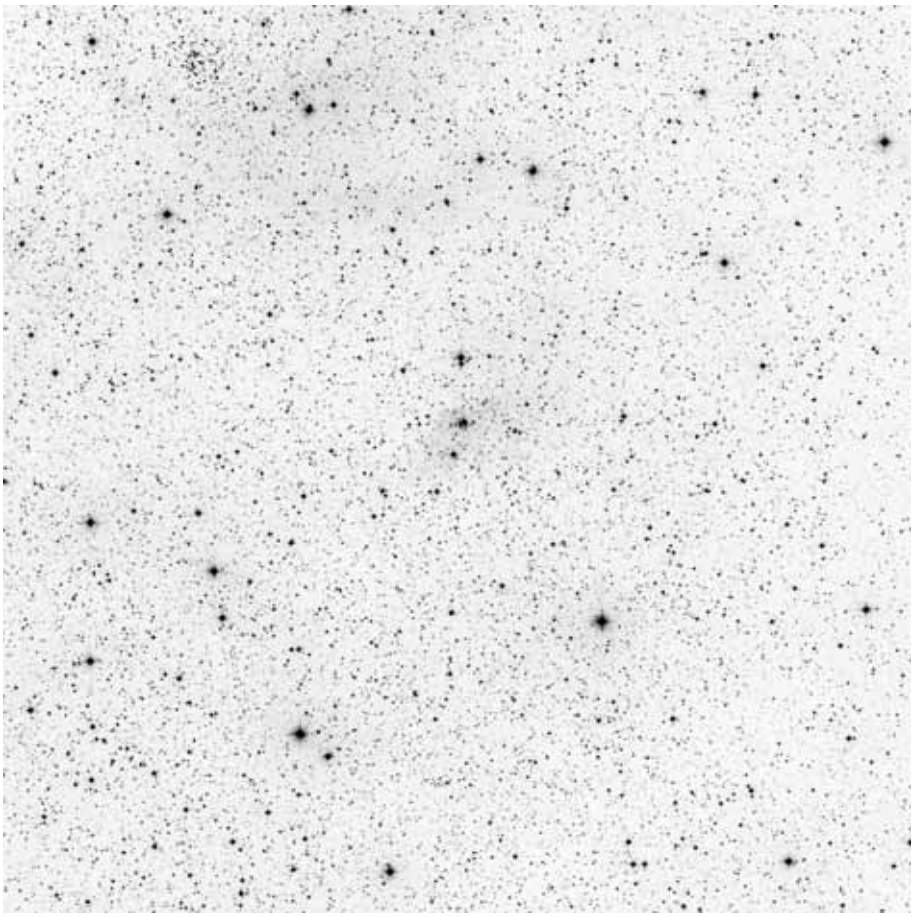
Observing notes:


NGC 2251
NGC 2236
Plaskett'S Star
Cr 106
Cr 97
NGC 2252
NGC 2244
Cr 92
Cr 104
Cr 96
Cr 91
Cr 110
Cr 115
NGC 2324
NGC 2301
Do 25
Monoceros
NGC 2286
NGC 2311
NGC 2232
NGC 2250
+05°00'
+00°00'
-05°00'
7h00m
6h30m
6h00m

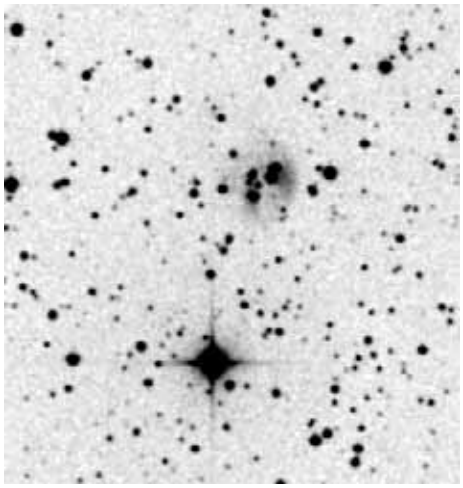

vdB 1
Cr 96
Cr 110
Cr 115
NGC 2262
Do 25
+03°00'
+02°00'
+01°00'
+00°00'
6h45m
6h40m
6h35m
6h30m

Sh 2 - 283

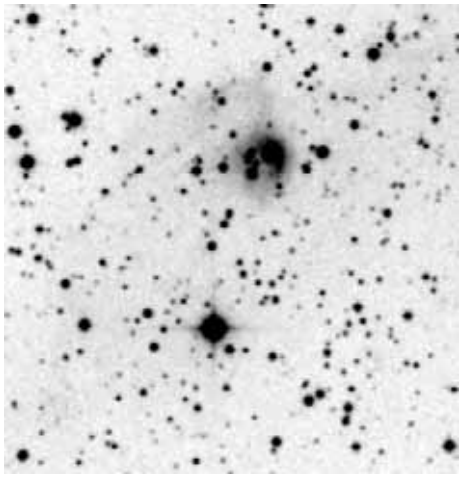
in Monoceros



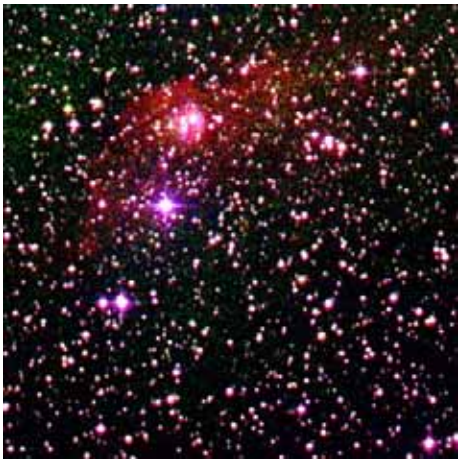
60x60, red



POSS blue



POSS red



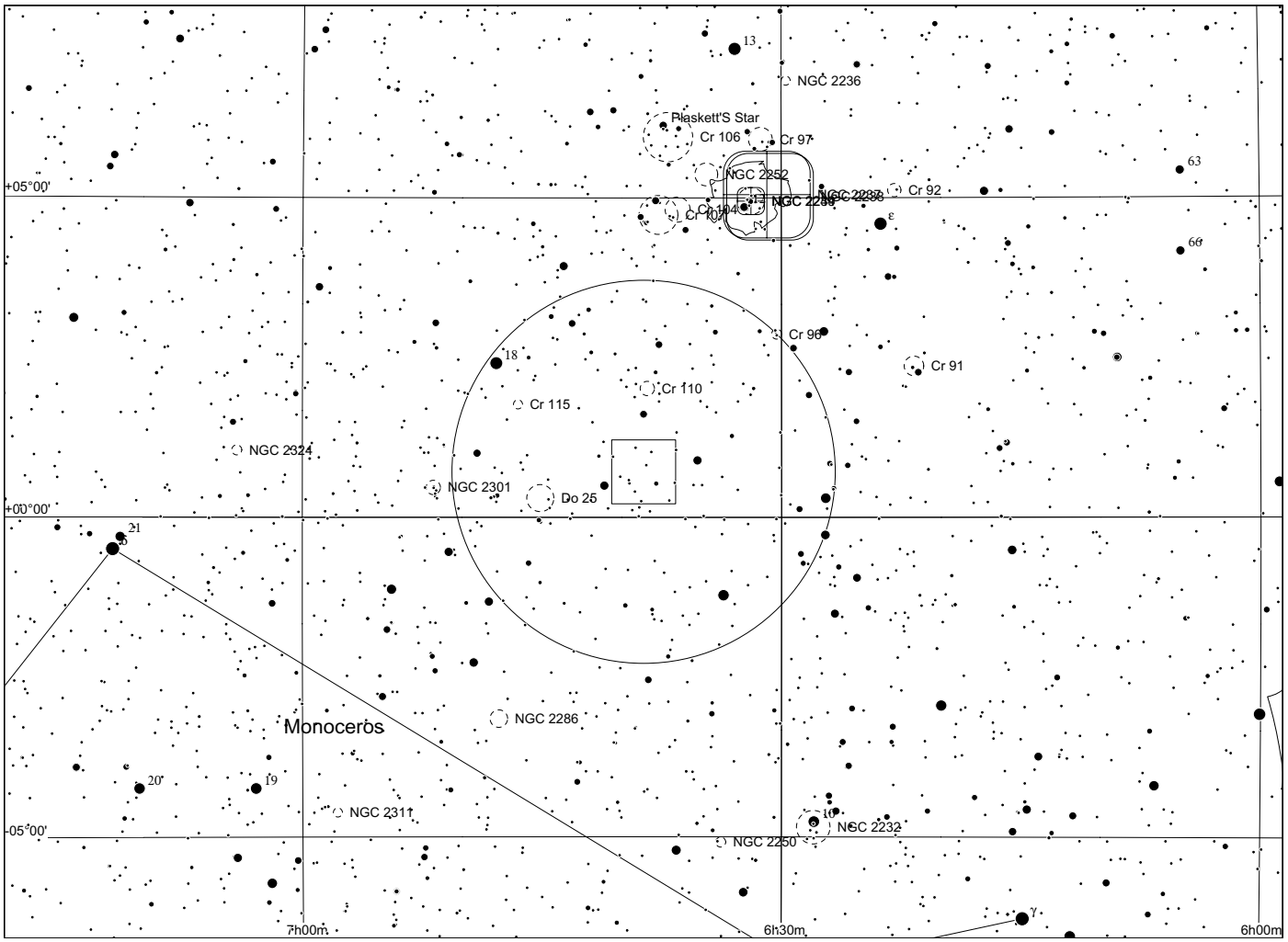
composite

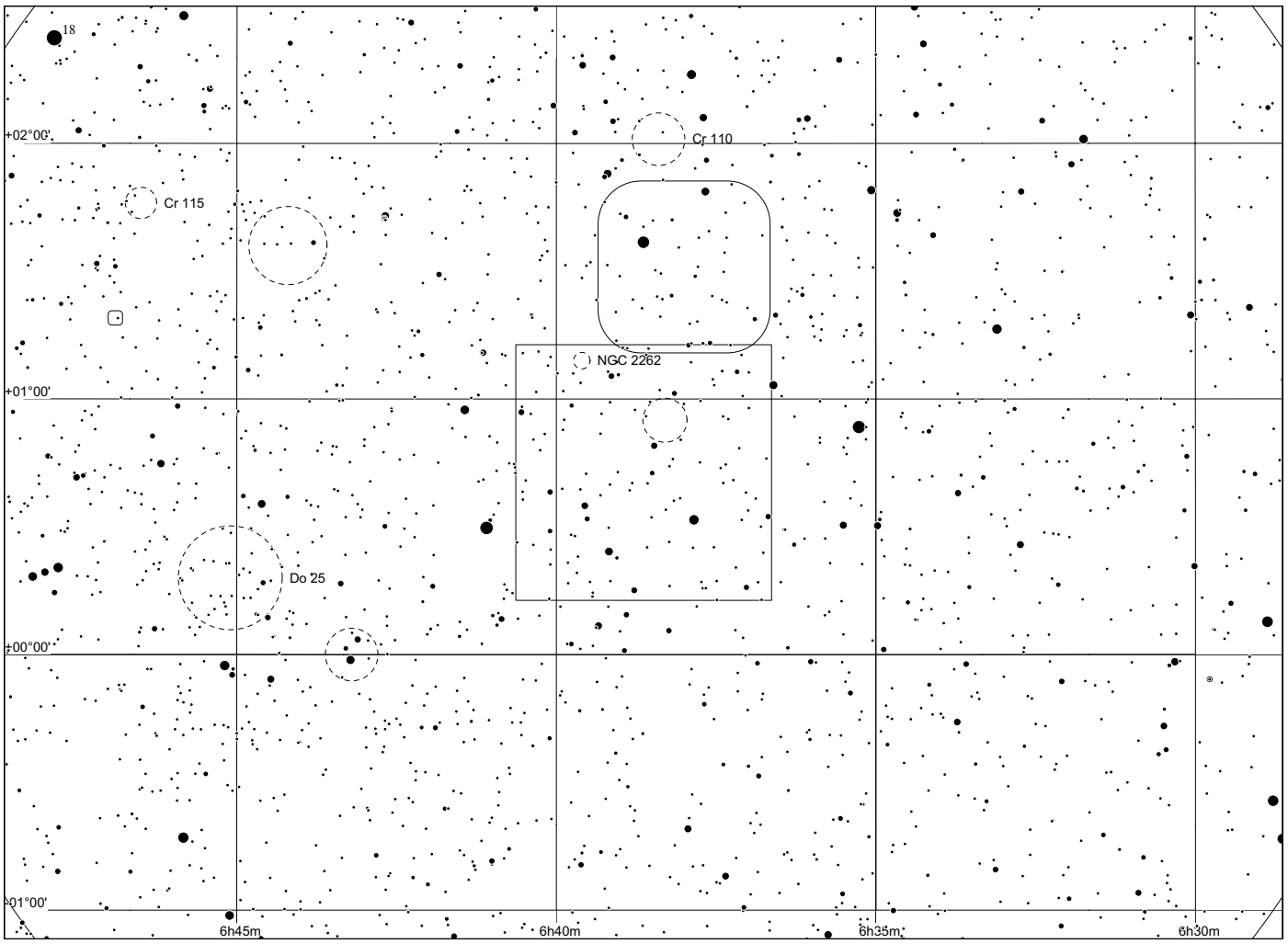
	other name	RA	dec	dia. '	F	S	B
Sh 2-283		06 38 38.6	+00 42 45	3	3	1	1

Distance: 9100 pc, Size: 7.9 pc, Source: 1982ApJS...49..183B

Includes the infrared cluster [BDS2003] 84.

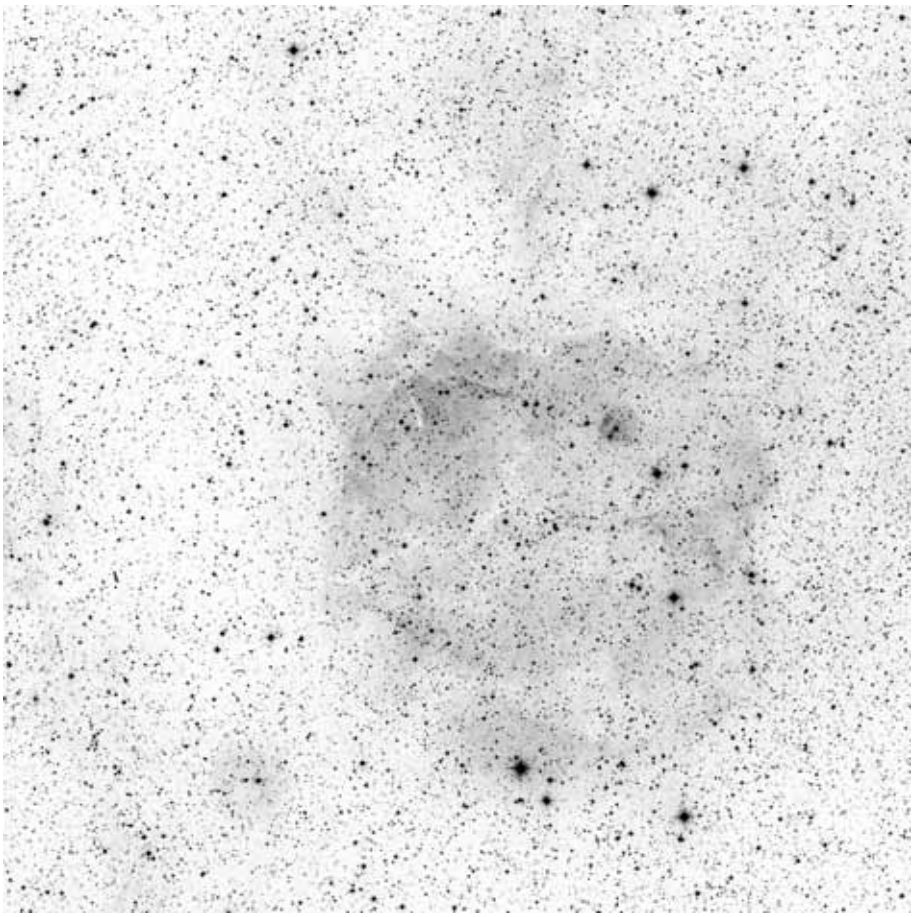
Observing notes:


13
NGC 2236
Plaskett'S Star
Cr 106
Cr 97
NGC 2252
NGC 2287
Cr 92
NGC 2289
Cr 104
Cr 107
63
66
+05°00'
Cr 96
Cr 91
18
Cr 110
Cr 115
NGC 2324
NGC 2301
Do 25
+00°00'
21
Monoceros
NGC 2286
20
19
NGC 2311
10
NGC 2232
-05°00'
NGC 2250
7h00m
6h30m
6h00m

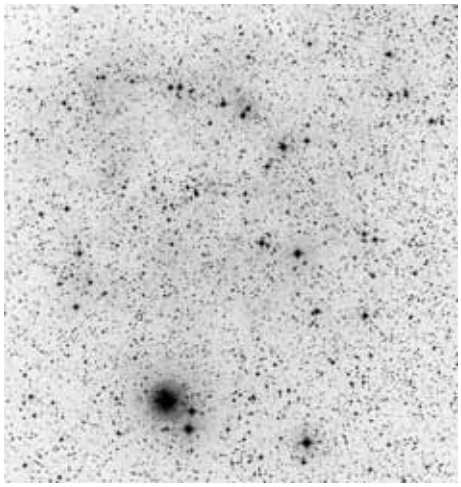

18
+02°00'
Cr 110
Cr 115
NGC 2262
+01°00'
Do 25
+00°00'
-01°00'
6h45m
6h40m
6h35m
6h30m

Sh 2 - 284

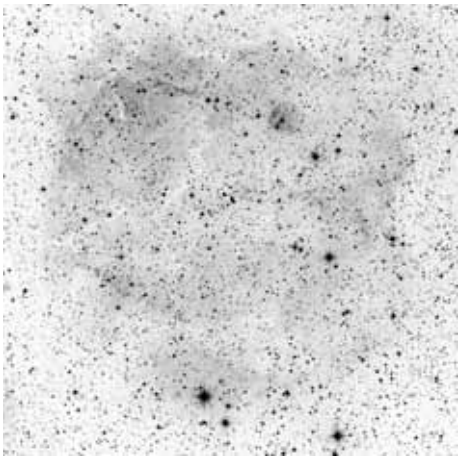
in Monoceros



60x60, red



POSS blue



POSS red



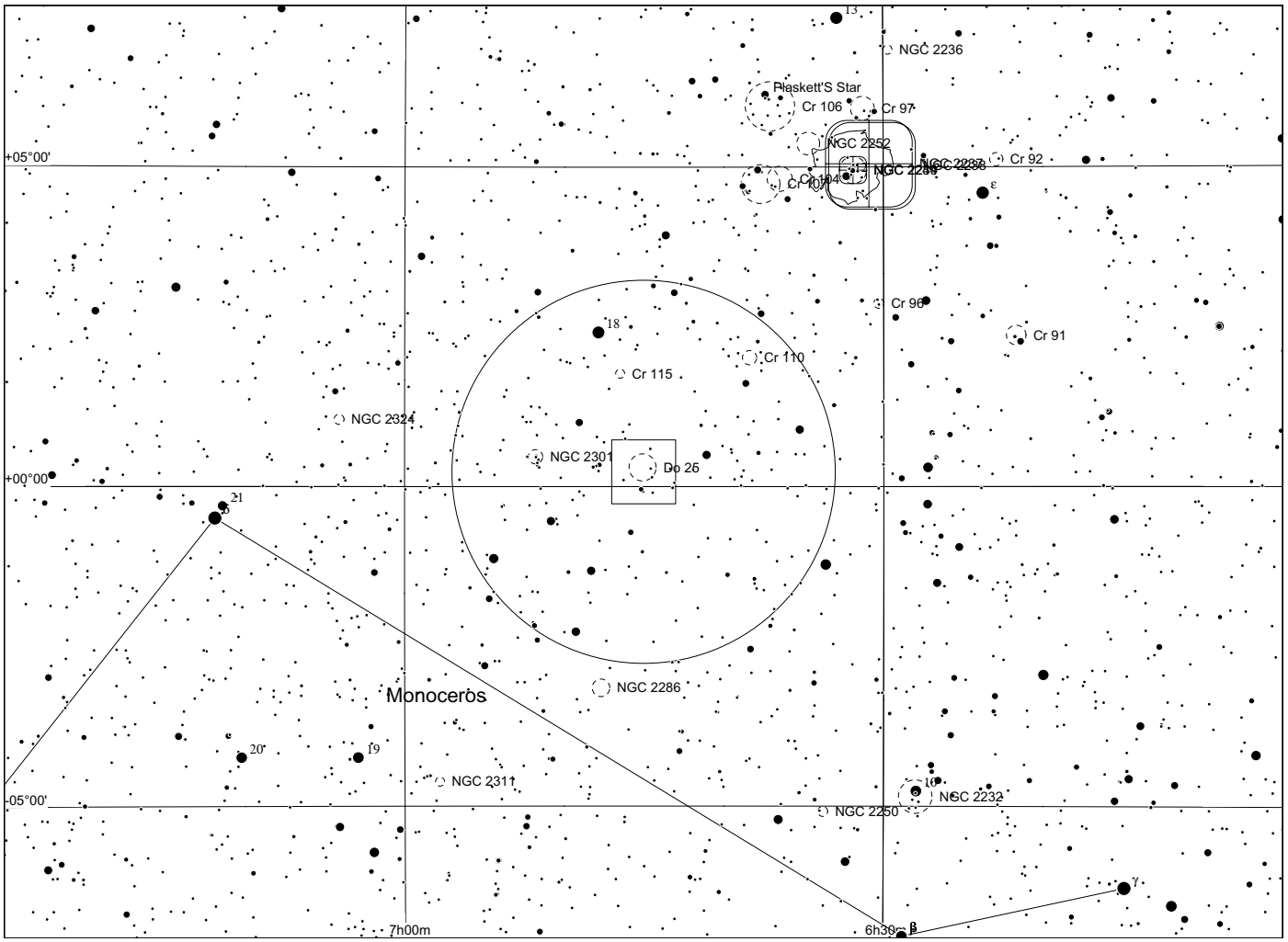
composite

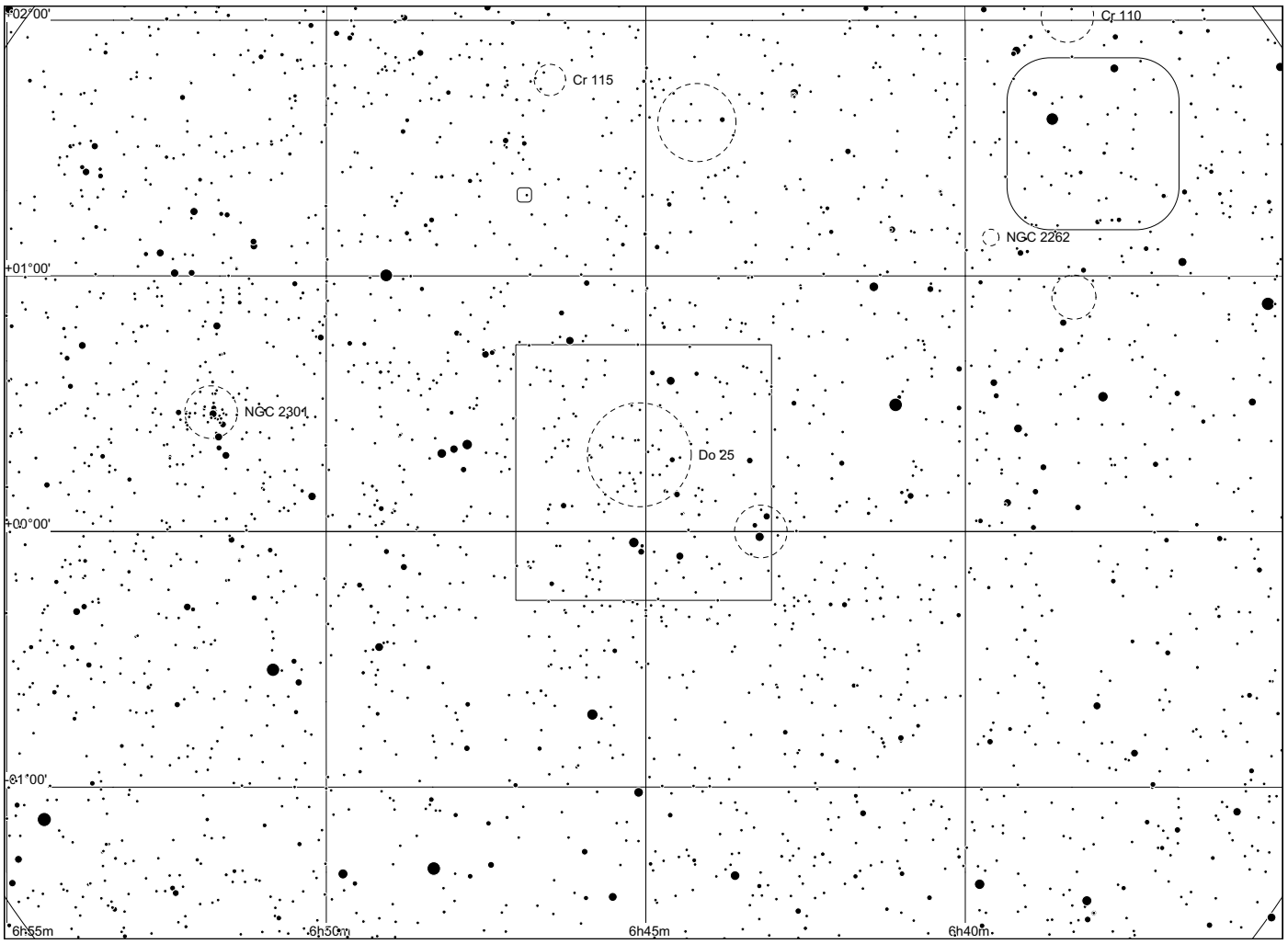
	other name	RA	dec	dia. '	F	S	B
Sh 2-284		06 45 02.0	+00 13 51	80	2	2	2

Distance: 5200 pc, Size: 121.0 pc, Source: 1982ApJS...49..183B

This large HII region is associated with the star cluster Dolidze 25 and is one of the few relatively unobscured major star formation regions in the outer galaxy.

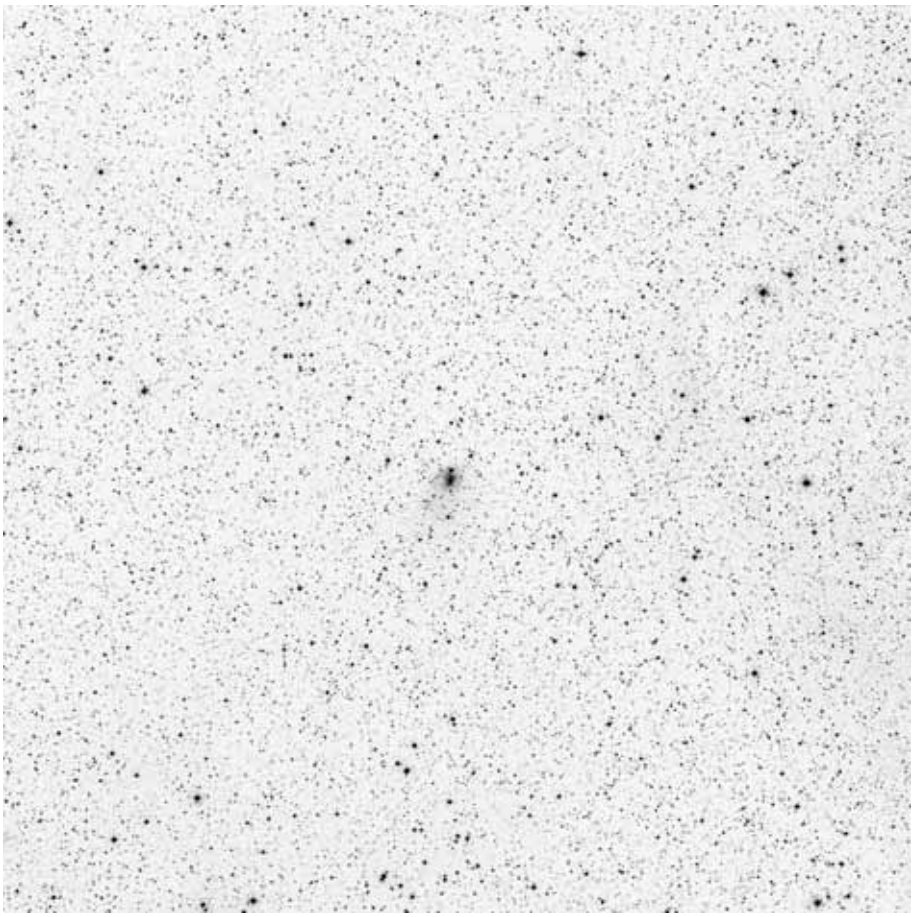
Observing notes:


NGC 2236
Plaskett's Star
Cr 106
Cr 97
NGC 2252
Cr 92
Cr 104
Cr 90
Cr 91
Cr 115
Cr 110
NGC 2324
NGC 2301
Do 25
+05°00'
+00°00'
-05°00'
Monoceros
NGC 2286
NGC 2311
NGC 2232
NGC 2250
7h00m
6h30m

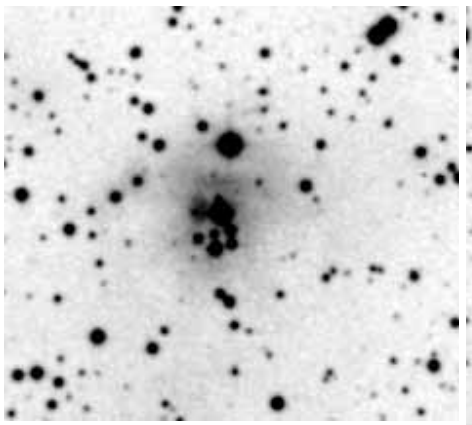

+02°00'
+01°00'
+00°00'
-01°00'
Cr 115
Cr 110
NGC 2262
NGC 2301
Do 25
6h55m
6h50m
6h45m
6h40m

Sh 2 - 285

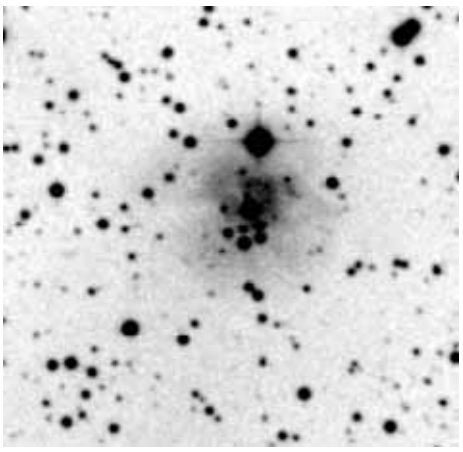
in Monoceros



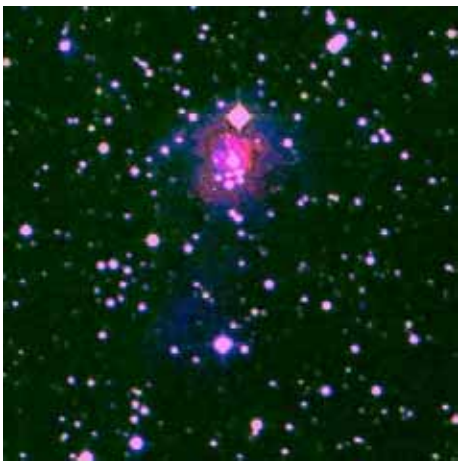
60x60, red



POSS blue



POSS red



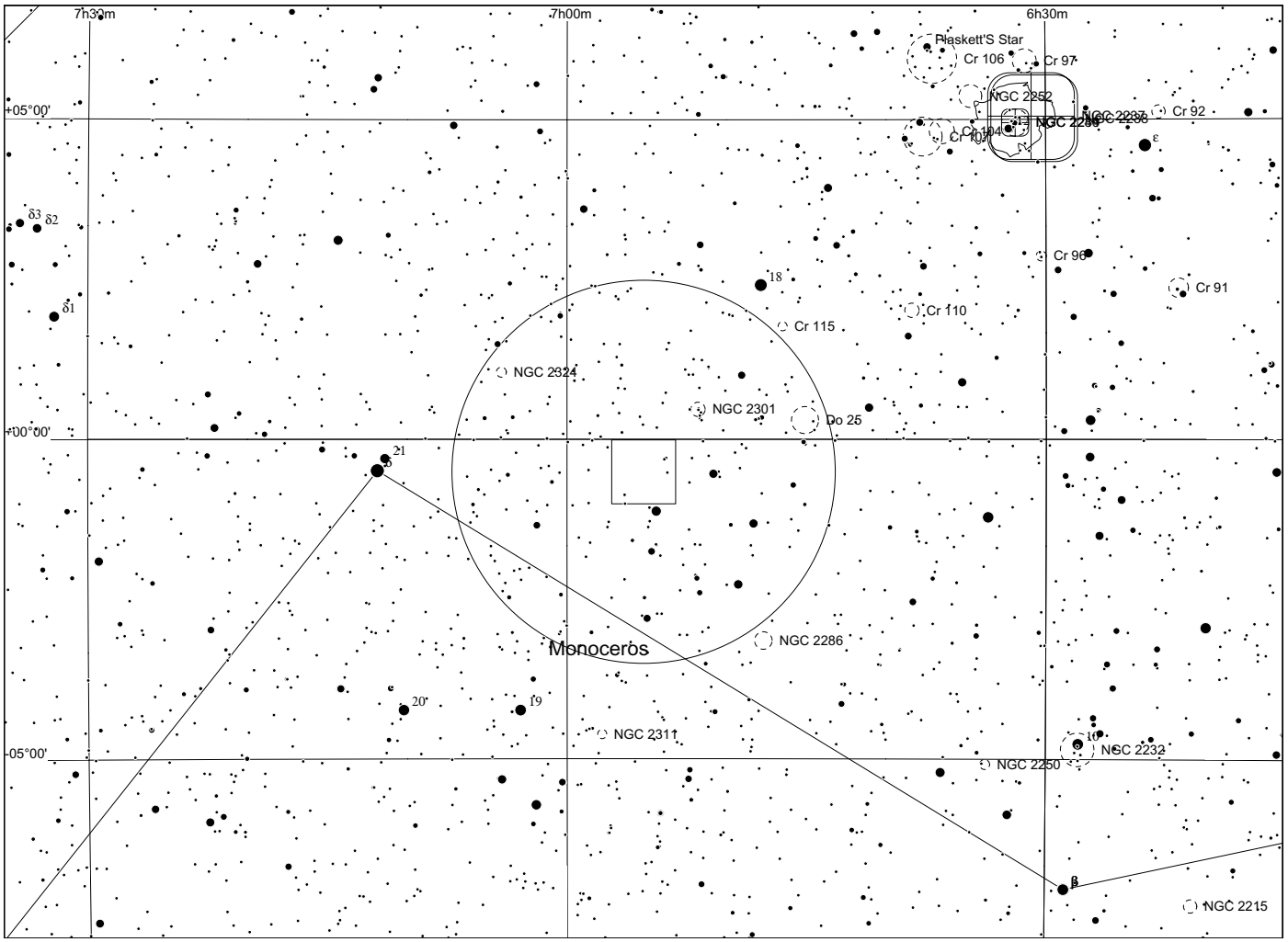
composite

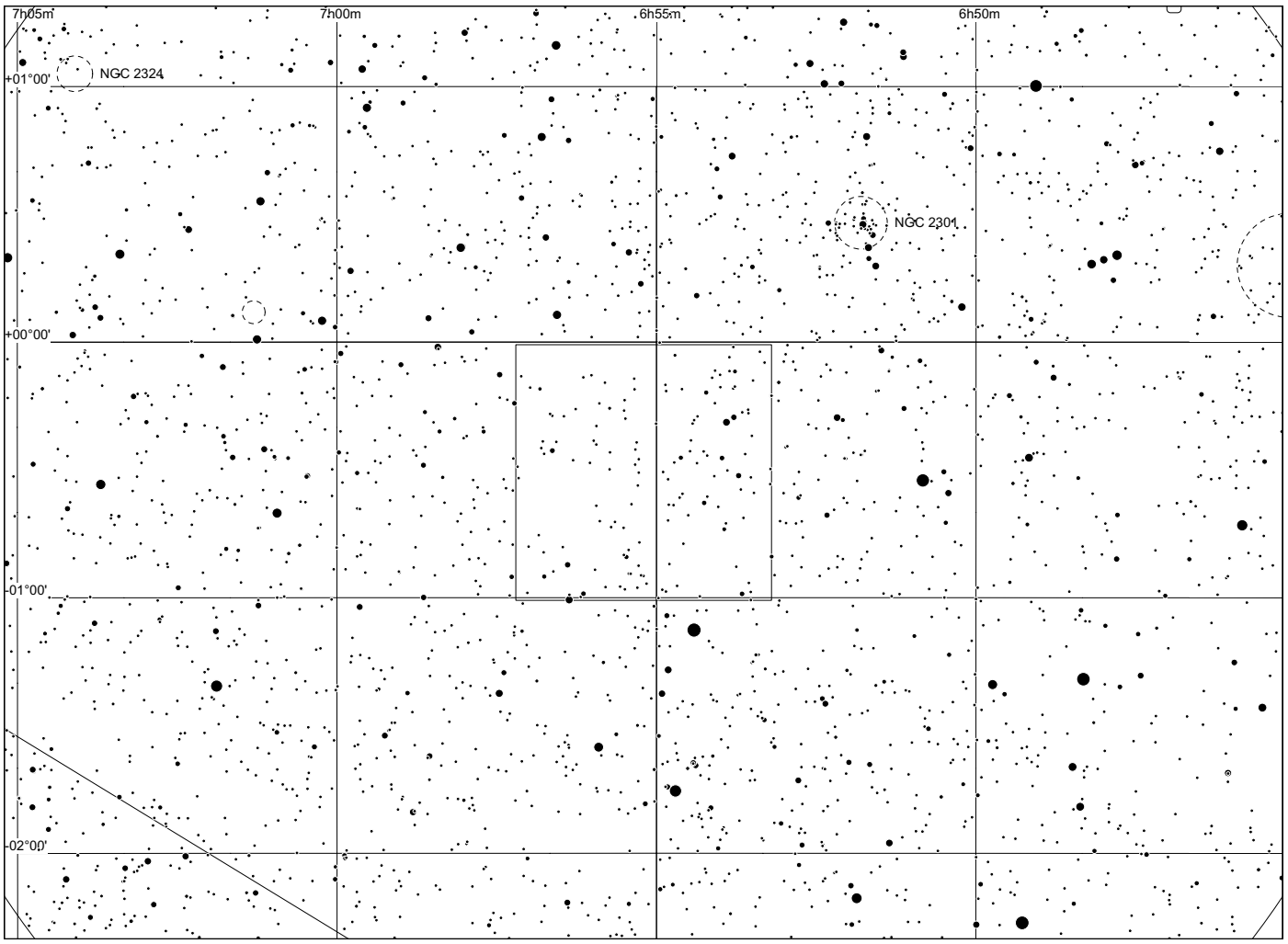
	other name	RA	dec	dia. '	F	S	B
Sh 2-285		06 55 12.2	-00 30 37	1	1	2	3

Distance: 6900 pc, Size: 2.0 pc, Source: 1982ApJS...49..183B

Contains at least two B0 V stars and the infrared cluster [BDS2003] 85.

