

Interactive comment on “3D GPS velocity field and its implications on the present-day postorogenic deformation of the Western Alps and Pyrenees” by Hai Ninh Nguyen et al.

Anonymous Referee #2

Received and published: 20 July 2016

This paper investigates the usage of vertical GPS velocities for crustal deformation of the Western Alps using a large dataset of continuous sites in France and Spain. The paper presents a careful methodology for analyzing the time series derived from the GPS processing and the uncertainties treatment is well explained. The paper is well written and the illustrations support the manuscript. I have only one main comment related to discussion of the paper: The authors proposed (in the introduction) the question, whether slow tectonic motions below 1 mm/yr, can be resolved. However, in the discussion nor the conclusion of the paper there no clear answer to this question. I suggest a development of the discussion to what extent should we trust the vertical derived velocities from GPS? and how this extrapolates to other areas than the Alps. I

C1

think this can provide a good impact to the paper.

Interactive comment on Solid Earth Discuss., doi:10.5194/se-2016-78, 2016.

C2