Ocean Surface Vector Wind Constellation
Used at WGCV-30

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User Community Engagement

1. *Focus initially on operational marine forecasting for Southern Hemisphere via provision of OSVW & SWH*

2. *Assess whether GMDSS high-seas forecast centers have timely access to, and a capability to use, these products*

3. *Depending on what is learned, proceed accordingly...*

Met Area	Operational Forecast Responsibility in these MetAreas of the Southern Hemisphere	Point of Contact (no response)	Surface Vector Winds				Significant Wave Height			
			QuikSCAT*		ASCAT		Jason		ENIVSAT*	
			GTS	FTP	GTS	FTP	GTS	FTP	GTS	FTP
V	*Marine Meteorological Service, Brazilian Navy*	*CDR Hilbert Strauhs*	*N/A*	*Yes!*	*No*	*No*	*No*	*No*	*N/A*	*No*
VI	*Servicio Meteorológico Nacional, Argentina*	*Paula Etala (Navy)*	*N/A*	*some*	*No*	*No*	*No*	*some*	*N/A*	*No*
VII	*South African Weather Service*	*Ian Hunter for T.D. Ngobeni*	*N/A*	*some*	*No*	*No*	*No*	*No*	*N/A*	*No*
VIII South	*Mauritius Meteorological Services*	*Mohamudally Beebeejaun*	*N/A*	*?*	*?*	*?*	*?*	*?*	*N/A*	*?*
X	*Australian Bureau of Meteorology*	*Graham Warren*	*N/A*	*Yes!*	*No*	*Yes!*	*Yes!*	*No*	*N/A*	*Yes!*
XIV North	*Fiji Met Service*	*Asha Fernandes*	*N/A*	*?*	*?*	*?*	*?*	*?*	*N/A*	*?*
XIV South	*Met Service of New Zealand*	*Steve Ready*	*N/A*	*Yes!*	*No*	*Yes!*	*No*	*No*	*N/A*	*No*
XV	*Servicio Meteorológico de la Armada, Chile*	*Capt Gonzalo Espinosa*	*N/A*	*No*	*No*	*No*	*No*	*No*	*N/A*	*No*

* These are in the process of being inserted into the GTS

We have been observing OSVW & SWH for 10+ years…Why such low operational use?

- Unaware of the capabilities of the 5 different satellites
- Unable to access the GTS
- Unable to decode BUFR files on GTS & each is different
- Must sort through files on the GTS that have little correspondence to areas of interest
- Must write a proposal to get ftp access
- Must go to 5 different ftp sites, each with a different format
- Don't know when products become available on each ftp site
- Difficult to integrate OSVW & SWH products into analyses
- Forecasters don't know how to use the products

*What can we do to facilitate
operational use of our data?*

"One-stop shopping"

- *Assemble, reformat & QC data from the different satellites*

- *Generate a simple, easy-to-use product combining SVW and SWH for operational use*

- *Maintain a continuing global file of those products*

- *Provide subsets of that file corresponding to the region & time of interest for each forecast center*

- *Use NetCDF in packaging those subset files*

- *Distribute those subset files – automatically or on demand – using email, ftp, GTS, GEONETCast...*

- *Do all this via a centralized service*

Training & capacity building

- **Train operational forecasters to use the combined SVW & SWH product**

- **Include a researcher from each country**
  - **Researchers in Chile and Argentina are using these products in delayed mode, but are not linked with their operational counterparts**

- **Organize marine forecasting course through the IOC/IODE Training Facility in Oostend, Belgium**

- **Use satellite instrument scientists and experienced operational forecasters as instructors**

- **Begin with key Southern Hemisphere countries having responsibility for GMDSS MetAreas**

Data policy issue
Timely access for operational use

- *Facilitate access to current data*
  - *ESA has waived requirement for a "proposal" when accessing SWH data via the GTS*
  - *Extend waiver for access via other avenues*
- *Enable access to new sources of data*
  - *EUMETSAT & ISRO have agreed to timely access to Oceansat-2 SVW data*
  - *NOAA & ISRO are negotiating for similar access*
  - *Engage the Chinese in discussions of similar access to data from their HY-2 series*

