The Global Ocean Observing System www.ioc-goos.org



GOOS update and IQuOD in the context of Framework for Ocean Observing

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Ocean observations for societal benefit Climate, operational ocean services, ocean health

The Global Ocean Observing System







OceanObs'09

Cones

EUMETSAT

eesa

Ocean information for society: sustaining the benefits, realizing the potential

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Why a Framework?

- OceanObs' 09 identified tremendous opportunities, significant challenges
- Called for a framework for planning and moving forward with an enhanced global sustained ocean observing system over the next decade, integrating new physical, biogeochemical, biological observations while sustaining present observations



post-OO'09 Working Group

www.oceanobs09.net

Framework for Ocean Observing **A simple system**







Driven by requirements, negotiated with feasibility **Essential Ocean Variables**



The Global Ocean Observing System



- We cannot measure everything, nor do we need to
- basis for including new elements of the system, for expressing requirements at a high level
- Driven by requirements, negotiated with feasibility
- Allows for innovation in the observing system over time



Towards sustained system: requirements, observations, data management



Framework for Ocean Observing Societal drivers 2012





Framework for Ocean Observing
Opening up to new societal drivers



GOOS Structures

















GCOS Implementation Plan 2016

 GOOS and its three panels work together in articulating requirements and targets of global ocean observations for climate through developing new GCOS IP 2016, which will be submitted to UNFCCC next week.





GCOS IP actions relevant to IQuOD

- There are many such actions including:
- Action G20: ECV data products
 - Continue production and develop more refined versions of the established in situ and satellite observation based ECV data products
- Action O2: Data Quality
 - Sustain and increase efforts for quality control of current and historical data records.
- Action O6: Upper ocean temperature observing system
 - Maintain a global ocean temperature observing system for assessment of ocean temperature and heat content and its contribution sea level rise



In conclusion

- IQuOD has been contributing to Framework for Ocean Observing (FOO) in data and product domain to feedback to observation requirements.
- Particularly IQuOD is expected to respond to some of general and oceanic actions in new GCOS IP.

