

STATUS – May 2008

- Buildings complete. Roads & pads on high site starting.
- 16-input correlator installed
- 8 (9?) antennas on site – testing in progress
- Transporters on site and under test
- First receiver system and antenna electronics just arrived
- Systems and software testing on-going at VLA site
- Some development work still going on in other areas:
 - Band 10 front-ends
 - Production radiometers
 - Laser Local Oscillator refinements

Main buildings
complete



- ACA Correlator installed and running at high site



Plant in the AOS building



ASAC Telecon May 21st 2008

Transporter Hanger at AOS



Foundation work at AOS



New Membrane being tested for UV resistance



Working towards occupation of OSF buildings



New foundation at OSF



Foundation testing Device



Melco 12m Antennas



CFRP backup structure of AEM antenna



CFRP Cabin for AEM antenna







Dummy Load for Transporter







CCLRC
Rutherford Appleton Laboratory



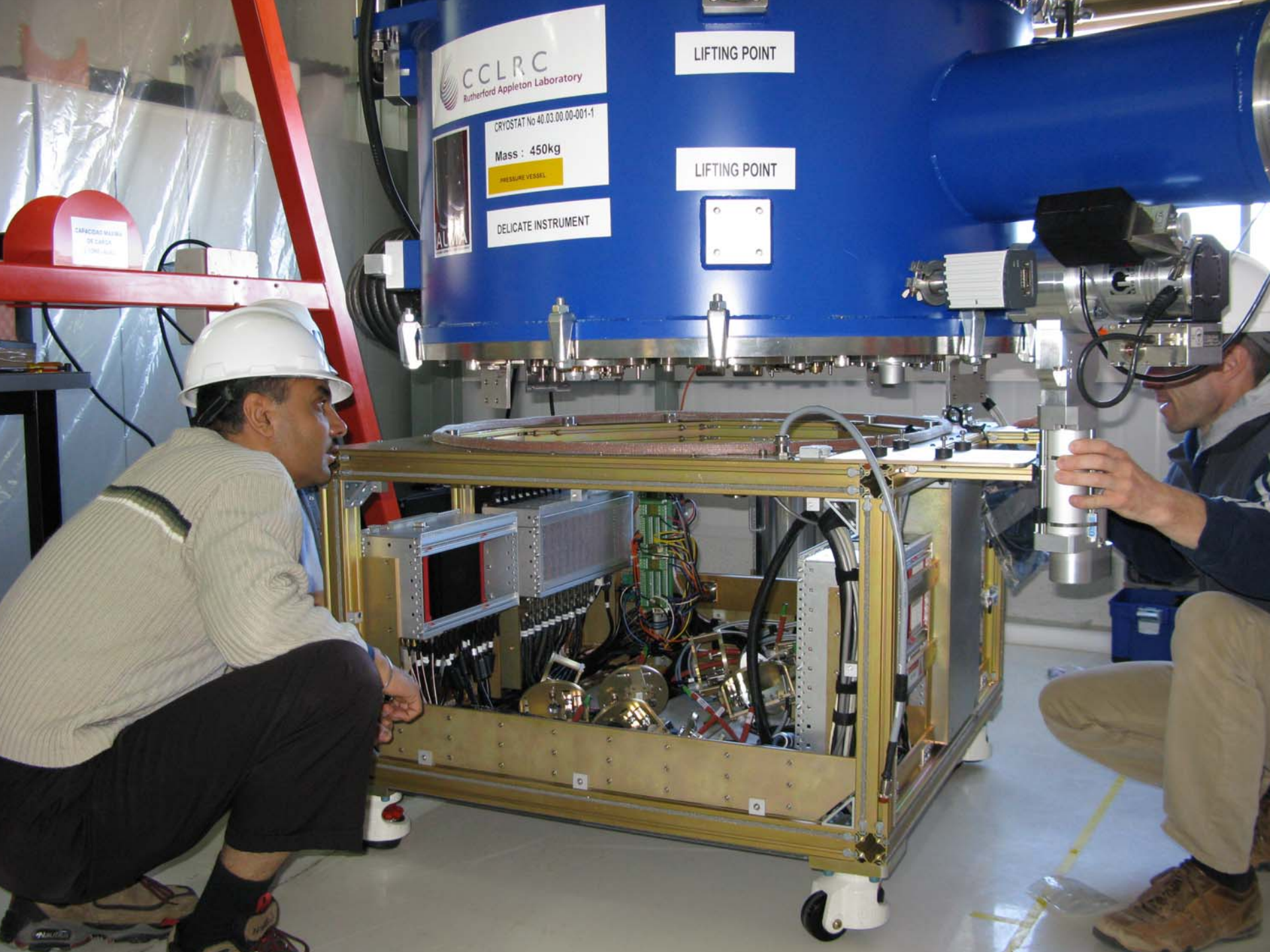
CRYOSTAT No 40 03 00 00-001-1
Mass : 450kg
DELICATE INSTRUMENT

