2-Year Large-Scale Forcing Data for GOAmazon 2014/5

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Variational Analysis
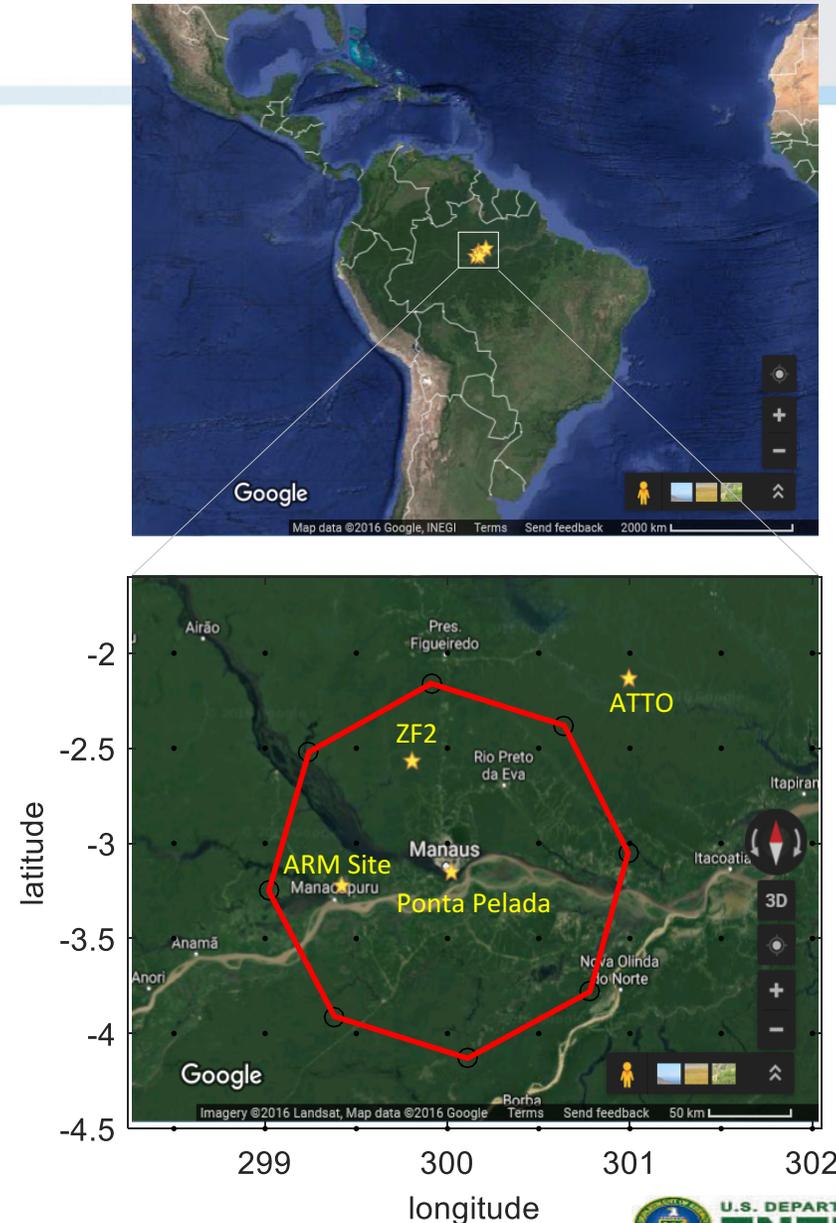
- 110 km radius domain centered at Ponta Pelada

- ECMWF analysis data as the first guess and other required surface and TOA fluxes

