University NAVSTAR Consortium Support for SuomiNet, a GPS Network for Atmospheric Sensing (paper, year?)

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University NAVSTAR Consortium Support for Suominet, a GPS Network for Atmospheric Sensing

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ABSTRACT

The University NAVSTAR Consortium (UNAVCO) is a consortium of 100 international universities and laboratories joined to promote the use of the Global Positioning System (GPS) for high-accuracy geosciences research. Traditionally UNAVCO's Boulder Facility provides GPS technology and support to high-accuracy geodetic users via specific project support to investigators funded by the National Science Foundation (NSF) and National Aeronautics and Space Administration (NASA). SuomiNet is a university-based, real-time, national GPS network that is being developed for atmospheric research and education (Ware, et al, 2000). SuomiNet is based on a network of GPS receivers located at participating universities that will measure phase delays induced in GPS signals by the ionosphere and neutral atmosphere. These delays can be converted into integrated water vapor (if surface pressure data are available) and total electron content (TEC) along each GPS ray path. Currently UNAVCO provides operational support for SuomiNet by developing receiver specifications, equipment testing, computer operating system configuration, providing data streaming and receiver configuration software compatible with the UNIDATA program, by system packaging, shipping, and configuration, and finally by data routing and backup for geodetic quality stations. SuomiNet provides an opportunity to create a synergy between the solid Earth and atmospheric research communities by providing a single point of contact for all GPS based technology, support, and data management.

[See attached .pdf file for more.]

Online URL:
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