

CONSTRUCCIÓN DIAGRAMA H-R

A) DATOS:

Las 100 estrellas más brillantes visibles desde la Tierra

HIP	Nombre	Vmag	M_abs	Distancia (pc)	B-V (mag)	Tipo Espectral
32349	Sirius	-1.44	1.45	2.64	0.009	A0m
30438	Canopus	-0.62	-5.53	95.88	0.164	F0Ib
69673	Arcturus	-0.05	-0.31	11.25	1.239	K2IIIp
71683	Rigil Kentaurus	-0.01	4.34	1.35	0.71	G2V
91262	Vega	0.03	0.58	7.76	-0.001	A0Vvar
24608	Capella	0.08	-0.48	12.94	0.795	G5IIIe+G
24436	Rigel	0.18	-6.69	236.97	-0.03	B8Ia:
37279	Procyon	0.40	2.68	3.5	0.432	F5IV-V
7588	Achernar	0.45	-2.77	44.09	-0.158	B3Vp
27989	Betelgeuse	0.45	-5.14	131.06	1.5	M2Ib
68702	Agna	0.61	-5.42	161.03	-0.231	B1III
97649	Altair	0.76	2.20	5.14	0.221	A7IV-V
60718	Acrux	0.77	-4.19	98.33	-0.243	B0.5IV
21421	Aldebaran	0.87	-0.63	19.96	1.538	K5III
65474	Spica	0.98	-3.55	80.39	-0.235	B1V
80763	Antares	1.06	-5.28	185.19	1.865	M1Ib+B2.
37826	Pollux	1.16	1.09	10.34	0.991	K0IIIvar
113368	Fomalhaut	1.17	1.74	7.69	0.145	A3V
62434	Becrux	1.25	-3.92	108.11	-0.238	B0.5III
102098	Deneb	1.25	-8.73	990.1	0.092	A2Ia
71681	a Cen B	1.35	5.70	1.35	0.9	K1V
49669	Regulus	1.36	-0.52	23.76	-0.087	B7V
33579	Adara	1.50	-4.10	132.1	-0.211	B2II
36850	Castor	1.58	0.59	15.81	0.034	A2Vm
61084	Gacrux	1.59	-0.56	26.96	1.6	M4IIIH
85927	Shaula	1.62	-5.05	215.52	-0.231	B1.5IV+B
25336	Bellatrix	1.64	-2.72	74.52	-0.224	B2III
25428	El Nath	1.65	-1.37	40.18	-0.13	B7III
45238	Miaplacidus	1.67	-0.99	34.08	0.07	A2IV
26311	Alnilam	1.69	-6.38	411.52	-0.184	B0Ia
109268	Al Nair	1.73	-0.73	31.09	-0.07	B7IV
26727	Alnitak	1.74	-5.26	250.63	-0.199	O9.5Ib
39953	Alsu hail	1.75	-5.31	257.73	-0.145	WC8+O9I
62956	Alioth	1.76	-0.21	24.81	-0.022	A0p
15863	Algenib	1.79	-4.50	181.49	0.481	F5Ib
90185	Kaus Australis	1.79	-1.44	44.35	-0.031	B9.5III
54061	Dubhe	1.81	-1.08	37.91	1.061	K0IIIa
34444	Wezen	1.83	-6.87	549.45	0.671	F8Ia
67301	Alkaid	1.85	-0.60	30.87	-0.099	B3V
41037	e Car	1.86	-4.58	193.8	1.196	K3III+B2
86228	q Sco	1.86	-2.75	83.4	0.406	F1II
28360	Menkalinan	1.90	-0.10	25.18	0.077	A2V
82273	a TrA	1.91	-3.62	127.39	1.447	K2IIb-II
31681	Alhena	1.93	-0.60	32.13	0.001	A0IV
42913	Koo She	1.93	-0.01	24.45	0.043	A1V
100751	a Pav	1.94	-1.81	56.18	-0.118	B2IV
11767	Polaris	1.97	-3.64	132.28	0.636	F7:Ib-II
30324	Mirzam	1.98	-3.95	153.14	-0.24	B1II/III
46390	Alphard	1.99	-1.69	54.35	1.44	K3III
9884	Hamal	2.01	0.48	20.21	1.151	K2III
50583	Algieba	2.01	-0.92	38.52	1.128	K0III
3419	Deneb Kaitos	2.04	-0.30	29.38	1.019	K0III
92855	Nunki	2.05	-2.14	68.78	-0.134	B2.5V
68933	q Cen	2.06	0.70	18.68	1.011	K0IIIb
677	Alpheratz	2.07	-0.30	29.76	-0.038	B9p

