ALMA Observing Tool (OT) for Cycle 6 Proposal Preparation: **Update since last cycle**

Daniel Espada

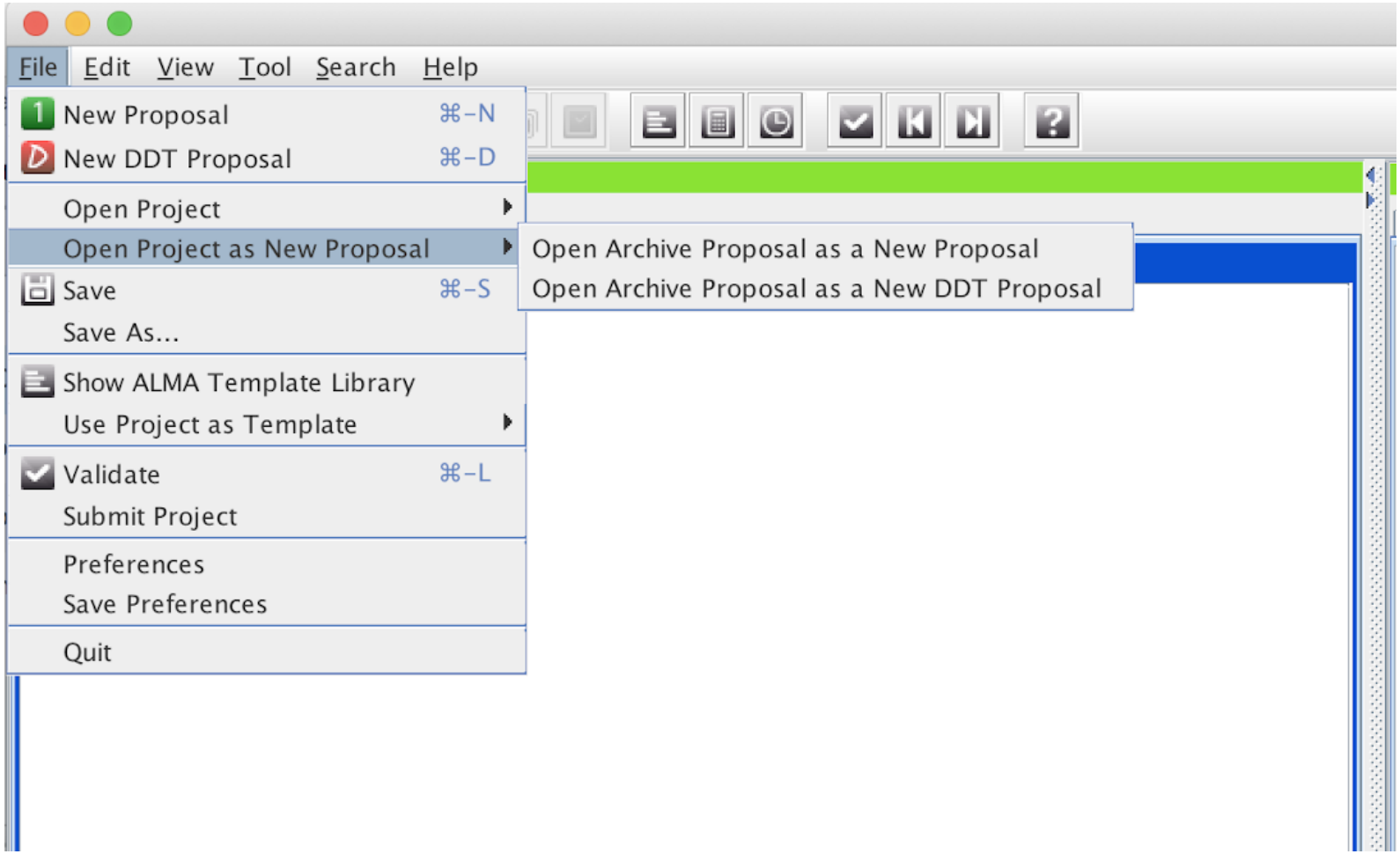
East Asian ALMA Regional Center

Specially Appointed Associate Professor

1) JAVA version

- OT will only work using **Java 8 (64 bit)**. Java 9 has been recently released, but this should not be used.

