




PLANNING ORA

- ORA can be a key player in the integration promoted by the ACTO
- Strengthen regional integration and cooperation in basin management
- Monitor the elements that could lead to the Point of No Return
- Support decision-making and the development of sustainable public policies
- Produce and disseminate qualified scientific content: media and social networks, events and publications



Risk of **Amazon Tipping Point**

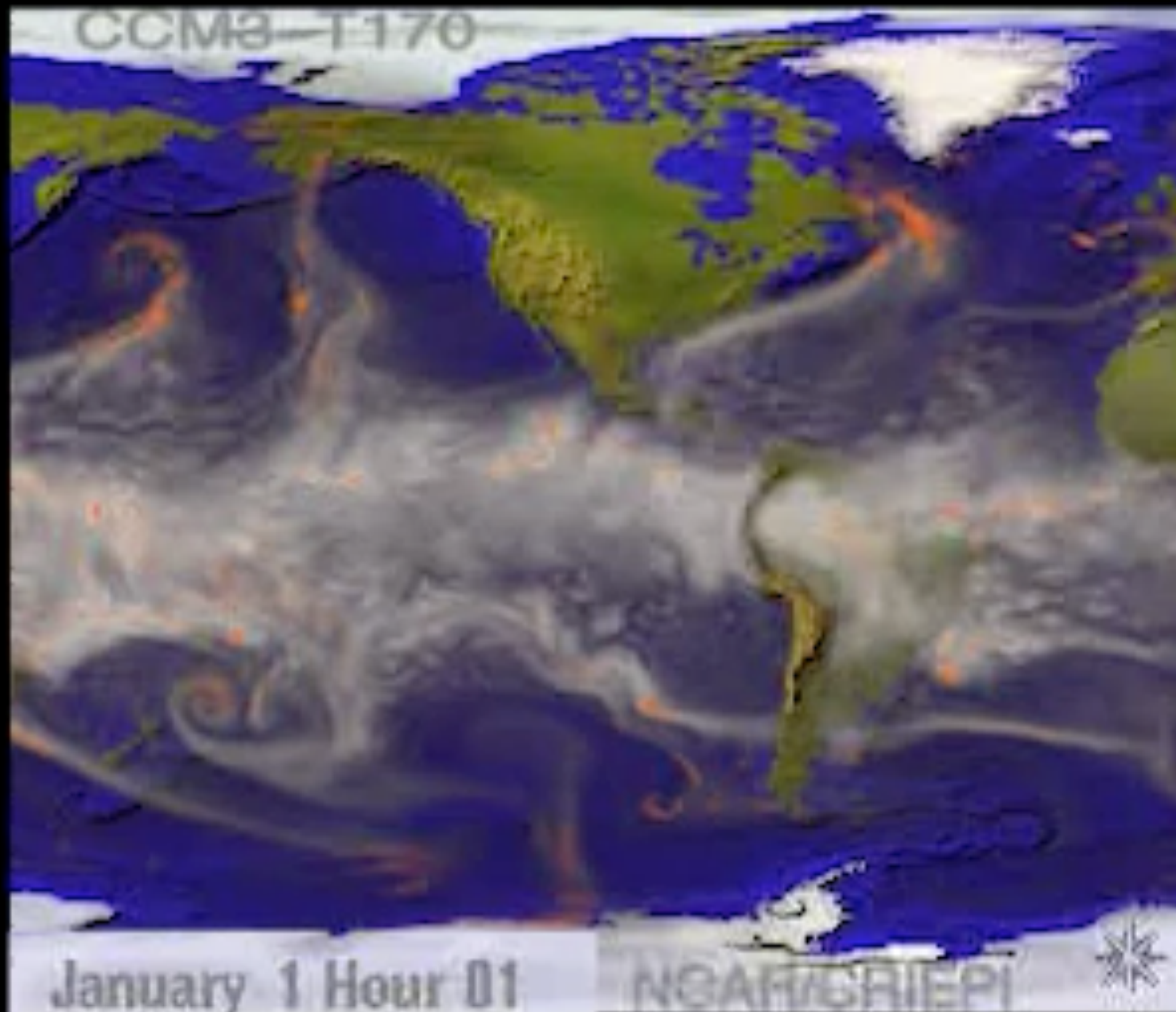
Closer than we thought?

