| a. Programme desc | a. Programme description: | | | | | |
|--------------------|-----------------------------|----------------------|----------------------------|--|--|--|
| Category | No. of ships at 31 Dec 2013 | Recruitments in 2013 | De-recruitments in 2013 | Comments | | |
| Selected | 2 | 0 | 2 | MV "Cabo Pilar" (CBPR) and "Cordillera" (CECA) have not been recruited by the Chile Navy Weather Service. | | |
| Selected AWS | 0 | 0 | 0 | | | |
| VOSClim | 0 | 0 | 0 | | | |
| VOSClim AWS | 0 | 0 | 0 | | | |
| Supplementary | 0 | 0 | 0 | | | |
| Supplementary AWS | 0 | 0 | 0 | | | |
| Auxiliary | 4 | 1 | 1 | Chile Navy vessels have been recruited on a seasonal basis, including international cruise of tall ship "Esmeralda" (CCES), oceanographic research vessel "Cabo de Hornos" (CCCH), summer antarctic campaign on board the transport "Aquiles" (CCAQ) and icebreaker "Oscar Viel" (CCOV). There was no frigate assigned to any international exercises, like "Lynch" (CCLY) in 2012. | | |
| Auxiliary AWS | 0 | 0 | 0 | VOS Drifting Buoys donors pilot program receiver candidates: "Esmeralda" tall ship (CCES), fishing research vessel "Abate Molina" (CB4633) and oceanographic research vessel "Cabo de Hornos" (CCCH), at their Eastern South Pacific Ocean cruises. | | |
| Other | 6 | 2 | 1 | Occasionally counted with the collaboration from oceanic patrols "Piloto Pardo" (CCPP) and "Cmdte. Toro" (CCTR) with the landing ship transports "Chacabuco" (CCCB) and "Rancagua" (CCRA), but no data received from logistic vessel ship "Sgt. Aldea" (CCAL). Collaborations received at Punta Arenas from trawlers "Unión Sur" (CBUS) and "Unzen" (CBUN) operating at the Drake Passage during winter time. | | |
| National VOS Total | 8 | | <u> </u> | 1 | | |

National VOS Target

National VOSClim Target

15

2

| b. Data management: | | |
|---|------------------|--|
| Total number of ship observations (BBXX) distributed on the GTS in 2013 | <mark>702</mark> | |
| Frequency of VOS data submitted to the GCC in 2013 | 1-2 a day | |

| c. Si | Shipboard Automatic Weather System | | | | | | |
|-------|------------------------------------|--------------------------|---|----------------------------|--|--|--|
| Туре | No. of ships at 31 Dec 2013 | Manual Input Yes / No | Method of Comms | 2014 Planned installations | | | |
| | 0 | Yes | satellite connection to e-mail (Sky File) | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| d. Electronic | d. Electronic logbooks: (TurboWin, SEAS, OBSJMA) | | | | |
|--------------------|--|--|--|--|--|
| Software & version | No. of ships at 31 Dec 2012 | Implementation plans | | | |
| Turbo Win 4.5 | 10 | to massify the use of the TW software on board the Chile Navy ships, for recording their weather observations on board and facilitate it codification, no matter the ship were part of VOS or not. | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

e. Major challenges and difficulties:

- at the beginning of the embrionary national VOS level, there is evidence of the need to develop a formal training for the new PMOs
- Chile Navy Weather Service have not access to GTS, our VOS operates by sending the SHIP.OBS to NOAA, CANADA, KNMI and DMC (also, we have no access to the lists of ships using masked call signs)
- to translate into spanish the TW operation manual, for helping the installation on board the research, fishing and factory vessels operating at high seas in front of chilean coasts.

f. Research / development / testing:

- during PMO courtesy visits in Valparaiso, Marine Meteorological Monitoring Survey (MMMS) issued by JCOMM, have been used as a formal tool to ask the Masters about their needs and improvements.
- two foreign inspections visits were scheduled at Valparaiso, after vessels owner's requested them
- PMO courtesy visits in Punta Arenas were focused on ice monitoring and charting, together with weather support for Antarctic navigations
- Chile Navy tall ship "Esmeralda" on her 2011-2013 worldwide training cruises, received the foreign PMOs visits at San Diego and Miami (US), Vancouver (CA), Wellington (NZ), Mumbai (IN), Haifa (IL) and Guayaquil (EC).
- sailwx.info web page is a good source of information for to know where are the ships sailing and their weather conditions, showing that important feedback to our twitter account followers.
- on line web cams on board from ship's bridges (Princess Cruise, Cunard Line, British Antarctic Survey, National Science Foundation, etc.), internet blogs from scientific vessels (Polar Stern) or adventure expeditions (sailing contests) are also very helpful data and very popular for the public social media.

g. Other comments:

- Chile Navy have agreed to host the next International Port Meteorological Officers Workshop to be held on Valparaiso, during 5-8th August 2014 among the 50th anniversary of her Weather Service. Also, the ETSI-NOAA ice analysts meeting, have been scheduled for October at Punta Arenas.
- -Mr. Shawn Dolk from NOAA, Dr. Augustus Vogel for US.Embassy and Prof. Mario Caceres of Valparaiso University (Ocean Sciences) were contacted by Chile Navy Weather Service, to coordinate the shipment and drifting buoys deployment program, on board the ships pointed in page 1.