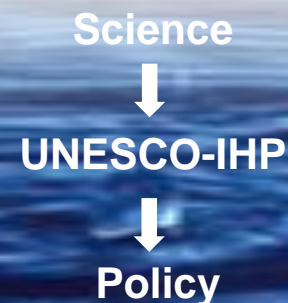


# Technical Session on Science and Technology to Advance DRR on Water Activating International Initiatives

Blanca Jiménez-Cisneros  
Director of the Division of Water Sciences and  
Secretary of the International Hydrological Programme (IHP), UNESCO



- **Nearly 80% of the world's population** is exposed to high levels of threat to water security

- IPCC's Fifth Assessment Report on Impacts, Adaptation and Vulnerability (AR5) 2014: **Water Security is at risk**

IPCC's Fifth Assessment Report  
WG-2 on Impacts, Adaptation  
and Vulnerability (AR5) 2014:  
**Risks and Challenges**

**IHP-VIII (2014-2021):**  
*Water security: Responses to  
local, regional and global  
challenges*

IHP contributing to  
SDGs mainly :



**GOAL 6**  
ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

**GOAL 11**  
MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

**GOAL 13**  
TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS\*

SUSTAINABLE DEVELOPMENT GOALS  
More at [sustainabledevelopment.un.org/13goalsproposal](http://sustainabledevelopment.un.org/13goalsproposal)

# IHP-VIII Responses: 6 Themes, 3 Axes 2014-2021

*Improve knowledge and innovation to address water security challenges*



## INTERNATIONAL FLOOD INITIATIVE

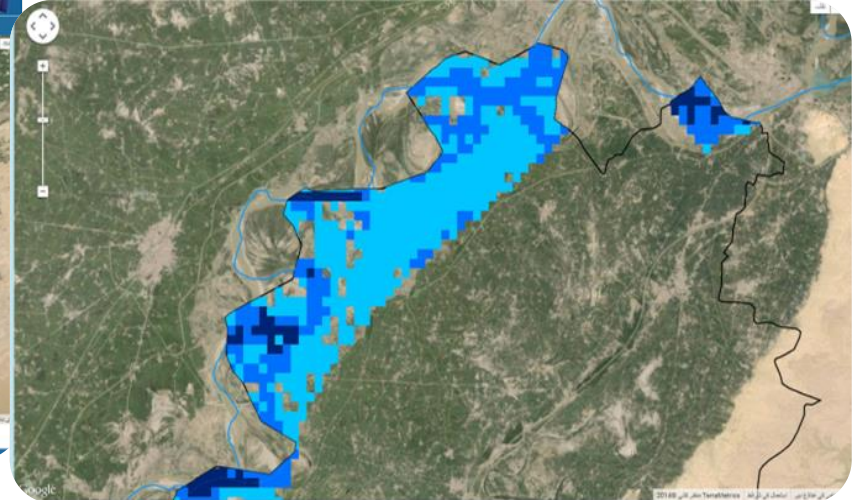
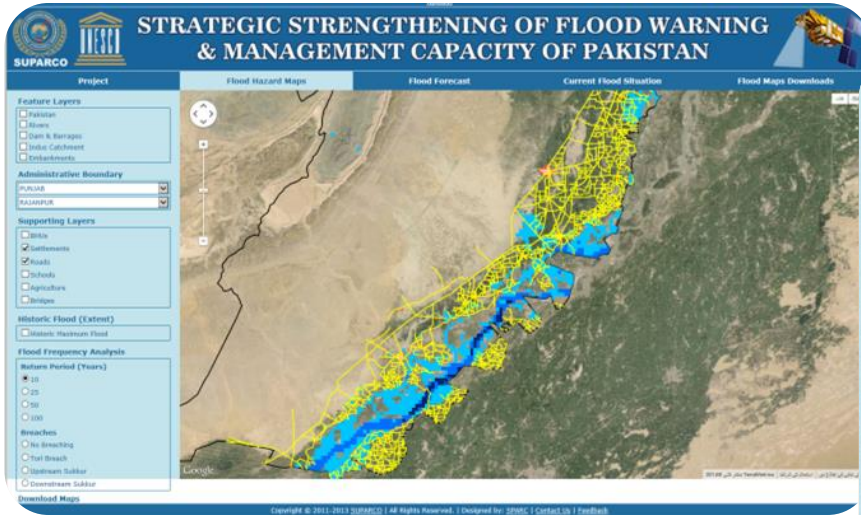
UNESCO • WMO • UNU • ISDR

