

**JP2.1 NOAA/NWS UPDATED PRECIPITATION FREQUENCIES FOR THE SEMIARID
SOUTHWEST UNITED STATES**

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1. STUDY UPDATE

The rainfall frequency atlases and technical papers published by the National Oceanic and Atmospheric Administration's (NOAA) National Weather Service (NWS) serve as national standards for rainfall intensity at specified frequencies and durations in the United States. The Hydrometeorological Design Studies Center (HDSC) located in the Hydrology Laboratory of the NWS Office of Hydrologic Development is updating the standards for the semiarid southwest published in NOAA Atlas 2 "Precipitation-Frequency Atlas of the Western United States" (Miller et al. 1973), Technical Paper No. 49 "Two- to ten-day precipitation for return periods of 2 to 100 years in the contiguous United States" (Miller 1964) and Technical Paper No. 40 "Rainfall frequency atlas of the United States for durations from 30 minutes to 24 hours and return periods from 1 to 100 years" (Hershfield 1961).

The Semiarid study includes estimates for 4 states completely, Arizona, Nevada, New Mexico, and Utah, and also southeastern California. The study involved collecting data and performing quality control, compiling and formatting datasets for analyses, selecting applicable frequency distributions and fitting techniques, analyzing data, mapping and preparing reports and other documentation. HDSC analyzed durations from 5-minute through 60-days at return frequencies from 2-years through 1000-years using L-moment statistics (Hosking and Wallis 1997). This poster paper presents selected results of the update. Separate posters/papers present the methodology used in this study, results for the Ohio River basin and the Precipitation Frequency Data Server (AMS paper J13.5 NOAA/NWS Precipitation Frequency Data Server), which will provide the final results via the Internet.

2. ACKNOWLEDGMENTS

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3. REFERENCES

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