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# PLATMAR2 Cruise Report

Santa Maria Island, Azores

24th, Aug - 12th, Sep, 2018

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The scientific party and crew of cruise  
PLATMAR2



RV Arquipelago

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## Summary of the cruise

Zhongwei Zhao from the University of Manchester, UK, is grateful to be invited by the chief scientist of cruise PLATMAR2, Dr Rui Quartau from the Hydrographic Institute of Portugal, and financially supported by InterRidge to participate in this cruise and work in the sampling team. The cruise was lasted from 23rd August to 12th September, 2018 onboard RV Arquipélago around the Santa Maria Island and the Isle of Formigas, Azores, under the project PTDC / GEO-GEO / 0051/2014 PLATMAR, funded by the Portuguese Foundation for Science and Technology.

The objectives of the cruise are listed as following:

- 1) Seabed sediment sampling around shelves of Santa Maria Island and the Isle of Formigas using Smith-McIntyre type grab.
- 2) Seabed photograph using “drop-down” camera to ground truth the seabed morphology and habitats.
- 3) Installing GPS/GNSS station in the lighthouse of the Isle of Formigas.
- 4) High resolution aerial photograph of the Isle of Formigas using an Unmanned Aerial Vehicle (UAV).

During the cruise, totally 169 samples and 18 mini-cores were successfully collected through 227 attempts for grain size and in-organic geochemistry analysis. Additional ~20 kg samples from the successful attempts were taken for organic geochemistry analysis. Associated photographs were taken when grab samples arrived the deck from the seabed. A GoPro camera were attached to the grab to ground truth the morphology of where the samples were taken. ~70 seabed videos were filmed to ground truth the seabed morphology.

Finally, Zhongwei would like to thank the help from the fantastic crew of the Arquipélago.

