## HOLOGRAPHY 003 MASSACHUSETTS INSTITUTE OF TECHNOLOGY HAYSTACK OBSERVATORY

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Subject: Simulations of the effect atmospheric phase errors

Figure 1 shows the difference between radome corrections in which one is made with a different random phase error of 20 degrees rms for each azimuth scan. An azimuth scan full width of 1.6 degrees was used. The rms error due to the phase errors 69 microns while 20 degree phase errors are significant 2 degree phase errors result in only 7 microns rms which is insignificant.



Figure 1. Residual radome effects due to Gaussian random phase errors of 20 degrees rms.