

## **Lidia Cucurull**

### **Current research**

Program Scientist for satellite GPS Radio Occultation within NOAA/NESDIS. My responsibility is to provide the scientific leadership necessary for the scientific success of the current and future GPS RO missions by insuring that the mission/measurements meet the scientific requirements. I am also the scientific spokesperson and independent technical authority on behalf of the program for NOAA and represent STAR and the Joint Center for Satellite Data Assimilation (JCSDA) in national and international committees, boards, and working groups.

I am responsible for the assimilation of GPS RO satellite observations into the NCEP's Global Data Assimilation System (GSI/GFS). I establish priorities for the transition of the current and future GPS RO satellite measurements from research to operations. I also coordinate all the GPS RO missions within the JCSDA, including determining requirements for personnel, funding and maintaining a balance between long-term and short-term goals. As a Program Scientist for GPS RO, I coordinate the RO satellite data assimilation research programs within NOAA and with the external partners at the JCSDA. My duties also include the preparation of reports and presentations on the current and future RO mission impacts to senior level management.

During the last years I have lead the role of the use of GPS RO products at the US National Weather Service (NOAA/NWS) and have developed, tested and optimized the procedures necessary to assimilate GPS RO sounding data into the new generation of NCEP's Global Data Assimilation System, including the basic measurement science, data retrieval procedures, data quality controls, operational data handling, data format, observation operators, impact studies and model verification procedures. Following the good results of the data assimilation experiments with COSMIC, NCEP began operational use of the COSMIC data on 1 May 2007, roughly one year after the launch.

In addition, I am the lead for scientific applications of the GPS RO data at NOAA, including their assimilation into the NCEP's next generation of the re-analysis system, retrieval of the planetary boundary height, calibration of other satellite instruments and building climatologic historical records with RO retrieved temperatures.

### **Education**

- Ph. D. in Physics (with specialty in Atmospheric Sciences) on the Use of Global Navigation Satellite Systems (GNSS) signals into Numerical Weather Prediction (NWP), Universitat de Barcelona (UB), Barcelona, Spain (June 2001).
- M.S. Degree in Theoretical Physics, Universitat Autònoma de Barcelona (UAB), Barcelona, Spain (Sept 1995)
- Graduated (B.S.) in Physics, Universitat Autònoma de Barcelona (UAB), Barcelona, Spain (Sept 1994).

### **Work experience**

- Program Scientist for GPS Radio Occultation missions, NOAA/NESDIS (since Sept. 2008).
- Intergovernmental Personnel Act (IPA) Assignment Agreement. Assignment from UCAR to the Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) National Environmental Satellite, Data & Information Services (NESDIS) (since Oct 2007).
- University Corporation for Atmospheric Research (UCAR) (Jan 2002-Oct 2007; off-site at NOAA since 2003)

- Research Scientist, Institut d'Estudis Espacials de Catalunya (IEEC), Barcelona, Spain (1996-Jan 2002).
- Assistant Professor at the Theoretical Physics Group, Physics Department, Universitat Autònoma de Barcelona (UAB), Barcelona, Spain (Sept 1994-March 1996).

**Selected awards**

- Member of the COSMIC Team, awarded with the 2007 UCAR Outstanding Scientific and Technology Advancement Award, 2007.
- NOAA Team Member of the Month (November) in recognition for the work on COSMIC on leading the effort at the JCSDA in conducting testing and exploitation of COSMIC data in the GFS system, following the launch of COSMIC in April 2006, 2007.