

Global Positioning System Meteorology: Ready to Move into Operations

Decision-makers are increasingly reliant on public and private forecasts for daily planning, hurricane evacuations, fuel distribution, agriculture pricing policy, positioning fire weather assets and positioning road chemicals for winter storms. They can benefit from better forecasts resulting from the availability of measurements of atmospheric water vapor from ground-based Global Positioning System Meteorology (GPS-Met) Integrated Precipitable Water (IPW) retrievals. These GPS-Met-IPW data are being used in weather prediction models to help produce more accurate analyses and forecasts of the atmospheric moisture pattern over the U.S. as well as in a wide range of other forecast applications. The GPS-Met-IPW network provides unattended, continuous, independent, frequent, and accurate observations of IPW at very low cost. More importantly, the improved situational awareness to forecasters leads to better short-term regional warnings and forecast services potentially resulting in reduction of life and property. Current budget planning by the National Oceanic and Atmospheric Administration does not call for the National Weather Service to begin funding the transition of this valuable network from experimental to operational status until Fiscal Year 2009.

NWA Remote Sensing Committee