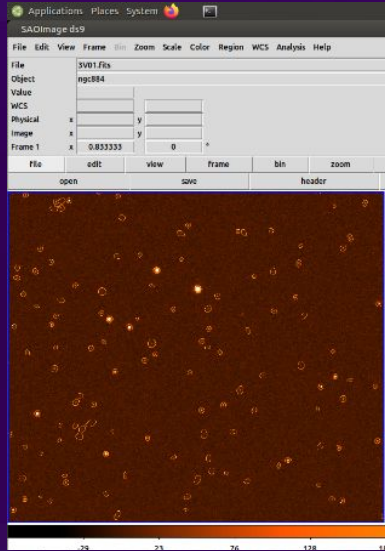


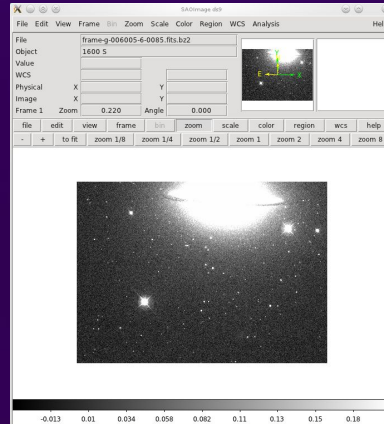
Caratterizzazione di un ammasso aperto

Ferrazzo Riccardo - Mainardis Zeno - Panareo Gioacchino

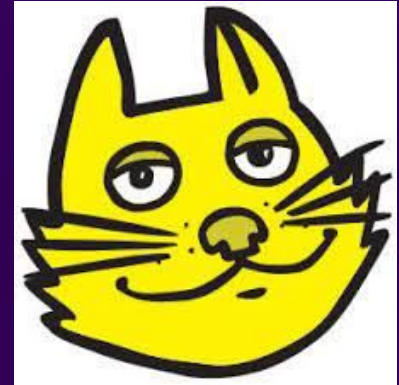
Software



Source Extractor



SAO ds9

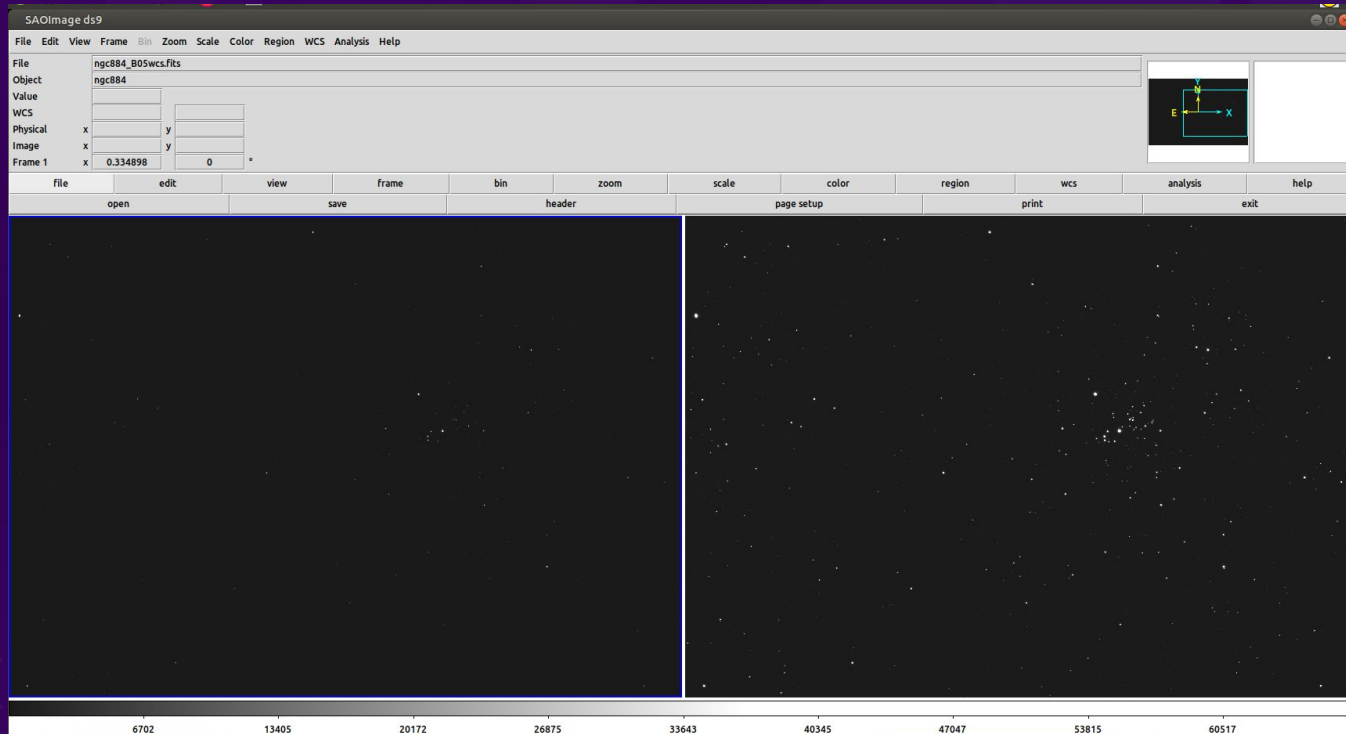


TOPCAT

Doppio ammasso di Perseo



Tempo di Esposizione



Parametri Source Extractor

	DETECT_MINAREA	DETECT_THRESH	DEBLEND_MINCONT
B05	10	1.5	0.0001
B60	5	1.0	0.00001
V01	10	1.2	0.00001
V30	10	1.4	0.00001
R01	10	1.2	0.00001
R30	10	1.4	0.000001

