

**Nuit du 2013.05.21**  
**Observateurs : Nicolas, Norm, Narges**

**CONFIGURATION : E2 E1 W1 + POP3 POP 1 POP 3**

Cophasing on HD106591, small corrections of cophasing. R0 around 8cm

Nicolas is saving the images and pupils as requested by Jean-Michel.

We have 30 photons while all shutters are closed.

Problem with ICS. Nicolas restarts the spectrograph ON/OFF, but nothing changes. We ask Norm to restart the computer manually. Still problems. The spectro was not set properly, we do INIT. Now spectro is fine. All set. Asking to find the fringes with CLIMB.

There was a problem with CLIMB\_B1 and CLIMB\_BC2 button which should be in Green and the ENG\_BEAM button should be red in the BC1 control panel (in order to cophase VEGA and CLIMB). Done.

**UT05 :37** now the problem has been solved on CLIMB\_B1 and CLIMB\_B2.

Waiting for fringes with CLIMB.

**UT05 :37** we have fringes now. Removing the SERVO and try to find the fringes with VEGA. Fringes on CLIMB for E1 2.7 mm and for W1 2.7 mm. Beam 2 is as a reference. We have to put the fringes in the right way. Now fringes are 16 micron away.

**CLIMB\_B1 is -0.5**

For W1 we don't have fringes around CLIMB position. Nicolas put SERVO OFF and look to find fringes with VEGA. Fringes are not visible with changing the OPLE Offset.

The check star is a bit too resolved for the 23 baseline. Nicolas propose to try to cophase on another star: Cal=HD111270 and target=HD113337. Slew to CAL. It is a bit fainter, but as the conditions are good we should be able to cophase 23 properly. We go to E1E2 due to get fringes. No fringes finally. We move to 2T.

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**CONFIGURATION : E2 E1+ POP3 POP 1**

Fringes on CLIMB for E1 are in 2.8 mm.

**07.30** :R0 is around 8 cm. Waiting to find fringes with CLIMB. Norm said he can't find the 1-2 fringe. **UT07:35...** He found it. He said it moved a lot from the 2.8mm position.

The fringe position is 1.9mm and **CLIM\_B1=-0.2... CLIM\_B2=0.4**

**HD148897**

**HD148897CAL4E2E12013.05.22.07.27:**

We are at FT1=-230 micron instead of -100 micron.

We can see very nice fringes. We don't need to record CLIMB data.

The number of blocks are 20.

It's done quickly.

**HD148897CAL1E2E12013.05.22.07.48:**

Starting to record. R0 still is 8 cm.

The fringes position is in FT1=330 micron. The fringes are quite nice and stable and came so fast. We keep the same number of block=20.

The fringes now are quite nice. R0 still is 8 cm.

Before going to CAL4 again, Nicolas did some improvement on VEGA alignment.

He found block 1 to 7. The position of fringes are moved from 8 to 27. AT FT1=100um (correct position).

**HD148897CAL4E2E12013.05.22.08.02:**

R0 is around 9 cm. Fringes came so quick and are so bright and clear.

Number of blocks are 27. The fringes are stable.

We could record very quickly.

**HD148897CAL2E2E12013.05.22.08.21:**

The fringes are coming to fast and they are so bright.

R0 is around 9 cm.

We keep the same blocks of 27. The fringes are so stable.

**HD148897E2E12013.05.22.08.33:**

R0 is around 8 cm. From 1 to 9 we were cophasing (The fring position is smoving). We add 15 blocks (35 total and from 10 to 35 fringes are stable).

The fringes are quite nice and clear.

**HD148897CAL1E2E12013.05.22.08.55:**

The fringes comes so soon.

They are stable and bright.

R0 is still 8 cm. The recording time is so fast.

**HD148897CAL4E2E12013.05.22.09.06:**

R0 is around 9 cm. The fringes are quite bright and stable.

The recording done.

**HD148897CAL1E2E12013.05.22.09.19:**

R0 is around 9 cm. The fringes are not stable. At the moment no fringes.

The position of fringes is FT1=-205 um.

The fringes are so faint and not stable.

Now the fringes are quite better.

**HD148897E2E12013.05.22.09.36:**

The condition is not as good as before. The fringes are not so stable.

We put 30 blocks in stead of 20.

R0 is around 8 cm.

**HD148897CAL2E2E12013.05.22.09.55:**

R0 is around 8 cm. The fringes are coming fast. At the moment they are not so clear .  
The fringes are quite stable.  
The fringes now are more clear.  
So we add 4 blocks. We add 3 blocks more.

- **The file of calibration : D\_R2720.2013.05.22.10.16**  
**We forgot to put a density. Average number of photon around 3000.**  
**In any problem use the calibration at the end of the night.**

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**HD163296**

**HD163296CAL1E2E12013.05.22.10.21:**

For this target, we need to record data on CLIMB.  
So we start to record the CLIMB data. We don't have any tracking, as soon as finishing the CLIMB record we start to record data on VEGA.  
Now we start to record VEGA.  
R0 is around 8 cm.  
From 10 to 15 no tracking from CLIMB.  
We save data of this CAL1 but we will do observing again.  
At 15 block, it crashed.

CLIMB data corresponding to HD163296CAL1E2E12013.05.22.10.21 :

10:36:48: CLIMB/CLASSIC CAL1 HD\_170296 E1/POP1 E2/POP3 W1/POP3 V = 0.405 t0  
= 5.19/0.91mS

There is also another CLIMB measurement but without vega data :

10:57:53: CLIMB/CLASSIC CAL1 HD\_170296 E1/POP1 E2/POP3 W1/POP3 V = 0.488 t0  
= 1.03/0.18mS

No VEGA and CLIMB data on the Target.

We forgot the spectral calibration for HD163296CAL1E2E12013.05.22.10.21 so we remove the file !

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**HD181907**

**HD181907CAL2E2E12013.05.22.11.15:**

R0 is around 8 cm.  
The fringes are so bright.  
They came so quick.

**HD181907E2E12013.05.22.11.27:**

The fringes came so quickly.  
R0 is around 7 cm.  
The fringes are stable. The fringes are so bright.

**HD181907CAL2E2E12013.05.22.11.38:**

The fringes are coming quickly.

R0 is around 7cm.

The fringes are very nice and clear.

We put only 10 block in order to be able to observe target again.

**HD181907E2E12013.05.22.11.44:**

The fringes are very nice and bright.

The fringes are stable.

R0 is around 7 cm.

**HD181907CAL1E2E12013.05.22.11.51:**

The fringes are so bright and they appear quickly.

R0 is around 7 cm.

The fringes are stable.

- **The file of calibration : D\_R2720.2013.05.22.12.27**

**We put density of 2, but 800 of average photons**

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**Note :**

The Weather: clear and calm, RH 15-45%

Seeing: Min = 1.10cm at 03 15 Max = 29.60cm at 12 20 - Instantaneous

Seeing: Min = 2.26cm at 03 18 Max = 14.61cm at 11 13 - Ten Minute Average

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The END .... ;)