

Effect on telescope's electromagnetic performance.

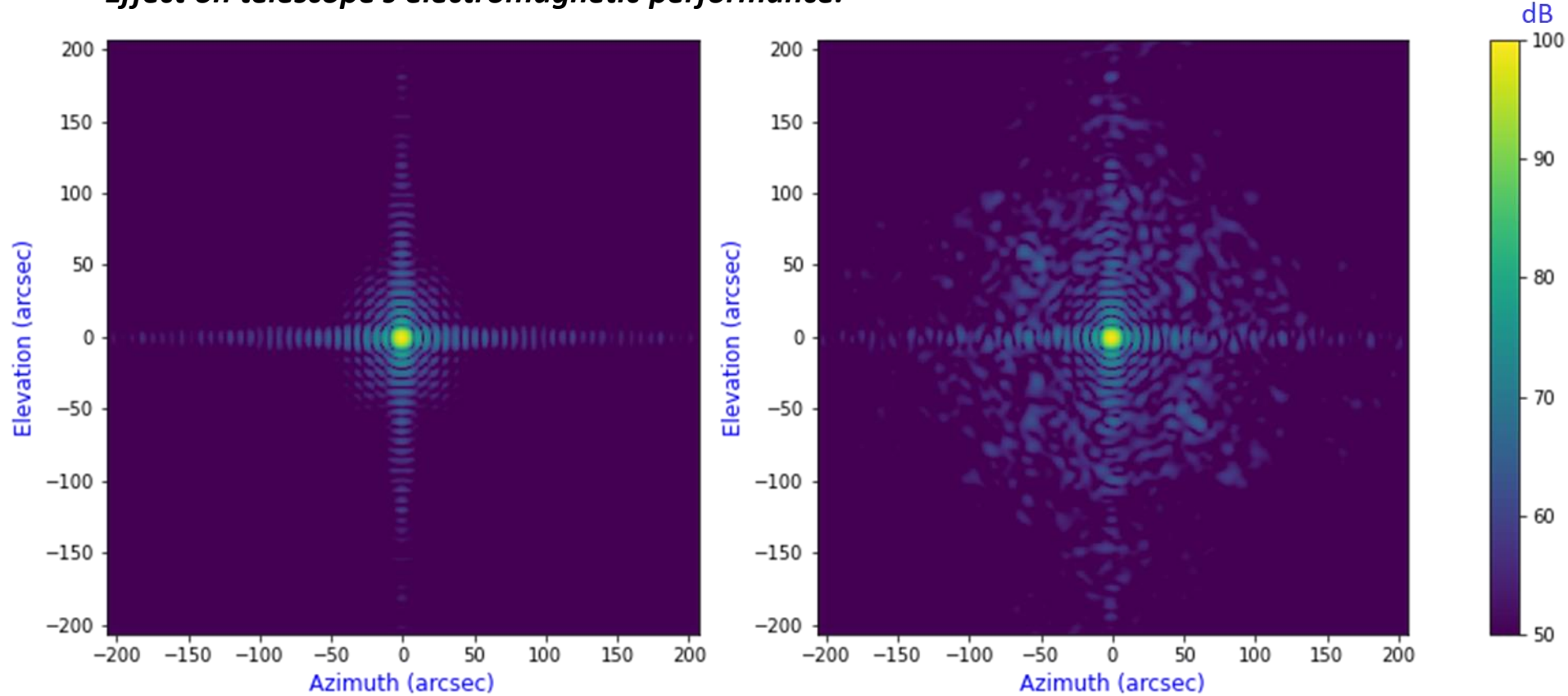


Figure 1. Radiation beam of the CCAT-prime telescope operating at 1.5THz ($\lambda = 200\mu m$). **Left:** Ideal beam of the telescope with perfect beam. **Right:** Distorted beam for the panels with manufacturing errors.

