



World Meteorological Organization

Working together in weather, climate and water

Global Framework for Climate Services: towards improved decision-making in climate sensitive sectors

Boadilla del Monte, Madrid, 22 October 2012

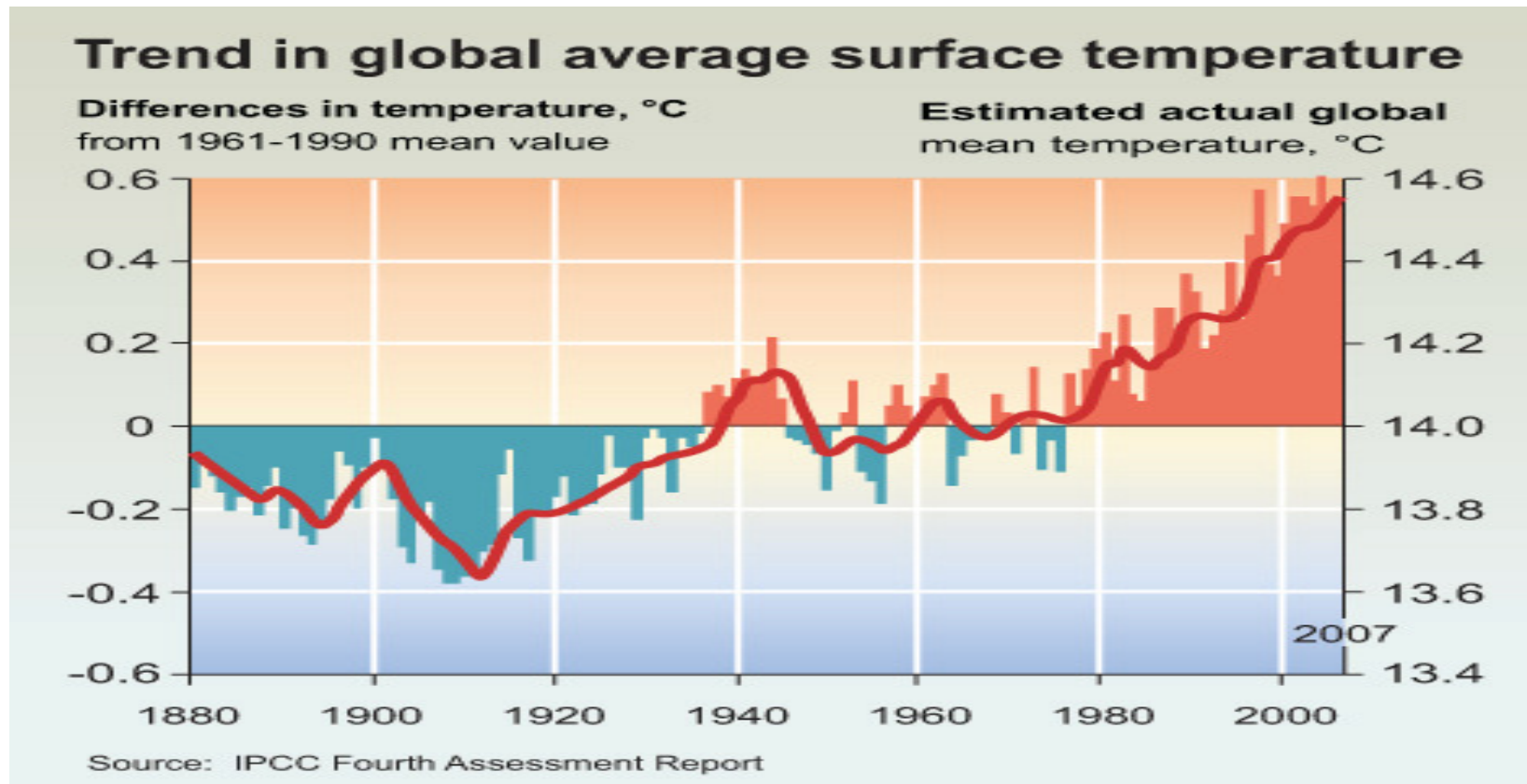
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http://www.wmo.int/pages/gfcs/gfcs_en.html

Concern...