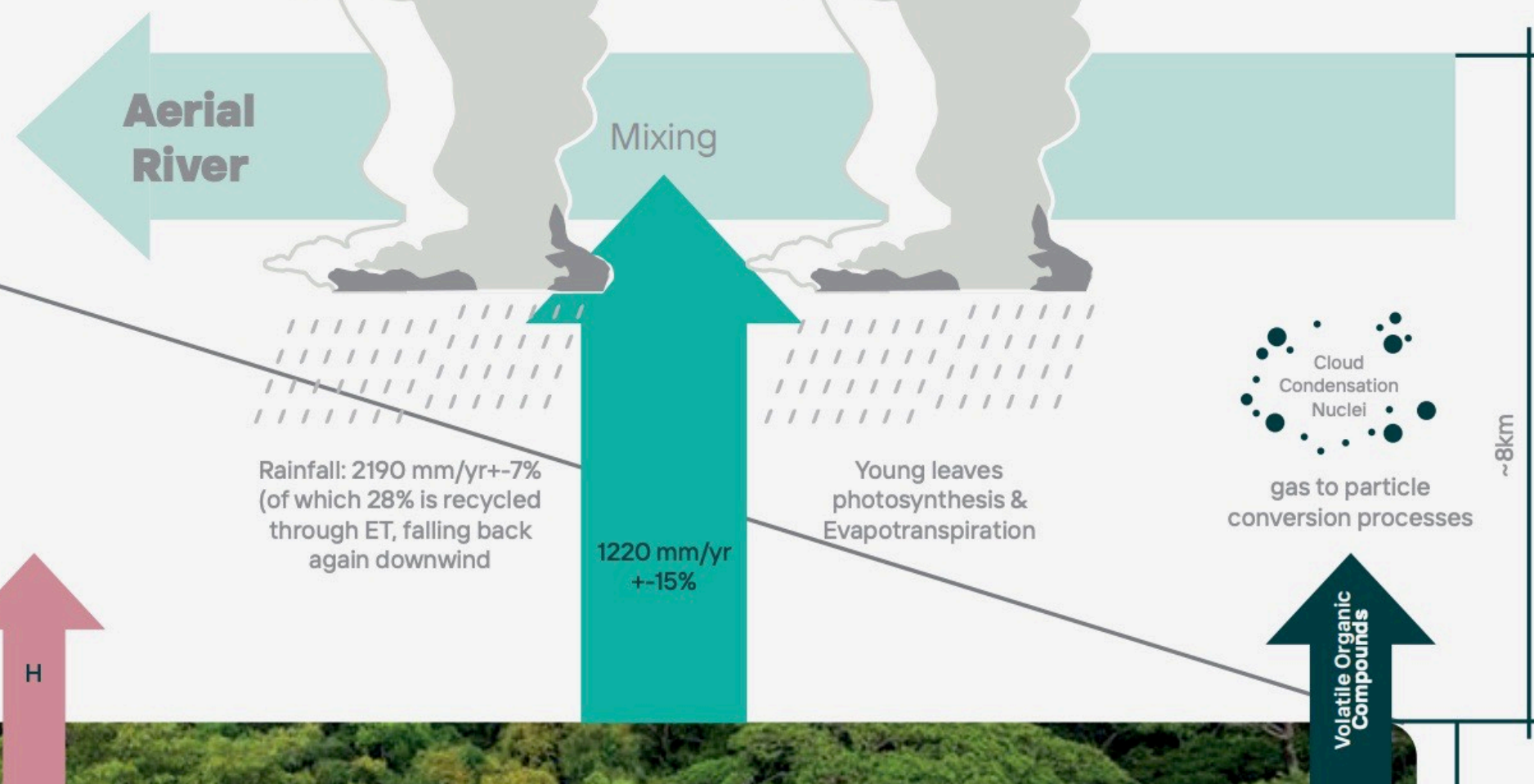
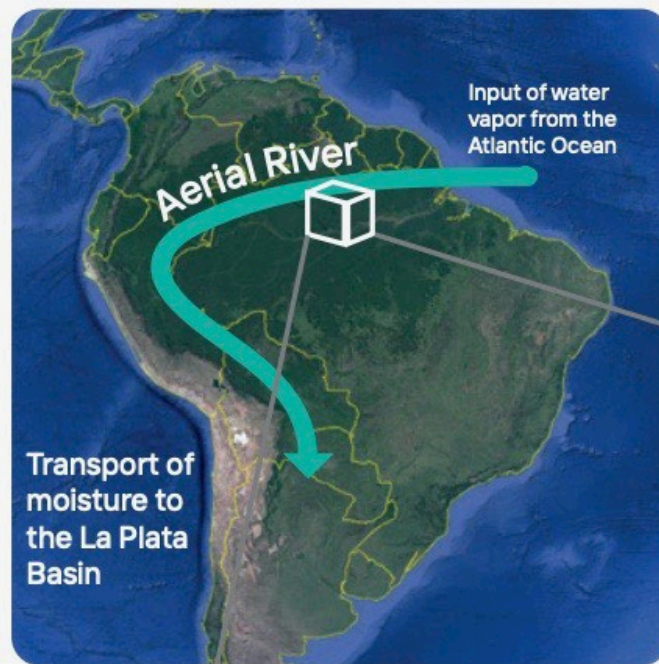
CLIMATE & ECOLOGICAL RISKS