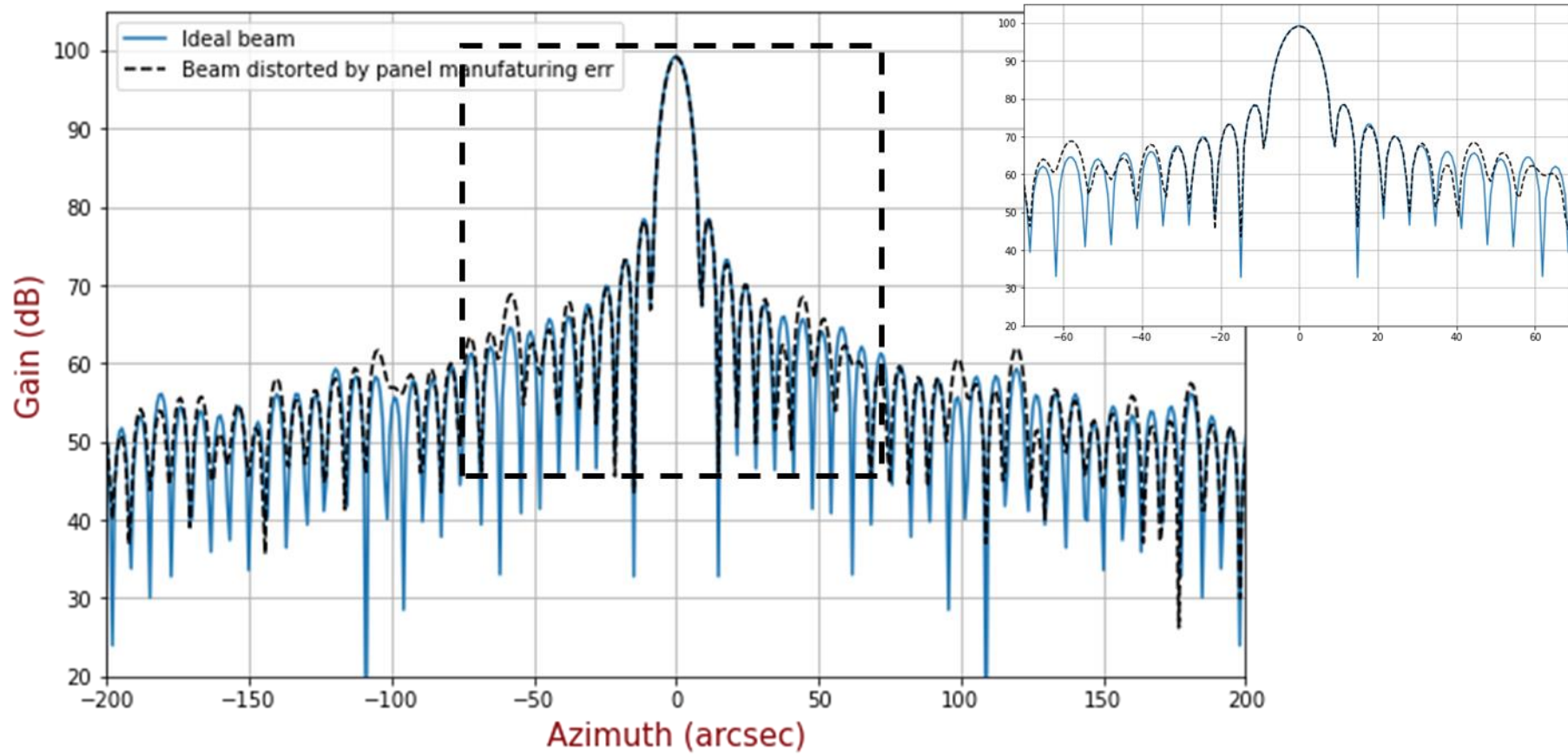


Figure 2. $\sim 3\mu\text{m}$ RMS surface error of the panels degrades telescope's gain by $\sim 0.17\text{dB}$ at 1.5THz . Energy loss in main beam is converted to power increasing of error beams.