

Interactive comment on “The anomalous low and high temperatures of 2012 over Greece: an explanation from a meteorological and climatological perspective” by K. Tolika et al.

K. Tolika et al.

diatol@geo.auth.gr

Received and published: 20 December 2013

Specific comments 1) First of all we would like to note that we did not have the intention to claim that we found in the present article a direct relationship between the SSTs anomalies in Southern Pacific and the extreme temperature phenomenon of 2012 in the domain of study. However, the results of the study showed that the temperature anomalies over the Atlantic (positive and negative to the north and south respectively) play an important role to the development of the negative atmospheric anomalies over the north Atlantic (the north poles of the two teleconnection indices EMP and NCP). Unquestionably the sea surface temperatures over the tropics do not show an impact

C2090

to the extreme temperatures in Greece, nevertheless we believe that Figure 3 should remain in the text in order to show the positive and negative SSTs over the Atlantic. If the reviewer insists on omitting this figure, we can do so, but we believe that the Atlantic SSTs should be illustrated. 2) We agree with the reviewer comment so we omitted the 850hPa and 200hPa maps from figures 1, 2, 4 and 5. 3) Table 1 derived by computing the monthly average Tmax and Tmin values for each station under study and then putting them in heraldically order. Thus, if for example January 2012 was the coldest month (from all the Januaries of the period 1958-2012) then in the table it was noted as -1st (the coldest of the examined period). If it was the second coldest then it was noted as -2nd etc. On the other hand if for example June was the hottest of all the Jules of the period 1958-2012 then in Table 1 it is noted as +1st (the hottest of the period). If it was found to be the second hottest then it is noted as +2nd etc. We agree with the reviewer comment so we added the results concerning December 2011, January 2012 and February 2012 in Table 1. Due to space limitation and more importantly due to our budget limitation for the certain paper we can not extent the length of the paper by including more figures.

Technical corrections - We agree and we made the suggested correction.

Please also note the supplement to this comment:

<http://www.nat-hazards-earth-syst-sci-discuss.net/1/C2090/2013/nhessd-1-C2090-2013-supplement.pdf>

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 1, 4871, 2013.