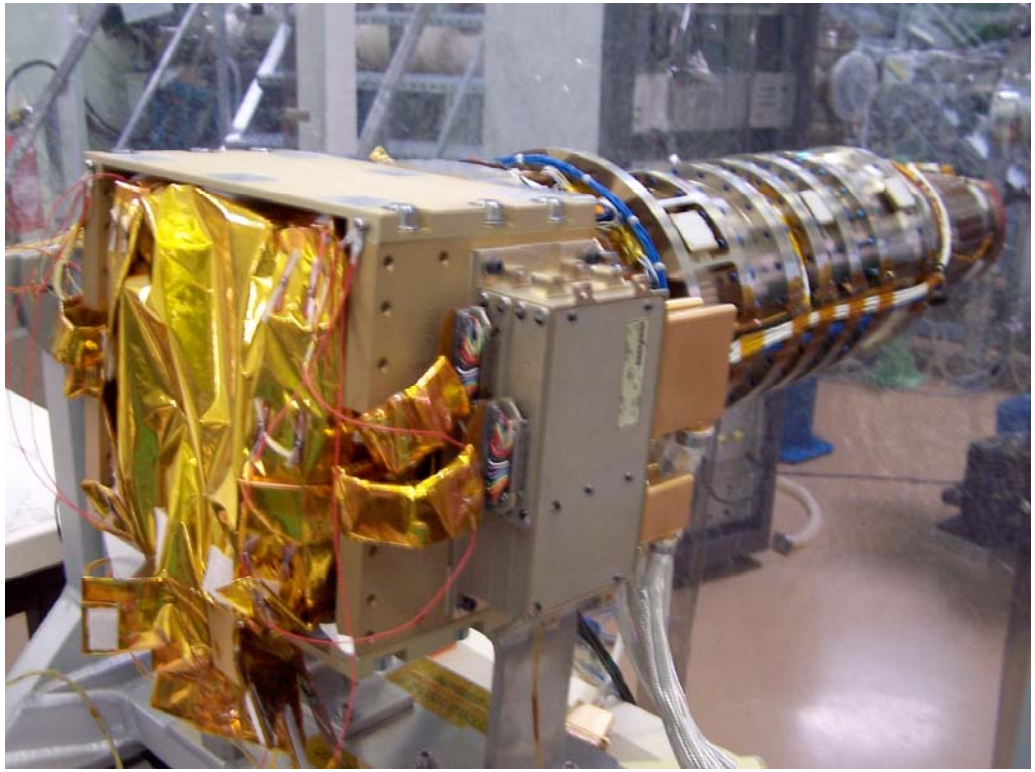
Where are we ?

What is needed….From ESTA

Camera calibration.

Several problems arise: some due to the test software equipment, some others to the hardware.

- Bad stability of the sources
- Difficulties to define the windowing
- Problems with the binning ->
  wrong camera
  control micro-sequences
- Identification of cross-talk between CCD PF-AS and AS-AS



Readout noise 10 e-
Total white noise 10% gt photon noise

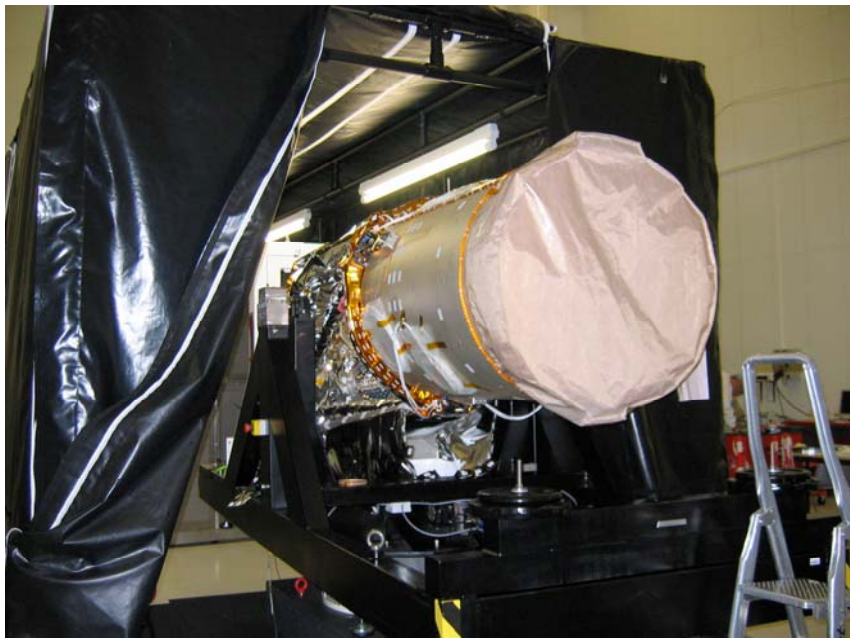
The most serious problem is the microsequence implemented in FPGA which shall be changed before the instrument thermal tests.