1.5-2°C
+ **20-25%**
deforestation

TODAY
1.2°C + **17%**

T. E. Lovejoy, C. Nobre, Amazon Tipping Point. Sci. Adv. 4, eaat2340 (2018)

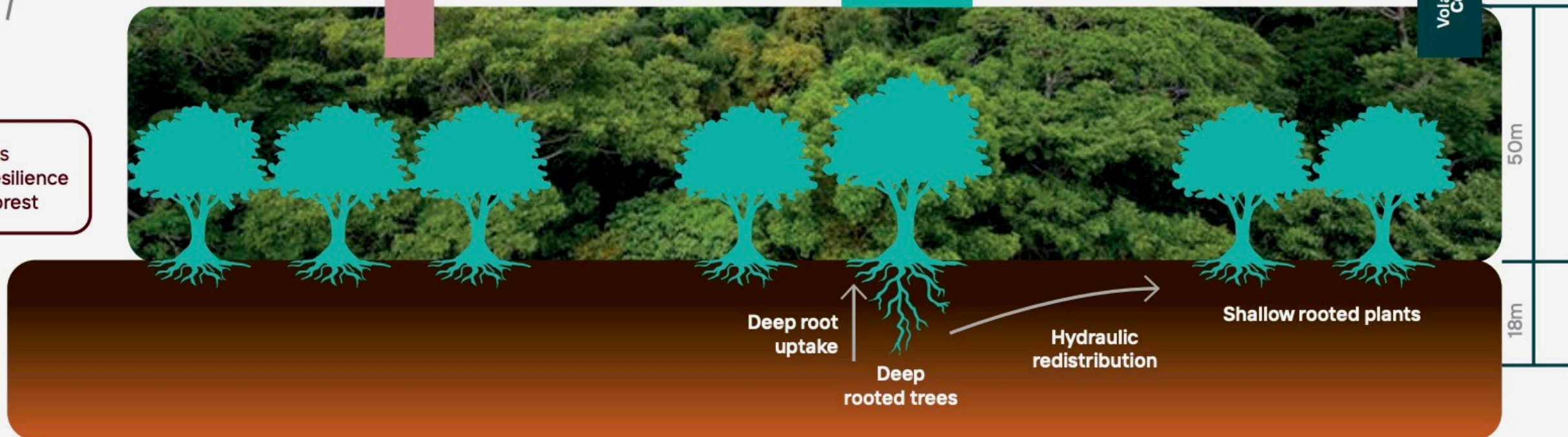




Sensible heat flux (H)

H

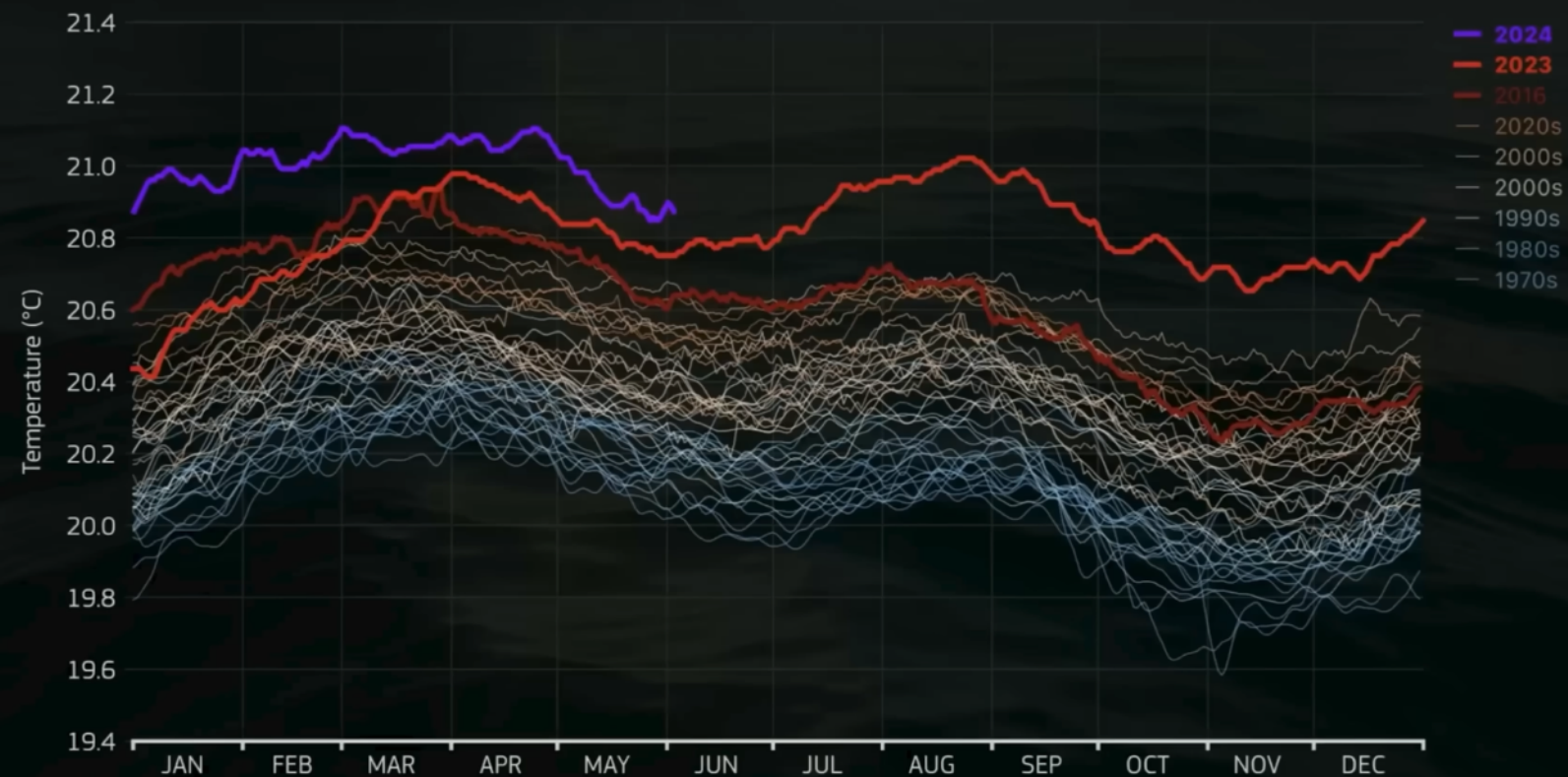
Edge effects decrease resilience of the rainforest