Analisi immagini

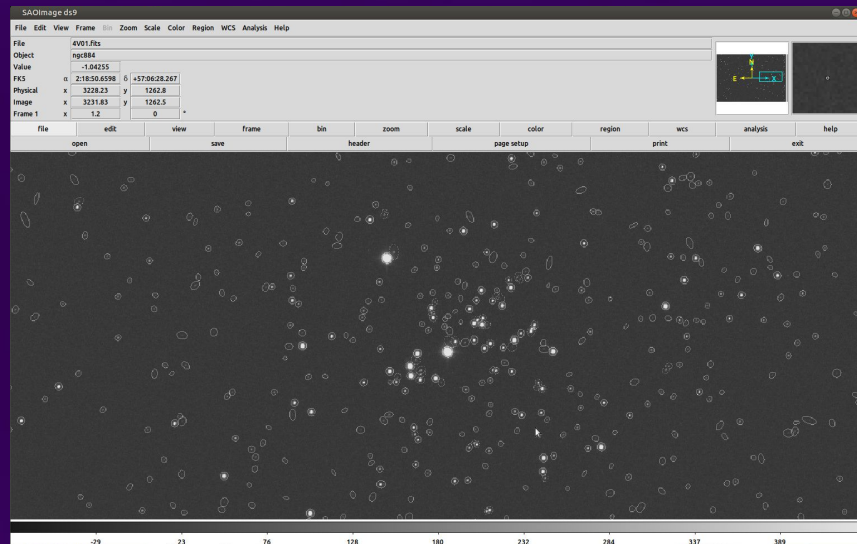
TOPCAT(55): Table Browser

Window Rows Help

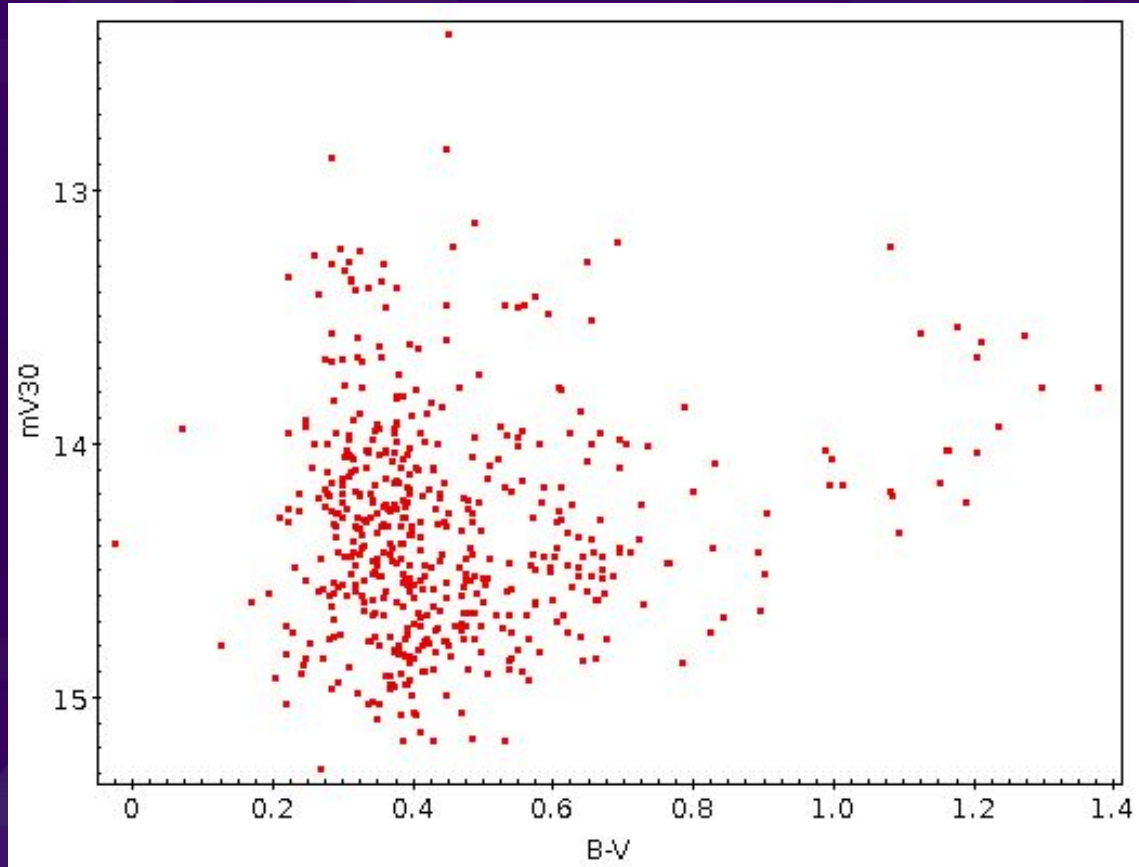
Table Browser for 55: 4testV01.cat

	NUMBER	FLUX_BEST	X_IMAGE	Y_IMAGE	ALPHA_J20...	DELTA_J20...	FWHM_IMA...	ELLIPTICITY
1	1	71778.	1927.84	36.5014	35.28872	56.81678	2.29	0.028
2	2	6317.4	3830.96	21.7807	34.45575	56.80859	14.05	0.492
3	3	957.06	1154.32	16.3187	35.62736	56.81226	2.18	0.219
4	4	1115.33	2986.12	12.9552	34.82554	56.80923	4.15	0.224
5	5	572.453	3733.2	10.9011	34.49861	56.80636	1.75	0.044
6	6	489.208	3046.39	9.8853	34.79918	56.80834	2.35	0.147
7	7	330.974	1059.23	8.6159	35.66898	56.81039	3.58	0.193
8	8	811.25	408.285	7.5397	35.9539	56.80959	2.03	0.15
9	9	268.725	1438.95	7.8996	35.50277	56.81024	3.65	0.175
10	10	946.153	3829.73	6.5067	34.4564	56.80494	5.34	0.301
11	11	790.572	2421.38	5.5858	35.07275	56.8087	2.54	0.093
12	12	219.687	3807.4	5.5533	34.46618	56.8048	2.19	0.154
13	13	554.547	2806.16	4.7663	34.90434	56.80772	7.04	0.72
14	14	222.682	1690.5	5.7546	35.39266	56.80961	5.	0.306
15	15	1152.9	3844.86	3.4785	34.4498	56.80415	6.39	0.329
16	16	514.587	2931.53	2.7211	34.84949	56.80692	3.72	0.201
17	17	219.478	638.755	2.5128	35.85301	56.80865	3.04	0.217
18	18	230.445	1474.96	19.7523	35.487	56.81307	4.6	0.38
19	19	4444.67	2770.07	35.0739	34.92001	56.81506	3.98	0.333