27366	Saiph	2.07	-6.98	645.16	-0.168	B0.5Iava
5447	Mirach	2.07	-1.86	61.12	1.576	M0IIIvar
72607	Kochab	2.07	-0.87	38.77	1.465	K4IIIvar
112122	Al Dhanab	2.07	-1.52	52.16	1.61	M5III
86032	Ras Alhague	2.08	1.30	14.32	0.155	A5III
14576	Algol	2.09	-0.18	28.46	-0.003	B8V
9640	Alamak	2.10	-3.08	108.81	1.37	K3-IIb
57632	Denebola	2.14	1.92	11.09	0.09	A3Vvar
4427	Cih	2.15	-4.22	187.97	-0.046	B0IV:eva
61932	g Cen	2.20	-0.81	39.98	-0.023	A1IV
39429	Naos	2.21	-5.95	429.18	-0.269	O5IAf
45556	Tureis	2.21	-4.42	212.31	0.189	A8Ib
76267	Gemma	2.22	0.42	22.91	0.032	A0V
44816	l Vel	2.23	-3.99	175.75	1.665	K4Ib-II
65378	Mizar	2.23	0.33	23.96	0.057	A2V
100453	Sadr	2.23	-6.12	467.29	0.673	F8Ib
3179	Schedar	2.24	-1.99	70.08	1.17	K0II-III
87833	Eltanin	2.24	-1.04	45.25	1.521	K5III
25930	Mintaka	2.25	-4.99	280.9	-0.175	O9.5II
746	Caph	2.28	1.17	16.7	0.38	F2III-IV
66657	e Cen	2.29	-3.02	115.21	-0.171	B1III
78401	Dschubba	2.29	-3.16	123.15	-0.117	B0.2IV
82396	e Sco	2.29	0.78	20.06	1.144	K2IIIb
71860	a Lup	2.30	-3.83	168.07	-0.154	B1.5III
71352	h Cen	2.33	-2.55	94.61	-0.157	B1Vn + A
53910	Merak	2.34	0.41	24.35	0.033	A1V
72105	Izar	2.35	-1.69	64.31	0.966	G8II-III
107315	Enif	2.38	-4.19	206.19	1.52	K2Ibvar
86670	k Sco	2.39	-3.38	142.25	-0.171	B1.5III
2081	Ankaa	2.40	0.52	23.74	1.083	K0III
58001	Phecda	2.41	0.36	25.65	0.044	A0V
84012	Sabik	2.43	0.37	25.79	0.059	A2.5Va
113881	Scheat	2.44	-1.49	61.09	1.655	M2II-III
105199	Alderamin	2.45	1.58	14.96	0.257	A7IV-V
35904	h Cma	2.45	-7.51	980.39	-0.083	B5Ia
45941	k Vel	2.47	-3.62	165.29	-0.141	B2IV
102488	Gienah	2.48	0.76	22.09	1.021	K0III
113963	Markab	2.49	-0.67	42.81	-0.002	B9.5III
14135	Menkar	2.54	-1.61	67.48	1.63	M2III
81377	Han	2.54	-3.20	140.45	0.038	O9.5V
68002	z Cen	2.55	-2.81	117.92	-0.176	B2.5IV
54872	Zosma	2.56	1.32	17.69	0.128	A4V
78820	Acrab	2.56	-3.50	162.6	-0.065	B0.5V
25985	Arneb	2.58	-5.40	393.7	0.211	F0Ib
59196	d Cen	2.58	-2.84	121.21	-0.128	B2IVne