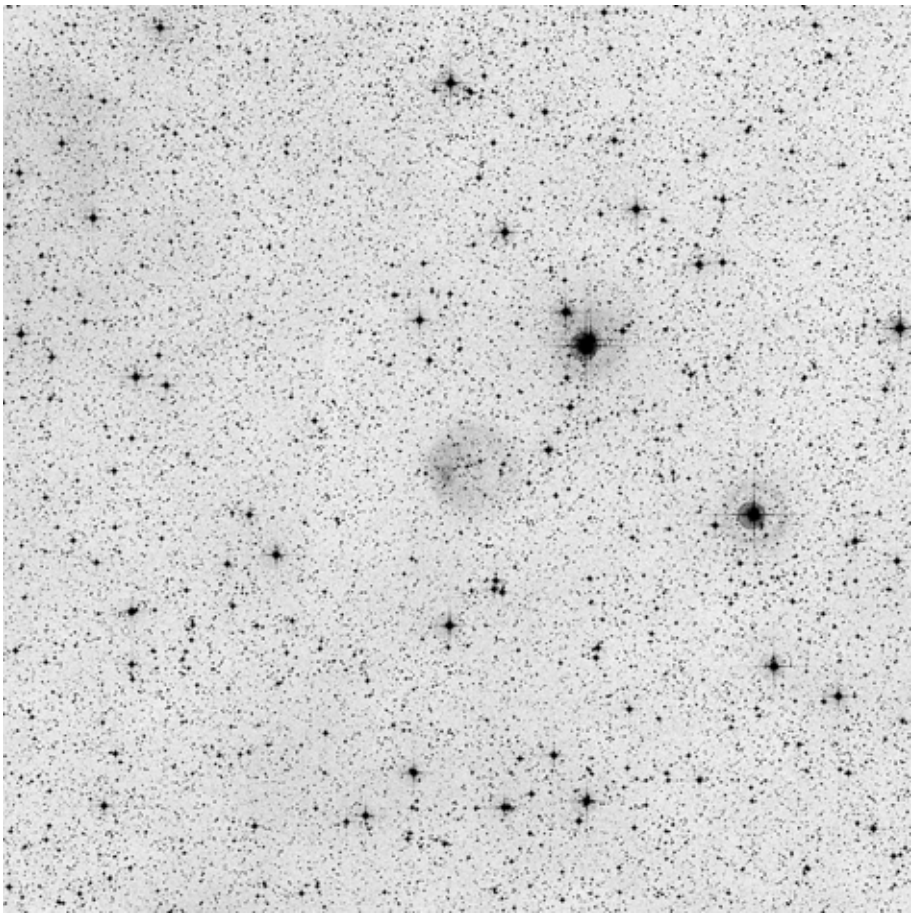
Observing notes:


7h30m
7h00m
6h30m
+05°00'
+00°00'
-05°00'
Plaskett'S Star
Cr 106
Cr 97
NGC 2352
NGC 2287
NGC 2286
Cr 92
Cr 104
Cr 107
Cr 96
Cr 91
Cr 110
Cr 115
NGC 2324
NGC 2301
Do 25
Monoceros
NGC 2286
NGC 2311
NGC 2232
NGC 2250
NGC 2215
δ3
δ2
δ1
18
21
20
19
16
ε
β

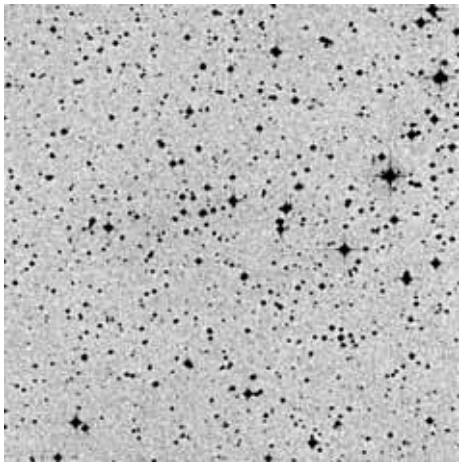

7h05m
7h00m
6h55m
6h50m
+01°00'
+00°00'
-01°00'
-02°00'
NGC 2324
NGC 2301

Sh 2 - 286

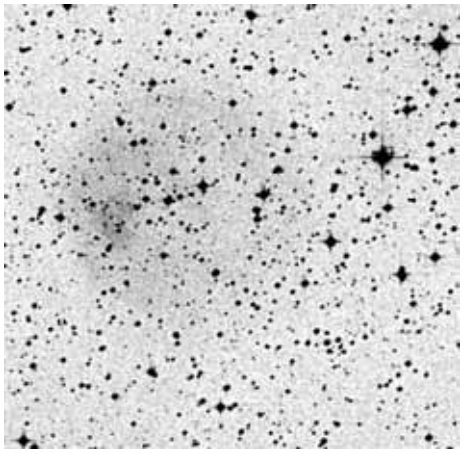
in Monoceros



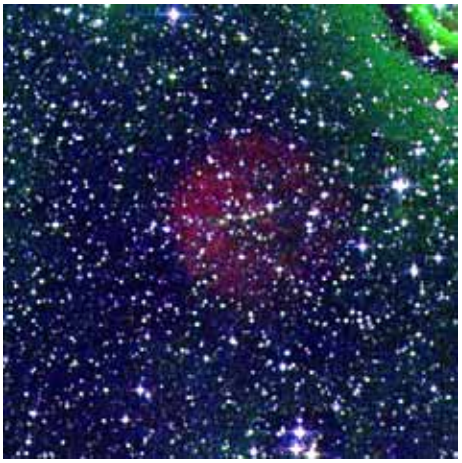
60x60, red



POSS blue



POSS red



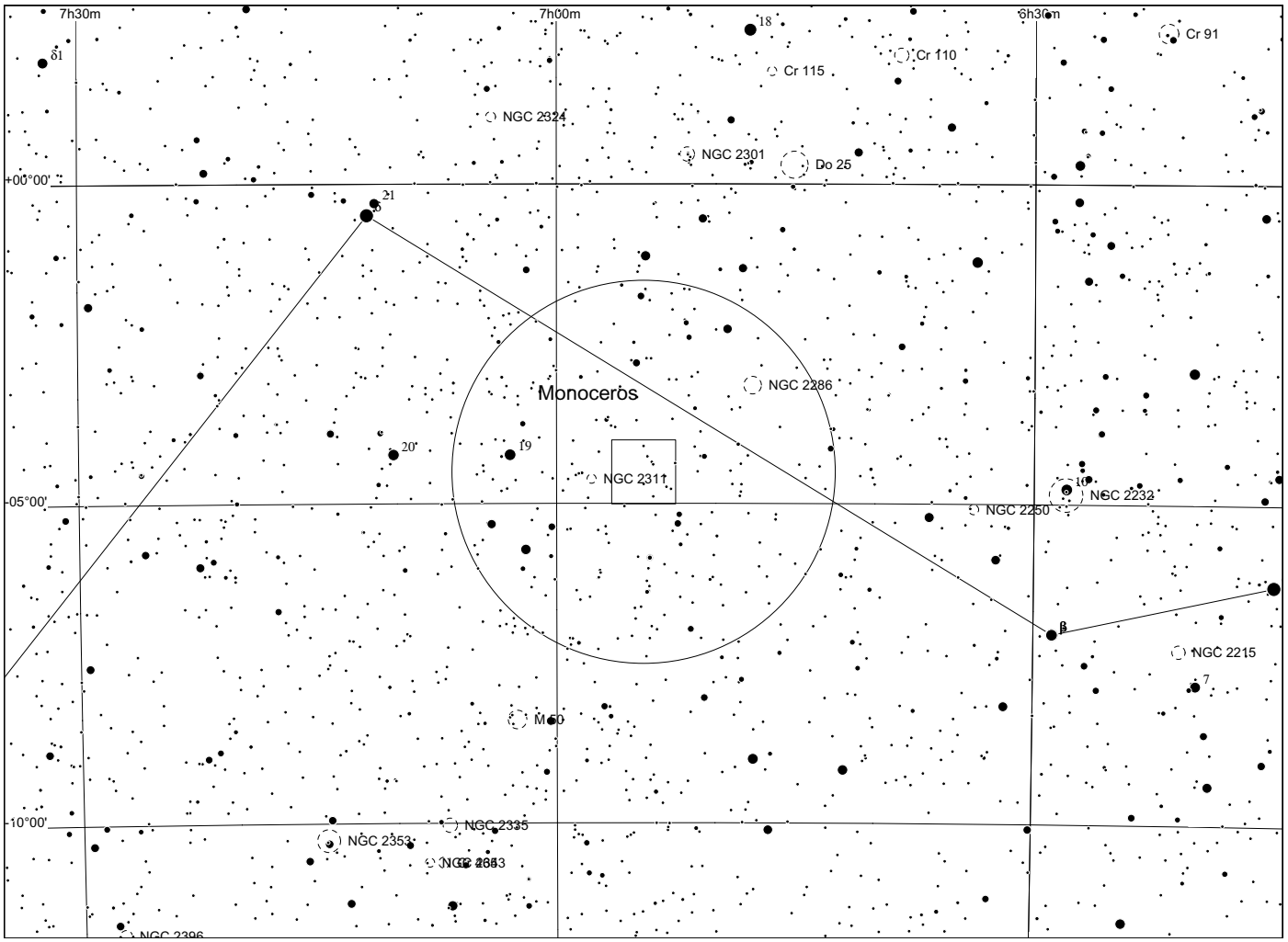
composite

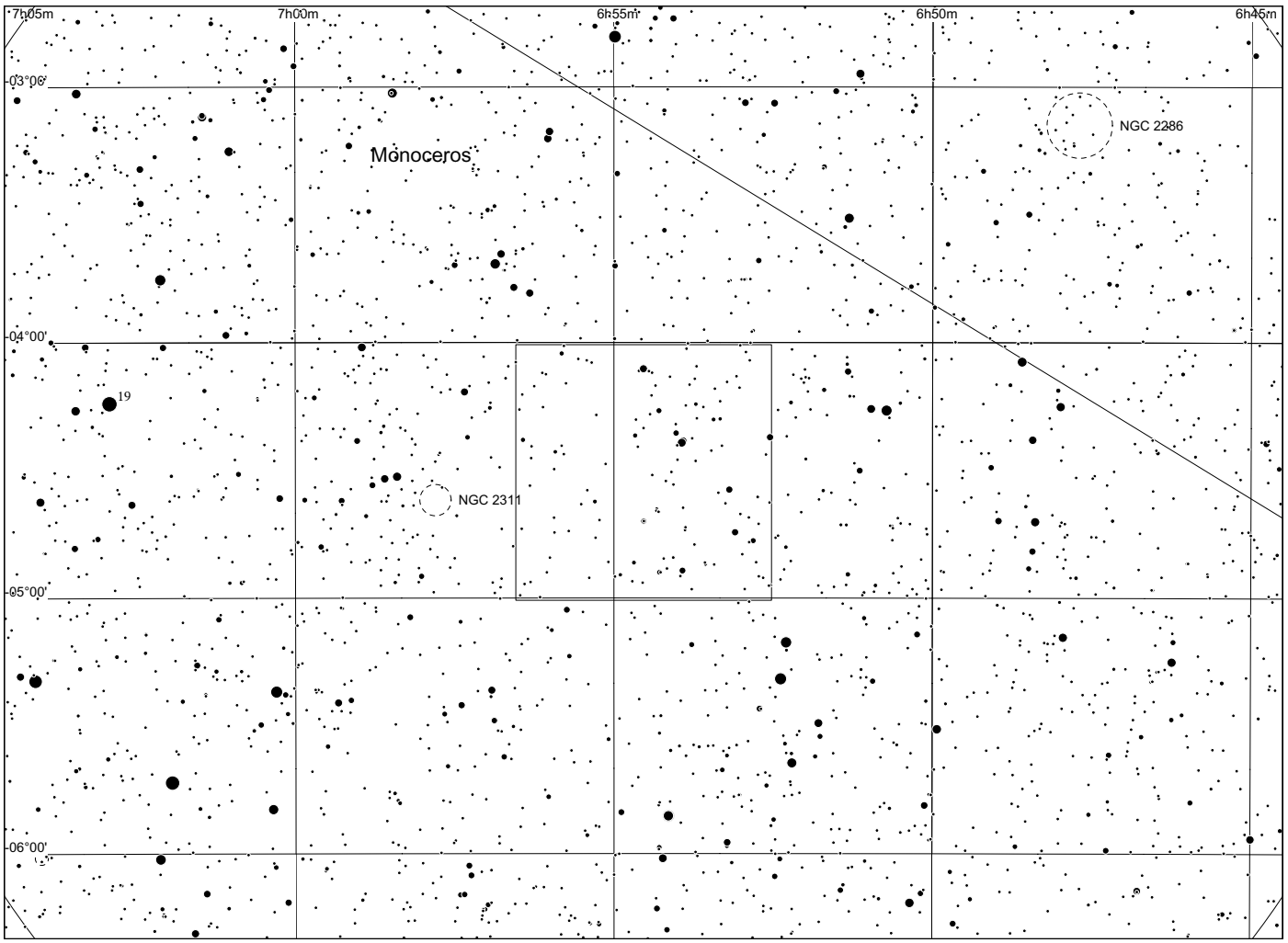
	other name	RA	dec	dia. '	F	S	B
Sh 2-286		06 54 32.6	-04 30 32	6	2	1	1

Distance: 6600 pc, Size: 11.5 pc, Source: 2003A&A...397..133R

Contains the infrared cluster [BDS2003] 88.

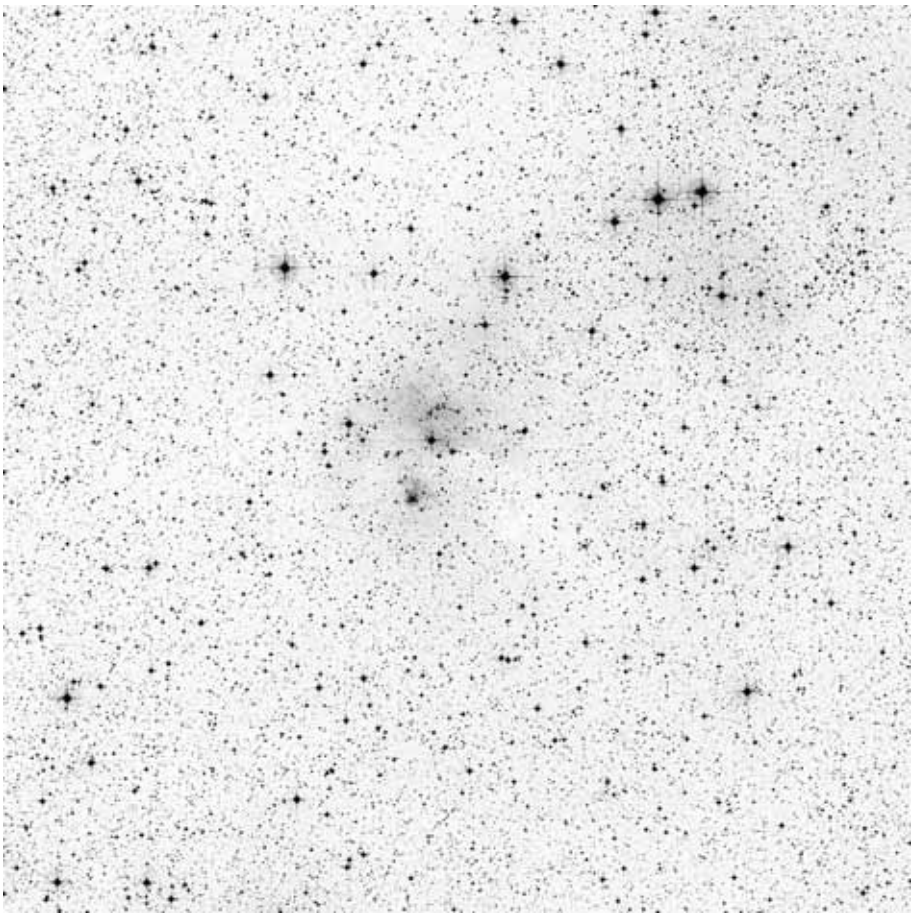
Observing notes:


7h30m
7h00m
6h30m
δ1
18
Cr 91
Cr 110
Cr 115
NGC 2324
NGC 2301
Do 25
+00°00'
21
Monoceros
NGC 2286
20'
19
NGC 2311
-05°00'
NGC 2232
NGC 2250
β
NGC 2215
7
M50
-10°00'
NGC 2335
NGC 2353
NGC 2396

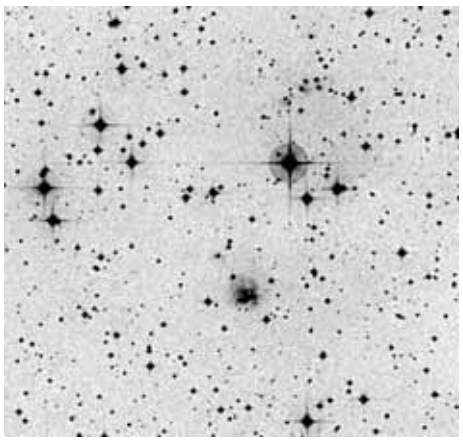

7h05m
7h00m
6h55m
6h50m
6h45m
-03°00'
Monoceros
NGC 2286
-04°00'
19
NGC 2311
-05°00'
-06°00'

Sh 2 - 287

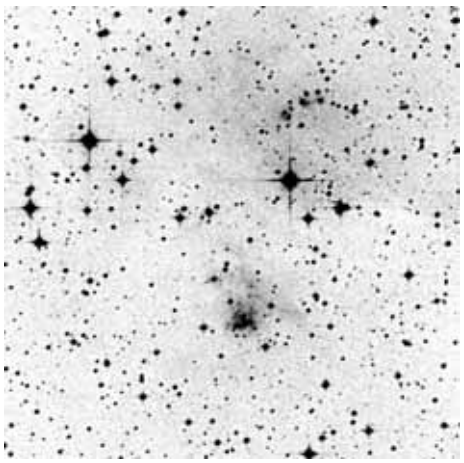
in Monoceros



60x60, red



POSS blue



POSS red



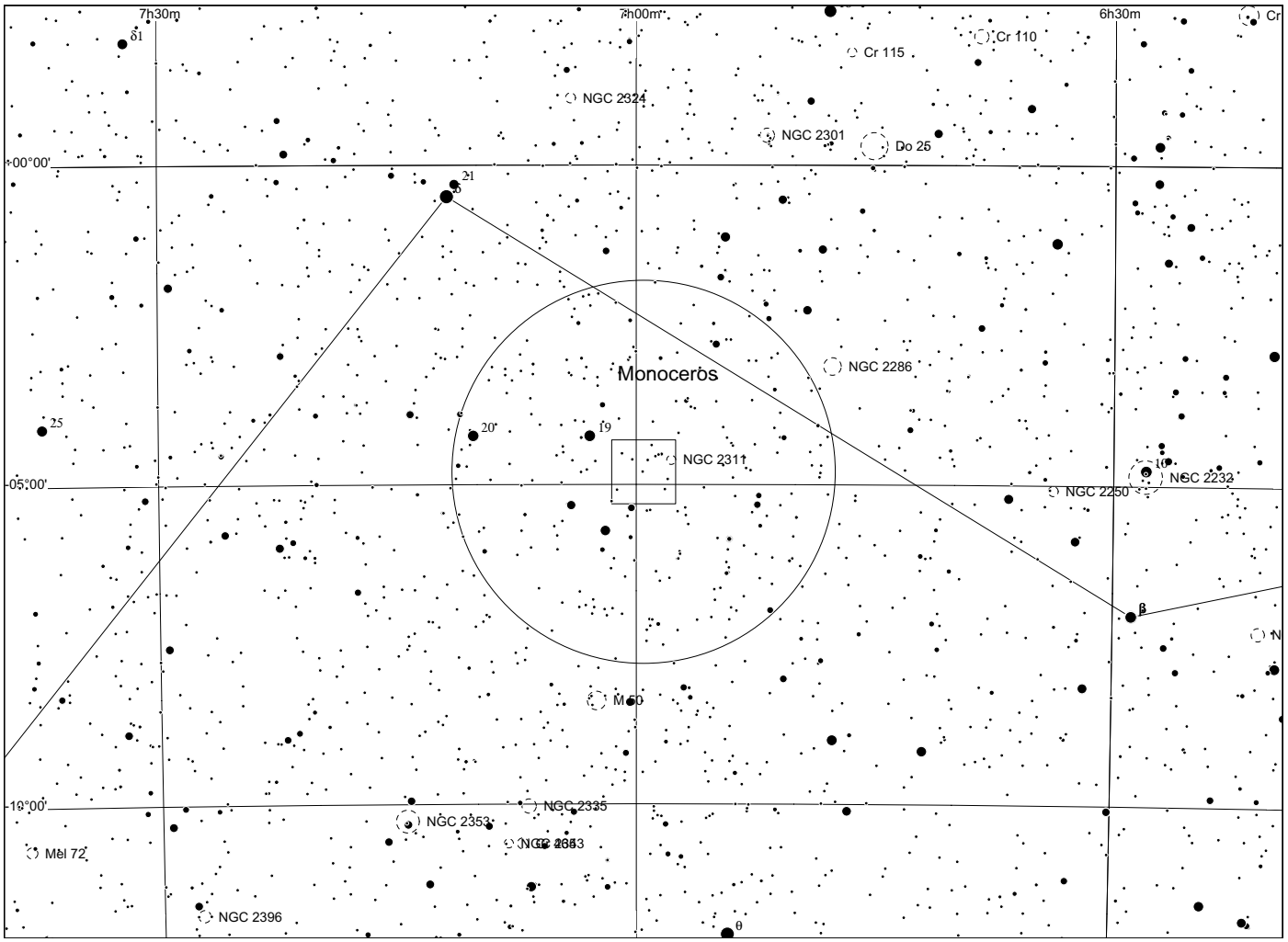
composite

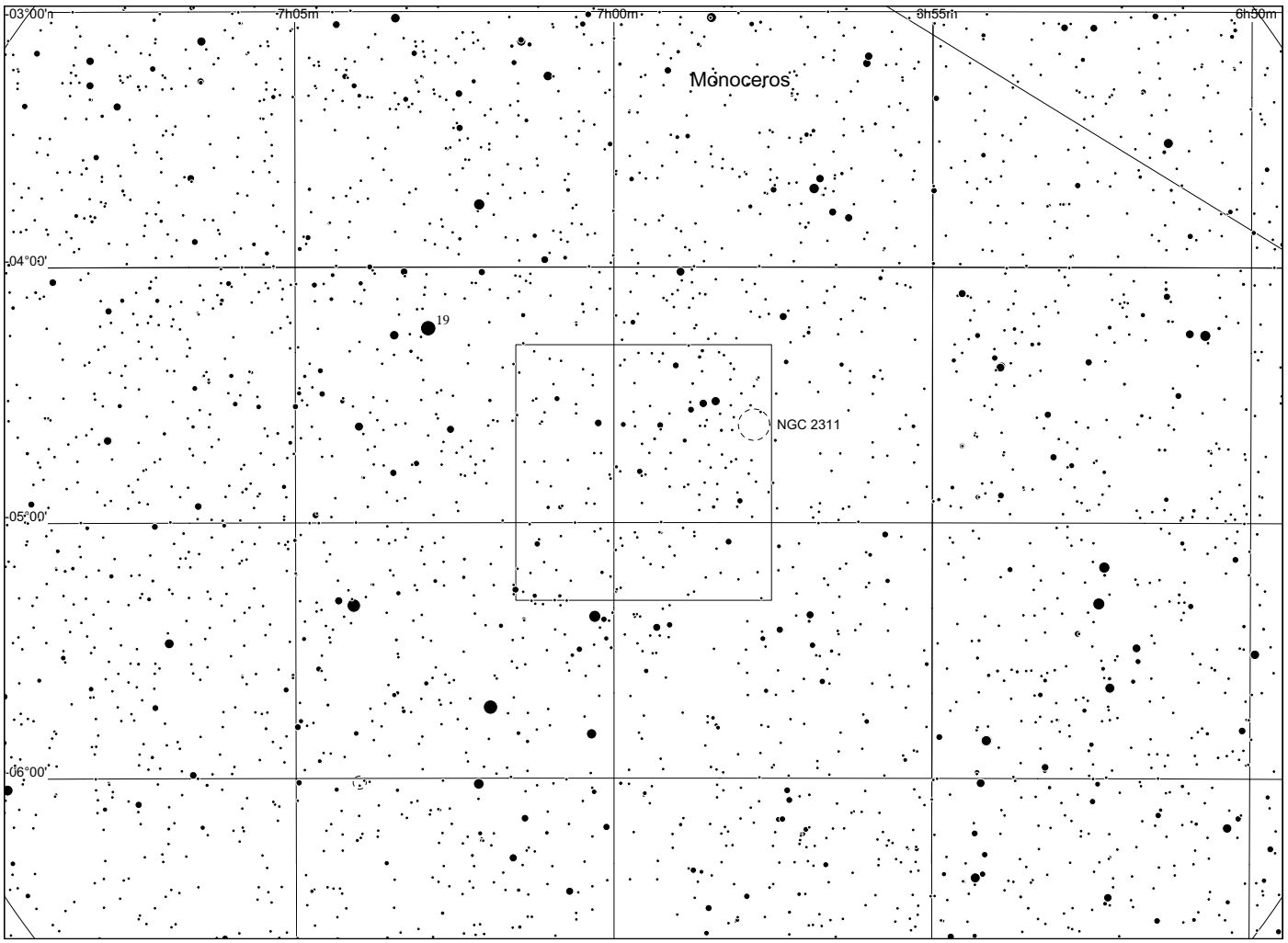
	other name	RA	dec	dia. '	F	S	B
Sh 2-287		06 59 32.3	-04 48 14	12	3	2	2

Distance: 2100 pc, Size: 7.3 pc, Source: 1992A&A...254..339N

Sh 2-287 appears to be associated with Maddalena's cloud (G216-2.5). It contains 4000-5000 solar masses of gas and dust and a bipolar nebula, NS 14.

