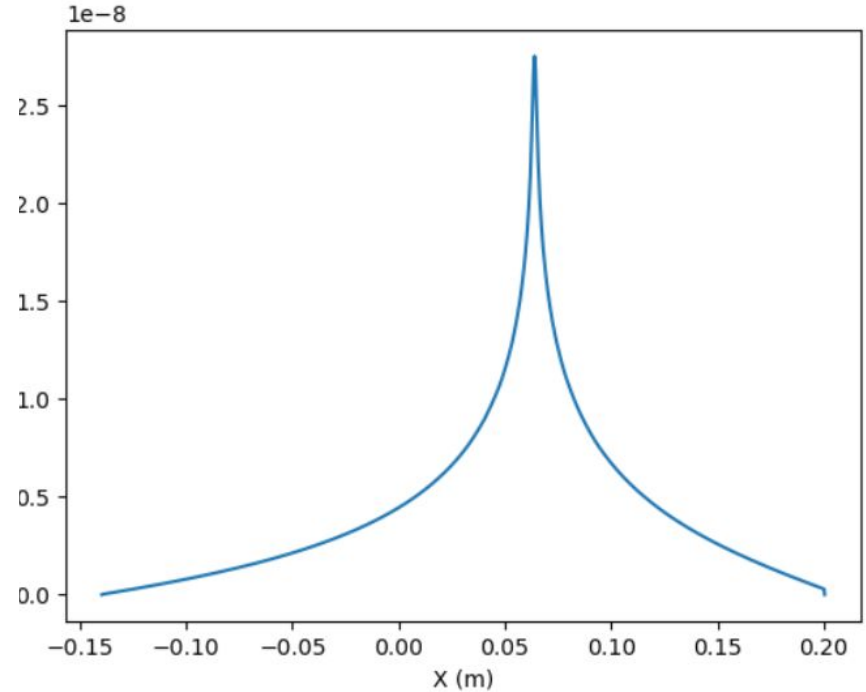
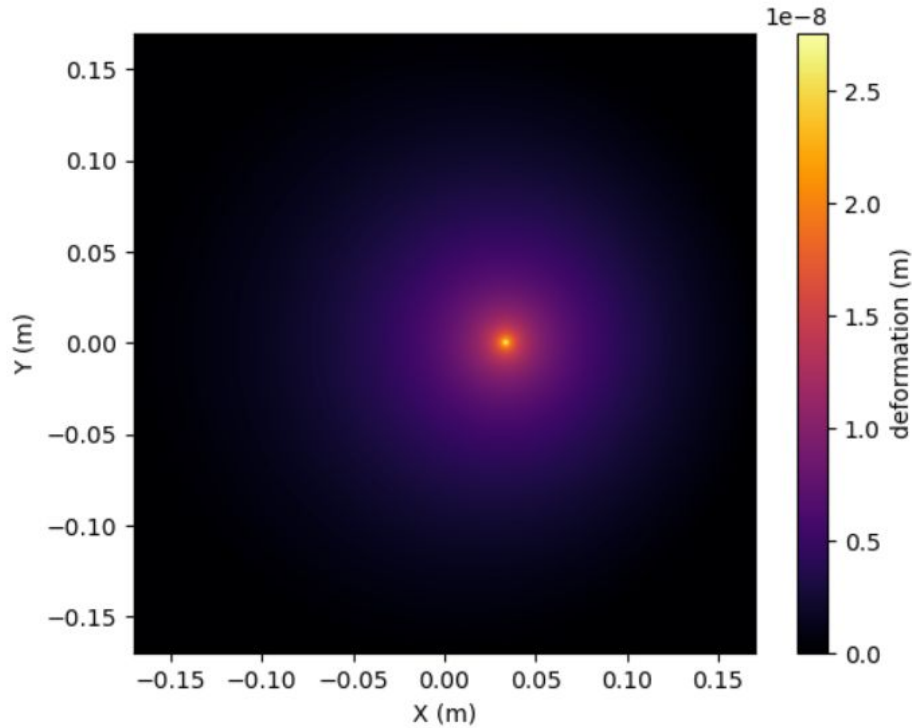
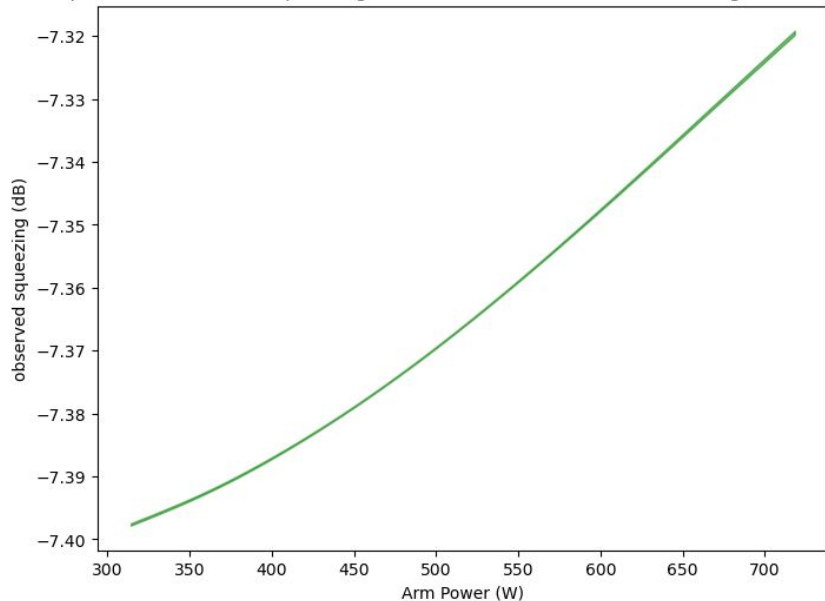