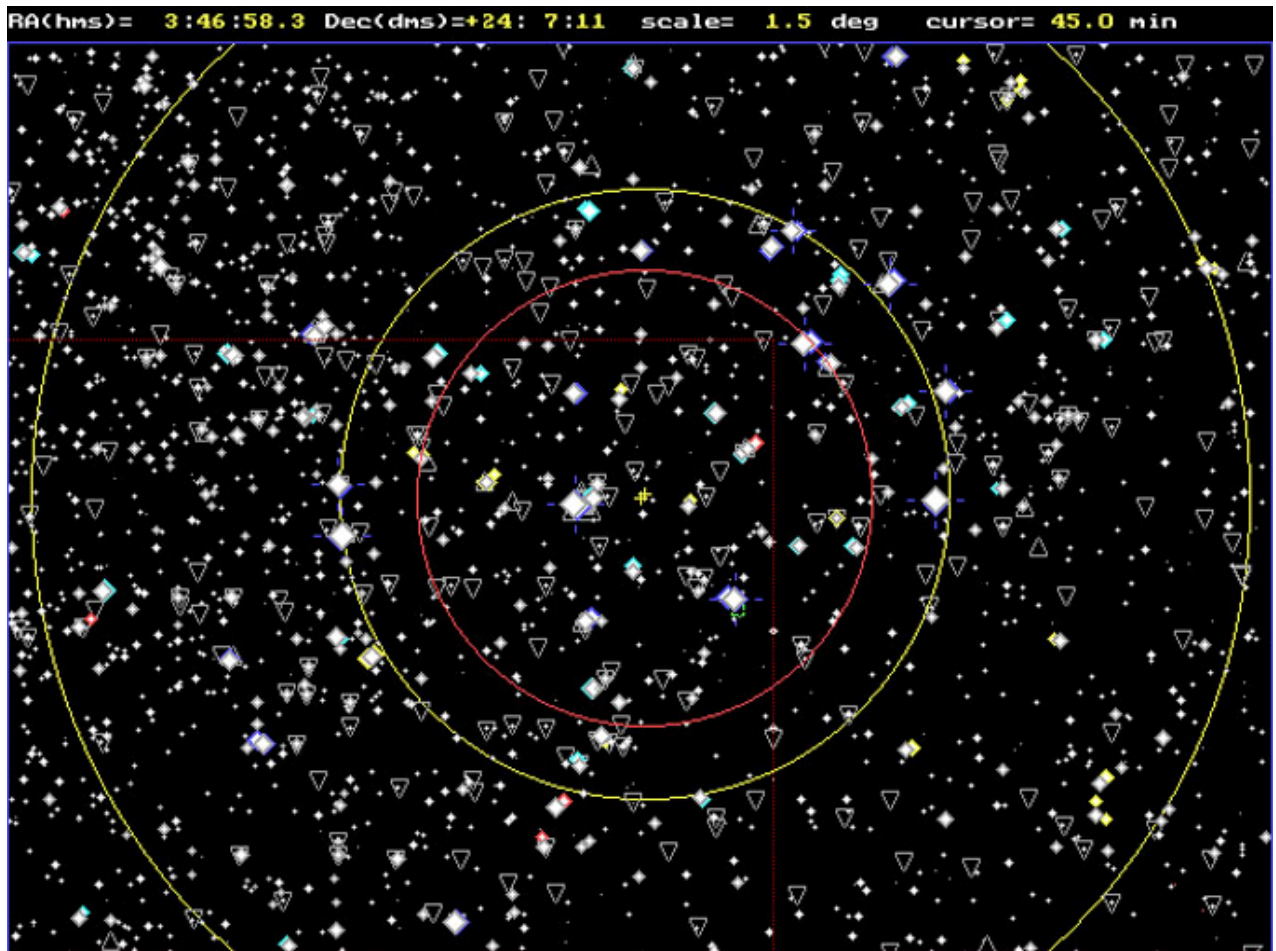
Las 100 estrellas más cercanas al Sistema Solar

