



Brainstorming for Regional Processes World Water Forum (WWF) 2024

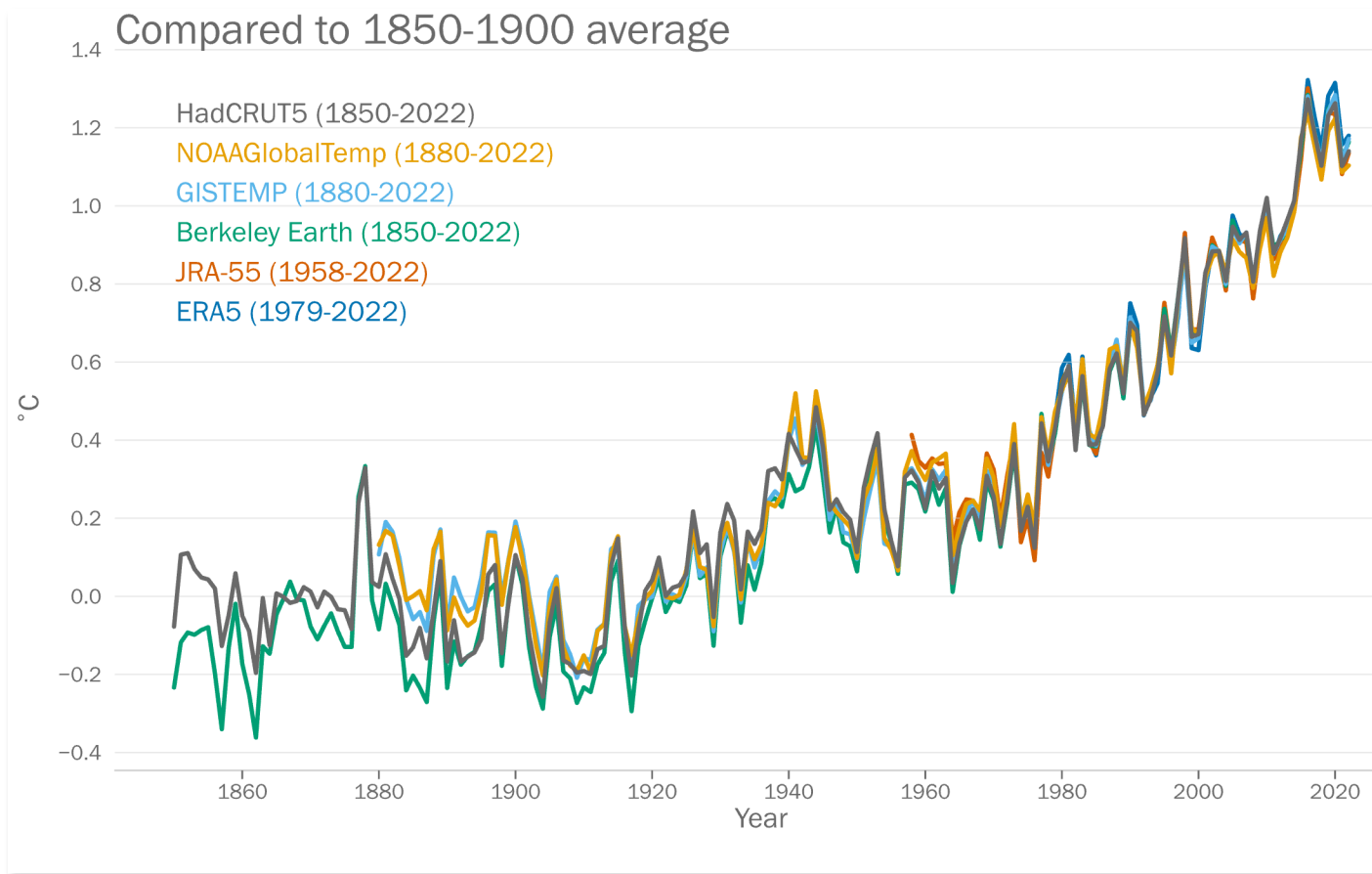


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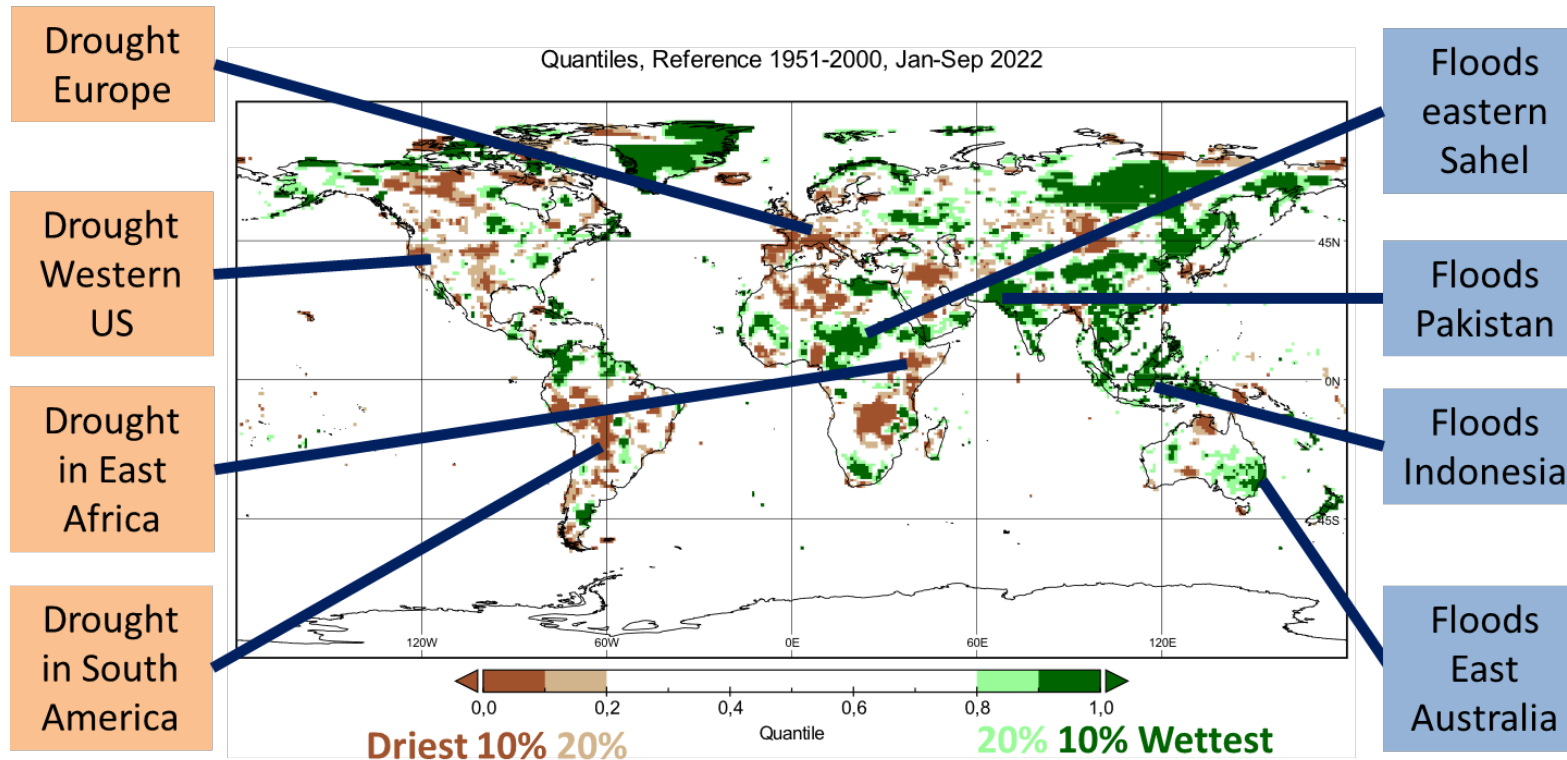


Global mean temperature



- **Warming trend continues**, despite three consecutive years of La Nina
- Past eight years (2015-2022) set to be **warmest eight consecutive years on record**.
- The year **2022** will be most likely **5th or 6th warmest year on record** despite La Nina.

Global rainfall anomaly in 2022



- **Drought and floods**, are the same facets of climate change, both **will increase in severity**.
- This trend **continues every year**.