LIFTING POINT

LIFTING POINT

CAPACIDAD MÁXIMA DE CARGA 1 TONELADA





CCLRC
Rutherford Appleton Laboratory

LIFTING POINT

CRYOSTAT No 40.03.00.00-001-1

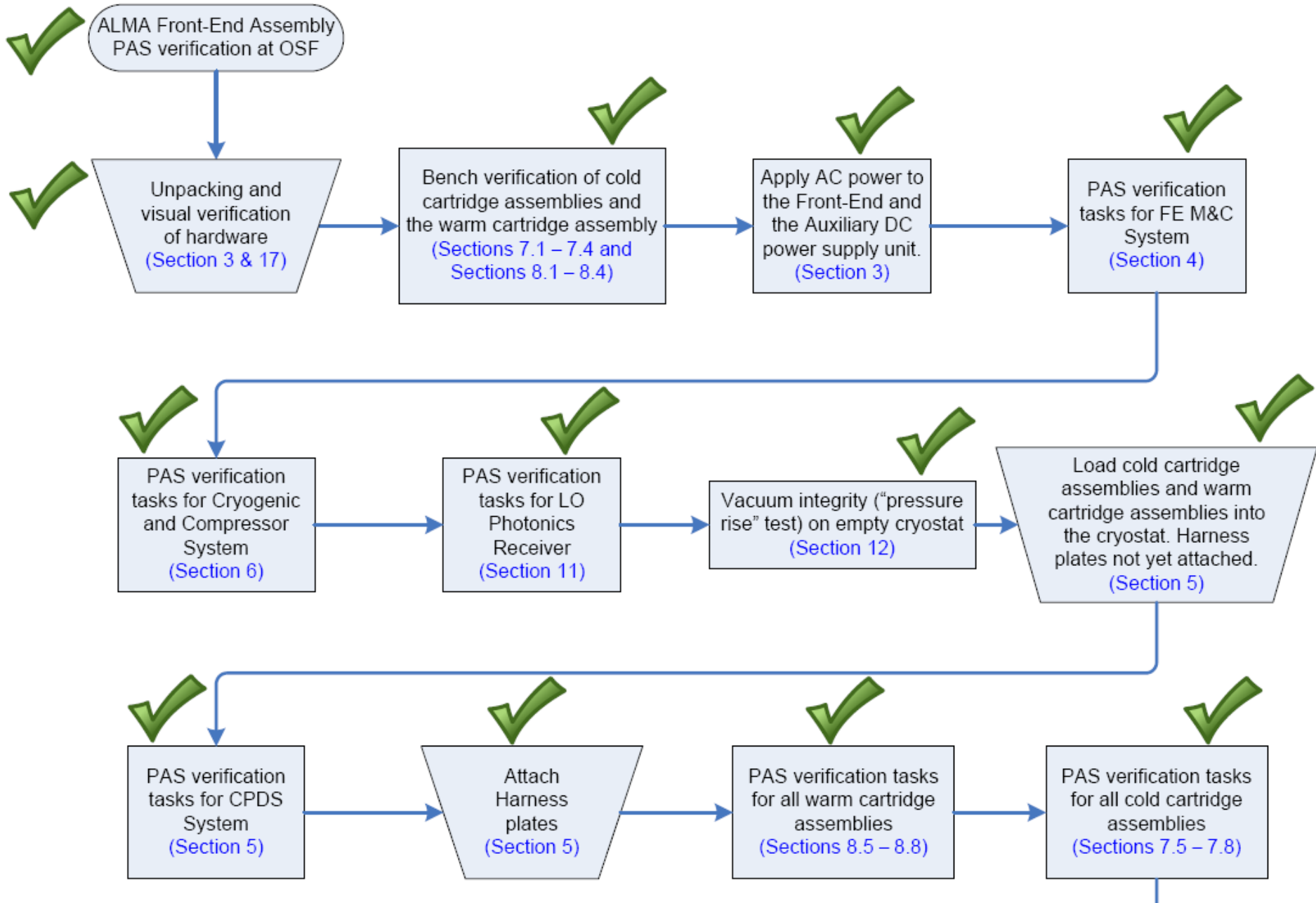
Mass: 450kg

