

What are the current QA2 requirements?

Sarah Wood - 2022-07-11 - Archive & Data Retrieval

Cycle 8:

<https://almascience.org/documents-and-tools/cycle8/alma-qa2-data-products-for-cycle-8>

1) Angular Resolution (AR) requirement

For Cycle 7 and 8 the angular resolution requirement has changed with respect to Cycle 6.

For Cycle 7 and 8, the angular resolution criterion is based on the measured beam area, rather than the linear size of the two axis, which was the Cycle 6 criterion.

The measured beam area must be within the areas of the circles having diameters of the minAR and maxAR resolutions.

Note that the above comparison is equivalent to the geometric mean of the beam axes ($\sqrt{a*b}$, where a and b are the observed major and minor axes, respectively) being within the angular resolution range given by the minAR and maxAR values.

The minAR and maxAR values are computed by the ALMA OT, for each of the SBs, based on the angular resolution range for the science goal provided by the PI.

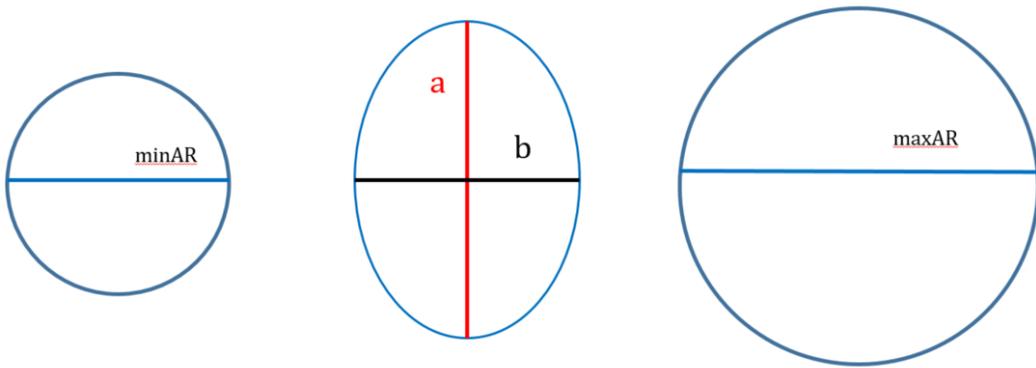
2) Sensitivity Requirement

For Cycle 7 and 8 the RMS requirements have been maintained with respect to previous cycles. More specifically, the RMS must be within or better than:

(Table in flux units per beam)

Bands 3/4/5/6	10%
Bands 7/8	15%
Bands 9/10	20%

$$\min AR < \sqrt{ab} < \max AR$$



Tags

qa2