What this means to water

Global Water Hotspots

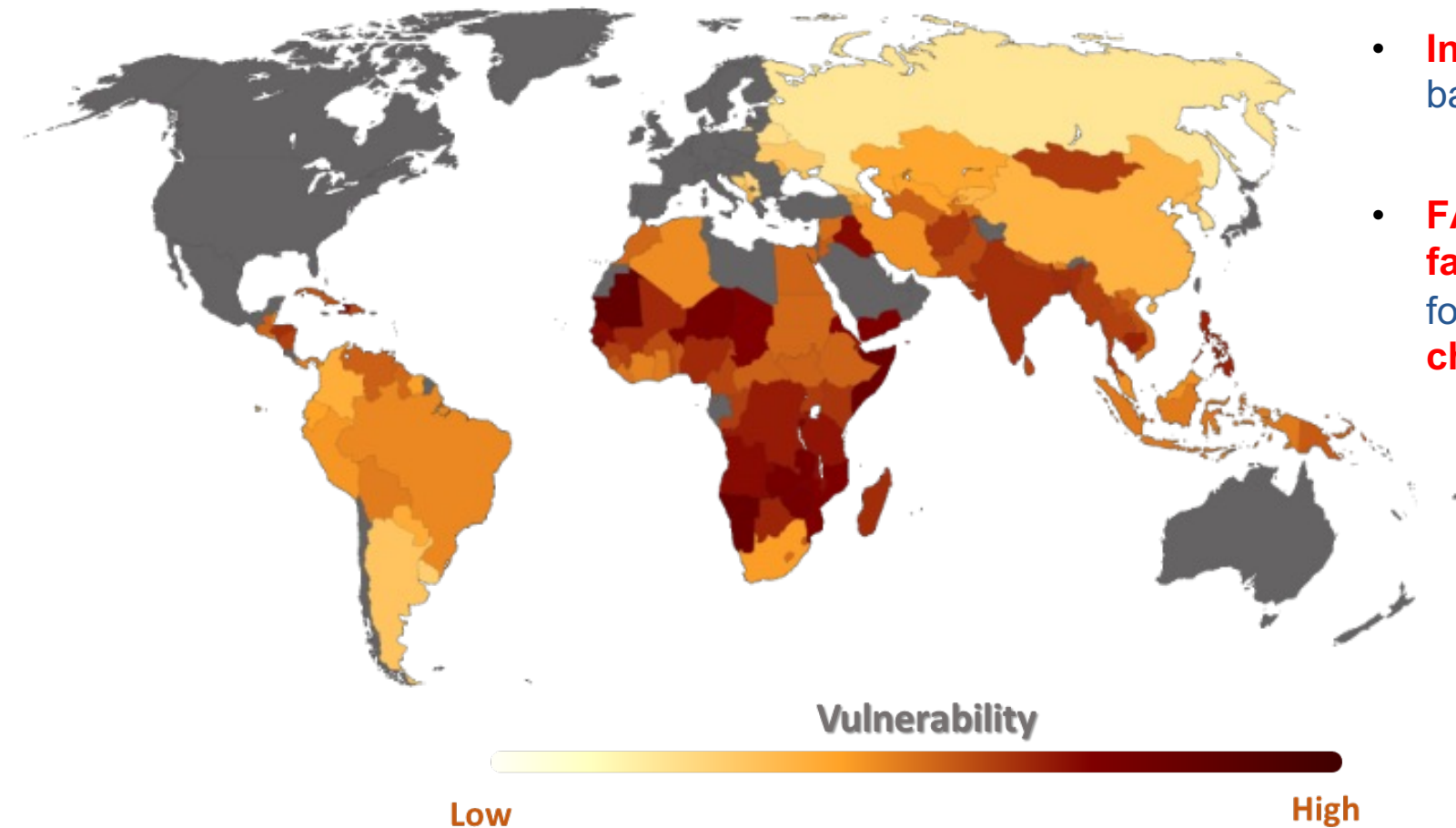


- **Climate change puts pressure** on the already scarce water resources, resulting in **water hotspots**.

What this means to food security

Pressure on Food Security

Mid-century period (2050s)



- **Increased vulnerability** on the World's food basket.
- **FAO:** more than **500 million small holder farmers**, which produce 80% of the World's food source, is the **most vulnerable to climate change**.

