

Measurement results for an IF chain containing: 50 Ohm Load, 4-12 GHz isolator, NRAO 4-12 GHz preamplifier, MITEQ 30dB amp, attenuator, MITEQ 30dB amp, YIG filter (45 MHz bandwidth @ 4.6 GHz), Agilent power head.

Three measurements were performed:

- Background measurement with 50 Ohm load in front of MITEQ amplifier chain.
- Measurement of full chain in warm dewar 300K. The amplifier bias points were left unchanged from 4K cold operation.
- Measurement of amplifier chain at 4K.

One can see that amount of $1/f$ noise increases significantly and this noise becomes dominant already at integration times more than 1s

