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Specifically, he has studied the influence of atmospheric circulation mechanisms on water resources availability, the assessment of climate change from an observational point of view, and the study of droughts from different perspectives, including the development of drought indices to improve the quantification of this complex phenomenon, and the assessment of drought impacts on environments and water resources.

Sergio has coordinated different research projects at the European level and, in collaboration with stakeholders and water managers, participated in projects of adaptation to the climate change in different regions of Spain. He has published more than 300 scientific documents, including more than 200 articles in international journals of the fields of water resources, atmospheric sciences, remote sensing, etc. He has also developed different climate services and products, including a drought monitoring system with global coverage (<https://spei.csic.es/map/>). Currently Sergio is working as lead author for the sixth assessment report of the IPCC.

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