- Develops capacity building to better understand and respond to floods hazards while taking advantage of their benefits
- Focus on research, information networking, education and training to empower communities



# Case Studies :

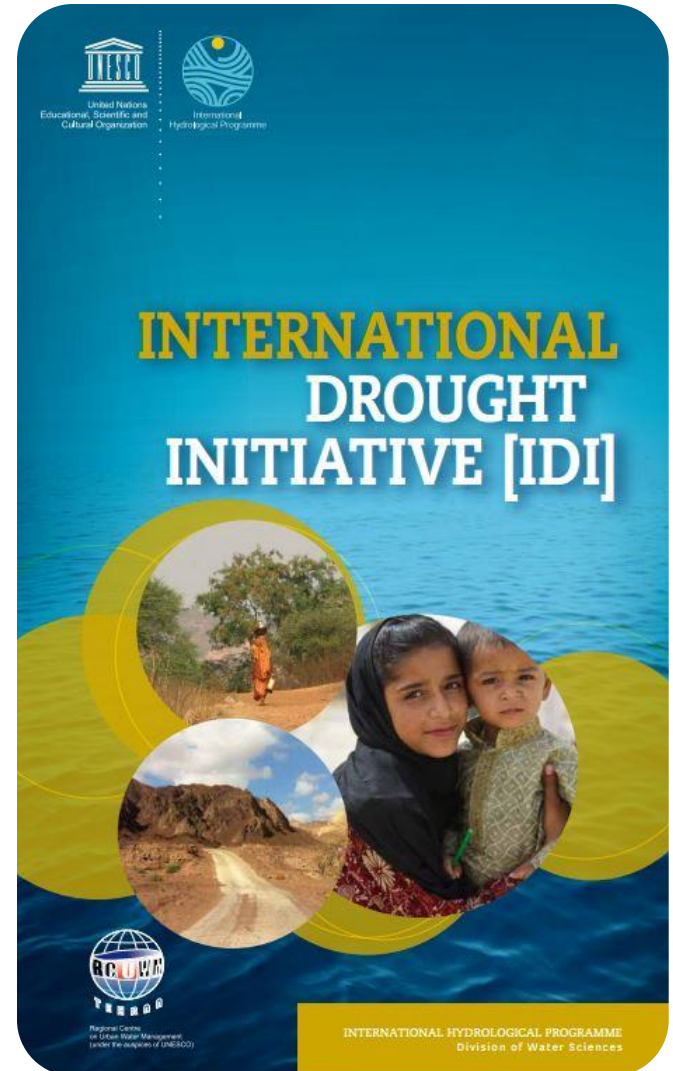
## Pakistan Flood Project / Namibia and Benin Project



- Flood Hazard Mapping covering lower Indus Basin in Pakistan:
- Maps with layers considering Settlements, Roads, Schools, Agriculture etc.