HIP	Nombre	Vmag	M_abs	Distancia (pc)	B-V (mag)	Tipo Espectral
70890	Proxima Centauri	11.01	15.45	1.2948	1.807	M5Ve
71681	a Centauri B	1.35	5.70	1.3475	0.9	K1V
71683	Rigel Kentaurus	-0.01	4.34	1.3475	0.71	G2V
87937	Barnard's Star	9.54	13.24	1.8215	1.57	sdM4
54035		7.49	10.46	2.5484	1.502	M2V
32349	Sirius A	-1.44	1.45	2.6371	0.009	A0m...
92403	Ross 154	10.37	13.00	2.9719	1.51	M3.5Ve
16537	e Eridani	3.72	6.18	3.2180	0.881	K2V
114046	Lacaille 9352	7.35	9.76	3.2906	1.483	M2/M3V
57548	FI Virginis or Ross 128	11.12	13.50	3.3380	1.746	M4.5V
104214	6l Cygni A	5.2	7.49	3.4827	1.069	K5V
37279	Procyon	0.4	2.68	3.4974	0.432	F5IV-V
104217	6l Cygni B	6.05	8.33	3.5036	1.309	K7V
91772		9.7	11.97	3.5152	1.561	K5
91768		8.94	11.18	3.5679	1.504	K5
1475	GX Andromedae	8.09	10.33	3.5680	1.56	M1V
108870	e Indi	4.69	6.89	3.6263	1.056	K5V
8102	t Ceti	3.49	5.68	3.6474	0.727	G8V
5643	YZ Ceti	12.1	14.25	3.7168	1.85	M5.5Ve
36208	Luyten's Star	9.84	11.94	3.7985	1.573	M5
24186	Kapteyn's Star	8.86	10.89	3.9176	1.543	M0V
105090	AX Microscopii	6.69	8.71	3.9468	1.397	M1/M2V
110893		9.59	11.58	4.0077	1.613	M2V
30920	Ross 614 A	11.12	13.05	4.1171	1.69	M4.5Ve
72511		11.72	13.58	4.2510	1.48	M
80824	Wolf 1061	10.1	11.95	4.2642	1.604	M4
439		8.56	10.36	4.3605	1.462	M2V
15689		12.16	13.94	4.3966		
3829	van Maanen's Star	12.37	14.15	4.4063	0.554	DG
72509		12.07	13.80	4.5086	1.524	M
86162		9.15	10.87	4.5280	1.505	M3.5Vvar
85523		9.38	11.10	4.5366	1.553	K5
114110		12.24	13.92	4.6185		
57367		11.5	13.18	4.6211	0.196	DC:
113020	IL Aquarii or Ross 780	10.16	11.80	4.7017	1.597	M5
54211	Furuhjelm I- 650	8.82	10.40	4.8323	1.491	M2Vvar
49908		6.6	8.16	4.8728	1.326	K8V
82725		11.72	13.26	4.9259		
85605		11.39	12.92	4.9336	1.101	
106440		8.66	10.19	4.9375	1.521	M1V
86214		10.94	12.43	5.0424	1.655	M5
19849	o2 Eridani A	4.43	5.92	5.0444	0.82	K1V
112460	EV Lacertae	10.29	11.77	5.0487	1.54	M4.5Ve
88601	70 Ophiuchi A	4.03	5.50	5.0860	0.86	K0V SB
97649	Altair	0.76	2.20	5.1430	0.221	A7IV-V
1242		11.49	12.90	5.2121	1.75	M:
57544		10.8	12.14	5.3914	1.572	M4
67155	Wolf 498	8.46	9.79	5.4309	1.435	M3V
103039		11.41	12.71	5.4900	1.653	
21088		10.82	12.11	5.5139	1.17	
33226	Wolf 294	9.89	11.18	5.5151	1.58	K:...
53020	EE Leo or Wolf 358	11.64	12.89	5.6351	1.679	M4:
25878	Wolf 1453	7.97	9.19	5.6909	1.474	M1V
82817	Wolf 630	9.02	10.23	5.7395	1.553	M3Ve
96100	s Draconis	4.67	5.87	5.7667	0.786	K0V
29295		8.15	9.34	5.7740	1.487	M1/M2V
26857	Ross 47	11.56	12.75	5.7877	1.675	M5
86990		10.75	11.93	5.8113	1.66	M5
94761	Wolf 1055	9.12	10.28	5.8734	1.464	M3.5V
73184		5.72	6.86	5.9060	1.024	K4V
37766	Ross 882	11.19	12.32	5.9315	1.6	M4.5Ve
76074		9.31	10.44	5.9340	1.524	M0