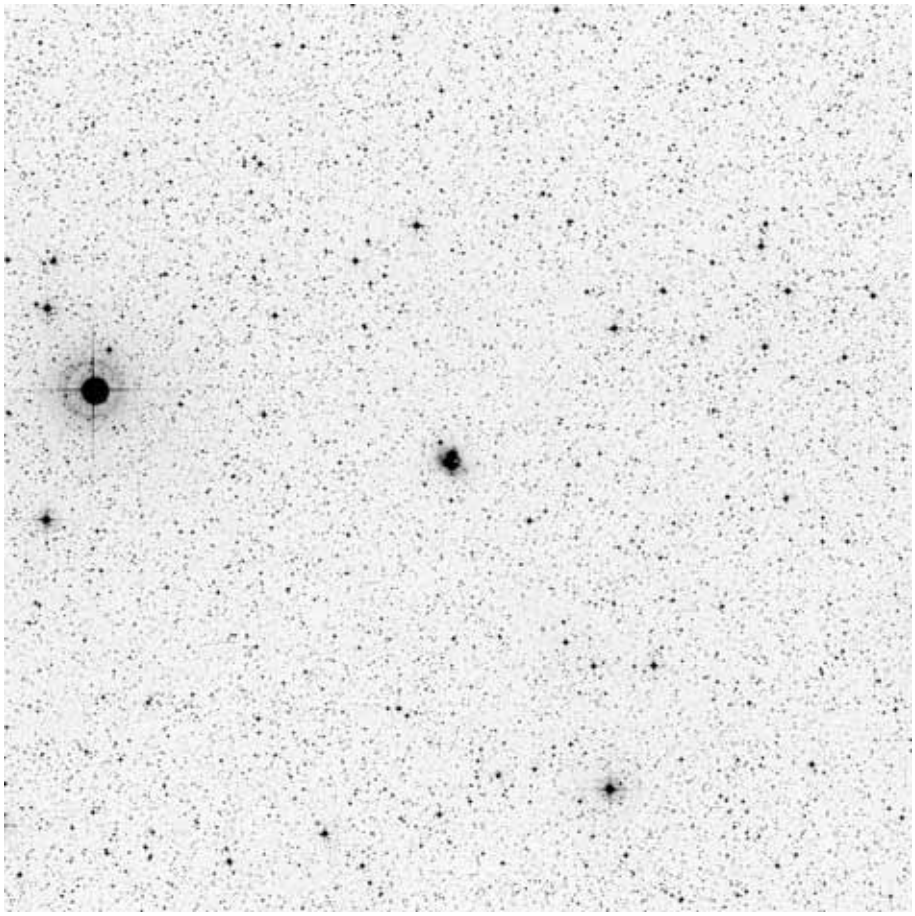
Observing notes:


7h30m
7h00m
6h30m
δ1
Cr 115
Cr 110
NGC 2324
NGC 2301
Do 25
00°00'
21
Monoceros
NGC 2286
25
20
19
NGC 2311
05°00'
NGC 2232
NGC 2250
β
M 50
NGC 2335
NGC 2353
Mel 72
NGC 2396
θ

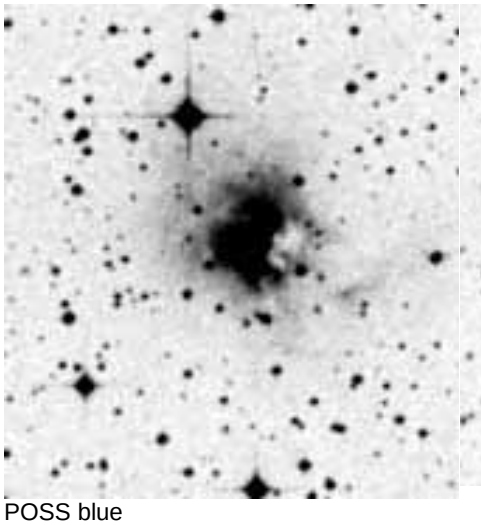

03°00'
7h05m
7h00m
6h55m
6h50m
Monoceros
04°00'
19
NGC 2311
05°00'
06°00'

Sh 2 - 288

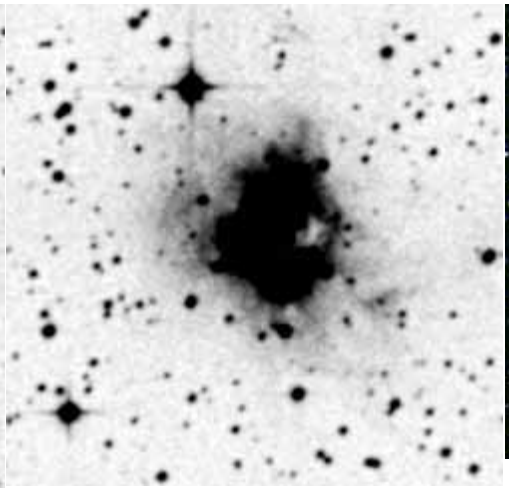
in Monoceros



60x60, red



POSS blue



POSS red



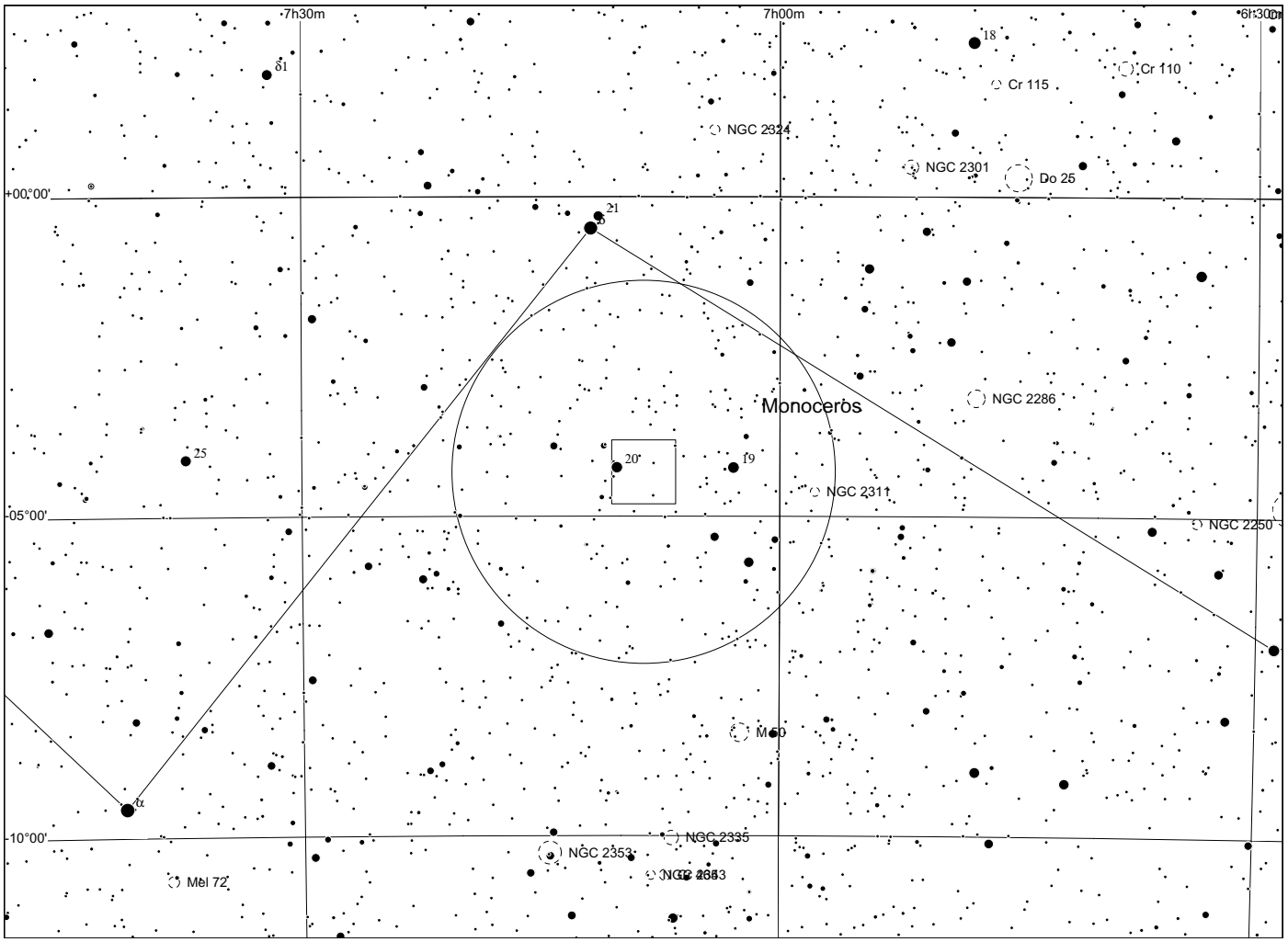
composite

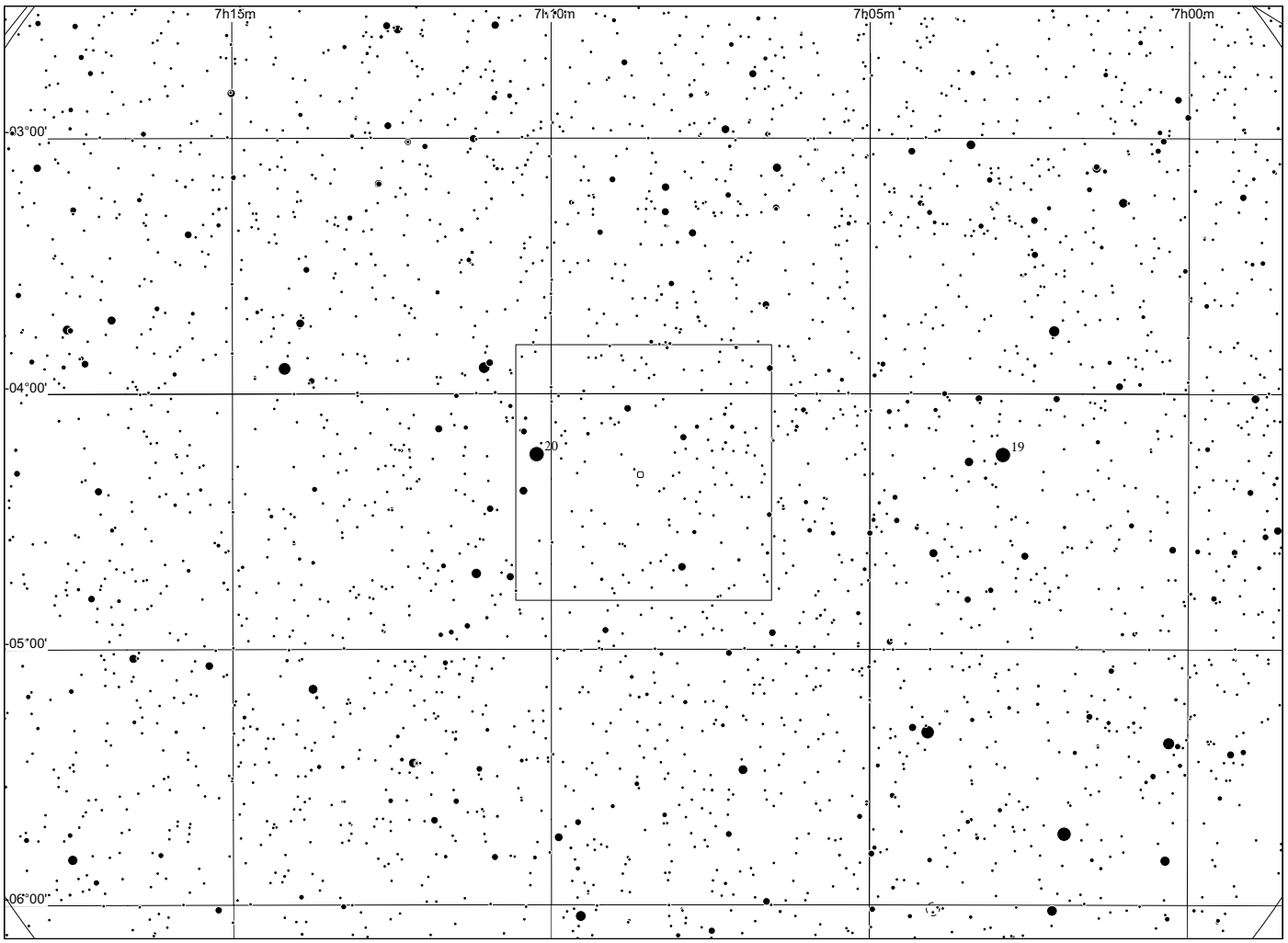
	other name	RA	dec	dia. '	F	S	B
Sh 2-288	IC 466	07 08 33.0	-04 18 30	1	3	2	3

Distance: 3000 pc, Size: 0.9 pc, Source: 1982ApJS...49..183B

This HII region, also called IC 466, is ionised by an O9V star

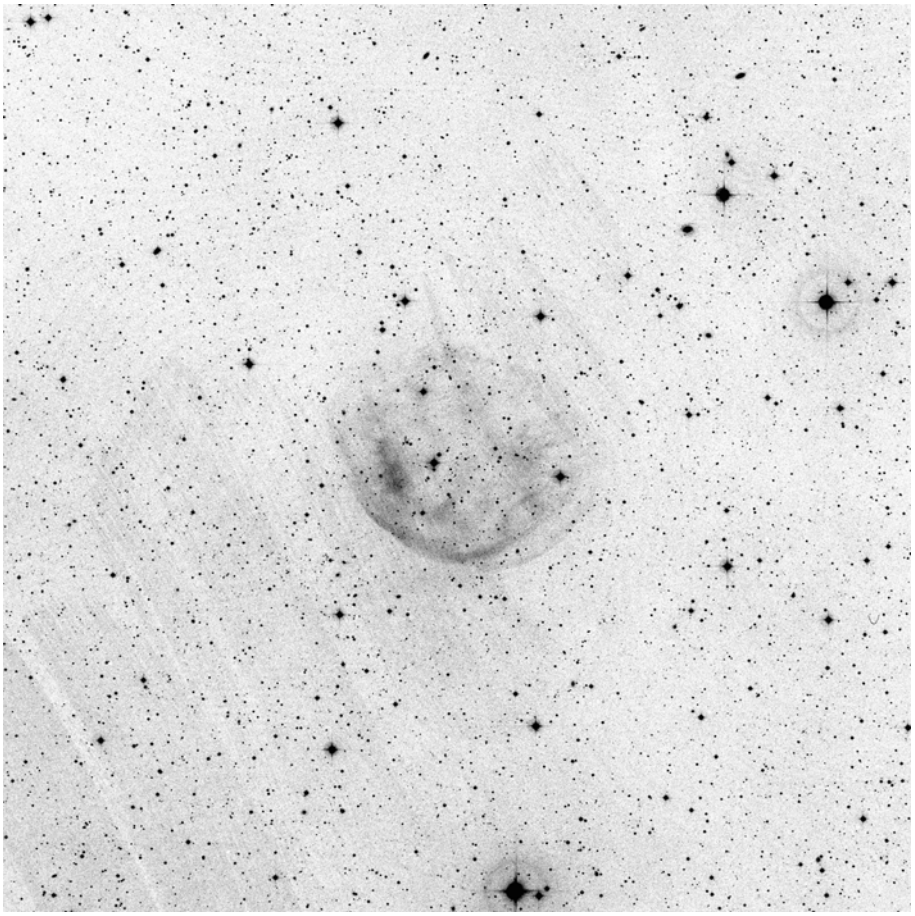
Observing notes:


7h30m
7h00m
6h30m
δ1
18
Cr 110
Cr 115
NGC 2324
NGC 2301
Do 25
+00°00'
21
Monoceros
NGC 2286
25
20
19
NGC 2311
05°00'
NGC 2250
M 50
α
10°00'
NGC 2335
NGC 2353
Mel 72

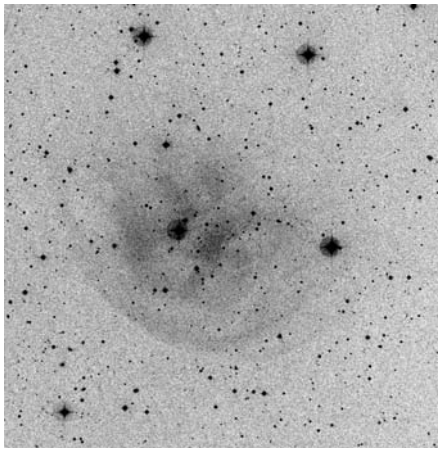

7h15m
7h10m
7h05m
7h00m
03°00'
04°00'
20
19
05°00'
06°00'

Sh 2 - 290

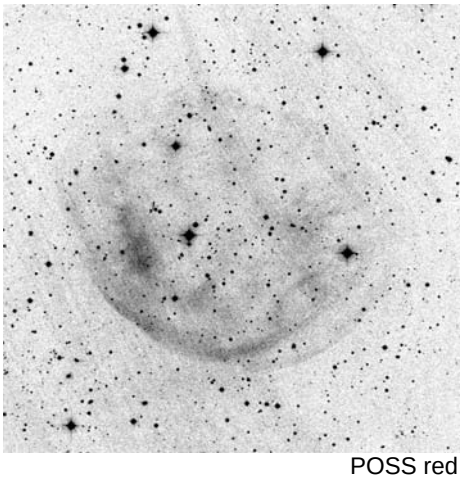
in Cancer



60x60, red



POSS blue



POSS red

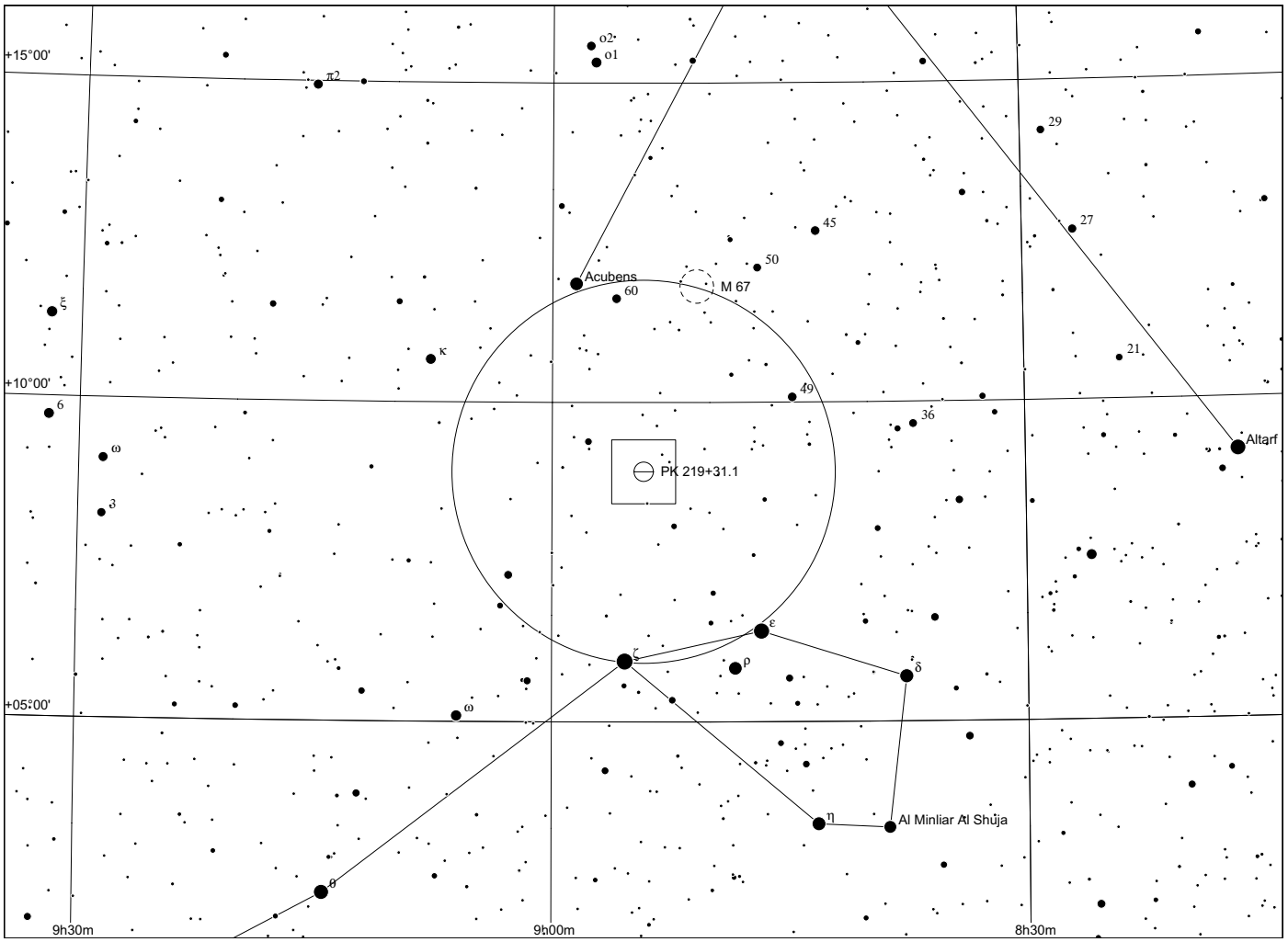


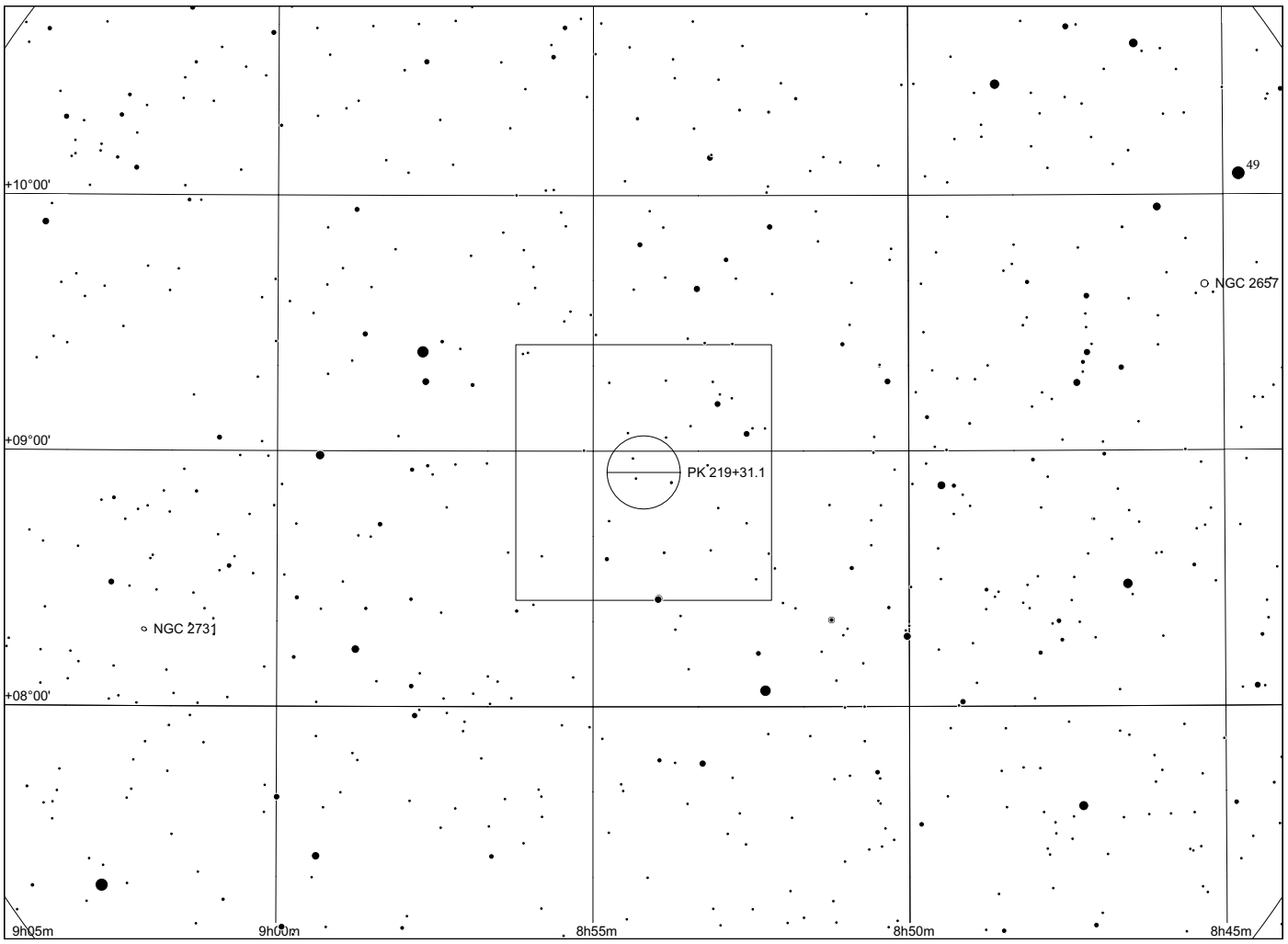
narrowband Dean Salman

	other name	RA	dec	dia. '	F	S	B
Sh 2-290	Abell 31	08 54 10.5	+08 55 16	17	2	2	2

This is the planetary nebula Abell 31.

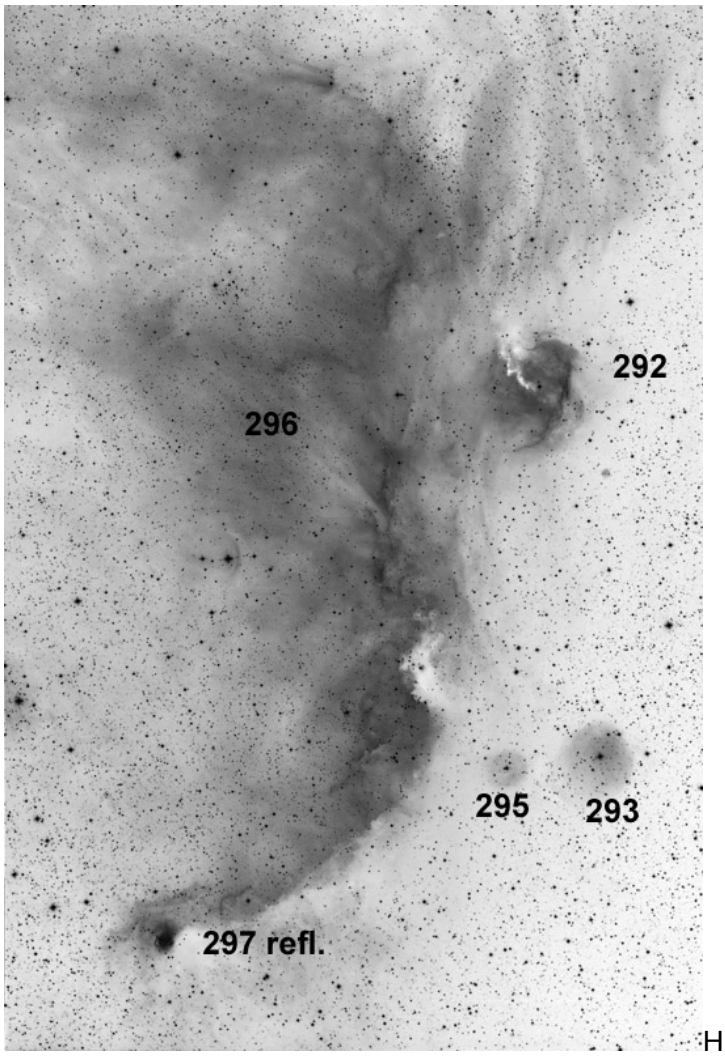
Observing notes:


+15°00'
+10°00'
+05°00'
o2
o1
π2
29
45
27
50
Acubens
60
M 67
κ
21
49
6
36
ω
Altarf
PK 219+31.1
3
ε
ρ
δ
ω
η
Al Minliar Al Shuja
θ
9h30m
9h00m
8h30m

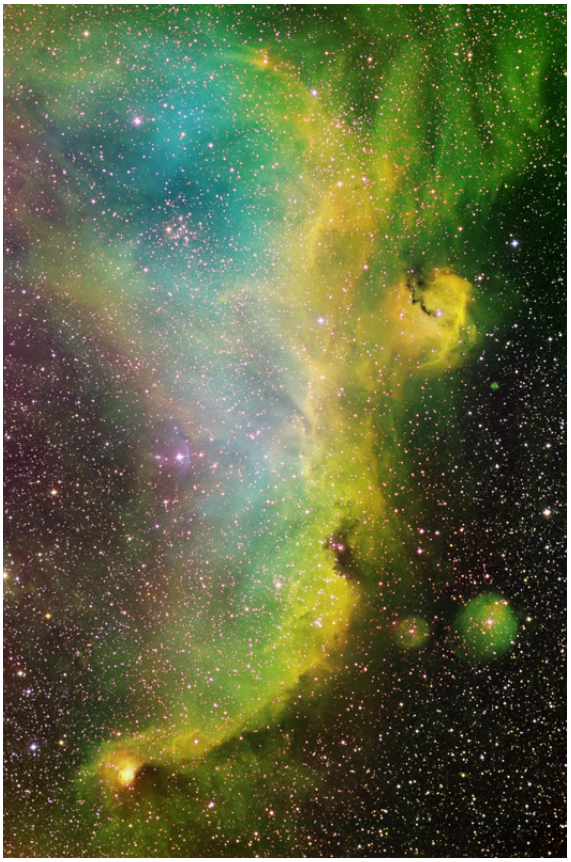

+10°00'
49
NGC 2657
+09°00'
PK 219+31.1
NGC 2731
+08°00'
9h05m
9h00m
8h55m
8h50m
8h45m

Sh 2 - 292/293/295/296/297

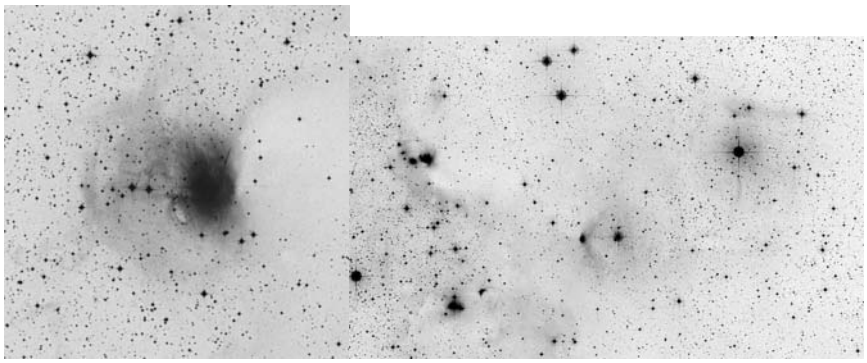
in Monoceros



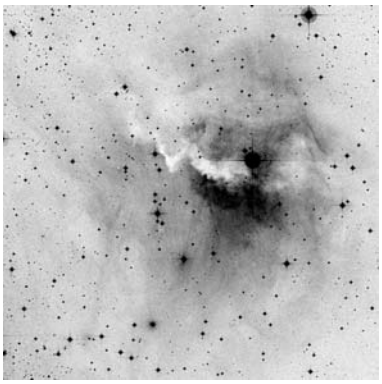
H alpha



narrowband Dean Salman



POSS blue 297 295/293



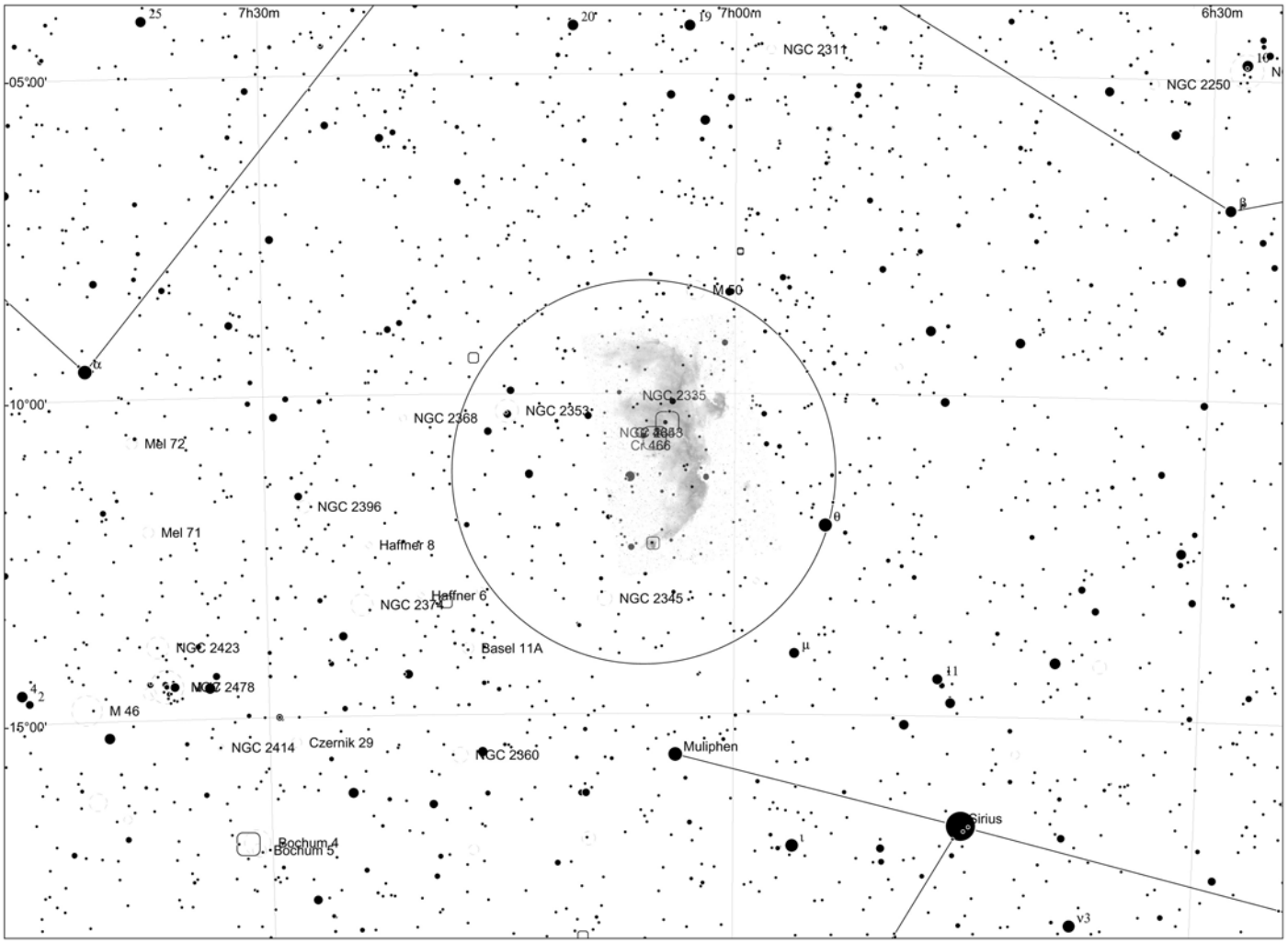
292

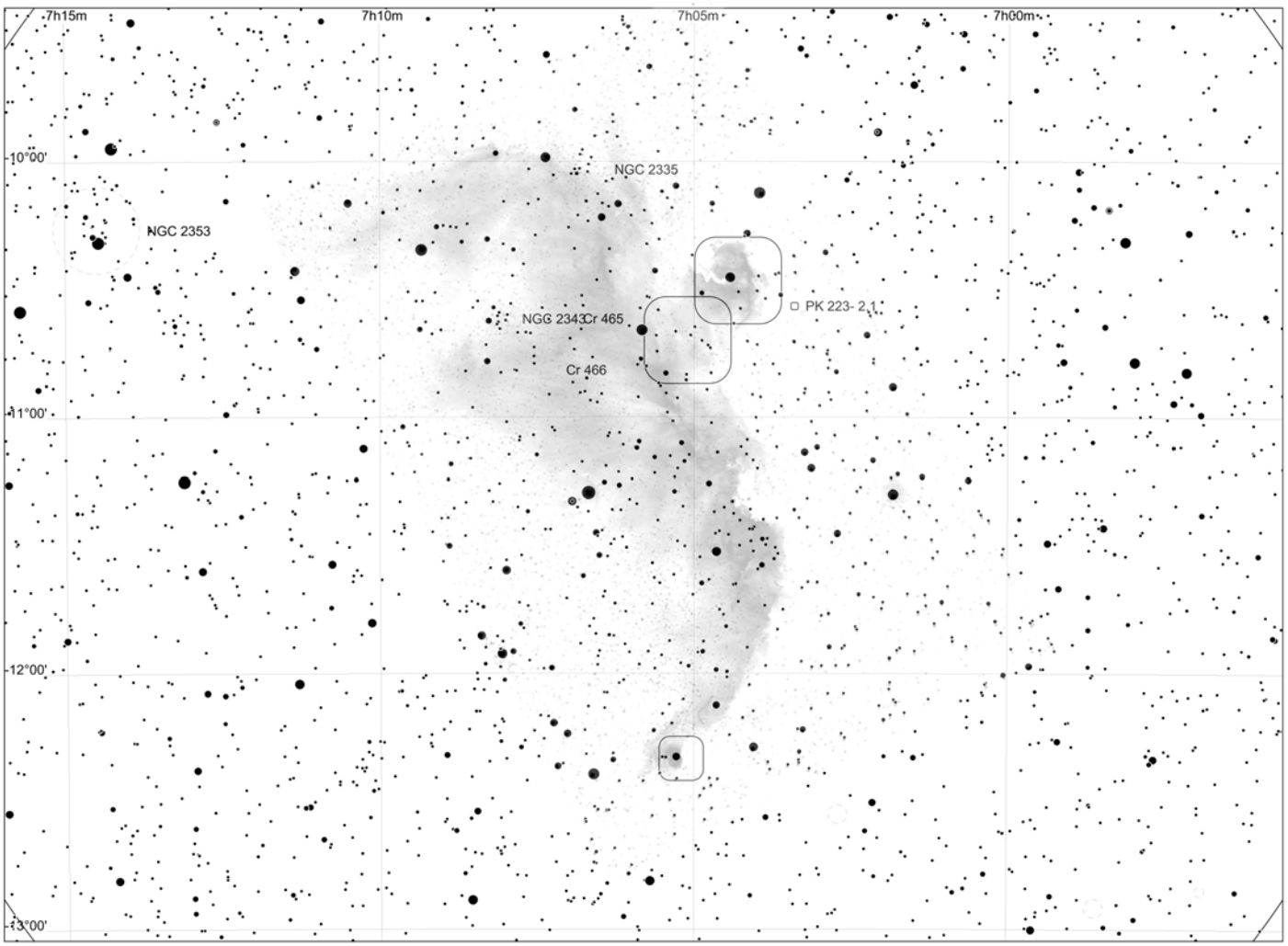
	other name	RA	dec	dia. '	F	S	B
Sh 2-292	vdB 93 = Gum 1	07 04 24.9	-10 26 56	21	3	2	3
Sh 2-293		07 01 46.9	-11 18 34	11	1	1	2
Sh 2-295		07 02 40.7	-11 27 42	8	1	1	1
Sh 2-296	IC 2177 = Seagull Nebula	07 05 48.0	-11 13 08	200	3	2	3
Sh 2-297		07 05 14.7	-12 20 04	7	3	2	3

Distance: 1150 pc, Size: 7.0 pc, Source: 1982ApJS...49..183B

292, the head of the Seagull nebula is both an HII region and reflection nebula (VDB 93). It is part of the CMa OB1 association and is ionised by the B0IV:e subgiant HD 53367, a young 20 solar mass star orbitted by a 5 solar mass companion in a highly elliptical orbit.

