

SKA SWG Update

Robert Braun, SKAO Science Director 17 October 2023

SKA Science Update

- SKA Construction Overview
- SKA Science Meetings
- AOB

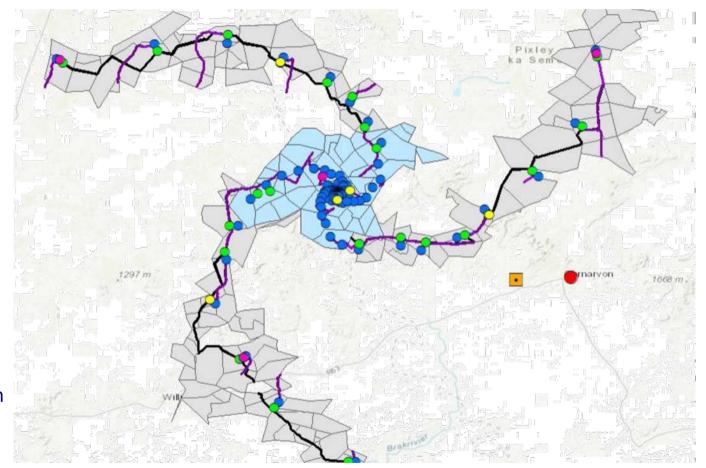


SKAO Construction Status Summary

- 26 months into ~7 year construction phase, 72 contracts awarded (approx. half contracts) representing 68% contract value (~€547M)
- Progress (end Aug 2023): 15.2% complete vs 17% planned and 15.8% spent (variance dominated by advance payments for infrastructure works)
- AA0.5 components in manufacture; software/computing platforms are demonstrating early observing functionalities
- All in the context of the Covid-19 pandemic and subsequent disruption to work, travel & supply chains; and also inflation and trade restrictions caused by the war in Ukraine
- 2023 is seeing the majority of the remaining contracts placed and significant progress towards our next key milestones, AA0.5 for each telescope



- 70/72 land servitudes realised (as of 17 Oct); remainder progressing well
- Good local participation in contractor camp roles
- Many local businesses registered for subcontracting and other opportunities
- Contractor camp progressing well
- General infrastructure well underway
- First four AA0.5 production dishes nearing completion for shipping to site





• Contractor camp progressing well





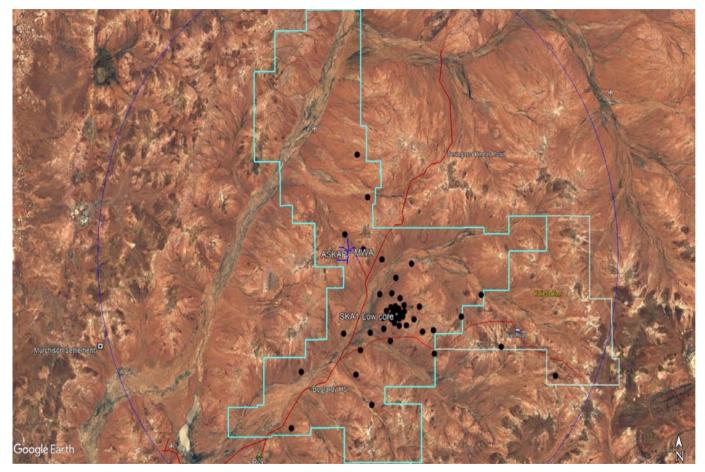
 General infrastructure (borrow pits, water catchments) and low frequency communications towers all progressing well







- AAVS3 deployed using SKAO staff, in lead-up to full deployment
- Excellent Wajarri Yamaji participation in contracts and employment
- "Fly" camp (103 beds) complete to support build of full camp (first beds by late October)
- "Turkey's nests" (water dams), borrow pits and tracks in progress
- Mesh, fibre and power cables all delivered to onsite laydown yard
- Trenching for AA0.5 underway





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Science Meetings

- Science at Low Frequencies IX, 11 15 Dec 2023, Amsterdam
- MeerKAT @ 5, 20 23 February 2024, Stellenbosch
- SKA Cosmology Conference, 18 22 March 2024, (see next slide)
- IAU GA, August 2024, Cape Town, various SKA Science events planned
- SKA Science Conference, Summer 2025, Germany, planning underway



Cosmology in the Alps



18 - 22 March 2024, Les Diablerets, Switzerland

- The Cosmology in the Alps Conference will focus on radio cosmology studying the universe on large scales. It aims to bring together experts in the field together with junior researchers to foster interactions.
- If successful, the meeting will be held every two years
- In person only, 80-100 participants
- Invited and contributed talks, list of topics includes:
 - 1. Radio galaxy surveys
 - 2. Intensity mapping
 - 3. Gravitational Lensing / Cosmology
 - 4. Cosmic Dawn and the Epoch of Reionization
 - 5. Foregrounds and Magnetic Fields
 - 6. Instrumentation and current/future experiments
 - 7. Dark and Quiet Skies



https://indico.skatelescope.org/event/1098/

8. Diversity and Inclusion and Collaborating Across Borders

Any Other Business

• News from SWG Chairs?





We recognise and acknowledge the Indigenous peoples and cultures that have traditionally lived on the lands on which our facilities are located. \bullet

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