

# AO40 Feasibility Study

## Focal Region Mapping Experiment Calibration and Observation Grids - August Campaign

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Off source pointing distance: 30 amin (10 HPBW)  
Half power beamwidth (HPBW): 3 amin (0.05 degrees, 180 asec)

### Coarse Grid

Number of points: 7 x 7 + 2 off source pointings at begin and end  
Grid spacing: 1.5 amin (0.5 HPBW)

### Fine Grid

Number of points: 15 x 15 + 2 off source pointings at begin and end  
Grid spacing: 0.75 amin (0.25 HPBW)

### Superfine Grid

Number of points: 33 x 13 + 2 off source pointings at begin and end  
Grid spacing: 0.375 amin (0.125 HPBW)  
Total time: 2.5 hrs

### Observation Mosaic

Number of points: 3 x 3 + 2 off source pointings or 5 x 5 + 2 off source pointings (depending on field size)  
Grid spacing: 7.5 amin (2.5 HPBW)

### Frequency Sweep

Number of points: One on source, one off source per frequency point  
Number of frequency points: 36  
Frequencies: 1200:20:1900 MHz or 1210:20:1910 MHz

See Phil's webpage for additional information:  
<http://www.naic.edu/~phil/hardware/byuPhasedAr/byuPhasedAr.html>