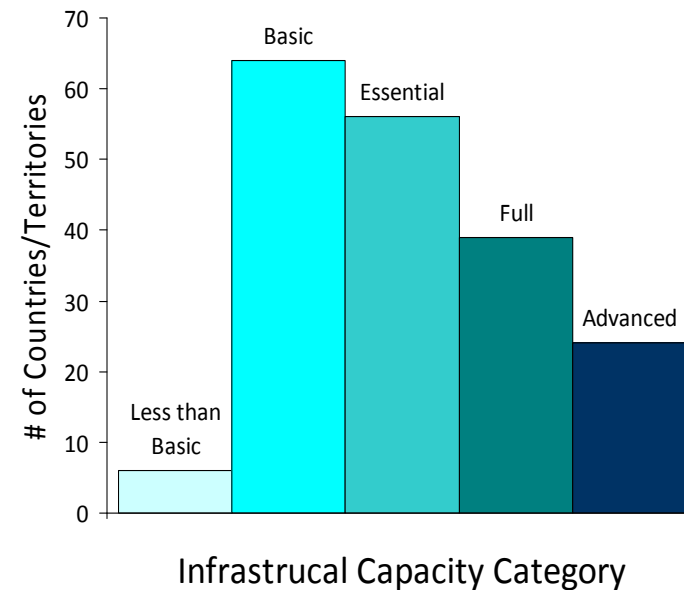
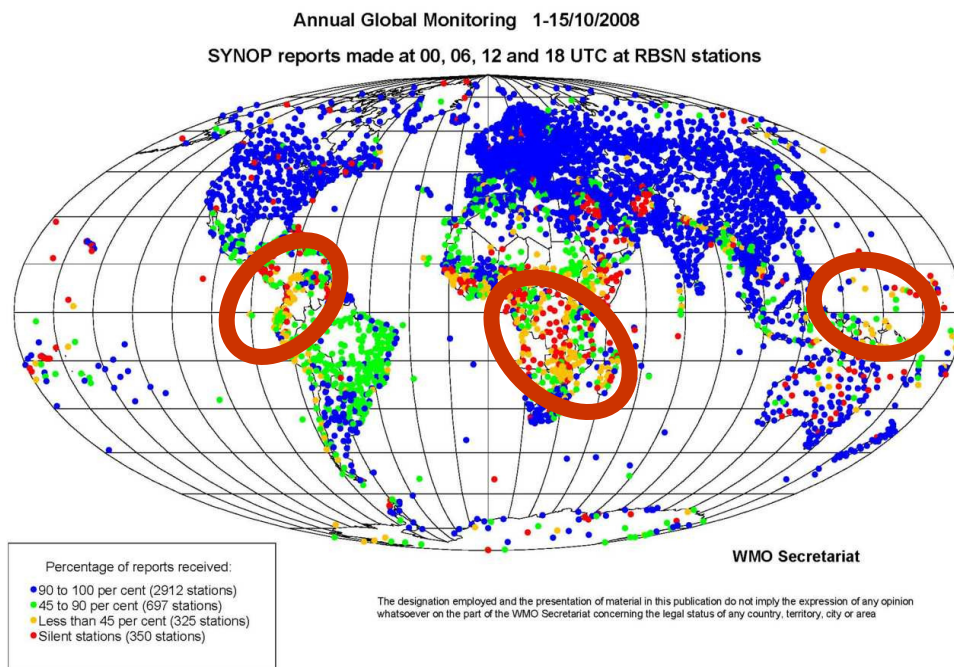


- ✓ The past is no longer a trustworthy indicator of the future
- ✓ New paradigms required to support decision-making

Concern...

- Many countries lack the infrastructural, technical, human and institutional capacities to provide

Infrastructural Capacities of Countries as of Aug 2010 to provide Basic, Essential, Full and Advanced Climate Services.



History of the GFCS

- Third World Climate Conference (2009)
- Intergovernmental meeting (Jan 2010)
- High Level Task Force (2010)
“Climate knowledge for action: A global framework for climate services – empowering the most vulnerable” (February 2011)
- WMO congress (May 2011)
- Creation of an Executive Council Task Team for GFCS (July 2011)
- Establishment of the GFCS office in the WMO Secretariat (June 2011)
- 1st ECTT GFCS meeting (October 2011)

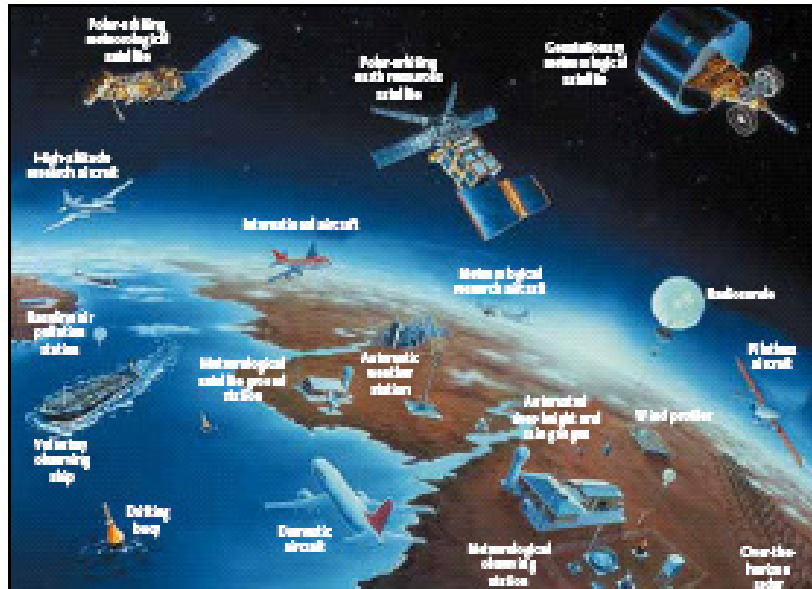


CLIMATE KNOWLEDGE FOR ACTION:

A GLOBAL FRAMEWORK
FOR CLIMATE SERVICES—
EMPOWERING
THE MOST VULNERABLE



The Vision of GFCS



The vision of the GFCS is to enable society to better manage the risks and opportunities arising from climate variability and change, especially for those who are most vulnerable to climate-related hazards

Pre-requisites for climate services

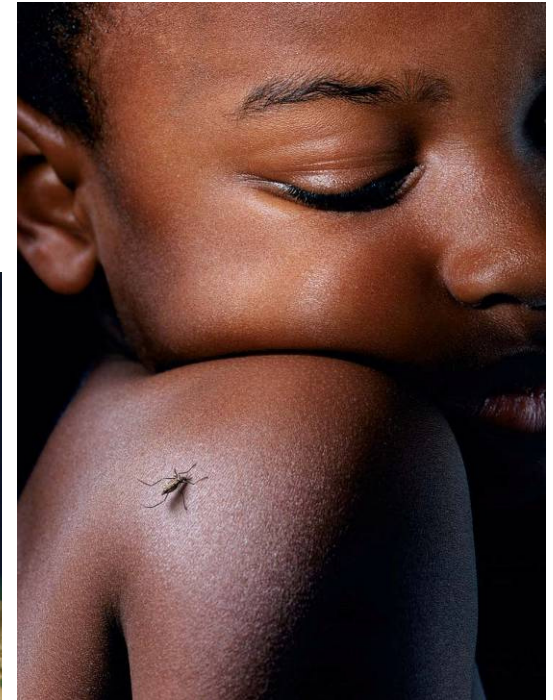
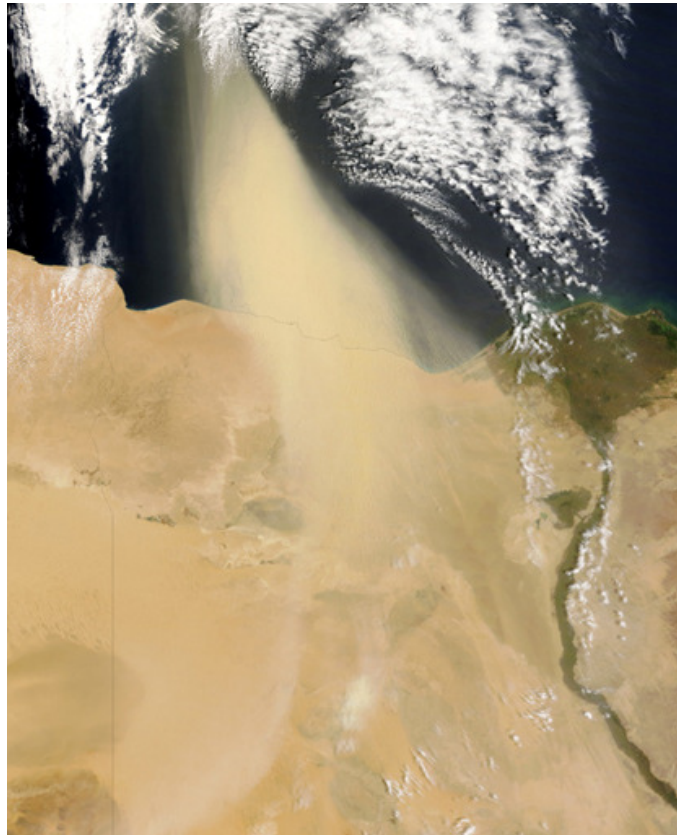
- **Available:** at time and space scales that the user needs,
- **Dependable:** delivered regularly and on time,
- **Usable:** presented in user specific formats so that the client can fully understand,
- **Credible:** for the user to confidently apply to decision-making
- **Authentic:** entitled to be accepted by stakeholders in the given decision contexts
- **Responsive and flexible:** to the evolving user needs, and
- **Sustainable:** affordable and consistent over time.