Interaction Ocean Biosphere Atmosphere

Daily Sea Surface Temperature · 60°S–60°N

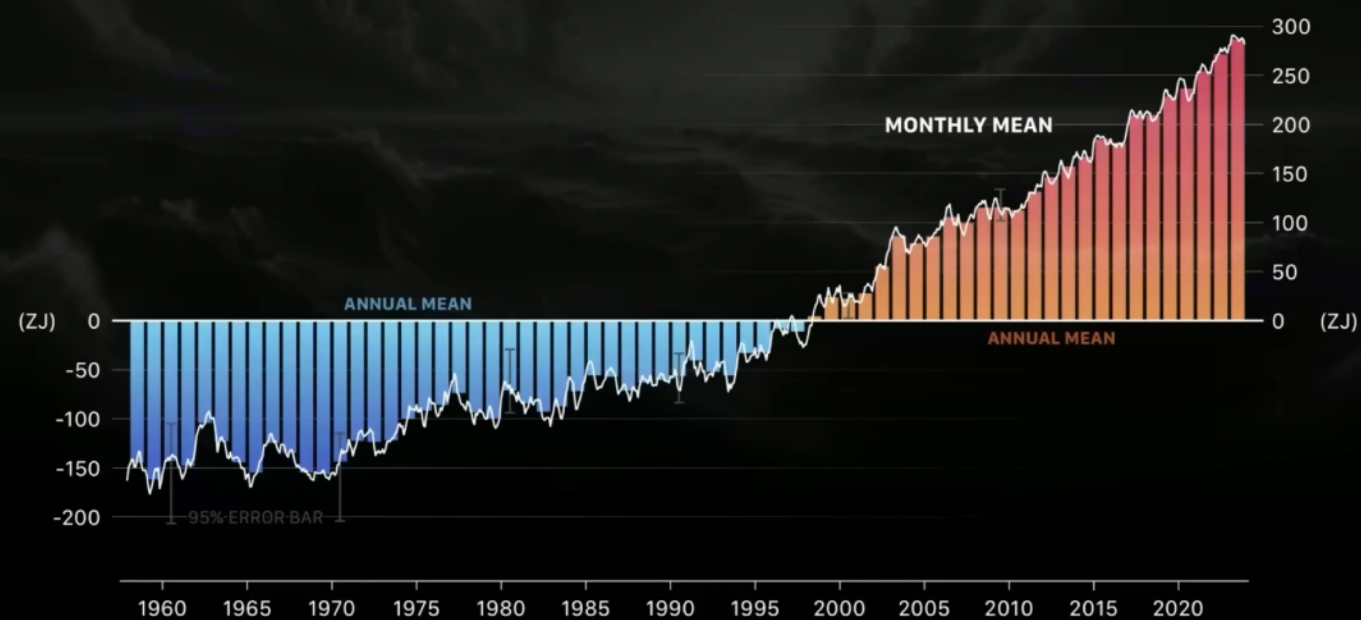
Data: ERA5 1979-2024



The Tipping Points of Climate Change - and Where We Stand / Johan Rockström / TED
Copernicus Climate Change Service (C3S), (2024), European State of the Climate 2023, <https://climate.copernicus.eu/esotc/2023>

