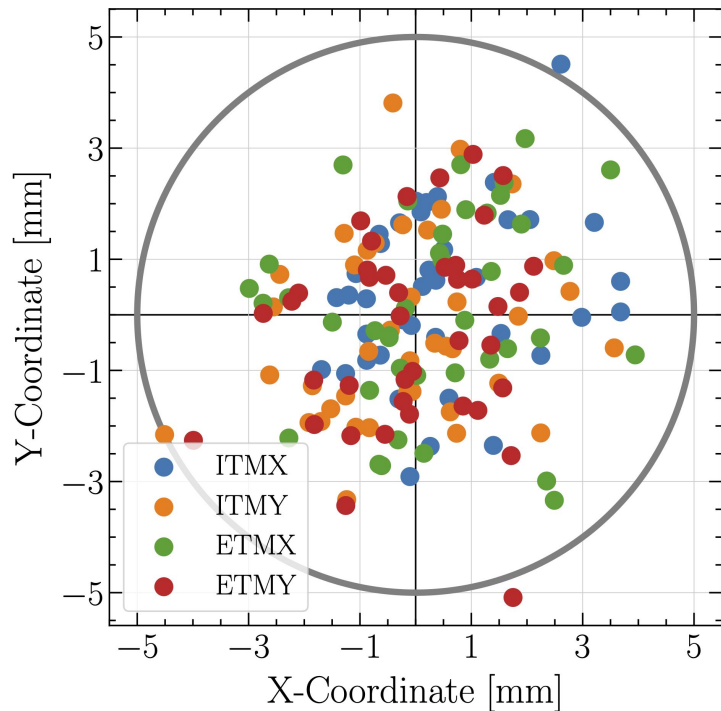
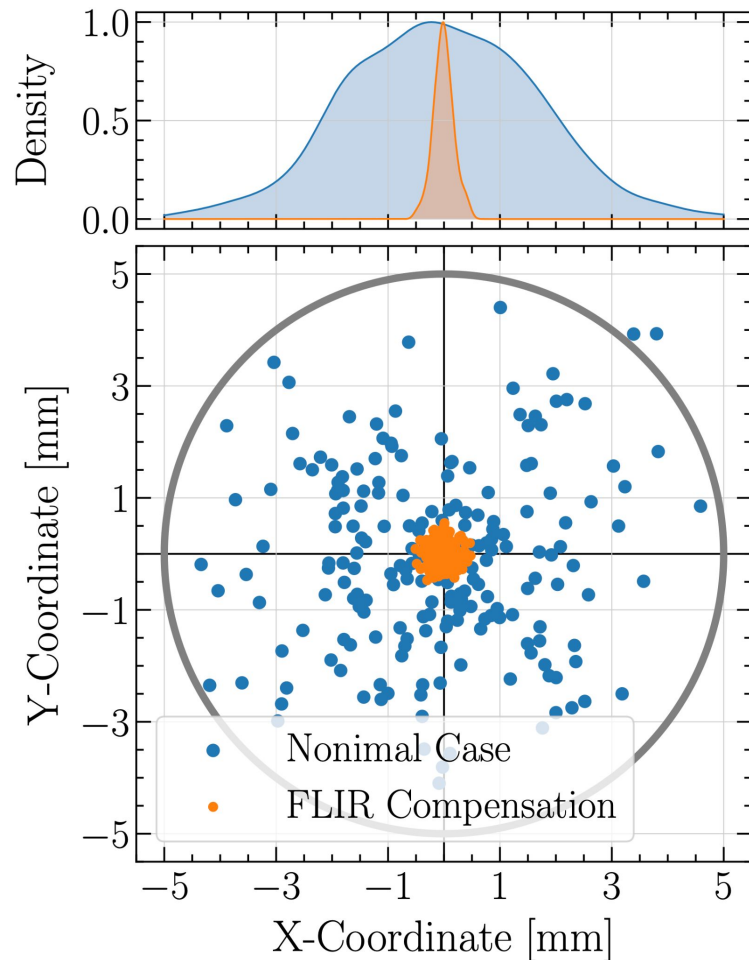
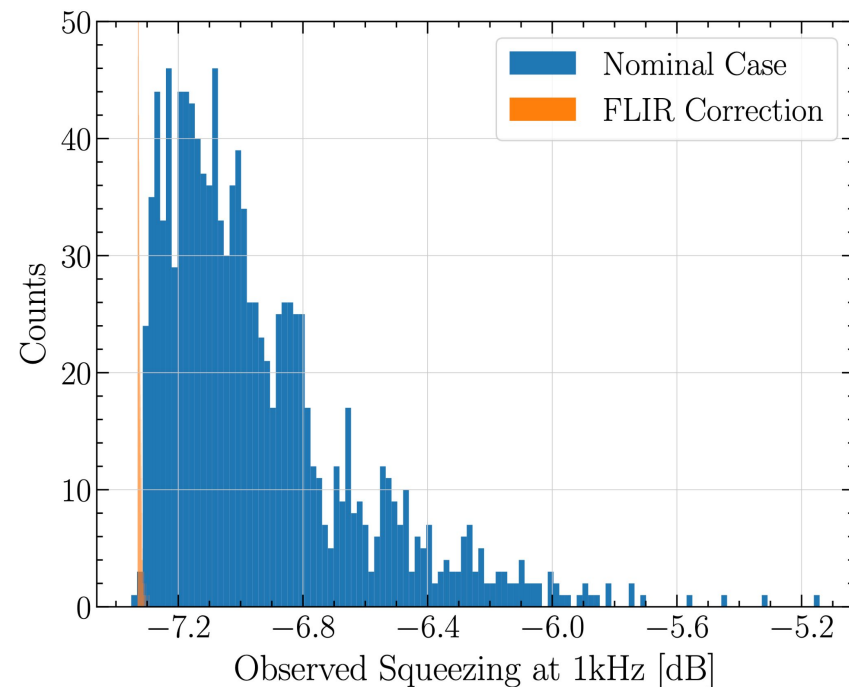
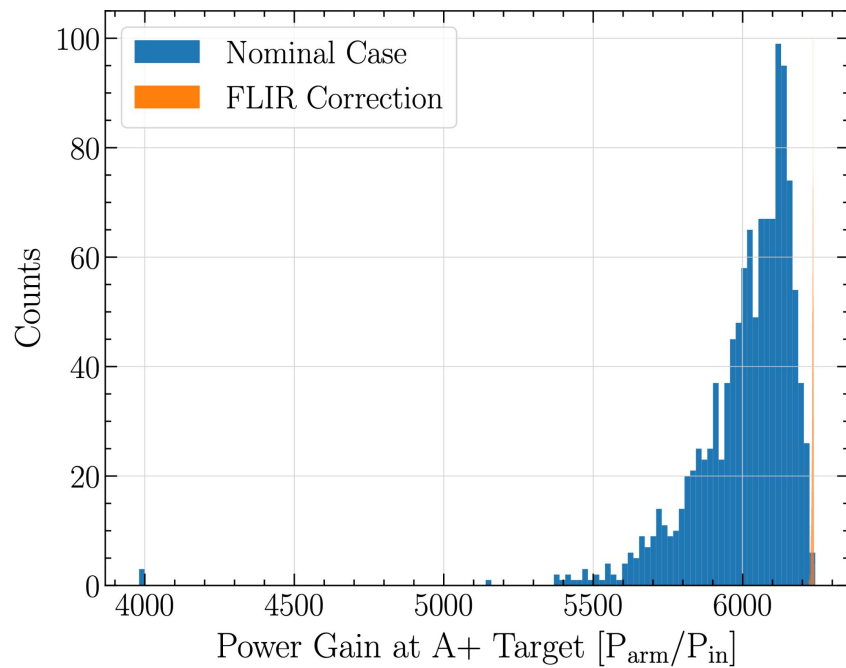


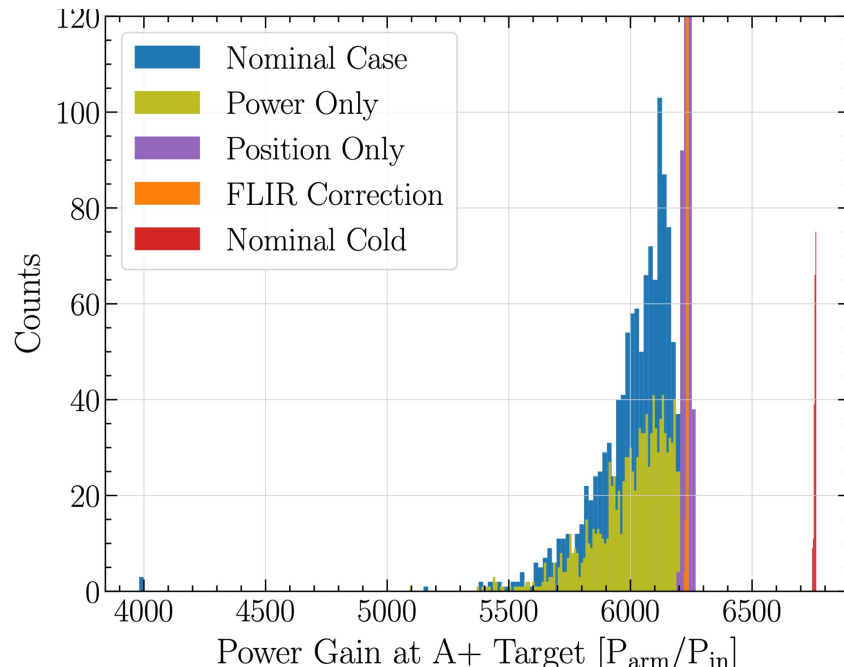
