Current Available Data

**(1) NA850data\_2000-2014.csv**

Contains LH/latent heating variable (K/day) and 6 predictor variables: AirTemp (°C), QV/Specific Humidity (g/kg), Omega/Vertical velocity (hPa/s), Sea Level Pressure (hPa), U-Winds/zonal winds (m/s), and V-Winds/meridional winds (m/s).

‘Lat’, ‘Lon’, and ‘Time’ correspond to the individual coordinates and timestamp for each individual NA point.

‘PtIndex’ refers to the original index out of the number of total points in each yearly n. hemisphere file for each retained NA point (e.g., 9818 total indices for the year 2000).

‘WaveTrajectory’ identifies what wave each track belongs to. In the original TEW database, the files are separated by hemisphere. For the n. hemisphere (year 2000), there are 286 total waves which is what the identifiers correspond to. When you add in the total number of individual tracks/points there are 9818 total points (1732 of which occur in the NA domain).

\* This ‘nonfiltered’ data has all available TEW matches for 01/01/2000 to 12/31/2014 in the N. Atlantic domain (N=20305) and retrieves the predictor variables at the same vertical level as the chosen level for LH (850 mb or lower troposphere), with the exception of mean sea level pressure since there is no vertical dimension.

**(2) Nhemisphere\_waveID\_specs\_2000-2014.csv**

‘FirstPtIndex’ refers to the index of the very first point identified for each wave in the full n. hemisphere domain. For example, for the year 2000, ‘FirstPtIndex’ refers to the index (out of the 9818 total indices) of the very first point identified for each of the 286 waves the full n. hemisphere domain.

‘NumPts’ refers to the number of points identified in each wave in the full n. hemisphere domain. For example, for the year 2000, ‘NumPts’ refers to the number of points identified in each of the 286 waves in the full n. hemisphere domain (e.g., sum(NumPts)=9818)

\* (1) and (2) are separate since (1) is the number of individual wave points/tracks in the NA domain and (2) is info pertaining to the number of ALL waves (made up of NumPts) occurring in the n. hemisphere. I.e., for (1) N=20305 and for (2) N=4007.

I’m thinking you can use the index for each individual NA point in (1) to identify whether or not it is the first point in the track or subsequent point by using the specs in (2).

\*\*Note that for all of the information regarding the wave tracks/indices/number of points, etc., these values start back over at ‘1’ for each new year of tracks.