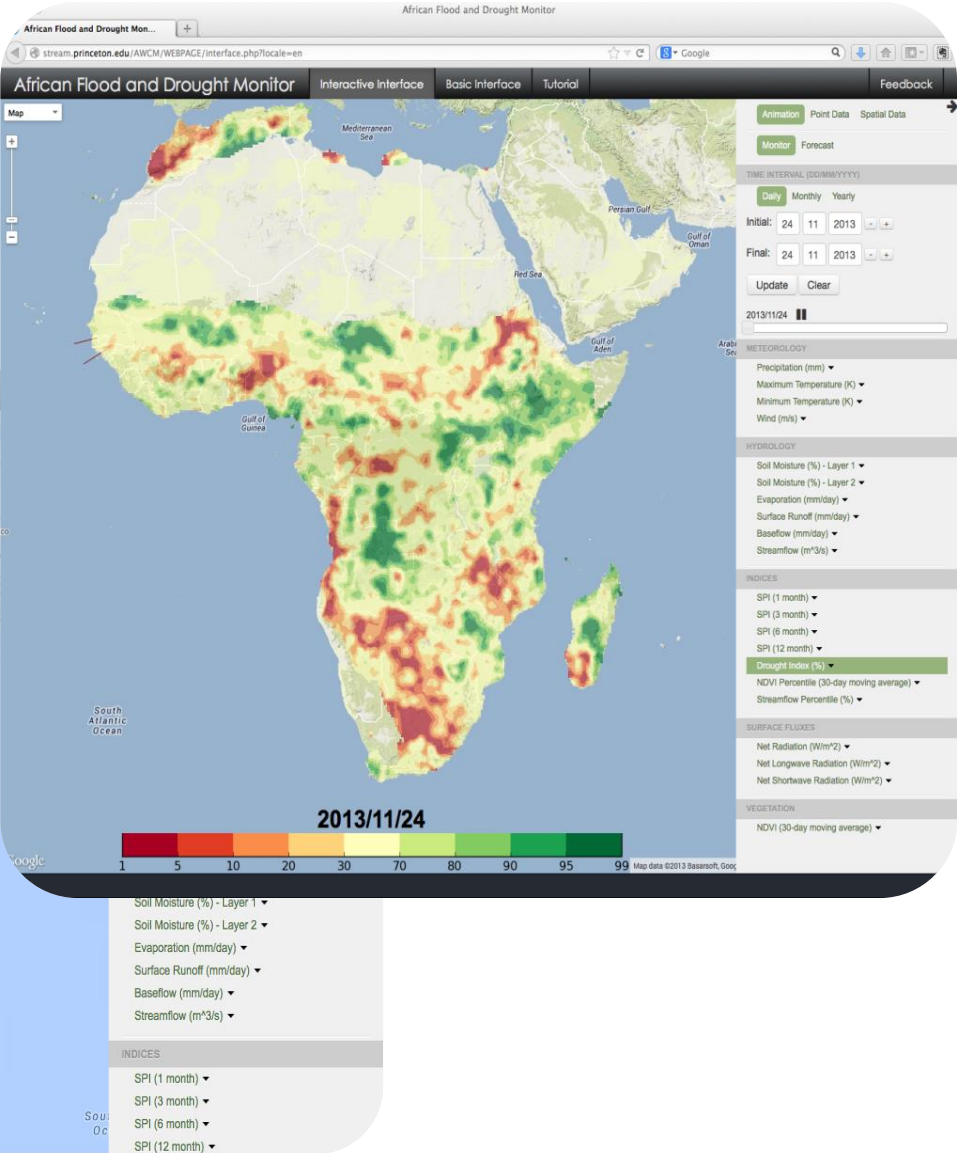
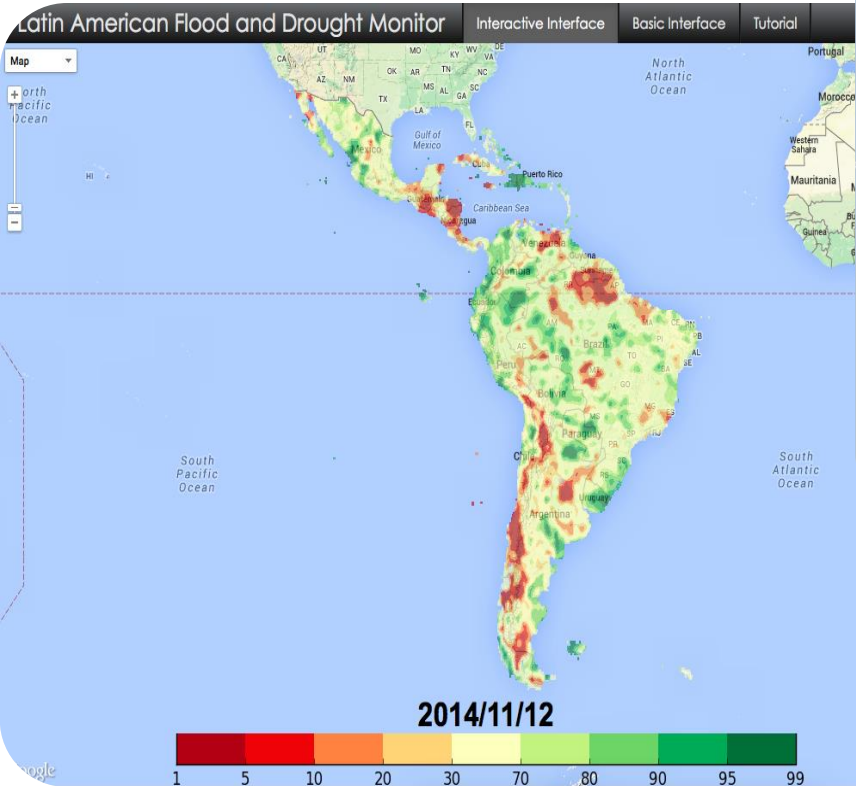
Platform of global networking and knowledge sharing between international entities:

- Surveys drought management;
- collects information;
- helps affected countries;
- develops capacity building;
- strengthens public participation and,
- promotes regional and international cooperation on drought issues.

