

## ***Interactive comment on “Hydroclimate variability in the low-elevation Atacama Desert over the last 2500 years” by E. M. Gayo et al.***

**V. Markgraf (Referee)**

vera.markgraf@colorado.edu

Received and published: 10 October 2011

E. M. Gayo, C. Latorre, C. M. Santoro, A. Maldonado, and R. De Pol-Holz: Hydroclimate variability in the low-elevation Atacama Desert over the last 2500 years

This is a very nice paper, combining high resolution paleoenvironmental records for the last 2500 years BP with archaeological data from the arid Atacama region in Chile. The paleoclimatic interpretation is especially well presented. Some aspects that perhaps should be addressed: 1. Fig. 5, the key figure, is far too small to be deciphered; I hope it could be enlarged. Some of the data should also be better explained in the text, especially 5 B: La Niña (arrow down in red) versus La Niña (arrow up in black); both curves look similar. I guess it would be excellent to provide a map of precipitation anomalies of La Niña phases, showing regional differences over the eastern Pacific

C1570

and Peru/Chile land areas, which would help explain the curves presented in Fig. 5. 2. The described intervals (not events) of apparent increased moisture (according to Fig. 5) should read: 2650 to 2100, 1700 to 1300 and 1050 (one date though 1150) to 650. In general description should list from oldest to youngest. 3. Details: p. 10, line 24 1350 to 1150; p. 11, line 14: argues; p. 11, line 21: analysis; p.18, line 20: lead; p. 19, line 24: argues.

Vera Markgraf, October 8, 2011

---

Interactive comment on Clim. Past Discuss., 7, 3165, 2011.