Telescope integration

Telescope + camera

Pb with referrence system, solved

At Alcatel Cannes



+ Baffle

At CNES

Instrument integration

Very touchy
But

No
problem


The primary
mirror

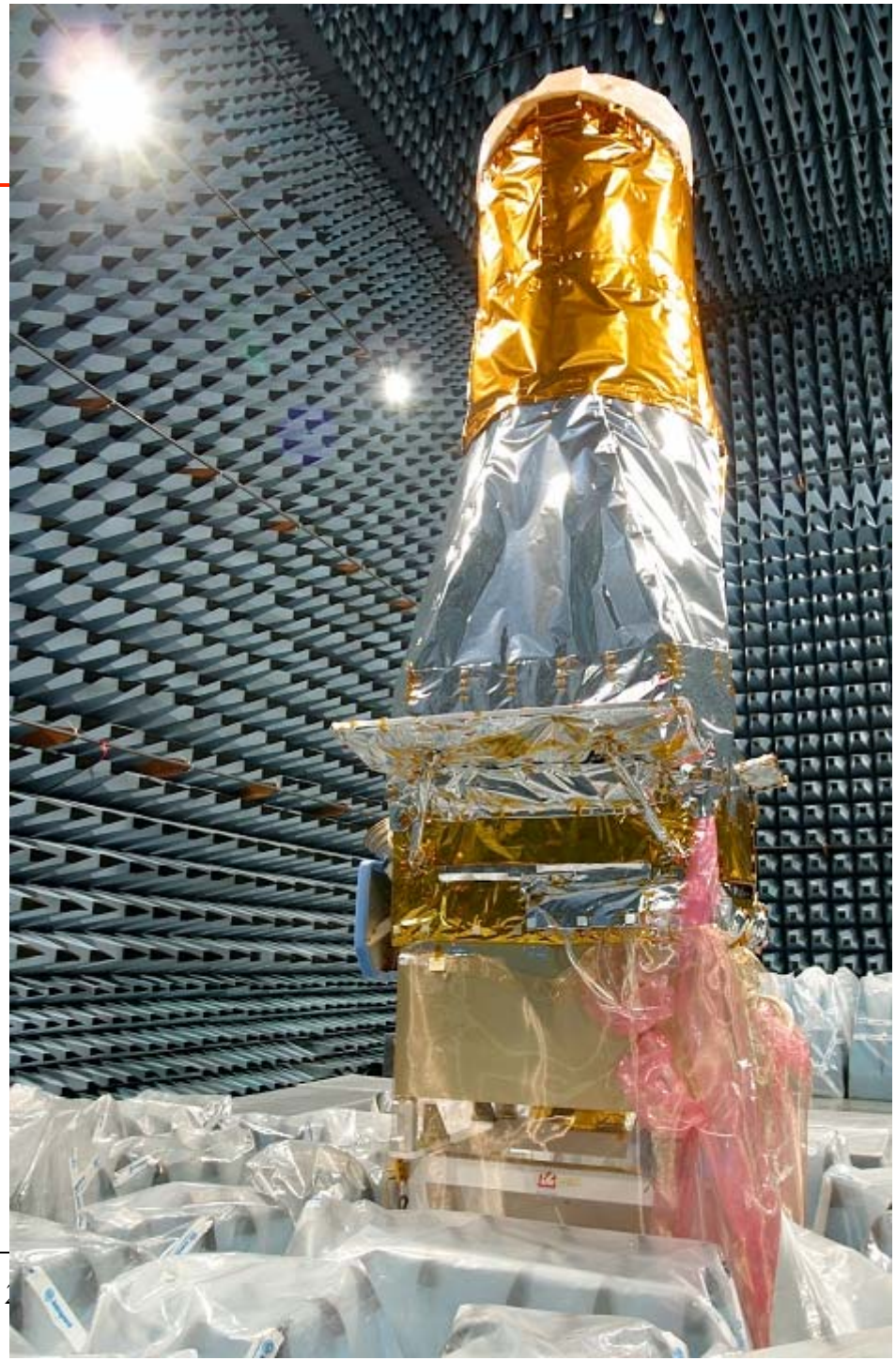
Fixing the telescope + camera on the Equipment bay

