

README_GROGRAT_Data

Author: Dr. Brentha Thurairajah (brenthat@vt.edu)

Date written: 27 September 2018

The GROGRAT ray-paths were simulated using the background meteorology from the NOGAPS-ALPHA model. The simulations were repeated for three ground-based phase speeds (0 m/s, 20 m/s, and 40 m/s) and seven horizontal wavelengths (100 km, 200 km, 400 km, 600 km, 800 km, 1000 km and 1200 km).

File naming format:

“nogaps_**hwn**km_**ps**ms.ray_paths”

- ‘hwn’ refers to the horizontal wavelength of either 100 km, 200 km, 400 km, 600 km, 800 km, 1000 km and 1200 km
- ‘ps’ refers to the phase speed of either 0 m/s, 20 m/s, and 40 m/s

Thus there are 21 files named in the below format.

Any text editor can open the *.ray_path” files. It includes the information about those waves that have dissipated and those waves that have propagated vertically. The header includes information about the longitude, latitude, altitude, and vertical and horizontal wavenumbers.