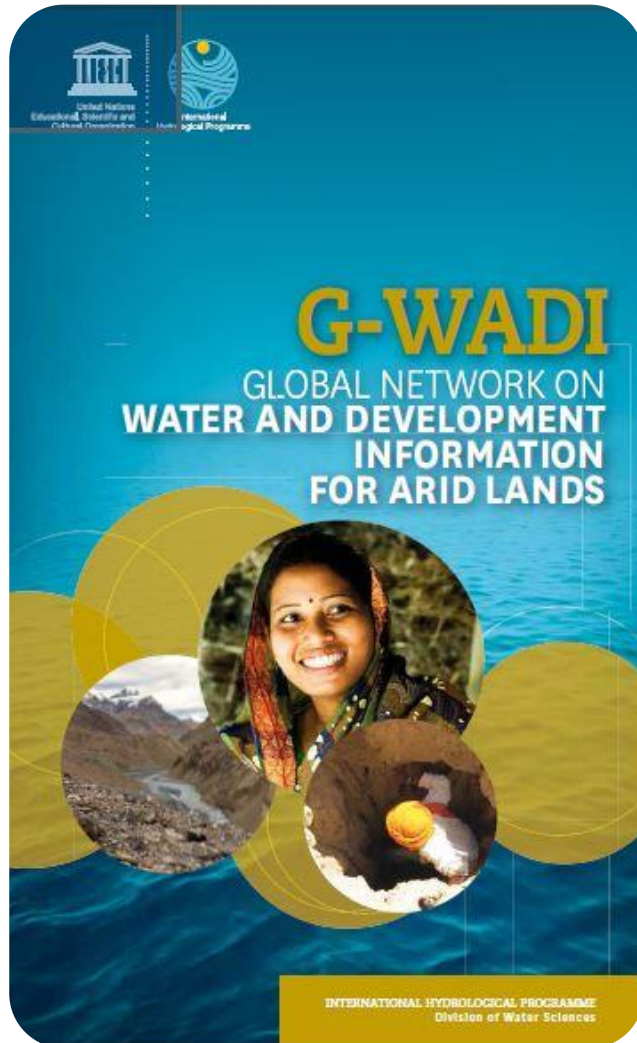


# Case Studies : Africa and LAC Droughts Monitors

- Strengthen the capacity of African and LAC countries for near real-time monitoring and seasonal forecasting; to raise awareness of the impact of drought on vulnerable and disadvantaged groups.

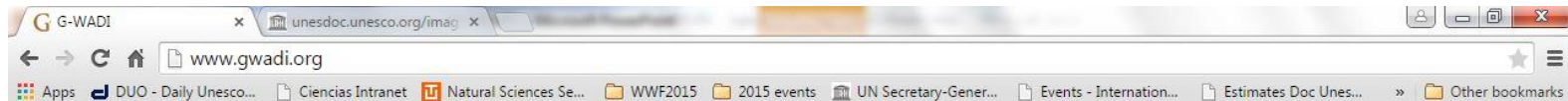


# Global Network on Water and Development Information for Arid Lands: G-WADI



- ◆ Improved understanding of the characteristics of hydrological systems and water management needs in arid areas
- ◆ Capacity building of individuals and institutions
- ◆ Broad dissemination of information to the user community and the public
- ◆ Exchange of experience
- ◆ Promoting integrated basin management and the development and use of appropriate decision support tools





## Quick Links

REAL TIME  
PRECIPITATION  
ESTIMATES

HYDROLOGIC  
MONITORING &  
FORECASTING

FREQUENCY  
ANALYSES

CHEMICAL  
& ISOTOPIC  
TRACERS

WATER  
HARVESTING

REGIONAL  
CENTERS

## News & Recent Events



### Technical training session on PERSIANN held during Thai Hydrologist Association's (THA) 2015 conference

2015-01-29

About 50 water scientists and engineers attended a technical training session on "Satellite-based Rainfall (...)