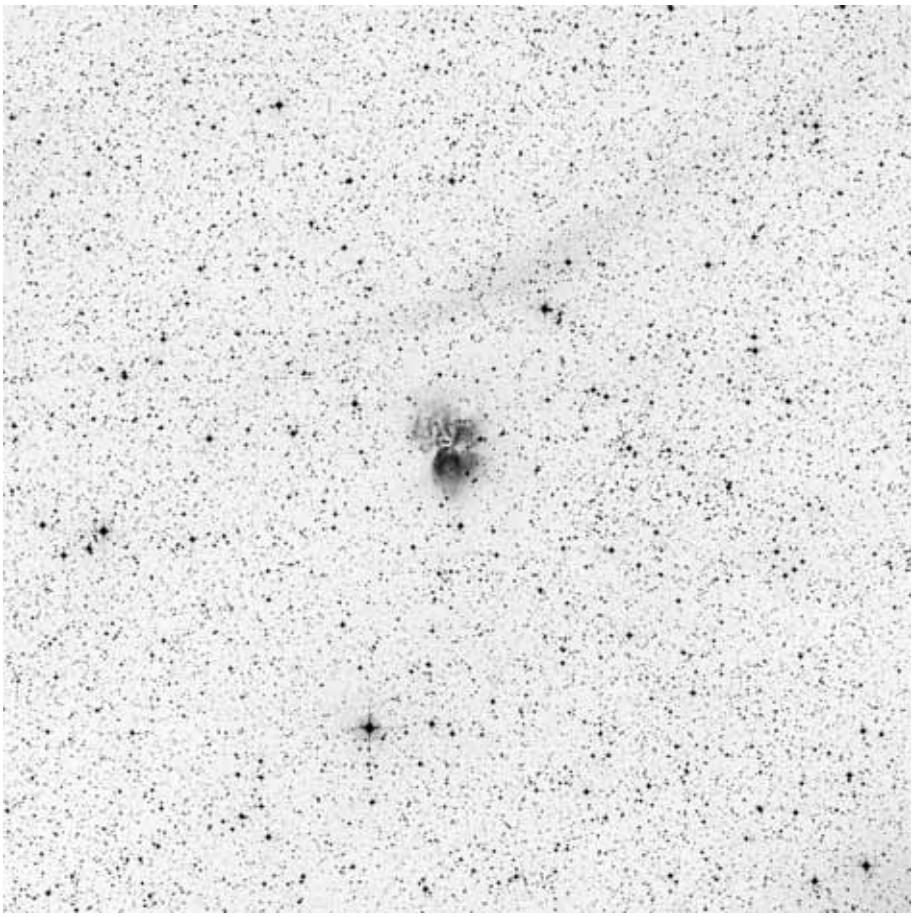
Observing notes:


7h30m
7h00m
6h30m
05°00'
10°00'
15°00'
NGC 2311
NGC 2250
M 50
NGC 2335
NGC 2353
NGC 2368
NGC 2383
Cr 466
Mel 72
NGC 2396
Mel 71
Haffner 8
Haffner 6
NGC 2374
NGC 2345
NGC 2423
Basel 11A
NGC 2478
M 46
NGC 2414
Czernik 29
NGC 2360
Muliphen
Sirius
Bochum 4
Bochum 5
v3

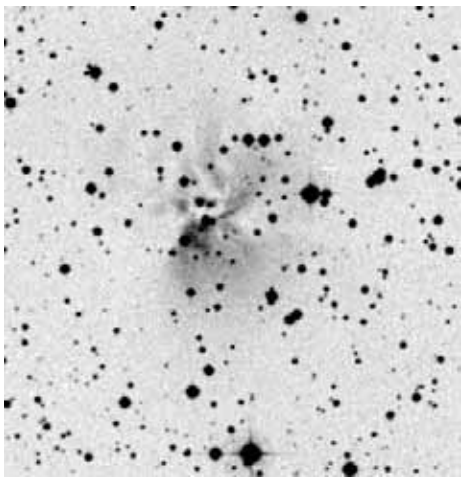

7h15m
7h10m
7h05m
7h00m
10°00'
11°00'
12°00'
13°00'
NGC 2335
NGC 2353
NGC 2343
Cr 465
Cr 466
PK 223- 2.1

Sh 2 - 294

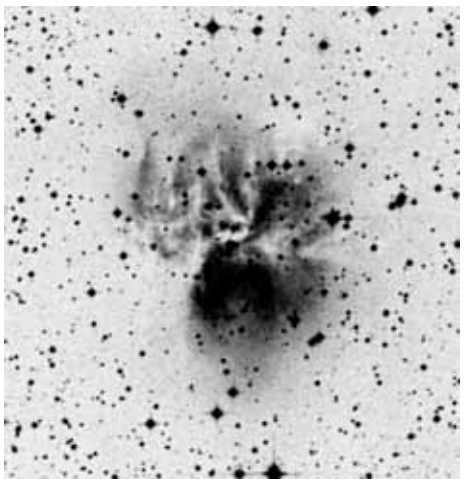
in Monoceros



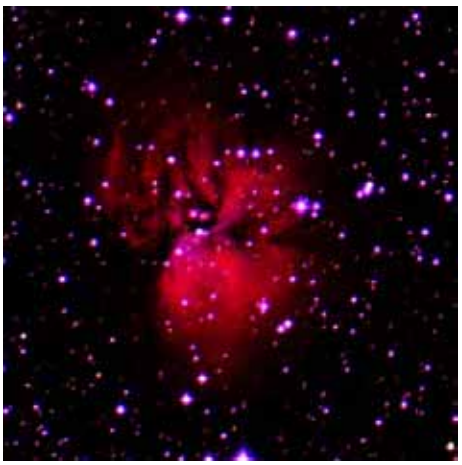
60x60, red



POSS blue



POSS red



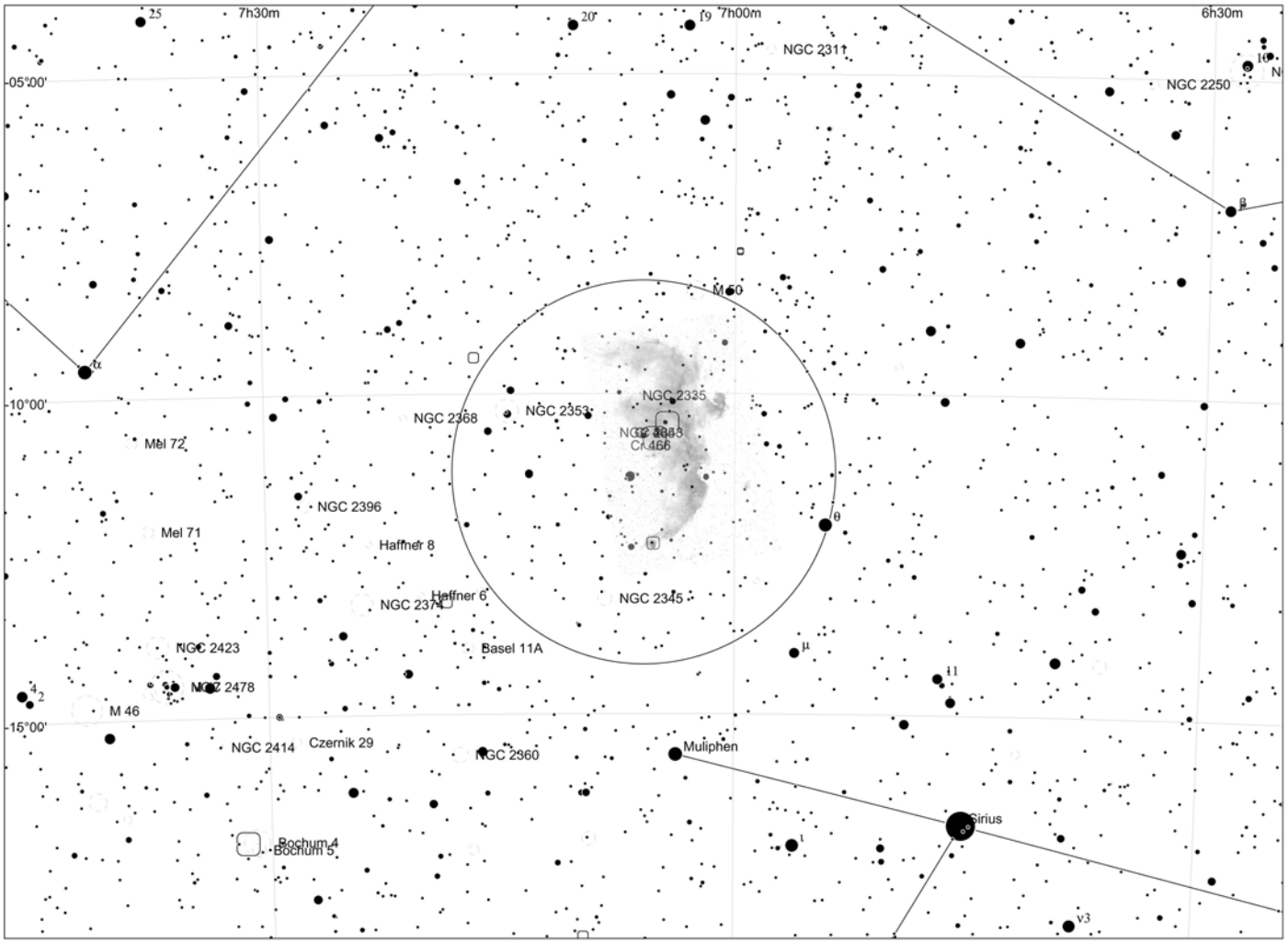
composite

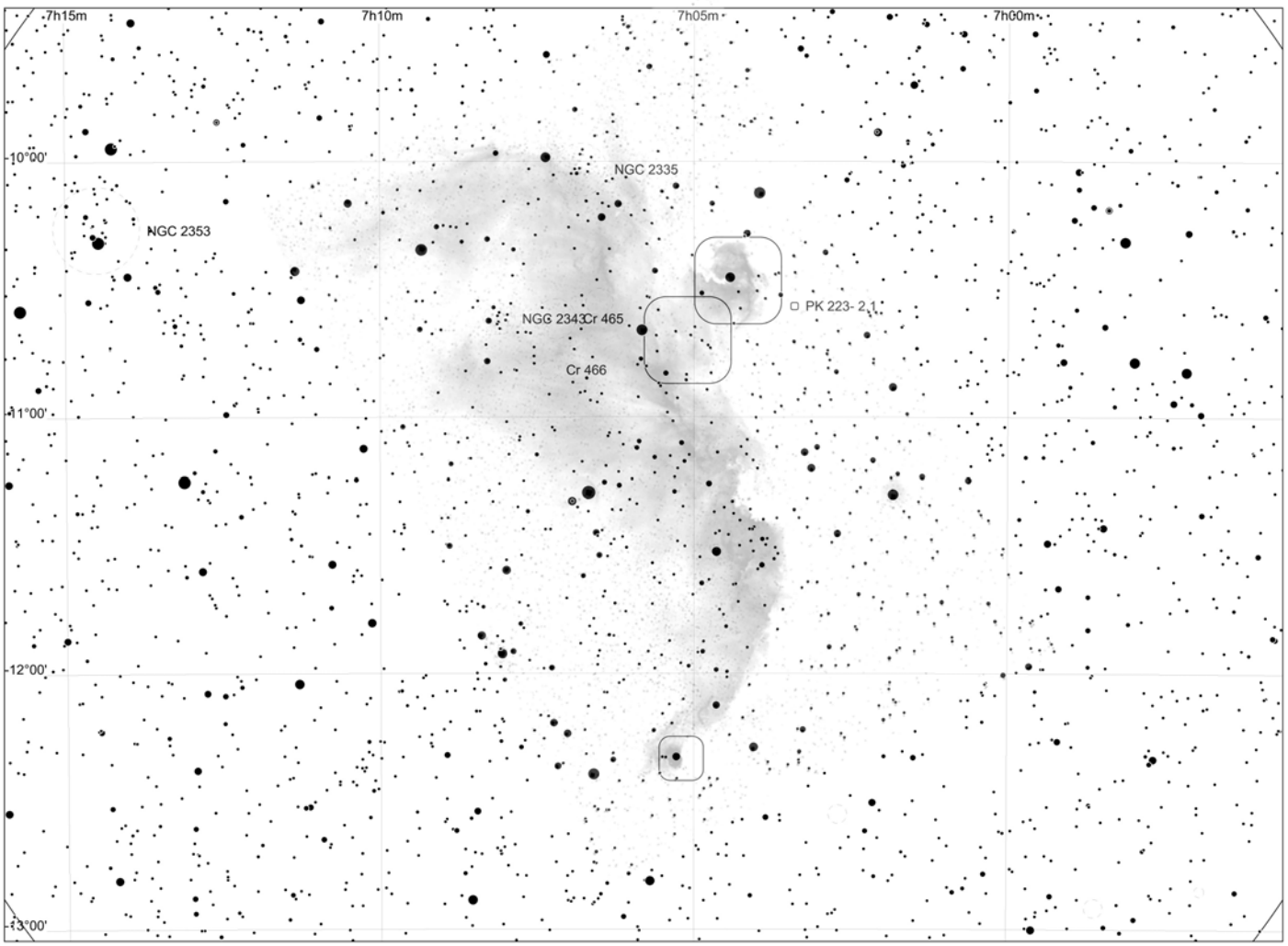
	other name	RA	dec	dia. '	F	S	B
Sh 2-294		07 16 34.3	-09 26 38	7	3	2	3

Distance: 4600 pc, Size: 9.4 pc, Source: 1982ApJS...49..183B

This HII region contains the loose infrared star cluster [BDS2003] 95. Its odd shape looks like an upside down octopus - should it perhaps be called the Octopus nebula?

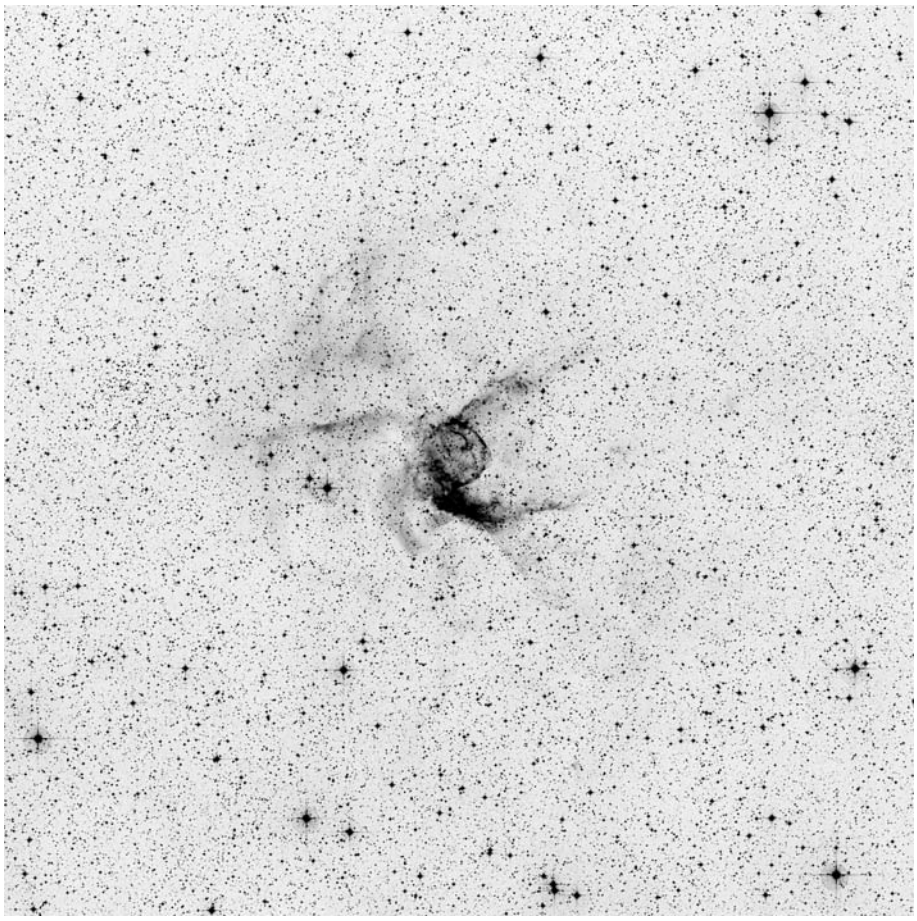
Observing notes:


7h30m
7h00m
6h30m
05°00'
10°00'
15°00'
NGC 2311
NGC 2250
M 50
NGC 2335
NGC 2368
NGC 2353
NGC 2383
Cr 466
Mel 72
NGC 2396
Mel 71
Haffner 8
Haffner 6
NGC 2374
NGC 2345
NGC 2423
Basel 11A
NGC 2478
M 46
NGC 2414
Czernik 29
NGC 2360
Muliphen
Sirius
Bochum 4
Bochum 5
v3


7h15m
7h10m
7h05m
7h00m
10°00'
11°00'
12°00'
13°00'
NGC 2335
NGC 2353
NGC 2343
Cr 465
Cr 466
PK 223- 2.1

Sh 2 - 298

in Canis Major



60x60, red



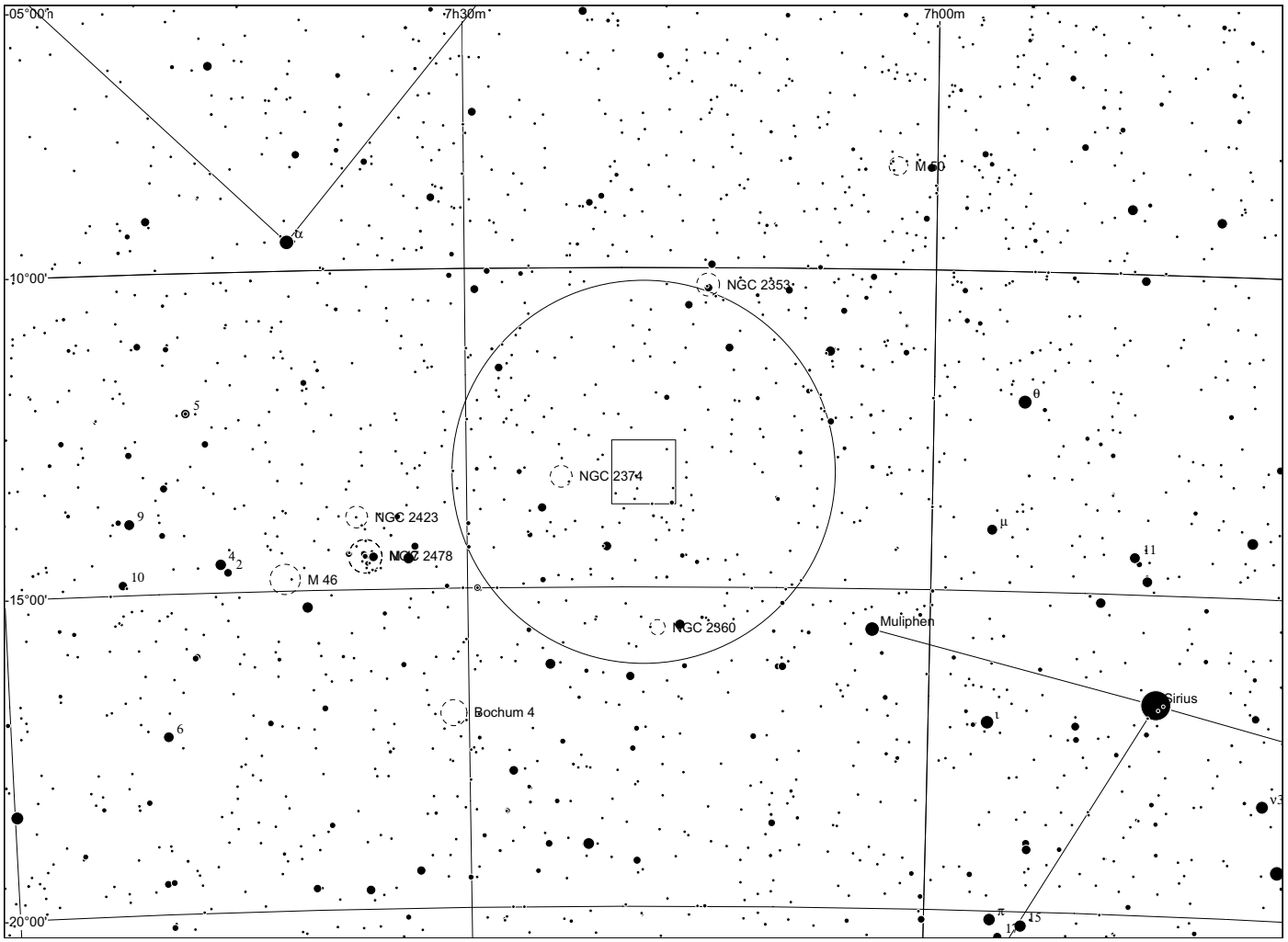
narrowband, Dean Salman

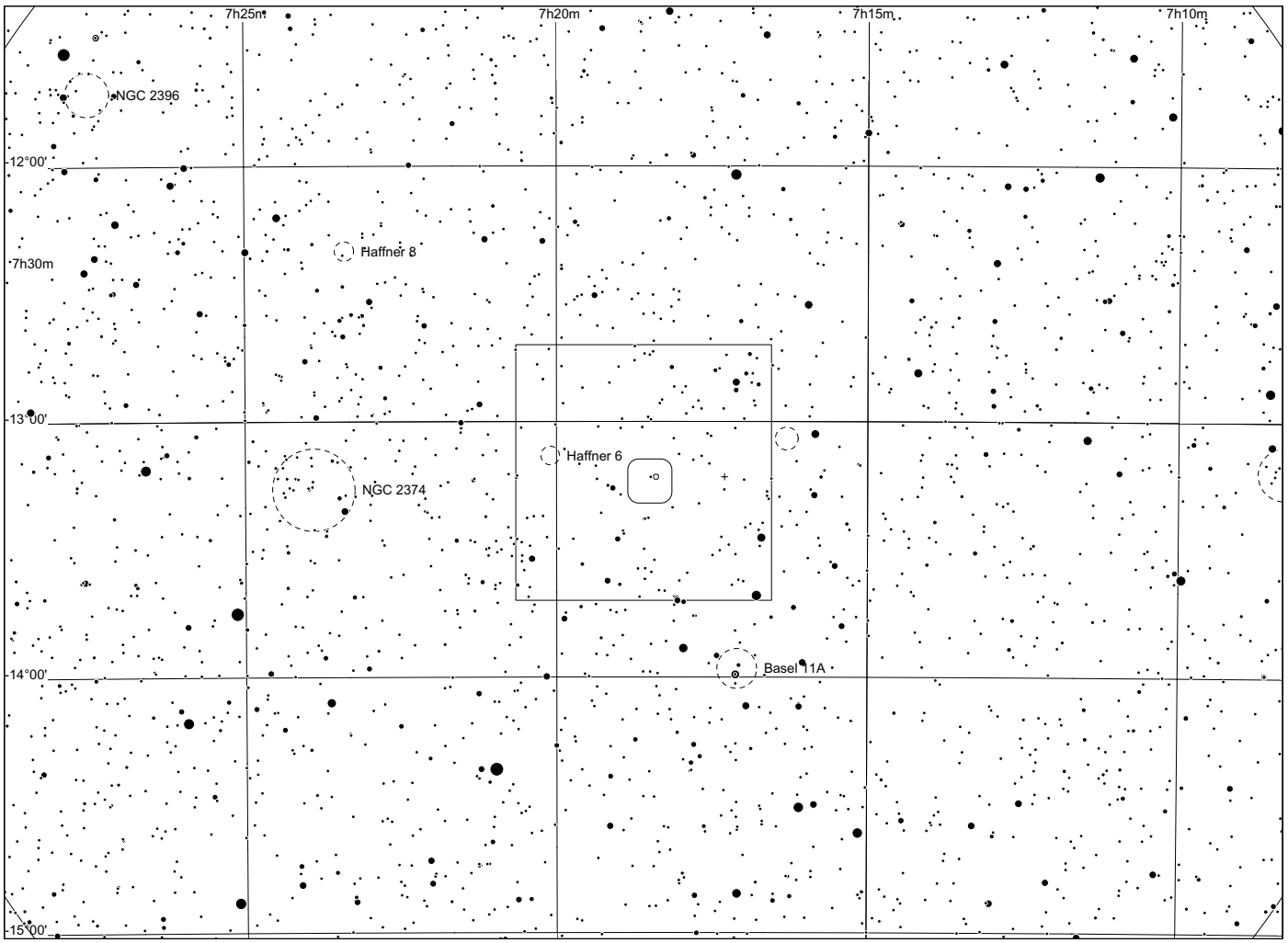
	other name	RA	dec	dia. '	F	S	B
Sh 2-298	NGC2359 = Thor's Helmet	07 18 38.0	-13 11 55	22	3	3	3

Distance: 5000 pc, Size: 32.0 pc, Source: 2001AJ....121.2664C

Nicknamed Thor's Helmet, this nebula (also called NGC 2359) is a wind blown bubble ionized by the Wolf-Rayet star WR 7 (HD 56925).

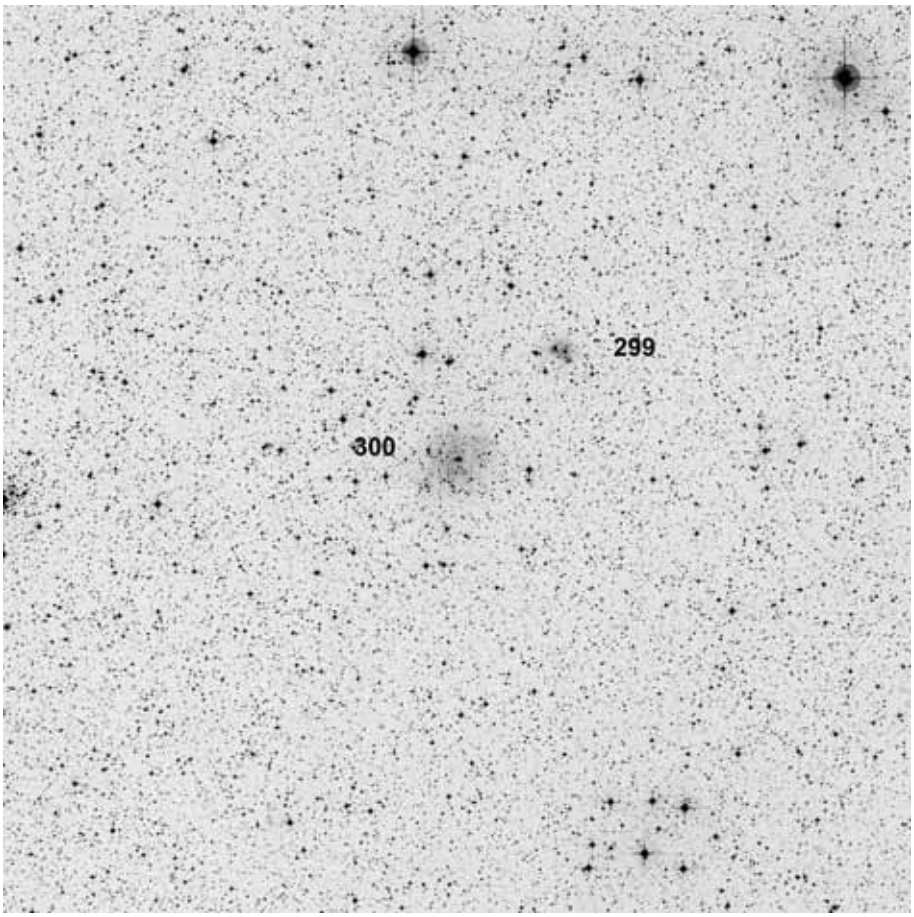
Observing notes:


05°00'n
7h30m
7h00m
M 50
α
10°00'
NGC 2353
θ
5
NGC 2374
NGC 2423
9
μ
11
4
2
NGC 2478
10
M 46
15°00'
NGC 2360
Muliphein
Bochum 4
Sirius
1
6
ν3
π
15
20°00'

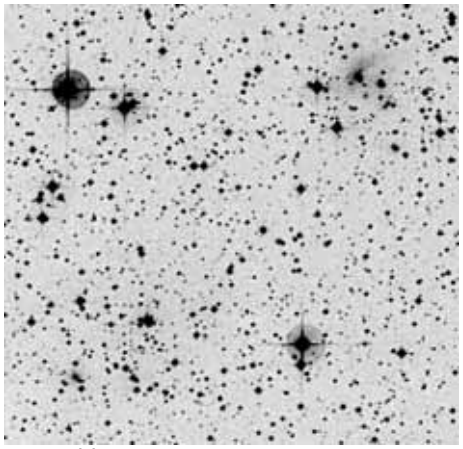

7h25m
7h20m
7h15m
7h10m
NGC 2396
12°00'
Haffner 8
7h30m
13°00'
Haffner 6
NGC 2374
Basel 11A
14°00'
15°00'

Sh 2 - 299/300

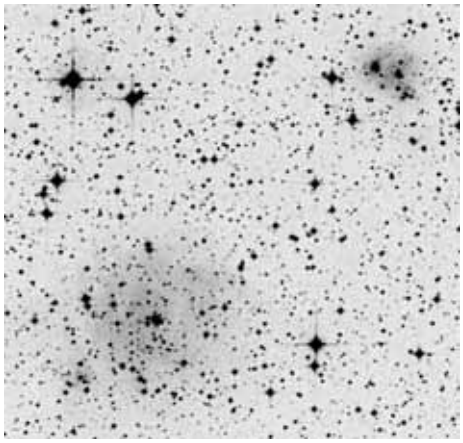
in Puppis



60x60, red



POSS blue



POSS red

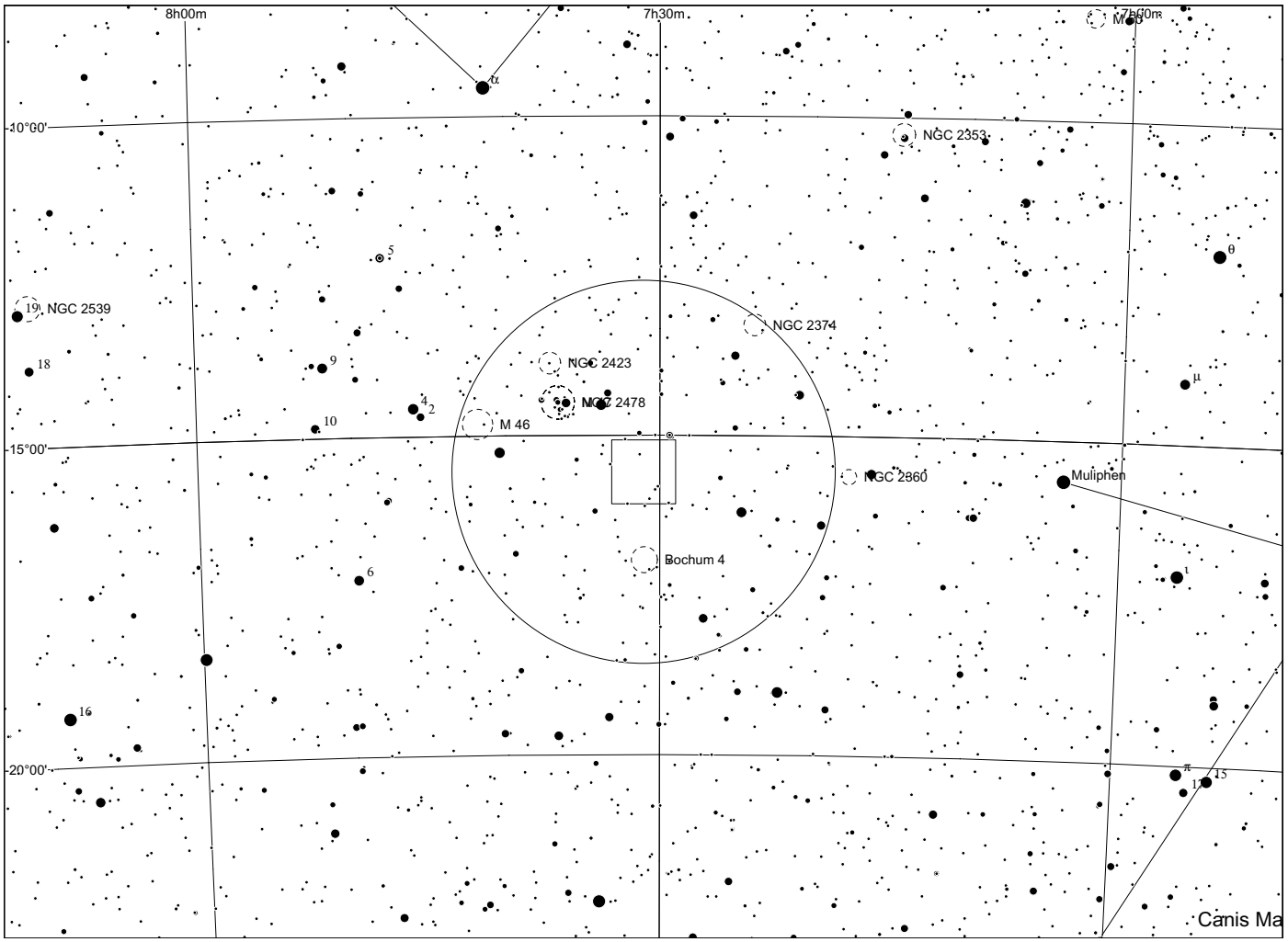
composite

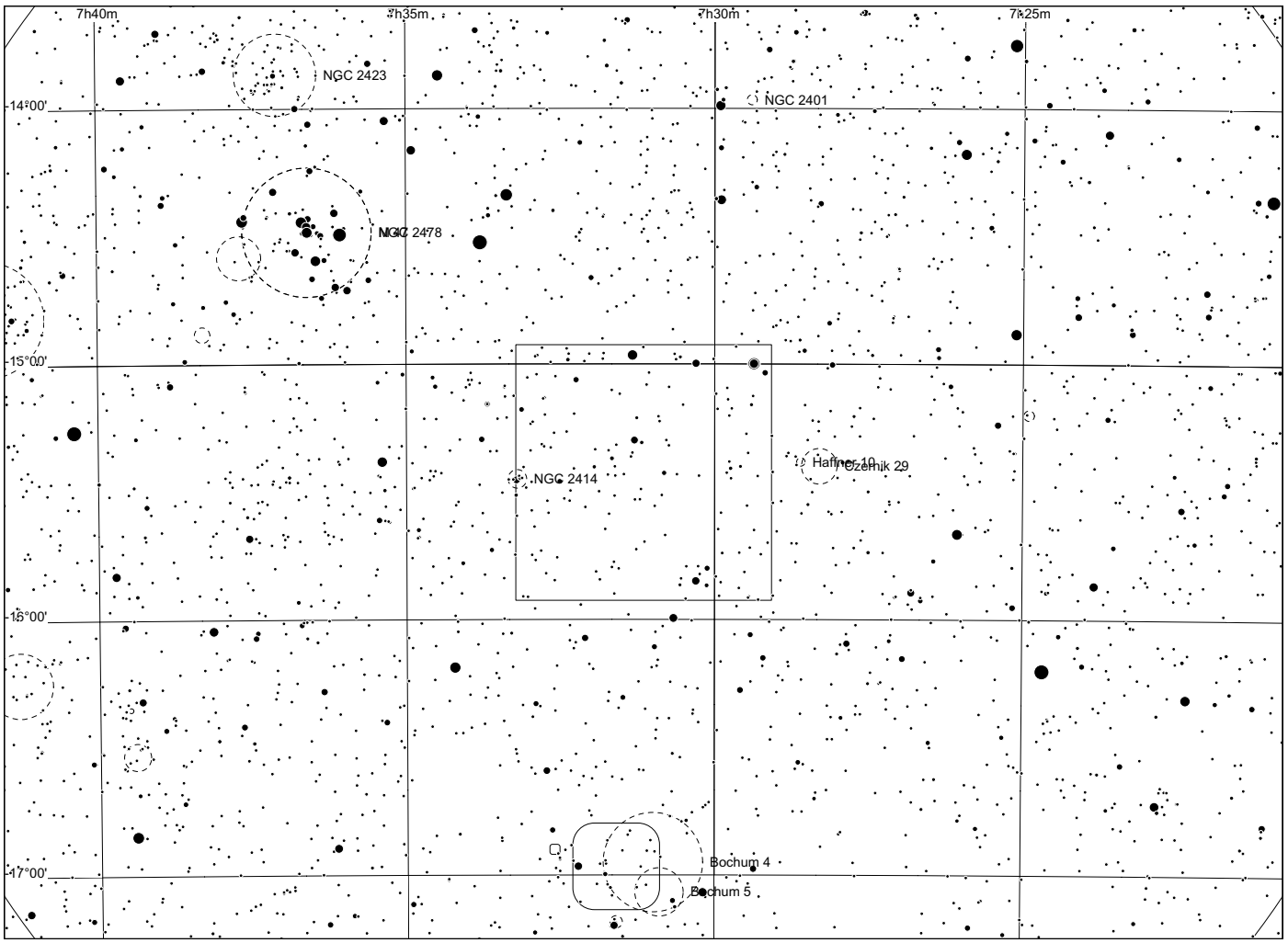
	other name	RA	dec	dia. '	F	S	B
Sh 2-299		07 30 38.9	-15 17 34	1	3	1	1
Sh 2-300		07 31 02.8	-15 24 37	3	2	1	1

Distance: 4200 pc Source: 1995A&AS..114..557R

S299, S300, S305, S306, S307 and S309 are all part of the same giant molecular cloud complex at 4200 pc.