2) Resubmitting previous projects



Now possible to convert between normal and DDT proposals

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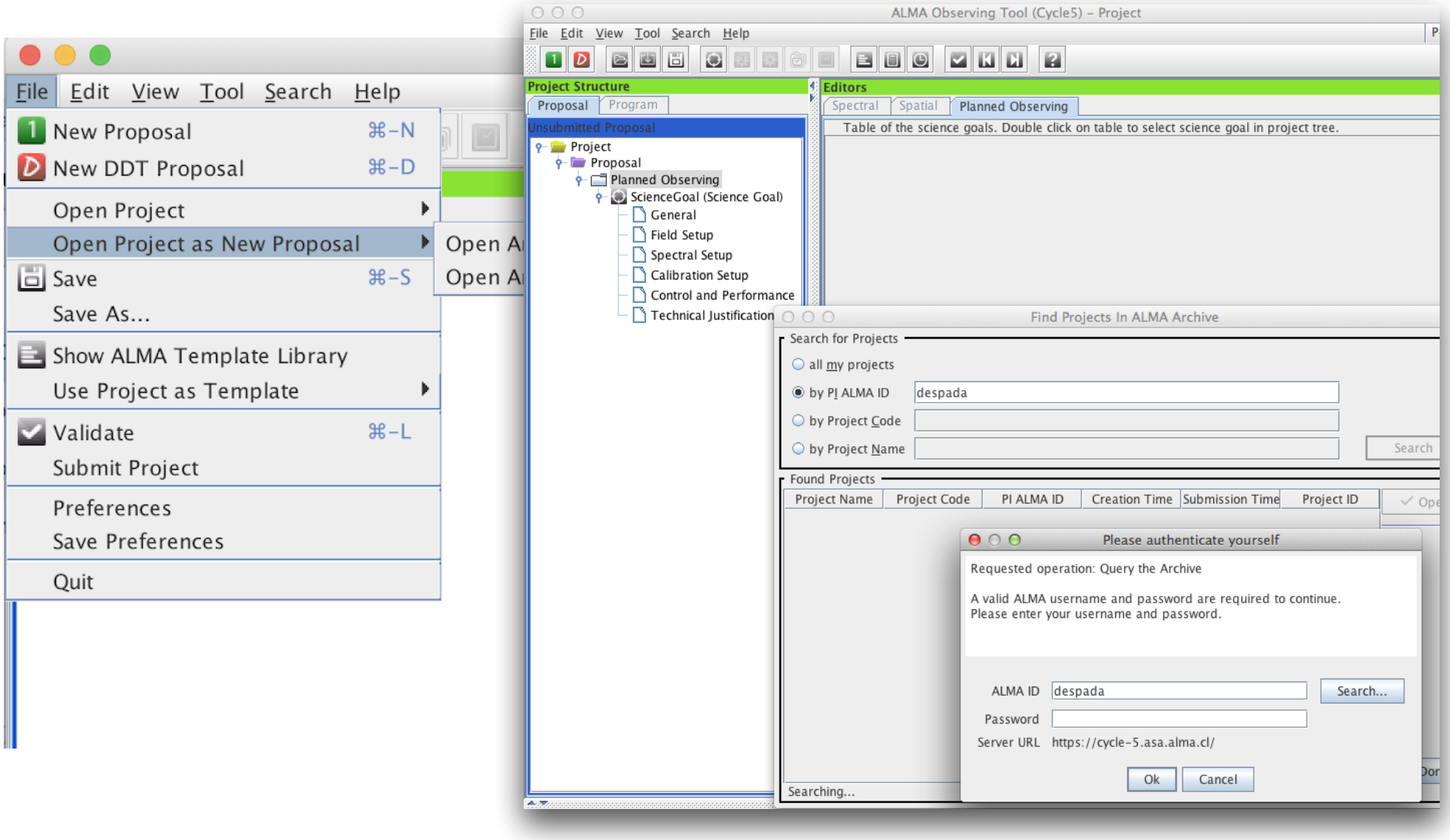
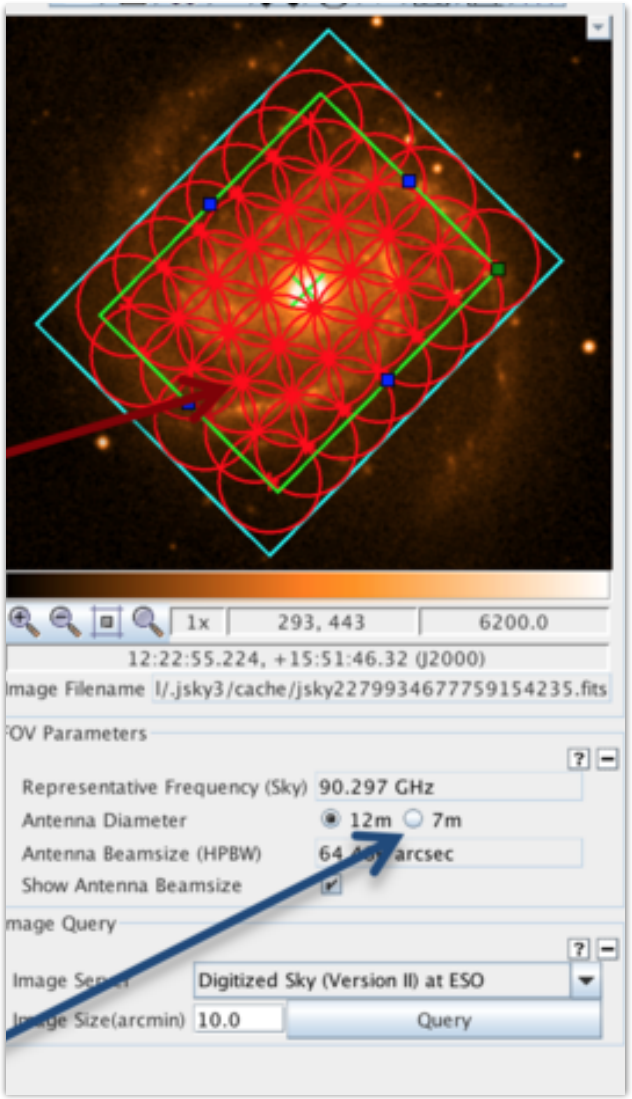


