

## **CO<sub>2</sub>, CH<sub>4</sub>, and CO with CRDS technique at the Izaña Global GAW station: instrumental tests, developments and first measurement results**

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At the end of 2015, a CO<sub>2</sub>/CH<sub>4</sub>/CO CRDS was installed at the Izaña Global GAW station (Tenerife, Spain) to improve the Izaña GHG GAW measurement programme. The acquisition of the instrument was largely financed by European FEDER funds through a Spanish R+D infrastructure project.

In this presentation, we firstly detail the results obtained in the initial tests performed to the instrument (precision, repeatability, sensibility to inlet gas pressure, response function...). Secondly, we analyse the results of the calibrations performed every 3-4 weeks since the end of 2015 using Tertiary WMO standards, and provide some details on the numerical processing software developed to evaluate the calibrations. Thirdly, some details of the obtained water vapour correction are provided. Finally, the ambient measurements carried out till now are presented, as well as some details in the numerical processing software developed to obtain the ambient air CRDS measurements from raw data and the calibration results, and compared with those obtained with other Izaña measurement instruments.

Additionally, we very briefly mention some few more novelties in the Izaña GHG measurement programme.