

Fecha del CVA	06/03/2017
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## Parte A. DATOS PERSONALES

Nombre y Apellidos	Alberto Cazorla Cabrera		
DNI	[REDACTED]	Edad	37
Núm. identificación del investigador	Researcher ID		
	Código Orcid		

### A.1. Situación profesional actual

Organismo	Universidad de Granada		
Dpto. / Centro			
Dirección	Avda. del Mediterraneo s/n, Edificio CEAMA, 18006, Granada		
Teléfono	[REDACTED]	Correo electrónico	<a href="mailto:cazorla@ugr.es">cazorla@ugr.es</a>
Categoría profesional	Contrato de personal docente e investigador por obra y servicio	Fecha inicio	2017
Espec. cód. UNESCO	250000 - Ciencias de la Tierra y del Espacio; 250100 - Ciencias de la atmósfera		
Palabras clave			

### A.2. Formación académica (título, institución, fecha)

Licenciatura/Grado/Doctorado	Universidad	Año
Doctor en Programa Oficial de Posgrado en Física	Universidad de Granada	2010

## Parte B. RESUMEN LIBRE DEL CURRÍCULUM

Alberto Cazorla, started his research career in 2004 at University of Granada when he was selected as researcher for a national plan founded project. Shortly after, he was awarded with a predoctoral fellowship and was founded twice for short research stays at international institutions. He obtained his doctoral degree in 2010, and moved to California for a postdoctoral position at University of California San Diego. In 2012 the candidate came back to Spain and he has been working as a postdoctoral researcher in several projects at University of Granada and University of Extremadura. He started in 2017 to manage his own project obtaining funding from the "Ministerio de Economía y Competitividad" under the funding plan "Proyectos de I+D +i para jóvenes investigadores sin vinculación o con vinculación temporal".

The research career of Alberto Cazorla has been focusing on the effect of aerosol particles and clouds on radiation and, therefore on climate. He has developed instrumentation and new techniques for the characterization of cloud macro-physical properties and has experience with state of the art instrumentation. He also has been developing new techniques for the aerosol characterization and is familiar with a wide range of instrumentation for the characterization of their optical, microphysical and chemical properties.

Alberto Cazorla is author of 33 articles published on international journals, 28 of them indexed on the JCR and 22 of them on the first quartile (several of them in the first decile), and all of them highly referenced, highlighting a publication on Science. He has contributed with numerous conference communications (more than 60). He participated on 25 projects including 9 international projects, and is contributing on a COST action (ES1303). The candidate also has experience on research campaigns and has worked on 6 experimental campaigns aboard aircrafts, the last one being the mission scientist (designing the scientific flight plans). He supervised 5 master theses and has a wide teaching experience (national and international) on undergraduate and master courses.

His main research line can be described as "Aerosol, clouds and their effects on climate" and it is divided into two specific lines according to the application of his research activities: (i) Direct effects of aerosols on climate, and (ii) Effects of aerosol on cloud properties

