

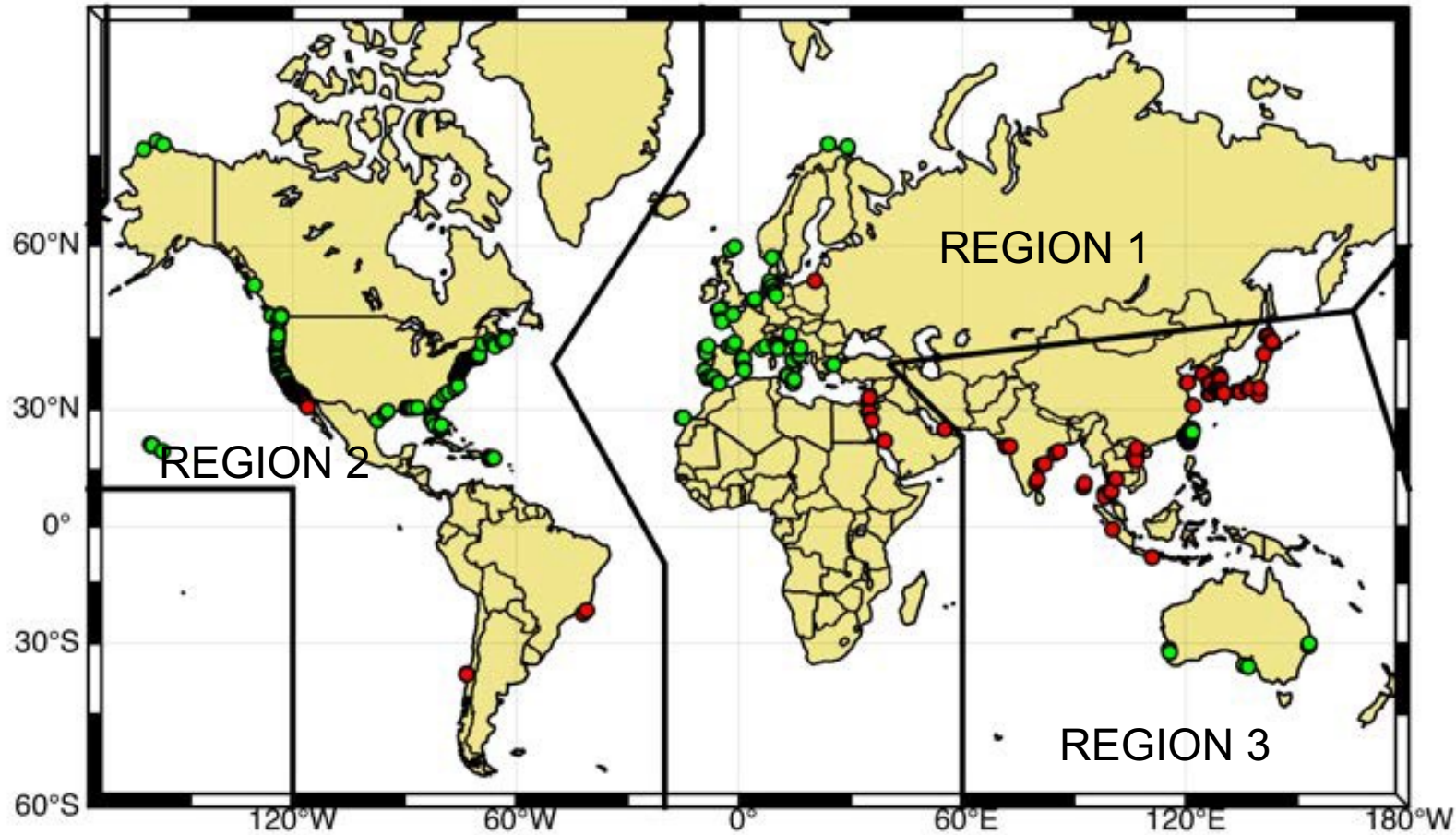
OCG – 12 VIRTUAL MEETING  
MAY 2021

Presenter: Hugh Roarty  
Rutgers University  
MARACOOS

# Global HF Radar Network