### Expert Symposium "Coping with Droughts" and Flood and Drought Monitor for Latin America and the Caribbean workshop in Santiago de Chile

2014-11-19

As part of the GWADI Network and in the setting of the Project "Managing Water Resources in Arid and semi-Arid Regions of Latin...



### ICIWARM Deputy Director strengthens ties with Oman Water resources authorities and supports the Arab GWADI regional network.

2014-10-18

ICIWARM Deputy Director Dr. Will Logan participated in the Water Sciences and Technology Association's (WSTA) 11th Gulf Water...



### Hydrologic Modeling and Water Management Workshops in Nairobi (Kenya) and the Mara Basin.

2014-06-30

ICIWARM members Juan Valdes and Aleix Serrat-Capdevila from the University of Arizona are leading a NASA SERVIR funded Project in East...

[See all news & announcements >>](#)

## News & Recent Events



### G-WADI highlighted at the 21st session of the IHP Intergovernmental Council

2014-06-18

G-WADI and its programs played a prominent role at the 21st session of the International Hydrological Programme's (IHP)...



2014-04-20

Members of the GWADI Network such as the International Hydrologic Programme (IHP), the International Center for Integrated Water...



### G-WADI PERSIANN-CCS GeoServer Captures the Immensity of Total Precipitation of Super Typhoon Haiyan

2014-01-21

Super Typhoon Haiyan was an extremely intense and costly weather event in terms of damages and lives lost and much has already been said...

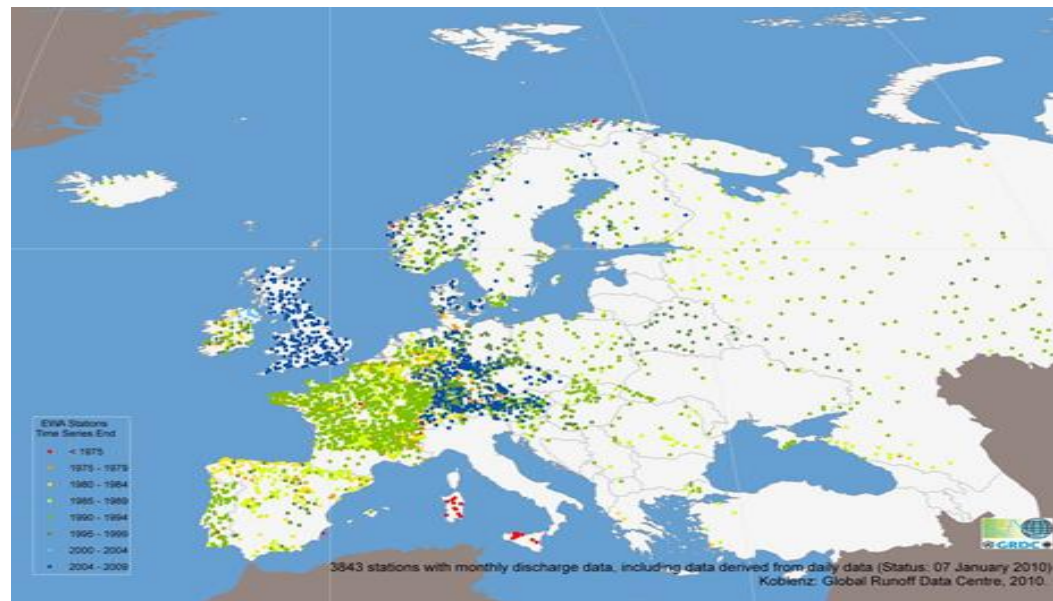
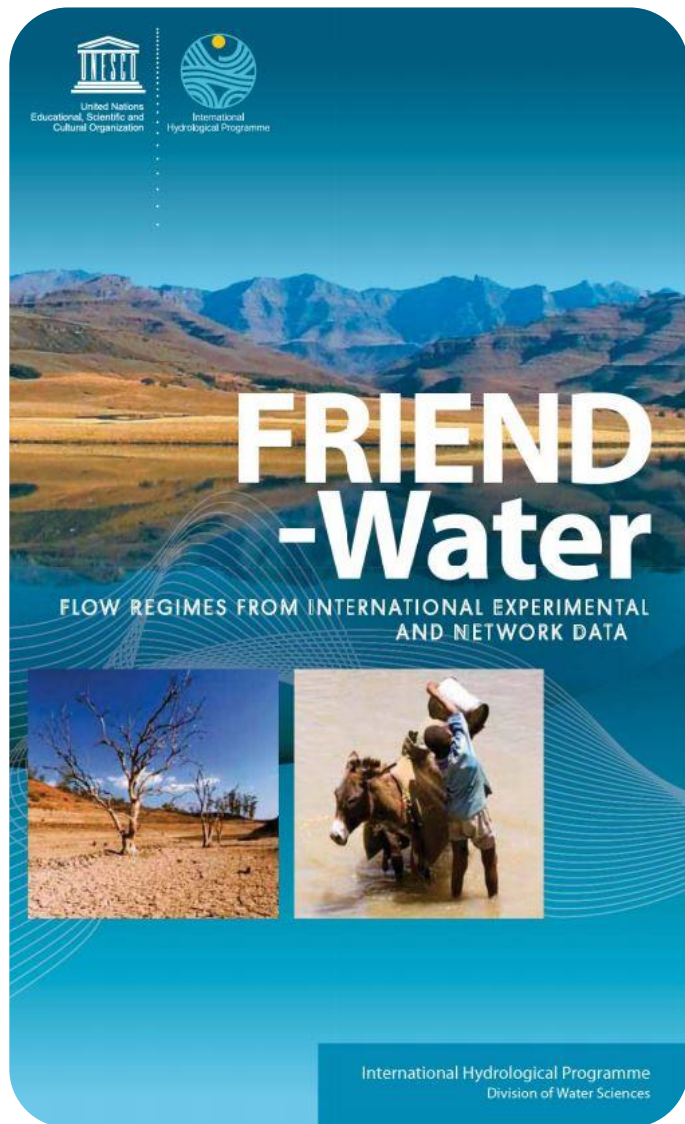