Total: 3,566 Visible: 3,566 Selected: 0



Aumento THRESH



Magnitudine

$$m = m_0 - 2.5 \times \log \left(\frac{FLUX}{T_{exp}} \right) - k \times airmass$$

Errore: magnitudine come espressione

TOPCAT(57): Table Browser

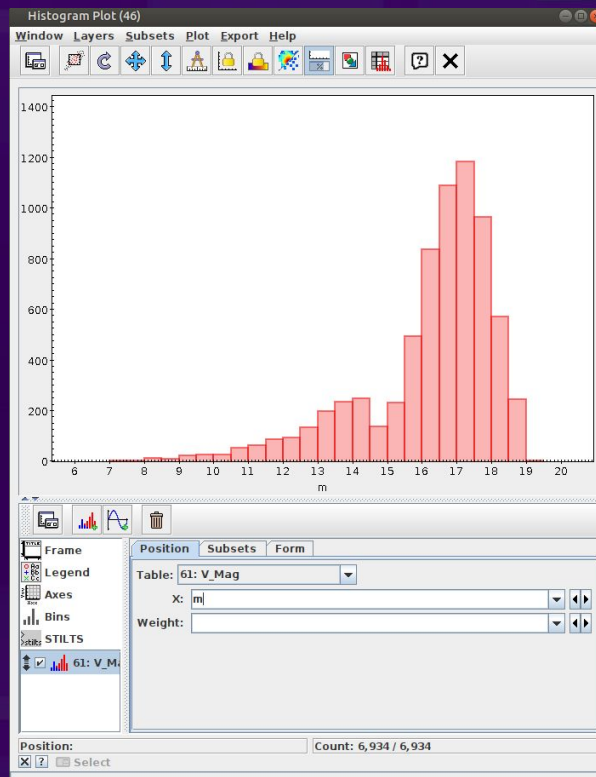
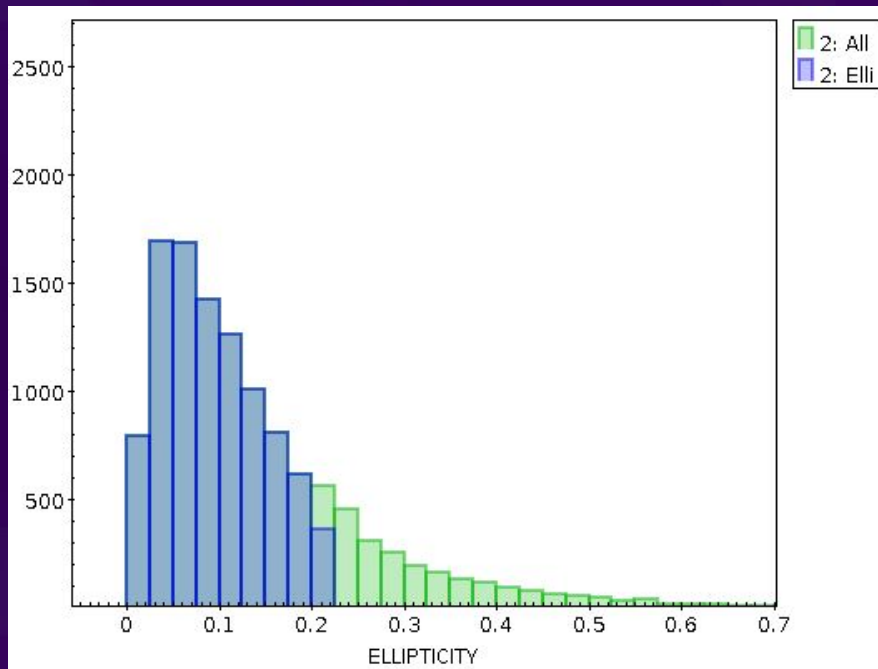
Window Rows Help