Ideas for Topics in Regional Process

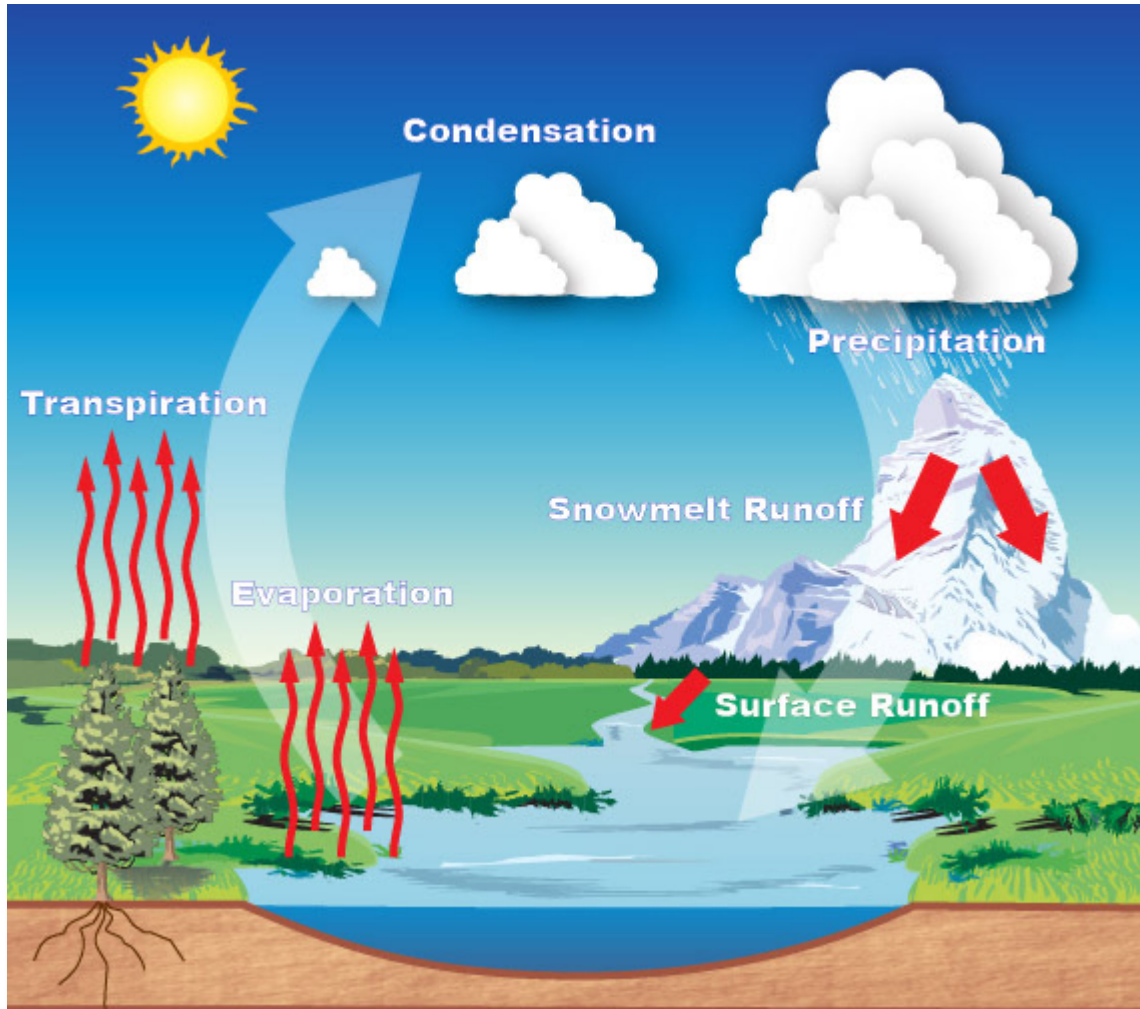


- ✓ **Regional water hotspots:** foresight on future water challenges
- ✓ **Ocean:** not as separator but connector
- ✓ Water in the region: **on climate (change), ocean and water nexus**
- ✓ **Better use of data:** where are the regional data and how to best use data **for shared prosperity**?
- ✓ *[More elaboration on data issue below ...]*
- ✓ Other inputs from the forum ...