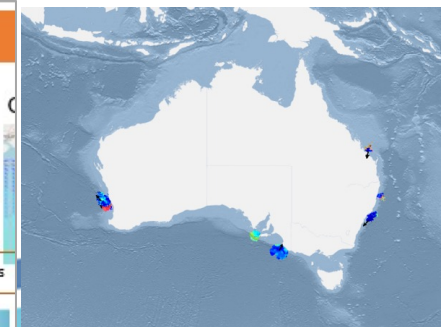
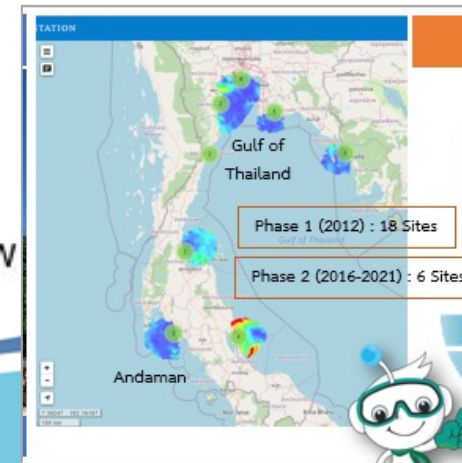
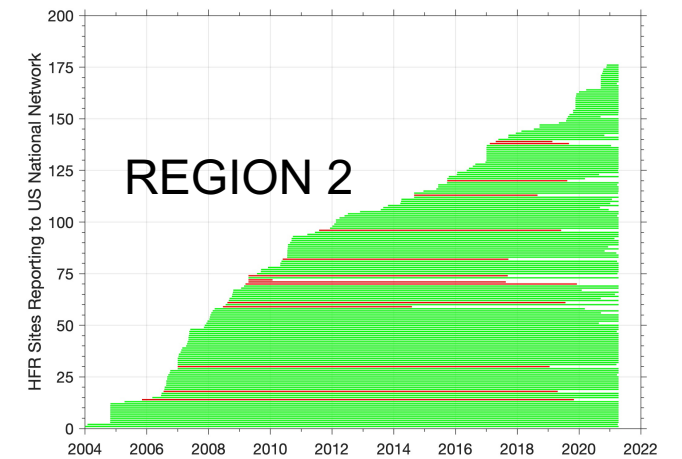
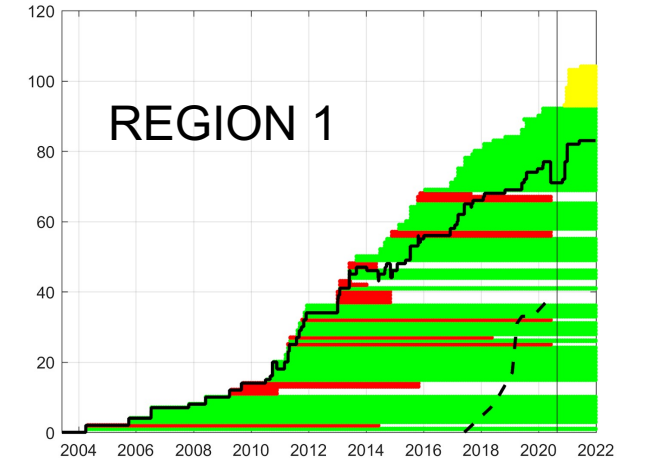