Now possible to convert between normal and DDT proposals

3) Galactic coordinates

- OT had partially supported Galactic coordinates for some time, but now this is improved:
  - The spatial visualizer displays externally loaded fits in Galactic coordinates and will convert between different coordinate systems.
  - Source coordinates that are read via a text file are interpreted in Galactic if they are in decimal degrees.



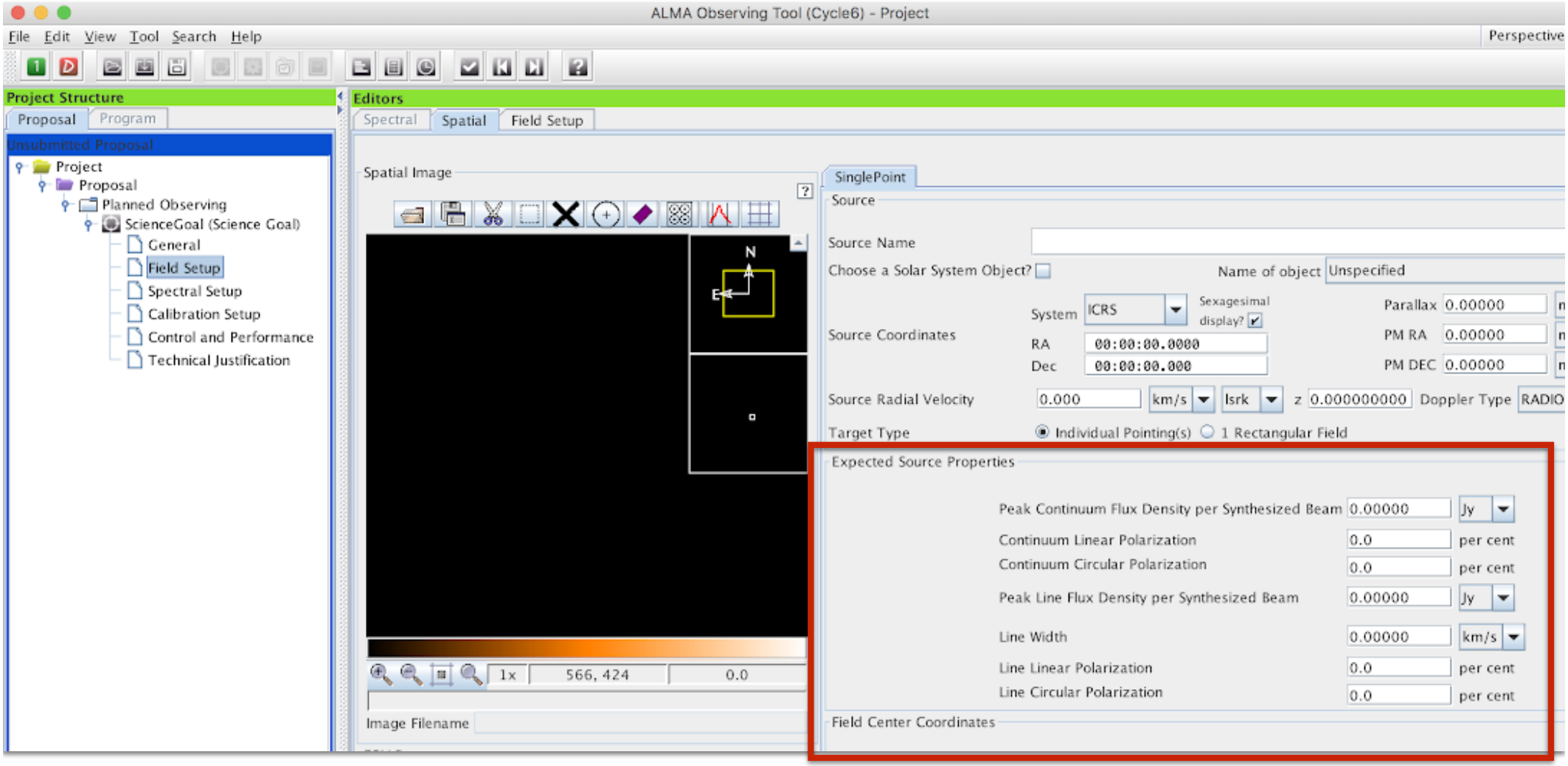
4) Circular polarization

- The spectral setup is defined in exactly the same way as for linear polarization, but separate estimates of the continuum and linear polarization of the source should now be entered.

- OT enforces lower limits on the allowed polarization percentage (different for circular and linear). For circular it is 1.8%.