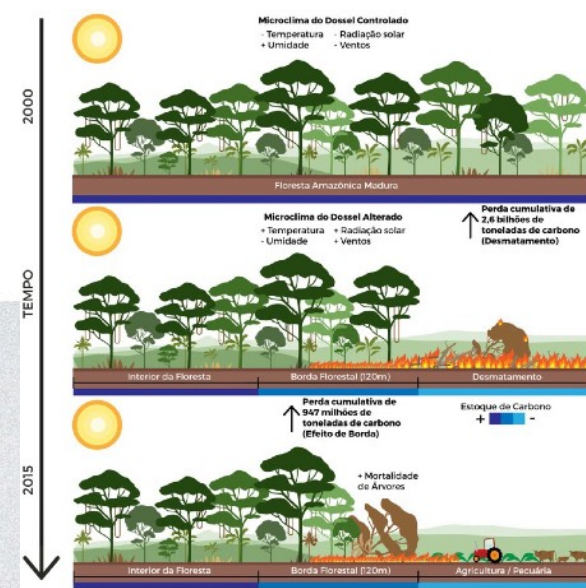
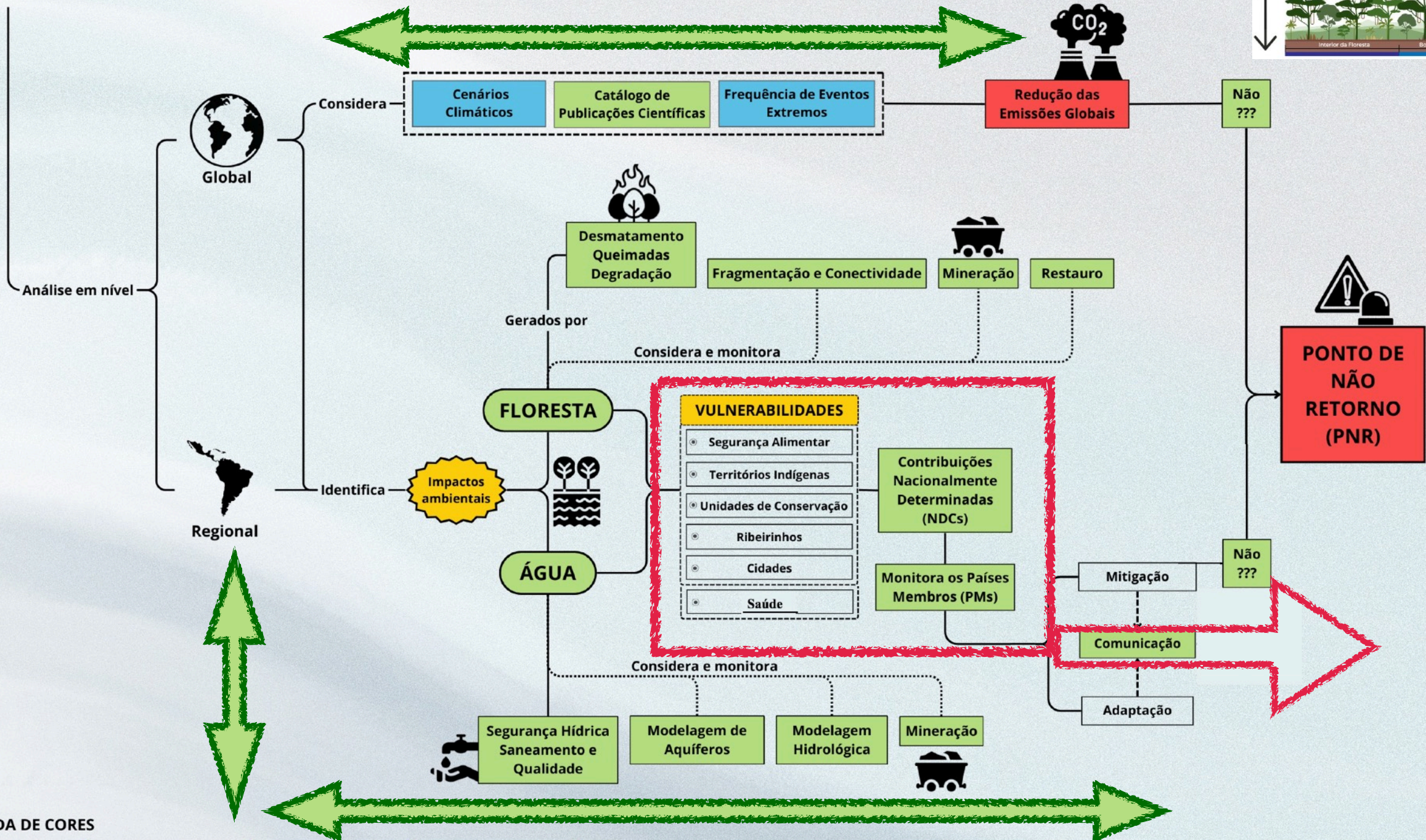
Global Ocean Heat Content Anomaly in the upper 2,000 meters, 1958-2023