Table Browser for 57: simbad_NGC884_BV.txt

	TYPED_ID	MAIN_ID	OTYPE_S	RA_d	DEC_d	FLUX_B	FLUX_V
1	ngc884	HD 14476	Star	35.57066	57.27193	9.13	8.1914
2	ngc884	HD 14520	Star	35.68136	57.0868	9.47	9.232
3	ngc884	BD+56 553	Star	35.28196	57.16679	9.703	9.502
4	ngc884	BD+56 592	Star	35.73627	57.01339	9.951	9.74
5	ngc884	BD+56 561	Star	35.39882	57.29646	10.137	9.95
6	ngc884	BD+56 599	Star	35.89358	57.21776	10.35	10.09
7	ngc884	BD+56 601	Star	35.98928	57.23725	10.67	10.27
8	ngc884	BD+56 557A	Star	35.32098	57.14518	10.68	10.38
9	ngc884	BD+56 557B	Star	35.32078	57.14519	10.83	10.41
10	ngc884	TYC 3694-1371-1	Star	35.75499	57.29556	10.99	10.49
11	ngc884	NGC 884 2895	Star	35.98866	57.20618	11.22	10.57
12	ngc884	NGC 884 1816	Star	35.24547	57.01218	10.99	10.593
13	ngc884	NGC 884 1983	Star	35.35794	57.22111	10.874	10.609
14	ngc884	NGC 884 2112	Star	35.44124	56.96577	10.67	10.6207
15	ngc884	NGC 884 1903	Star	35.30477	57.14155	10.83	10.69
16	ngc884	LS V+56 34	Star	35.39218	56.91318	10.89	10.6961
17	ngc884	NGC 884 2485	Star	35.64951	57.0287	10.9	10.6982
18	ngc884	BD+56 581	Star	35.58776	57.18138	10.72	10.712
19	ngc884	NGC 884 2255	Star	35.51627	57.15385	10.97	10.7125
20	ngc884	EM* MWC 448A	Star	35.85385	57.31763	11.52	10.75
21	ngc884	TYC 3694-2144-1	Star	35.6385	57.04158	10.91	10.76
22	ngc884	NGC 884 2628	Star	35.75345	57.13701	11.185	10.8111

