Experimental Observed Precipitation Map

Part 1 – Mission Connection

a. Product Description – The National Weather Service (NWS) collects rainfall data to support its forecast and warning operations. Individual River Forecast Centers (RFCs) and Weather Forecast Offices typically provide rainfall collectives in text format and graphical format for their areas of responsibility. The National Centers for Environmental Prediction (NCEP) Climate Prediction Center (CPC), collects additional data from cooperative observers. This rainfall data is made available to HPC and is used extensively for verification purposes.

b. Purpose - This rainfall data is plotted on a map of the CONUS and made available to forecasters. The data is used for feedback on forecast accuracy and can be used in case studies and other scientific endeavors.

c. Audience - The target audience includes NWS forecasters, the academic community, the emergency management community, and anyone interested in rainfall totals.

d. Presentation Format – The 24-hour observed precipitation graphics are web-based and can be viewed at the following URL:

http://www.hpc.ncep.noaa.gov/qpf/obsmaps/obsprecip.php

e. Feedback Method – Comments regarding the observed precipitation graphics should be sent to one of our feedback email addresses. Links for these addresses are located on the left-hand menu under "Contact Us".

Comments may also be provided to:

Edwin Danaher
5200 Auth Road Suite 410H
Camp Springs, MD 20746
(301) 763-8000 ext. 7354
Edwin.Danaher@noaa.gov

Experimental Feedback Period: October 1, 2008 through January 1, 2009.

Part II – Technical Description

a. Format and Science Basis – 24-hour rainfall data (gage) are collected from cooperative observers and data collection networks such as the Automated Surface Observing System (ASOS). Utilizing GEMPAK software interfaced with Fortran and C-shell code, these data sources are combined to create daily charts of 24-hour observed rainfall valid at 1200 UTC for the CONUS, southern Canada, and northern Mexico. Two images are created each day: a small image in gif format provides a preview of the observed data,

while a larger graphic in pdf format allows users to view the data at very high resolution. Web browsers using standard Hypertext Markup Language (HTML) can display the preview images. Users must have Adobe's Acrobat Reader plug-in to view the pdf files. In addition to the web graphics, two text files containing the raw data are prepared. One sorts the data first from heaviest to lightest amounts, then from north to south and finally from west to east. The other text file sorts precipitation first from north to south, then west to east and finally from heaviest to lightest amounts.

b. Product Availability – Two charts are created once daily, with an archive of precipitation data dating to May 4, 2008.

c. Additional Information – None.