PRESSURE VESSEL

LIFTING POINT

DELICATE INSTRUMENT

CAPACIDAD MÁXIMA
DE CARGA
1000 kg



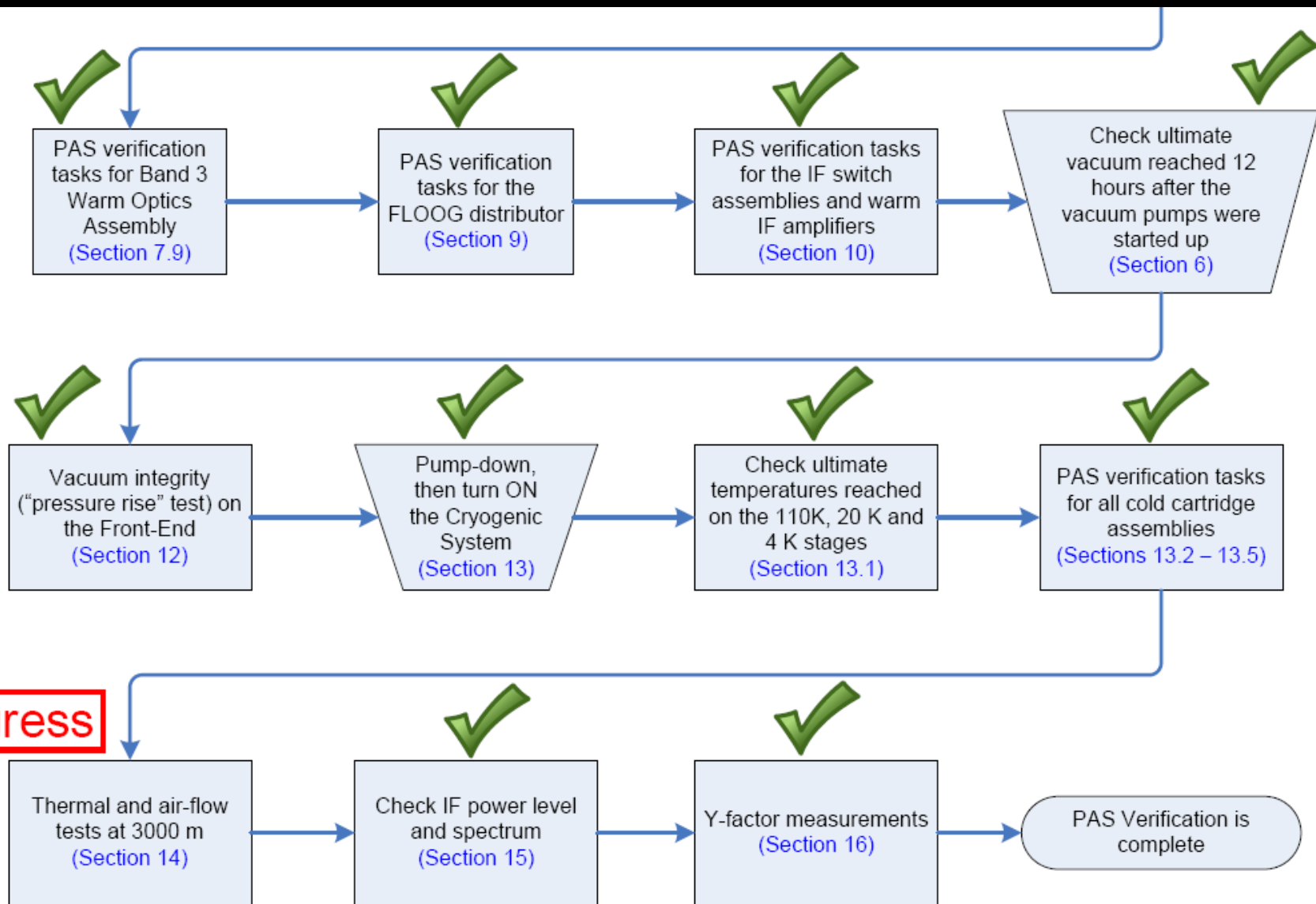


Figure 1: Outline of the process flow of the PAS verification at OSF.

