

VOS Report for 2013

Country = PORTUGAL

| a. Programme description: |                             |                      |                         |  |
|---------------------------|-----------------------------|----------------------|-------------------------|--|
| Category                  | No. of ships at 31 Dec 2013 | Recruitments in 2013 | De-recruitments In 2013 | Comments                                   |
| <i>Selected</i>           |                             |                      |                         |  |
| <i>Selected AWS</i>       |                             |                      |                         |  |
| <i>VOSclim</i>            |                             |                      |                         |  |
| <i>VOSclim AWS</i>        |                             |                      |                         |  |
| <i>Supplementary</i>      |                             |                      |                         |  |
| <i>Supplementary AWS</i>  | 1                           | 1                    | 0                       | Recruiting code EU with call sign BAREU 71 |
| <i>Auxiliary</i>          |                             |                      |                         |  |
| <i>Auxiliary AWS</i>      |                             |                      |                         |  |
| <i>Other</i>              |                             |                      |                         |  |
| <b>National VOS Total</b> | 1                           |                      |                         |  |

|                                |  |
|--------------------------------|--|
| <b>National VOS Target</b>     |  |
| <b>National VOSclim Target</b> |  |

| b. Data management:  |   |
|--|---|
| <i>Total number of ship observations (BBXX) distributed on the GTS in 2013</i> | 3141  |
| <i>Date when VOS data submitted to the GCCs in 2013</i>                        | First message was emitted on 20130517 2000UTC and send to GTS |



| <b>e. Standard Meteorological Equipment: (Types and Settings)</b> |  |  |
|---|--|--|
| <b>Equipment Type / Element</b>                                   | <b>Manual Instrumentation</b>          | <b>AWS Instrumentation</b>             |
| Barometer   |  | BAROS++                                |
|   |  |  |
| <i>Default national setting</i>                                   | <i>Station Level or Mean Sea Level</i> | <i>Station Level or Mean Sea Level</i> |
| Barograph   |  |  |
|   |  |  |
| <i>Default national setting</i>                                   | <i>Station Level or Mean Sea Level</i> | <i>Station Level or Mean Sea Level</i> |
| Thermometers  |  | METPAK II sensor                       |
|   |  |  |
| Sea Surface Temperature   |  |  |
|   |  |  |
| Wind Speed  |  | METPAK II sensor                       |
|   |  |  |
| Wind Direction  |  | METPAK II sensor                       |
|   |  |  |
| Humidity  |  | METPAK II sensor                       |
|   |  |  |

**g. Major challenges and difficulties:**

The major challenges of IPMA work consist in finding suitable ships and contact companies and shipmasters to participate on VOS. Also, in this first year, due to the sea state conditions (since November 2013 to January 2014), we have troubles with BaRos AWS every months. IPMA focal point contact the crew and ask every months to check if BaRos++ AWS are connected and the TRACO is ok (transmitter).

**h. Research / development / testing:**

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**i. Other comments**

IPMA receive VOS Monthly Statistics (Colin Parrett, Met Office) - Surface Observation from the Global Voluntary Observing Fleet - with the monitoring statistics for observations from each ship in the Voluntary Observing Fleet, that includes the Portuguese merchant ship (Sete Cidades) with the call sign BAREU71.

IPMA have more Portuguese ships to participate on VOS. However, first we need to replace the BaRos+ and AWS onboard Sete Cidades by the new shipborne AWS developed by E-SURFMAR. We want to thank's Pierre Blouch, Gilbert Emzivat and Alain Cariou.