1 Zetta Joule (ZJ) = 10^{21} Joules · 1981-2010 Baseline



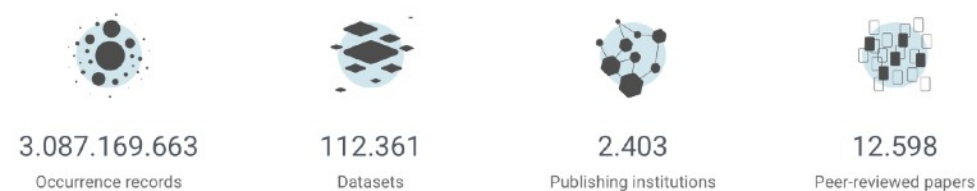
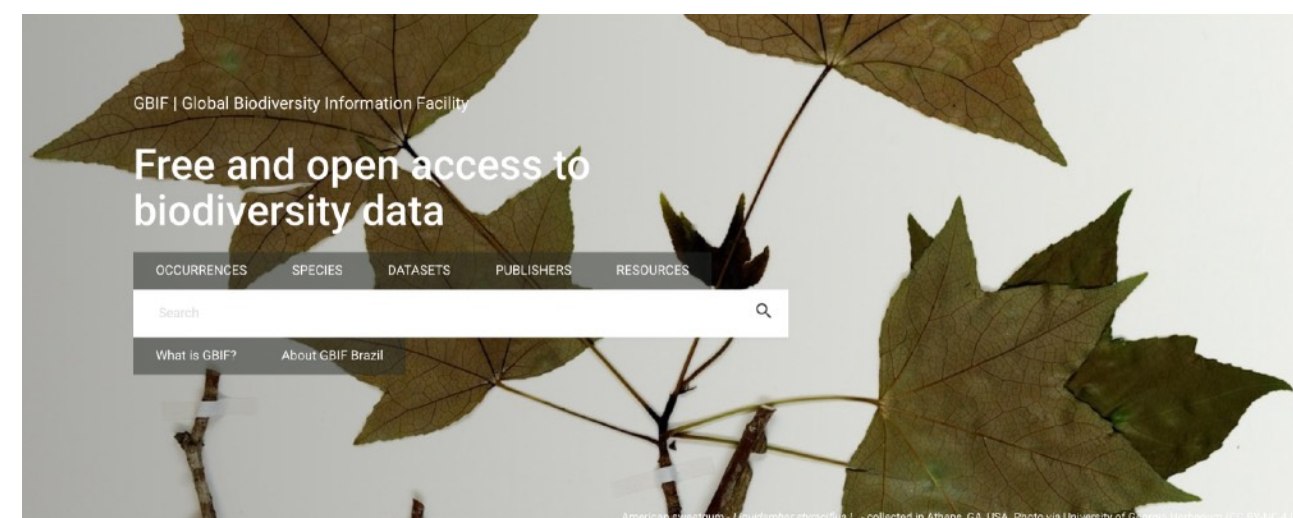
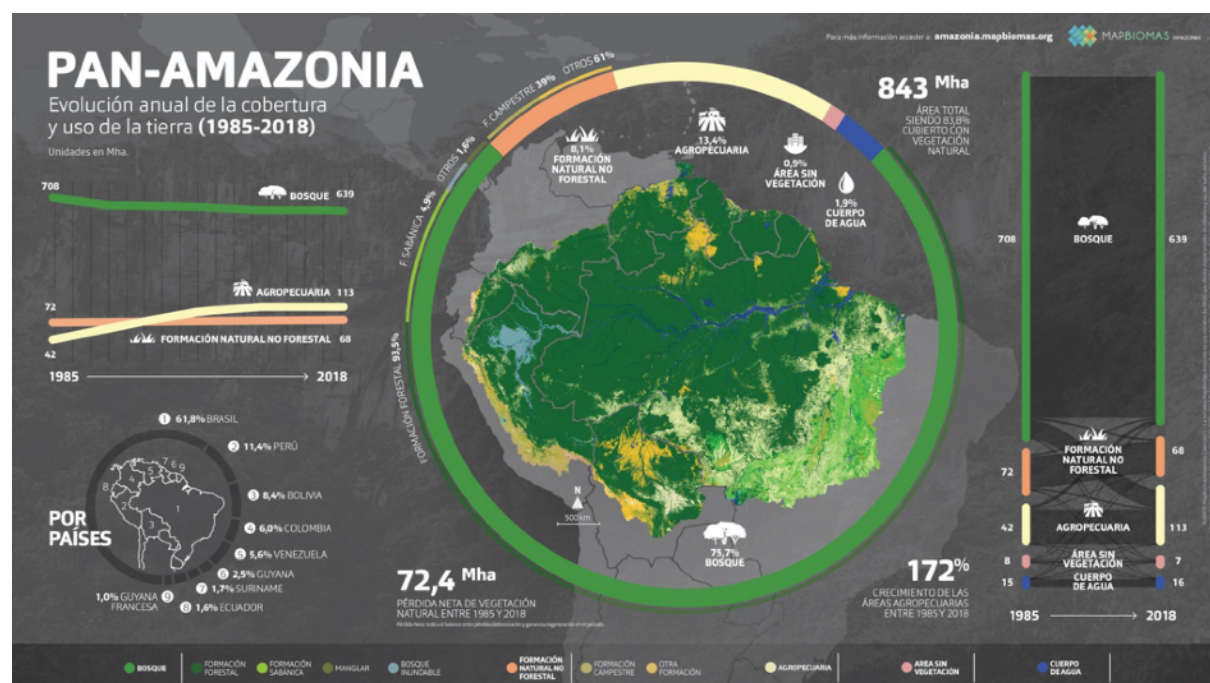
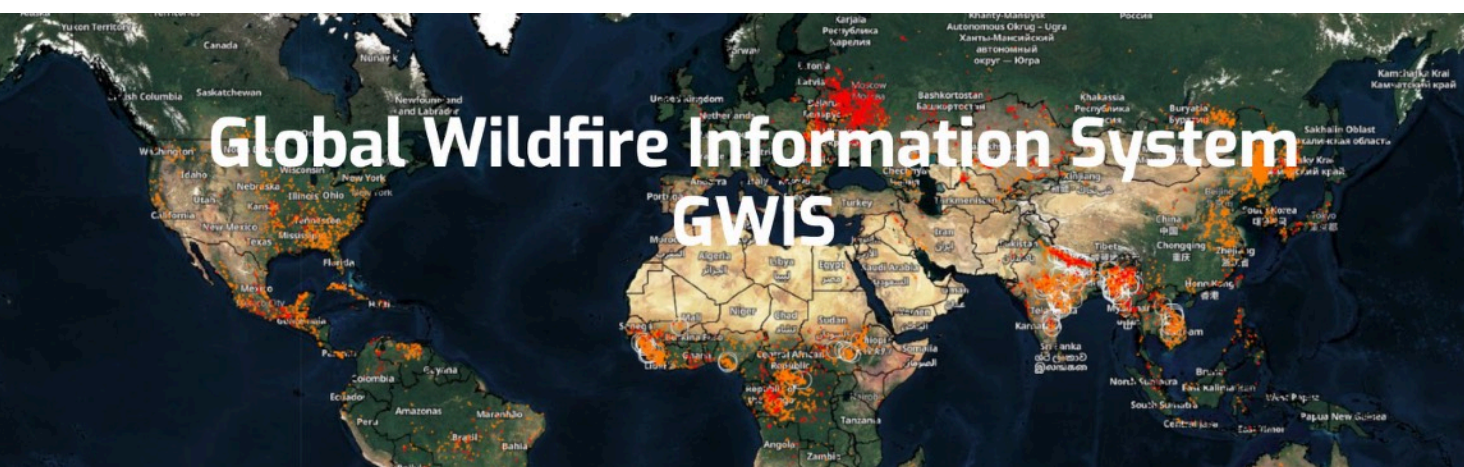
The Tipping Points of Climate Change - and Where We Stand / Johan Rockström / TED
DOI: 10.1007/978-94-007-5024-3_378-5