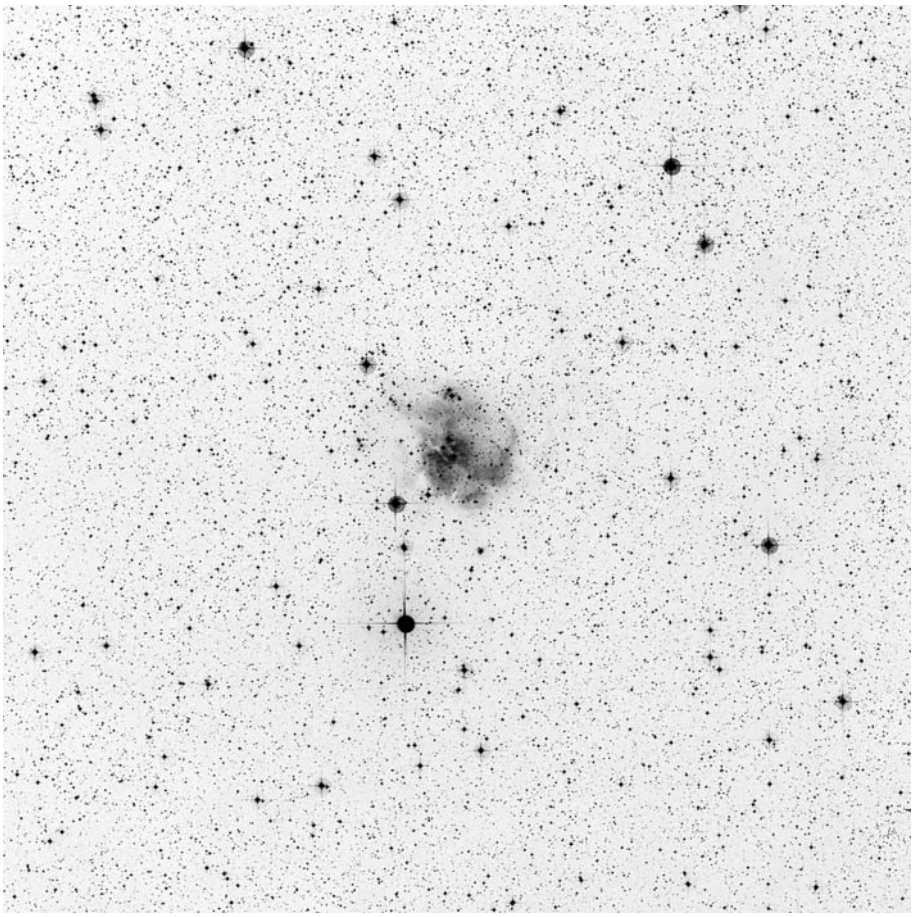
Observing notes:


8h00m
7h30m
7h00m
10°00'
15°00'
20°00'
NGC 2353
NGC 2539
NGC 2374
NGC 2423
NGC 2478
M 46
NGC 2360
Muliphen
Bochum 4
Canis Ma

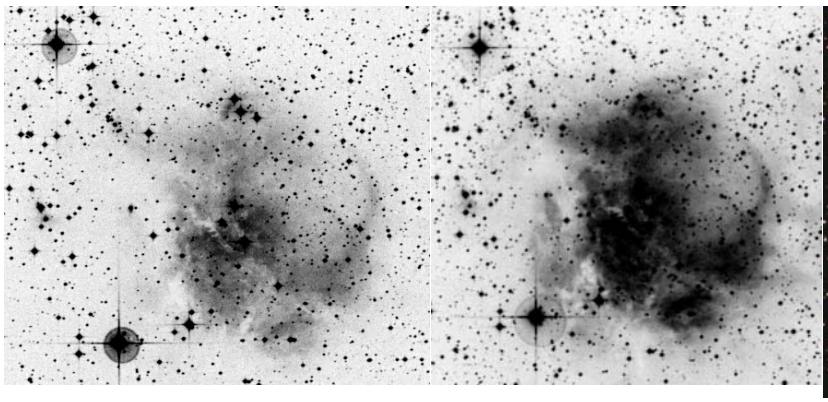

7h40m
7h35m
7h30m
7h25m
14°00'
15°00'
16°00'
17°00'
NGC 2423
NGC 2401
NGC 2478
NGC 2414
Haffner 10
Czernik 29
Bochum 4
Bochum 5

Sh 2 - 301

in Canis Major



60x60, blue



POSS blue

POSS red



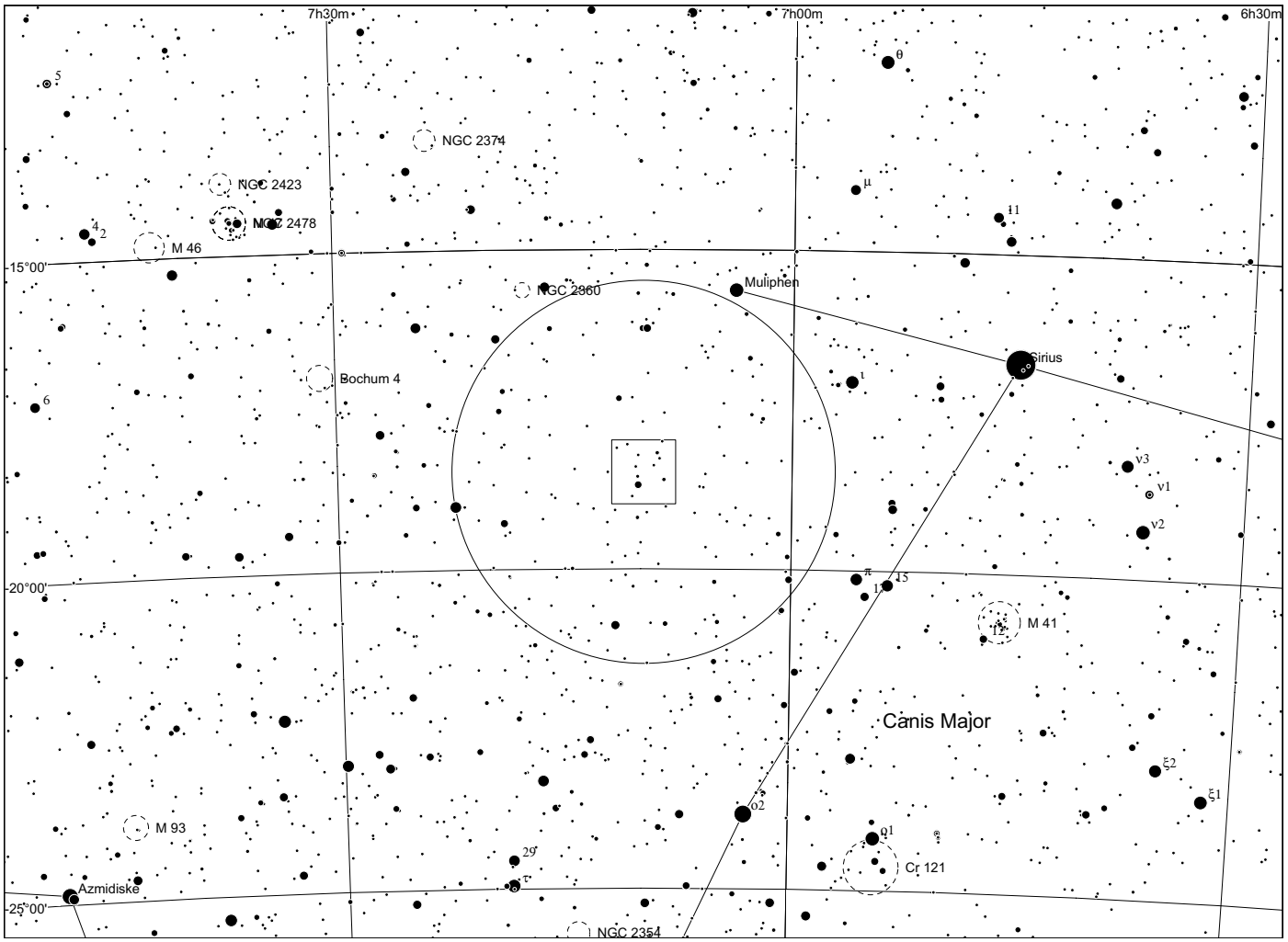
narrowband, Dean Salman

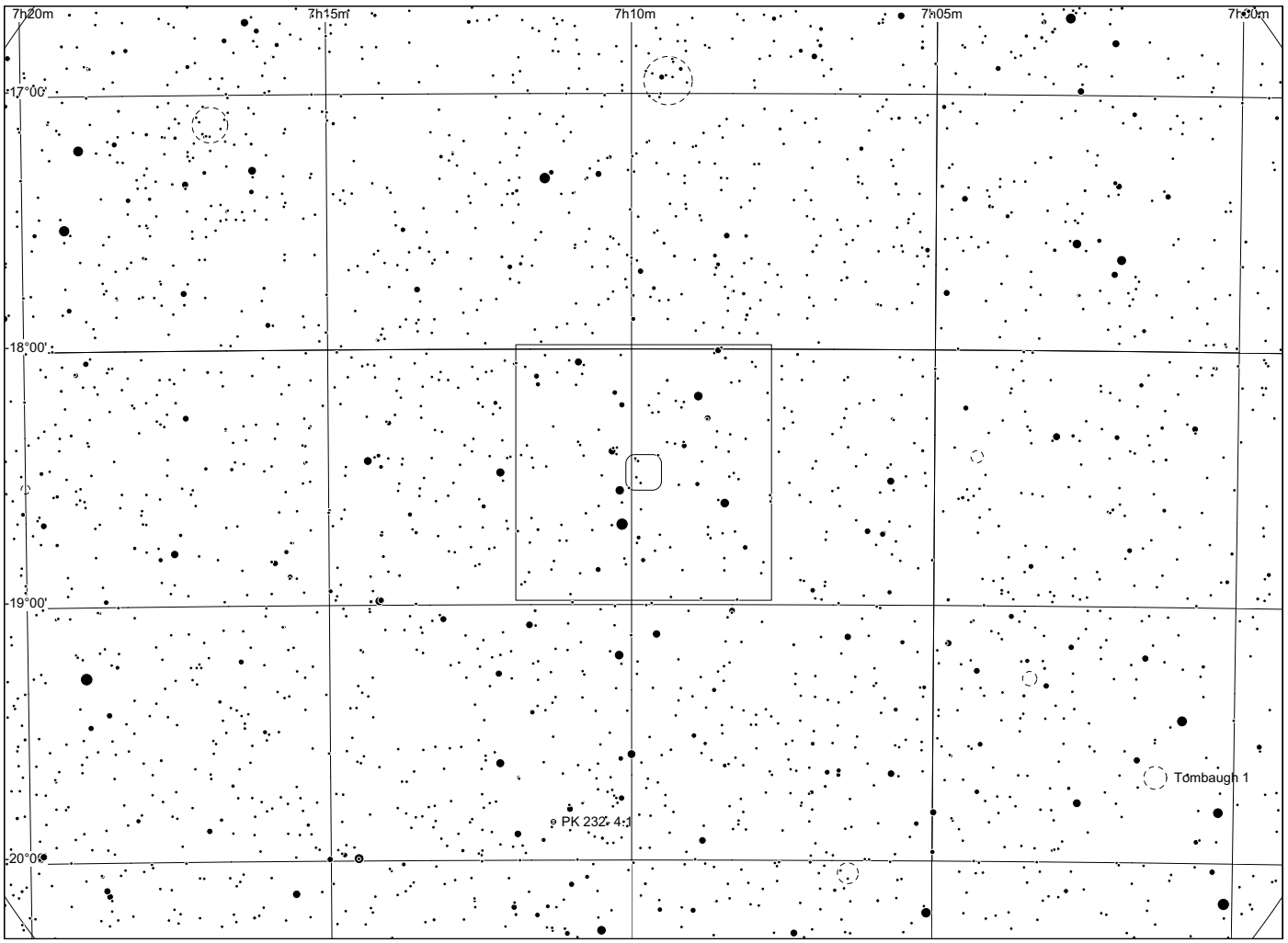
	other name	RA	dec	dia. '	F	S	B
Sh 2-301		07 09 48.4	-18 28 43	9	2	2	3

Distance: 5800 pc, Size: 15.2 pc, Source: 1982ApJS...49..183B

This HII region, also called Gum 5, may be associated with the GS234-02 star forming supershell.

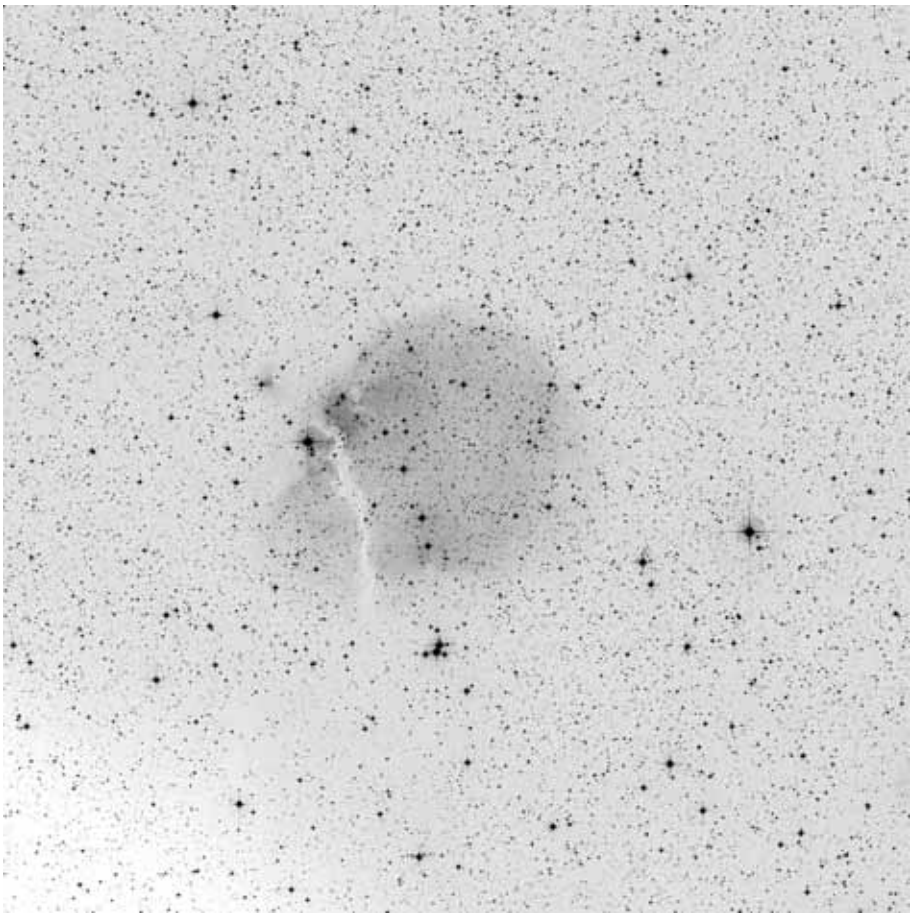
Observing notes:


7h30m
7h00m
6h30m
15°00'
20°00'
25°00'
NGC 2374
NGC 2423
NGC 2478
M 46
NGC 2360
Muliphen
Sirius
Bochum 4
M 41
Canis Major
M 93
Azmidiske
Cr 121
NGC 2354

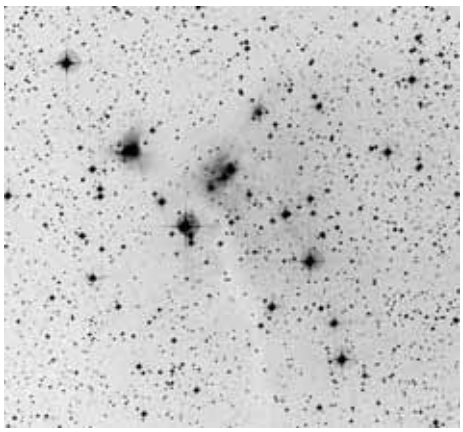

7h20m
7h15m
7h10m
7h05m
7h00m
17°00'
18°00'
19°00'
20°00'
Tombaugh 1
PK 232 4.1

Sh 2 - 302

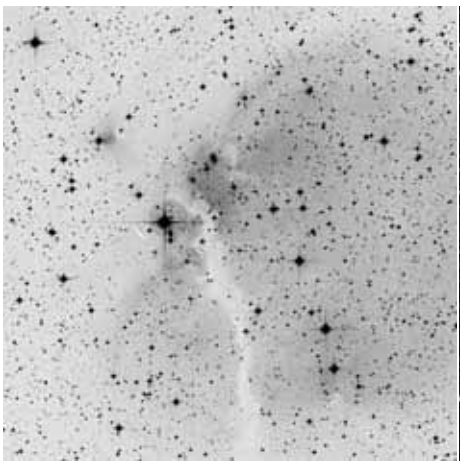
in Puppis



60x60, red



POSS blue



POSS red



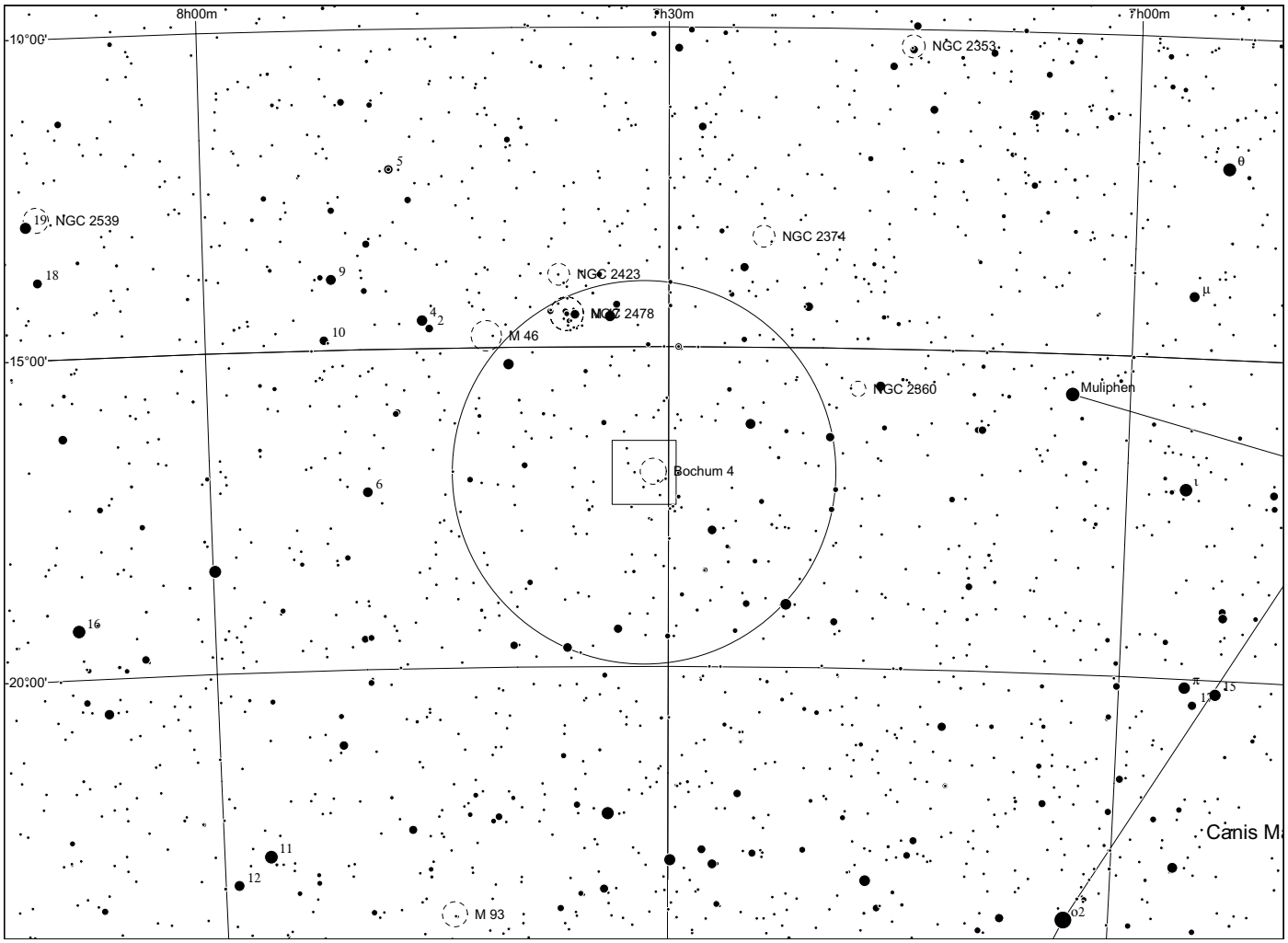
composite

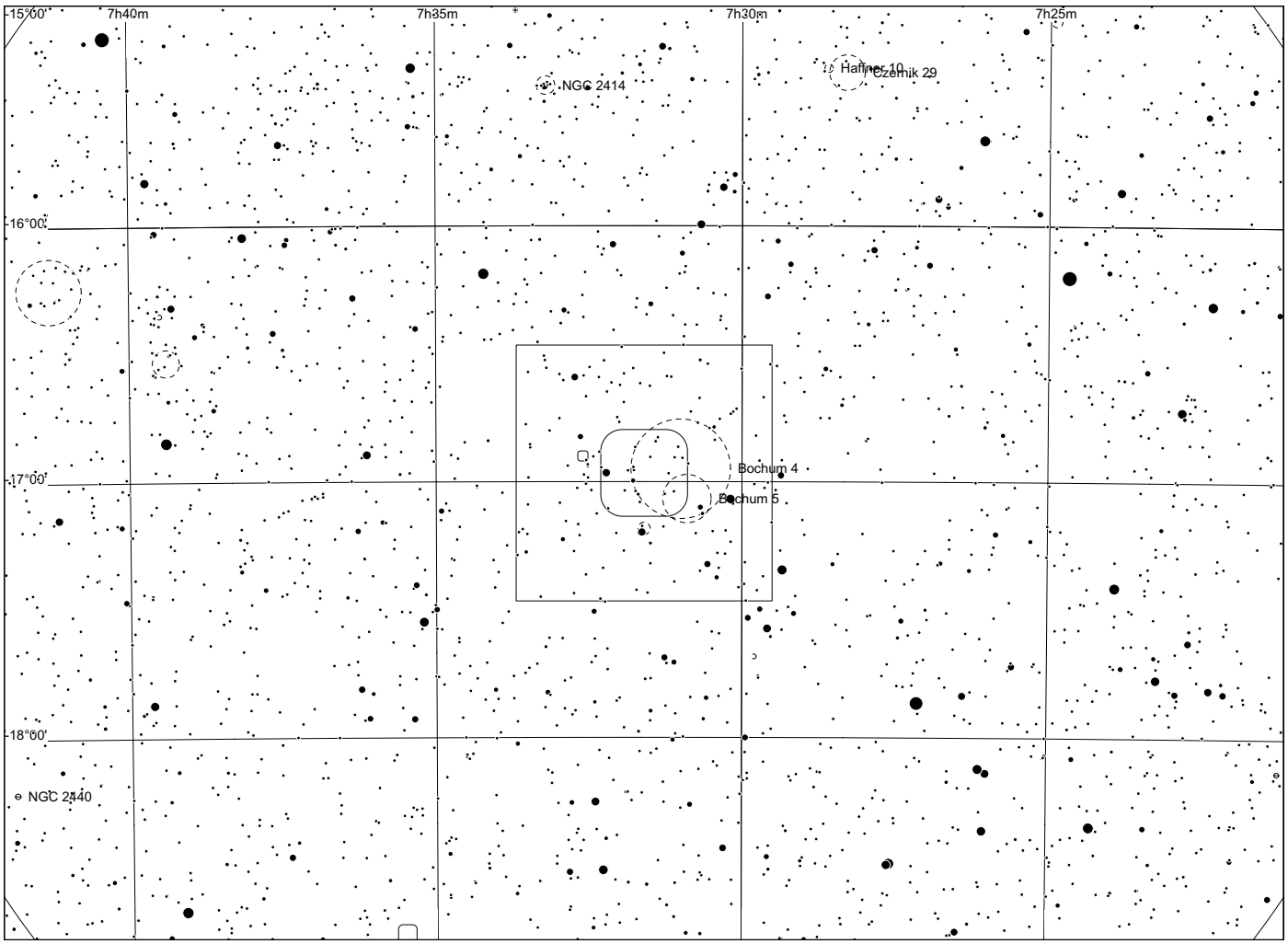
	other name	RA	dec	dia. '	F	S	B
Sh 2-302		07 31 41.0	-16 58 43	21	2	1	2

Distance: 1800 pc, Size: 11.0 pc, Source: 1996AJ....112.1625J

Also called RCW 7, Sh 2-302 is part of molecular cloud A in front of supershell GS234-02 and is located at a distance of 1800 pc.

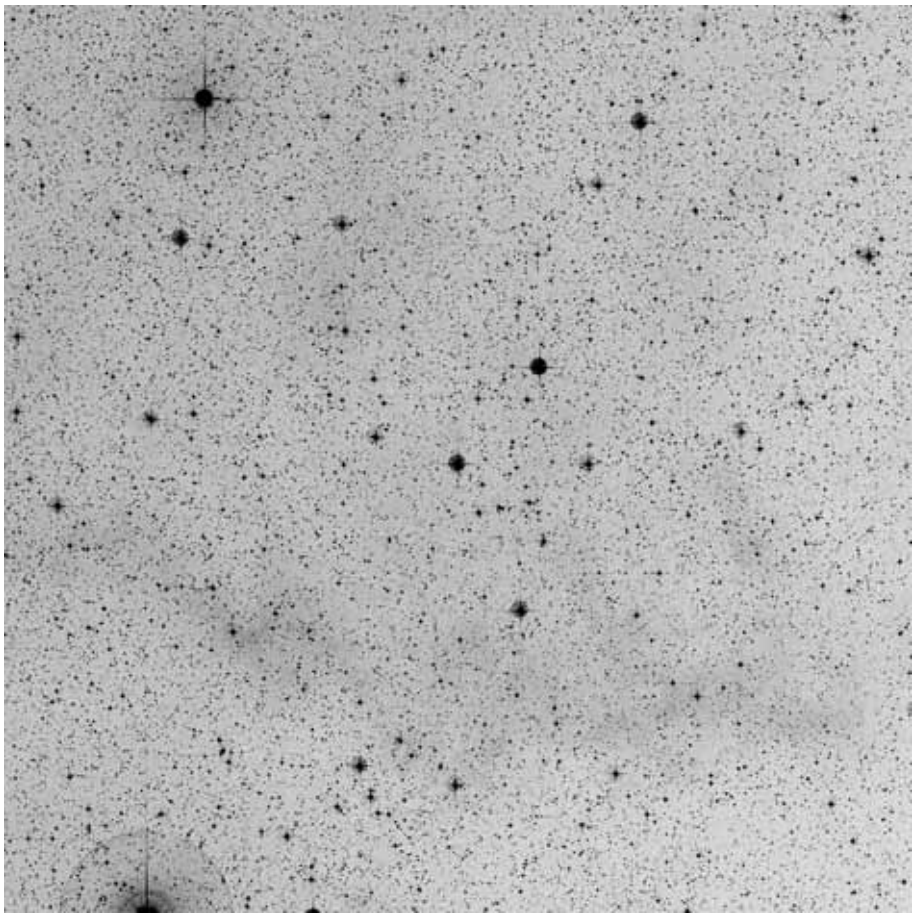
Observing notes:


8h00m
7h30m
7h00m
10°00'
15°00'
20°00'
NGC 2353
NGC 2539
NGC 2374
NGC 2423
NGC 2478
M 46
NGC 2360
Muliphen
Bochum 4
M 93
Canis Ma

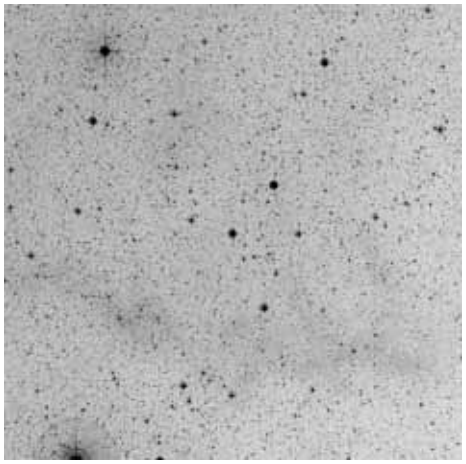

15°00'
7h40m
7h35m
7h30m
7h25m
NGC 2414
Haffner 10
Czernik 29
16°00'
Bochum 4
Bochum 5
17°00'
18°00'
NGC 2440

Sh 2 - 303

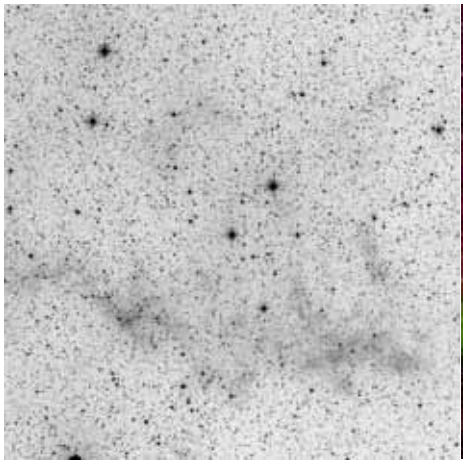
in Canis Major



60x60, blue



POSS blue



POSS red



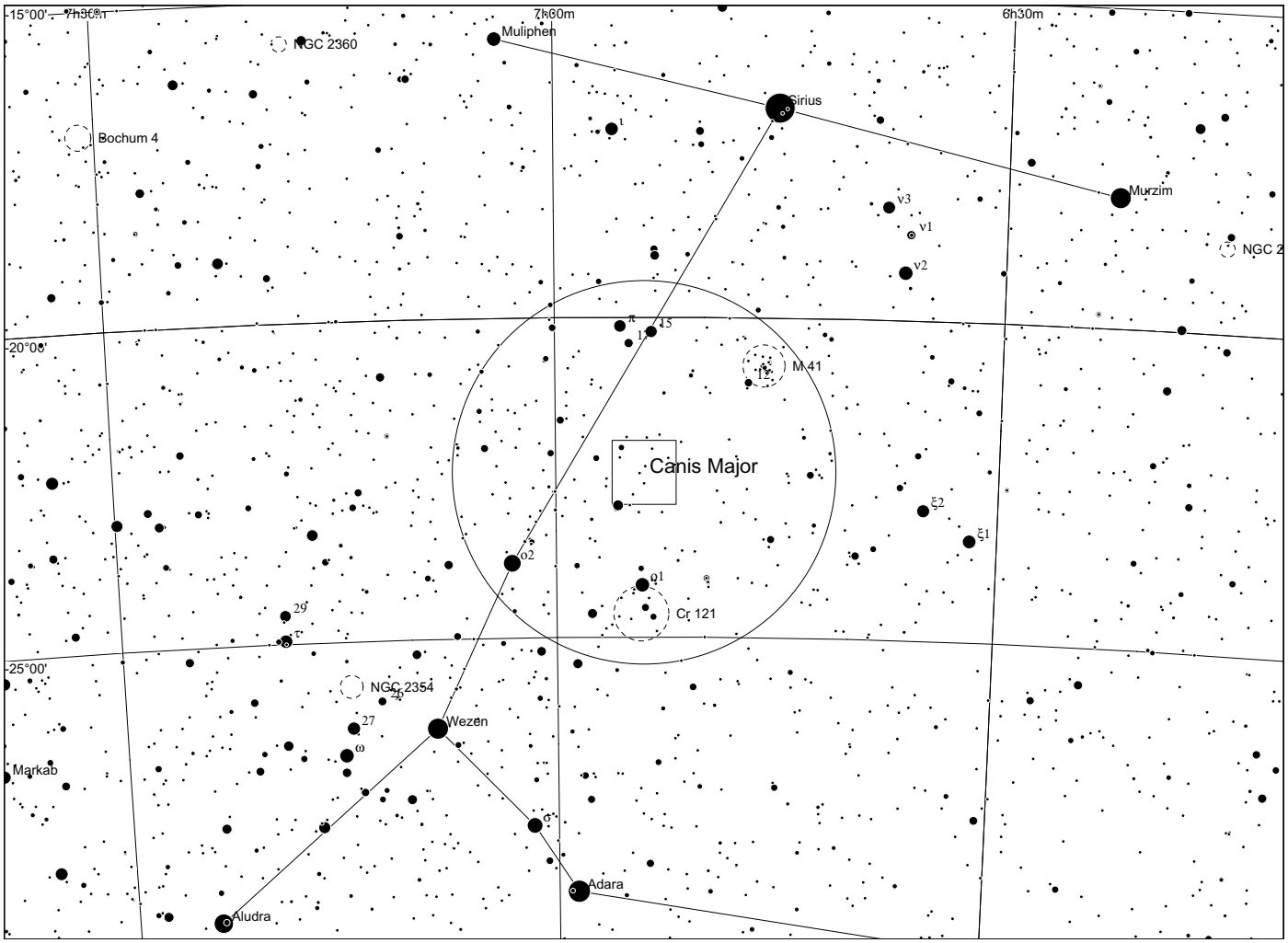
composite

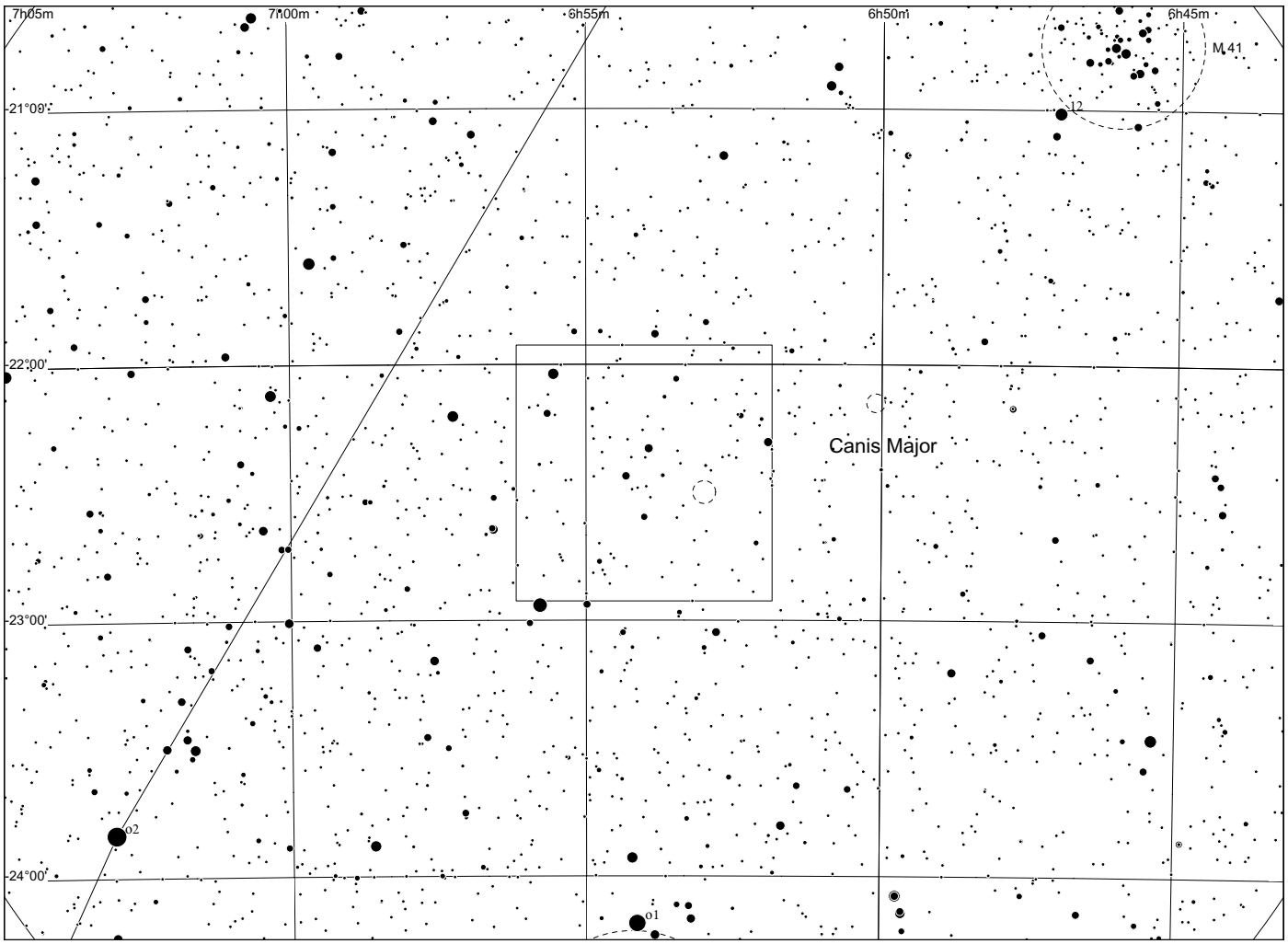
	other name	RA	dec	dia. '	F	S	B
Sh 2-303		06 54 00.9	-22 25 31	90	2	2	2

Distance: 575 pc, Size: 15.1 pc, Source: 2003MNRAS.346.1143B

Along with Sh 2-304 and Sh 2-308, this HII region is ionised by WR 6 (EZ CMa).

