Seventh Annual NOAA-Industry Space Weather Summit Meets

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The Seventh Annual NOAA Space Weather Prediction Center (SWPC)/Commercial Space Weather Interest Group (CSWIG)/American Commercial Space Weather Association (ACSWA) Summit was held on Tuesday 16 April 2013 during the Space Weather Workshop. Government personnel and commercial space weather representatives attended in person and by telecom, and many were participating for the first time. The ACSWA Executive Committee [Dr. Geoff Crowley (Atmospheric and Space Technology Research Associates, ASTRA), Dr. Devrie Intriligator (Carmel Research Center, CRC), Dr. Robert Schunk (Space Environment Corporation, SEC), and Dr. Kent Tobiska (Space Environment Technologies, SET)] was in attendance.

Dr. Devrie Intriligator and Mr. Brent Gordon, Acting Director of SWPC, welcomed the group. Mr. Gordon reported that the National Weather Service (NWS) continues its search for a permanent SWPC Director. There have been two unsuccessful hiring attempts since January 2012, and there is currently a NOAA-wide hiring freeze.

The SWPC forecast office is using the WSA (Wang Sheeley Arge–Enlil modeling system in their daily operations and has introduced two new products: a plain language forecast and a technical discussion report. Both are available from SWPC’s Product Subscription Service (http://pss.swpc.noaa.gov). The forecast office is also working closely with NASA/Community Coordinated Modeling Center on its recommendation for a Geospace model to transition into operations at SWPC. SWPC has also made progress on the Whole Atmosphere Model/Integrated Dynamics through Earth’s Atmosphere model.

The budget at SWPC continues to be a serious concern. Due to sequestration and other cuts, SWPC is facing a major reduction in its operating budget for fiscal year 13. SWPC faces serious reductions to its modeling efforts that could set them back several years on the planned implementation dates.

The Deep Space Climate Observatory (DSCOVR) project, the follow-on L1 spacecraft to ACE, continues to move toward its planned November 2014 launch date. NOAA will move the ground data processing from the National Environmental Satellite, Data, and Information Service to SWPC, i.e., the same ground configuration as used for ACE data recovery. Mr. Gordon reported that the Sunjammer solar sail mission would be comanifested with the DSCOVR launch. Sunjammer will attempt to reach a stable point approximately twice the distance of L1 from Earth. The UK is collaborating on the project by providing two space weather instruments for the mission, a magnetometer and a plasma detector. These data will not be available in real time to SWPC and its customers.

Mr. Gordon also reported on the NOAA Small Business Innovation and Research (SBIR) program. A SBIR Phase II award was given to Propagation Research Associates, Inc., to continue their work on detecting and nowcasting ionosphere scintillation. A new SBIR Phase I award was given to NorthWest Research Associates for “Delivering a Solar Flare Forecast Model that Improves Flare Forecast (Timing and Magnitude) Accuracy by 25%.”

Mr. David Bouwer (SET) reported on the operational use of the DOC/NOAA/NWS External Space Weather Data Store (E-SWDS) server and recommended new and future E-SWDS capabilities such as WSA-Enlil and GOES Extreme Ultraviolet sensor data access. Dr. Intriligator reiterated the commercial space weather community needs for long-term, stable space-based and ground-based space weather data, including GOES; coronagraph; solar irradiance; neutron monitor; and magnetospheric, ionospheric, and tropospheric radiation.

Dr. Schunk discussed the importance of the government complementing its current space weather capabilities through commercial data buys and buys of services. A lively discussion ensued on potential data and services buys from commercial companies. A sentiment was expressed
that the government should not be “reinventing the wheel” given the current and probable future federal budget situation.

Dr. Crowley summarized ACSWA, organization, accomplishments, and goals. In 2010, ACSWA was founded by five companies, and now, there are 16 members. At the January 2013 American Meteorological Society (AMS) Meeting, ACSWA members cosponsored and lectured for an all-day course on space weather.

Dr. Genene Fisher, Senior Advisor for Space Weather at NOAA NWS, discussed how AMS is addressing space weather public/commercial partnership issues. The AMS Commission on Weather and Climate Enterprise is facilitating discussion between the public and commercial sectors to improve cooperation. At the 2013 AMS Annual Meeting, a space weather panel discussion highlighted challenges, keys to success, and opportunities.

Mr. Michael Bonadonna, Executive Secretary for the National Space Weather Program (NSWP) Council, provided an update on NSWP activities. Since the last Summit, the NSWP Council established the Unified National Space Weather Capability through an interagency Memorandum of Understanding that empowers federal agencies to work together more effectively. Through the Executive Office of the President, a comprehensive 10 year assessment of the space weather sensing capabilities needed to provide operational space weather services to the nation was published. A National Space Weather portal website (www.spaceweather.gov/portal) has been launched to consolidate public access to all U.S. government space weather–related resources.

Mr. Mark Gunzelman (Aviation Meteorology Applications, Inc.) summarized the status of the International Space Weather Concept in Support of Aviation Operations and the International Civil Aviation Operations Activities. Dr. Tobiska reported on the recommendations of the Third Annual SpWx Community Operations Workshop, which was cosponsored by ACSWA and NOAA SWPC.

Gatherings such as the Workshop and the Summit are important for fostering communications between the various sectors of the space weather community; increasing mutual awareness of the goals, capabilities, and problems in each sector; and encouraging future partnerships and collaborations between the sectors.

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