MonitORA

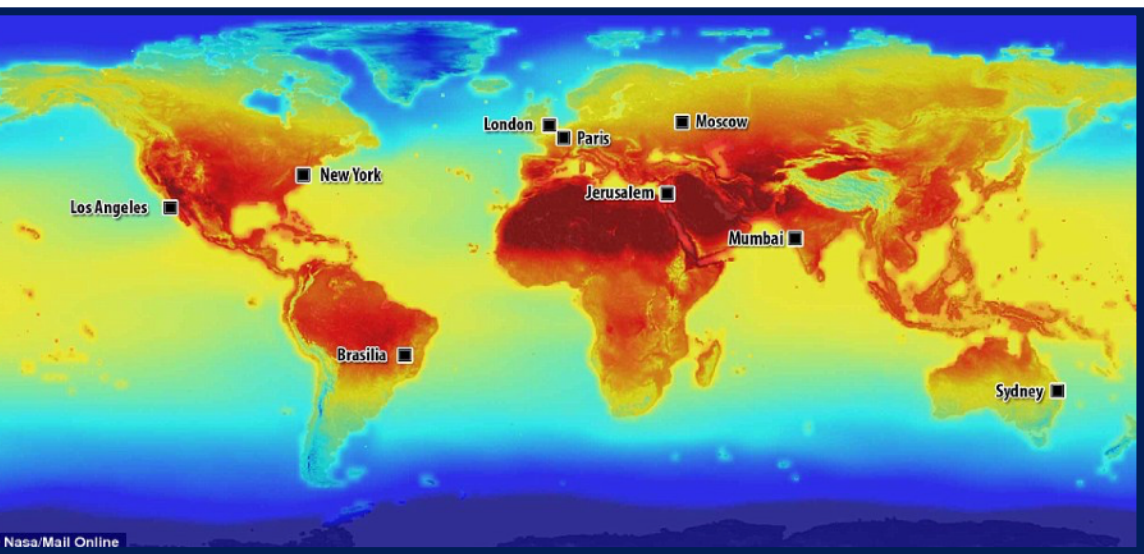


LEGENDA DE CORES

Observador - Articulador	Análise ORA	Foco do Observador	Limite Crítico/Irreversível
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Plataforma Worldclim