The principles of the GFCS

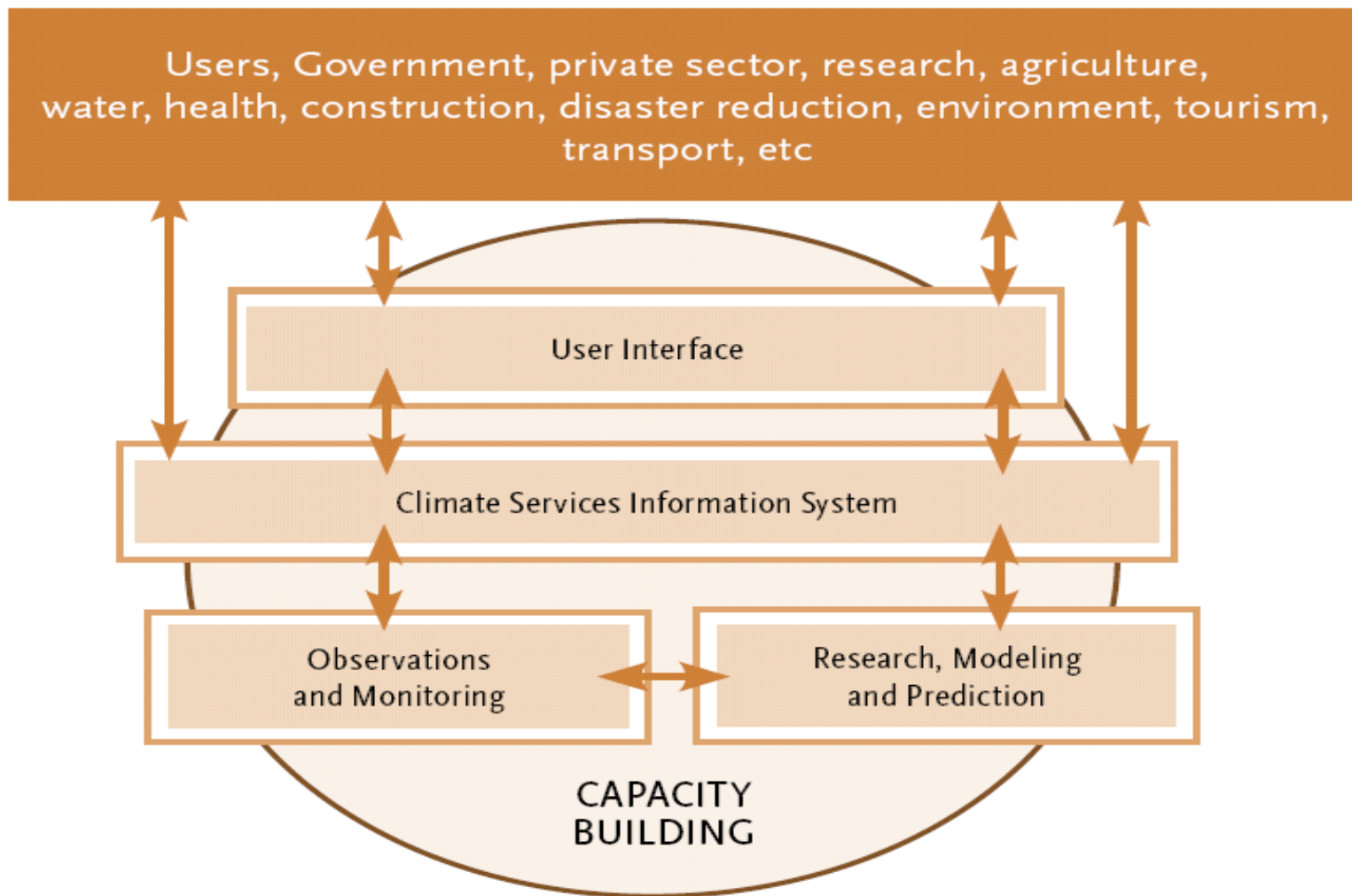
- 1 - Priority shall go to **building the capacity** of climate-vulnerable developing countries
- 2 - Ensure **greater availability of, access to, and use** of climate services for all countries
- 3 - **Three geographic domains**; global, regional and national
- 4 - **Operational climate services** will be the core element of the Framework
- 5 - Climate information is primarily an international **public good provided** by governments, which will have a central role in its management through the Framework
- 6 - Promote **free and open exchange of climate-relevant observational data** while respecting national and international data policies
- 7 - The role of the Framework will be to **facilitate and strengthen**, not to duplicate
- 8 - **Built on user needs** through user – provider partnerships that include all stakeholders

The GFCS short term priority areas

- ✓ **Water**
- ✓ **Disaster risk reduction**
- ✓ **Health**
- ✓ **Agriculture/food security**