### Representatives from the G-WADI Team Supports Water Cooperation in the Nile Basin

2013-12-20

Representatives from the International Center for Integrated Water Resources Management (ICIWARM)—the Technical Secretariat for G-...

# FRIEND: Flow Regimes from International Experimental and Network Data - Water



A network of scientists and water managers:

- Regional water resources
- Water-related disasters
- Global change; water cycle
- Water education and capacity building

# Snow and Ice Networks



Regional Workshop: Assessment of Snow-Glacier and Water Resources in Asia  
28-30 November 2006, Almaty, Kazakhstan



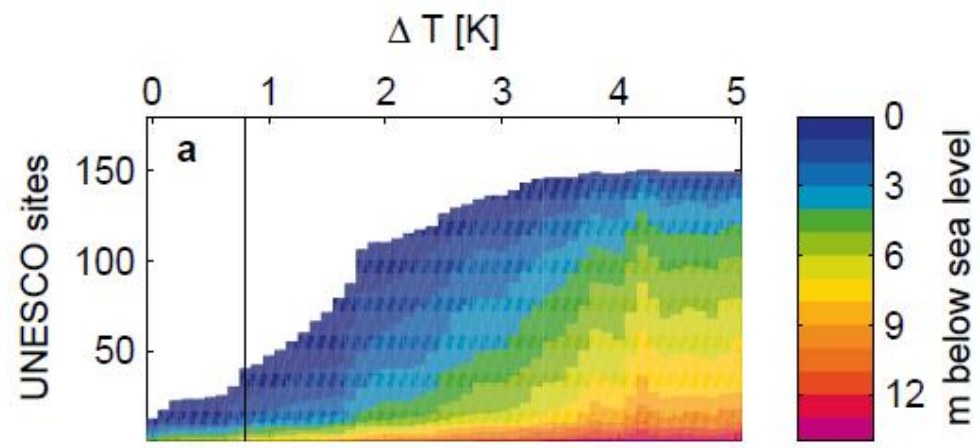
Working Group on Snow, Ice and Glaciers (GTNH)-LAC

High Level Panel session: Climate Change Impacts on Water Resources and Adaptation policies in Mountainous regions  
13-November 2013, 37<sup>th</sup> General Conference