3821	h Cassiopei or Wolf 24	3.46	4.59	5.9527	0.587	G0V SB
84478	36 Ophiuchi C	6.33	7.45	5.9680	1.144	K5V
117473	BR Piscium	8.98	10.10	5.9698	1.46	M2V
84405	36 Ophiuchi	4.33	5.44	5.9852	0.855	K2:III:
99461		5.32	6.41	6.0518	0.868	K2V
15510	82 Eridani	4.26	5.35	6.0599	0.711	G8V
99240	d Pavonis	3.55	4.62	6.1076	0.751	G5IV-Vvar
71253	Wolf 1481	11.32	12.39	6.1158	1.633	M4
86961		10.49	11.53	6.1816	1.463	M2V:
86963		11.39	12.43	6.1816	1.439	M2V:
45343		7.64	8.68	6.1885	1.41	M0V
99701		7.97	9.01	6.2046	1.431	M0V
116132	EQ Pegasi	10.05	11.07	6.2477	1.19	M6Ve
74995	HO Librae or Wolf 562	10.57	11.58	6.2688	1.6	M5
120005		7.7	8.71	6.2704	1.42	K2
84140		9.31	10.31	6.3223	1.485	K5
34603	QY Aurigae or Ross 986	11.65	12.63	6.3597	1.7	M5Ve
54298		11.69	12.65	6.4400		
82809	Wolf 629	11.73	12.67	6.4952	1.7	M4
114622		5.57	6.50	6.5257	1	K3Vvar
80459		10.13	11.04	6.5820	1.591	M2
53767	Ross 104	10.03	10.92	6.6243	1.525	M3
72659	37 Bootis	4.54	5.41	6.6997	0.72	G8V + K4V
106106	Ross 775	10.33	11.19	6.7435	1.62	M4
114176		12.28	13.13	6.7590		
113296	Ross 671	8.68	9.49	6.8837	1.507	M2:
84709		5.91	6.69	6.9711	1.082	K4V
103096		8.55	9.31	7.0447	1.483	M2V
12114		5.79	6.50	7.2088	0.918	K3V
51317	Ross 446	9.65	10.35	7.2312	1.507	M2
83945		11.77	12.47	7.2548	1.696	M3
3765	Wolf 25	5.74	6.38	7.4605	0.89	K2V
7981	107 Piscium	5.24	5.87	7.4677	0.836	K1V
2021	b Hydri	2.82	3.45	7.4750	0.618	G2IV
73182		8.01	8.64	7.4833	1.519	K5V
12781	VX Arietis or Ross 556	10.55	11.16	7.5517	1.53	M3.5Ve
5336	m Cassiopei A	5.17	5.78	7.5529	0.704	G5Vp
65859	Ross 490	9.05	9.64	7.6266	1.493	M1V

