

Interactive comment on "Thinning of the Quelccaya Ice Cap over the last thirty years" by C. D. Chadwell et al.

E. Berthier (Editor)

etienne.berthier@legos.obs-mip.fr

Received and published: 24 June 2016

Dear authors,

The online discussion of your paper 'tc-2016-40' is now closed. Your manuscript has been thoroughly reviewed by three external referees and I want first to acknowledge them for the time they spent on evaluating comprehensively your study.

All referees raised some important issues on the novelty of your study, its structure and the significance of your results. In particular, some of your results are based on assumptions that are not justified and quantified. Among many other assumptions, the fact that the emergence velocities are assumed to remain constant since 1983-84 (the only year when they were measured) is highly problematic if the authors want to infer changes in mass balance for a thirty year period (1983-2013) during which the ice cap

C1

has been completely out of balance with the climate.

In this context, I ask you to answer point-by-point to the general comments of all three referees first and explain how you would proceed if you were asked to provide a revised manuscript. Then, I will decide whether we will move forward with the review process of this study and if I will consider a revised manuscript.

Best regards,

Etienne Berthier

Interactive comment on The Cryosphere Discuss., doi:10.5194/tc-2016-40, 2016.