- Constrained by the SIPAM radar rain rate

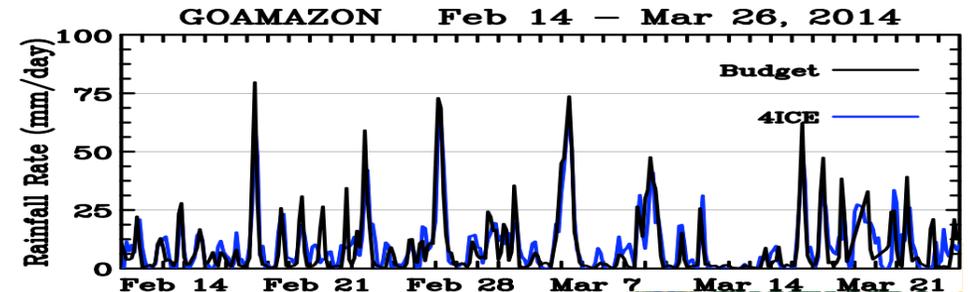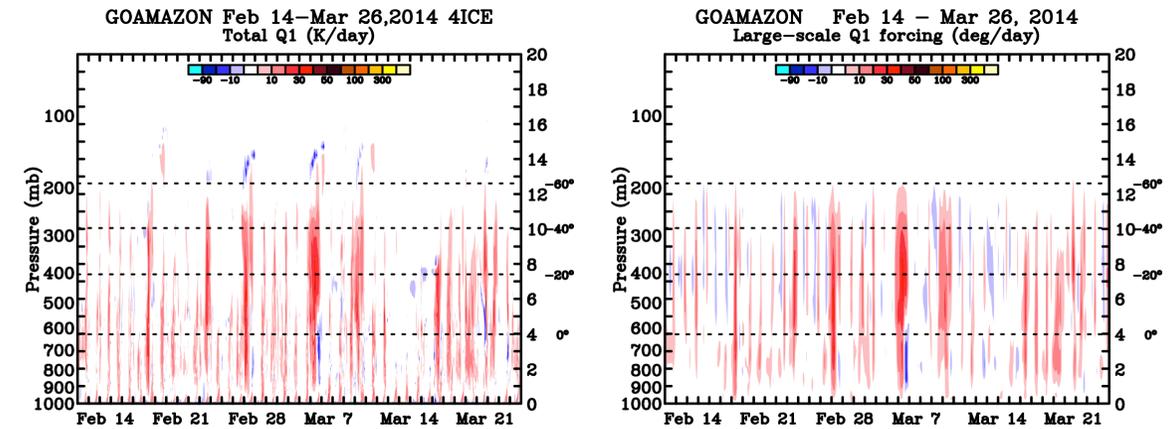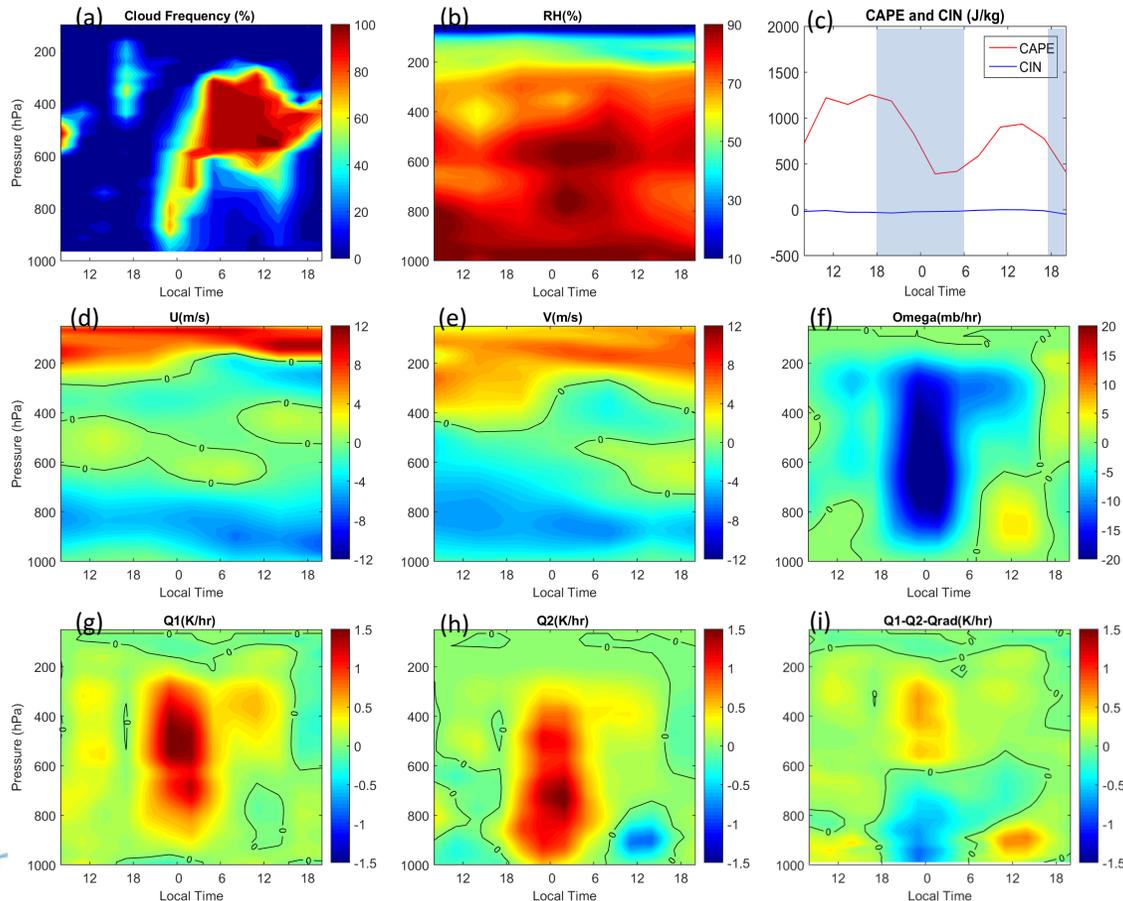- 3 hours, 25mb resolution