Electronics racks
at OSF to go in
first antenna.



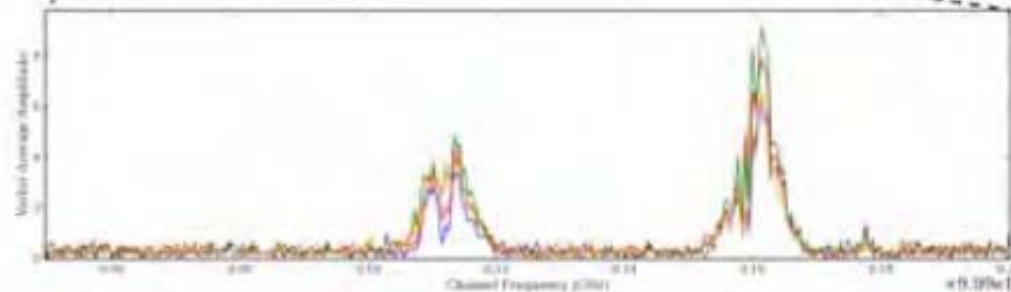
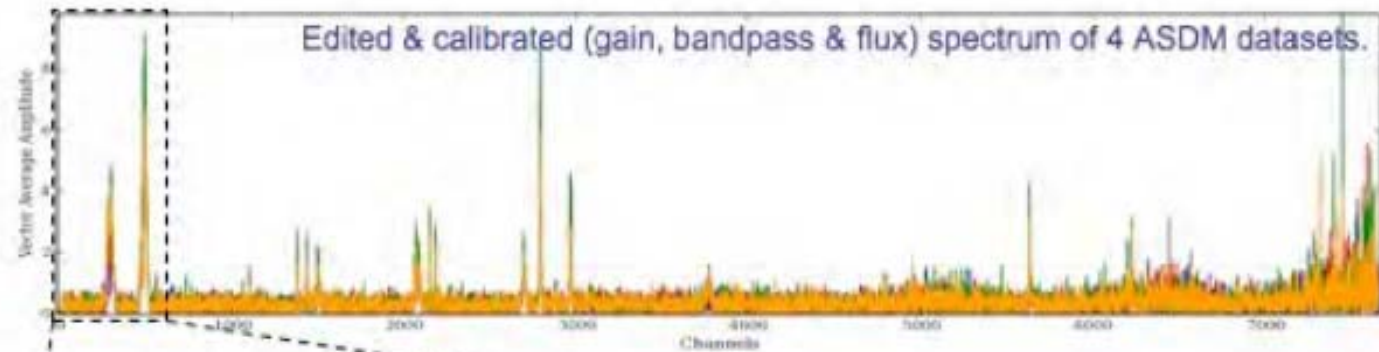
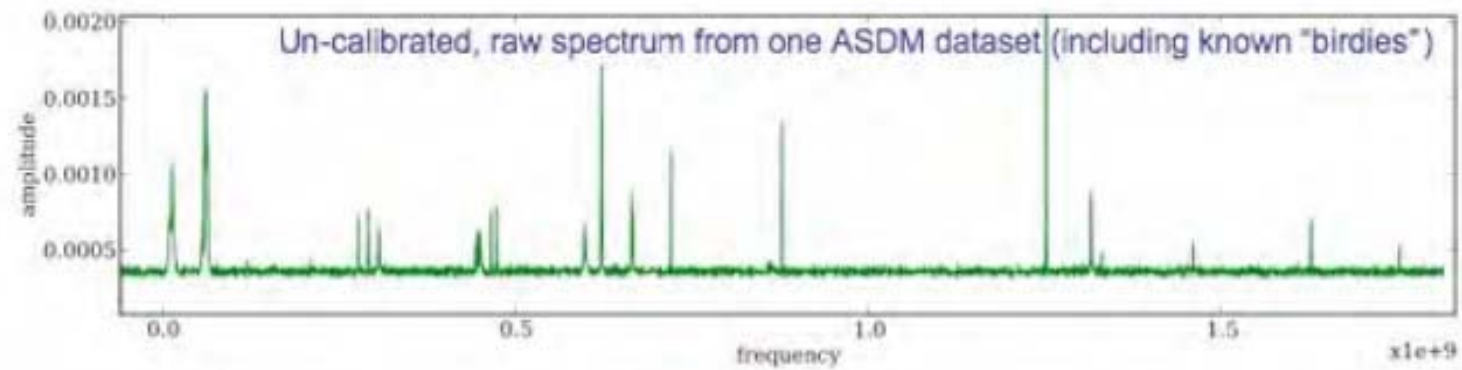
Patch Panels for Fiber Connections