At CNES

EMC tests

At Intespace
September 16th

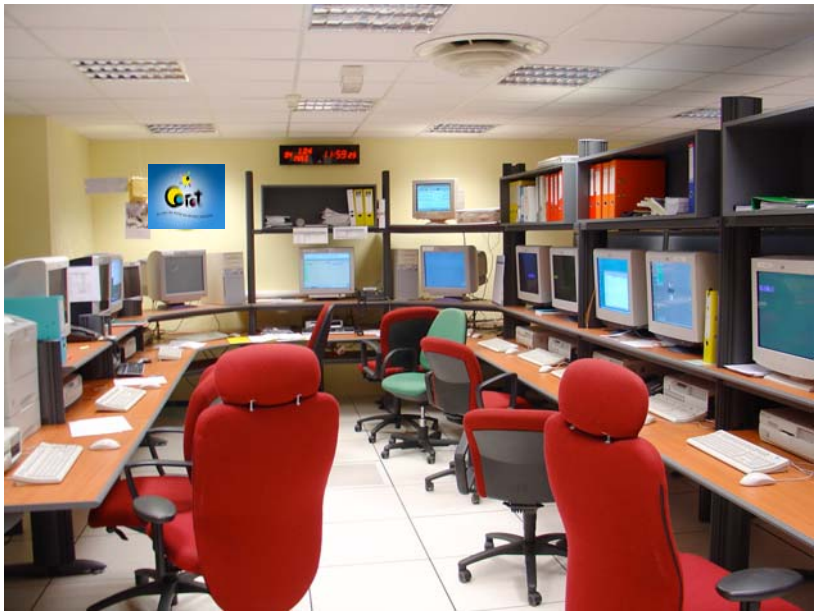
Everything nominal



Ground segment

The Control Centre has been successfully integrated.

The Mission Centre at CNES is still under integration



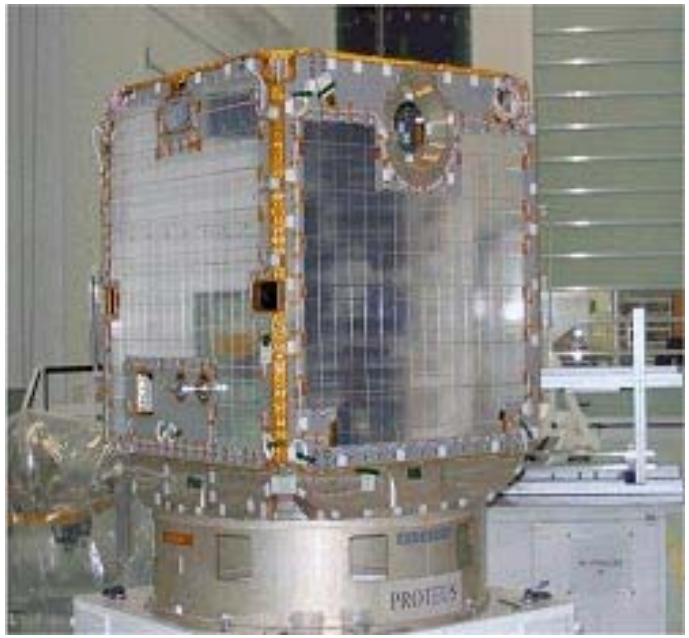
In labs, people are working hard
on the calibration and correction pipe-line
Dead-line for version V1 November 2005

PROTEUS Platform

The delay of Calypso till october 2005 will induce a slight delay on the launch date

