



Keith Alverson

Ocean Observations and Services

Intergovernmental Oceanographic Commission of UNESCO



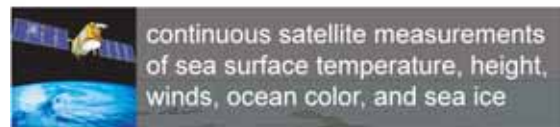
IOC and UNEP Regional Seas

- 1 The Global Ocean Observing System of IOC, WMO, UNEP and ICSU
- 2 Overview of IOC Regional Efforts
- 3 Assessment of Assessments and Regular Process for Global Reporting and Assessment of the Marine Environment
- 4 Transboundary Water Assessment Program

Global Ocean Observing System for Climate

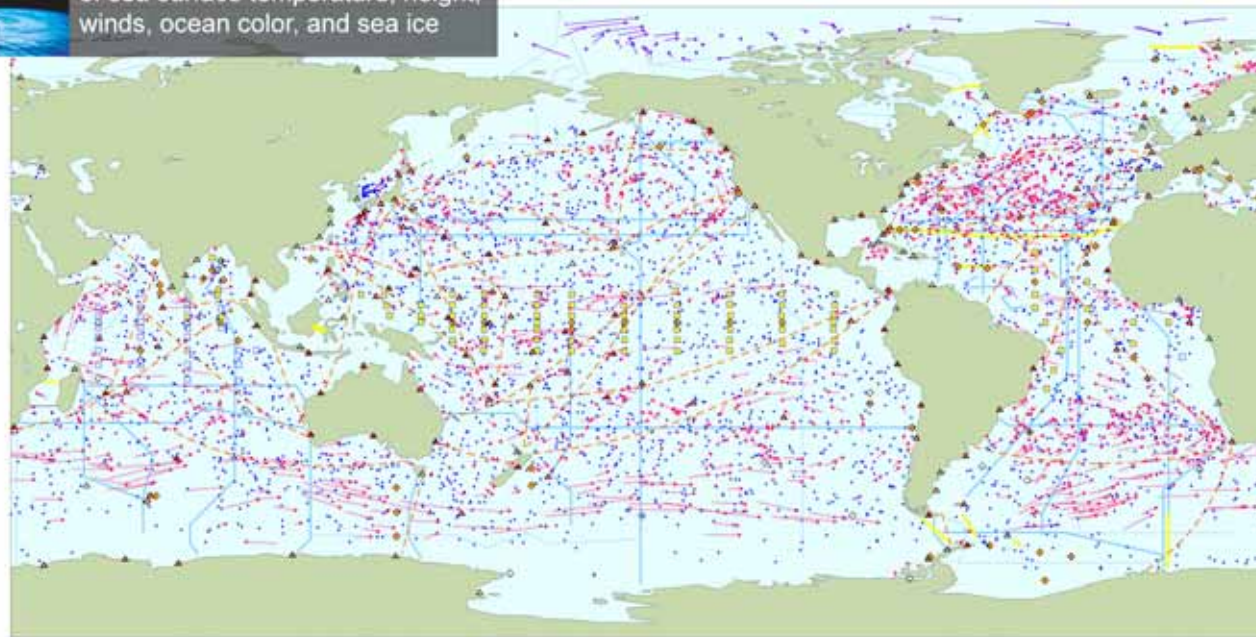
Designed to serve IPCC WG1 (Detection and Attribution) needs ...

Reporting “Essential Climate Variables” to UNFCCC ...



Total *in situ* networks **61%**

May 2009



87% Surface measurements from volunteer ships (VOS)

250 ships in VOSclim pilot project



100% Global drifting surface buoy array

ice buoys
5° resolution array: 1250 floats



66% Tide gauge network (GCOS subset of GLOSS core network)