- Jan 2014 – Dec 2015

The forcing has been used in both observational and modeling studies

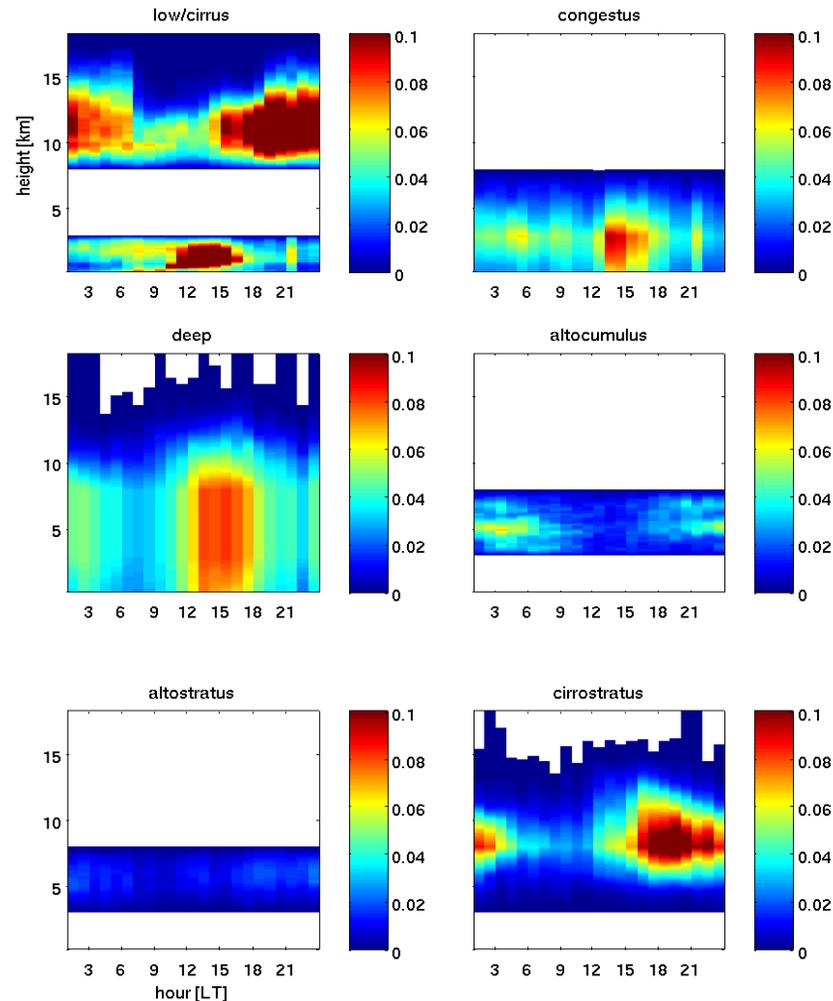A case study of a Basin-Occurring convective system during 1-2 March 2014 (Tang et al., 2016)

