Data File Details

Column Name*	Unit	Description	Statistic Applied
lat	Decimal Degrees	Latitude of cyclone center (-90° to +90°)	
long	Decimal Degrees	Longitude of cyclone center (-180° to +180°)	
x	Grid columns	Column in input grid	
y	Grid rows	Row in input grid	
Dx	Grid columns	Propagation (columns) since last observation	
Dy	Grid rows	Propagation (rows) since last observation	
u	km hr^{-1}	Zonal propagation velocity since last observation	
v	km hr^{-1}	Meridional propagation velocity since last observation	
uv	km hr_{-1}	Propagation speed since last observation	
id	unitless	Unique ID for the cyclone center in the instantaneous cyclone field	
pid	unitless	Unique ID of the lowest pressure cyclone center in a multi-center cyclone in the instantaneous cyclone field	
ptid	unitless	Track id (in file name) of the primary center for the cyclone system	
p_cent	Pa	Sea-level pressure at cyclone center	
p_edge	Pa	Sea-level pressure at cyclone edge (last closed isobar)	
area	km_2	Area enclosed by last closed isobar	
radius	km	Radius of a circle with the same area as the cyclone	

depth	Pa	Edge pressure – center pressure	
Dp	Pa	Change in center pressure since last observation	
DpDt	Pa day^{-1}	Deepening rate (scaled by latitude wrt 60°N)	
DsqP	Pa $(100\ km)^{-2}$	Laplacian of central pressure	

type	unitless	1 = primary center, 2 = secondary center, 0 = this row is only present for calculating propagation (used during splits, merges, and lysis events)	
centers	count	Number of centers in the cyclone system; if it is a secondary center, set to 0	
time	days since 1900-01-01 0000 UTC	Time of observation	
year	years (C.E.)	Year of observation	
month	month of year	Month of observation	
day	day of month	Day of observation	
hour	hour of day	Hour of observation	
Emg	unitless	0 = no merge, 1 = centers merge, 2 = areas merge, 3 = centers + areas merge	
Esp	unitless	0 = no split, 1 = centers split, 2 = areas split, 3 = centers + areas split	
Erg	unitless	0 = no event, 1 = secondary genesis event	

Formula/Scripts Applied

The original cyclone detection and tracking output is processed with a post-analysis Python script (C17_ExportToCSV_v12.py) that exports each track as a single CSV file and converts units into more standard