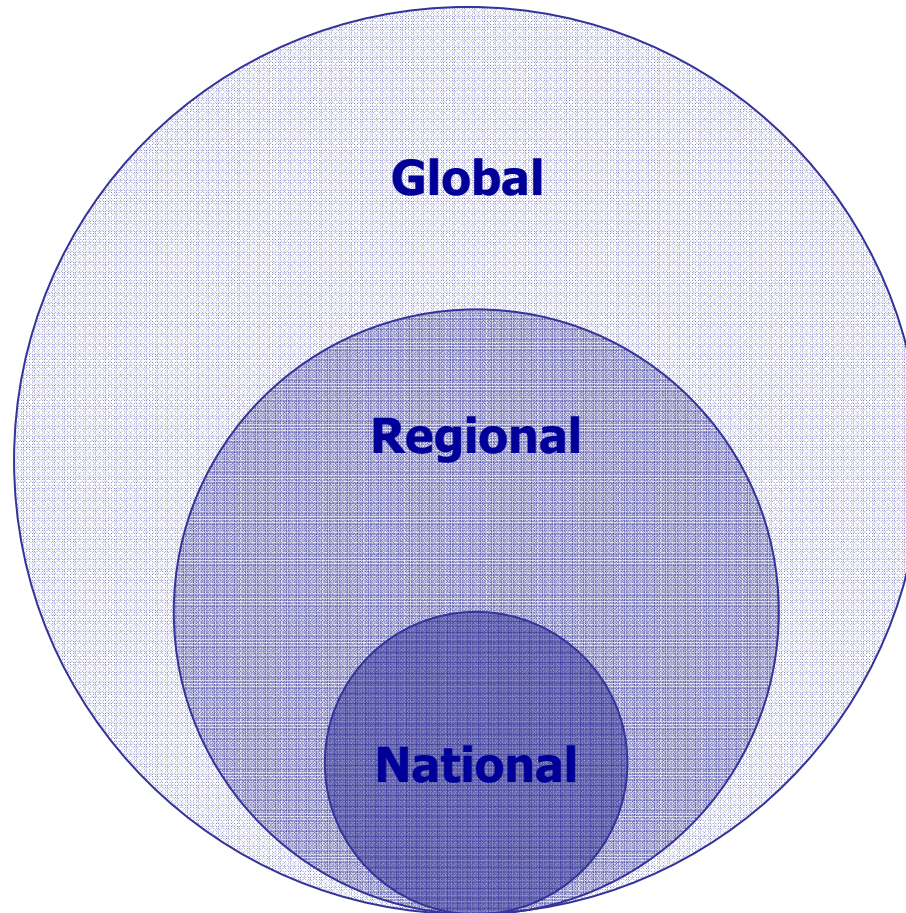
The pillars of the GFCS



Operational infrastructure required

- Technical infrastructure
 - Requirements for the different components of the GFCS (Observations, Monitoring, Research, Operational climate information and prediction products, User Interface mechanisms)
 - Interoperability of databases (e.g., WIS compliance)
 - Climate Services Toolkit (especially including downscaling/tailoring tools)
 - Web platform for dissemination
- Global-Regional-National interaction
 - Networking capabilities (national access to as well as contribution to global and regional products)
- Best practices and standardized approaches
 - Quality management, best practices on methods, tools, etc.
 - Standardized approaches for facilitating regional/sub-regional synergy
- Linking operational products with the applications
 - Access to application models and decision support tools
 - User-accessible climate knowledge base
 - Operational linkages with applications infrastructure

