

SKA1 MID - the SKA's mid-frequency instrument

The Square Kilometre Array (SKA) will be the world's largest radio telescope, revolutionising our understanding of the Universe. The SKA will be built in two phases - SKA1 and SKA2 - starting in 2018, with SKA1 representing a fraction of the full SKA. SKA1 will include two instruments - SKA1 MID and SKA1 LOW - observing the Universe at different frequencies.



Location:
South Africa



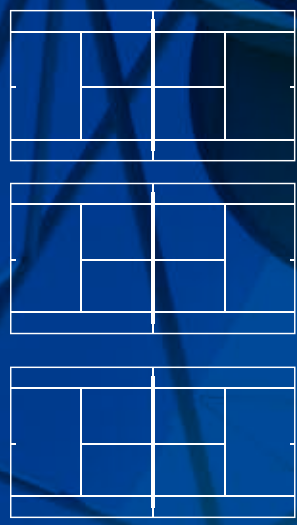
Frequency range:

350 MHz to
14 GHz

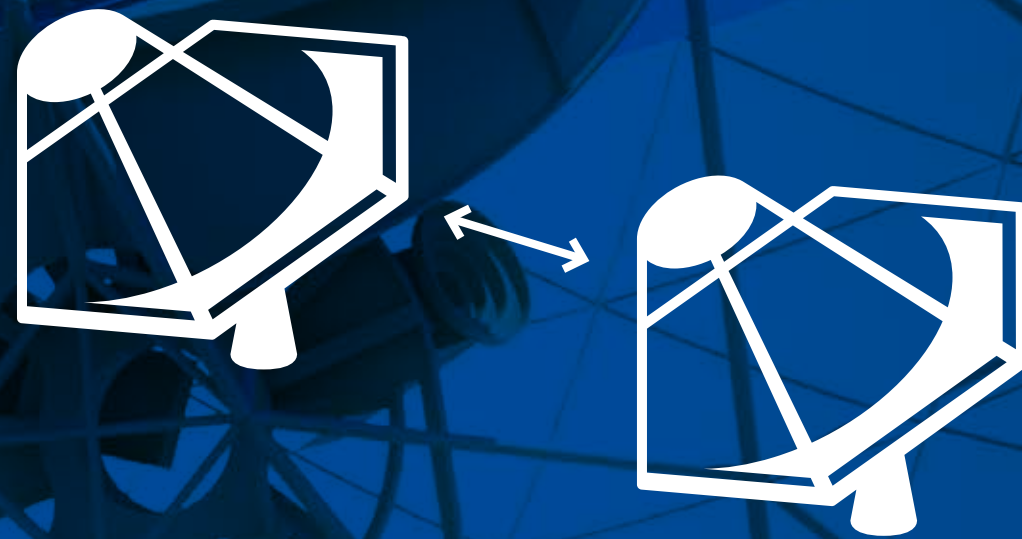


~200 dishes
(including 64 MeerKAT dishes)

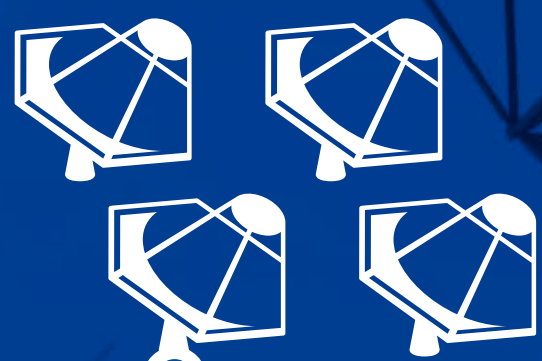
Total collecting area:
33,000m²



or
126 tennis courts



Maximum distance between dishes:
150km



SKA1 MID

Total raw data output:

2 terabytes
per second

62 exabytes
per year



Enough to fill

340,000
average laptops with content **every day**

Compared to the JVLA, the current best similar instrument in the world:



4x
the resolution

5x
more sensitive

60x
the survey speed