

# REQUEST FOR ADDITIONAL RESOURCES IN THE CURRENT YEAR FOR AN EXISTING SPECIAL PROJECT

**MEMBER STATE:** .....Italy.....

**Principal Investigator<sup>1</sup>:** ...Luciana Bertotti.....

**Affiliation:** ...Institute of Marine Sciences – ISMAR – CNR .....

.....  
Castello 2737/F – Arsenale, Tesa 104

**Address:** .....  
30122 Venice - Italy

**E-mail:** luciana.bertotti@ismar.cnr.it.....

**Other researchers:** ...Luigi Cavaleri.....

**Project title:** The different effects of heavy rain on the development of ocean waves

**Project account:** **SPITWM**

<b>Additional computer resources requested for</b>	2017
High Performance Computing Facility (units)	200000
Data storage capacity (total) (Gbytes)	100

*Continue overleaf*

---

1

## **Technical reasons and scientific justifications why additional resources are needed**

We are pursuing the effect of heavy rain on the development of sea storms. This requires a large number of tests where we explore different rain dependent physics and compare the results with a standard run (i.e. with the present set-up operational at ECMWF).

To save units, rather than one month test, (as we did last year), we focus on single ten day forecasts, each costing about 150000 units.

The results of our present three runs have clearly indicate where the attention needs to be focused (i.e. on modification of the source function). We expect that at least two more experiments are required to frame well the situation. Together with 100K units we are presently left with, we ask for 200K more units to complete our research.