Domains of operation of GFCS



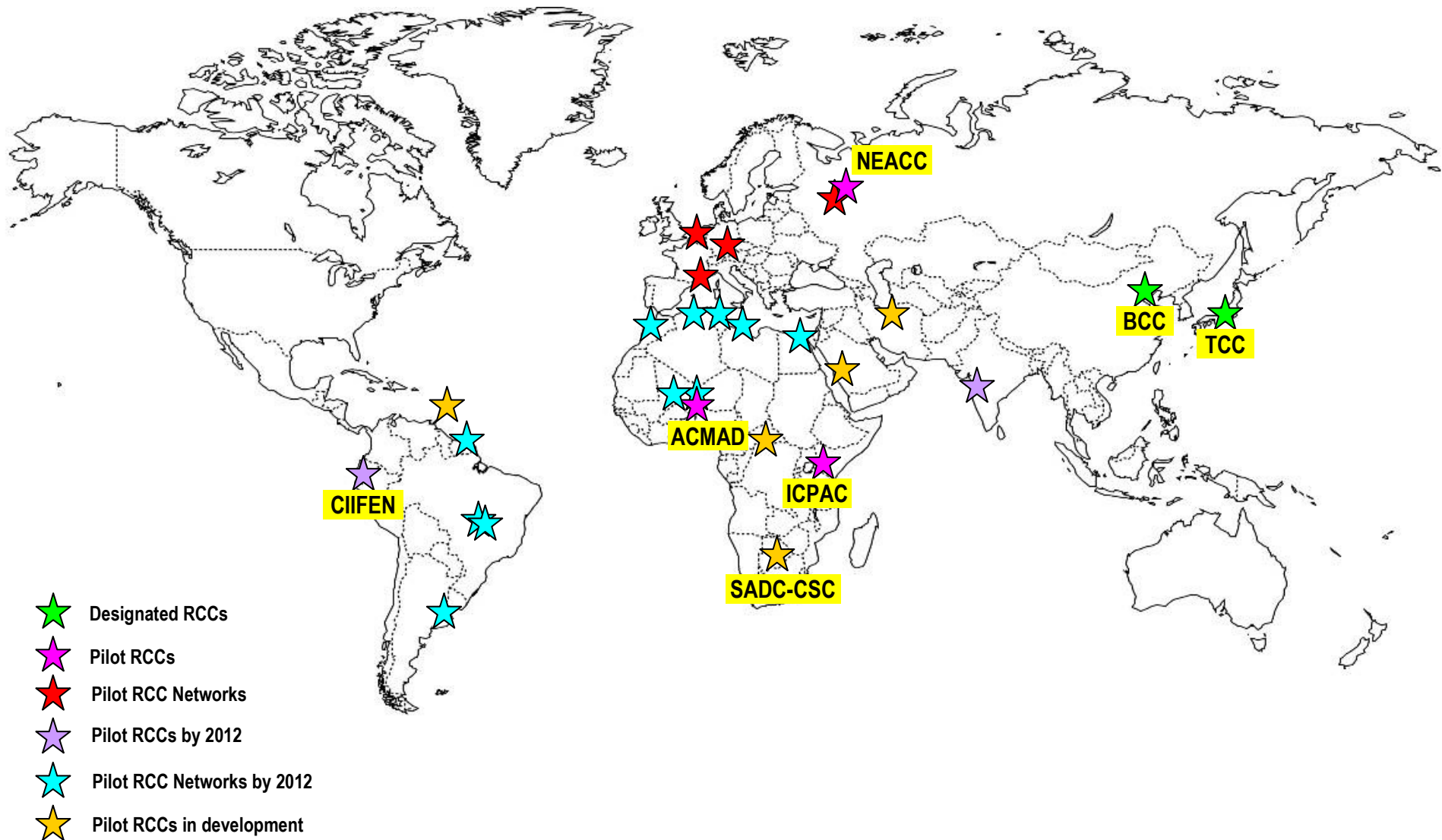
Currently Designated GPCs



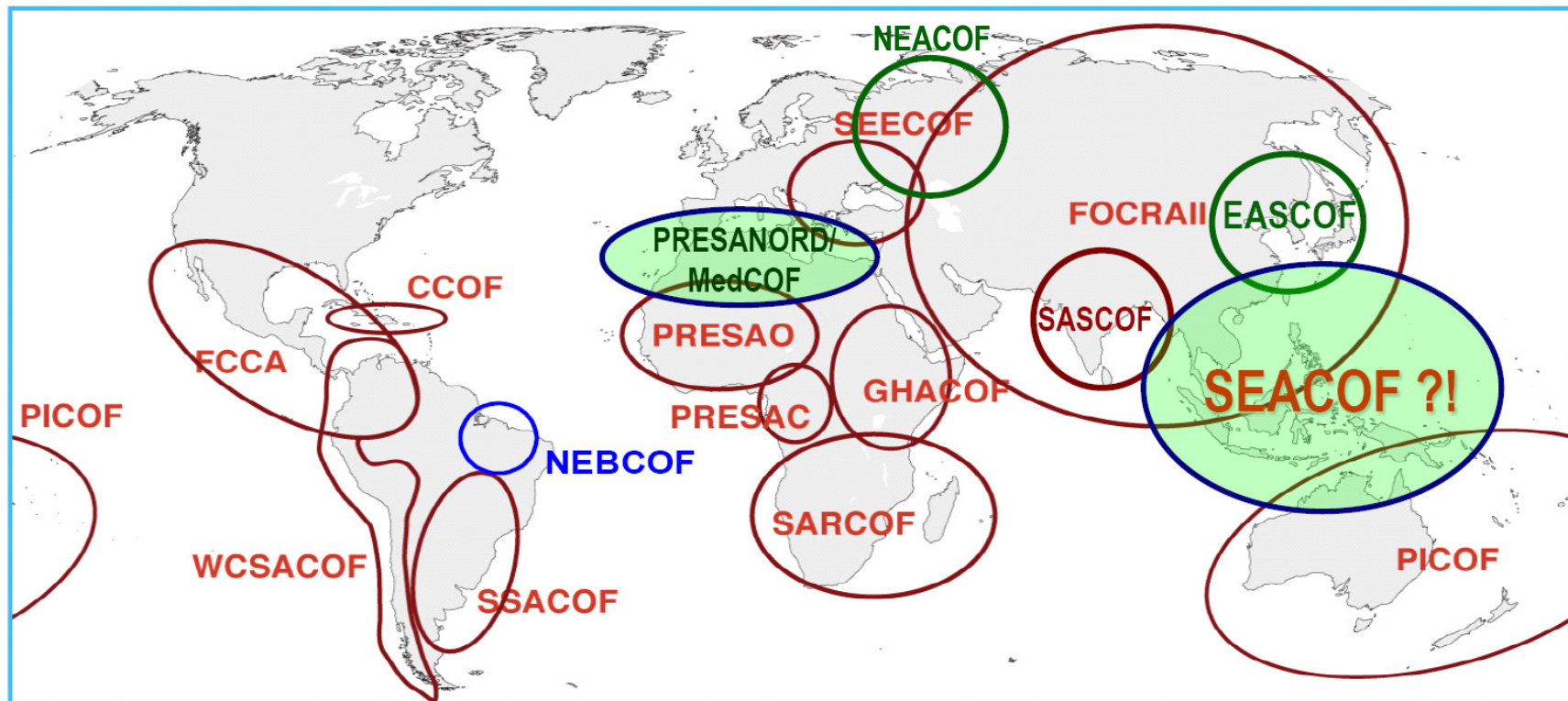
Links to GPCs:

http://www.wmo.int/pages/prog/wcp/wcasp/clips/producers_forecasts.html

WMO RCC Status Worldwide



Regional Climate Outlook Forums worldwide



Potential National Mechanisms

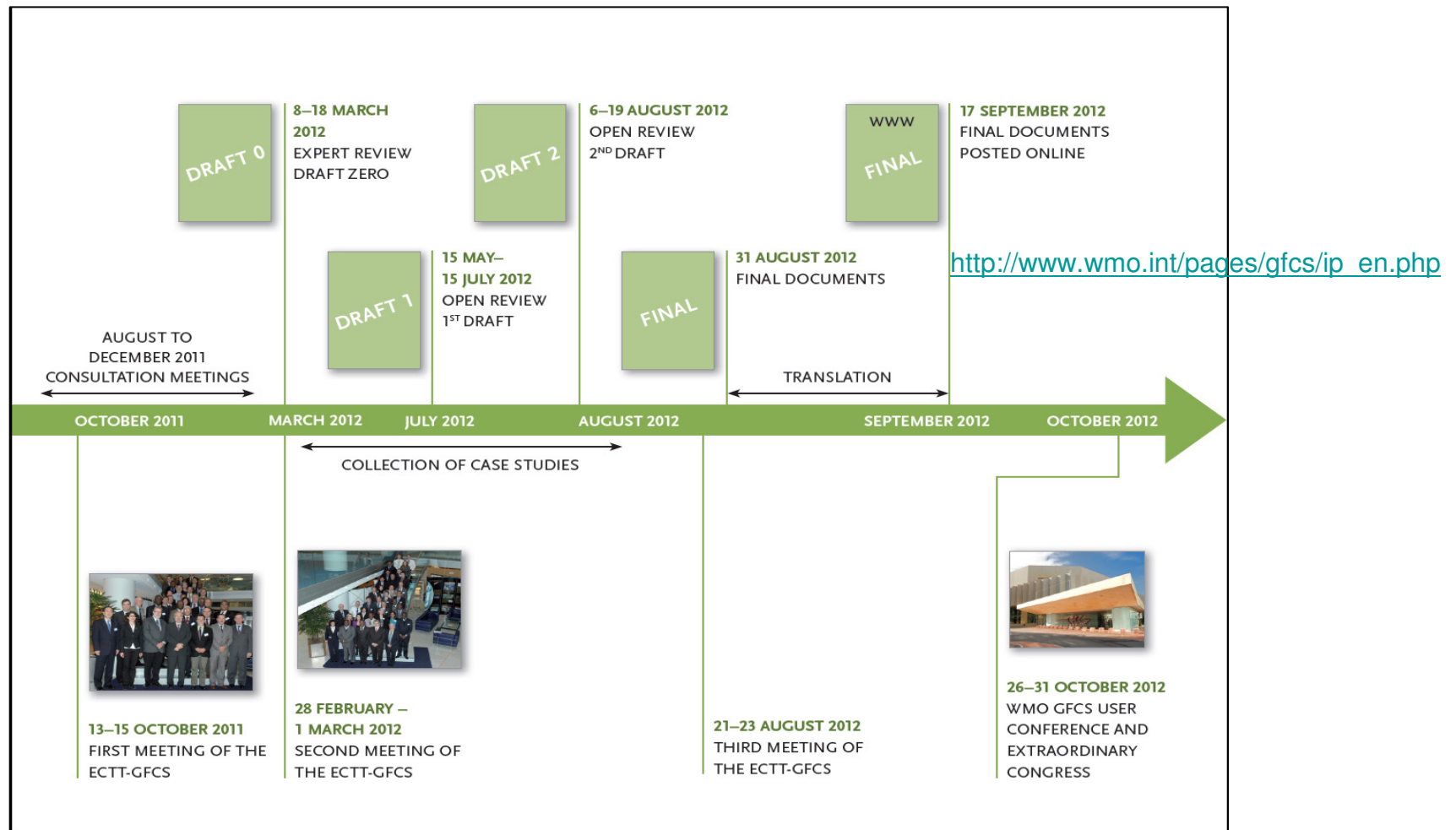
- Framework for Climate Services at national level
 - Require well-coordinated arrangements between the key national institutions responsible for observations, research, tailored products and expert advice
 - Some countries may establish National Climate Services as integral components of the NMHSs, to support/facilitate the Framework at National Level
- National Climate Outlook Forums (NCOFs)
 - Adapting the Large and Regional scale forecasts to the national context
 - Tailoring products and translating key messages for users (Multidisciplinary Working Groups)
 - Evaluating the impact of expected conditions (with existing vulnerabilities)
- Coordination mechanisms at National level
 - Context specific (National context)
 - Needs a strong and sustained users liaison
 - Needs coordination of Research (including climate change aspects)
 - Needs coordination of climate data and knowledge base

Pilots conducted in Burkina Faso, Niger and Mali

Outcomes from 3 National Workshops in Burkina, Niger and Mali

- A national covenant to render climate services useful to vulnerable communities
 - Realization of the need to use climate knowledge as input to decision-making in all climate-sensitive sectors in country (Agriculture & Food security, Health, Disaster Risk Management and Infrastructure/construction/transport, etc.)
- A National Action Plan to establish Framework for Climate Services at the National Level
 - Operational user-devised roadmaps to build Frameworks for Climate Services
 - FCSN Action Plans endogenously proposed and developed by national stakeholders establish an effective chain of information that links available climate science and early warning information with technical services in all climate-sensitive sectors
 - Farmers, herders and the most vulnerable community: final end-users of the climate service provided with built-in channels for feedback and end-user input into climate service development

Process for the development of the Implementation Plan



Challenges identified through consultations

- *Accessibility*: many countries do not have climate services at all, and all countries have scope to improve access to such services
- *Capacity*: many countries lack the capacity to anticipate and manage climate-related risks and opportunities
- *Data*: the current availability and quality of climate observations and impacts data are inadequate for large parts of the globe
- *Partnership*: mechanisms to enhance interactions between climate service users and providers are not always well developed, and user requirements are not always adequately understood and addressed
- *Quality*: operational climate services are lagging advances in climate and applications sciences, and the spatial and temporal resolution of information is often insufficient to match user requirements.