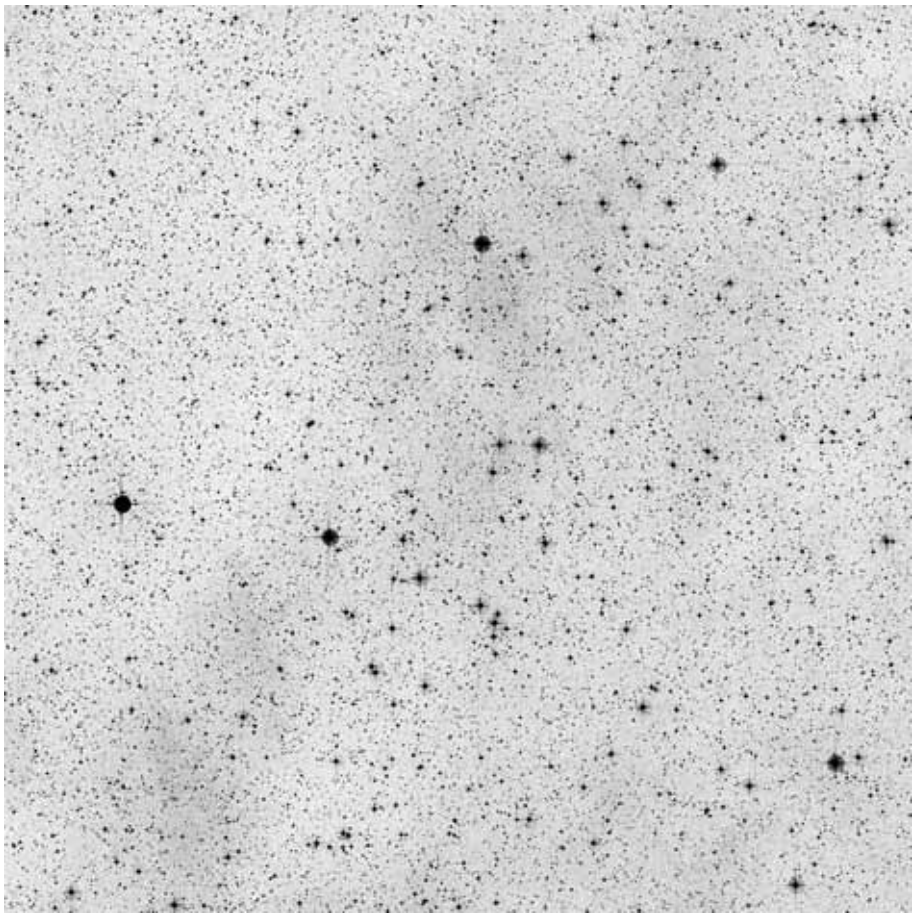
Observing notes:


15°00'
7h30m
7h00m
6h30m
NGC 2360
Muliphen
Sirius
Bochum 4
Murzim
ν3
ν1
ν2
NGC 2
20°00'
M 41
Canis Major
ξ2
ξ1
ο2
ο1
29
τ
Cr 121
25°00'
NGC 2354
27
Wezen
ω
Markab
Adara
Aludra

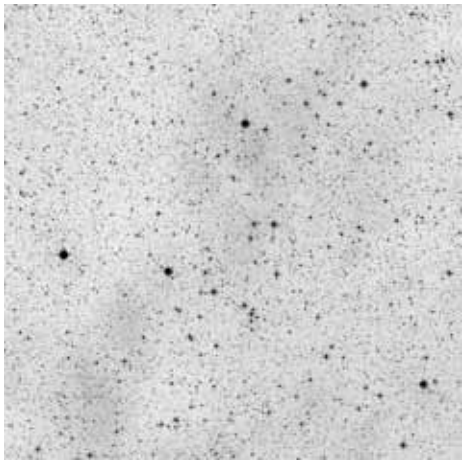

7h05m
7h00m
6h55m
6h50m
6h45m
M 41
21°00'
12
Canis Major
22°00'
23°00'
ο2
24°00'
ο1

Sh 2 - 304

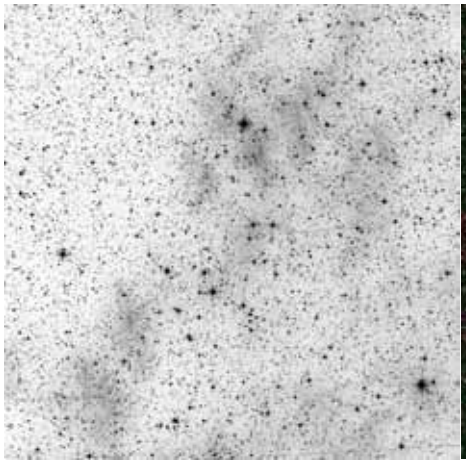
in Canis Major



60x60, red



POSS blue



POSS red



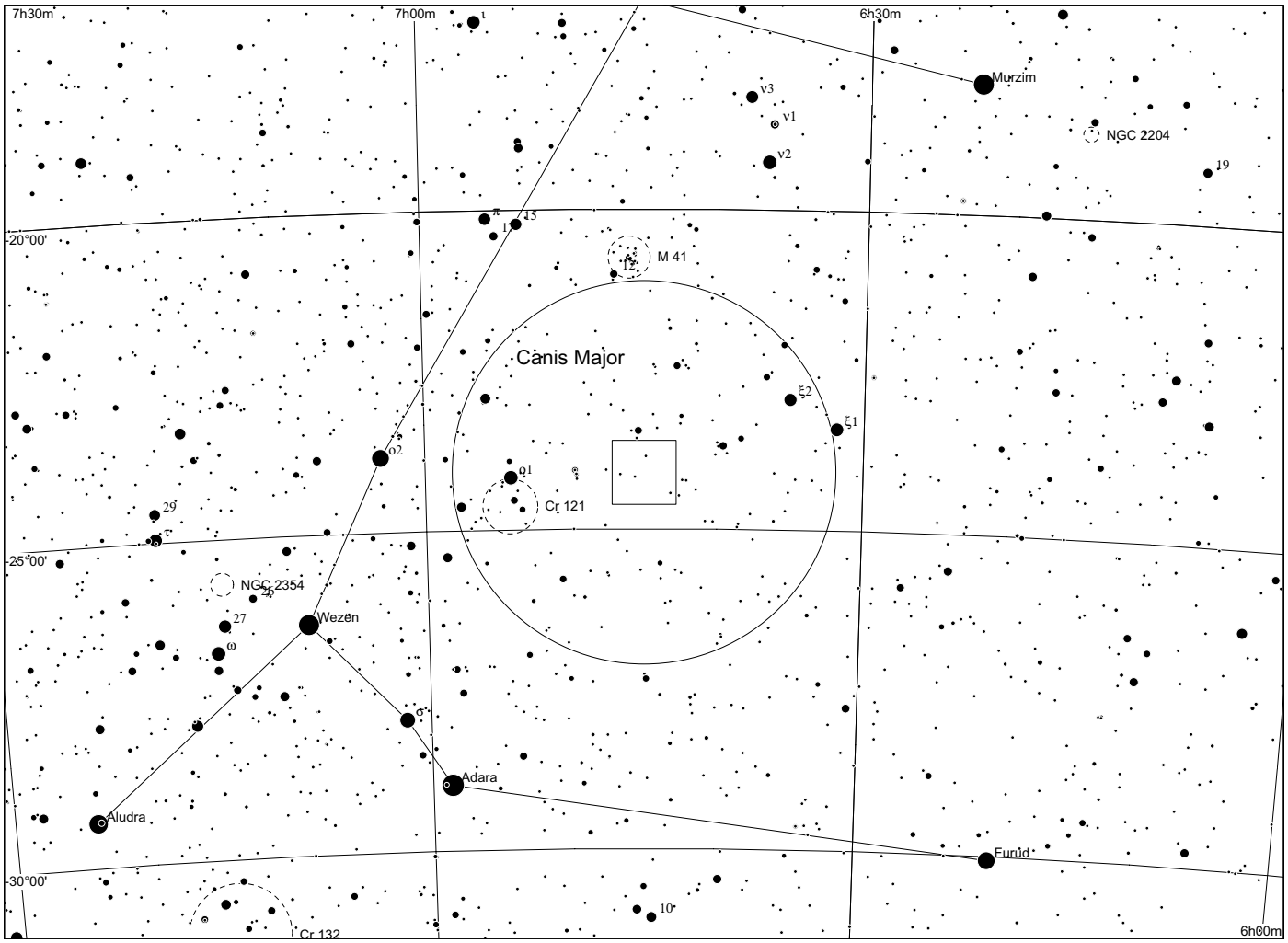
composite

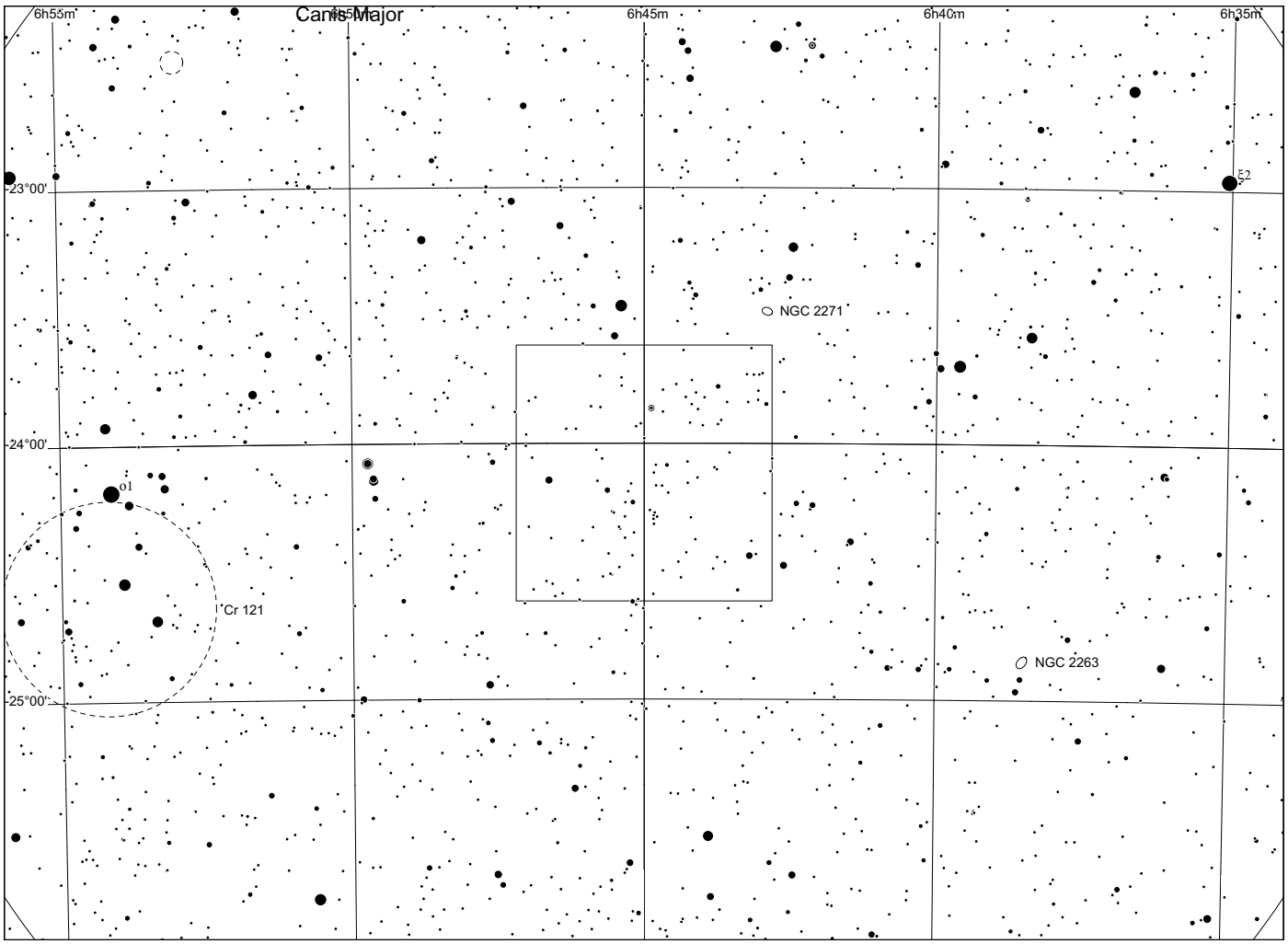
	other name	RA	dec	dia. '	F	S	B
Sh 2-304		06 43 26.3	-24 07 59	200	3	2	2

Distance: 575 pc, Size: 33.5 pc, Source: 2003MNRAS.346.1143B

Along with Sh 2-303 and Sh 2-308, this HII region is ionised by WR 6 (EZ CMa).

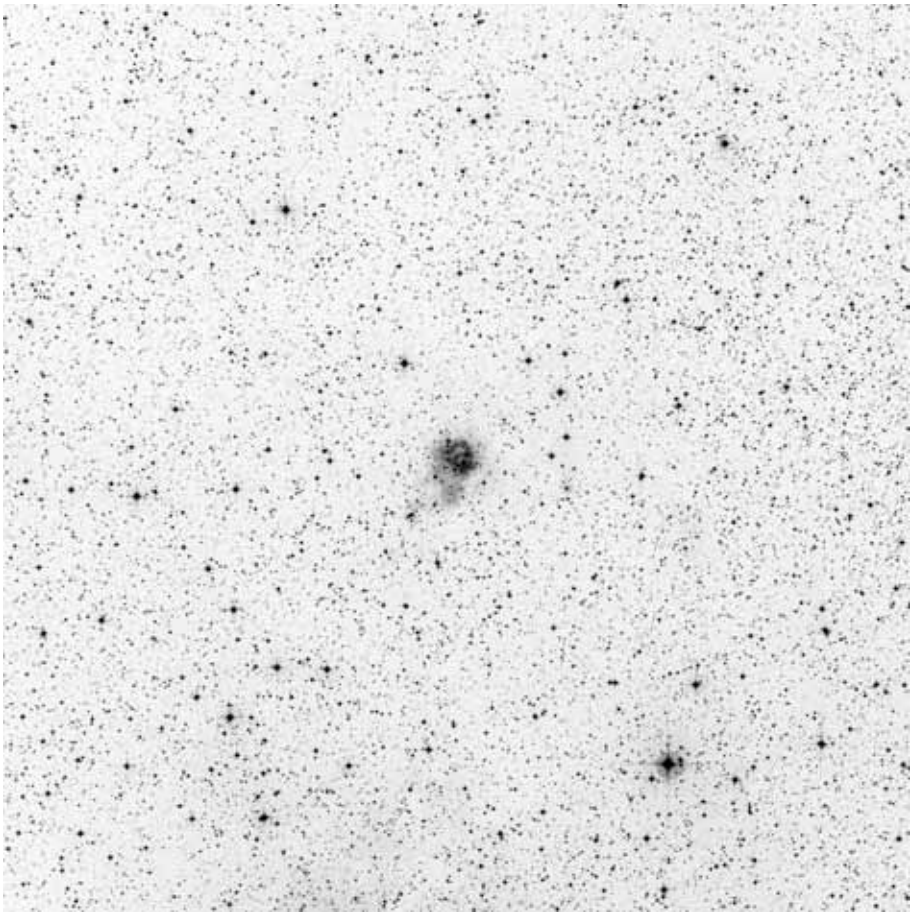
Observing notes:


7h30m
7h00m
6h30m
Murzim
ν3
ν1
ν2
NGC 2204
19
-20°00'
15
M 41
Canis Major
ξ2
ξ1
ο2
ο1
Cr 121
29
-25°00'
NGC 2354
Wezen
27
ω
Adara
Aludra
Furud
-30°00'
10
Cr 132
6h00m

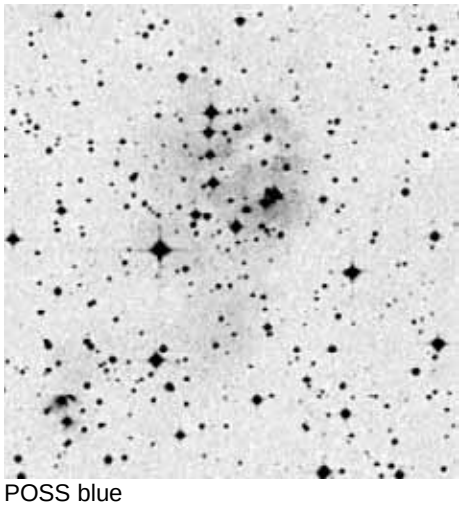

Canis Major
6h55m
6h50m
6h45m
6h40m
6h35m
-23°00'
ξ2
NGC 2271
-24°00'
ο1
Cr 121
NGC 2263
-25°00'

Sh 2 - 305

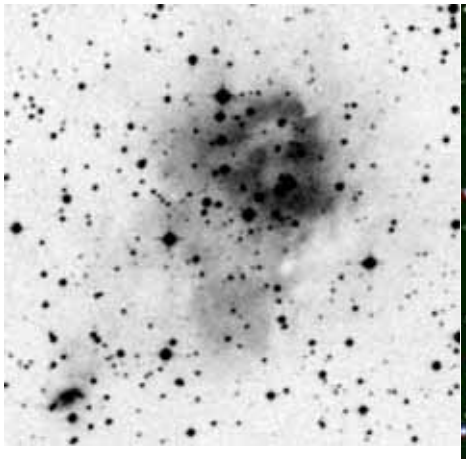
in Puppis



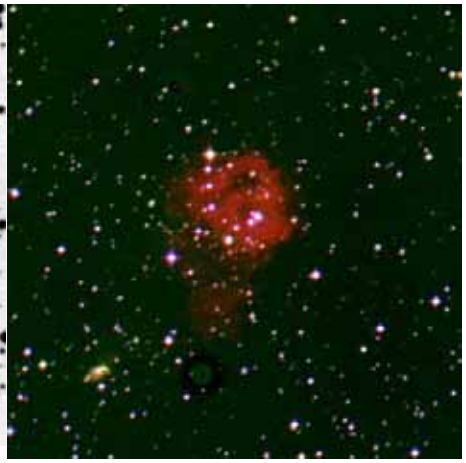
60x60, red



POSS blue



POSS red



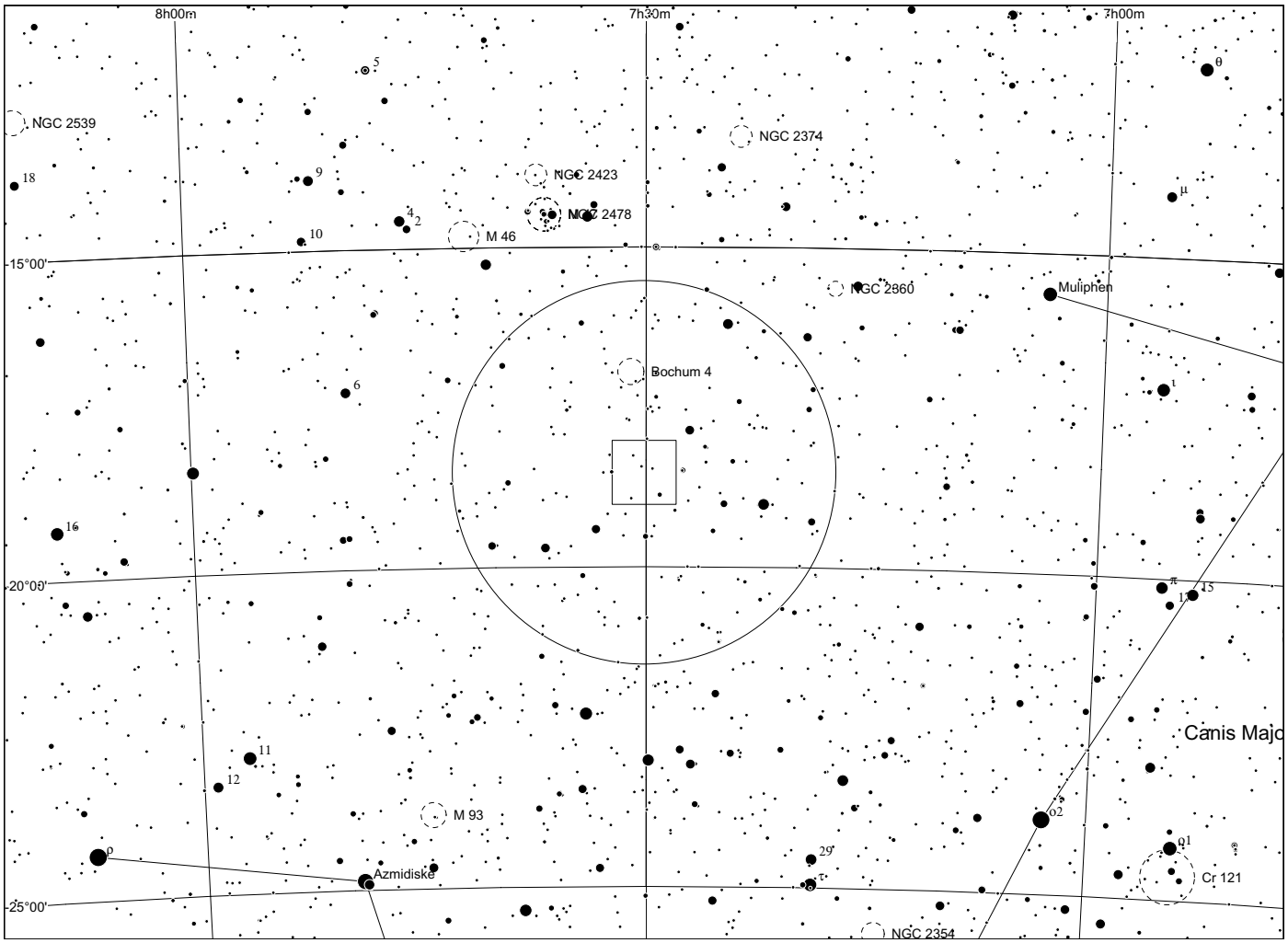
composite

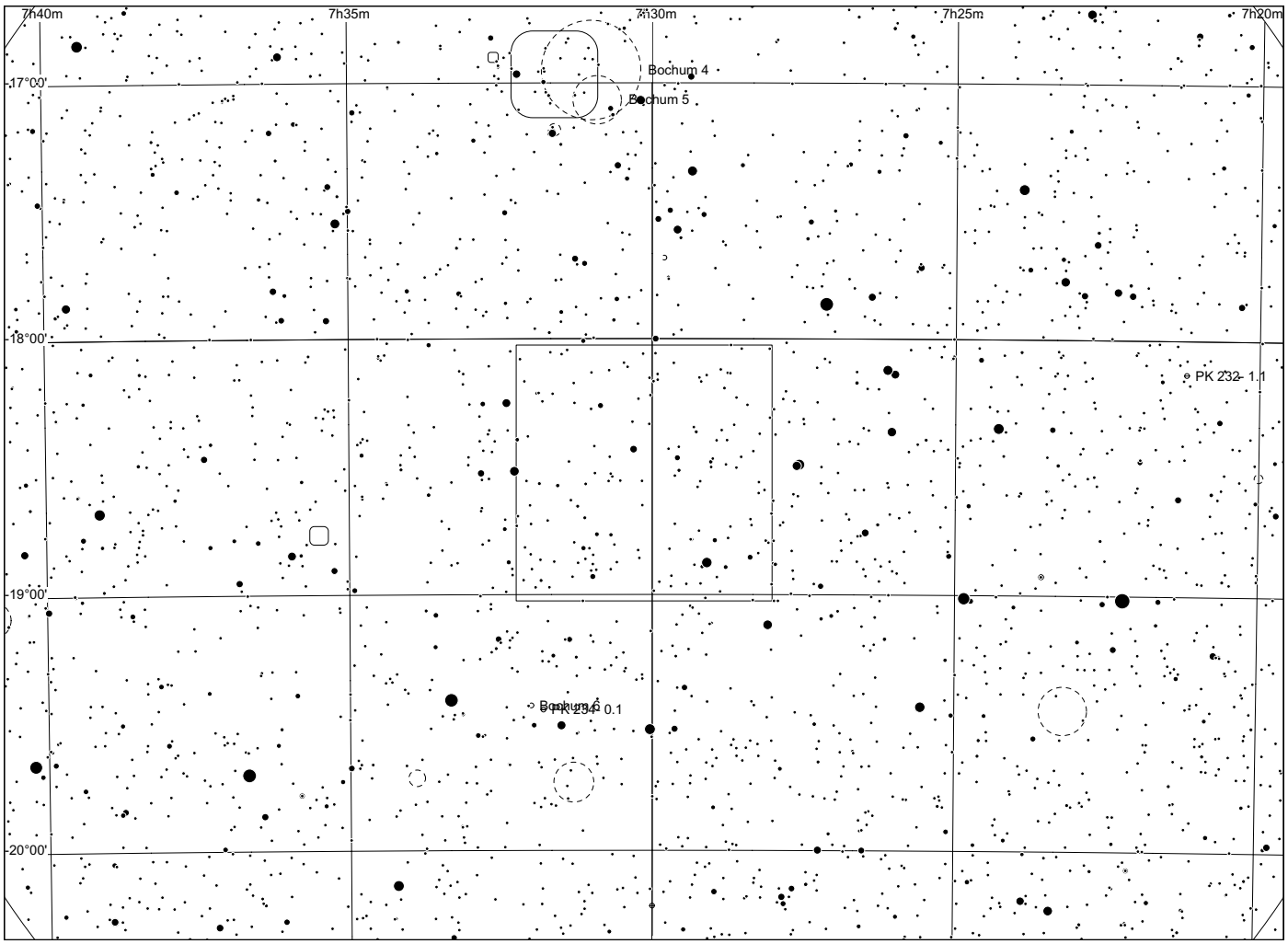
	other name	RA	dec	dia. '	F	S	B
Sh 2-305		07 30 08.1	-18 31 31	4	3	2	3

Distance: 4200 pc, Size: 4.4 pc, Source: 1995A&AS..114..557R

RCW 8 is part of a huge molecular cloud complex with a distance of 4200 pc and is ionised by at least two O-class stars, and possibly two B0 class stars as well.

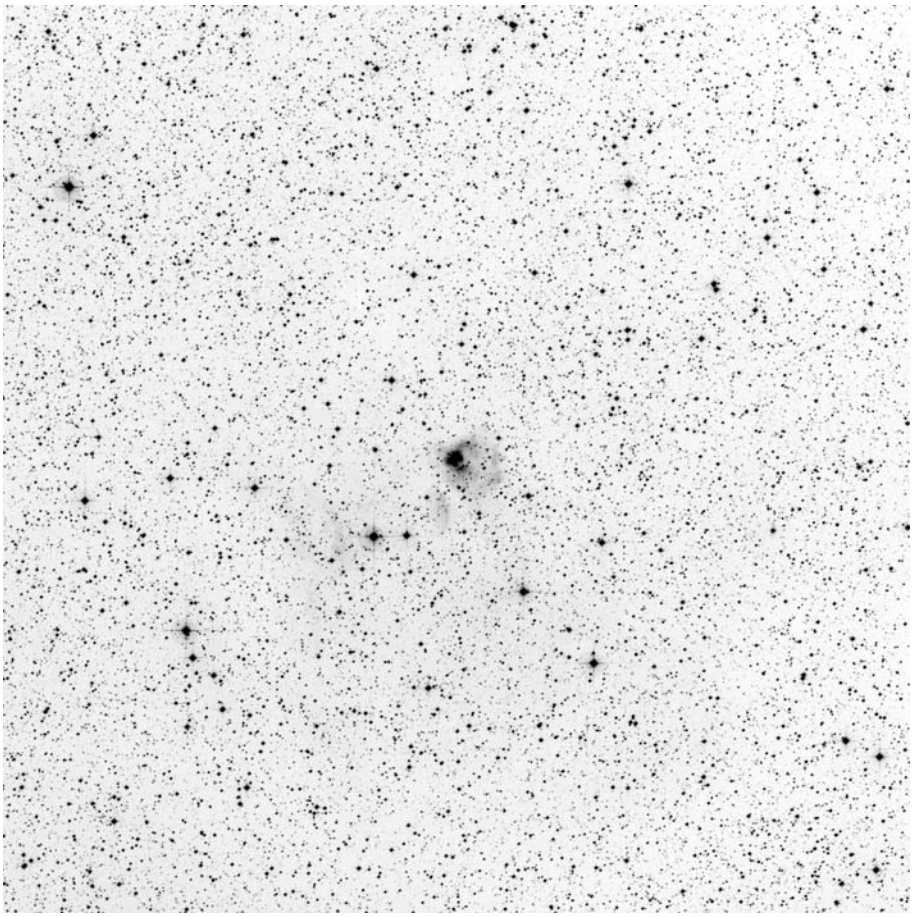
Observing notes:


8h00m
7h30m
7h00m
NGC 2539
NGC 2374
NGC 2423
NGC 2478
M 46
15°00'
NGC 2860
Muliphen
Bochum 4
20°00'
Canis Majo
M 93
Azmidiske
Cr 121
25°00'
NGC 2354

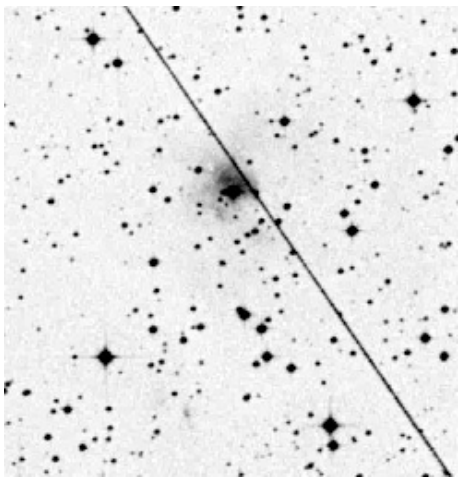

7h40m
7h35m
7h30m
7h25m
7h20m
Bochum 4
Bochum 5
17°00'
18°00'
PK 232- 1.1
19°00'
Bochum 4
PK 234- 0.1
20°00'