Elaboration on the necessity of data



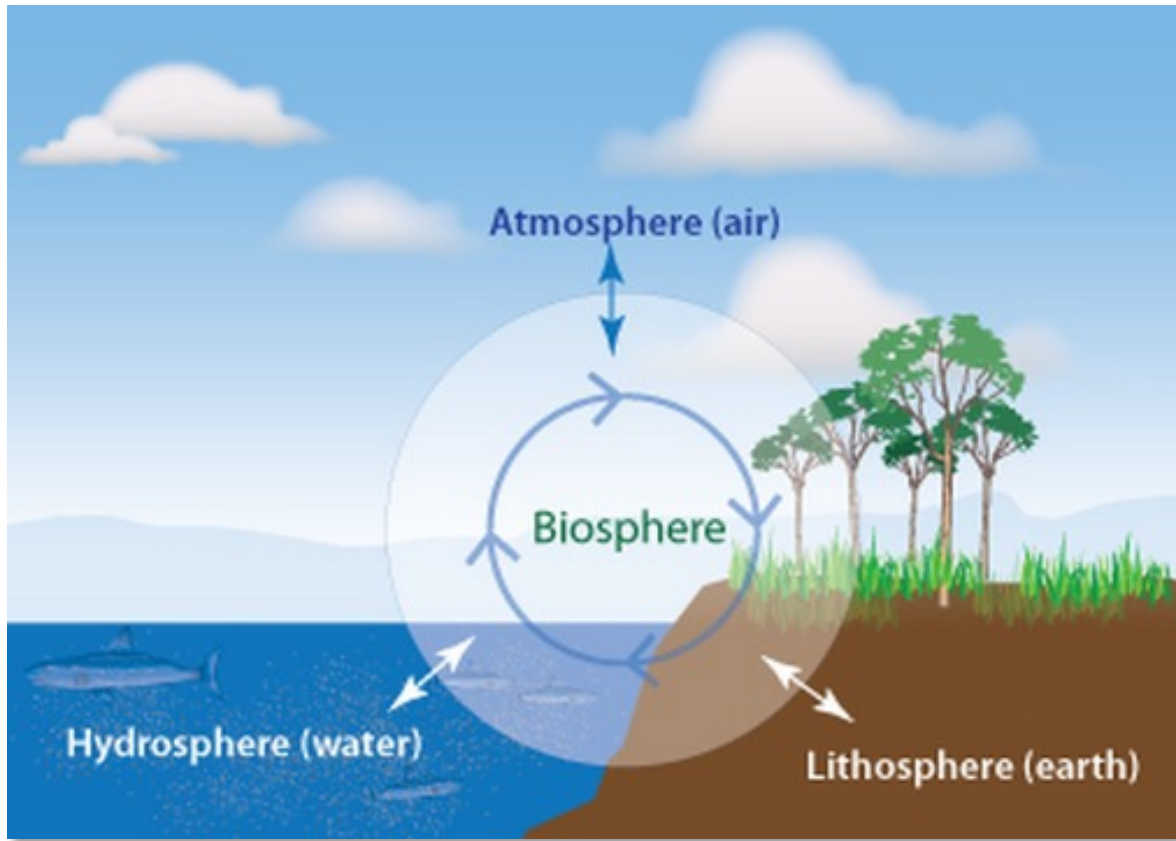
Hydrological cycle



Interaction of water with the atmosphere, land and ocean.

Elaboration on the necessity of data

Four interconnected geo-spheres



Water for shared prosperity: means we need to **improve quality of life**.

Life (bio): supported by **water** (hydro), **earth** (litho) **and the air** (atmo).

This underlines the **necessity to understand the interactions of the spheres: data (and science) are required**.

Elaboration on the necessity of data

Example of data exchange and utilization:



WMO UNIFIED DATA POLICY



Exchange of Earth system data vital to strengthen observing system and **to meet increased demand for services** in era of climate change.

Types of data exchanged: **weather, water, climate and other environmental data.**

Better environmental services with **massive socioeconomic benefits** as a result.