Fixed The Point Absorber Map, located at 3cm away from center, with 3cm miscentering. 40mW of absorption

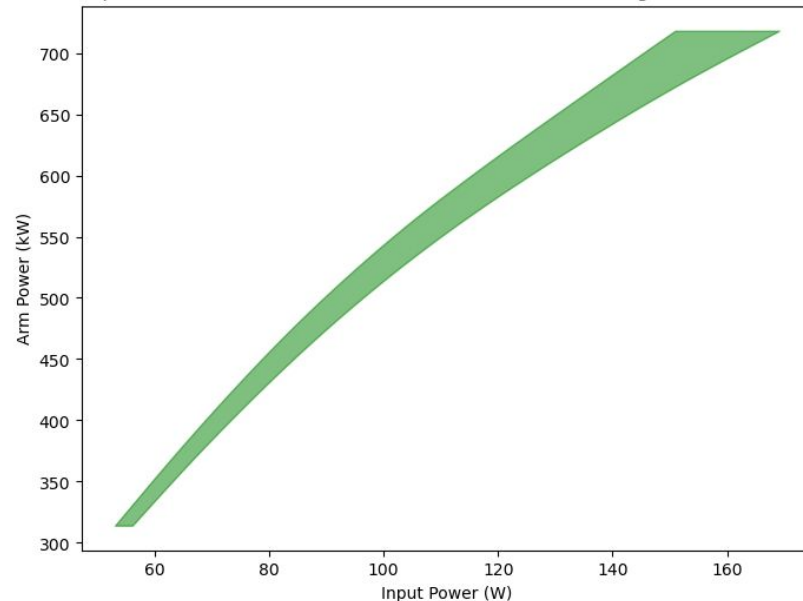


# New Result After Removing Tilt of Thermal Maps+Point Absorber Map For FROSTI Dual

Arm power vs Observed Squeezing with Point Absorber and Miscentering for FROSTI Dual