## Parte C. MÉRITOS MÁS RELEVANTES (ordenados por tipología)

## C.1. Publicaciones

- 1 **Artículo científico.** Titos, Gloria; et al. 2017. Spatial and temporal variability of carbonaceous aerosols: Assessing the impact of biomass burning in the urban environment. *Science of The Total Environmen*. Elsevier. 578, pp.613-625.
- 2 **Artículo científico.** Román, Roberto; et al. 2017. Cloud cover detection combining high dynamic range sky images and ceilometer profiles. *Atmospheric Research*. Elsevier. under review.
- 3 **Artículo científico.** CAZORLA, ALBERTO; et al. 2017. Near real time processing of ceilometer network data: characterizing an extraordinary dust outbreak over the Iberian Peninsula. *Atmospheric Chemistry and Physics*. Copernicus Gesellschaft mbH. submitted.
- 4 **Artículo científico.** Román, Roberto; et al. 2017. Remote sensing of lunar aureole with a sky camera: Adding information in the nocturnal retrieval of aerosol properties with GRASP code. *Remote Sensing of Environment*. Elsevier. under review.
- 5 **Artículo científico.** Titos, Gloria; et al. 2016. Effect of hygroscopic growth on the aerosol light-scattering coefficient: A review of measurements, techniques and error sources. *Atmospheric Environment*. Elsevier. 141, pp.494-507.
- 6 **Artículo científico.** Antón, Manuel; et al. 2016. Sensitivity of UV Erythral Radiation to Total Ozone Changes under Different Sky Conditions: Results for Granada, Spain. *Photochemistry and Photobiology*. Wiley. 92, pp.215-219. ISSN 1751-1097.
- 7 **Artículo científico.** Valenzuela, Antonio; et al. 2015. Aerosol scattering and absorption Angström exponents as indicators of dust and dust-free days over Granada (Spain). *Atmospheric Research*. Elsevier. 154, pp.1-13. ISSN 0169-8095.
- 8 **Artículo científico.** CAZORLA. ALBERTO; et al. 2015. Multi-Exposure Adaptive Threshold technique for cloud detection with sky imagers. *Solar Energy*. Elsevier. 114, pp.268-277. ISSN 0038-092X.
- 9 **Artículo científico.** Titos, Gloria; et al. 2014. Study of the relative humidity dependence of aerosol light-scattering in southern Spain. *Tellus Series B*. Wiley. 66, pp.24536. ISSN 0280-6509.
- 10 **Artículo científico.** Corredor-Ardoy, Juan Luis; et al. 2014. Active and passive remote sensing for monitoring the planetary boundary layer height. *Óptica Pura y Aplicada*. Sociedad Española de Óptica. 47-2, pp.83-90. ISSN 2171-8814.
- 11 **Artículo científico.** Foyo-Moreno, Inmaculada; et al. 2014. Estimating aerosol characteristics from solar irradiance measurements at an urban location in Southeastern Spain. *Journal of Geophysical Research - Atmospheres*. Wiley. 119-4, pp.1845-1859. ISSN 0148-0227.
- 12 **Artículo científico.** Mateos, David; et al. 2014. Efficiency of clouds on shortwave radiation using experimental data. *Applied Energy*. Elsevier. 113, pp.1216-1219. ISSN 0306-2619.
- 13 **Artículo científico.** Piedehierro, Ana A.; et al. 2014. Evaluation of enhancement events of total solar irradiance during cloudy conditions at Granada (Southeastern Spain). *Atmospheric Research*. Elsevier. 135-136, pp.1-7. ISSN 0169-8095.
- 14 **Artículo científico.** CAZORLA, ALBERTO; et al. 2013. Relating aerosol absorption due to soot, organic carbon, and dust to emission sources determined from in-situ chemical measurements. *Atmospheric Chemistry and Physics*. Copernicus Gesellschaft mbH. 13, pp.9337-9350. ISSN 1680-7316.
- 15 **Artículo científico.** Mateos, David; et al. 2013. Shortwave radiative forcing at the surface for cloudy systems at a midlatitude site. *Tellus Series B*. Wiley. 65, pp.21069. ISSN 0280-6509.
- 16 **Artículo científico.** Rosenfeld, Daniel; et al. 2013. The Common Occurrence of Highly Supercooled Drizzle and Rain near the Coastal Regions of the Western United States. *Journal of Geophysical Research - Atmospheres*. Wiley. 118, pp.9819-9833. ISSN 0148-0227.
- 17 **Artículo científico.** Creamean, Jessie M.; et al. 2013. Dust and Biological Aerosols from the Sahara and Asia Influence Precipitation in the Western US. *Science*. American Association for the Advancement of Science. 339, pp.1572-1578. ISSN 0036-8075.