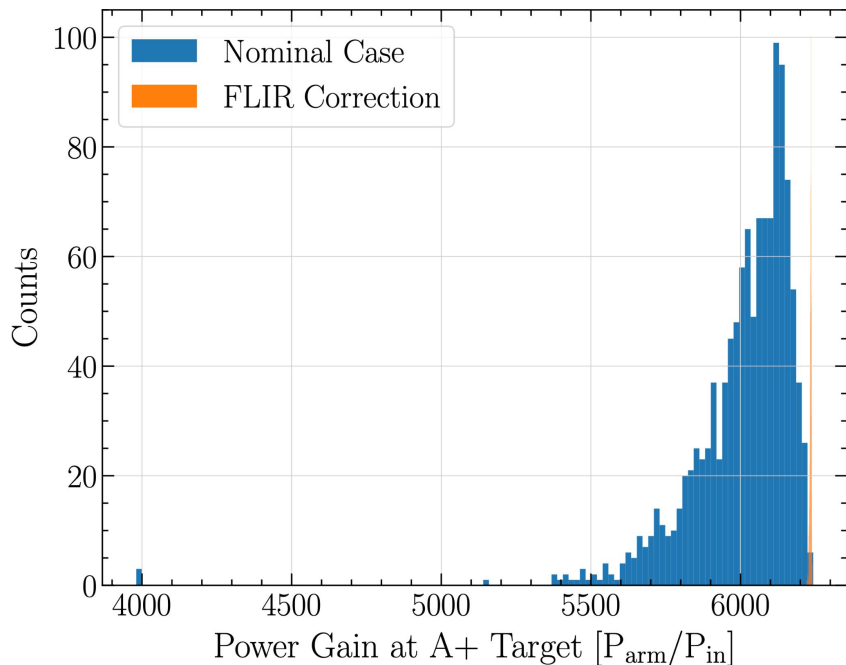


Beam positions and RH/FROSTI
power uncertainties with
 $(2+2)*4 = 16$ parameters

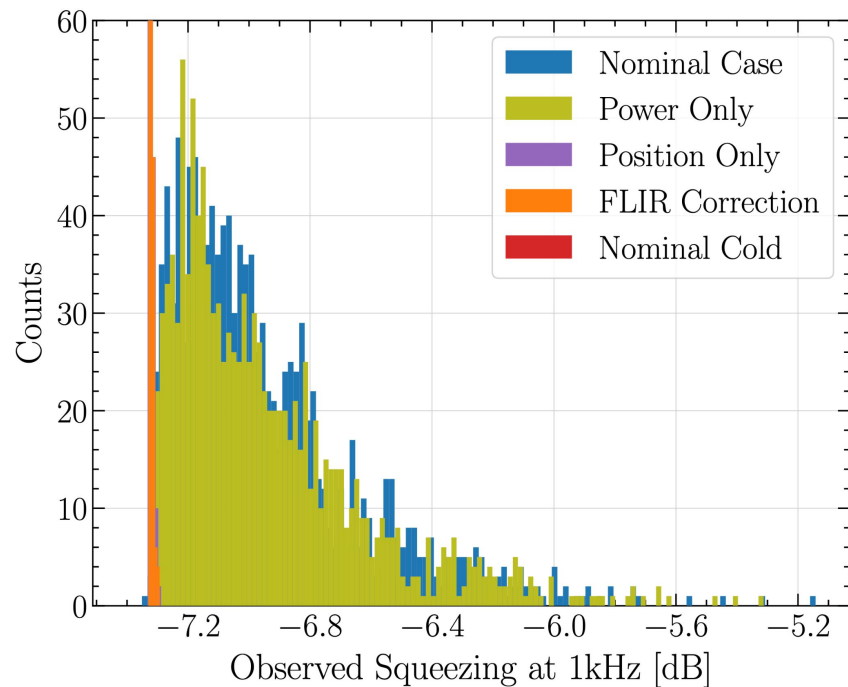
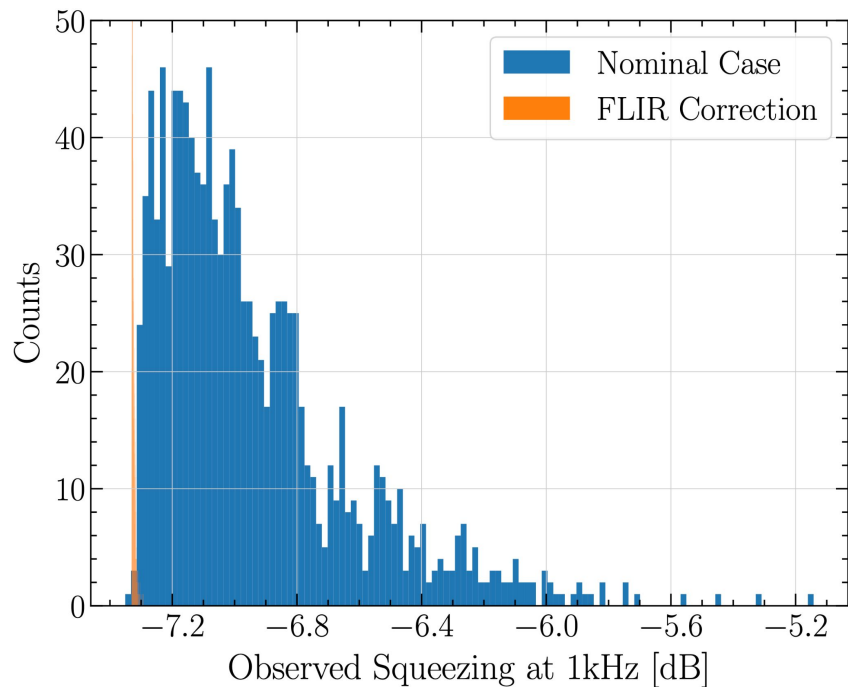




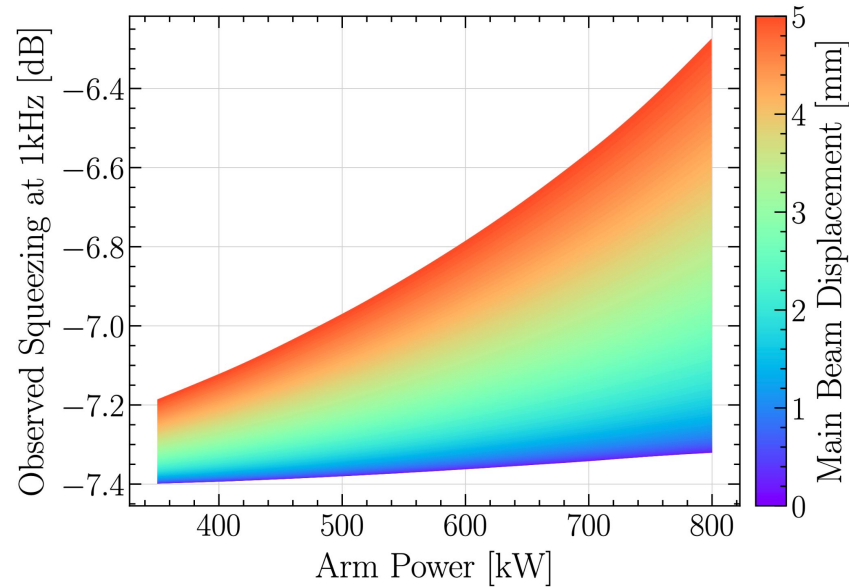
