Calibration

For the antenna 256 we did SMA and N type calibration, for 255 & 254 SMA cal only. We also did measurements of the sky and measurements of 3 resistors (20, 50 and 200 Ohm). Resistors were measured multiple times as indicated in the list below. Filenames include the # of the antenna, orientation (EW or NS), type of measurement. For resistors there are names (r20, r50, r200) and numbering: "r20.ij" where the first index is the order with respect to the measurement, and the second index is the order for the same measurement. Resistors as measured in the lab: set A (19.69, 50.22, 195.05 Ohm) and set B (19.72, 50.16, 194.56 Ohm). Set A was the main one used, however in the field some of the resistors detached and were replaced by the set B (perhaps Lincoln remembers more details).

256 EW

- Calibration type SMA, time 11:32. $T_{sys} = 44$C, $T_{load} = 15.2$C
- R = 20 Ohm at 11:40 am, filename includes: 256, EW, SMA & "r20.11"
- R = 50 Ohm at 11:42 am, filename includes: 256, EW, SMA & "r50.11"
- R = 200 Ohm at 11:44 am, filename includes: 256, EW, SMA & "r200.11"
- R = 20 Ohm at 11:45 am, filename include: 256, EW, SMA & s "r20.12"
- R = 50 Ohm at 11:47 am, filename includes: 256, EW, SMA & "r50.12"
- R = 200 Ohm at 11:48 am, filename includes: 256, EW, SMA & "r200.12"
- Measurement, $T_{sys} = 46$C, time 11:51
- R = 20 Ohm, filename includes: 256, EW, SMA & "r20.21"
- R = 50 Ohm, filename includes: 256, EW, SMA & "r50.21"
- R = 200 Ohm, filename includes: 256, EW, SMA & "r200.21"
- R = 20 Ohm, filename includes: 256, EW, SMA & "r20.22"
- R = 50 Ohm, filename includes: 256, EW, SMA & "r50.22"
- R = 200 Ohm, filename includes: 256, EW, SMA & "r200.22"
- Type N calibration, $T_{sys} = 46$C, time 12:04, $T_{load} = 22.9$C
- R = 20 Ohm, filename includes: 256, EW, N & "r20.11"
- R = 50 Ohm, filename includes: 256, EW, N & "r50.11"

- R = 200 Ohm, filename includes: 256, EW, N & "r200.11"
- R = 20 Ohm, filename includes: 256, EW, N & "r20.12"
- R = 50 Ohm, filename includes: 256, EW, N & "r50.12"
- R = 200 Ohm, filename includes: 256, EW, N & "r200.12"
- Measurement, T_{sys} = 46C, time 12:17
- R = 20 Ohm, filename includes: 256, EW, N & "r20.21"
- R = 50 Ohm, filename includes: 256, EW, N & "r50.21"
- R = 200 Ohm, filename includes: 256, EW, N & "r200.21"
- R = 20 Ohm, filename includes: 256, EW, N & "r20.22"
- R = 50 Ohm, filename includes: 256, EW, N & "r50.22"
- R = 200 Ohm, filename includes: 256, EW, N & "r200.22"

256 NS

- Calibration type SMA, time 12:42. T_{sys} = 47C, T_{load} = 24.8C
- R = 20 Ohm
- R = 50 Ohm
- R = 200 Ohm
- R = 20 Ohm
- R = 50 Ohm
- R = 200 Ohm
- Measurement, T_{sys} = 47C, time 12:58
- R = 20 Ohm
- R = 50 Ohm
- R = 200 Ohm
- R = 20 Ohm

- R = 50 Ohm
- R = 200 Ohm
- Type N calibration, T_{sys} = 47C, time 13:08, T_{load} = 24.1C
- R = 20 Ohm
- R = 50 Ohm
- R = 200 Ohm
- R = 20 Ohm
- R = 50 Ohm
- R = 200 Ohm
- Measurement, T_{sys} = 46C, time 13:22
- R = 20 Ohm
- R = 50 Ohm
- R = 200 Ohm
- R = 20 Ohm
- R = 50 Ohm
- R = 200 Ohm, T_{sys} = 46C