5) Circular polarization

New fields in ‘Expected Source Properties’ in Field setup



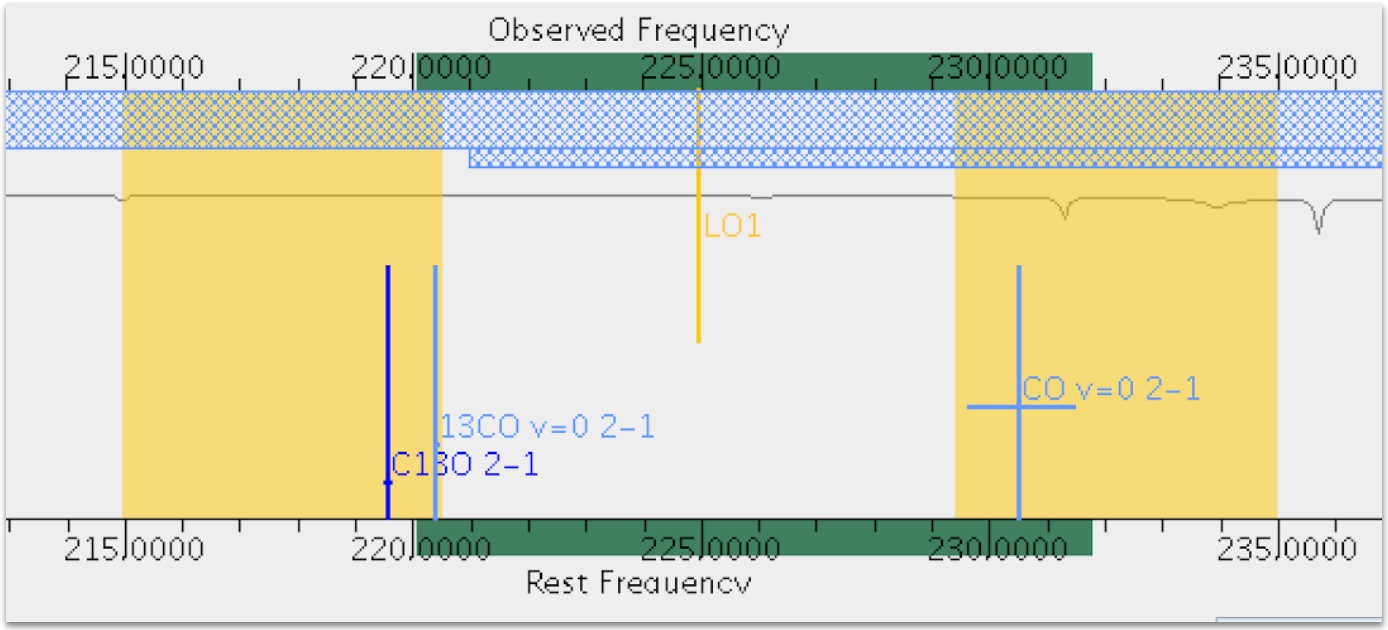
6) Band 8

- Band 8 observations become standard
- Therefore Band 8 observations are now possible with ACA standalone

7) Band 6 IF range

- Since Cycle 0, the IF range of band 6 has been 5 - 10 GHz, but it has been extended by 0.5 GHz (i.e. 4.5 - 10 GHz).

- It is now easier to observe the spectral setup with CO, 13CO and C18O(2-1) lines



8) Correlator data rates

- The OT now enforces a strict upper limit of **70 MB/s** for the (peak) data rate assuming 50 antennas (maximum that might be used, although sensitivity calculations are based on 43 antennas)

- If limit is exceeded, then spectral averaging should be used (or spectral windows removed) until validation error disappears

9) Simultaneous 12m+ACA

- In addition to specific time windows and multiple visits, you can also request that the 12m and ACA observations are executed simultaneously using a tick box.
- In that case 7m/TP time will be as for the 12m array
- Only allowed if only one 12m configuration required

