

Interactive comment on “Large-Scale Vertical Velocity, Diabatic Heating and Drying Profiles Associated with Seasonal and Diurnal Variations of Convective Systems Observed in the GoAmazon2014/5 Experiment” by Shuaiqi Tang et al.

J. Cohen (Referee)

jcpcohen@gmail.com

Received and published: 13 September 2016

The publication of this paper is relevant to the understanding of the diurnal cycle of convection in the Amazon region. However it is necessary that some doubtful points listed below are answered in order to accept the publication of this article.

Line 62: Give some reference about this paragraph.

Line 202: Greco et al, 1994 also estimated W, Q1 and Q2 for a Squall Line observed

Printer-friendly version

Discussion paper



during ABLE-2b in the Manaus region. I recommend the authors include this pioneering reference in the Amazon. Compare your results with those found in Greco et al, 1994.

Line 273: Include the paper Greco et al, 1990 which was the first paper that characterized the LOS, BOS and COS in Manaus region (Greco et al 1990).

Line 291: One of the case studies in this paper was called COS as defined by Kouky, 1980; Greco et al, 1990; Cohen et al, 1995. Thus, to be considered as a COS, this convective system must have formed in the afternoon of March 19 along the Atlantic Coast Amazon and crossed by Manaus on March 20 in the morning. Looking at satellite images I realized that actually formed a squall line on the coast in March 19, but during its propagation inland this convective system lost its linear format and did not reach Manaus region. Therefore, I recommend that the convective system observed March 20 be classified as BOS, since even in the satellite images it does not represent a COS classic. Thus, I ask you to choose one of two cases of BOS to use in this publication.

Interactive comment on Atmos. Chem. Phys. Discuss., doi:10.5194/acp-2016-644, 2016.

Printer-friendly version

Discussion paper