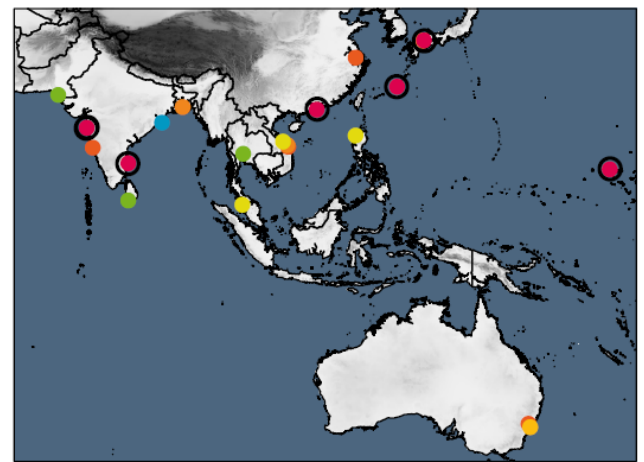
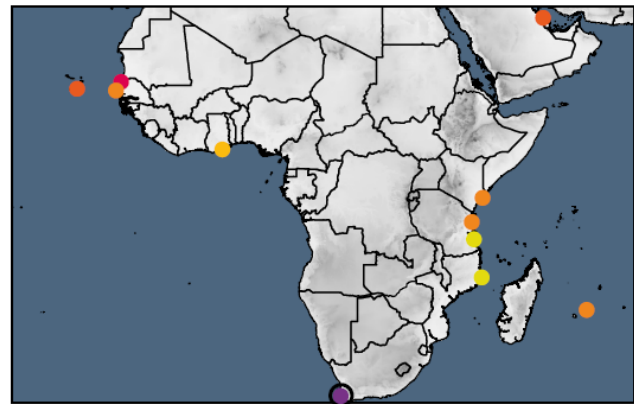
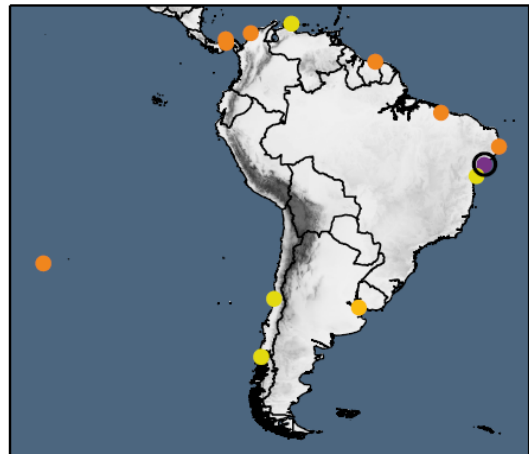
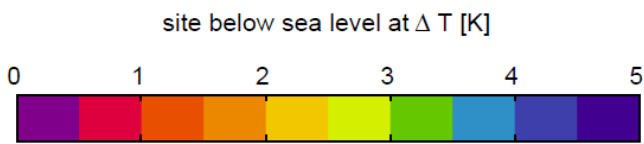
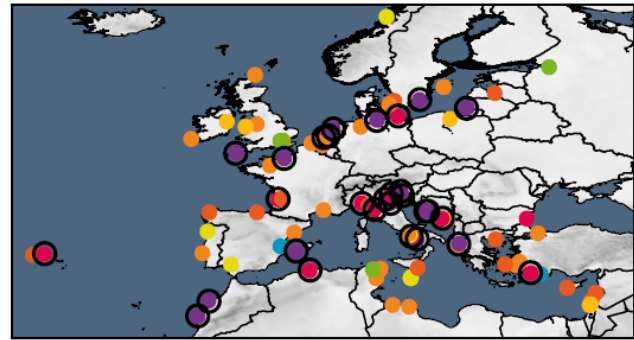
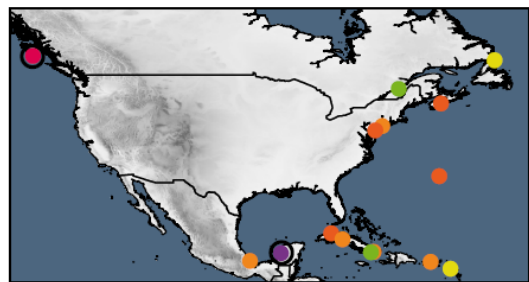