Total: 943 Visible: 943 Selected: 0

Filtraggio: EL e FWHM



Errore: filtraggio dopo l'unione

Unione di immagini di stessa banda

Match & Concatenate

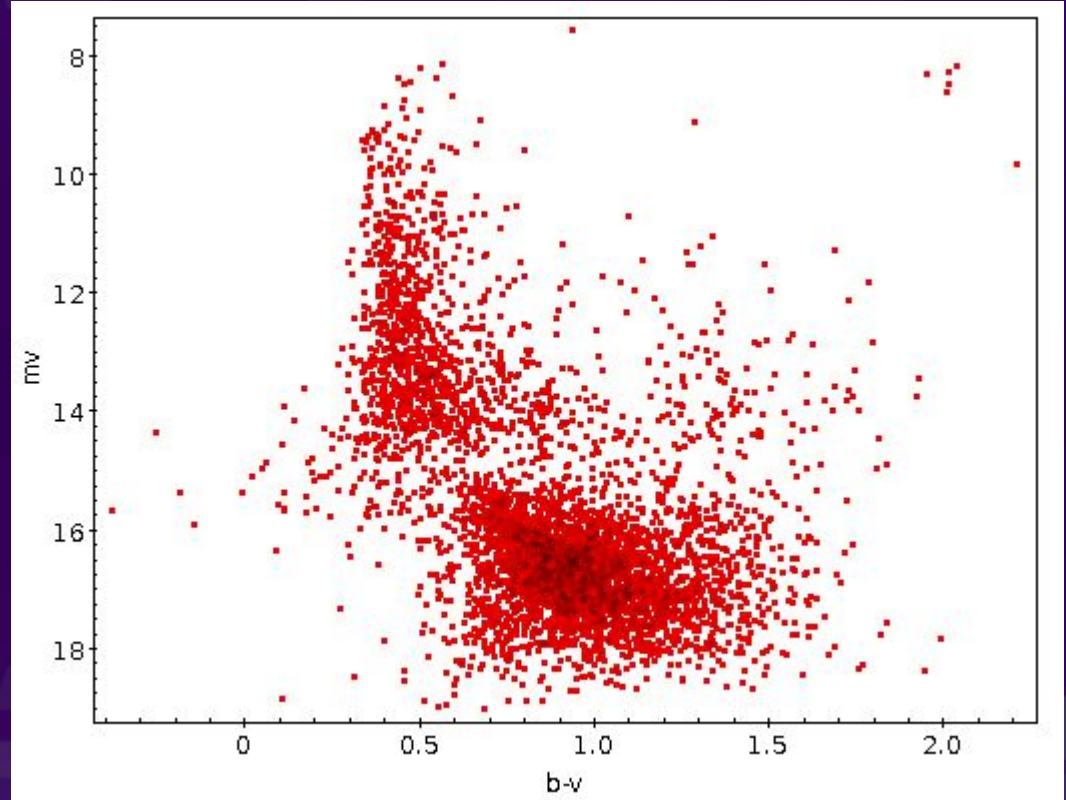
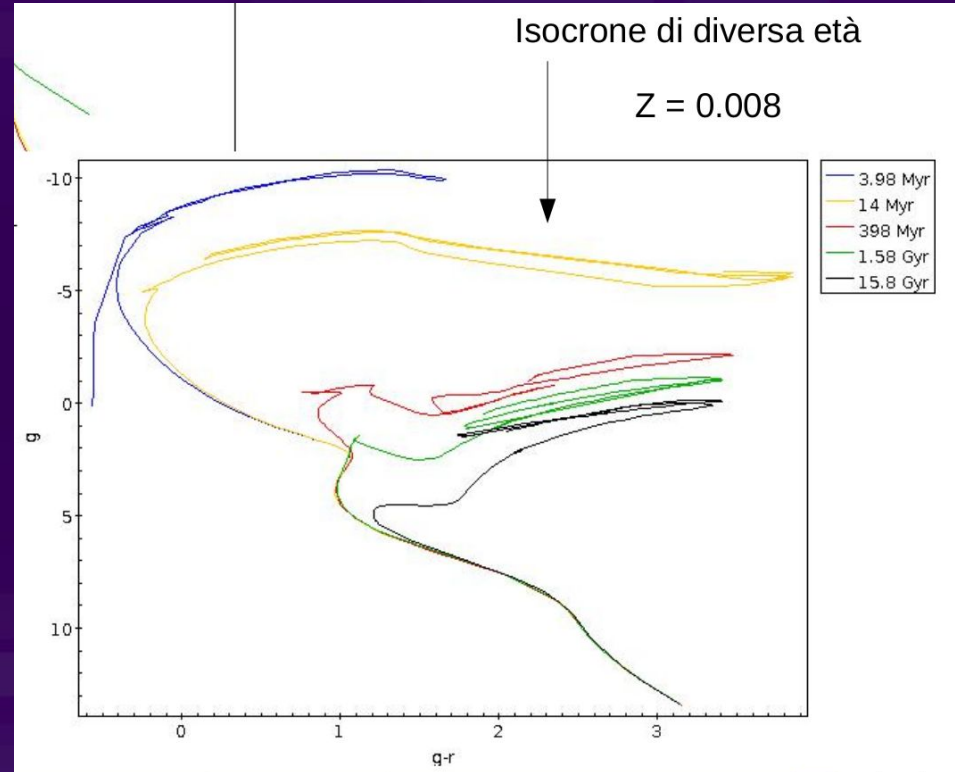
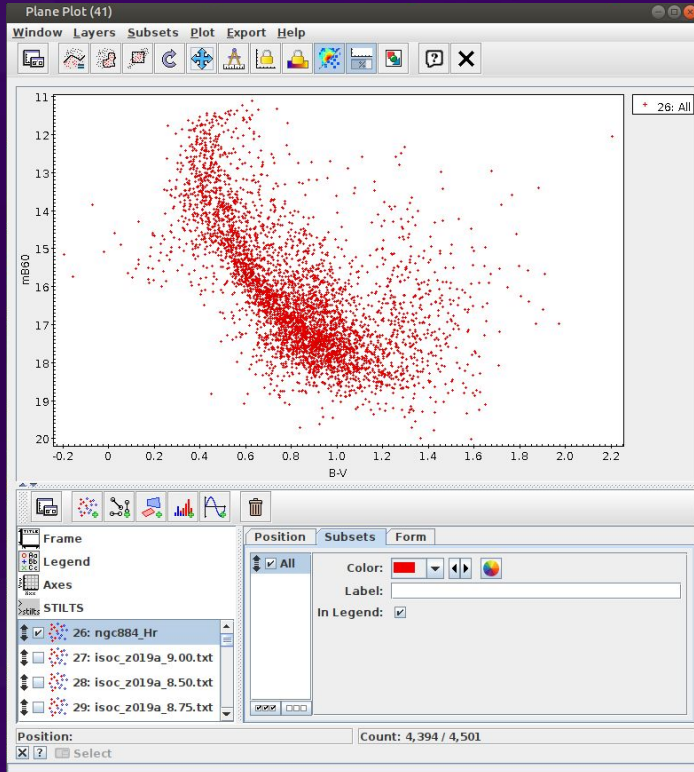