Sh 2 - 307

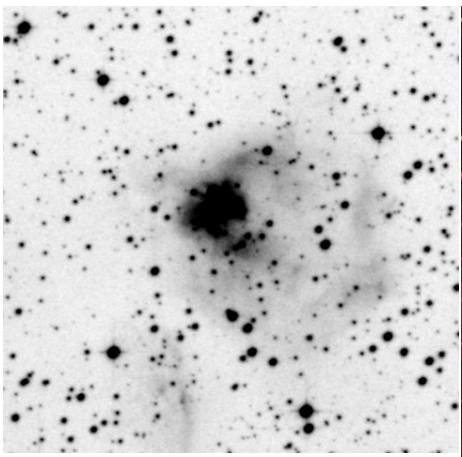
in Puppis



60x60, red



POSS blue



POSS red



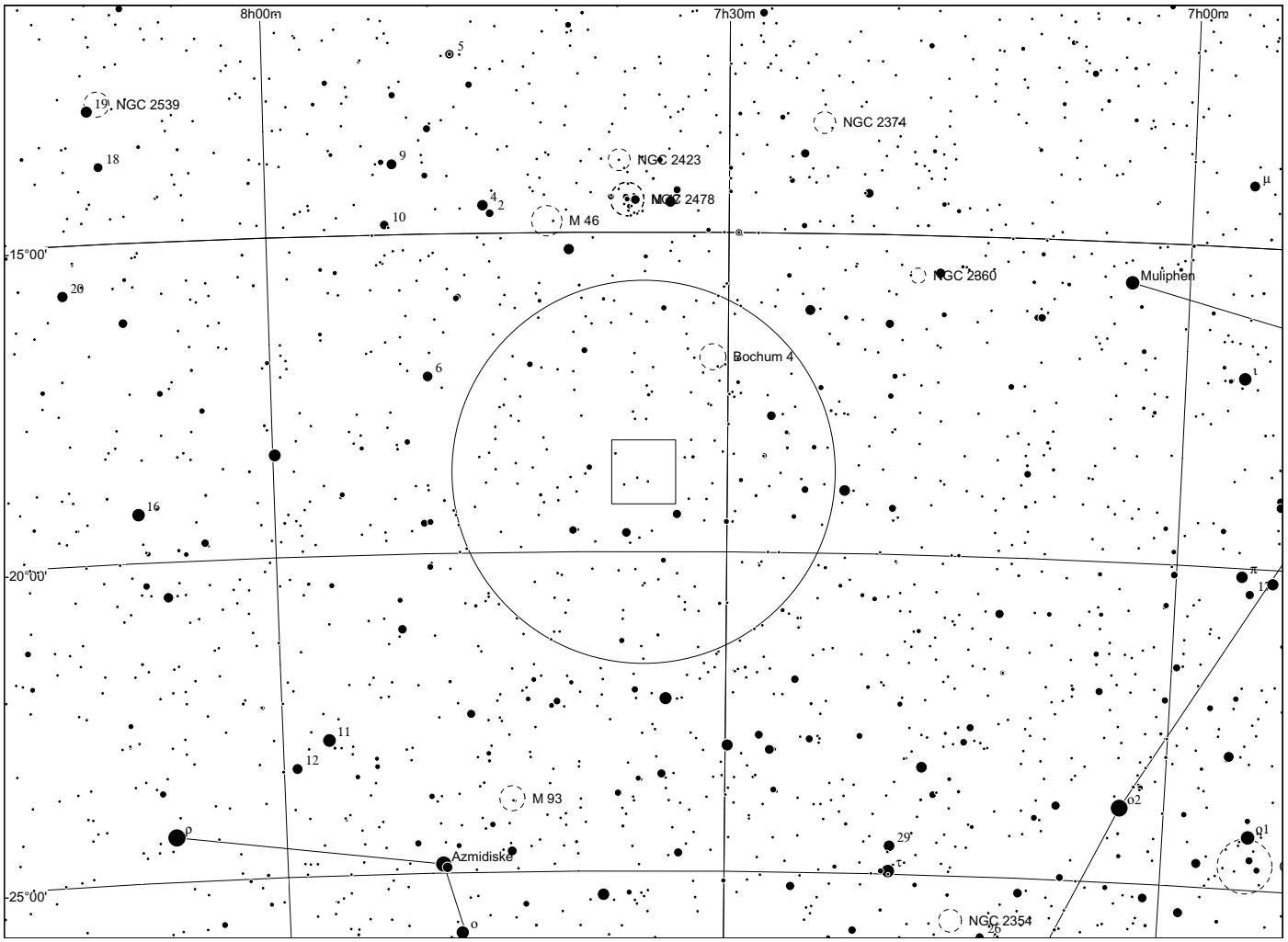
RGB Dean Salman

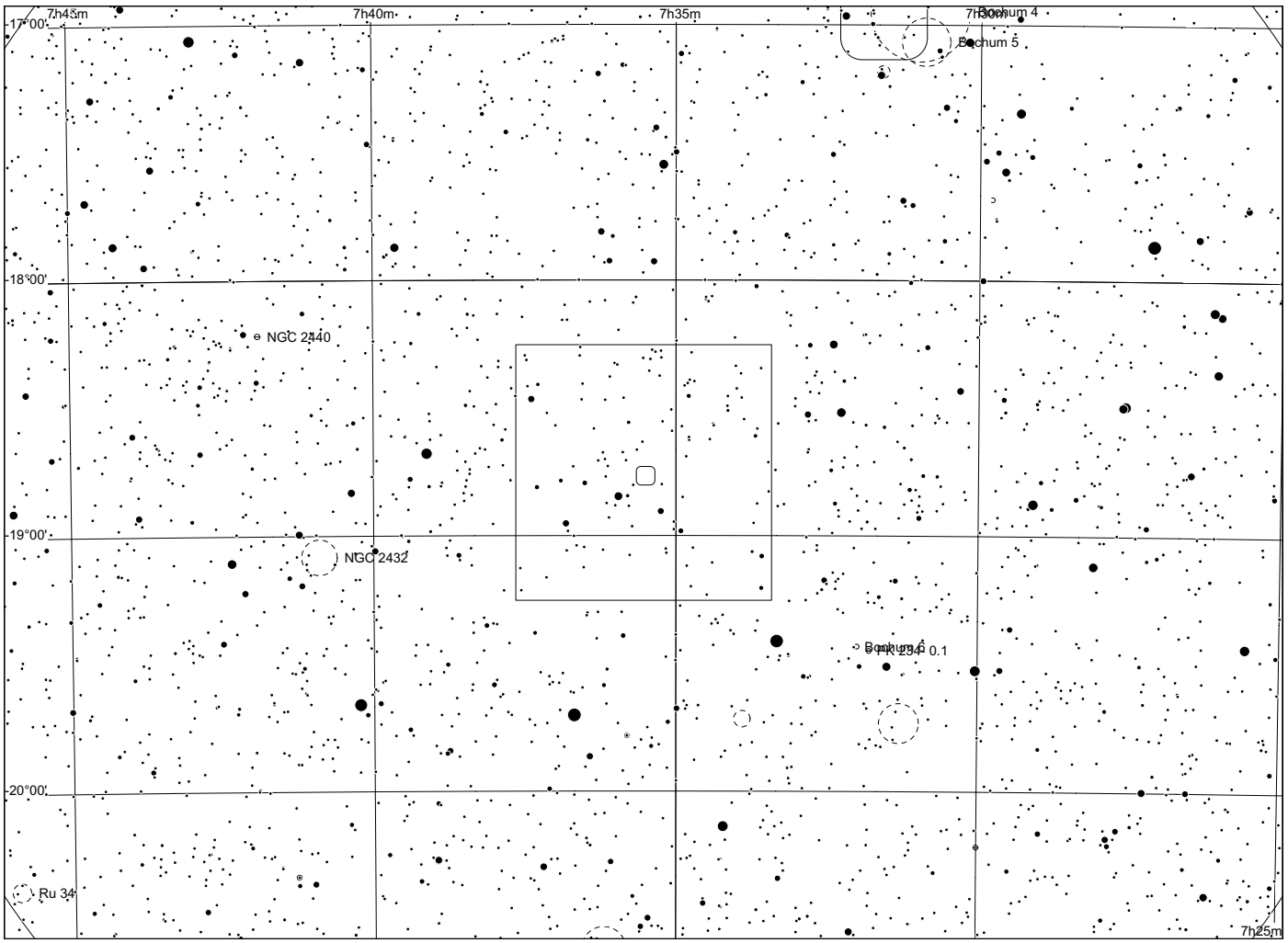
	other name	RA	dec	dia. '	F	S	B
Sh 2-307		07 35 32.0	-18 45 13	6	3	2	3

Distance: 4200 pc, Size: 7.3 pc, Source: 1995A&AS..114..557R

The exciting star for this nebula is the B0V star MFJ Sh 2-307 3 and the nebula contains the infrared cluster candidate [DBS2003] 8. It is part of the same giant molecular cloud complex that includes S299, S300, S305, S306 and S309.

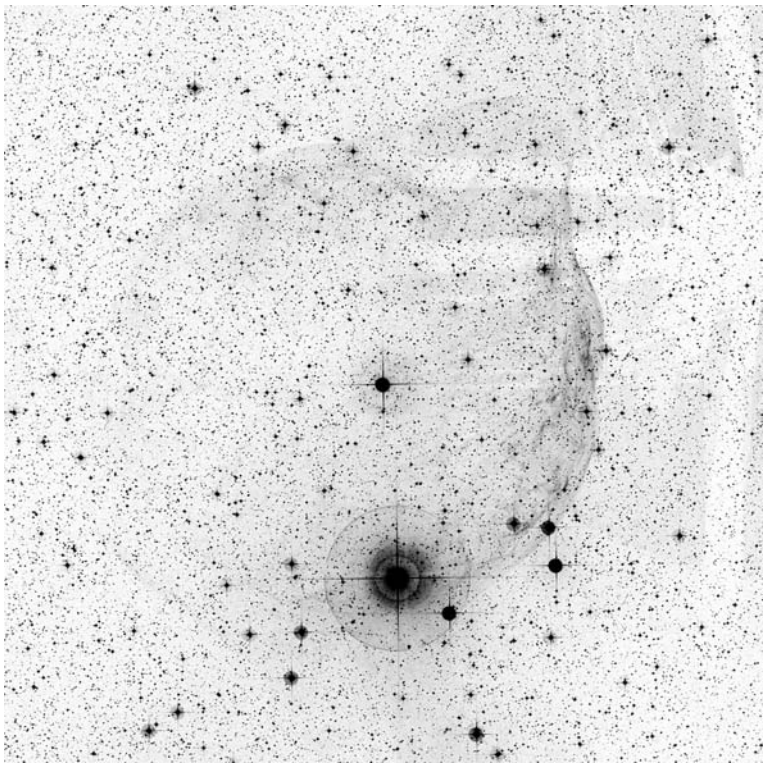
Observing notes:


8h00m
7h30m
7h00m
15°00'
20°00'
25°00'
NGC 2539
NGC 2374
NGC 2423
NGC 2478
M 46
NGC 2860
Muliphen
Bochum 4
M 93
Azmidiske
NGC 2354


7h45m
7h40m
7h35m
7h30m
17°00'
18°00'
19°00'
20°00'
Bochum 4
Bochum 5
NGC 2440
NGC 2432
Bochum 6
K 234 0.1
Ru 34
7h25m

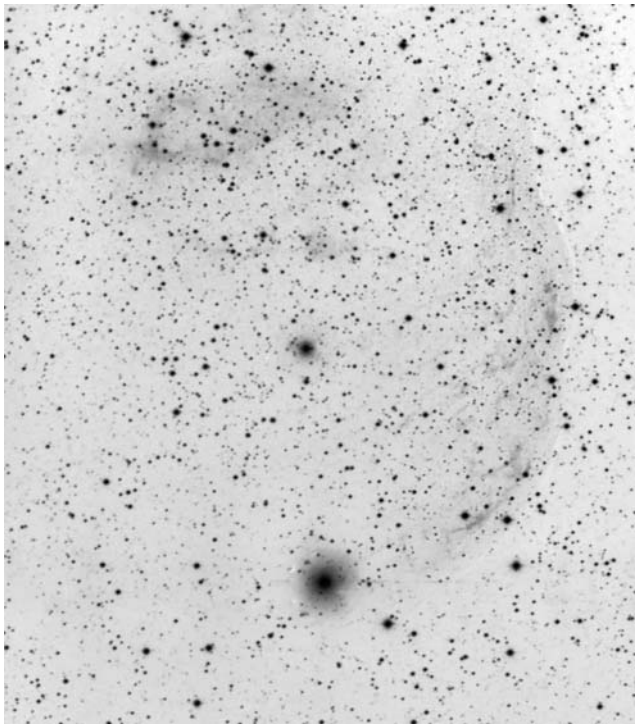
Sh 2 - 308

in Canis Major



60x60, blue





RGB Dean Salman

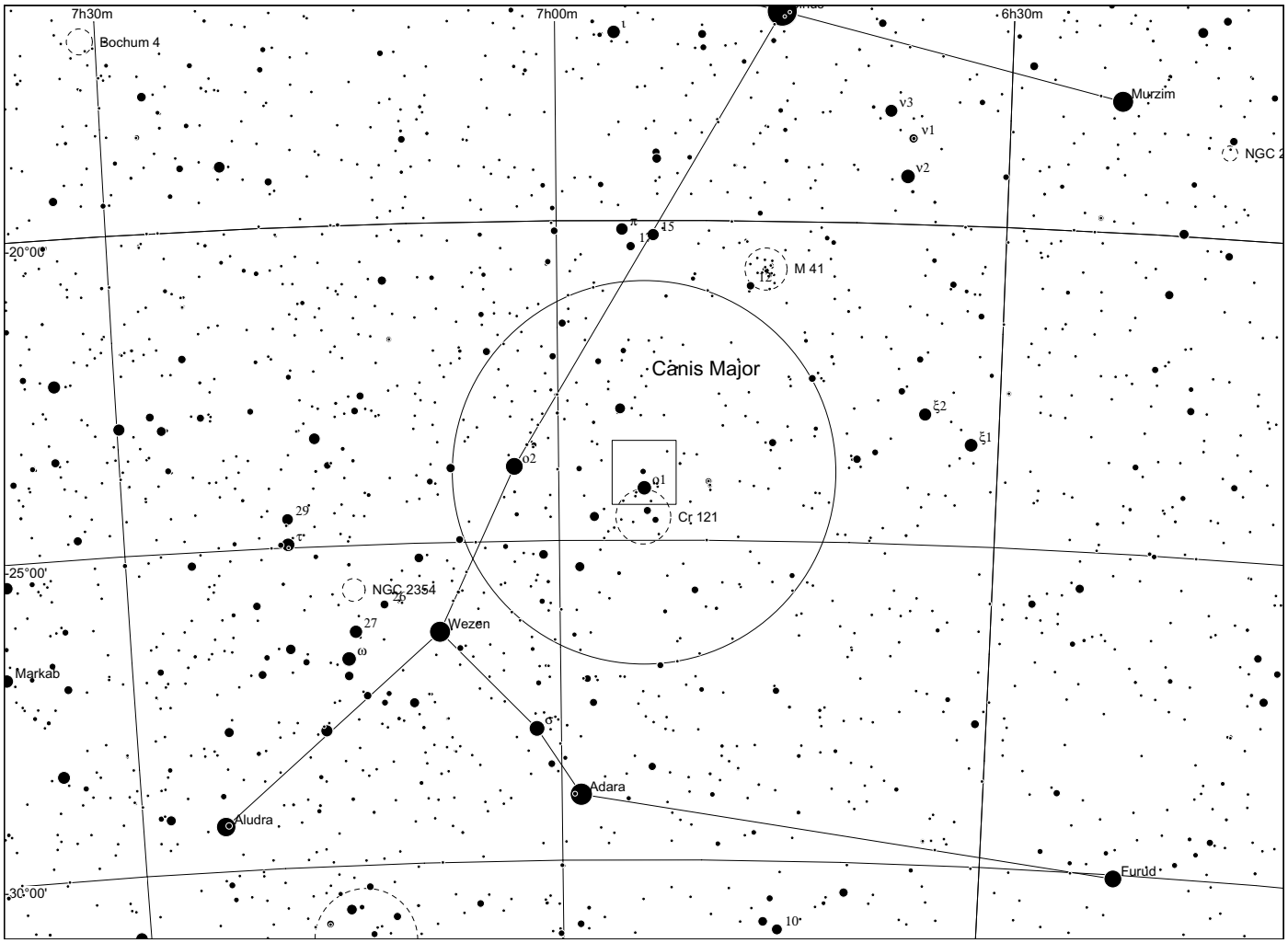
OIII

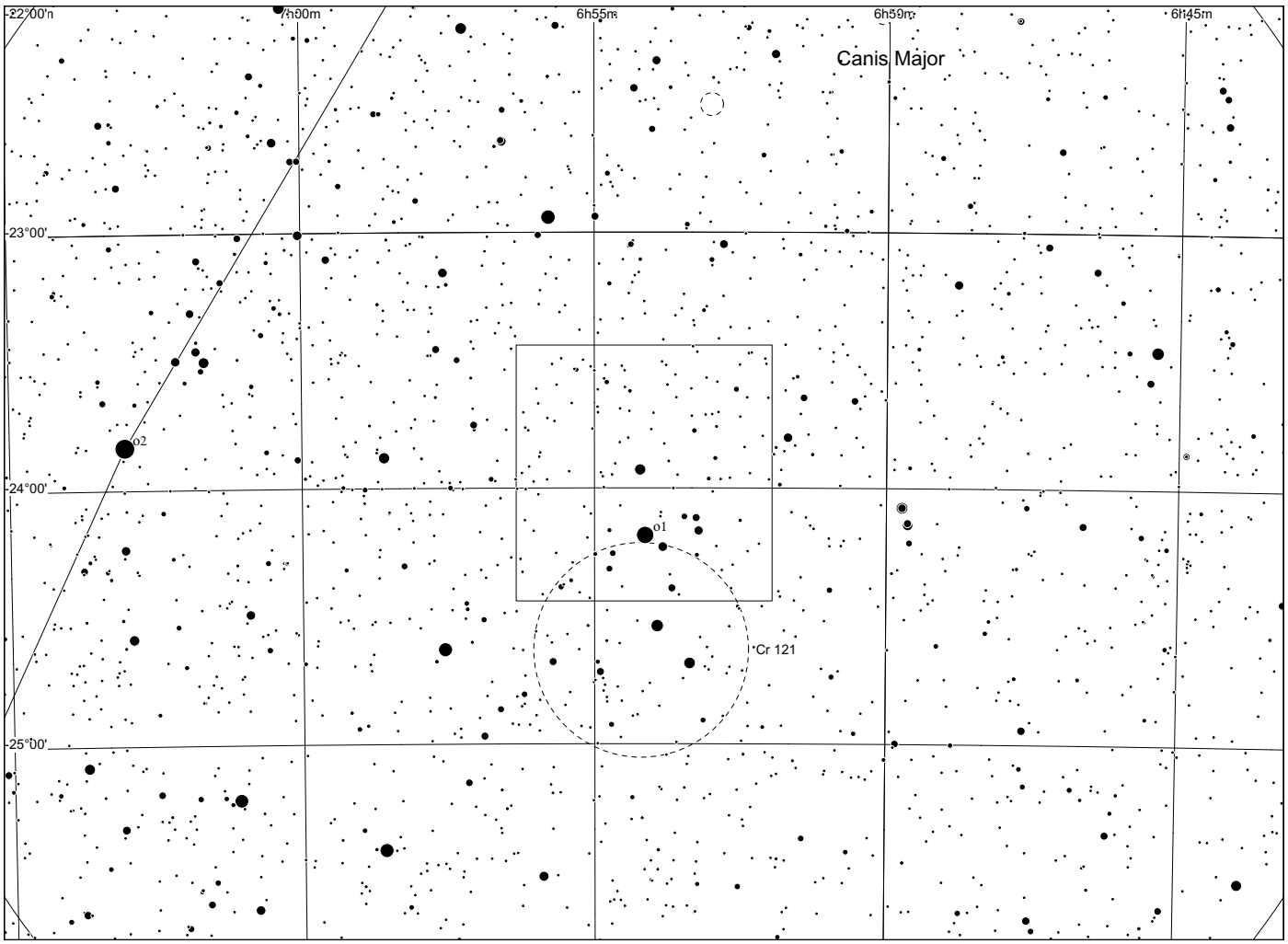
	other name	RA	dec	dia. '	F	S	B
Sh 2-308		06 54 08.9	-23 56 31	35	3	3	2

Distance: 575 pc, Size: 5.9 pc, Source: 2003MNRAS.346.1143B

This ring nebula surrounds the Wolf-Rayet star WR 6.

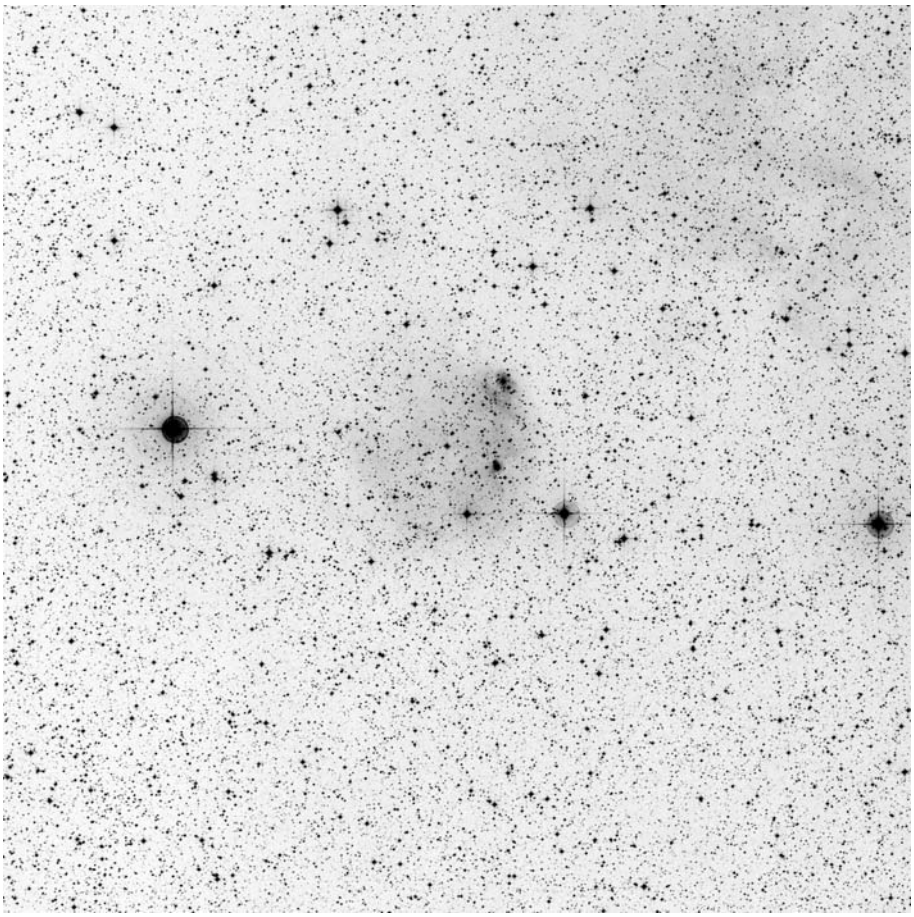
Observing notes:


7h30m
7h00m
6h30m
Bochum 4
Murzim
ν3
ν1
ν2
NGC 2
π
15
-20°00'
M 41
Canis Major
ξ2
ξ1
ο2
ο1
Cr 121
29
-25°00'
NGC 2354
27
Wezen
ω
Markab
σ
Adara
Aludra
Furud
-30°00'
10

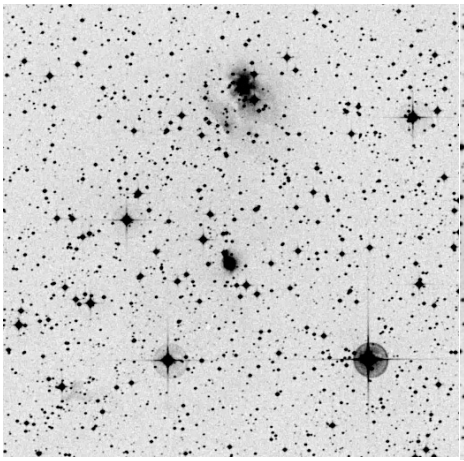

-22°00'
7h00m
6h55m
6h50m
6h45m
Canis Major
-23°00'
ο2
-24°00'
ο1
Cr 121
-25°00'

Sh 2 - 309

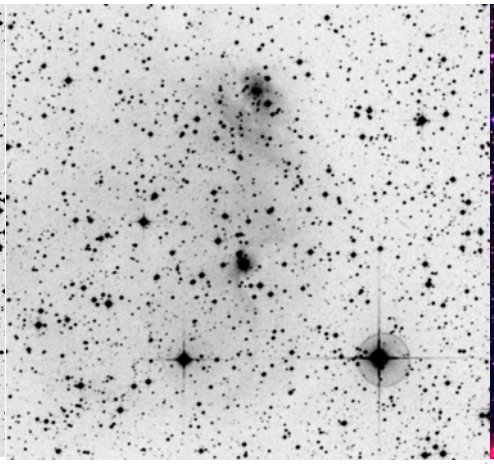
in Puppis



60x60, red



POSS blue



POSS red



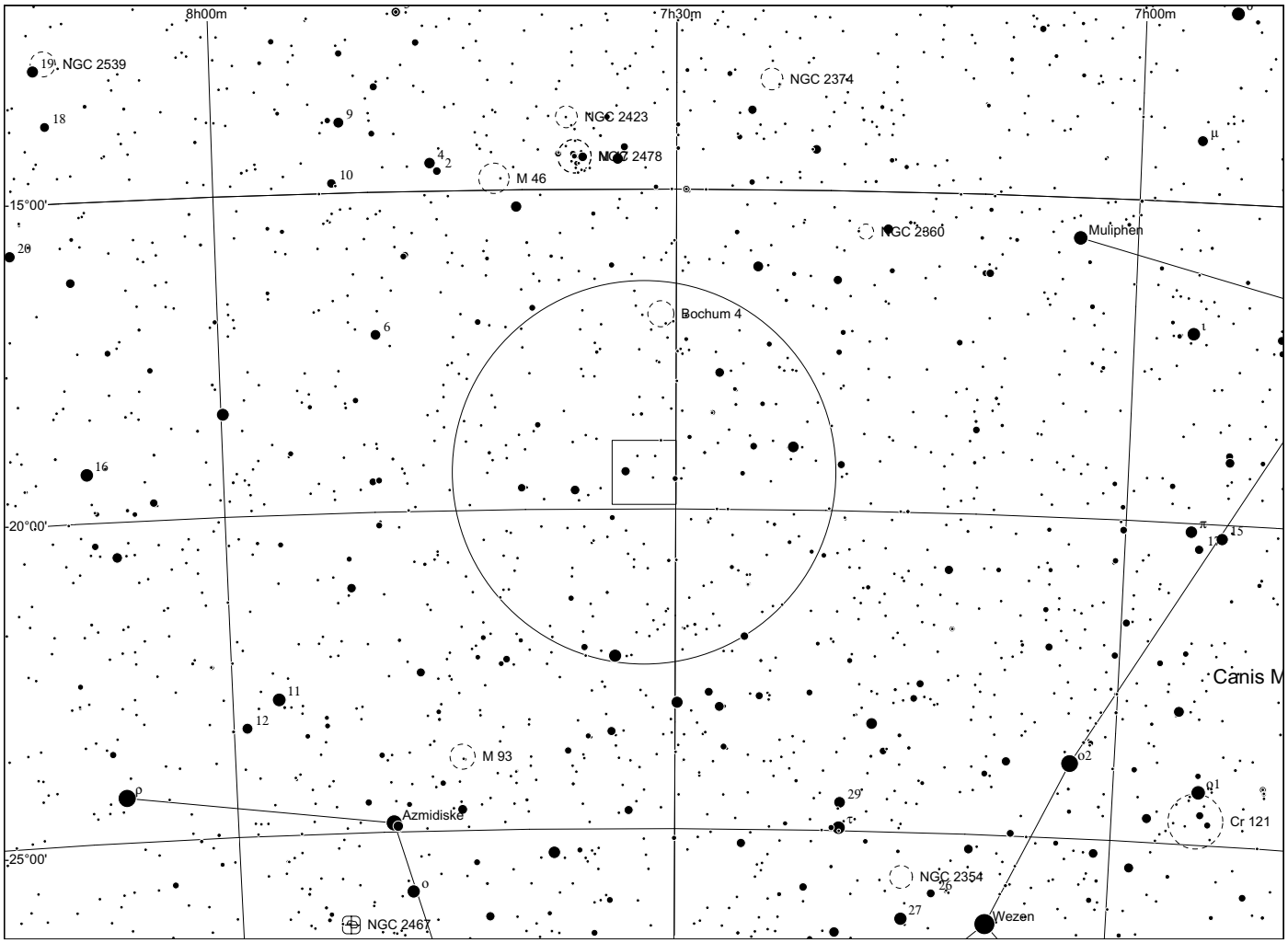
composite

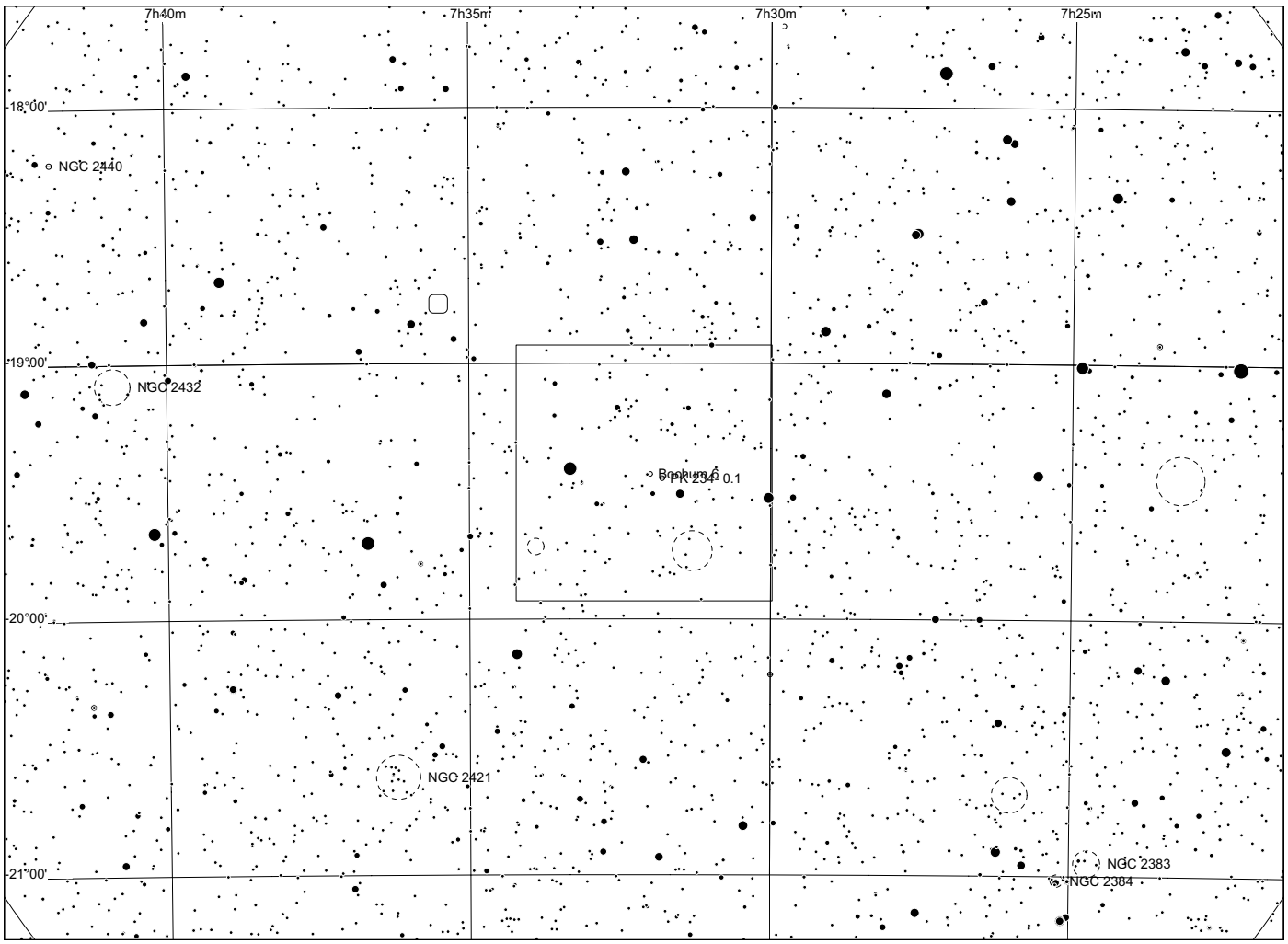
	other name	RA	dec	dia. '	F	S	B
Sh 2-309		07 32 06.1	-19 25 47	12	2	1	2

Distance: 4200 pc, Size: 14.7 pc, Source: 1995A&AS..114..557R

This HII region is part of the GS234-02 star forming supershell, at 4000 pc from the Sun.