255 EW

- Calibration type SMA, time 15:15. T_{sys} = 39C, T_{load} = 18.2C
- R = 20 Ohm
- R = 50 Ohm
- R = 200 Ohm
- R = 20 Ohm
- R = 50 Ohm
- R = 200 Ohm

- Measurement, T_{sys} = 41C, time 15:28
- R = 20 Ohm
- R = 50 Ohm
- R = 200 Ohm
- R = 20 Ohm
- R = 50 Ohm
- R = 200 Ohm, T_{sys} = 42C.

255 NS

- Calibration type SMA, time 16:13. T_{sys} = 39C, T_{load} = 14.1C
- R = 20 Ohm, filename includes: "r20.11"
- R = 50 Ohm, filename includes: "r50.11"
- R = 200 Ohm, filename includes: "r200.11"
- Measurement, T_{sys} = 39C
- R = 20 Ohm, filename includes: "r20.21"
- R = 50 Ohm, filename includes: "r50.21"
- R = 200 Ohm, filename includes: "r200.21"
- R = 20 Ohm, filename includes: "r20.22"
- R = 50 Ohm, filename includes: "r50.22"
- R = 200 Ohm, filename includes: "r200.22", T_{sys} = 40C

254 EW, Dec 20

Dust storm, AF left after lunch.

- Calibration, time 09:41. T_{sys} = 46C, T_{load} = 19.1C
- R = 20 Ohm, filename includes: "r20.11"
- R = 50 Ohm, filename includes: "r50.11"

- R = 200 Ohm, filename includes: "r200.11"
- R = 20 Ohm, filename includes: "r20.12"
- R = 50 Ohm, filename includes: "r50.12"
- R = 200 Ohm, filename includes: "r200.12"
- Measurement, T_{sys} = 45C, time 10:02
- Cal2, time 10:06, T_{sys} = 44C, T_{load} = 18.0C
- Measurement, T_{sys} = 44C
- R = 20 Ohm, filename includes: "r20.21"
- R = 50 Ohm, filename includes: "r50.21"
- R = 200 Ohm, filename includes: "r200.21"
- R = 20 Ohm, filename includes: "r20.22"
- R = 50 Ohm, filename includes: "r50.22"
- R = 200 Ohm, filename includes: "r200.22"

254 NS

- Calibration, time 10:32. T_{sys} = 44C, T_{load} = 17.3C
- R = 20 Ohm, filename includes: "r20.11"
- R = 50 Ohm, filename includes: "r50.11"
- R = 200 Ohm, filename includes: "r200.11"
- R = 20 Ohm, filename includes: "r20.12"
- R = 50 Ohm, filename includes: "r50.12"
- R = 200 Ohm, filename includes: "r200.12"
- Measurement, T_{sys} = 45C, T_{load} = 17.8C
- Cal2, time 10:53
- R = 20 Ohm, filename includes: "r20.21"

- R = 50 Ohm, filename includes: "r50.21"
- R = 200 Ohm, filename includes: "r200.21"
- R = 20 Ohm, filename includes: "r20.22"
- R = 50 Ohm, filename includes: "r50.22"
- R = 200 Ohm, filename includes: "r200.22"
- Measurement2, T_{sys} = 47C, time 11:09
- Cal3, time 11:11, T_{load} = 18.4C
- Measurement3, time 11:16
- R = 20 Ohm, filename includes: "r20.31"
- R = 50 Ohm, filename includes: "r50.31"
- R = 200 Ohm, filename includes: "r200.31"
- R = 20 Ohm, filename includes: "r20.32"
- R = 50 Ohm, filename includes: "r50.32"
- R = 200 Ohm, filename includes: "r200.32", T_{sys} = 47C