

Data File Details

Column Name*	Unit	Description	Statistic Applied
year	year (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	
time	days since 1 Jan 1900 0:00 UTC	Time of 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	
x	grid columns	Column of input grid	
y	grid rows	Row of input grid	
lat	degrees N	Latitude of cyclone center (-90° to +90°)	
lon	degrees E	Longitude of cyclone center (-180° to +180°)	
p_cent	hPa	Sea-level pressure at cyclone center	
p_edge	hPa	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	hPa	Edge pressure – center pressure	
p_grad	hPa / [1000 km]	Pressure gradient between center and ring of cells with radius of 1000 km	
DsqP	hPa / [100 km] ²	Laplacian of central pressure	
type	unitless	1 = primary center, 2 = secondary center, 0 = row 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	
Ege	unitless	0 = no genesis, 1 = center genesis, 2 = area genesis, 3 = center + area genesis	
Erg	unitless	0 = no event, 1 = secondary genesis event	
Ely	unitless	0 = no lysis, 1 = center lysis, 2 = area lysis, 3 = center + area lysis	

Esp	unitless	0 = no split, 1 = centers split, 2 = areas split, 3 = centers + areas split	
Emg	unitless	0 = no merge, 1 = centers merge, 2 = areas merge, 3 = centers + areas merge	
Dp	hPa	Change in center pressure since last observation	
u	km / h	Zonal propagation velocity since last observation	
v	km / h	Meridional propagation velocity since last observation	
uv	km / h	Propagation speed since last observation	
DpDt	hPa / day	Deepening rate (scaled by latitude wrt 60°N)	

Formula/Scripts Applied

The original cyclone detection and tracking output is processed with a post-analysis Python script (C17_ExportToCSV_v13.py) that exports each track as a single CSV file and converts values into more standard units.