Actions

- *May 09 – Organize a meeting to agree on a centralized service and its development of:*
  - *SVW-SWH product & format*
  - *Global product file & means for sub-setting*
  - *Distribution options*
- *Dec 09 – Organize a one- to two-week training course in Oostend to use of this product*
- *Sep 09 – Invite the Chinese National Space Agency & State Oceanic Administration to SIT-24*
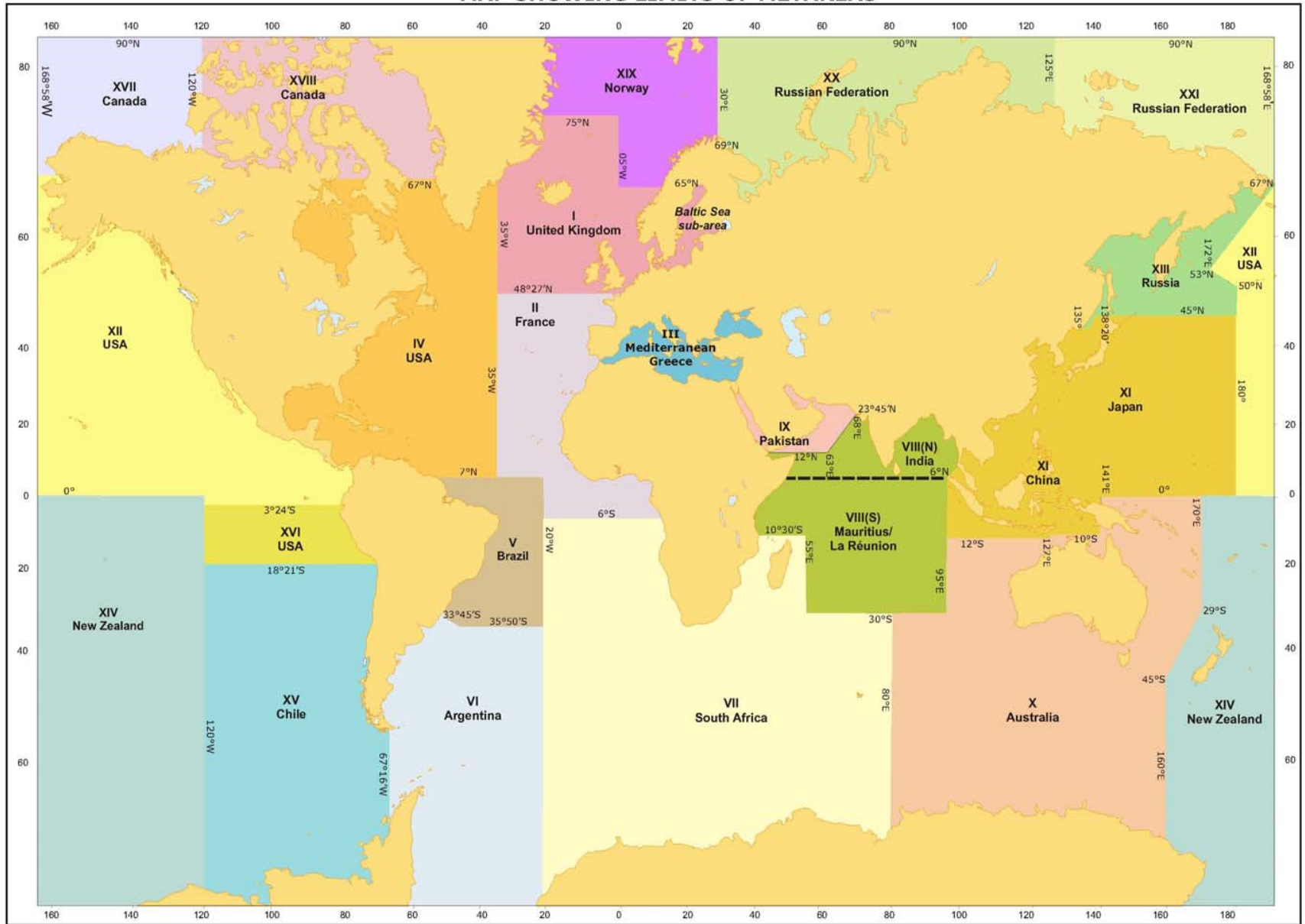
Backup Slides

WMO Executive Council, June 2008

The Council recognized that severe coastal inundation events from extreme sea state conditions occurred in many parts of the world…where…ocean surface meteorological observations were still limited or absent…

The Council requested that efforts be made… to ensure that…ocean surface meteorological observations be routinely collected and disseminated…

It also requested the Secretary-General to promote participation of space agencies in that scheme...

MAP SHOWING LIMITS OF METAREAS

Global Maritime Distress and Safety System

Ocean Surface Vector Wind Constellation

- **Scatterometers in Orbit**
  - *US/NASA QuikSCAT*
  - *Europe/EUMETSAT MetOp/ASCAT – series*
- **Scatterometers in Development**
  - *India/ISRO Oceansat-2 (2009)*
  - *China/SOA HY-2A (2010) – series*
  - *China/SOA/France/CNES CFOSat (2013)*
  - *US/NOAA/Japan/JAXA QuikSCAT Follow-on (2015)*
- **Challenge –** *Maintain continuity with at least two scatterometers*