Internet Dynamic Environmental Atmospheric Summaries Data Display System

(D D S)

Background

The Internet Dynamic Environmental Atmospheric Summaries Data Display System (IDEAS DDS) is the latest generation climatology support system designed by Fleet Numerical METOC Detachment Asheville. The DDS was designed to provide functionality consistent with that found in the second generation climatology products distributed on CD-ROM. The DDS, however, is a truly windows compatible application.

Concept

The DDS was designed primarily to function as a self contained application. Rather than embedding the client into a web page for display in a browser, the DDS followed a design philosophy much like RealPlayer and Norton AntiVirus.

Look and Feel

The DDS client has a simple design as reflected in its familiar file folder appearance. The DDS client application provides an interactive, clickable and zoomable map that allows users to define a geographic region of interest (ROI). All database extraction's and displays are made over this ROI. Each tab defines the underlying database:

Upper Air - The NCEP/NCAR Reanalysis Data is from a Joint Project between the National Centers for Environmental Prediction (NCEP, formerly "NMC") and the National Center for Atmospheric Research (NCAR). Data are on 2.5 degree lat/long grid for 1000-10 mb levels by year-month (1949-2000) and period of record-month for 1958-1997.

Fleet Historical Fields - One degree data received from FLENUMMETOCCEN Monterey, CA. Currently available NOGAPS levels are surface -10 mb, and elements include Relative Humidity (%), Temperature (Celsius), Geopotential Height (m), Wind Barbs (kts) and from WAM are Significant Wave Heights (ft), Significant Wave Direction, Significant Wave Period (sec).

Marine Gridded - 1 degree lat/long summary containing mean, median, std deviation, max, min, and count of occurrence for every element in a ship synoptic observation derived from the Comprehensive Oceanographic and Atmospheric Data Set (COADS) (1854-1995).

Tropical Summaries - updated GTECCA CD-ROM with latest tracks, and narratives. Plus charts of Climatological Preferred Tracks and Basin Statistical Graphs.

WEB SITE

Global Marine Climatic Atlas (GMCA)

GMCA Version 1.1 is derived from the Comprehensive Ocean Atmosphere Data Set (COADS), which includes virtually all marine data from 1854 through 1995. Additional data will be added to the GMCA data base as it becomes available and is quality controlled. GMCA data is in 1 deg. x 1 deg. boxes. The user can define: the area, beginning and ending; month, year and hour which is displayed as statistical analysis in tabular form (Mean, Median, Min, Max, Std Dev, and Mode) for all elements and as a graphical display for user selected elements (Single and Bi-Variate Frequency Distribution).

Oceanographic and Atmospheric Master Library (OAML) Data Sets

The Surface Marine Gridded Climatology (SMGC), Global Tropical Cyclone Tracks (GTCT), Northern Hemisphere Extra-tropical Cyclone Tracks (NHECT) and the Upper Air Gridded Climatology (UAGC) data sets are all downloadable.

CAPABILITIES

GRAPHICS AND VISUALIZATION PRODUCTS

We can provide high quality maps and charts depicting customer-specified atmospheric variables from a variety of gridded fields. Graphical products can be provided on paper or in standard graphic file formats such as GIF and JPEG, or in PowerPoint.

CLIMATIC DATA BASES

As part of the Federal Climate Complex (FLENUMMETOC DET Asheville, National Climatic Data Center (NCDC) and Air Force Combat Climatology Center (AFCCC)), provides us access to the world's largest active archive of meteorological data, as well as, global baseline data sets developed for climate monitoring. These data can be provided on any digital media or via ftp in a variety of formats including spreadsheet compatible.

CD-ROM Products

The CD-ROMs are unclassified and operate with IBM-PC compatible systems using MS-DOS version 3.1 or higher (also will operate in Windows).

- ***International Station Meteorological Climate Summary (ISMCS)*** Windows Version distribution expected Jun 01
- ***Marine Climatic Atlas of the World (MCA)***
- ***Global Upper Air Climatic Atlas, Volumes I and II (GUACA)***
- ***Global Tropical and Extratropical Cyclone Climatic Atlas (GTECCA)***
- ***Global Historical Fields (GHF)***