**Tasks February 2015 ARGOS run**

**Daytime LM1 Motor upgrade Feb 13-19**

Mechanical intervention on DX LM1. Exchange of the tilt motors with upgraded threads, stiffer leverages and bearings.

**People:**

Matthias, Mathias, Franz, Julian

Responsible: Matthias

**Telescope needs:** Telescope at Horizon. Access to LM area

**LBTO Support:** Gustavo

**MechanicsTasks:**

* LM1 reference verification
* LM1 motors upgrade DX (open enclosure, acess the motor units, fix mirror in position, exchgange one motor after the other)
* LM1 re-alignment
* LM1 SW scale verification with dial gauge
* LAT LBT interface definition
* Launch focus stage- measurements
* LM1 counter heater installation

**Electronics Tasks**

* Install counter heater
* Mocons re-installation
* LM1 motor check
* LM1 counter heater control setup

**Daytime system checks Feb 20-22**

**People:**

Lorenzo, Marco, Tommaso, Jose, Martin, Wolfgang, Gilles, Sebastian, Matthias, Julian

Responsible: Lorenzo

**Telescope needs:** Telescope at Zenith. Calibration source in

**LBTO Support:** Gustavo, Michael,

* TT setup
* TT measurement of flux on the APDs, compare to pyramid
* WFS setup (Jitter compensation test, SW test, FLAO ICE interface test)
* AOS interface test
* Luci Focus setup
* Pupil centering at low flux
* Truth sensing SW verification
* TT calibration (aperture wheel test, flat, IM, closed loop)
* SW (update of machines, TCS interfacing)
* LM1 counter heater test (requires laser on in the dome)
* Swing arm controller IP fixing (telescope at zenith, 2h, needs power cycling of the controller)
* DX swing arm software update (telescope at zenith. 2h)
* DX swing arm limit switch / end stop adjustment (telescope at horizon, 2h)

**Nighttime Feb 23-27**

**People and tasks:**

*AO supervision:* Lorenzo

*Argos AO & TT station:* Gilles, Marco

*Snapshots, AO analysis:* Tommaso, Marco

*Laser system:* Wolfgang, Julian

*Vibration control:* Diethard

*SW on duty:* Martin, Jose

*Luci station* Wolfgang

*Electronics & mechanics emergency:* Julian, Matthias

**LBTO:**

SW training: Doug

Argos system use training: Gustavo

Spotters & Aircraft station Michael

**Telecope needs during day:** Zenith pointing, calibration source, dark dome

**Tasks:**

* TT measurement of flux on the APDs with star of known mag
* TT control with APD. (Performance assessment, Comparison to Pyramid)
* Truth control at low light levels, performance characterization
* Truth sensing SW verification
* Vibration control setup and test (details provided by Diethard)
* Flexure model verification
* LM1 interaction matrix test
* Laser LM deformation measurement, counter heater test, corrector test, lookup table generation
* Focus and deformation corrector- aquire lookup table.
* LGS Closed loop performance on target, WFS data & LUCI & Dimm notes
* LGS acquisition procedure check
* TT / truth star acquisition check
* Arbitrator test
* Gain optimization scheme test

**Obs:**

* Observation of the targets provided by Gilles.
* AO Performance assessment on the fields
* TT anisoplanatism.
* Detector tilt measurement. (Step Luci focus through, rotate Luci by 180°)
* Luci presets verification, script testing
* Dithering…Sky??
* Measurement of proper flatfields in twilight, dome?
* K-band sky test, check on structure at bottom detector.