- 18 **Artículo científico.** CAZORLA, ALBERTO; et al. 2013. Relating aerosol absorption due to soot, organic carbon, and dust to emission sources determined from in-situ chemical measurements. *Atmospheric Chemistry and Physics Discussion*. Copernicus Gesellschaft mbH. 13, pp.3451-3483. ISSN 1680-7375.
- 19 **Artículo científico.** Antón, Manuel; et al. 2012. Global and diffuse shortwave irradiance during a strong desert dust episode at Granada (Spain). *Atmospheric Research*. Elsevier BV. 118, pp.232-239. ISSN 0169-8095.
- 20 **Artículo científico.** Ghonima, Mohamed; et al. 2012. A method for cloud detection and opacity classification based on ground based sky imagery. *Atmospheric Measurement Techniques*. Copernicus Gesellschaft mbH. 5, pp.2881-2892. ISSN 1867-1381.
- 21 **Artículo científico.** Román, Roberto; et al. 2012. Calibration of an all-sky camera for obtaining sky radiance at three wavelengths. *Atmospheric Measurement Techniques*. Copernicus Gesellschaft mbH. 5-8, pp.2013-2024. ISSN 1867-1381.
- 22 **Artículo científico.** Ghonima, Mohamed; et al. 2012. A method for cloud detection and opacity classification based on ground based sky imagery. *Atmospheric Measurement Techniques Discussion*. Copernicus Gesellschaft mbH. 4-4, pp.4535-4569. ISSN 1867-8610.
- 23 **Artículo científico.** Román, Roberto; et al. 2012. Calibration of an all-sky camera for obtaining sky radiance at three wavelengths. *Atmospheric Measurement Techniques Discussion*. Copernicus Gesellschaft mbH. 5-1, pp.1873-1905. ISSN 1867-8610.
- 24 **Artículo científico.** Antón, Manuel; et al. 2011. Short-term variability of experimental ultraviolet and total solar irradiance in Southeastern Spain. *Atmospheric Environment*. Elsevier Limited. 45-28, pp.4815-4821. ISSN 1352-2310.
- 25 **Artículo científico.** Antón, Manuel; et al. 2011. Influence of the calibration on experimental UV index at a midlatitude site, Granada (Spain). *Atmospheric Measurement Techniques*. Copernicus Gesellschaft mbH. 4-3, pp.499-507. ISSN 1867-1381.
- 26 **Artículo científico.** Antón, Manuel; et al. 2010. Influence of the calibration on experimental UV index at a midlatitude site, Granada (Spain). *Atmospheric Measurement Techniques Discussion*. Copernicus Gesellschaft mbH. 3-6, pp.5645-5670. ISSN 1867-8610.
- 27 **Artículo científico.** Serrano-Ortiz, Penelope; et al. 2009. Interannual CO<sub>2</sub> exchange of a sparse Mediterranean shrubland on a carbonaceous substrate. *Journal of Geophysical Research G: Biogeosciences*. American Geophysical Union. 114-4, pp.G04015. ISSN 0148-0227.
- 28 **Artículo científico.** CAZORLA, ALBERTO; et al. 2009. Determination of aerosol optical properties by a calibrated sky imager. *Atmospheric Chemistry and Physics*. Copernicus Gesellschaft mbH. 9-17, pp.6417-6427. ISSN 1680-7316.
- 29 **Artículo científico.** Olmo, Francisco Jose; et al. 2008. Retrieval of the optical depth using an all-sky CCD camera. *Applied Optics*. Optical Society of America. 47-34, pp.H182-H189. ISSN 1559-128X.
- 30 **Artículo científico.** López-Álvarez, Miguel Ángel; et al. 2008. Using a trichromatic CCD camera for spectral skylight estimation. *Applied Optics*. Optical Society of America. 47-34, pp.H31-H38. ISSN 1559-128X.
- 31 **Artículo científico.** CAZORLA, ALBERTO; et al. 2008. Calibrated sky imager for aerosol optical properties determination. *Atmospheric Chemistry and Physics Discussion*. Copernicus Gesellschaft mbH. 8-6, pp.19989-20018. ISSN 1680-7375.
- 32 **Artículo científico.** CAZORLA, ALBERTO; Olmo, Francisco Jose; Alados-Arboledas, Lucas. 2008. Using a Sky Imager for aerosol characterization. *Atmospheric Environment*. Elsevier Limited. 42-11, pp.2739-2745. ISSN 1352-2310.
- 33 **Artículo científico.** CAZORLA, ALBERTO; Olmo, Francisco Jose; Alados-Arboledas, Lucas. 2008. Development of a sky imager for cloud cover assessment. *Journal of the Optical Society of America A, Optics and Image Science, and Vision*. Optical Society of America. 25-1, pp.29-39. ISSN 1084-7529.
- 34 **Capítulo de libro.** Alados-Arboledas, Lucas; et al. 2013. Monitoring the daily evolution of the atmospheric aerosol in an urban environment by means of remote sensing and in-situ methodologies. Juan Antonio Morente Chiquero: In Memoriam. Editorial Universidad de Granada. pp.75-80. ISBN 978-84-338-5540-4.