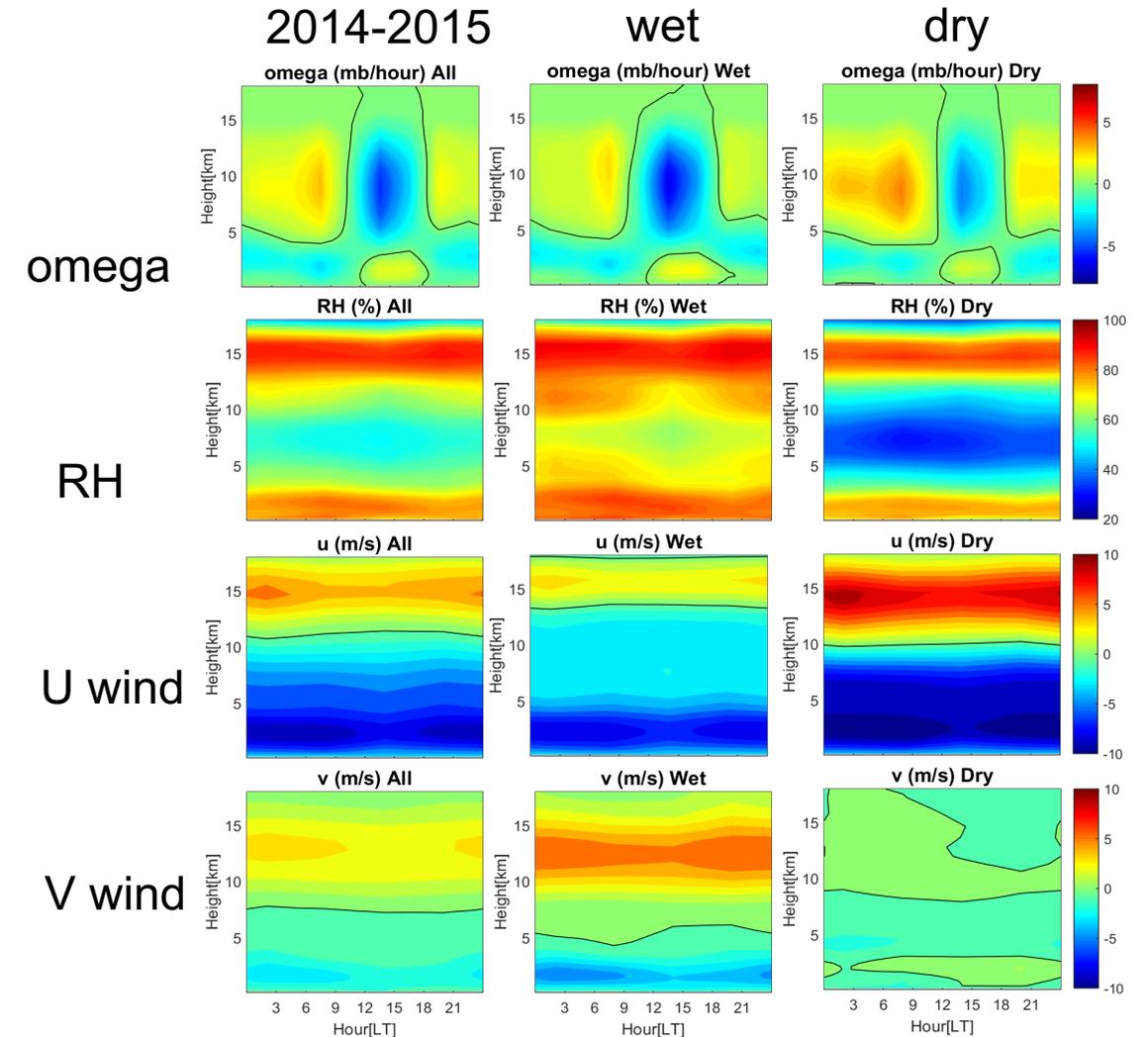NASA GCE model simulations for GOAmazon IOP1 (Courtesy from Wei-Kuo Tao)

Diurnal Cycles of Clouds and Forcing

Categorized Cloud fraction from 2014-2015
(Giangrande et al., 2017)

Large-scale Forcing

Data Availability

- Forcing data for IOP1 (Feb-Mar 2014) and IOP2 (Sep-Oct 2014) are available at the ARM Archive (www.arm.gov/data)

- Forcing data for the full year 2014 and 2015 will be released soon and are available upon request now.

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