Plataforma Interativa AMAZONIA 360



Plataforma Balanço Hídrico y Cambio Climático

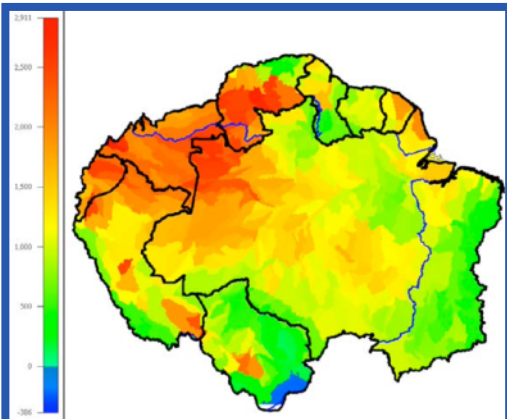


Figure 3: Baseline water balance by major sub-basin

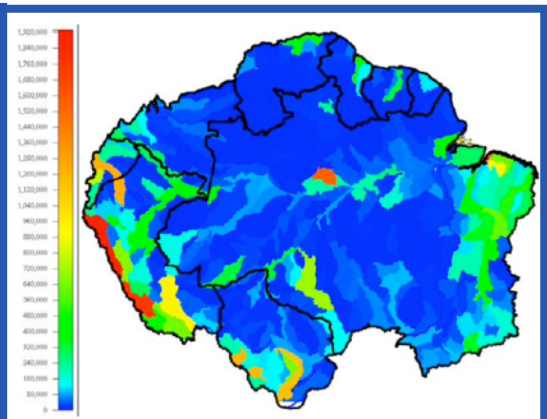
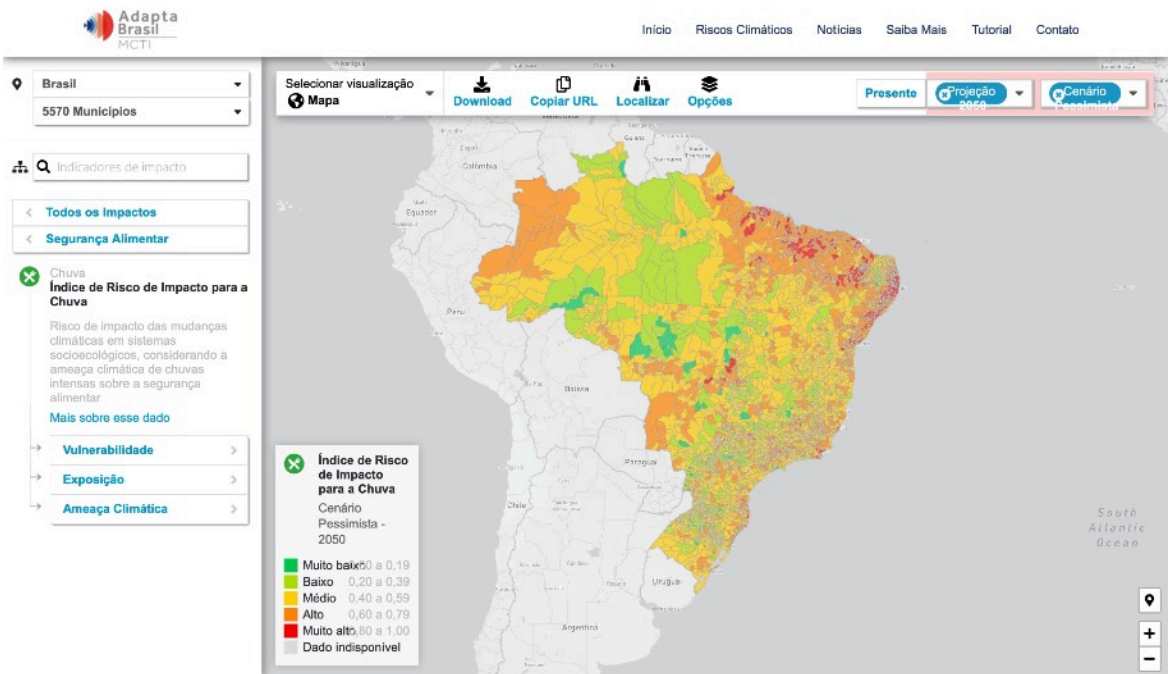
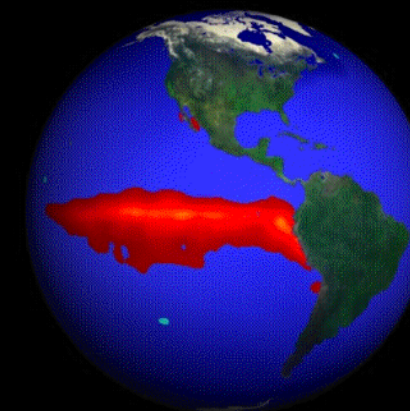
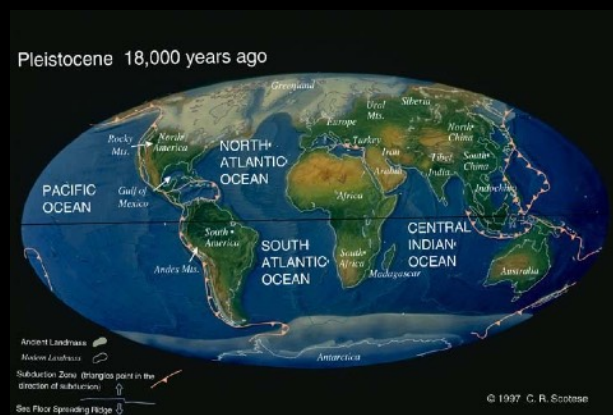


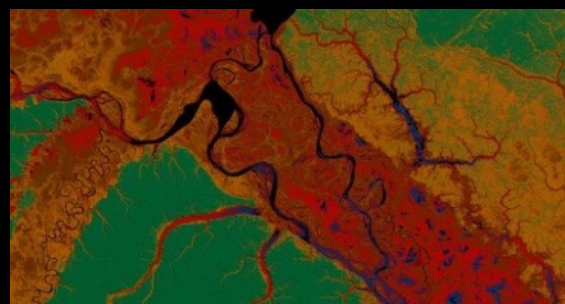
Figure 1: Population by major sub-basin

Plataforma Adapta Amazônia y Cambio Climático





3D View of the El Niño Phenomenon



THANKS !!