- 35 Libro o monografía científica.** CAZORLA, ALBERTO. 2010. Development of a sky imager for cloud classification and aerosol characterization. Universidad de Granada. ISBN 978-84-693-3307-5.
- 36 Informe científico-técnico.** Prather, Kimberly A.; et al. 2013. Three-dimensional measurements of aerosol mixing state during CalNex 2010 using aircraft aerosol time-of-flight mass spectrometry. Final Report to California Air Resources Board Contract No. 09-333.

## C.2. Proyectos

- 1 Evaluación del impacto del aerosol atmosférico en la precipitación en Sierra Nevada (ASCENT) (CGL2015-73250-JIN). Ministerio de Economía y Competitividad. CAZORLA, ALBERTO. (Universidad de Granada). 01/01/2017-31/12/2019. 198.440 €. Investigador principal.
- 2 Aerosols, Clouds, and Trace gases Research InfraStructure (ACTRIS-2). (Ref. : 654109). Unión Europea. H2020-INFRAIA-2014-2015. Alados-Arboledas, Lucas. (Universidad de Granada). 01/05/2015-30/04/2019.
- 3 Caracterización del material particulado atmosférico con especial énfasis en sus efectos sobre la salud y el patrimonio histórico (P12-RNM-2409). Ministerio de Economía y Competitividad. Olmo, Francisco José. (Universidad de Granada). 01/05/2014-30/04/2018. 98.456 €.
- 4 Seguimiento Regional del aerosol atmosférico en tres dimensiones combianando lidar multiespectral y red de ceilómetros-radiómetros (TRIAEROMONITOR) (CGL2013\_45410-R). Ministerio de Economía y Competitividad. Lucas Alados Arboledas. (Universidad de Granada). 01/01/2014-01/01/2017.
- 5 Researchers Square (H2020-MSCA-NIGHT-2016) (722930). García-López, Ana Isabel. (Universidad de Granada). 14/05/2016-15/10/2016. 174.782,82 €.
- 6 Contract number 262254, Aerosols, Clouds, and Trace gases Research Infrastructure Network (ACTRIS). 7º Programa Marco-EU INFRA-2010-1.1.16 Research Infrastructures for Atmospheric Research. Pappalardo, Gelsomina. (Universidad de Granada). 01/04/2011-30/03/2016. Otros.
- 7 Distribución espacio-temporal de la Radiación Solar Total y UV en el suroeste de España (CGL2011-29921-C02-01). Ministerio de Economía y Competitividad. Cancillo-Fernández, Maria Luisa. (Universidad de Extremadura). 01/01/2012-01/01/2015. 216.590 €.
- 8 Impact of african dust on cloud properties during ICE-T using on-line single particle mass spectrometry (AGS-1118735). National Science Foundation. Kimberly Prather. (University of California, San Diego). 01/09/2011-01/09/2014. 682.695 €.
- 9 Perfil vertical de las propiedades microfísicas del aerosol atmosférico. Aplicación a la higroscopicidad (AEROMICROPRO) (CGL2010-18782). Ministerio de Economía y Competitividad. Lucas Alados Arboledas. (Universidad de Granada). 01/01/2011-01/01/2014. 229.900 €.
- 10 Aircraft measurements of the vertical mixing state of soot aerosol in California (500-09-043). State Energy Resources Conservation and Development Commision. Kimberly Prather. (University of California, San Diego). 01/06/2010-01/06/2012. 1.300.000 €.
- 11 Black carbon and the regional climate of California (08-323). State of California Air Resources Board. Veerabhadran Ramanathan. (University of California, San Diego). 01/06/2009-01/06/2012. 796.403 €.