

ASKAP Report

ATNF Users' Committee

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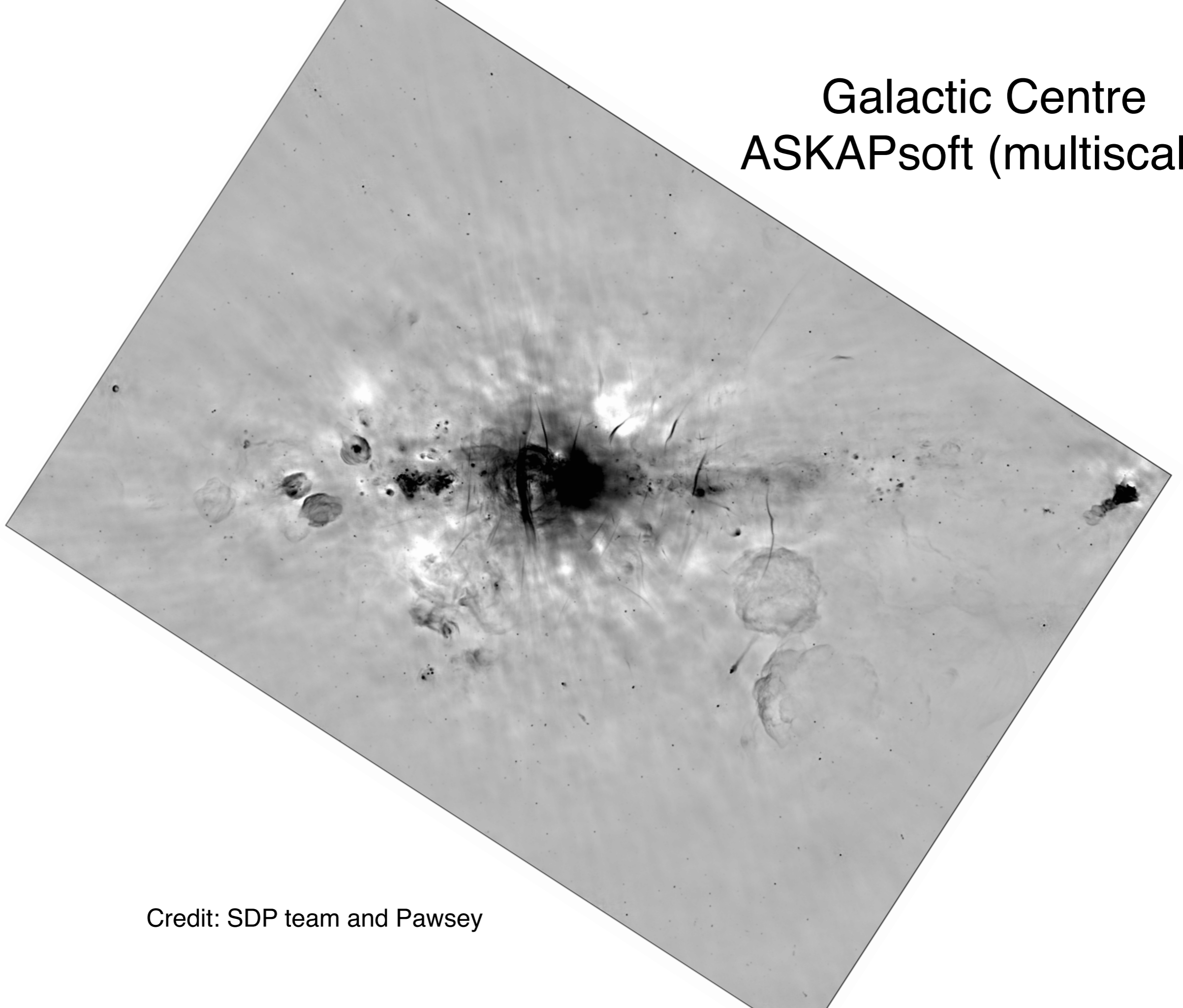
ASKAP update

- ~~Construction/commissioning progress SDP progress~~
- ~~Pilot surveys - the next round of science observations~~
- ~~Science highlights~~ FRB news from CRAFT
- Observatory projects

Science data processing

- ASKAPsoft and the pipeline continue to improve
 - SDP group now employs an “agile scrum” development process
 - the Project Scientist (Aidan Hotan) is “product owner”
 - good progress has been made under this new scheme
 - the ultimate aim of real-time processing now has less urgency
 - the immediate goal is the capability of processing all data types “off-line”
 - using the pipeline but acknowledging the need for human intervention for parameter setting etc.
- SDP team has just finished a 1-week test using all of Galaxy resources

Galactic Centre ASKAPsoft (multiscale)



Credit: SDP team and Pawsey

CASDA - ASKAP Science Data Archive

- **Functionality includes:**

- Long term storage of ASKAP science data products
- Searches and data access via web (CSIRO Data Access Portal) and Virtual Observatory (scripted) services
- Validation of ASKAP observations
- Upload of value-added science catalogues and image cubes by users

