

Title: The Global Precipitation Climatology Project (GPCP) Data Products—Transfer to Operations at NCDC

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The objective of this proposal is to successfully transfer the routine production of Global Precipitation Climatology Project (GPCP) products to NCDC. The suite of GPCP precipitation products has become a science community standard, having been used in over 1200 journal articles. The current monthly (1979-present), pentad (1979-present) and daily products (1997-present) have been developed by research groups over the last 15 years and are produced by a consortium of those groups, funded by various agencies. Transfer of the routine processing of the GPCP products to an operational entity would ensure continuation of these important data analysis sets.

This proposed activity will develop (with NCDC partners) a detailed strategy for transfer of scientific knowledge, satellite and other data source accesses, and processing code for successful implementation of an end-to-end processing system that would routinely produce the GPCP current (Version 2) products for archival and dissemination. Although the proposal will present an initial plan of action for the transfer, the early part of the proposal period would focus on reviewing the requirements with a small group of advisors and the larger outside user community.

The current GPCP processing involves computation of individual intermediate products or data sets by a number of government and university entities and a merger of these products by another group. The proposed work would organize, streamline, update and document all code needed for product production from the level of the satellite-calibrated radiances to the final merged products. Arrangements will be made to ensure continued access to the various input data sets. Testing and evaluation of output products from the new system will be a key part of this project, as will an evaluation of the feasibility of reprocessing the 30-plus-year-record to make minor upgrades. Maintaining science quality of the output products will be a critical aspect and will require significant on-going effort.