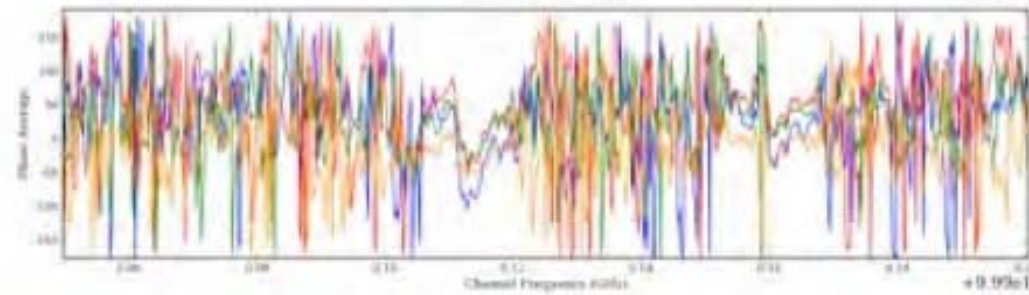
ATF testing continues – expect to go to Sept 1st



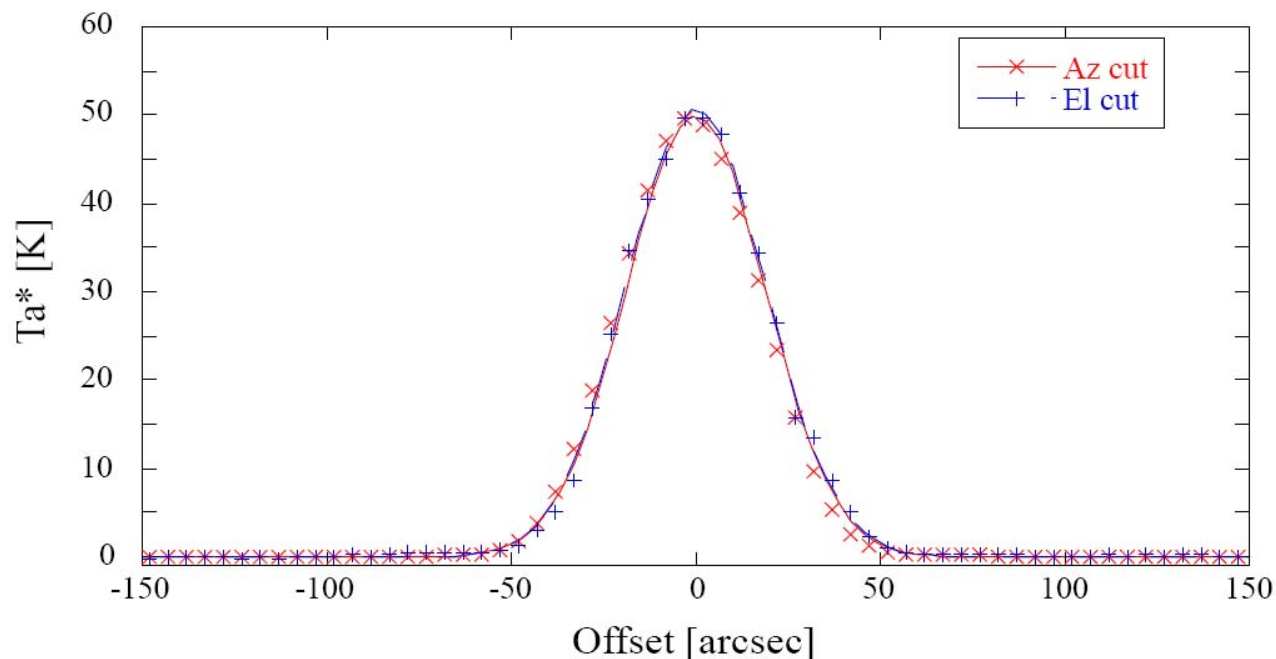
Interferometry
data from the
ALMA test
facility



Zoom in on amplitude
and phase of 2 lines -
good comparison
between the 4 datasets.

