

# ALMA at High $v$

Are we getting return on investment?

# Charge to ASAC

- The ALMA Board will provide the ASAC with an ad hoc charge for October 2018 as follows below:
  - "The ASAC should suggest additional ways to further engage the community in proposing for high frequency observations."
- JAO seeks independent IST input.
  - Director: Release new high frequency SV-type data sets?
  - Considerations:
    - Several hi frequency SV datasets are available:
      - A [Band 9](#) dataset on IRAS16293, complete with [CASA Guide](#), is available.
      - **VY CMa** [Band 7](#) and [Band 9](#): high angular resolution is available.
    - Need time to take data and to develop an SV package.

# Alternative: Use Available Data

- Archive: 213 B9 or B10 projects, only 25 in proprietary period
  - These projects have resulted in  $\sim > 200$  publications
  - Those publications have  $\sim 1300$  citations
- Do we need more SV datasets?
- ALMA is only interferometer at these frequencies!
  - Are there datasets which could be used instead of SV?
    - Less preparation—data analysts already did the work to produce reference images
    - PI-driven science
  - How to advertise these facts?
    - Workshop/AAS session featuring the range of near-THz science?
    - Feature certain archival datasets

# Record to Date

- Cycle 0 produced 21 High frequency datasets with 134 papers; two had none.
- Cycle 1 produced 18 high frequency datasets with 44 papers; 8 had none.
- Cycle 2 produced 19 high frequency datasets with 56 papers; 6 had none.
- Cycle 3 produced 16 high frequency datasets with 2 papers; 14 had none. Eight are still in proprietary period.
- Cycle 4 produced 14 high frequency datasets with 2 papers; 13 had none. Six are still in proprietary period.
- Cycle 5 has so far produced 11 high frequency datasets with no papers. All are still in proprietary period.
  
- That is a total of 99 hf datasets with 238 papers; only 43 datasets out of proprietary period have yet to result in a publication, most of them since Cycle 3.
  
- At least 1273 citations to papers involving B9 or B10 data.

- B10 only
- JVO lists four observed.
  - 1 3c368 18h05m06.401018 +11d01m32.98501 2
  - 2 Arp220 15h34m57.265701 +23d30m10.70719 3 OH+, looks good!
  - 3 Sgr\_A\_star 17h45m39.736534 -29d00m41.13289 2
  - 4 SMM\_J22471-0206 22h47m12.002002 -02d05m38.03399 2
- Few; none are published. Four others are in proprietary period.