Interactive comment on “Carbon monoxide measurements onboard the CARIBIC passenger aircraft using UV resonance fluorescence” by D. Scharffe et al.

Anonymous Referee #2

Received and published: 23 May 2012

General comments

This paper will serve as reference paper for scientific studies using the Caribic CO measurements. This paper is clearly written and clear. It explains all the capabilities of the CO instrument, with a very fast response time and suitable accuracy. It also explains the technical problems of this technique and how improvements have been made over years of operation.

Specific comments

Page 7 – Line 22 Drying air not needed in altitude? I agree when you say that air drying
between 9-12 km altitude is not needed. Can you add a statement for vertical profiles? When encountering low altitude clouds, humidity can be high. It is also the case near the ground. At which altitude do you start the instrument and the data acquisition?

Page 8 – Line 15 Why is it useful to heat the Sofnocat to 80°C? Please explain.

Technical comments

Page 4 – Line 20 Is it Arinc-428, not Arinc-429?

Page 8 – Line 9 What is the O2 concentration in ArCO2 bottle? zero?

Page 9 – Line 6 CO reference bottle is referred to an international standard?