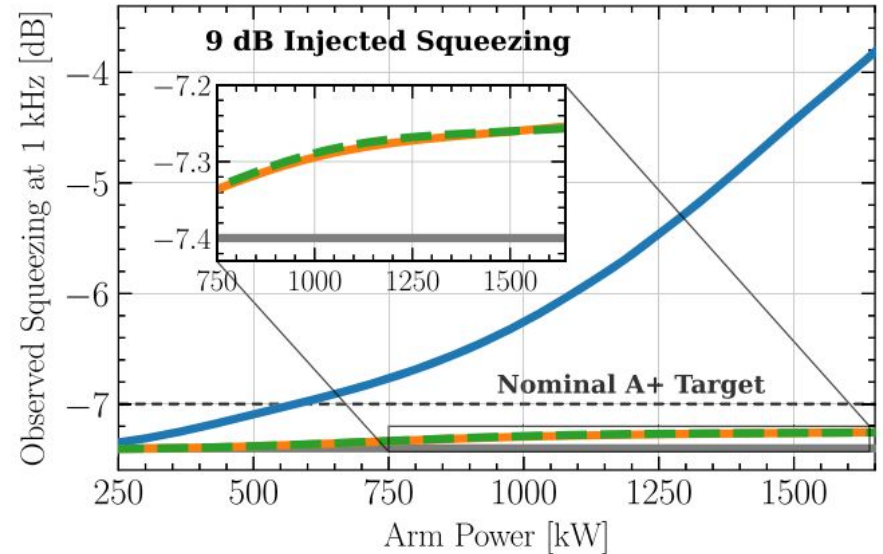
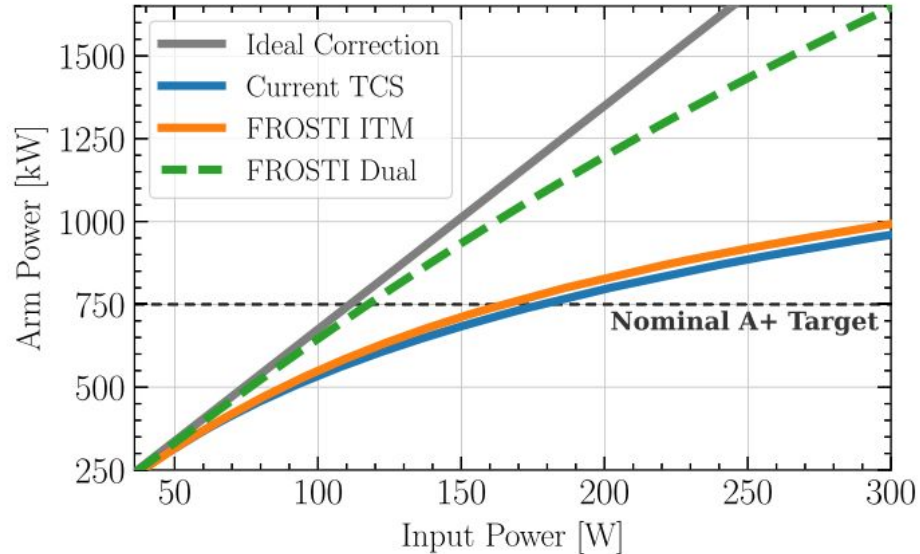


Input vs Arm Power with Point Absorber and Miscentering for FROSTI Dual



# Comparison to the PRL Result

- The achieved arm power significantly decreased
- Changes to observed squeezing not as noticeable



# Other Current Work

- Plotting the 2 plots but include Current TCS and Cold State
- Try calculating the power absorbed by point absorber with “ccd” in Finesse
  - Also keep PHR and therefore arm power fixed/independent variable, but assuming that the changes point absorbers made for these values are small (to avoid the long expression of math in my old method)
  - First calculate the power absorbed assuming a nominal arm power of 1.5 kW
  - Use readings from a ccd detector from Finesse placed at the mirror the point absorber is at to infer the power absorbed by the point absorber at some other arm power
  - generate/rescale maps to find the map of point absorbers at the current power absorbed
  - Add it as well as thermal maps to the model
  - Rerun the code but now finding the required input power for the arm power we independently vary