

P-I-4

The NOAA Climate Database Modernization Program

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The Climate Database Modernization Program (CDMP) is managed through the National Oceanic and Atmospheric Administration's (NOAA) National Climatic Data Center (NCDC). Its major goal is to make major climate databases accessible through the World Wide Web. CDMP's primary focus is on imaging and keying of climate data. CDMP has grown to include tasks from all five major NOAA line offices, and internationally to include digitizing historical upper air records from six African nations, with an agreement to cooperate with Canada to provide access to archived marine observations. The amount of images on-line in mid 2003 reached 39 million records, totaling over three terabytes of data.

In support of the International Comprehensive Ocean-Atmosphere Data Set (I-COADS) and related programs interested in marine observations, CDMP has supported the imaging and keying of numerous marine observational records. As part of the NCDC operational incoming records effort, CDMP contractors are imaging and keying all U.S. Navy and Voluntary Observing Ship records received for archiving. As the forms are received the images are on-line within 48 hours, and keyed within days of imaging.

CDMP with the great support and cooperation of Deutscher Wetterdienst, the German Meteorological Service in Hamburg imaged all the German Maury logbooks in their archives. Deutscher Wetterdienst transported the logbooks to NCDC, where they were imaged, indexed, and placed on-line by CDMP before the original logbooks were returned to Germany. Another task included keying a special collection of marine observations from Japan.

This year, CDMP has allocated resources for imaging and keying the early editions (1955-1972) of WMO Pub. 47. The WMO Library has graciously consented to loan their copies of the publication to CDMP for up to two months for imaging. This important metadata information will then be keyed from the images. Also slated for this year is the imaging and placing on-line of the U.S. Maury Collection (1796-1861) and the U.S. Marine Meteorological Journals (1879-1893) off of microfilm copies from the National Archives and Records Administration (NARA). These observations were keyed earlier in cooperation with the Chinese National Oceanographic Data Center (CNODC) from paper copies produced from the microfilm. CDMP has also scheduled a visit to NARA to image a number of historical collections, including a large number of Atlantic lightship logbooks to be keyed along with the lightship records housed at NCDC. The keying of the NCDC-archived lightship records has already begun, and will be available for the National Marine Fisheries Service and for merging into I-COADS.

In keeping with the goal of making climate data accessible over the Internet, CDMP is continually searching for and supporting tasks to accomplish this objective.