

## ***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.***

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### General comments:

The article by Tolika et al., on the anomalous low and high temperatures of 2012 over Greece is an important article that enlightens the increasing uncertainty regarding the temporal behavior of various meteorological parameters. In the same calendar year, both, abnormally low and extremely high temperature were recorded over Greece. I tend to believe that similar conditions were experienced also in the neighboring countries. For this reason, this is a valuable article that merits its publication.

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### Specific comments:

Last paragraph of section 3.1 is mainly a speculation. No real attempt was made to relate the SST anomalies in Southern Pacific and the temperature anomalies over Greece. I don't believe that such a relationship can be found easily. Therefore I suggest omitting this last paragraph (starting on l.19, p.4876) and Fig. 3 as well.

Figs. 1,2,4&5 present anomaly fields in different months at 4 geopotential levels. However, along the manuscript only the 1000 hPa and 500 hPa level are referred, therefore, I suggest presenting only the maps of these two levels and omitting the maps of the 850 and 200 hPa levels.

Table 1 is not clear. What the figures represent? If as I suspect, "+1" means that this month was ranked as the hottest month and "+2" means, the next to the hottest, then what negative values represent? Why January and February are not included as well so the reader could see where these cold months were ranked? It is possible that I completely misunderstood this table. I believe that a further explanation of what is presented is needed. I suggest also to present maps of one cold month(January or February) and one hot(July or August). After all, the focus of this study should be on Greece.

### Technical corrections:

p.4879, l.11, should be: Brunetti and Kutiel, 2011.

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