# COASTAL SURFACE CURRENTS NETWORK OVERVIEW



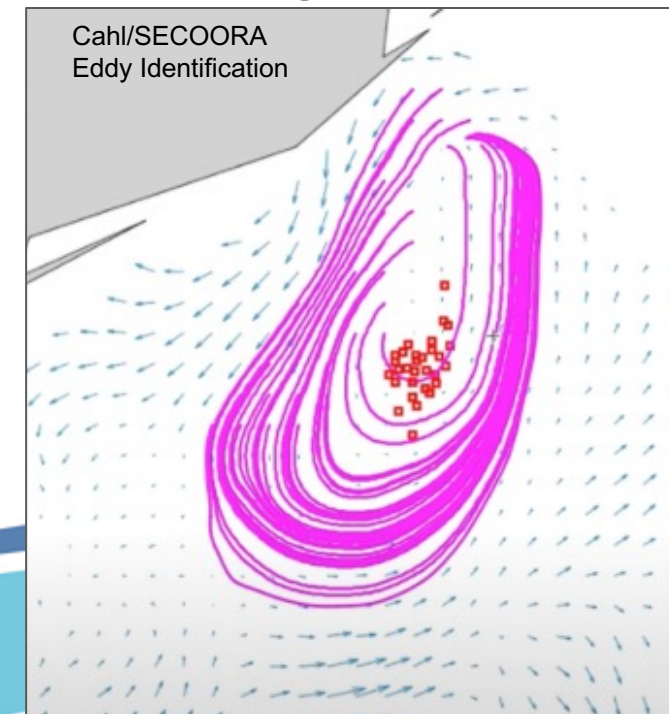
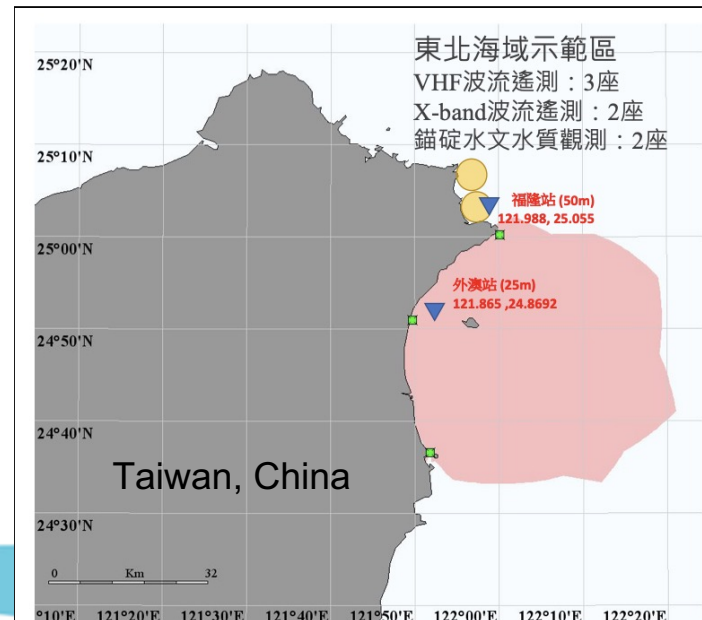
● Sharing data on Internet

● Not sharing data on Internet



# DEVELOPMENTS AND ACHIEVEMENTS

- New installations on the Iberian Peninsula, southwest and southeast of France, Ligurian sea in Italy upgrade and re-installation of two antenna sites east coast of Lemnos island, Greece
- 140 stakeholders identified within the European community
- United States added 3 stations and planning first operational freshwater HF (41 MHz) radar system in September 2021, Canada added 1 station.
- Emerging products: waves, eddy identification
- Taiwan, China preparing for deployment of 12 phased array systems and 15 X-band ocean radars focused on monitoring ocean waves and currents
- Thailand is concluding Phase 2 (2016–2021) of their HF radar buildout plan which brings the number of operating stations to 24
- IMOS has made major efforts to install new HFR systems along the northwest shelf, Ningaloo

