

National Climatic Data Center

DATA DOCUMENTATION

FOR

DATASET 6110 (DSI-6110)

NCEP Charts

September 23, 2005

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

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1. **Abstract:** The National Climatic Data Center archives weather charts that are produced by the U.S. [National Centers for Environmental Prediction](#) (NCEP). The charts are the most commonly used by the climate community because they provide a quick historical reference concerning weather conditions on selected dates. They can also be used to geographically locate and date a series of weather phenomena and events. These charts consist of analyses and forecasts of all mandatory levels of the atmosphere.

Charts are produced on a daily basis at 00 and 12 UTC. The forecast charts present the expected condition for the next 12 hour period. During special meteorological events analysis charts are available at more frequent time intervals. The geographic presentations of these charts include the Northern and Southern Hemispheres, Tropical and Polar Regions.

The following summary of the chart contents contain constant pressure charts, including the analyses and forecasts of heights, temperatures, winds, relative humidity, vertical velocity, vorticity, lifted index, thickness levels, and wind shear. Also included in this archive are satellite imagery from the GOES East and West satellites. These satellite analyses include visible, infrared, and water vapor imagery. Also available are surface analyses and charts of the Atlantic and Pacific with special emphasis on specific areas such as the Gulf of Alaska.

Types of charts available -

File Name	Description	Area of Coverage	Observations per Day
ak_24_wndwav	Forecasts of sea winds and waves in the Alaska area. Significant wave height is shown.	Bering Sea and Gulf of Alaska	2
atlxx_wndwav	Forecasts of 00, 24, 48, and 96 hour winds and waves. Shows significant wave height. The average height of the highest one-third of the waves. Produced twice daily at 00 and 12 UTC.	North Atlantic	2
atl_seaanal_12	Sea-state analysis. Arrows show direction of dominant waves and significant wave height in meters.	North Atlantic	1
atlxx_500fcst_xx	Forecast of 00, 24, 36, 48, and	North Atlantic	2

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	96 hour 500 mb analysis.		
atlxx_sfcfcst_xx	Forecast of 48 and 96 hour ocean surface weather. Includes pressure movements and fronts.	North Atlantic	2
atl48_wavepd_12	Forecast of 48 hour wave period and direction and 48 hour ice accretion.	North Atlantic	2
atle_sfcanal_xx	Analysis of Atlantic Surface. Includes pressure systems, fronts, and wind direction and speed.	Northeast Atlantic	4
atlsfc.00	Preliminary analysis of Atlantic Surface. Includes pressure systems tendency, and measurements (mb), fronts, temps, dew points, winds, cloud cover, and ship call signs.	North Atlantic	4
atlw_sfcanal_xx	Analysis of Atlantic surface. Includes pressure systems and their movements, measurements, winds, cloud cover, and fronts. In color.	Northwest Atlantic	4
epac24_sfcfcst_00	24-hour surface forecast of the Eastern Pacific. Includes pressure systems and their movement, measurements, and fronts.	Northeast Pacific	4
epac24_wndwav_xx	24-hour wind and wave forecast. Includes significant wave height and direction.	Eastern Pacific	2
epac_wwanal_00	Analysis of significant wave	Eastern Pacific	8

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	height and winds		
pacxx_wndwav	Forecasts of 00, 24, 48, and 96 hour winds and waves. Shows significant wave height. The average height of the highest one-third of the waves. Produced twice daily at 00 and 12 UTC.	North Pacific	2
pac00_500fcst	Analysis of the 500 mb level in the North Pacific. Included are pressure centers, measurements, and winds aloft. The analysis are produced twice daily at 00 and 12 UTC.	North Pacific	2
pacxx_500fcst	Forecasts of the 500 mb level. Available for 24, 48, 96 hour forecasts.	North Pacific	2
pacxx_sfcfcst	Forecasts of the Pacific sea surface. Available for 12, 24, 48, and 96 hour forecasts.	North Pacific	2
pacxx_wavpd	Forecasts of wave period/direction and ice accretion. Available for 12, 24, 48, and 96 hour forecasts.	North Pacific	2
pac_seaanal	Analysis of the Pacific sea state. Significant wave height and direction is shown.	North Pacific	2
pace_sfcanal_xx	Analysis of the sea surface in color. Contains pressure areas and their movements,	Northeast Pacific	4