- **Current datasets:**

- BETA : PKS2252-089 HI absorption (Allison et al.), Tucana cont image (Heywood et al.)
- First ASKAP Early Science: ASKAP12 Continuum reduction of NGC 7232 field
- EMU Early Science Cosmology fields (5 SBIDs)
- HIPASS (Parkes, Koribalski et al.) and SGPS (ATCA + Parkes, McClure-Griffiths et al.) HI spectral line cubes as Level 7 upload
- WALLABY Early Science Spectral Line Cubes (Tristan Reynolds et al., Lee-Waddell et al.) as Level 7 uploads

CASDA future

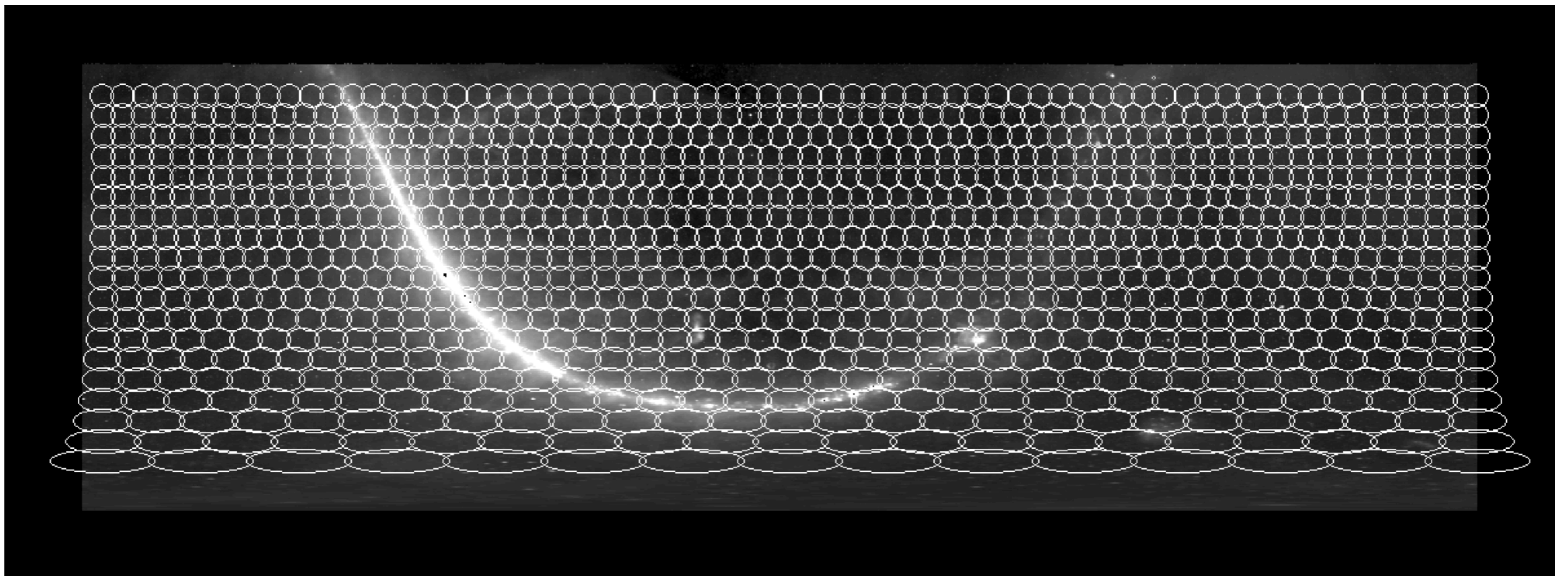
- The priorities for Stage 3.0 are:
 - Further develop CASDA: e.g. UI improvements, continue performance testing under load, VO TAP uploads, more example VO scripts, more functionality as ASKAP SSTs provide more feedback.
 - Analysis for consolidation of ATOA into CASDA/Pawsey or DAP.
- CASDA Stage 3.0 now expected to be only one sprint before July 2019.
 - Therefore not all updates/developments can be completed.
 - feedback from science teams to Minh Huynh crucial if you want a feature/functionality in CASDA by July 1.

Observatory projects

- “Wide-shallow” continuum survey - RACS
 - populate Global Sky Model
- Deep survey in one or two fields
 - test and characterize deep-field performance
- Show-case image for ASKAP
 - Likely to be Centaurus A

Observatory projects

- RACS - Rapid ASKAP Continuum Survey
 - 10 minute integrations on each field - detection limit of $\sim 1.5\text{mJy}$
 - whole visible sky
 - whole useable frequency range



Community links

- Early science forum, third Tuesday of every month
 - <https://confluence.csiro.au/display/askapsst/Early+Science+Forum>
- Commissioning update newsletters
 - https://www.atnf.csiro.au/projects/askap/commissioning_update.html
- Commissioning schedule
 - <https://confluence.csiro.au/display/askapsst/Schedule>
- We welcome ATUC's feedback!