Vice-Admiral Conrad C. Lautenbacher, Jr. USN, Retired
Under Secretary of Commerce for Oceans and Atmosphere
NOAA Administrator
National Oceanic and Atmospheric Administration
Herbert Clark Hoover Building, Room 5128
14th and Constitution Ave, NW
Washington, DC 20230

Dear Vice-Admiral Launtenbacher:

Through remarkable synergy and foresight, NOAA’s GSD (FSL) has led in the development of a network of more than 380 GPS receivers into a very effective and accurate observing system (GPS Met) for measuring the moisture content (Precipitable Water, or PW) in the atmosphere. This network is highly leveraged, with roughly 80% of the observing stations supported by other federal, state, and university partners. We urge NOAA to continue its leadership role in supporting this cost-effective and successful program. Absent additional funds, NOAA’s GSD (FSL) must terminate the project sometime in 2007. We ask NOAA to find the modest resources needed to fully fund GPS-Met, and recommend that NOAA move forward aggressively to transition the operational aspects of GPS-Met to NOAA NWS operations.

GPS Met’s high accuracy, stability, low cost, and availability under all weather conditions make it ideally suited as an observing system for both weather forecasting and climate monitoring. GPS PW data are also used to validate and correct both radiosonde and satellite water vapor data. The measurements are gathered every hour and are assimilated into NOAA’s Rapid Update Cycle (RUC) model, the only weather prediction model running at EMC/NCEP that provides updated forecasts on an hourly basis. The positive benefits of GPS PW data have been clearly demonstrated. The RUC and the GPS-Met observations are critical for detecting changes in fast-evolving
severe weather. Airlines and railroads heavily depend on the RUC hourly forecasts. Loss of GPS-Met water vapor data will diminish RUC forecast accuracy potentially increasing the threat severe weather poses to personal safety and to property.

Thank you for considering our request. We would be happy to provide additional information if you wish.

Sincerely,

[Signature]

Professor Steven Businger
And other signatures