

RSRO Phased Array report (Feng Gao)

- Feng has been looking at 3 test datasets at K band to evaluate the best practices for phasing up the VLA. The observations use 2 sub-band pairs, each with 128 MHz bandwidth. He has been able to:
- Determine how long the phasing up time needs to be:
 - Use 10s phasing up time, at least 6 phasing scans
- Determine how long the phase remain stable at K band after the array has been phased:
 - Phase can be stable for less than or on the order of 5 min (very weather dependent)
- Determine how weak of a source we can use to phase the array.
 - We need 50 mJy flux density in calibrators at K-band to obtain good phasing results.
- Determine how far away from the target the phasing up source can be:
 - We need a source less than 8deg away (again, this is very weather dependent)