

Interactive comment on “Investigation of suitable sites for Wave Energy Converters around Sicily (Italy)” by C. Iuppa et al.

Anonymous Referee #1

Received and published: 2 March 2015

General comments

The paper deals with the evaluation of wave potential around the coasts of Sicily in order to identify hot-spots for the potential implementation of WECs. The manuscript is clear enough and informative as regards the scope of work and the presentation of the relevant methodology.

However, some points need further clarification and justification. My specific comments are the following:

Specific comments:

1) Please explain why bottom friction term is not considered in the SWAN model 2) the number of observations in Capo Gallo buoy seems to be erroneous. With efficiency

C14

73% and period of observations 2004-2008, the sample size is not analogous to the other buoys 3) Provide the recording period and the recording interval of the buoy measurements 4) ECMWF data should be compared with buoy wave data with respect to the wave period as well 5) The significant wave height and wave period from the SWAN model should be also compared with the buoy measurements 6) page 7, line 12-13. The explanation is not rigorous and seems to have lack of meaning 7) The authors should describe whether WAM wave model utilizes wave data assimilation; if yes, based on which satellites? If these are the same satellites used for the evaluation of ECMWF results, then the relevant comparison is biased 8) In page 12, the authors present results on the ratio between the standard deviation and mean energy flux. This is the coefficient of variation (CV). First, the value of CV seems to be very low. Second, for wave energy assessment, the inter-annual variability (IAV) or the mean annual variability (MAV) should be better provided.

Technical corrections

1) page 3, line 8: Fig. 1 is not in correspondence with the relevant text. Fig. 1 depicts only a small part of the Med Sea. 2) page 3, line 27: the entire sentence makes no sense. 3) page 12, line 6: correct "follows months" to "following months" 4) Review carefully the syntax and grammar of the manuscript

Interactive comment on Ocean Sci. Discuss., 12, 315, 2015.

C15