***Plan for Indoor/Outdoor test on July 2013***

Test procedure:

* 1. Mount the PAF with the ground shield and pointing at zenith.
  2. Measure the RF spectrum at the Dewar coax port output with `hotload' and `coldload'. The `hotload' is the absorber and its temperature is measured using a thermometer. The `coldload' is essentially the sky. The RF spectrum of say 5 dipoles will be initially measured using a spectrum analyzer on these two loads. The resolution bandwidth of the spectrum analyzer can be 1 MHz. The values from the spectrum analyzer be readout through a gpib interface. Estimate the receiver temperature of the dipoles from this data set. Test measurements to make sure the setup works can be done anytime of the day -- Bob will do this test. (Do we need to check the linearity of spectrum analyzer ?)
  3. Repeat the above measurement with the DAQ system for all the 19x2 dipoles. DAQ has an instantaneous bandwidth of 5 MHz and so the LO1 will be changed to scan over the frequency range 1300 and 1800 MHz. Estimate the receiver temperature from this data set. Testing of this setup can be done anytime of the day -- Anish will do this test. (Do we need to check the linearity of DAQ ?)
  4. The actual receiver temperature measurements will be done either at night after 10 pm or early morning when the galactic plane is not near the zenith. 3 sets of measurements will be taken to check the consistency of the results.
  5. Data from both DAQ and spectrum analyzer for 5 dipoles will be taken when the galactic plane is away from zenith to compare the receiver temperatures between these two measurements. LO1 is set such that the measurements are made near RF frequency 1400 and 1750 MHz where the RFI is minimum.
  6. Compare the results of these measurements with those given in report dated June 2011.