DISPERSION TEST RESULTS WITH MULTIPLE GEOMETRIES AT RBCC-E campaign AROSA 2014

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Two different devices were tested:

GLOBAL PORT, use the UV port as for input as the UV global measurements. Used routinely by IOS & RBCC-E

DIRECT PORT, use the quartz window for input as Ozone measurements. Used routinely by EC and K&Z.

The dispersion is performed using the HG lines and Cd lines, the internal HG lamp is routinely used, on this test we use the external lamp and the internal lamp to check differences.
- Seven Brewer participate on the campaign, and we test 4 different combinations for every brewer. In addition we add the data from Illias Fountoulakis from brewer 086.

- We show the ozone absorption coefficient determined by the quadratic polynomial using only ozone range lines is taking to account on the analysis. (280-340)

The error on the dispersion procedure is estimated as 1 step, a mean value of +/- 1.1E-3 on the ozone absorption coefficient is applied to obtain the error bars.
The observations can be accessed on the campaign logs.
Comparison with the RBCC-E/IOS method: Internal HG, Cd lamp on GLOBAL PORT

RESULTS:
Internal HG lamp vs External HG lamp
Direct vs Global port

$\% \text{ Difference Quartz vs Dome}$
Conclusions:

- We don't find at AROSA and Thessaloniki differences on ozone absorption coefficient calculation between the use of the internal Hg lamp and the External.

- On brewers 017, 040 and 086 the ozone absorption calculation is **0.5% lower** when is calculated with the Direct Port compared with the Global port.