



# NOAA Readjusts the National Spatial Reference System

NOAA's National Geodetic Survey (NGS) is readjusting the horizontal positions and ellipsoid heights of the National Spatial Reference System (NSRS), using high accuracy Global Positioning System (GPS) data. The NSRS is a consistent, national coordinate system that specifies latitude/longitude, height, scale and gravity throughout the Nation; providing the foundation for mapping, charting, and a multitude of scientific and engineering applications. The readjustment will improve the accuracy and consistency of the NSRS and provide a local and network accuracy measure for each coordinate.

The NSRS encompasses a network of permanently marked control points; a nation-wide array of continuously operating Global Positioning System reference stations; up-to-date national shoreline data; and a set of accurate models describing geophysical processes. The NSRS control points aid in air navigation, provide data for coastal maps, and assist state and local highway planners. NSRS data is also critical in identifying subsidence and flood plane areas that are crucial for determining safe flood evacuation routes.

Scheduled for completion in February 2007, the readjustment will incorporate vast improvements in observational accuracies furnished by high-accuracy GPS-derived observations, that were not available for earlier coordinate computations. The readjustment will provide surveyors and others with a highly accurate, consistent set of coordinates with specifically defined point accuracies. For more information on the new readjustment, visit

[www.ngs.noaa.gov/NationalReadjustment](http://www.ngs.noaa.gov/NationalReadjustment)

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The U. S. Department Commerce  
National Oceanic and Atmospheric Administration  
National Ocean Service  
National Geodetic Survey

The National Geodetic Survey (NGS) defines and manages the National Spatial Reference System. Since 1807, NGS and its predecessor agencies have led the world in precise positioning and developed emerging technologies for the public. For further information or specific questions please contact:

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