



- 2-D atmospheric model from 555 radiosonde observations separated into 5° longitudinal bins
- Model atmosphere of 0.5° horizontal resolution created via interpolation between each mean value
- Five separate Multiple-Phase-Screen (MPS) simulations, each centered on a different bin
- For each of the five MPS simulations, the difference between the simulated refractivity profile and the corresponding 2-D model profile at bin center increases from west to east.
- For each MPS simulation, the difference between the simulated refractivity profile and the 2-D model profiles at $\pm 0.5^{\circ} \& \pm 1^{\circ}$ offset from center decreases from west to east.