170 real-time reporting gauges



81% XBT sub-surface temperature section network

51 lines occupied



100% Argo profiling float network

3° resolution array: 3000 floats



59% Repeat hydrography and carbon inventory

Full ocean survey in 10 years

Transport monitoring

24%

29 sites



54% Global time series network

58 moorings planned



79% Global tropical moored buoy network

119 moorings planned

Representative milestones



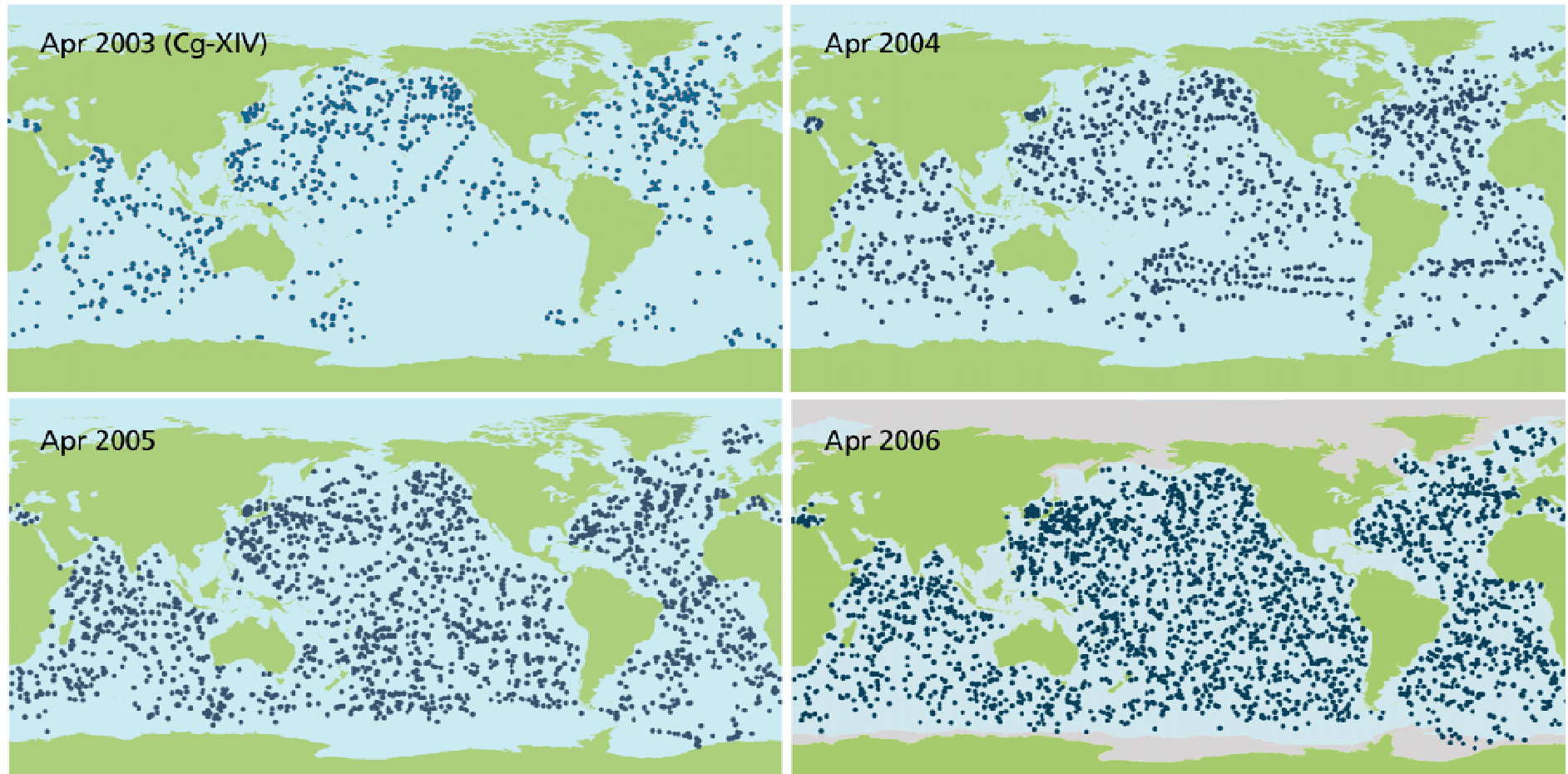
actual implementation

100%

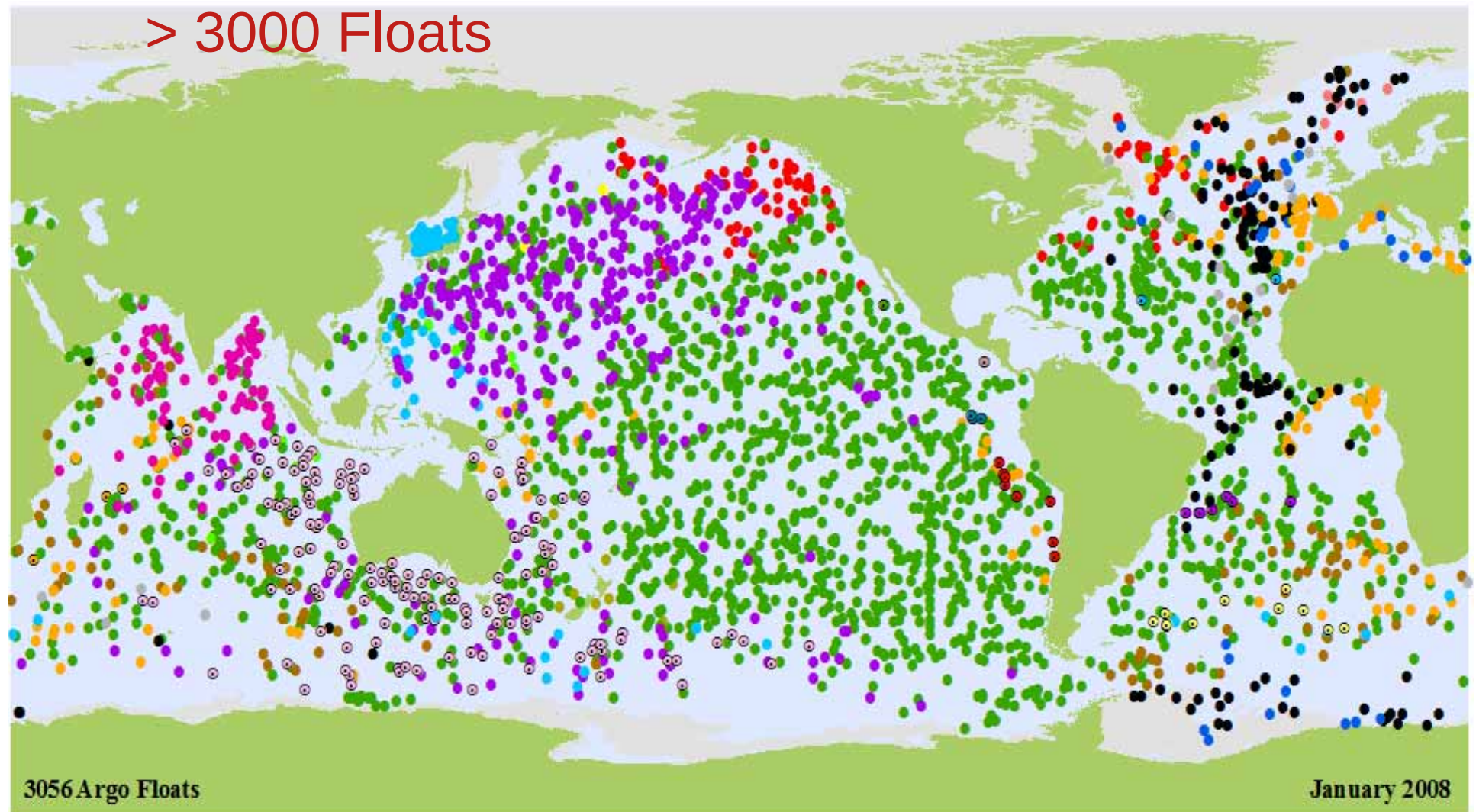
original goal for full implementation by 2010

System % of initial goals

The ARGO array of profiling floats from 2003...