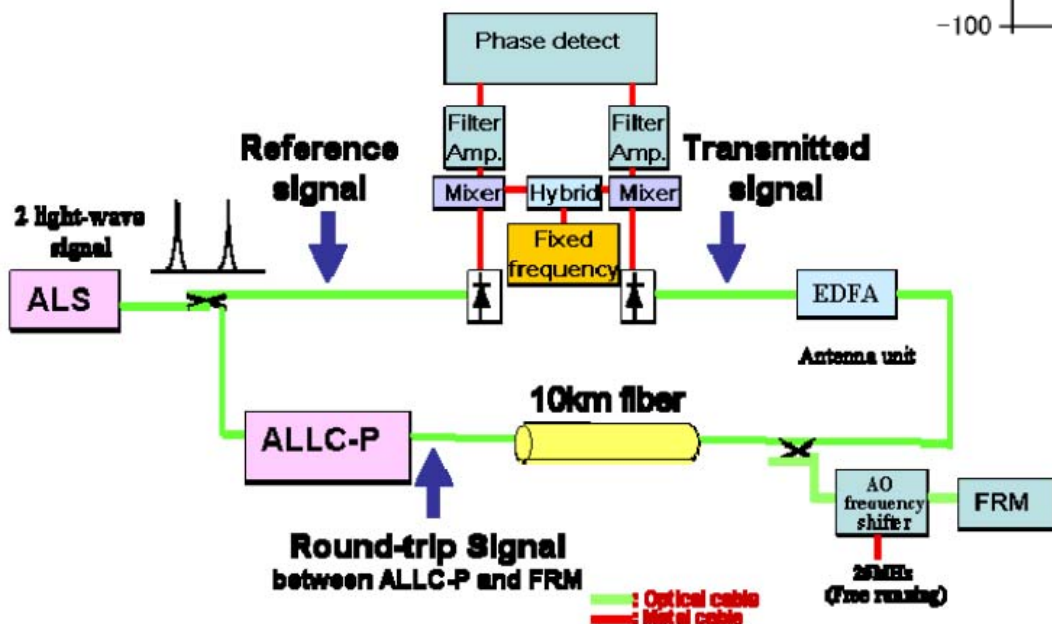
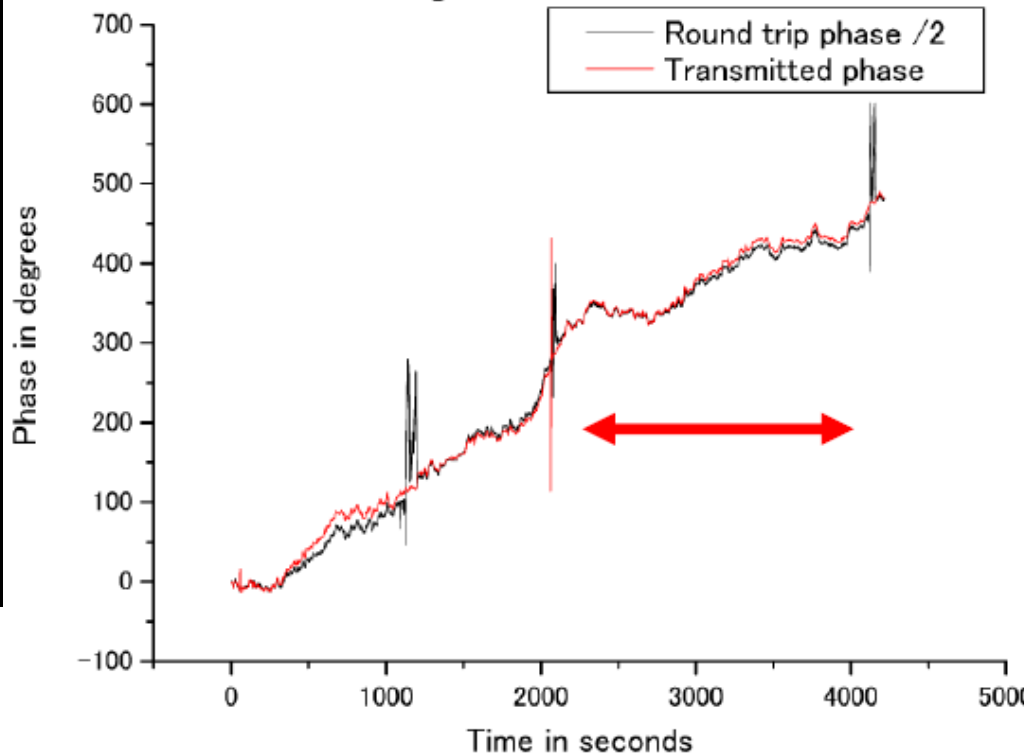