To August 22nd 2006

Under discussion



Launcher

The development is almost nominal

Visit to Baikonour Team ALCATEL/CNES
21/24 June 2005

Antennas

Activities concerning the Brazilian station (at Alcantara) are underway

Discussions are going on with Institut of Astronomy
in Vienna to use the MOST antenna
19/04/2005
(Evenually also in Vancouver)

Corot Brasil agreement

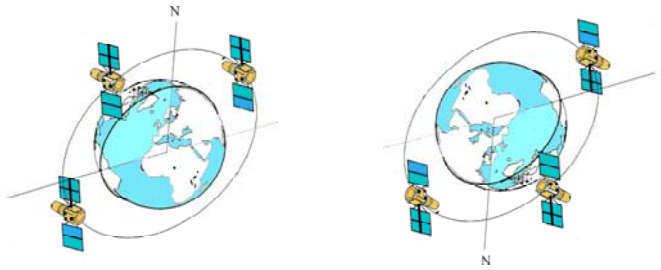
Signed at Le Bourget Air show on June 14th 2006

Scheduling the observations

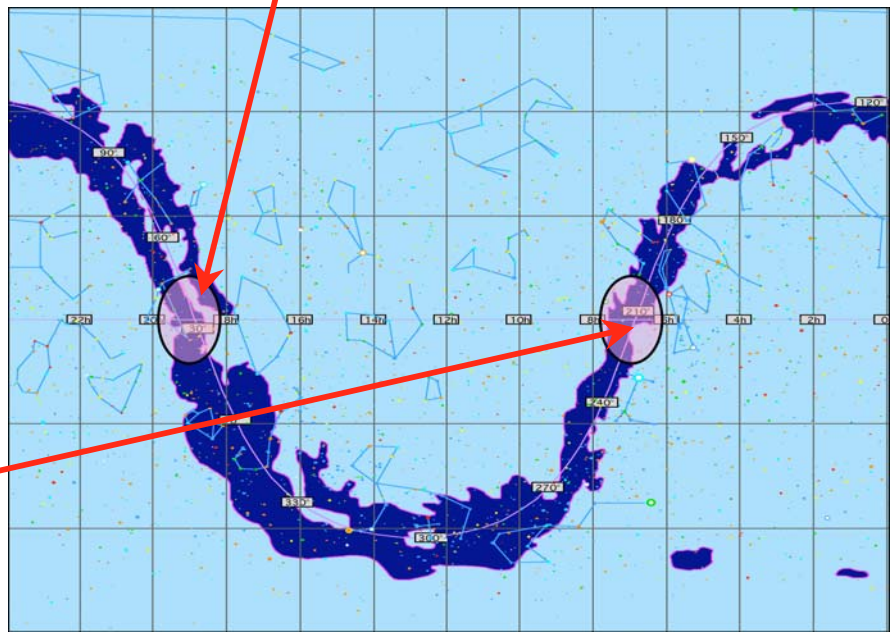
Launch August 22nd

Commissioning October 6th (in the centre direction)

