

Frequency dependence

Comparisons usually assume equal sensitivity.

Generally not true, e.g.

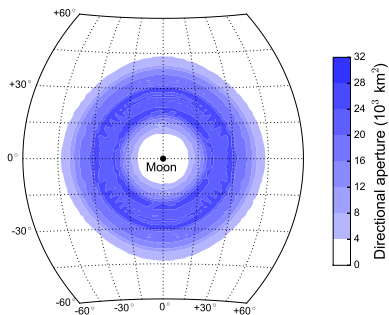
- ▶ $T_{\text{sys}} \sim 400\text{--}700$ K for WSRT @ 113-168 MHz
- ▶ $T_{\text{sys}} \sim 55$ K for Parkes @ 1.2–1.5 GHz

True now:

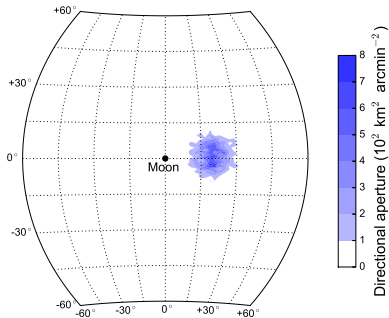
- ▶ threshold 1.4×10^{-9} V/m/MHz for SKA-LOW
- ▶ threshold 2.1×10^{-9} V/m/MHz for SKA-MID2)

Easier beamforming tips the balance decisively towards SKA-LOW
... if dedispersion is computationally practical.

Directional resolution



whole moon



constrained

resolution $\sim 5^\circ$