GFCS Implementation Priorities

- Governance — Leadership and management capacity to take the Framework forward
- Capacity development
 - Linking climate service users and providers.
 - Developing national capacity in developing countries.
 - Strengthening regional climate capabilities.
- Implementation of high-profile projects to address gaps in across pillars and priority areas
- Improving climate observations in data sparse areas
- Promote partnerships among stakeholders for addressing gaps and priorities

Possible initial implementation activities & projects

- Establish Framework leadership & management
- Define national mandates in climate services provision
- Strengthen capabilities in disaster risk reduction
- Improve communication between climate, agriculture and food security communities
- Enhance partnerships between climate services and water resources management
- Develop national working groups in climate and health
- Improve decision-making on climate-related risks
- Strengthen climate information regional infrastructure
- Advance in data recovery and digitizing
- Launch pilot projects

In the 1st two years

Deadline	Milestone
End January 2013	Distribute the Implementation Plan to stakeholders after updating it with the outcomes of the Extraordinary Session of the World Meteorological Congress. This Plan will be considered at the inaugural meeting of the Intergovernmental Board
End December 2013	Undertake the organisation building phase as described in the governance mechanisms approved by the Extraordinary Congress, including establishment of a secretariat to support the Framework, establishment of the necessary management and executive (technical) committee structures, convening of the first meeting of the Intergovernmental Board, and development of programmes to undertake immediate implementation priorities.
End June 2013	Convene a series of fora to agree upon the management of individual demonstration projects.
End December 2013	Convene a series of pillar-specific dialogues at global and regional scale (beginning in Africa) to organise management of activities.
End December 2014	Complete demonstration projects from the priorities for the initial 2 years.

In six years

- Framework should have facilitated access to improved climate services worldwide in the initial priority areas and initiate activities in additional areas
- Framework should closely involve at least five United Nations agencies or programmes
- Framework should have active technical committees in place that encompass the five components (Capacity Development; Research, Modelling and Prediction; Observations and Monitoring; Climate Services Information Systems; and the User Interface Platform)
- Framework should have an active communications programme to ensure that services are delivered effectively and should have actively engaged in at least US\$ 150 M of climate-related development projects.

In ten years

- Framework should have facilitated access to improved climate services worldwide and across all climate-sensitive sectors
- The Framework should closely involve at least eight United Nations agencies or programmes
- Framework should have actively engaged in at least US\$ 250 M of climate-related development projects that have been assessed as useful in meeting user needs.

Costs

- Initiating and designing projects might require consultants and meeting expenses of US\$ 250,000 to 400,000 per year (intergovernmental board)
- Estimated cost of US\$ 2 M in 2013 rising to US\$ 3 M in 2014
- Initial high priority projects to cost US\$10-15 M over the first two years of the Framework.

Measuring success

The GFSC successful when:

- Climate information services are used as regular inputs to decisions in climate sensitive sectors, e.g. in short term water allocation or design of longer term infrastructure development and operations
- The applications of climate information services results in greater efficiencies and effectiveness in resources use thus promoting sustainable development
- climate information is being disseminated effectively and in a manner that lends itself more easily to practical action than at present
- Improved access to accurate and reliable climate information results improved livelihoods and well being of peoples particularly in the developing world

Dialogue for Climate Services Users and Providers (FAO, WFP, UNESCO, ISDR, IFRC, WB, WMO)

Objectives

- **Further understanding of how GFCS implementation will assist decision making “on the ground” and how to better work across communities to maximize benefits of GFCS from Global to National Levels**
- **Provide an opportunity for climate services users and providers to learn from one another about the challenges and opportunities ahead, thus paving the way for effective implementation**
- **Share lessons and good practices on development and application of climate services**

<http://cg-ext-2012.wmo.int/gfcs-user-conference>

Dialogue for Climate Services Users and Providers

- **More than 60 cases provided by more than 40 countries**
- **Outcomes to be reflected in the detailed plans of action of the GFCS**
- **Provide perspectives from user community to be considered by the first Intergovernmental board of the GFCS**



Limited financial assistance for LDCs, SIDS, LLDC

Extraordinary Congress

(29 – 31 October 2012)

- One agenda item (GFCS) to discuss
 - Implementation Plan
 - Governance Mechanisms
 - Budget
- Expected Outcomes
 - Approval of the IP and Governance of GFCS

Extraordinary Congress

- Critical issues
 - Governance
 - Data exchange
 - Secretariat

Thank you



Global Framework for Climate Services (GFCS) Office



Global Framework for Climate Services

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Or join the talk:

<https://groups.google.com/a/wmo.int/group/gfcs?hl=en>