

# Early science with GLEAM-X and what's next?

*Tuesday, 7 May 2024 11:00 (25 minutes)*

The GaLactic and Extragalactic All-sky MWA eXtended (GLEAM-X) survey boasts twice the resolution, and up to an order of magnitude higher sensitivity to its predecessor the GLEAM survey. In 2020, observations for GLEAM-X were completed and the first data release covering 2,000 square degrees down to an RMS noise level of  $<1.5$  mJy/beam was recently released. The second data release, covering an RA range from  $\sim 20^{\text{h}}$  to  $6^{\text{h}}$  and  $\text{Dec} < +30$ , has an improved RMS noise level of  $<1$  mJy/beam, and  $\sim 650,000$  sources with spectral fitting. In this talk, we will showcase early science results from the second data release including spectral variability of peaked spectrum sources, cosmology, and tomography of ionospheric disturbances.

## keywords

surveys overview, survey science, AGN, imaging, variability

## In-person or online?

unsure

## Career level

ECR

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**Session Classification:** Surveys