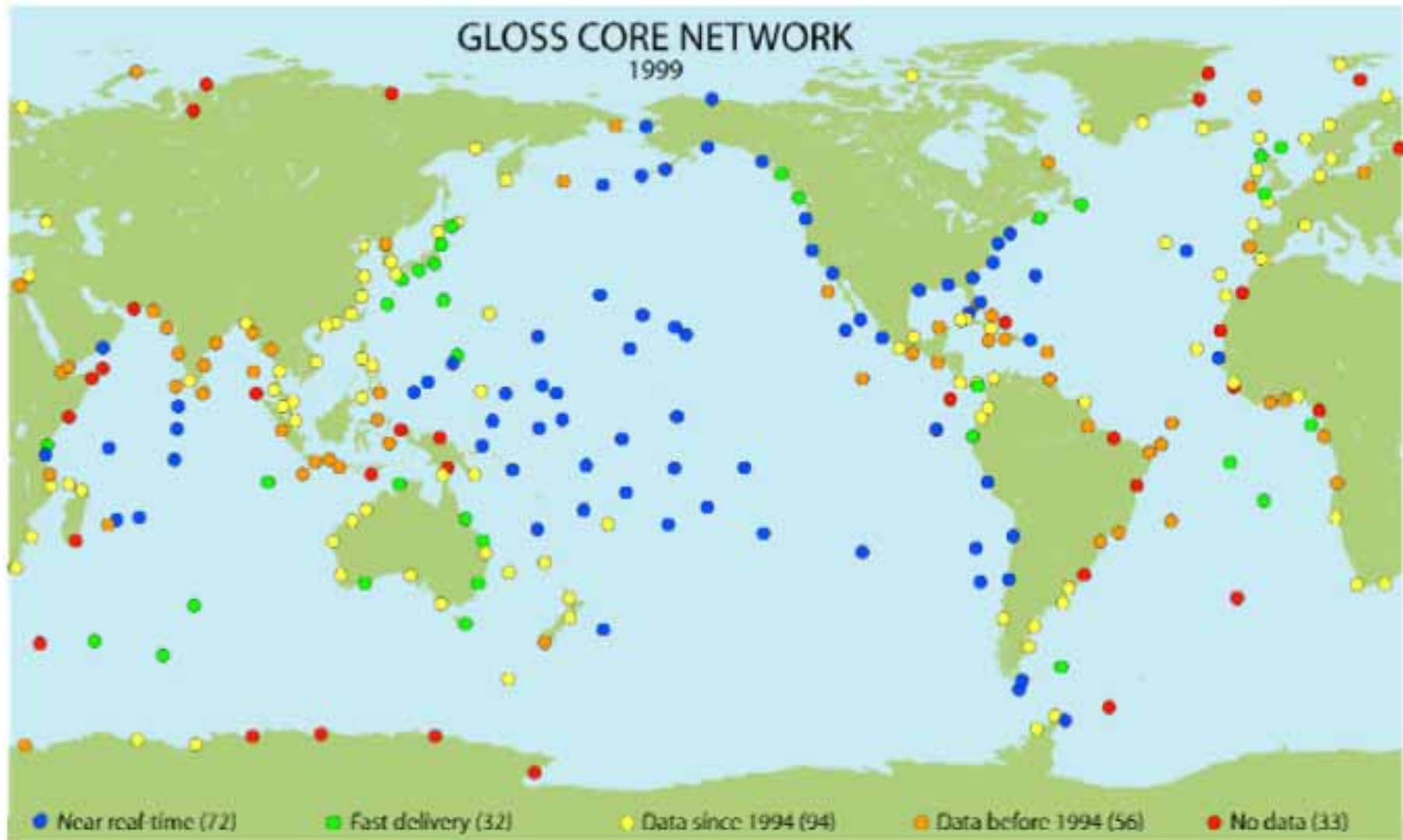


> 3000 Floats

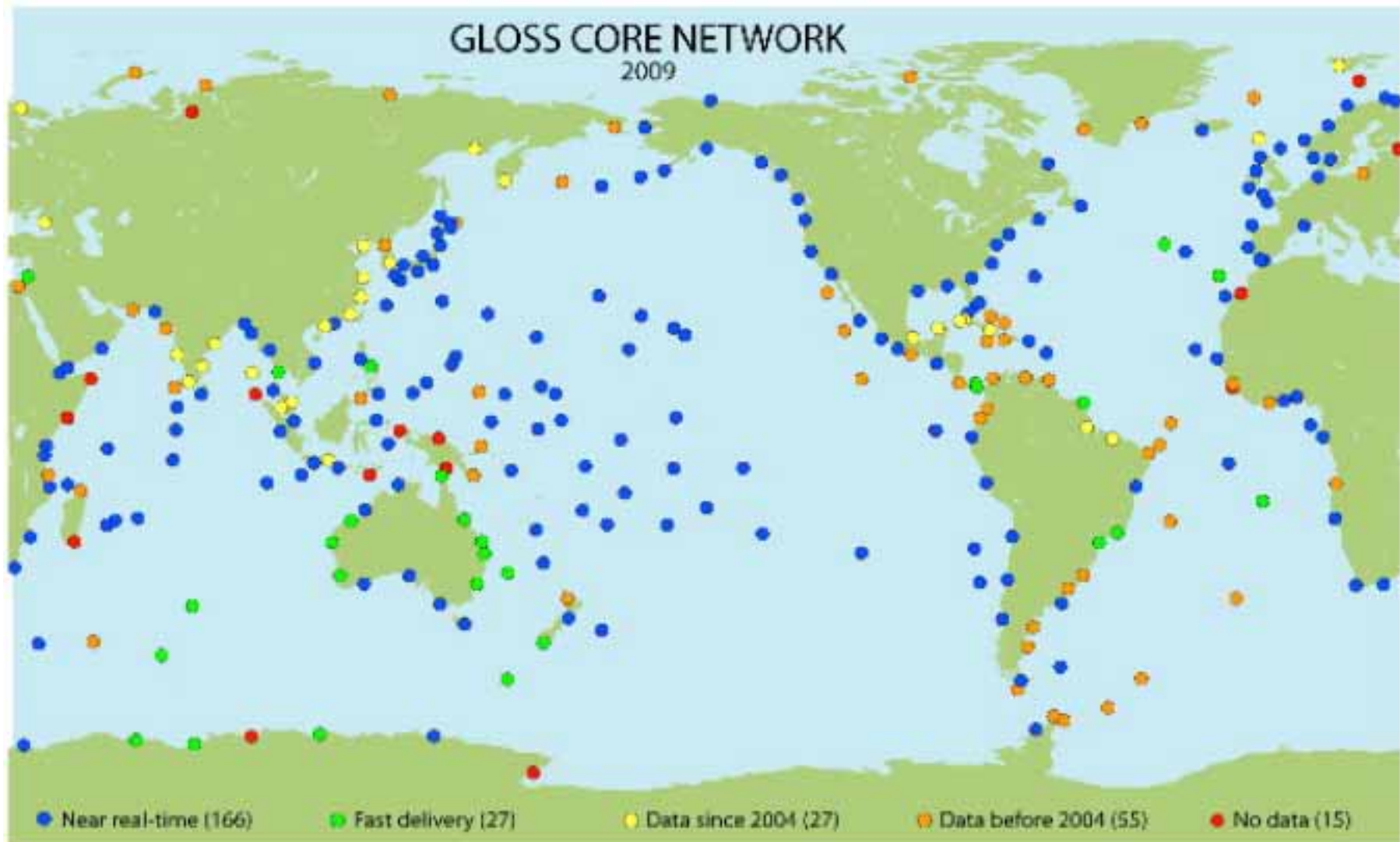


ARGENTINA (11)	CHILE (8)	EUROPEAN UNION (29)	IRELAND (0)	MEXICO (1)	RUSSIAN FEDERATION (2)
AUSTRALIA (151)	CHINA (11)	FRANCE (144)	JAPAN (369)	NETHERLANDS (18)	SPAIN (2)
BRAZIL (7)	COSTA RICA (1)	GERMANY (145)	SOUTH KOREA (100)	NEW ZEALAND (8)	UNITED KINGDOM (106)
CANADA (103)	ECUADOR (3)	INDIA (84)	MAURITIUS (4)	NORWAY (7)	UNITED STATES (1741)