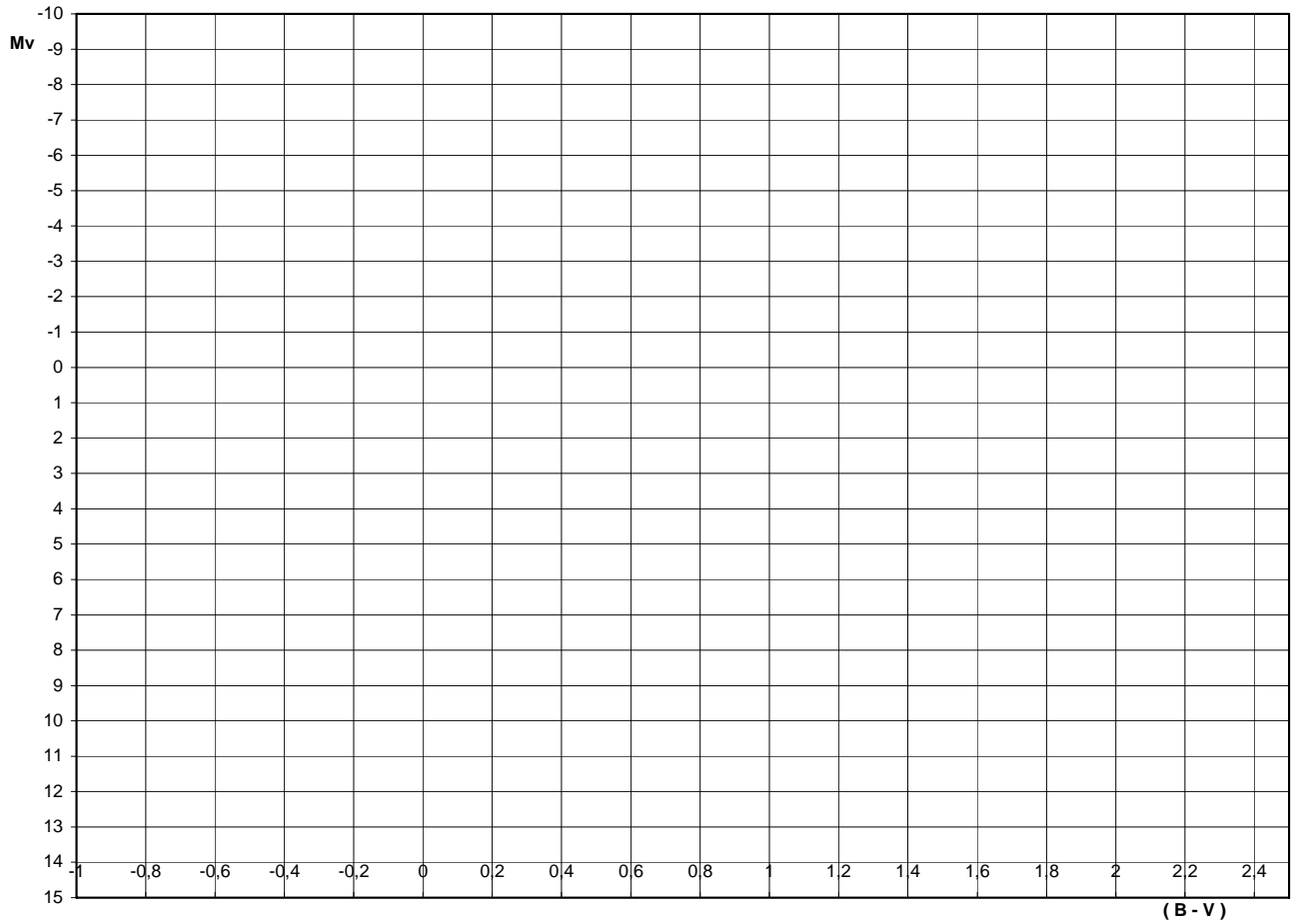
Selección estrellas en cúmulo abierto Pleiades

