# Observation Capabilities for Cycle 7 Supplemental Call

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# Important Points

- **Only standard observing modes**
- **Same ACA stand-alone capabilities as those for the main call**

# What is the capabilities?

- **Array components**
  - **The ACA 7-m array or the 7-m array plus the total power (TP) array**
  - **At least ten 7-m antennas and three 12-m antennas**
- **Spectral Setup**
  - **Receiver bands 3, 4, 5, 6, 7, and 8**
  - **Spectral-line and continuum observations for the 7-m array, only spectral-line observations for the TP array.**
  - **No spectral scan.**
- **Field setup**
  - **Single field and mosaics**

# Recap

**Table 3: List of non-standard modes**

| |
|---|
| Bands 9 and 10 observations |
| Band 7 observations with maximum baselines > 5 km if a suitable phase calibrator is not available within 5 degrees of the science target[1] |
| All polarization observations |
| Bandwidth switching projects (having less than 937.5 MHz aggregate bandwidths over all spectral windows) |
| Solar observations (Bands 3, 6 and 7) |
| VLBI observations |
| User-specified calibrations |
| Astrometric observations |

# AR/MRS

| Config | Lmax | | Band 3 | Band 4 | Band 5 | Band 6 | Band 7 | Band 8 |
|---|---|---|---|---|---|---|---|---|
| | Lmin | | 100 GHz | 150 GHz | 183 GHz | 230 GHz | 345 GHz | 460 GHz |
| 7-m Array | 45 m | AR | 12.5” | 8.4” | 6.8” | 5.4” | 3.6” | 2.7” |
| | 9 m | MRS | 66.7” | 44.5” | 36.1” | 29.0” | 19.3” | 14.5” |

# Source restrictions

- **ACA observations will have a severe shadowing at low elevations.**
- **Special attention to DEC>+25, DEC<-70**

https://almascience.nao.ac.jp/proposing/7m-array-supplemental-call
https://almascience.nao.ac.jp/documents-and-tools/cycle7/alma-proposers-guide