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Brewer-OMI ozone comparisons in EUBREWNET

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The European Brewer Network (EUBREWNET) is integrated by more than 30 Brewer spectrophotometers located at observation sites across all Europe, from the Canary Islands to Finland. The network's website, http://rbcce.aemet.es/eubrewnet/, currently provides near real-time ozone data at various different quality levels. Besides the scientific possibilities offered by such a large concentration of easily accesible data at a single source, EUBREWNET's data server can be also useful to Brewer operators in their day-to-day activities, providing enough information to check the status of their spectrophotometers.

The Ozone Monitoring Instrument (OMI), on board of the NASA Earth Observing System Aura satellite, provides daily, high-resolution global atmospheric chemistry data. There are two OMI ozone products available, the OMTO₃, based on the well-known TOMS algorithm, and the OMDOAO₃, which uses a more recent Differential Optical Absorption Spectroscopy algorithm. Both products are available at the Aura Validation Data Center, http://avdc.gsfc.nasa.gov/.

As one of the objectives of the IDEAS+ project, funded by the European Space Agency in collaboration with LuftBlick Earth Observation Technologies, at the Regional Brewer Calibration Center for Europe (RBCCE) we are working in the implementation of a new product for EUBREWNET's data server which will provide a comparison between the Brewer and OMI ozone data. In this work we present some results of this kind of comparison for selected Brewer spectrophotomers, both while operating at their usual observation sites and during the latest intercomparison campaign of the RBCCE, held at El Arenosillo from May 25th to June 5th, 2015. It is expected that this Brewer-OMI comparison product will be available at EUBREWNET's data server soon, providing Brewer operators with another data quality assurance tool.