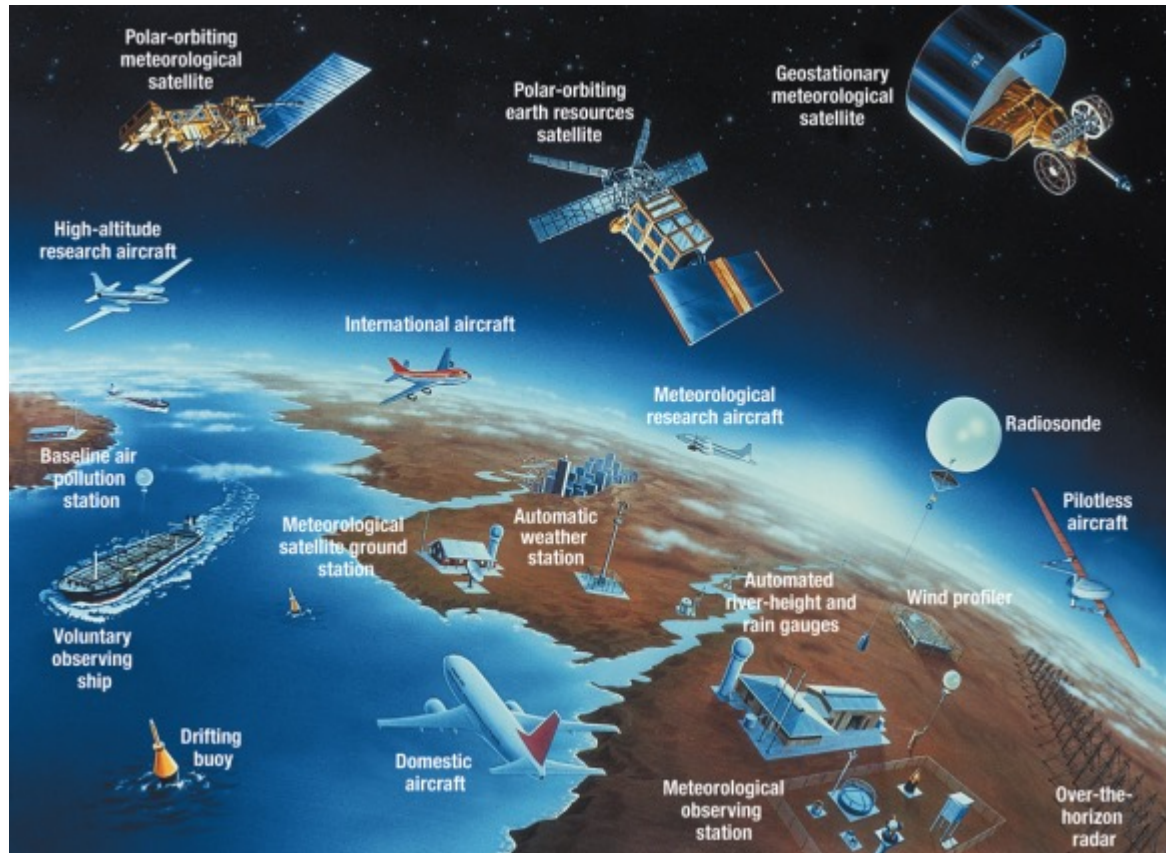
Elaboration on the necessity of data



Example of data exchange and utilization:



WMO INTEGRATED GLOBAL OBSERVING SYSTEM



Encompasses :

- **Global Observing System (GOS):** Weather and climate observation.
- **Global Atmosphere Watch (GAW):** Atmospheric (chemical) composition.
- **WMO Hydrological Observing System (WHOS):** hydrological observation.
- **Global Cryosphere Watch (GCW):** assessment of changing cryosphere.
- **Global Ocean Observing System (GOOS):** monitoring state of the oceans.

Ideas for Topics in Regional Process



- ✓ **Regional water hotspots:** foresight on future water challenges
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- ✓ **Better use of data:** where are the regional data and how to best use data **for shared prosperity?**
- ✓ **Integrated global observation and data exchange** as key success for **achieving sustainable water resource management** and **water for shared prosperity**. How WWF / WWC can also encourage and promote this.
- ✓ Other inputs from the forum ...