Rotation



Anticentre session
October 20th if everything OK



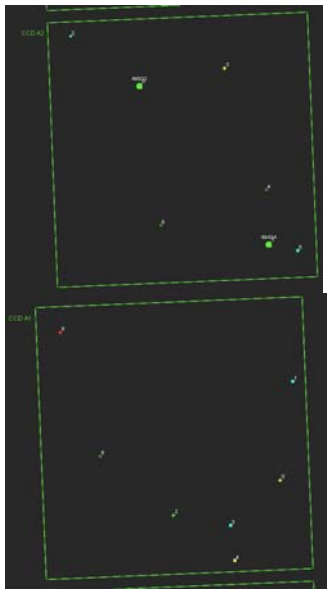
First long run

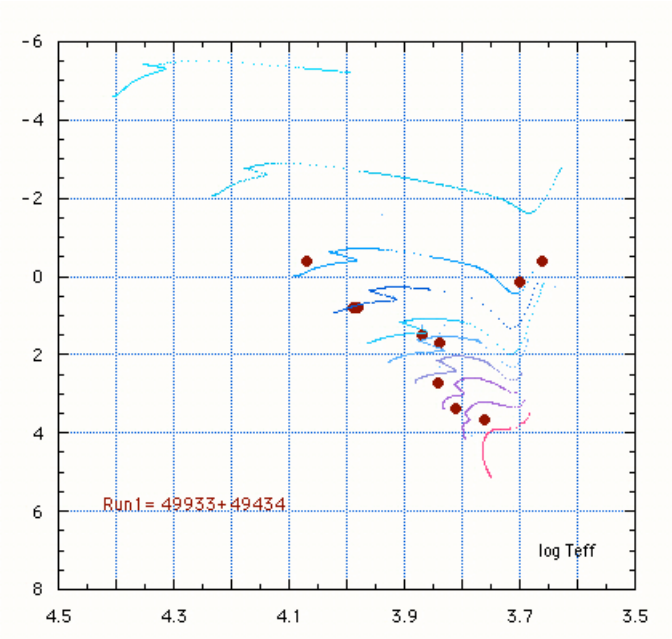
* Long run on HD 49 933

Final selection of the targets April to June

First data by January 2006….

	0 mass	1 ID	2 log te	3 49933	4
0	49434	Gam Dor	3.842	2.740	
1	49933	F2V	3.811	3.390	
2	49385	G0 IV-V	3.760	3.670	
3	50229	B9V (var)	3.660	-0.4100	
4	50085	A0	4.070	-0.4100	
5	49330	B0 Be var?	3.870	1.510	
6	49808	F0V	3.840	1.680	
7	50209	B9V	3.990	0.7800	
8	49713	B9V Ap	4.080	0.05000	
9	40608	G5	3.700	0.1600	