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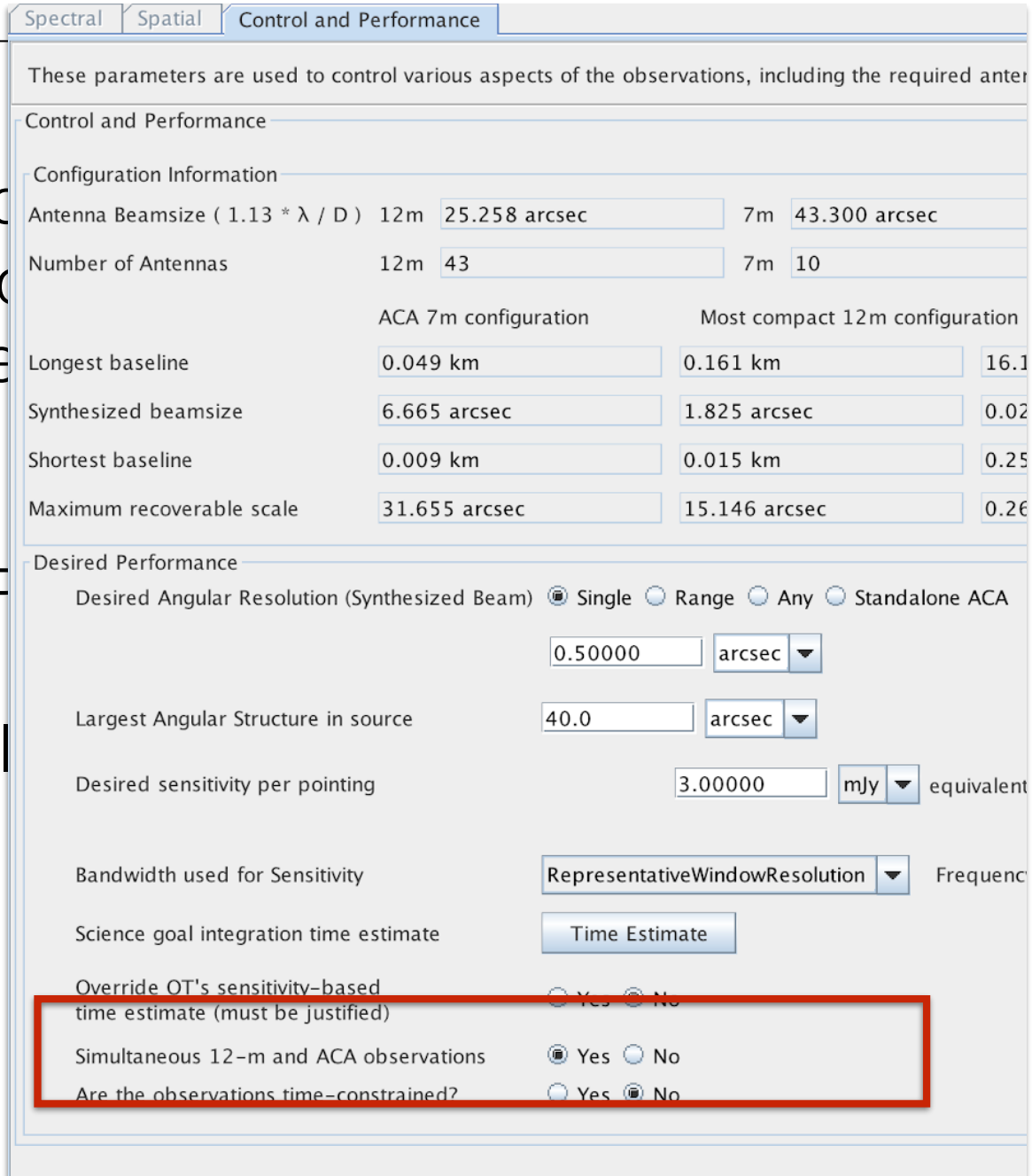

Other changes

- **10) If multiple sources, groups** are done within a radius of 10 deg, except for Long baseline configurations, where the radius is 1 deg

- **11) LSRK to barycentric correction** now works properly for all velocity definitions

- **12) Minimum time on source** (adding all sources in a given Scheduling Block) will be the largest of 5 min or 50% of the total calibration time (amplitude and bandpass)