CRADAs (Cooperative Research and Development Agreements)

GPS-Meteorology (GPS-Met)

Established: April 2014
Duration: Two years
Collaborator: Trimble Navigation

This agreement provided for collaborative work toward GSL's intent to transfer the GSL GPS-Met Data Acquisition and Processing System and/or to verify that equivalent capabilities, held by Trimble Navigation, met or exceeded NOAA's specifications for GPS-Met products. Completion of this CRADA provided NOAA assurance that the private sector can provide the desired observations. The CRADA also provided opportunities to conduct joint research and development to refine, improve, or evaluate commercial extensions of the GPS-Met technology.

Trimble Navigation demonstrated that it can meet NOAA's specifications for GPS-Met products. NWS conducted a competitive acquisition in early FY2016 to procure the GPS-Met products for NOAA use from a commercial vendor.

Integrated Weather Solution for Civil Aviation Stakeholders: Air Traffic Management, Airlines, and Airports

Established: November 2015
Duration: Five years
Collaborator: I.M. Systems Group (IMSG)

IMSG designed the Integrated Aviation Weather System (IAWS) with the following basic Service Functions: 1) IAWS-R for En-Route Aviation Weather; 2) IAWS-T for Terminal Area Aviation Weather and 3) IAWS-C for Collaborative Decision Making (CDM) Support. These service functions are to provide highly accurate nowcast and forecasts to support operational Aviation Weather Stakeholders including Air Traffic Management, Airlines, and Airports both within the U.S. and overseas. INtegrated Support for Impacted air-Traffic Environments (INSITE), developed at GSL, is a web-based prototype application designed to be used in the convective weather forecast process. Joint efforts included developing proof-of-concept capabilities to incorporate INSITE functionality into the IAWS system, adapted to sectors of China airspace. GSL also consulted on radar-based nowcasting techniques which are the primary component of IAWS-R and IAWS-T.

Patents

Science On a Sphere®

Patent Number: US 6,937,210
Date of Patent: August 30, 2005
Inventor: Dr. Alexander E. MacDonald

Science On a Sphere® (SOS) is a room-sized global display system that uses computers and video projectors to display planetary data onto a six-foot diameter sphere, analogous to a giant animated globe. Dr. Alexander MacDonald invented Science On a Sphere® and researchers at NOAA developed Science On a Sphere® as an educational tool to help illustrate Earth system science to people of all ages. Animated images of atmospheric storms, climate change, and ocean temperature can be shown on the sphere to explain complex environmental processes in a way that is simultaneously intuitive and captivating.

Trademarks

Planet Theater®

Registered Trademark Serial Number: 78512934
Registration Date: 2006-09-26
Trademark Holder: NOAA

TerraViz™

Registered Trademark Serial Number: 87575179 and 87575141
Registration Date: 08/18/2017Trademark Holder: NOAA

SOSX® (Science On a Sphere Explorer)

Registered Trademark Serial Number: 87575319 and 87575267
Registration Date: 08/18/2017
Trademark Holder: NOAA