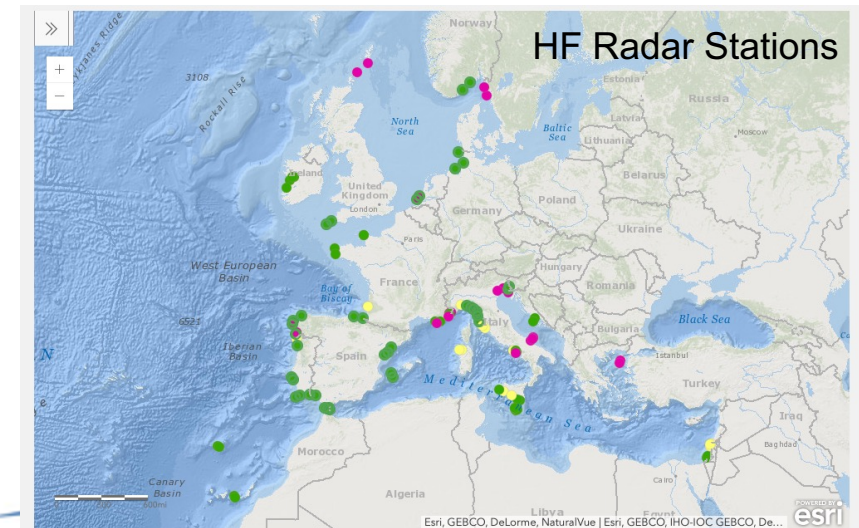
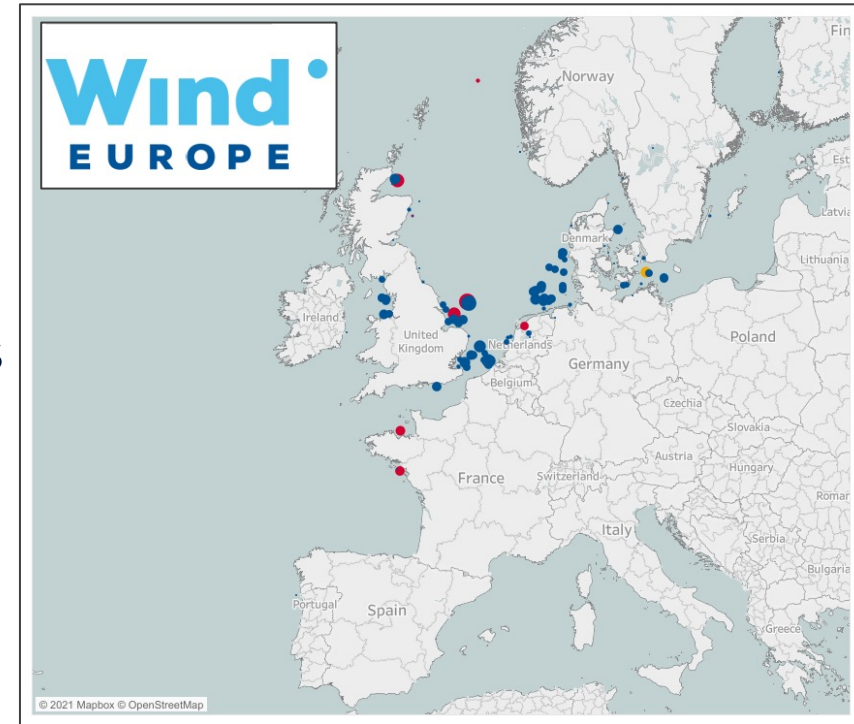


# CHALLENGES AND CONCERNS

- Transition to ITU frequency bands
- Developing new products while maintaining existing ones
- Offshore wind development


## The WRC-Allocated Bands and Total Spectral Widths

Allocated Frequency Bands (MHz)		
ITU Region 1	ITU Region 2	ITU Region 3
4.438-4.488	4.438-4.488	4.438-4.488
5.250-5.275	5.250-5.275	5.250-5.275
9.305-9.355	No allocation	9.305-9.355
13.450-13.550	13.450-13.550	13.450-13.550
16.100-16.200	16.100-16.200	16.100-16.200
24.450-24.600	24.450-24.650	24.450-24.600
26.200-26.350	26.200-26.420	26.200-26.350
39.0-39.5	No allocation	39.5-40.0
42.0-42.5	No allocation	No allocation












Map of locations of the 109 HFRs included in the current EuroGOOS Task Team inventory (March 2021). The **ongoing systems** (68) are plotted in green, **future installations** (15) in yellow and **non-functioning** (26) in purple (including historical deployments or currently inactive stations). 42 HFRs are connected to the HFR node (pulsing circles) **sending data in near real-time**.

# FUTURE PLANS AND OPPORTUNITIES

- Continue discussions with Ocean Best Practices to finalize community approved HF radar best practices
  - Begin discussions with Ocean Ops to define metadata standards for the delivery of data to national and global data assembly centers.
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# ATTRIBUTE REPORT OUT

	Global in scale	Good
	Observe one or more EOV or ECV	Good
	Observations are sustained	Good
	Community of Practice	Satisfactory
	Maintain Network Mission and Targets	Satisfactory
	Delivers data that are free, open and in a timely manner	Satisfactory
	Ensures metadata quality and delivery	Needs Improvement
	Develops and follows Standards and Best Practices	Good
	Undertakes capacity development and technology transfer	Satisfactory
	Environmental stewardship awareness	Good

Good
Satisfactory
Needs Improvement

# ASKS FROM OCG

- Guidance on how to encourage operators from Region 3 to share data from their networks?
  - How to develop central repository for Region 3?
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