

Interactive comment on “FTIR time-series of biomass burning products (HCN, C₂H₆, C₂H₂, CH₃OH, and HCOOH) at Reunion Island (21 S, 55 E) and comparisons with model data” by C. Vigouroux et al.

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Received and published: 11 July 2012

General comments:

The authors present a study of biomass burning products such as CO, HCN, C₂H₆, C₂H₂, CH₃OH, and HCOOH. The study is based on ground-based FTIR measurements and model data. For the FTIR data the data analysis and time series of the species listed above are given. The data are compared with data from 2 models: GEOS-Chem and IMAGESv2. Periods with increased amounts of biomass burning

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products are studied using these models. The species investigated have different tropospheric life time which is used to estimate the origin of the air mass.

The subject is fully appropriate for publication in ACP. I recommend publication after minor revisions.

Specific comments:

Chapter 2.1: Is the ILS result obtained with cell measurements and LINEFIT software used as input data in the retrieval of atmospheric trace gas concentrations?

Please state the period of the wet season: Is it December to March? For CH₃OH, C₂H₆ and C₂H₂ some model runs ‘overestimate the observations during the wet season’: A label for the wet season would help the reader to assign these periods in Fig. 4. Moreover, Fig. 4 is too small in the actual ACPD version.

Interactive comment on Atmos. Chem. Phys. Discuss., 12, 13733, 2012.

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