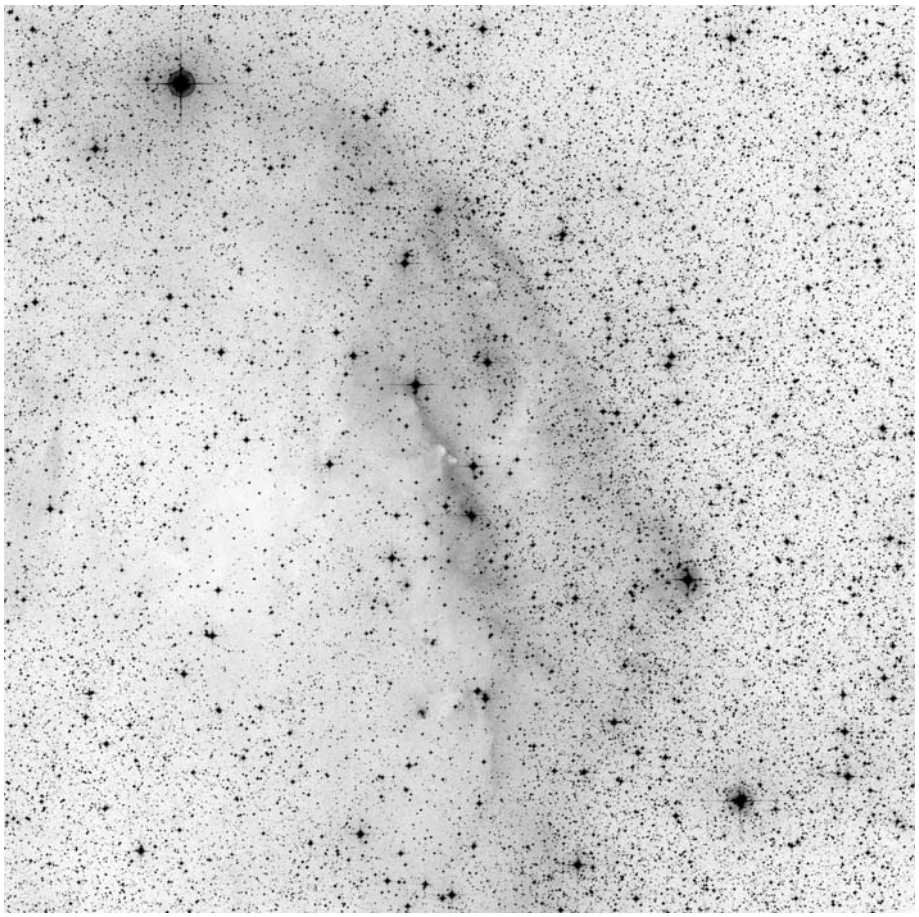
Observing notes:


8h00m
7h30m
7h00m
NGC 2539
NGC 2374
NGC 2423
NGC 2478
M 46
15°00'
NGC 2860
Muliphen
Bochum 4
20°00'
Canis M
M 93
Azmidiske
Cr 121
25°00'
NGC 2354
NGC 2467
Wezen

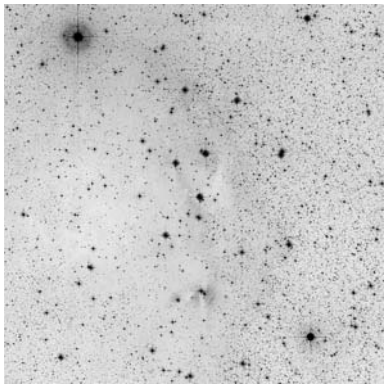

7h40m
7h35m
7h30m
7h25m
18°00'
NGC 2440
19°00'
NGC 2432
Bochum 6
PK 234 0.1
20°00'
NGC 2421
21°00'
NGC 2383
NGC 2384

Sh 2 - 310

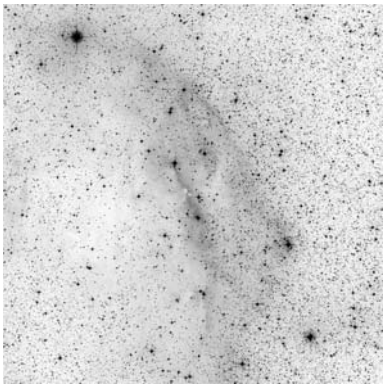
in Canis Major



60x60, red



POSS blue



POSS red



composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-310	image centered at	07 24	-25 35 30	480	3	2	2

Distance: 1500 pc, Size: 209.8 pc, Source: 1982ApJS...49..183B

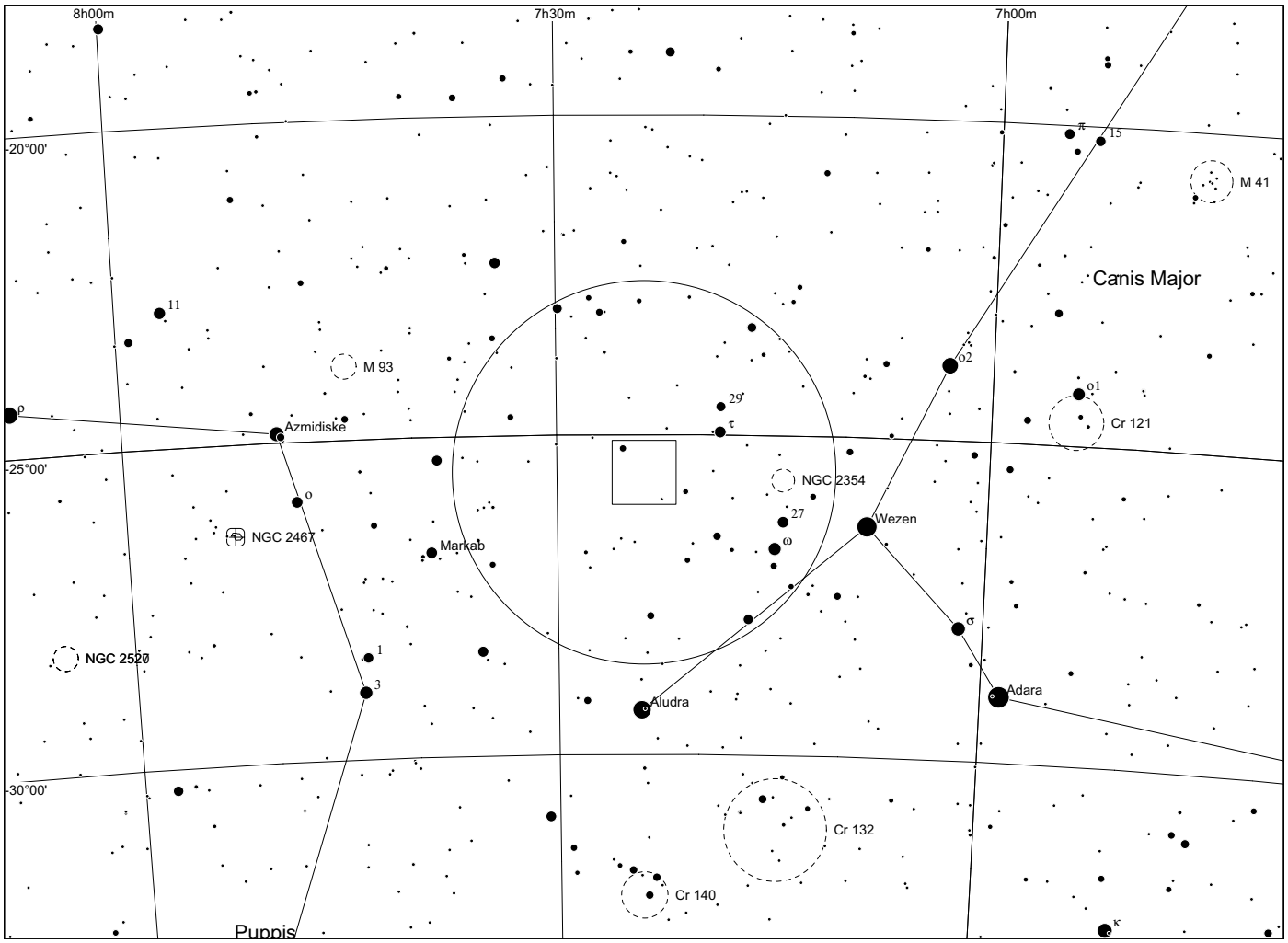
This vast nebula, one of the largest single HII regions known in the Milky Way, is ionised by two multiple star systems (Tau Canis Majoris and UW Canis Majoris) each made up of several O-class stars. This image shows only the brightest part of the enormous Sh 2-310 complex. The intense radiation from the Tau Canis Majoris and UW Canis Majoris star systems has created a cavity in the molecular clouds at the centre of Sh 2-310, which is located beyond the upper right of the image.

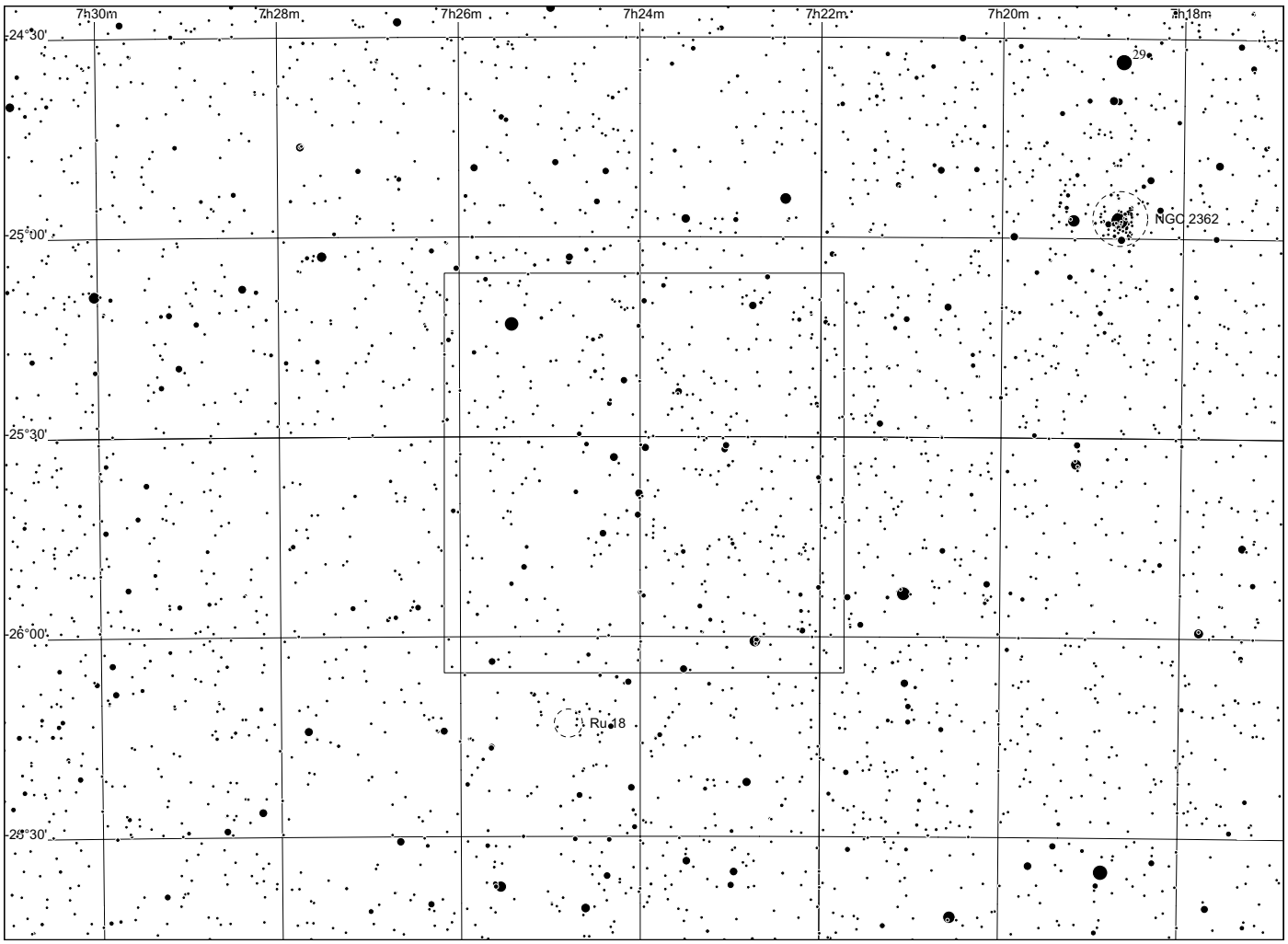
At least one scientific paper notes the "arrow-shaped bright rim" shown in this image. Perhaps Sh 2-310 should be known as the Arrowhead nebula?

The extremely luminous red supergiant VY Canis Majoris is located near the bright rim. (This incredible star is green in this false colour image because of the infrared radiation emitted by the large dust cloud it ejects.)

Tau Canis Majoris, which may be one of the brightest stars in the Milky Way, is sometimes called the "Mexican jumping bean star", allegedly because of the way it moves around in the eyepiece of amateur telescopes.

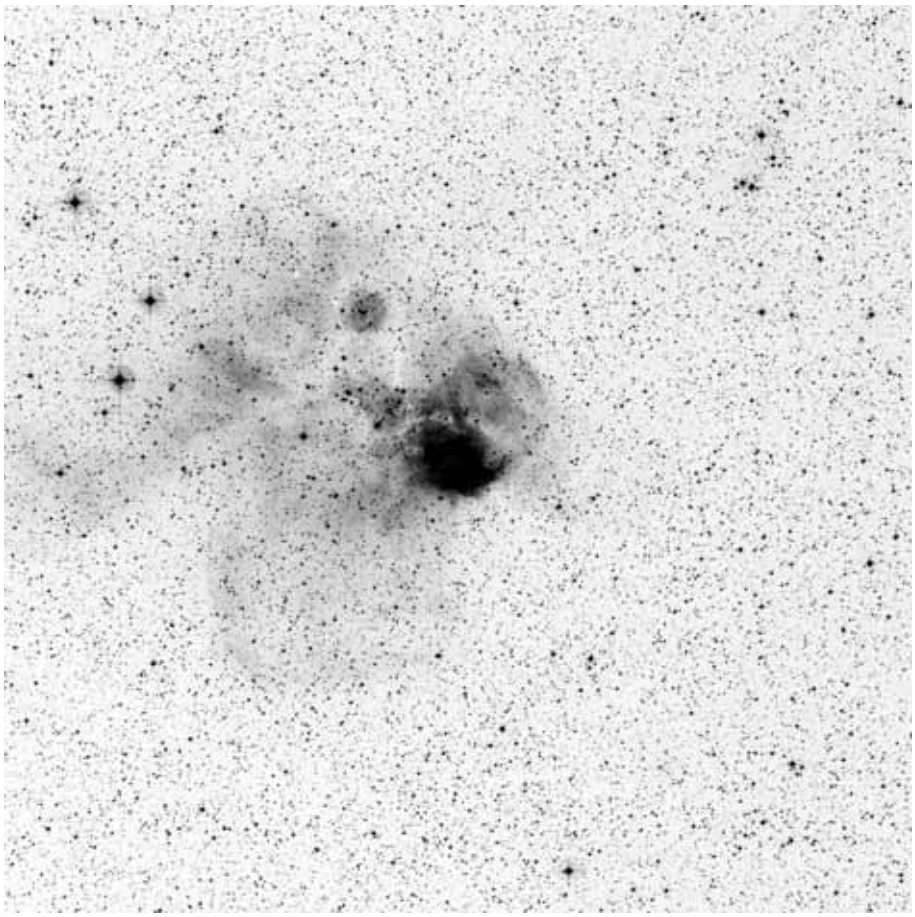
Observing notes:


8h00m
7h30m
7h00m
-20°00'
-25°00'
-30°00'
M 41
Canis Major
11
M 93
ρ
Azmidiske
o
NGC 2467
Markab
NGC 2354
29
τ
27
ω
Wezen
σ
o2
o1
Cr 121
NGC 2527
1
3
Aludra
Adara
Cr 132
Cr 140
Puppis
π
15
κ

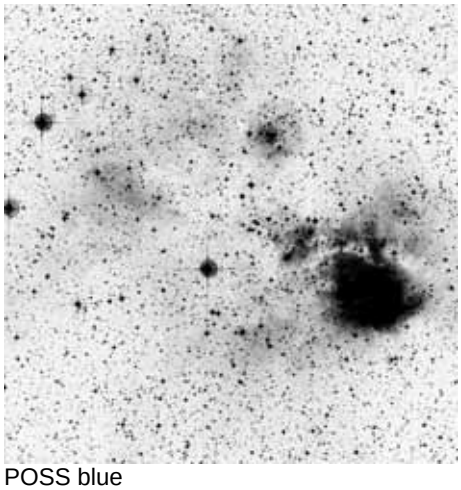

7h30m
7h28m
7h26m
7h24m
7h22m
7h20m
7h18m
-24°30'
-25°00'
-25°30'
-26°00'
-26°30'
29
NGC 2362
Ru 18

Sh 2 - 311

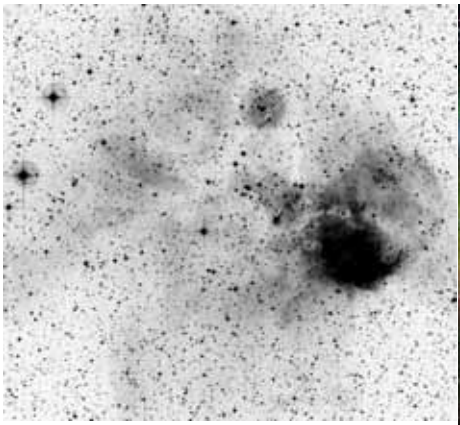
in Puppis



60x60, red



POSS blue



POSS red



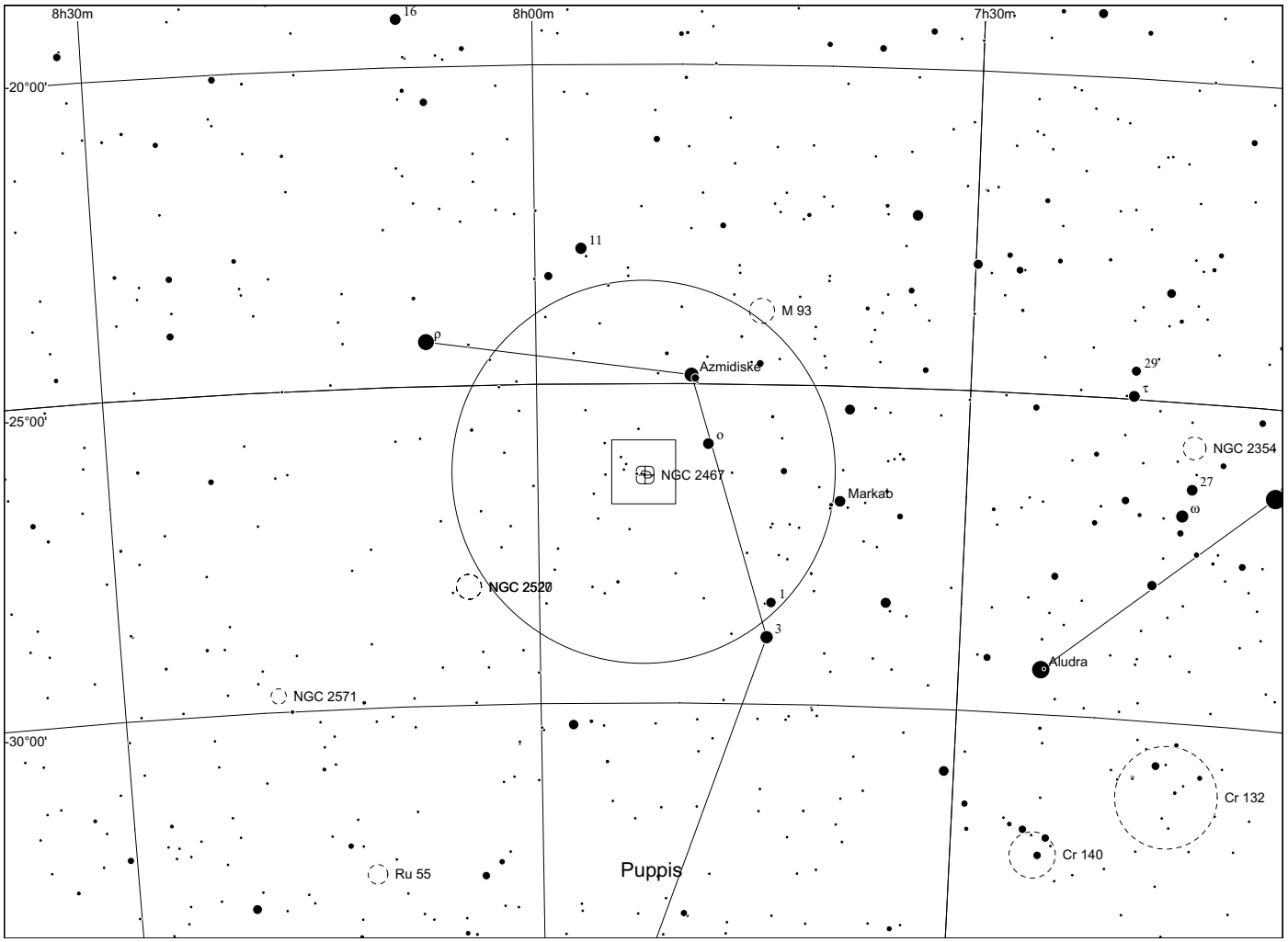
narrowband

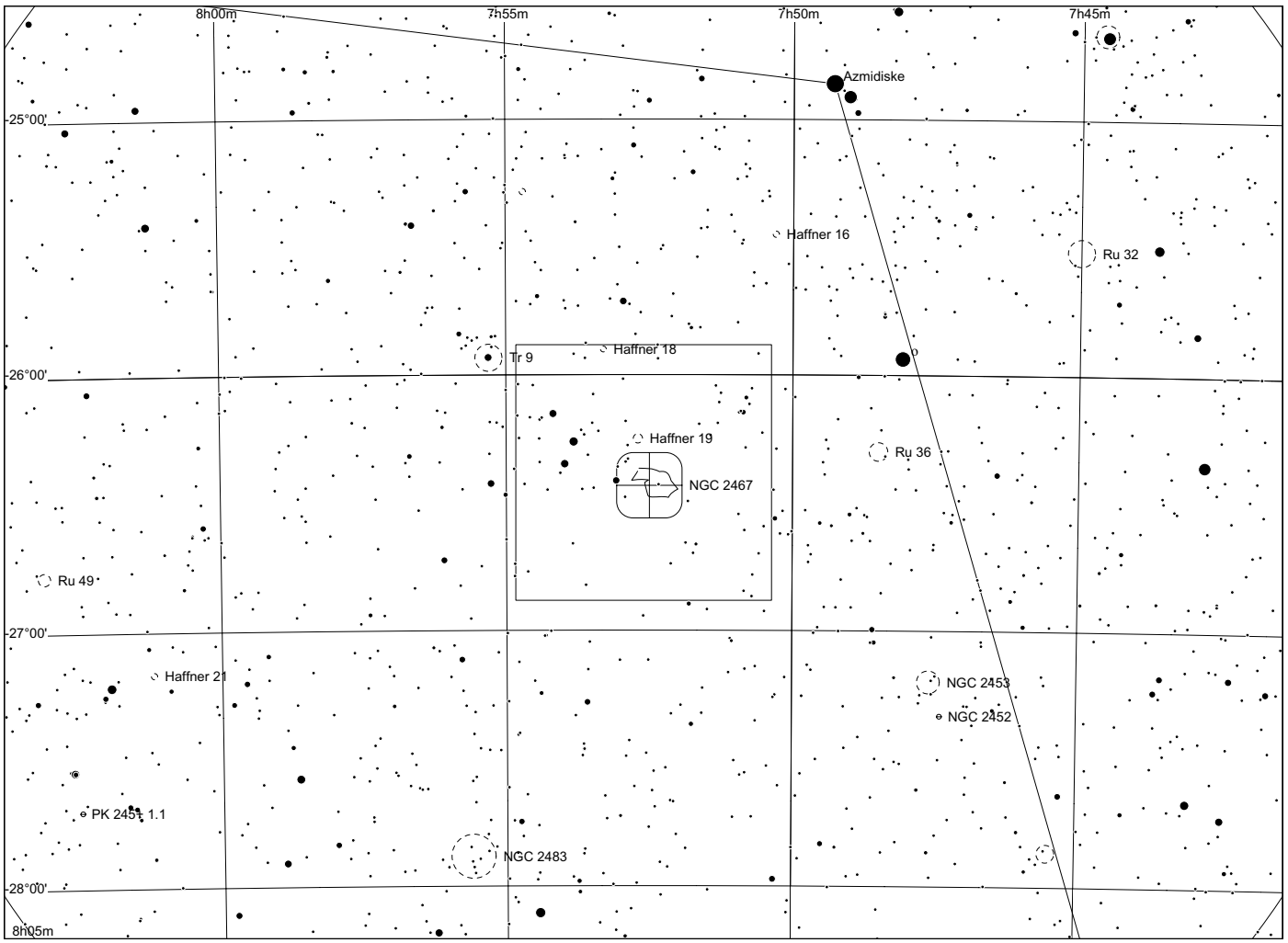
	other name	RA	dec	dia. '	F	S	B
Sh 2-311	NGC2467	07 52 20.4	-26 26 28	45	3	2	3

Distance: 4850 pc, Size: 10.6 pc, Source: 2003A&A...397..213P

NGC 2467, sometimes called the Mandrill nebula, is ionised by the O6 star HD 64315 and includes the star clusters Haffner 18ab and Haffner 19. The bright foreground star on the far left of the image is the B8 IV subgiant HD 64455.

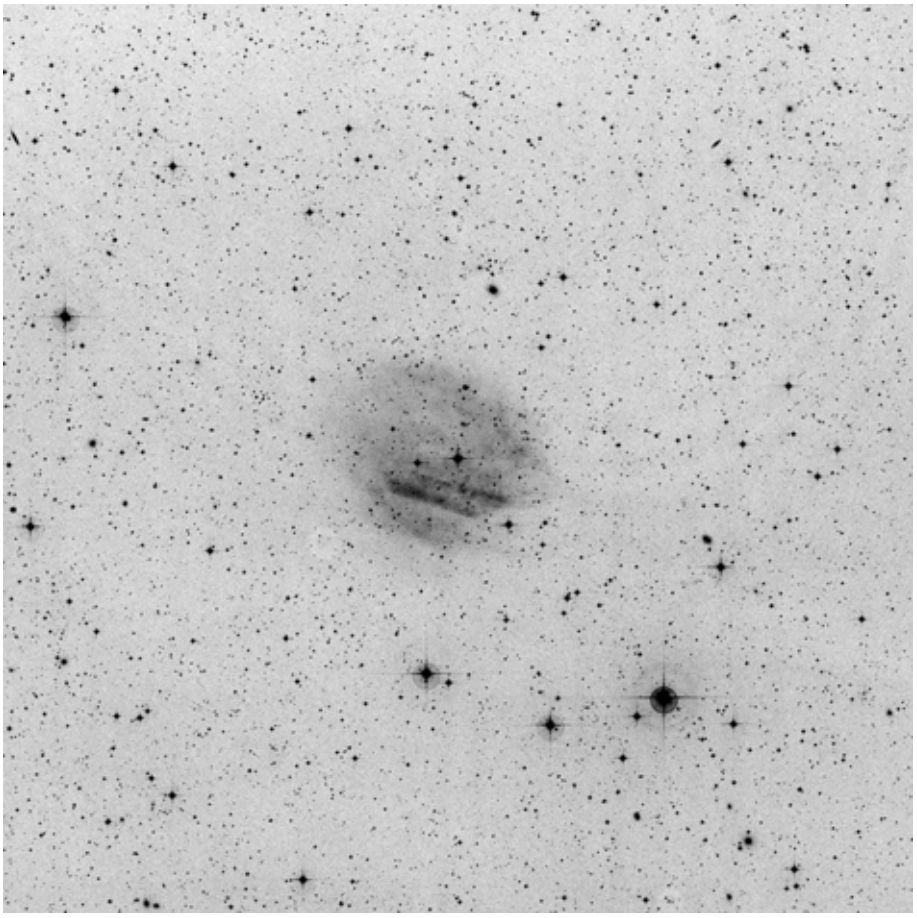
Observing notes:


8h30m
8h00m
7h30m
-20°00'
-25°00'
-30°00'
16
11
M 93
ρ
Azmidiske
29
τ
ο
NGC 2467
Markab
NGC 2354
27
ω
NGC 2520
1
3
Aludra
NGC 2571
Cr 132
Cr 140
Ru 55
Puppis

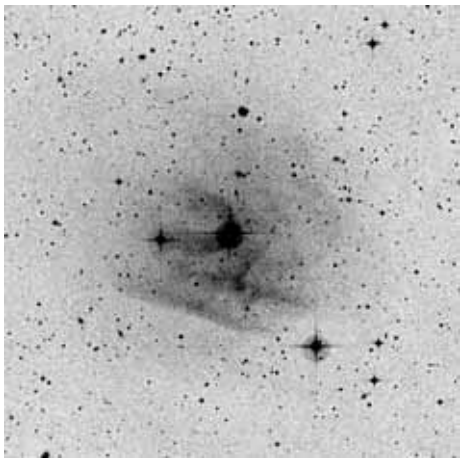

8h00m
7h55m
7h50m
7h45m
Azmidiske
-25°00'
Haffner 16
Ru 32
Tr 9
Haffner 18
-26°00'
ο
Haffner 19
NGC 2467
Ru 36
Ru 49
-27°00'
Haffner 21
NGC 2453
NGC 2452
PK 245+1.1
NGC 2483
-28°00'
8h05m

Sh 2 - 313

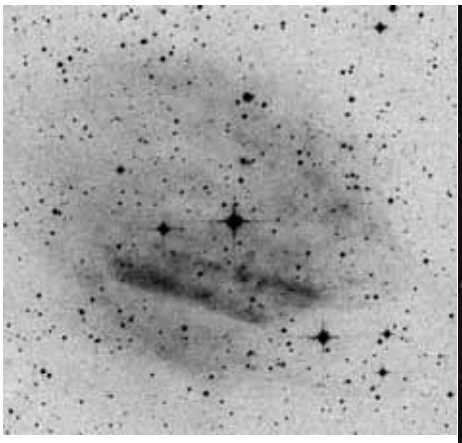
in Hydra



60x60, red



POSS blue



POSS red

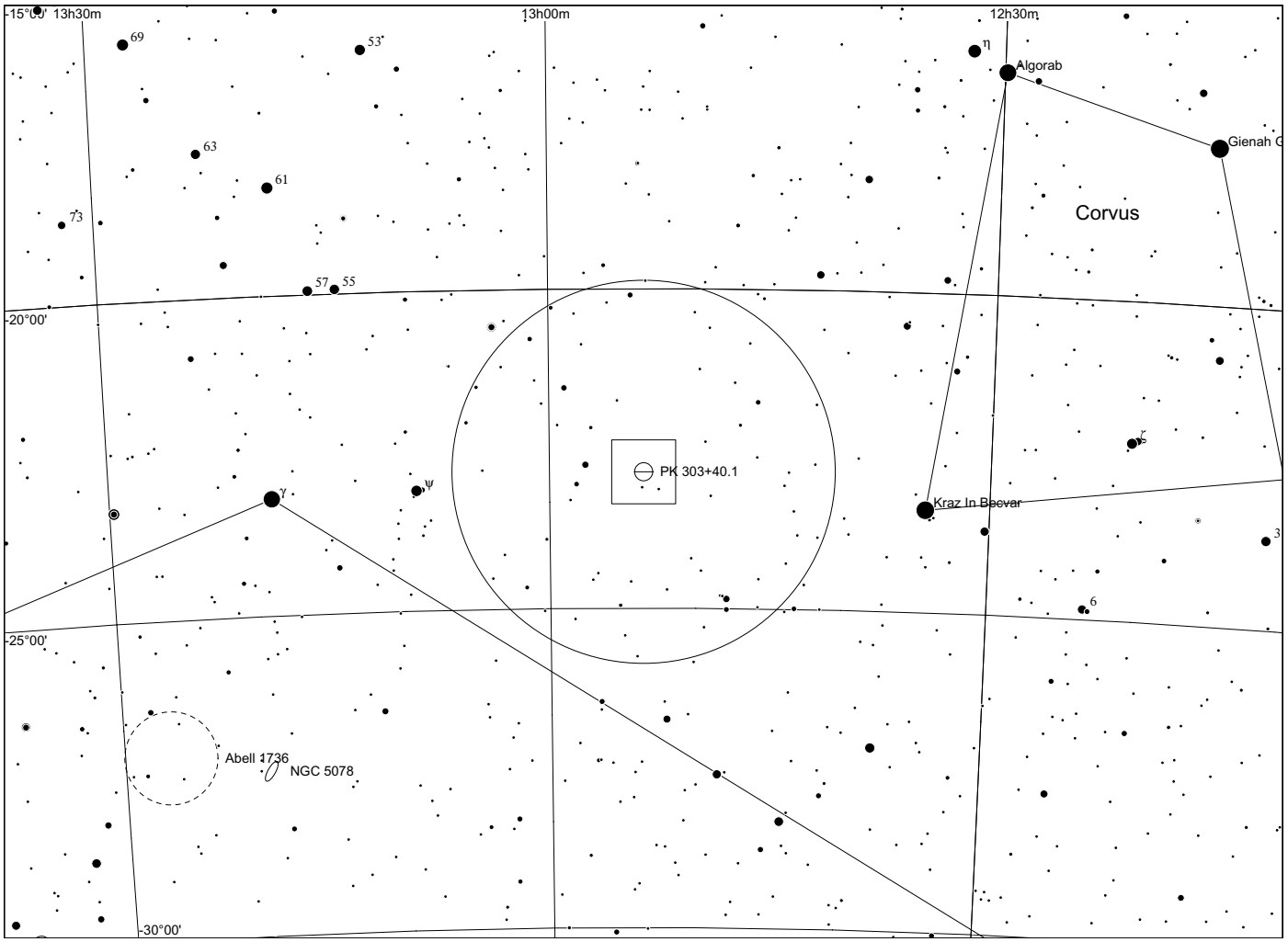


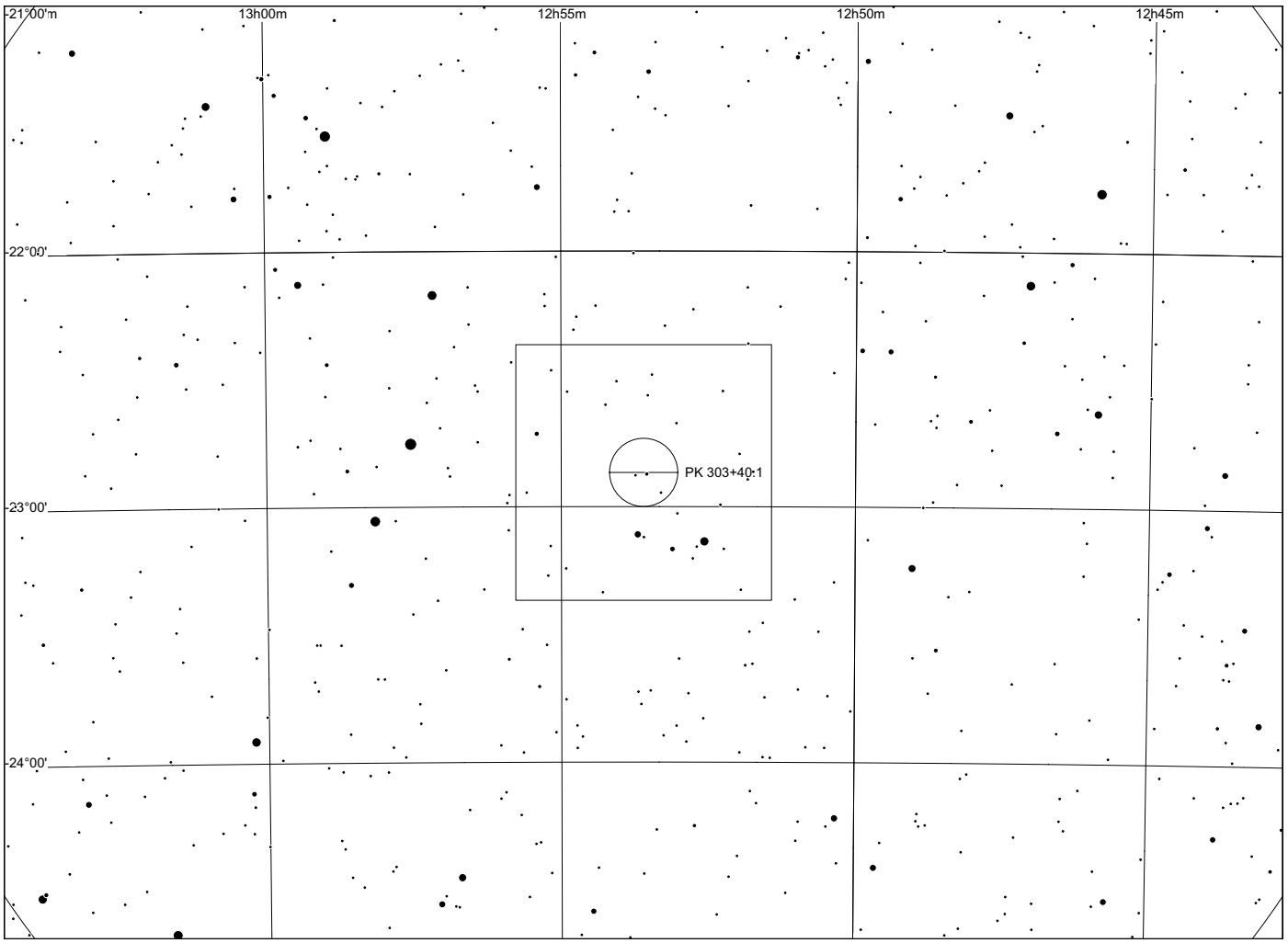
composite

	other name	RA	dec	dia. '	F	S	B
Sh 2-313	Abell 35	12 53 31.0	-22 51 35	12	1	2	2

This is the planetary nebula Abell 35. Like Sh 2-52 (Abell 65), it has a highly unusual binary central star. It probably lies at a distance of 160 pc.

Observing notes:


-15°00'
13h30m
13h00m
12h30m
69
53
η
Algorab
Gienah C
63
61
73
Corvus
57
55
-20°00'
PK 303+40.1
γ
ψ
Kraz In Beevar
6
-25°00'
Abell 1736
NGC 5078
-30°00'


-21°00'
13h00m
12h55m
12h50m
12h45m
-22°00'
PK 303+40.1
-23°00'
-24°00'