# UNESCO Cultural Heritage Sites

1 – 1,5% Land  
5 – 10% Population



*Marzeion and Levermann (2014)*



# UNESCO- IHP main activities during COP21

**Exhibition:**  
**“Mountains: early  
warning systems  
for climate  
change”**  
2 November-20  
December

**Launching of the  
commemorative Book  
50 years of UNESCO  
Water Programmes**  
2 December, 2015

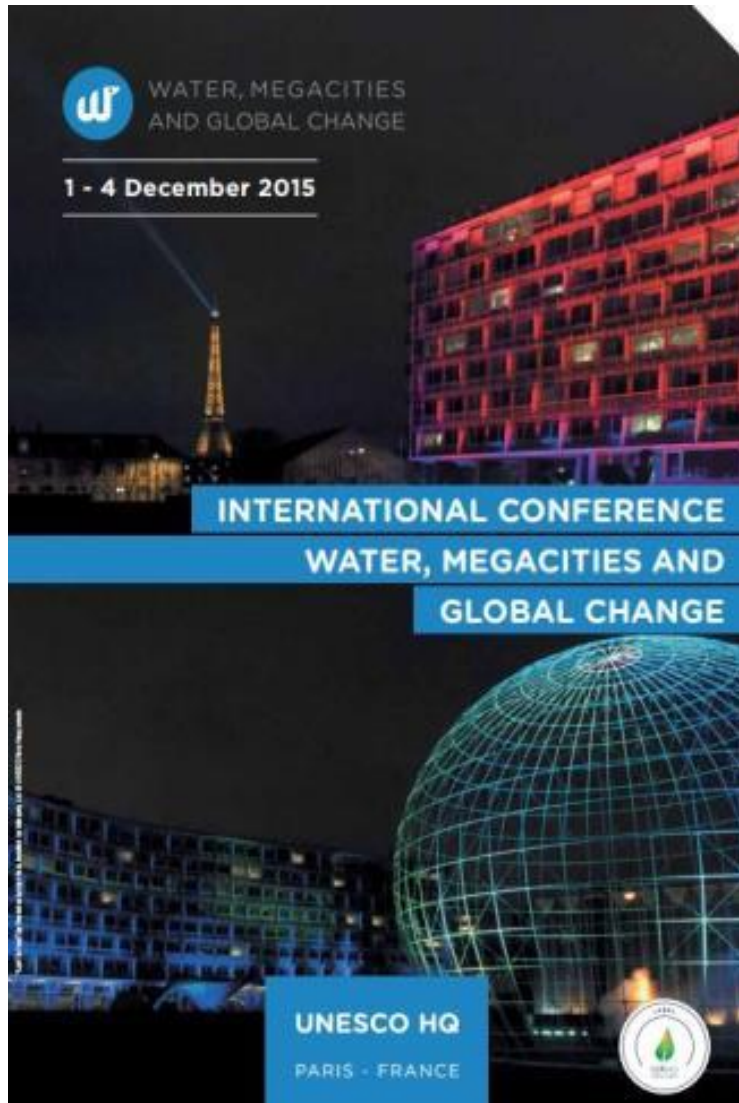
**Water and Climate Day:**  
**7 activities**  
**UNESCO’s Pavilion,**  
2 December, COP21



**Håll-Bar: “Implementing  
the Paris Agenda; Water  
as the summoning  
power?”**  
8 December 2015

**Outreach Event:**  
**“Raising awareness on  
Climate Change: Key  
findings of the IPCC  
5th Assessment Report  
(AR5)”**  
7 December, 2015

**UN-WATER Side  
Event: “The pivotal  
role of water in  
climate change  
adaptation and  
mitigation”**  
7 December 2015,  
COP21



- Organized by UNESCO-IHP in partnership with ARCEAU-IdF, the association of water professionals, researchers, decision-makers and elected officials from the Paris metropolitan area.
  - 7 Themes around vulnerability, resilience and climate change
  - Theoretical aspects, case studies and policies (130 authors from 38 countries)
  - Scientist, policy makers, public and private water utilities, local and regional governments, NGOs, etc
  - An initiative with the civil society, under the leadership of IHP, for the creation of an international network to foster cooperation between megacities will be launched.
- A declaration has been prepared that will be conveyed to the main stakeholders of the COP21.

# Project Achievements - Publications



## WWAP

## Cambridge Press



Thank you!

[www.unesco.org/water](http://www.unesco.org/water)