Atmospheric and oceanographic applications of GIS in the United States – from "fish sticks" to satellites

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Collaborations among GIS developers, research and operational users are contributing to integrated data modeling and evolving GIS functionality across atmospheric and oceanographic applications. GIS-Ready atmospheric and oceanographic datasets are enabling new initiatives across a broad user community, with new strategies for automated data access in open data formats. Emerging operational and research applications range from climate, weather forecasting and fisheries, to tsunami and severe weather warnings, verification, and emergency response. A Team Atmosphere User Group is developing an integrated Data Model for GIS applications, and is contributing to new functionality such as netCDF in the latest release of ESRI software (ArcGIS 9.2). Selected developments in the United States are summarized, with citations for easy reference.