Band 4 Cartridge & 147 GHz observation of Jupiter made with ALMA-J antenna

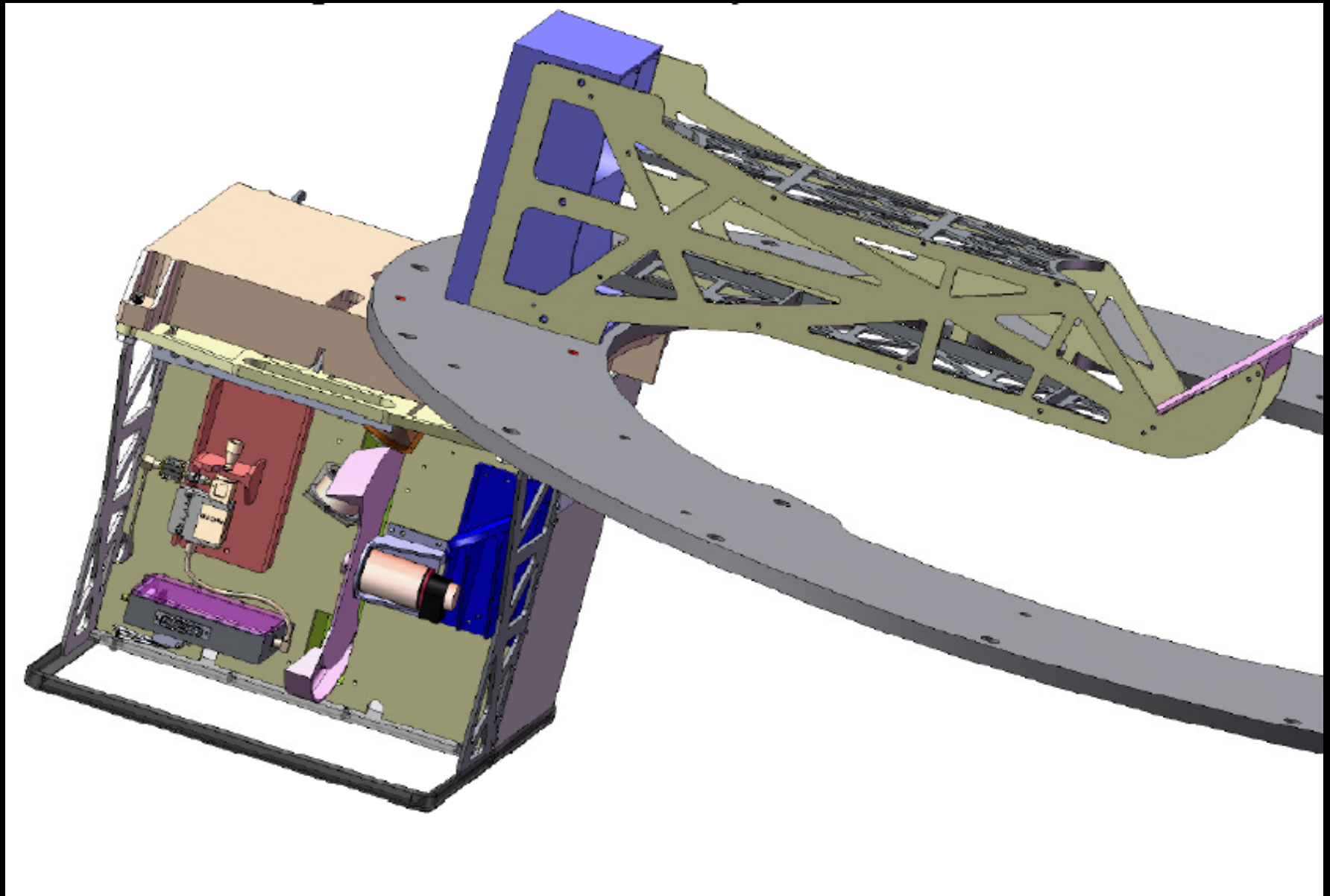


Test of alternative Laser LO system

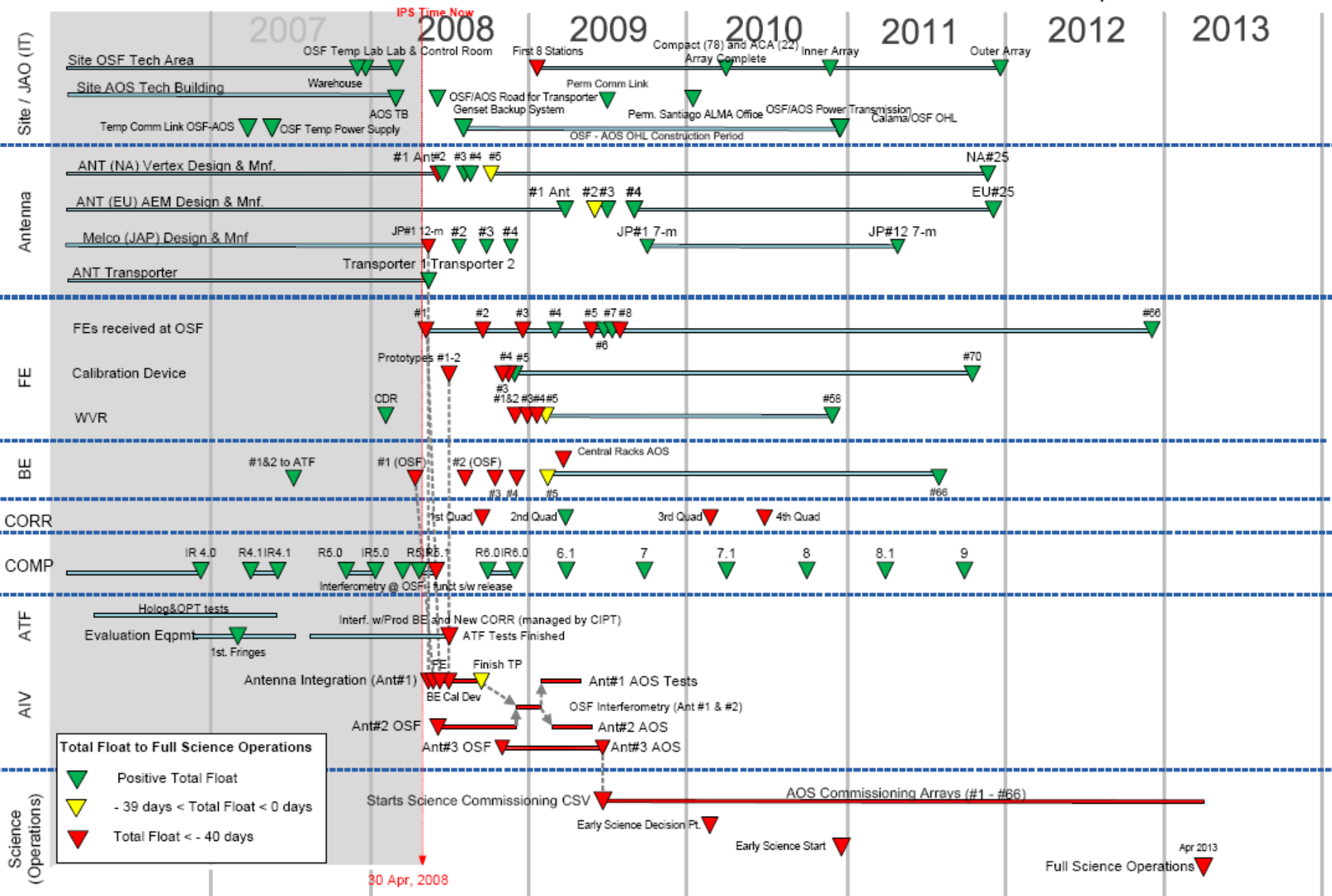
80 GHz signal transmission with 10 km fiber



183 GHz WVR Design – in review



ALMA General Overview – Forecast Dates as of 30 Apr 2008





www.alma.cl

The Atacama Large Millimeter/submillimeter Array (ALMA), an international astronomy facility, is a partnership among Europe, Japan and North America, in cooperation with the Republic of Chile. ALMA is funded in Europe by the European Organization for Astronomical Research in the Southern Hemisphere, in Japan by the National Institutes of Natural Sciences (NINS) in cooperation with the Academia Sinica in Taiwan and in North America by the U.S. National Science Foundation (NSF) in cooperation with the National Research Council of Canada (NRC). ALMA construction and operations are led on behalf of Europe by ESO, on behalf of Japan by the National Astronomical Observatory of Japan (NAOJ) and on behalf of North America by the National Radio Astronomy Observatory (NRAO), which is managed by Associated Universities, Inc. (AUI).