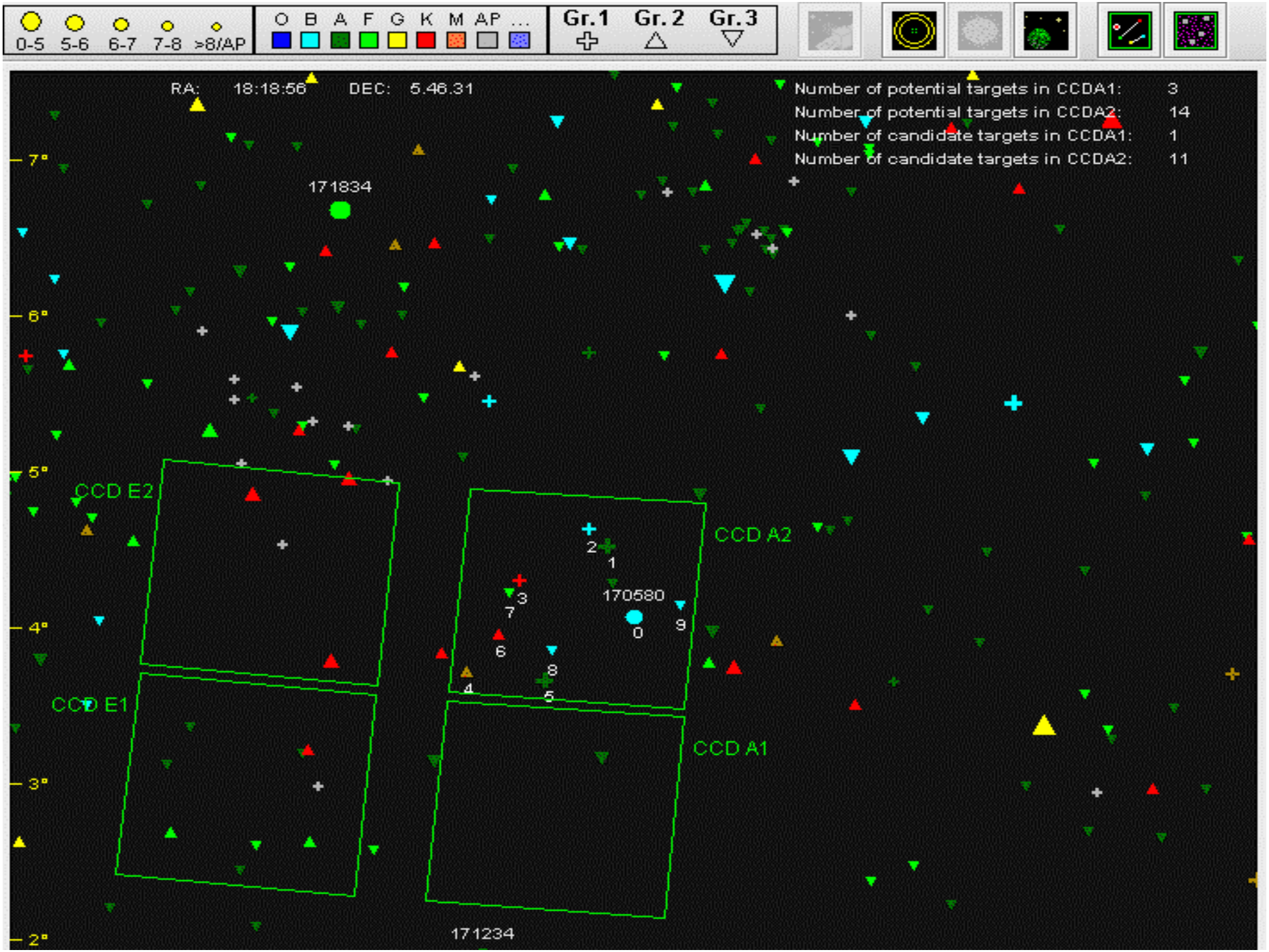
0-5 5-6 6-7 7-8 >8/AP
O B A F G K M AP ...
Gr.1 Gr.2 Gr.3
RA: 18:18:56 DEC: 5.46.31
Number of potential targets in CCDA1: 3
Number of potential targets in CCDA2: 14
Number of candidate targets in CCDA1: 1
Number of candidate targets in CCDA2: 11
7°
6°
5°
4°
3°
2°
171834
CCD E2
CCD E1
CCD A2
CCD A1
170580
171234
1
2
3
4
5
6
7
8
9
0

Block: LRc05	Id: 1724.0	Last update: 2009-10-09 14:36:33
Catalogue: Non-specified	User: michele	Current date: 2009-12-15 22:28:02
		Creation date: 09/10/2009

CCD A1

Priority	C Id	Name	m_v	SpT	M_v	log(Teff)	Vsin(i)	Parallax	Star type	SCAO
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										

