Montserrat Costa Surós

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Research Topics:

- Cloud macroscopic distribution and precipitation response to aerosols
- Atmospheric water content observations
- Merging observations and atmospheric models

Current Project:

05/2016-03/2019: High Definition Clouds and Precipitation for Climate Prediction (HD(CP)^2) Phase-II, S1: Fast cloud adjustment to aerosols (Funded by BMBF)

Former Projects:

10/2014 - 04/2016	"MULTIPLY: Development of a European HSRL airborne facility". Funded by: European Space Agency (ESA, cont. no. 4000112373/14/NL/CT). Co-coordinator in University of Warsaw: Dr. I. S. Stachlewska.
10/2014 - 04/2016	"Integrated study of climate processes involving absorbing aerosols". Funded by: Grant SONATA BIS funded by National Science Center (NCN, No. project: 2012/05/E/ST10/01578). Main researcher: Dr. K. Markowicz.
2010 – 2014	"Clouds and their radiative effects: Study from the local scale situations to climatological analysis of global scope. Interactions with the atmospheric aerosol (NUCLIERSOL)". Funded by: Science and Innovation Ministry of Spanish Government (Project no. CGL2010-18546). Main researcher: Dr. J. Calbó Angrill.
2008 – 2010	"Cloud and Climate Change: cloudiness and sunshine duration variability and trends in the Iberian Peninsula, and measurement and modeling of surface cloud radiative effects (NUCLIEREX)". Funded by: Education and Science Ministry of Spanish Government (MEC, Project no. CGL2007-62664/CLI). Main researcher: Dr. J. Calbó Angrill.

Publications:

2015 "Modeling Atmospheric Longwave Radiation at the Surface during Overcast Skies: The Role of Cloud Base Height". Authors: Viúdez-Mora, A., Costa-Surós, M., Calbó, J., González, J.A. Journal of Geophysical Research – Atmospheres (Vol. 120 (1), pp. 199-214). DOI: 10.1002/2014JD022310.

2014 Title: "Comparing the cloud vertical structure derived from several methods based on measured atmospheric profiles and active surface measurements". Authors: Costa-Surós, M., Calbó, J., González, J.A., Long, C.N. Atmospheric Measurement Techniques (Vol. 7, pp. 2757-2773). DOI: 10.5194/amt-7-2757-2014.

2013 Title: "Behavior of cloud base height from ceilometer measurements". Authors: Costa-Surós, M., Calbó, J., González, J.A., Martín-Vide, J. Atmospheric Research (Vol. 127, pp. 64-76). DOI: 10.1016/j.atmosres.2013.02.005.

Educational Background:

10/2014 PhD in Environmental Physics, University of Girona (Spain). Thesis title: "Geometric Characteristics of Clouds from Ceilometer Measurements and Radiosounding Methods". Group of Environmental Physics, Department of Physics, University of Girona. Supervisors: Dr. J. Calbó Angrill and Dr. J.A. González Gutierrez.

09/2009 M. Sc. in Environment - Environmental Physics and Technology itinerary, University of Girona (Spain). Thesis title: "Study of the Distribution of Cloud Base Heights. Application to Girona".

10/2005 Extraordinary Award for the Bachelor's Degree in Environmental Sciences, course 2004/2005, University of Girona (Spain).

09/2005 Bachelor's Degree in Environmental Sciences, Environmental Science and Technology Itinerary, University of Girona (Spain).

Research experience and scientific visits:

10/2014-04/2016 PostDoc researcher at Atmospheric Physics Department, Institute of Geophysics, University of Warsaw (Warsaw, Poland).

02/2012-04/2012 Brief Stay in the company Vaisala Oyj. (Helsinki, Finland). Granted by Science and Innovation Ministry of the Spanish Government.

02/2011-05/2011 Brief Stay in the Pacific Northwest National Laboratory (PNNL, Richland, WA, USA) in the Climate Physics Group of the Atmospheric Science and Global Change Division, in conjunction with the ARM (Atmospheric Radiation

	Measurement) Program. Granted by Science and Innovation Ministry of the Spanish Government.
2012 - 2014	University of Girona (Spain): research assistant (Project: NUCLIERSOL).
2008 - 2012	University of Girona (Spain): researcher in training (Projects: NUCLIEREX and NUCLIERSOL).