Diagramma colore-magnitudine

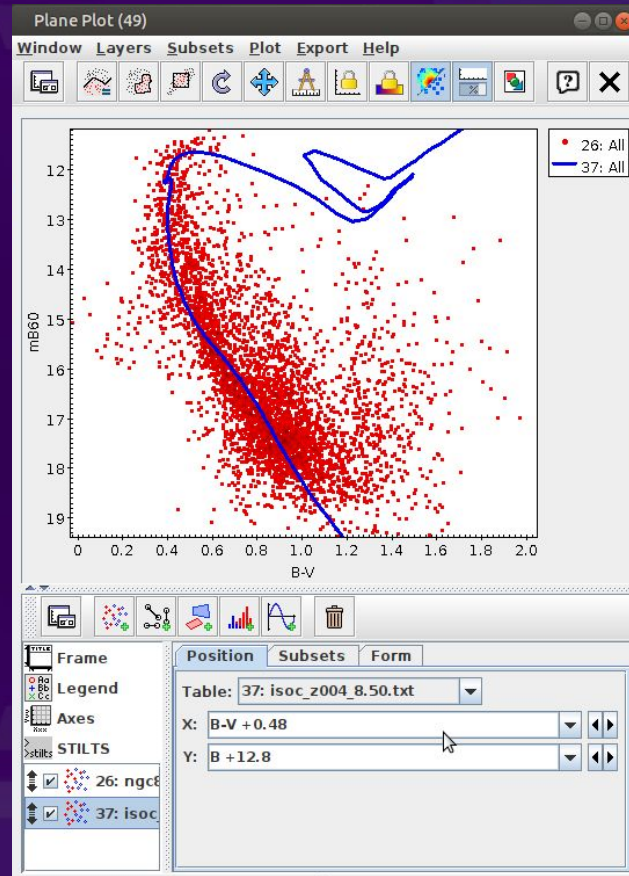


Confronto con isocrona

isoc_z004_8.50.txt

metallicità: 0.004

Età: $10^{(8.5)}$



Distanza dell'ammasso

$$d = 10^{\frac{b - M_b + 5 - 3.1 E(v - b)}{5}}$$

Distanza reale: 2.51 ± 0.37 kPc

Distanza trovata: 1.59 kPc

Possibili soluzioni

Trovare una isocrona più precisa

Rimuovere più stelle di campo

Filtraggio dei dati non a occhio

