

An archive model for a wide array of weather and climate data sets

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Recent developments in NOAA policies and partnerships have lead to new archiving systems and methodologies for supporting data at the NOAA National Climatic Data Center (NCDC). The NCDC is responsible for preserving data that originate from a wide variety of observational platforms to products containing any number of environmental variables of varying time spans and formats. Decades-old data archives are relatively small in volume and are mostly in non-standard formats. More recent data sets are in standard formats but can have unprecedented volumes. The diverse nature of the data holdings presents challenges for developing an archive model for data management. This presentation will show how NCDC uses a standards-based approach to support the full spectrum of data for the purposes of improving data access and understanding for users. Procedures for data acquisition based on NOAA guidelines and other archiving standards are components of the model that ensure a foundation for essential data stewardship. Standard metadata attributes and unique identifiers associated with the data sets organize the data for access. Web-based tools have been developed to assist providers with data archiving and writing data set documentation.