Evolution of the GLOSS tide gauge network 1999-2009

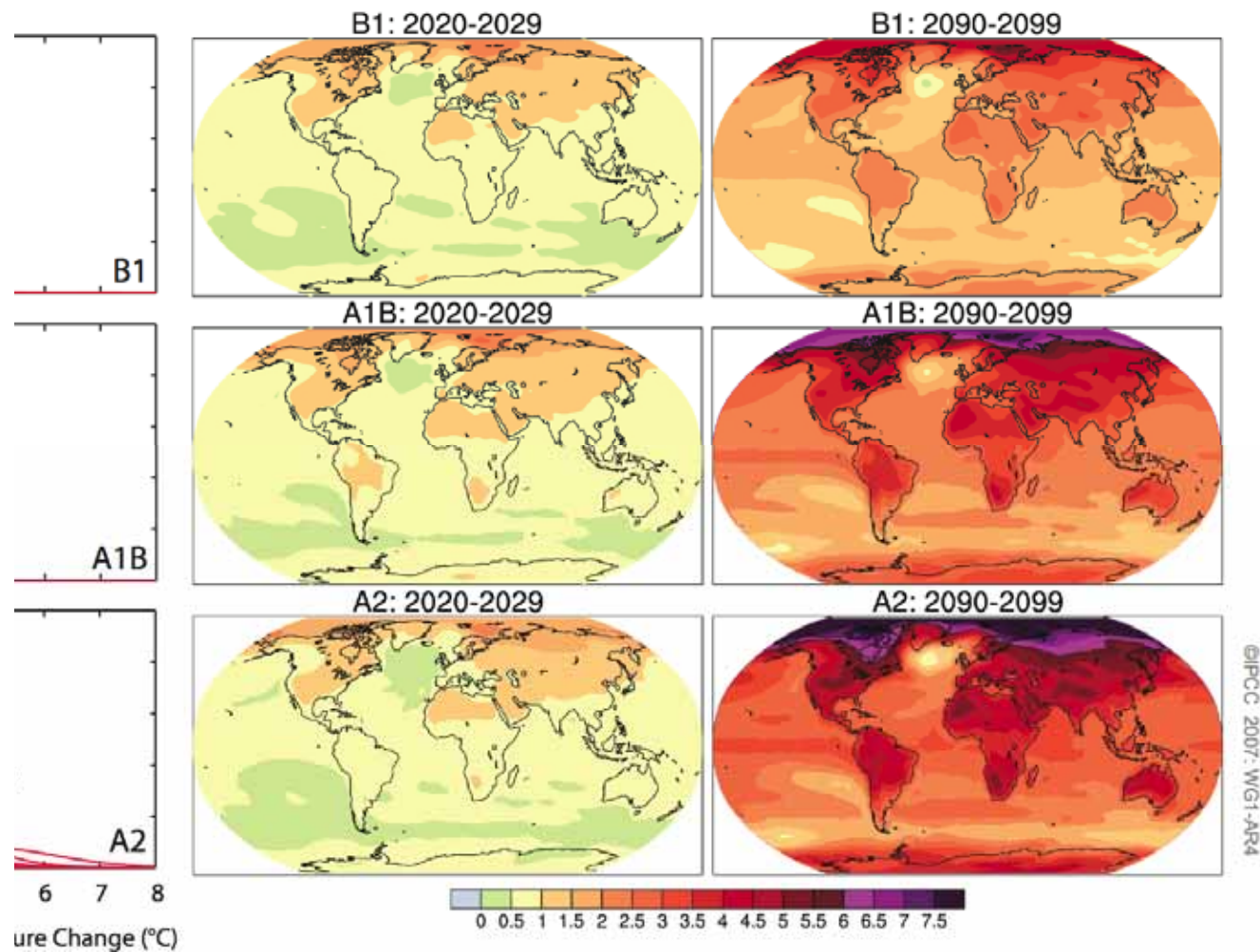


Evolution of the GLOSS tide gauge network 1999-2009



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AOGCM Projections of Surface Temperatures



IPCC AR4, 2007

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_14533

