

## ***Interactive comment on “The Medieval Climate Anomaly and the Little Ice Age in the Eastern Ecuadorian Andes” by M.-P. Ledru et al.***

**V. Markgraf (Referee)**

vera.markgraf@colorado.edu

Received and published: 10 September 2012

Ledru et al This is an excellent 1k high-resolution paleoclimate proxy record from the Eastern Ecuadorian Andes, with an interesting approach to interpret moisture changes in terms of changes in Amazon convective activity focusing on the Medieval Warm Period and Little Ice age. General comments: 1. Much detail is provided to explain different regional moisture regimes and their forcing, ENSO vs. South American summer monsoon. However, the basis for the interpretation of temperature changes is only presented in passing in the results. 2. When using “rates” you actually mean conditions. 3. “Water stock”: use water levels instead. 4. “Cloud dripping”: cloud condensation. Details: p. 2 line 5: .. between pollen transported upslope.. line 7: ..distinguish between precipitation and soil.. p. 4 line 5: “Enso were weak” (state what

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you mean: low variability? Infrequent El Niño/La Niña? line 8: . . . showed that La Niña-like/El Niño-like. . . forcing was associated with MCA and LIA, respectively. Line 12: ..and complicate comparisons.. Line 17: ? MCA colder? Line 23: ..ability to expand new. . .practices to high elevations. P. 5 line 6: .. dominant climate forcing systems p. 6 line 9: .. cloud condensation (also p. 7 line 8 and p. 14 line 7) p.7 line 4: .. adiabatic lapse rate line 15: .. of bog plants, paramo grassland.. line 16: .. pinpinelifolia(?) (put colon after family name throughout) p. 8 line 18: 9-m long core p. 11 line 12: ? Each sample represents 14 years? p. 17 line 15: ..stopped abruptly as indicated by expansion.. (you derive climate from pollen changes not the other way around!) line 18: .. “wet period; paramo drier” ..??? Discussion p. 18: You describe precipitation “modes” for the two ENSO states, but your comparison between the Galapagos and your record falls back to ENSO variability to interpret the fact that their respective interpretation indicates contrasting modes. Not very satisfying.

Vera Markgraf September 9 2012

Interactive comment on Clim. Past Discuss., 8, 4295, 2012.

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