National Climatic Data Center

DATA DOCUMENTATION

FOR

DATASET 9628 (DSI-9628)

Cyclone Intensity - N. Hemisphere

March 11, 2004

National Climatic Data Center
151 Patton Ave.
Asheville, NC 28801-5001 USA

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Table of Contents

1. Abstract: The dataset consists of storm intensity derived from the 40 year series, Northern Hemisphere Historical Map Series, source 005. The maps used were for the 15 year period 1924 through 1938. The part of the Northern Hemisphere used in this data is outlined by the following Marsden squares: (numbers are inclusive) 074-082, 109- 117, 140-153, 176-190, 214-226, 248-252 and 284-288 in the North Atlantic; and 093-097, 121-132, 157-167, 194-203, 233-235 in the North Pacific Ocean. The year, month, day, and location (by Marsden square number) were punched for each low pressure area occurring within the geographical boundaries outlined above. The isobaric difference between the center of each low pressure area and a point 400 statute miles from the center was computed separately for each of the four directions: North, East, South and West. Wind velocities to the nearest Beaufort Force were taken directly from plotted data on the map when available and when considered representative. No attempt was made to extract wind data over the North Atlantic Ocean, for the years 1927-1929, 1933-1934 inclusive. The mean pressure difference was computed by machine methods and entered in whole millibars and tenths, daily for each storm. Only low pressure areas with at least 1 closed isobar were considered, and shallow lows that maintained their identity for less than two consecutive 1200 GMT charts were discarded. Tropical storms were not included except at a period in their history when they began to take on the appearance of extra-tropical cyclones. For the sake of convenience and to facilitate the extraction of pressure differences from the map, an overlay with two circles was drawn to scale and having 400 mile radii was constructed. The first circle was drawn to map scale at 60 degrees latitude and was used to compute pressure difference north of 45 degrees latitude. The second circle drawn to map scale at 30 degrees latitude was used in computation at 45 degrees latitude and below. On some occasions, the centers of two low pressure areas were close together and the highest pressure in one of the four cardinal directions was well within the 400 mile circle. In such cases the pressure difference was taken by using the value at the highest point within the circle, in that particular direction, rather than at the edge of the circle. On a few occasions, during the years 1924 through 1926 over the North Atlantic Ocean, pressure differences were recorded for only three directions if there was a lack of isobar symmetry in one direction. The number of directions was taken into consideration when computing mean pressure differences.

2. Element Names and Definitions:

Columns	Item	Code	Code Definition	Units/Remarks
1-2	Year	24-38	1924 through 1938	
3-4	Month	01-12	January-December	
5-6	Day	01-31	Day of month	
7-9	Latitude	074-288	Mardsen Square Number	
		Blank	Unknown	
10-12	Central Pressure (sea level)	900-999	900 to 999 mbs	Whole mbs
		000-099	1000 to 1099 mbs	
		Blank	Unknown	
13-14	Pressure Difference	01-99	1 through 99 mbs	Northern Quadrant
		Blank	Unknown	
15-16	Wind Force	01-12	1-12 Beaufort Force	
		Blank	Unknown	

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17-18	Pressure Difference	01-99	1 through 99 mbs	Eastern Quadrant
		Blank	Unknown	
19-20	Wind Force	01-12	1-12 Beaufort Force	Eastern Quadrant
		Blank	Unknown	
21-22	Pressure Difference	01-99	1 through 99 mbs	Southern Quadrant
		Blank	Unknown	
23-24	Wind Force	01-12	1-12 Beaufort Force	
		Blank	Unknown	
25-26	Pressure Difference	01-99	1 through 99 mbs	Western Quadrant
		Blank	Unknown	
27-28	Wind Force	01-12	1-12 Beaufort Force	
		Blank	Unknown	
29-31	Mean Pressure Difference	001-999	0.1 through 99.9 mbs	mbs and tenths
32-80		Blank	Not used	

3. Start Date: 19240101

4. Stop Date: 19381231

5. Coverage:

a. Southernmost Latitude: 0.0S
b. Northernmost Latitude: 90.0N
c. Westernmost Longitude: -5.0W
d. Easternmost Longitude: 120.0E

6. How to Order Data:

Ask NCDC's Climate Services about the cost of obtaining this data set.
Phone: 828-271-4800
FAX: 828-271-4876
E-mail: **NCDC.Orders@noaa.gov**

7. Archiving Data Center:

Archive Branch
National Climatic Data Center
151 Patton Avenue
Asheville, NC 28801

8. Technical Contact:

National Climatic Data Center
151 Patton Avenue
Asheville, NC 28801

9. Known Uncorrected Problems: None.

10. Quality Statement:

11. Essential Companion Datasets:

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12. References:

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