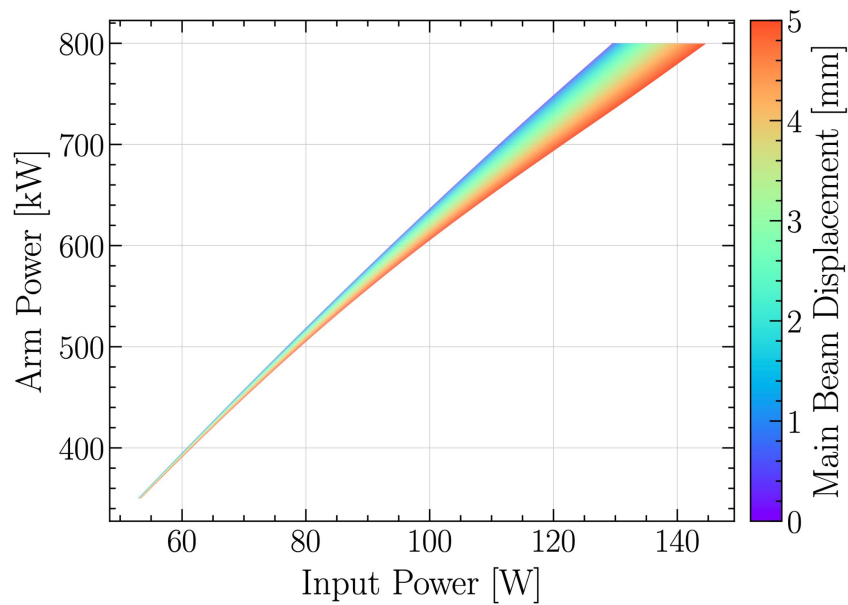
Monte-Carlo simulation (1200 trials) and results in Power Gain (Left) and the observed squeezing (Right) for the nominal case (5mm and 1%) and the FLIR correction case (0.5 mm and 0.1 %)