Star	EPOCH	RA			DEC			V	B-V	U-B
		h	m	s	d	m	s			
PLEA	1950.0	3	44	30	23	57	8	2.870	-0.090	-0.340
PLEB	1950.0	3	42	14	24	18	43	4.310	-0.110	-0.460
PLEC	1950.0	3	45	23	23	16	9	5.450	-0.070	-0.320
PLED	1950.0	3	45	7	24	50	9	6.460	1.700	2.070
PLEE	1950.0	3	44	0	24	22	0	6.820	0.030	-0.070
PLEF	1950.0	3	45	31	24	11	36	6.950	0.120	0.090
PLEG	1950.0	3	47	29	24	20	42	7.420	0.130	0.120
PLEH	1950.0	3	44	39	23	27	23	7.720	1.230	1.120
PLEI	1950.0	3	43	36	23	28	12	8.110	0.350	0.290
PLEK	1950.0	3	42	36	24	18	30	8.600	0.350	0.110
PLEL	1950.0	3	44	44	23	23	27	8.790	1.150	0.810
PLEM	1950.0	3	46	56	24	4	2	9.160	0.160	0.150
PLEN	1950.0	3	44	11	24	7	26	9.460	0.470	0.020
PLEO	1950.0	3	42	41	24	28	22	9.700	0.550	0.050
PLEP	1950.0	3	45	27	23	53	48	10.020	0.560	0.090
PLEQ	1950.0	3	43	56	23	25	50	10.520	0.640	0.160
PLER	1950.0	3	46	25	23	41	19	11.350	0.780	0.380
PLES	1950.0	3	43	42	23	20	40	12.020	0.990	0.540
PLET	1950.0	3	43	8	24	42	47	12.050	1.010	0.840
PLEU	1950.0	3	41	5	24	5	17	12.510	0.810	0.300
PLEV	1950.0	3	44	19	24	14	18	12.610	1.180	1.000
PLEX	1950.0	3	43	8	25	0	51	14.360	1.010	0.470
PLEY	1950.0	3	46	26	23	49	58	15.720	1.150	0.980
PLEZ	1950.0	3	44	39	24	34	52	16.420	0.600	0.250



(Carta zona cúmulo)

B) HOJA (EXCEL) PARA GRAFICAR



C) GRÁFICOS RESULTANTES

Diagrama H - R (estrellas brillantes)