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	fronts, winds, clouds, and isobars. Available at 00, 06, 12, and 18 UTC.		
pacw_sfcanal_xx	Analysis of the sea surface in color. Contains pressure areas and their movements, fronts, winds, clouds, and isobars. Available at 00, 06, 12, and 18 UTC.	Northwest Pacific	4
gdas_xxx_hgt_iso_nh_anl	Analysis showing heights and isotachs. Available for heights of 200, 250, 300, 500, 700, and 850. Produced twice daily at 00 and 12 UTC.	Northern Hemisphere	2
gdas_xxx_hgt_iso_sh_anl	Analyses showing heights and isotachs. Available for heights of 200, 250, 300, 500, 700, and 850. Produced twice daily at 00 and 12 UTC.	Southern Hemisphere	2
gdas_xxxhgt_tmp_nh_anl_xx	Analysis of heights and temperature at various levels. Levels include 100, 150, 200, 250, 500, and 700 mb.	Northern Hemisphere	2
gdas_xxxhgt_tmp_sh_anl_xx	Analysis of heights and temperature at various levels. Levels include 100, 150, 200, 250, 500, and 700 mb.	Southern Hemisphere	2
gdas_sfc_mslp_thk_xx_anl	Analysis showing mean sea level	Northern Hemisphere	2

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	pressure/ 1000-500 mb thickness levels.	and Southern Hemisphere	
gfs_sfc_mslp_thk_uscan_anl	Analysis showing mean sea level pressure/ 1000-500 mb thickness. Produced twice daily at 00 and 12 UTC.	United States and Canada	2
gfs_sfc_mslp_thk_nh_fxx	Forecasts of mean sea level pressure/1000-500 mb thickness. Forecasts are made twice daily at 00 and 12 UTC for 12, 24, 36, and 48 hour periods.	Northern Hemisphere	2
gfs_xxx_hgt_iso_nh_anl	Analysis showing heights, isotachs, and jet stream winds. Available for heights of 100, 150, 200, 250, and 300 mb.	Northern Hemisphere	2
gfs_xxx_hgt_tmp_nh_anl	Analysis showing heights and temperatures for 100, 200, 500, and 700 mb.	Northern Hemisphere	2
gfs_xxx_hgt_wnd_trp_anl	Analysis showing heights and winds for 150, 250, 500, 700, and 850 mb.	0 W 0 E 70 N -50 S	4
gfs_xxx_hgt_vor_nh_anl	Analysis showing heights and vorticity at the 500 mb level.	Northern Hemisphere	2
gfs_500_hgt_vor_uscan_anl	Analysis showing heights and vorticity at the 500 mb level.	United States and Canada	2
gfs_500_hgt_vor_nh_fxx	Forecasts of 500 mb heights and vorticity. Forecasts are made twice daily at 00 and 12 UTC for a 12, 24, 36, and 48 hour period.	Northern Hemisphere	2
gfs_700_rh_vvel_nh_anl	Analysis of 700	Northern	2

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	mb relative humidity and vertical velocity. Analysis made twice daily at 00 and 12 UTC.	Hemisphere	
gfs_700_rh_vvel_nh_fxx	Forecasts of 700 mb heights and vorticity. Forecasts are made twice daily at 00 and 12 UTC for a 12, 24, 36, and 48 hour period.	Northern Hemisphere	2
gfs_lift_nh_anl	Analysis of the lifted index. Produced twice daily at 00 and 12 UTC.	Northern Hemisphere	2
gfs_trop_prs_wsh_nh_anl	Analysis of the tropopause with respect to pressure and wind shear. Analyses are made twice daily at 00 and 12 UTC.	Northern Hemisphere	2
namxxsfc	Analysis of the surface. Charts show major surface elements including: Temps, dew points, wind speed and direction, pressure, fronts, and cloud cover. Charts are produced every 3 hours for all regions in the country, North America and the United States.	Alaska, Central Central, Central Eastern, Central Western, North Central, North East, North West, South Central, South East, South West, North America, United States	8
sat_evntxx	Analysis of visible satellite images covered by the GOES East satellite. Special events allow for 06 and 18 UTC transmissions.	GOES East	2
sat_evpnxx	Analysis of	GOES West	Various

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	evaporation of various areas covered by the GOES West Satellite.		Times
watl24_sfcfcst_xx	Forecasts of 24 hour sea surface. Contains surface pressure areas, measurements, and movements, fronts, and isobars.	North Atlantic	2
watl_wwanal_xx	Analysis of significant sea winds and waves. Significant wave height is shown along with surface winds.	Varies per special event	8

2. Element Names and Definitions:

None included with original documentation.

3. Start Date: 19940201

4. Stop Date: Ongoing

5. Coverage:

- a. Southernmost Latitude: -90.0S
- b. Northernmost Latitude: 90.0N
- c. Westernmost Longitude: -180.0W
- d. Easternmost Longitude: 180.0E

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

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Asheville, NC 28801

9. Known Uncorrected Problems: None.
10. Quality Statement:
11. Essential Companion Datasets:
12. References:

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