CCD A2

Priority	C Id	Name	m_v	SpT	M_v	log(Teff)	Vsin(i)	Parallax	Star type	SCAO
0	8252	HD 170580	6.7	B 2.0 V	-1.65	4.26	16.0	1.17	Principal Target	X
1	8301	HD 170699	6.96	A 2.0	1.49	3.88		8.07	Delta Scuti, Gamma Doradus	X
2	8303	HD 170783	7.73	B 5.0	-2.25	4.14		1.06	Hipparcos unsolved variable	X
3	8154	HD 171089	7.36	K 5.0	7.28	3.62	8.3		Hipparcos possible microvariable	X
4	8022	V* AG Ser	7.8	M 6.0	0.19	0.0				X
5	8081	HD 170973	6.43	A 0.0	-0.26	4.06	9.8	2.73	Ap star	X
6	8082	HD 171170	7.58	K 2.0	7.27	3.66	8.7			X
7	8138	HD 171126	8.26	F 0.0	1.72	3.86	221.3			
8	8117	BD+03 3736	8.6	B 8.0	0.99	3.86	59.6			
9	8329	BD+04 3760	8.49	B 8.0	0.39	4.06				

les cibles proposees:

deux etoiles B:
- HD170783 (B5)
- HD170580 la beta cephei cand. principale.

-HD170699 A2: delta Scuti/Gamma Dor ?

-HD170973: is a CP star

--HD171089: une geante K5 (mV=7.36)

en spare:

-V*AG Ser: une variable cataclysmique...Peut-etre une occasion?...reste a etablir ce qu'on peut en attendre...?

- HD171170: une autre geante K2 (mV=7.5) une geante rouge

- HD171126: une F0 (mV=8.26) : un candidat eventuel pour la peche aux gamma Dor.

>HD 170973 is certainly an interesting star. Considering the fact that the number of CP stars among the prime targets is very small I strongly advocate to include this star as a seismology target.

HD 170973 is a CP star with SrCrSi overabundance with a known rotational period of 18.2 days. Hence it is a slow rotator with the possibility to allow for parallel ground based spectroscopy with the goal of Doppler Imaging. I have some indications in my notes for binarity, but that's uncertain. The star is rather hot (11600K), hence, I have no hope that we might discover rapid pulsation - but who knows, considering the low possible noise. It has no - or at least a very low measurable magnetic field.

>it would be great if you could arrange to observe B0-B5 stars, because the scientific interest is really much better for them.

Regarding HD 170580: this is the only star in the hybrid part of the Beta Cep and SPB strip, and so is a potential candidate for p- and g-modes simultaneously, which is well placed in the eyes of CoRoT (as far as I remember, I screened all potential targets in the sismo lists you had).
Our spectroscopic analysis confirms this, with Teff = 20,000K, log g =4.1. Moreover, it has a very low vsini (see Morel & Aerts 2007).
On the other hand, we followed it during 2 years with Mercator in multicolour photometry and the star is constant at a level of a few mmag.
If it has oscillations, they will have low amplitude (of course still hugh for CoRoT...). If it does not oscillate, it would even be more challenging how to explain that...

For HD 170580 there was some worry about it being a quadruple system, but I remember that Michel Auvergne said the C and D components are no problem (7 mags fainter); the B component might be hard to separate, but this is an A star which is again quite fainter, so the oscillation spectra should be clearly separable also.

The problem with 80days run is a degradation of the frequency resolution, and thus a harder time to unravel rotational splitting. For HD 170580, a spectroscopy run with HARPS in the ESO Large Programme could make up for a shorter CoRoT time base and would be needed anyway to identify the modes and check if they are multiplets...

>HD170699
Tout a fait d'accord avec Ennio, il va falloir avoir la bonne precision pour allller aux modes de plus petites amplitudes et l'etoile est brillante et ca va aider

Ennio Poretti wrote:

> Cher Eric,
> HD 170699 c'est sans doute une Delta Sct, mais je ne suis pas tres
> confiante sur la classification Gamma Dor. CCDM donne une secondaire
> 2mag plus faible a 79 arcsec (c'est bonne pour la
> photometrie/spectroscopie au sol et peut etre aussi pour CoRoT). Elle
> tournes vite et ca c'est un probleme pour la modelization, mais pas
> pour l'identification des modes, s'il y aura la spectroscopie...
> La bonne nouvelle est qu'il est brillante (V=6.9).
>

➢Ennio
les observations preparatoires sol ((Alvarez et al. 2009, Rev. Mex. Astron. Astrofis. Serie de Conf. 35, 148) ont confirme sa variabilite delta Scuti et suggerent des variations basse freq...
le type spectral A2 semble tout de meme incompatible avec le label 'gamma Dor' (je ne sais pas d'ou il vient).
A part ca, c'est une etoile double (a creuser…)..C'est un rotateur rapide