

FourStar Status

SAC Meeting 13mar2010

Persson, Murphy, Birk, Monson, Kelson, Uomoto

1. The following (sub)systems are nearly complete:

Hardware and software:

Detectors and associated electronics

(still missing sync cable)

Data acquisition

Mechanisms and controller

Temperature monitor/control

Vacuum monitor

LN2 level sense/Autofill system (still has bugs)

Data reduction (still needs integration)

Hardware:

Vessel, Optics, and filters

FakeStar

Window air

Carts

Plumbing and patch panel to be done

Procedures:

Vessel assembly/disassembly

Focal plane assembly/disassembly

Detector alignment

Pumpout

Wheels encoder alignment

Window airflow

Cooldown

System startup

Detector startup - needs automation

Gain/linearity/noise/dark

Fakestar focus

Warmup

Parameters:

Readnoise 15 e- (1 CDS)

Dark 2 e-/s

Image quality < 1 pixel

Flexure consistent with model

Vacuum 8e-06 torr

LN2 hold time 20 hours for shroud dewar,
4 days for detector dewar

2. The following are in progress (90% complete)

PSR documentation:

Support agreement

Technical description

Shipping plan

Site preparation plan

Installation plan

Commissioning plan

Performance criteria

Routine maintenance

Instrument documentation:

Overview

Details on camera and detectors

Observer's cookbook

Instrument scientist/specialist's cookbook

Locations of engineering documentation -
Focal plane, vessel, electronics, etc

Spare parts inventory

Commissioning Plan - details to be done

Ks Pupil setting plan

Telescope interface - dither sequences
- focus

Flatfields

Throughput

Backgrounds

Standard practice for observations

3. Remaining Issues

Process controller bugs

Sync cable

End-to-end acq/reduction data flow checkout

Final detector parameters

Final focus test

Export license - is in the works

Final schedule - depends on above

Finish documentation

>>Pre-ship review not yet scheduled

Tentative schedule

PSR	May 11
Warmup ends	May 17
One month extra	June 17
Packing starts	June 17
Packing ends	July 17
Ship departs	July 26
Ship arrives	Sept 17
Shipment arrives LCO	Sept 25
Installation starts	Sept 26
Installation ends	Nov 24
Commissioning (#1) starts	Nov 24
Commissioning (#1) ends	Nov 30