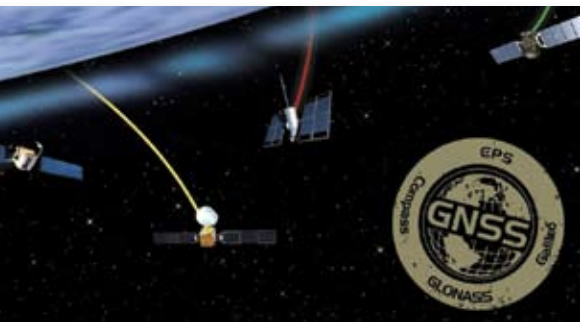


NOAA will lead an international effort to pinpoint the locations of more than 40 global positioning satellites in Earth orbit, which is vital to ensuring the accuracy of GPS data that millions of people worldwide rely upon every day for safe navigation and commerce.

NOAA personnel will compile and analyze satellite orbit data from 10 analysis centers worldwide to ensure the accuracy of GPS information. For the next four years NOAA's National Geodetic Survey will serve as the Analysis Center Coordinator for the International Global Navigation Satellite Systems Service, a voluntary federation of more than 200 organizations that provide continuous global satellite-tracking data.

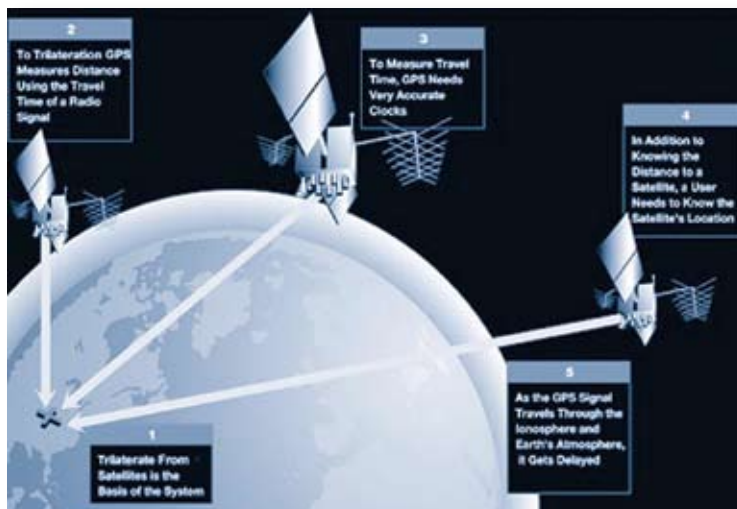
"For GPS receivers to provide accurate information, the precise location of positioning satellites as they orbit the Earth must first be determined,"



said David Zilkoski, director of NOAA's National Geodetic Survey. "NOAA looks forward to leading this international partnership to produce the highest quality satellite position data possible."

The Global Navigation Satellite Systems, which include the U.S. based Global Positioning System, the Russian GLONASS system, and the upcoming European Galileo system, are used for accurately determining the geographic position of any point on Earth.

A GPS receiver calculates its position by measuring the time it takes a signal to travel from the satellite



to the receiver. Because the signal travels at a known rate and the time is precisely measured using an atomic clock, the receiver can calculate its distance from the satellite. By repeating this process from four or more GPS satellites whose orbits are precisely known, the GPS receiver can determine its position.

NOAA is dedicated to enhancing economic security and national safety through the prediction and research of weather and climate-related events and information service delivery for transportation, and by providing environmental stewardship of our nation's coastal and marine resources. Through the emerging Global Earth Observation System of Systems (GEOSS), NOAA is working with its federal partners, more than 70 countries and the European Commission to develop a global monitoring network that is as integrated as the planet it observes, predicts and protects. [www.noaa.gov]

GEOSS

GEOSS arose out of the recognition that no matter how effective and efficient all of our single-purpose Earth observation systems may be, their value multiplies when they can work in synergy.

Decision-makers and users at many levels—farmers making planting choices, emergency managers making evacuation decisions, companies evalu-

ating prospective building sites, nations battling drought and disease, parents checking daily weather reports—all take advantage of data from satellite remote sensing, aerial surveys, land or ocean-based monitoring systems, and a vast array of socio-economic information.

Given that just a fraction of Earth observation data collected is being put to excellent, perhaps life-saving use, GEOSS aims to provide the right information, in the right format, to the right people, at the right time, to make the right decisions.

Such goals require sound policy based on science derived from more than "snapshot assessments." They require comprehensive, integrated data sets on all Earth systems, and taking the pulse of the planet requires an understanding of the intrinsic links between these systems. GEOSS has emerged to enhance such understanding. [www.noaa.gov/eos.html].

U.S. Group on Earth Observations

The United States is a founding member of the intergovernmental Group on Earth Observations (GEO), which is developing GEOSS. The U.S. Group on Earth Observations (USGEO), a subcommittee of the President's National Science and Technology Council, coordinates U.S. government participation. USGEO is supported by 15 federal agencies and three White House offices. NOAA has a major stake in national and international Earth observing systems, including IOOS, the U.S. Integrated Ocean Observing System.