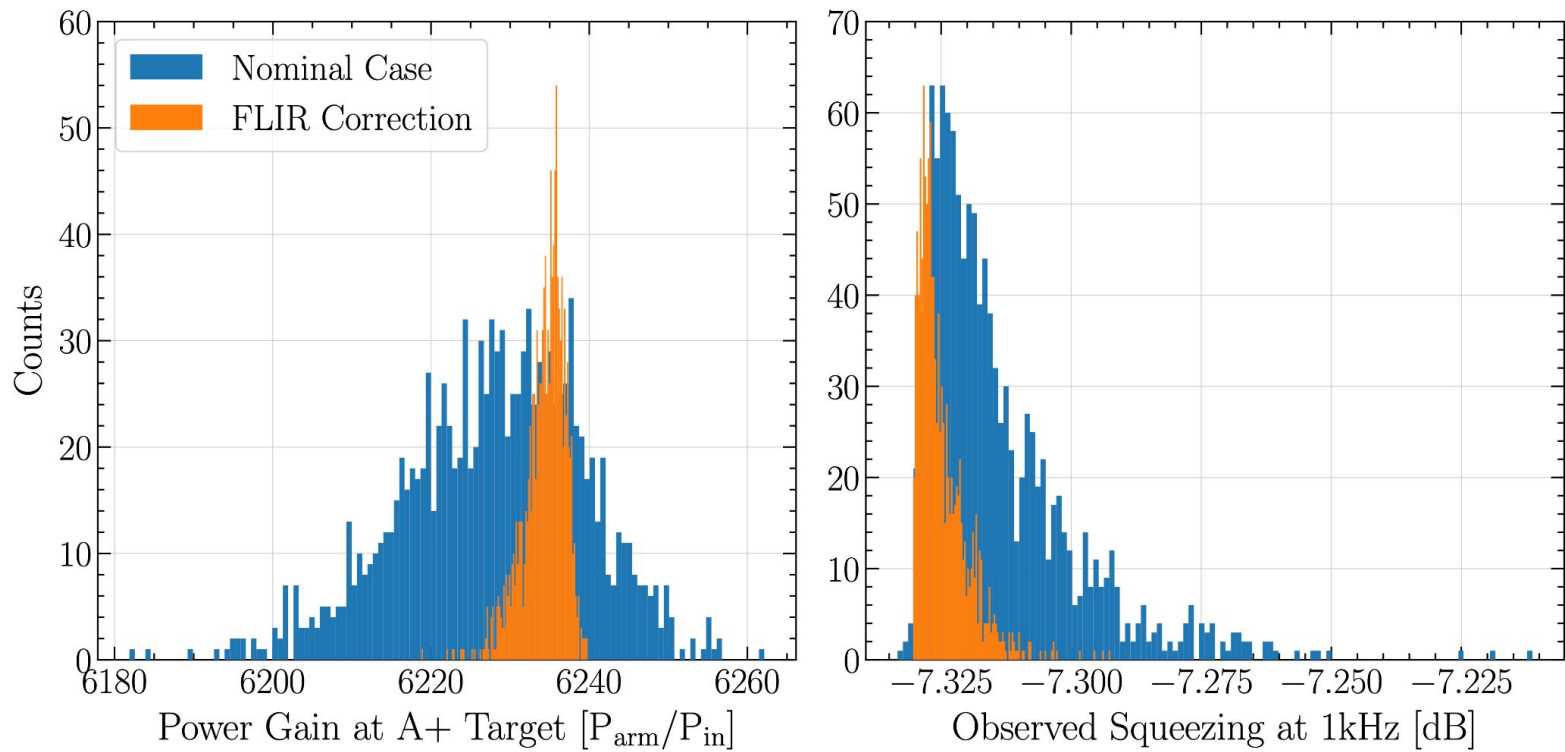
Power Only: 0.1% Power, 5mm Beam Miscentering;
Position Only: 1% Power, 0.5mm Beam Miscentering;
Nominal Cold: No thermal effects, only clipping due to beam miscentering.



Power Only: 0.1% Power, 5mm Beam Miscentering;
Position Only: 1% Power, 0.5mm Beam Miscentering;
Nominal Cold: No thermal effects, only clipping due to beam miscentering.



Power buildup and observed SQZ degradation due to beam miscentering (on a single mirror ITMX)



Assume $\pm 1\text{mm}$ position uncertainty (cad view from the camera and overlaying with the image) nominally vs. $\pm 0.5\text{mm}$ with FLIR correction