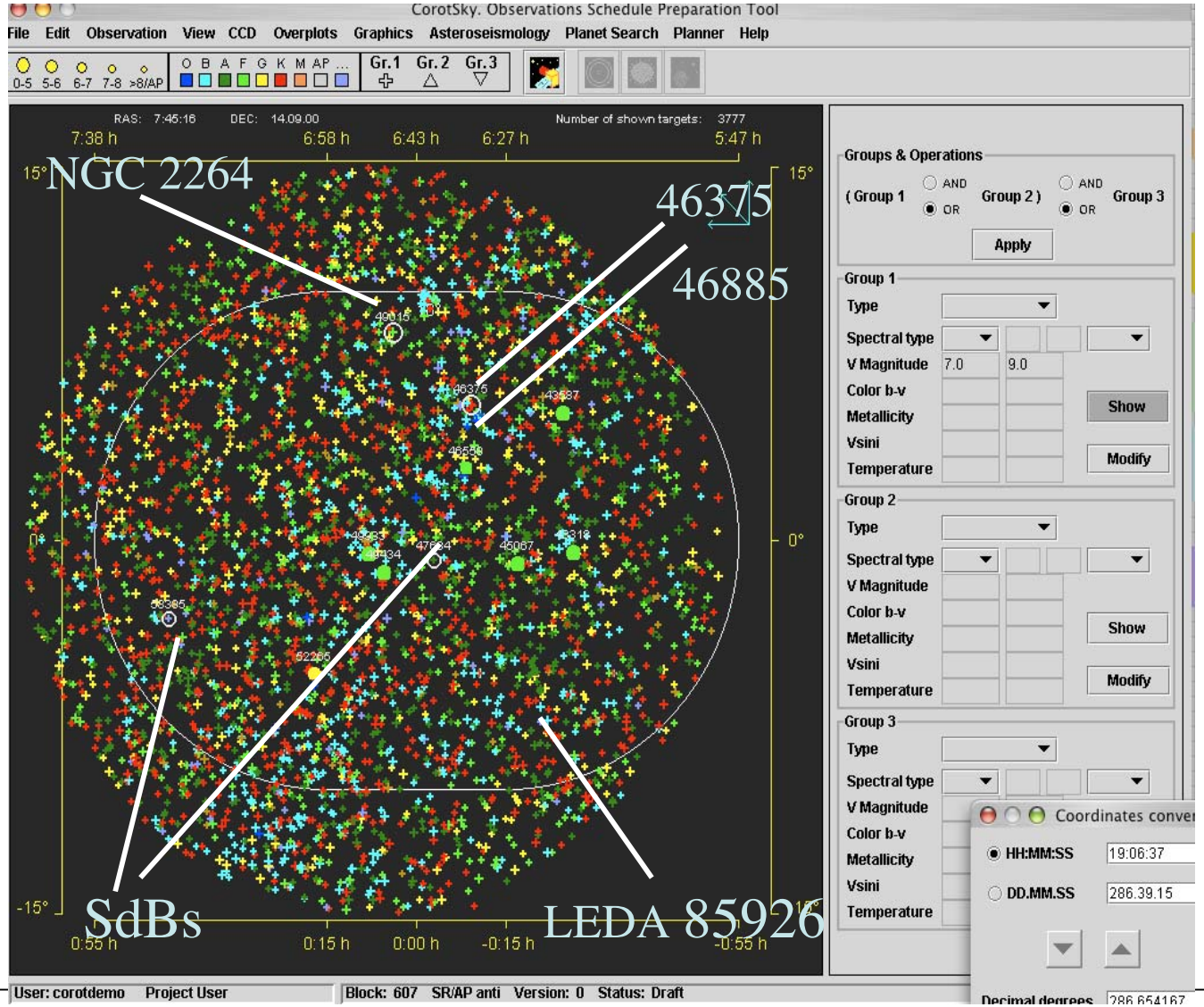




AP Short runs in the Anticentre

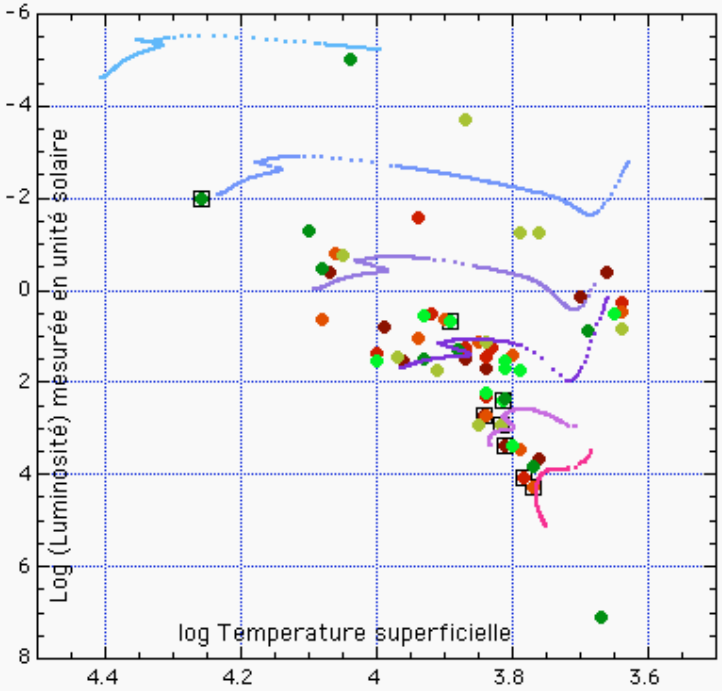
HD 46375
may be the first one
In NGC 2244

K1IV



At the end…..

5 long runs



What ESTA can provide ?

* Validated models, comparable to each other, even if different…under way, important progesses have been made
* Same comparison on oscillation codes ….

In a wide variety of mass and ages (may be including giants)

Evidently a pioneer contribution to a wider effort of modeling stars,

needed for CoRoT but also, ground based seismology, for GAIA……

The question of the accuracyneeded fot CoRoT: very different from the Sun !
Fundamental parametres are less well known
The number of modes is much smaller

The long runs of CoRoT have a frequency resolution of 0.1 μHz
Translated in accuracy on the frequency measurement of a mode depends on

- S/N e.g. amplitudes and magnitude
- life time of the modes

Estimate: from 0.2 μHz for large amplitude coherent modes
to 0.4 or 0.5 μHz for solar like oscillations in a 8th magnitude star.

How does this translate into accuracy on modeling…….Do not try to push comparison too far!

The CoRoT Schedule

Any information useful for the selection of targets *
has to be provided at least **6 months before the beginning of the observation**

- first long Run: selection of secondary targets April 2006

- first short run: selection of the field and of the targets: April 2006

A New selection every 6 months

Urgent to continue the comparison on other codes
But also to evaluate the oscillation codes in different situations

.*
- Should we include giants?
- Should we include very hot stars
- should we include many fast rotators
- Should we select only stars that we know how to model?