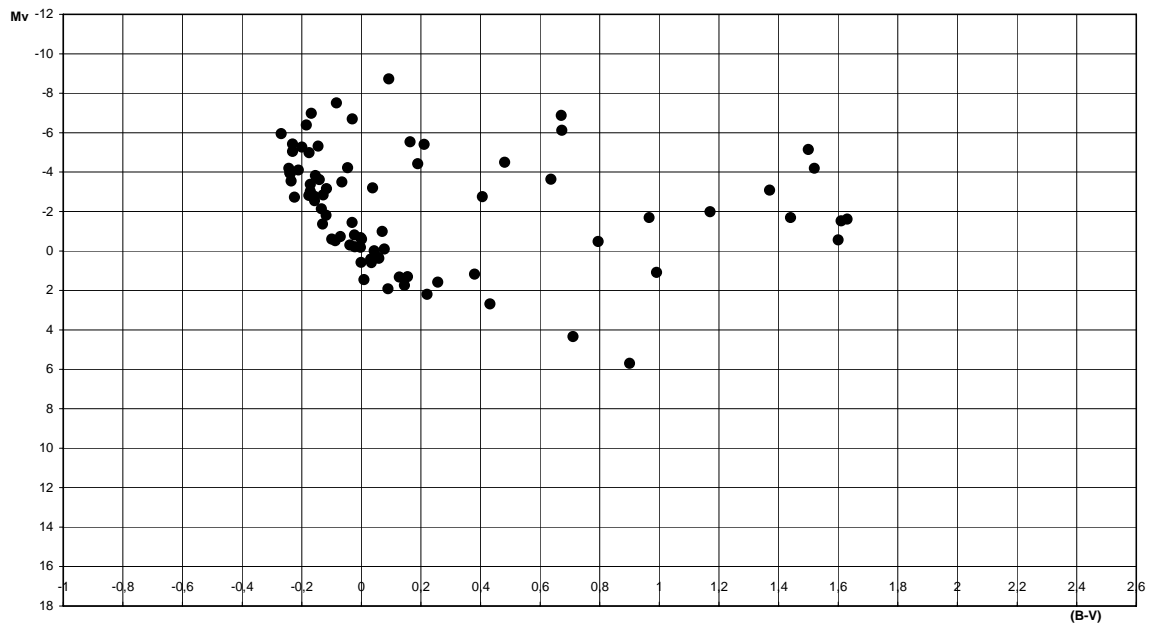
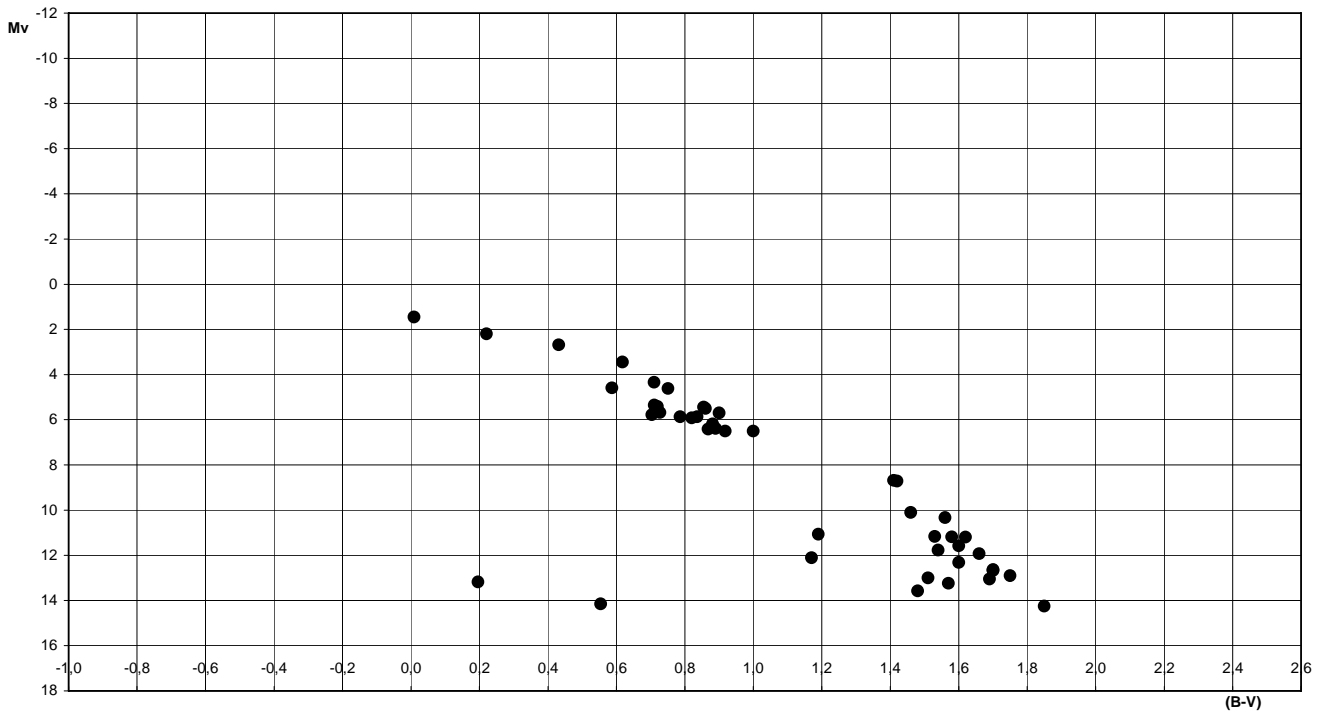


Diagrama H - R (estrellas cercanas)



Pleiades (con m ap.)