1) Asia-Pacific Region

Overview:

- Accounts for 40% of global land area and 60% of the world population
- Largest, most populous and most diverse region in the world by any measure including, political, economic, social, environmental, and geographic aspects

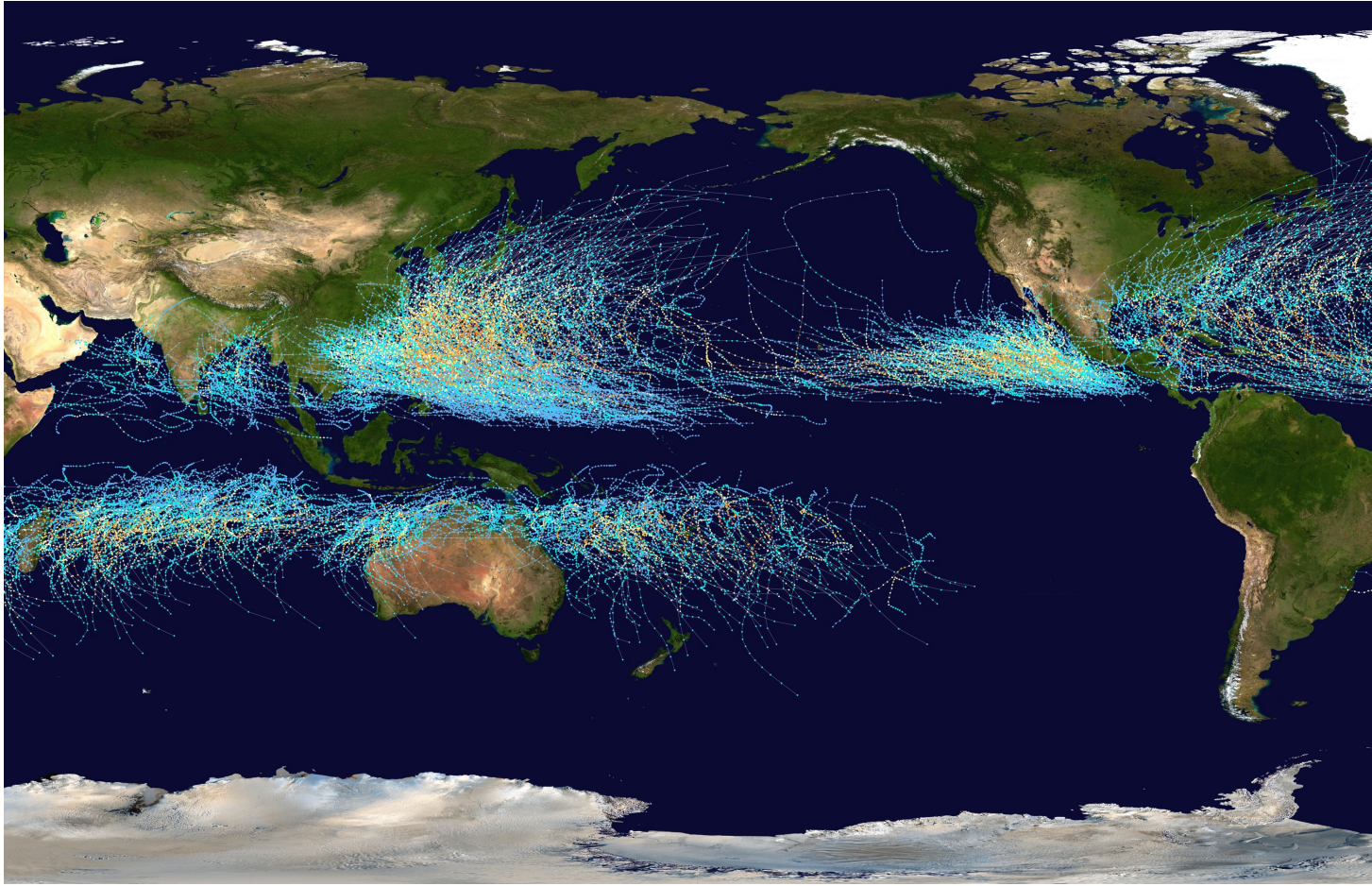
Challenges:

- Increase demand for **Disaster prevention methodologies and risk management, water for drinking, hygiene and food production, and increase wastewater discharge, severely impacting the environment and national resources**
- 80% of Asia's **rivers are in poor health**, jeopardizing economies and the quality of life
- Countries with varying water endowments should balance the requirements of **agriculture, industry, energy and the environment while considering climate change uncertainties**





Thank you



TROPICAL CYCLONE SEROJA 4 APRIL 2021

