

MapBiomás Agua

La crisis del Agua: su
impacto en la Amazonía.

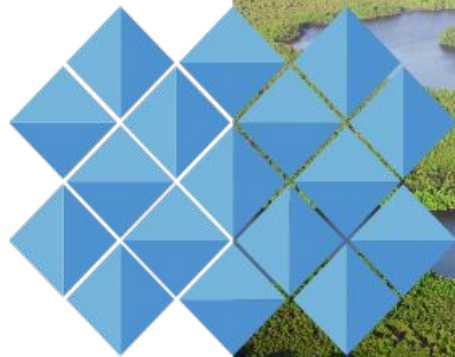
RAISG



Gaia Amazonas



Alliance

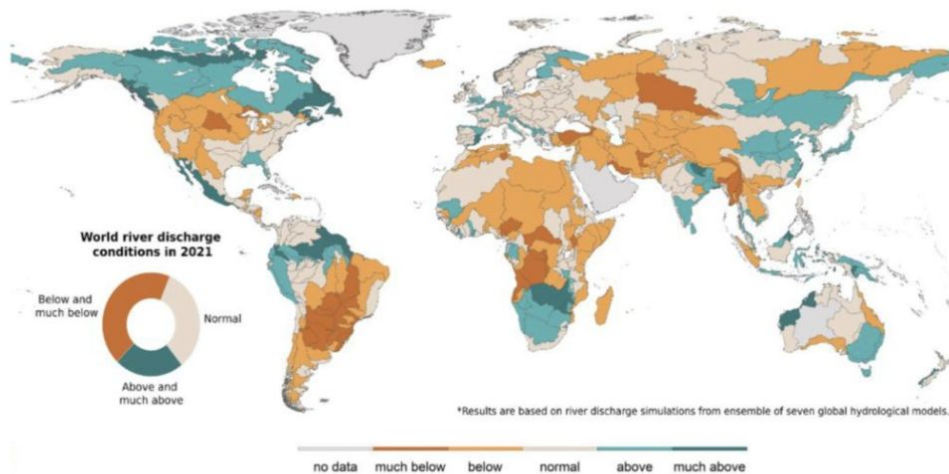


Escenario Mundial

Unprecedented Worldwide Water Crisis in 2021

UN's World Meteorological Organization reports how climate change is causing a worldwide water crisis with cascading effects on economies, ecosystems and society

by Elizabeth Partsch — November 30, 2022 in Climate Change, Environment



Flooding in England

Streamflow in 2021 w.r.t. the hydrological normal for 515 basins (calculated based on 30 years historic data, 1991-2020)

Climate Change: impacts and scenarios for the Amazon

Alana
 APIB (Articulação dos Povos Indígenas do Brasil)
 Article 19
 Conectas Direitos Humanos
 Engajamundo
 Greenpeace Brazil
 Instituto Socioambiental
 Instituto de Energia e Ambiente
 Environmental Science Graduate Program of the University of São Paulo
 National Institute of Science and Technology (INCT) for Climate Change Phase 2

José A. Marengo
 General Coordinator of Research
 and Development at CEMADEN

Carlos Souza Jr.
 Senior Researcher at Imazon

REVIEW article

Front. Earth Sci., 21 December 2018 | <https://doi.org/10.3389/feart.2018.00228>

Changes in Climate and Land Use Over the Amazon Region: Current and Future Variability and Trends

Jose A. Marengo^{1*}, Carlos M. Souza Jr.², Kirsten Thonicke³, Chantelle Burton⁴, Kate Halladay⁵, Richard A. Betts⁶, Lincoln M. Alves^{6*} and Wagner R. Soares⁷

¹CEMADEN-National Center for Monitoring and Early Warning of Natural Disasters, São José dos Campos, Brazil

SÃO PAULO, DECEMBER 2018

Vectores de cambio

FIGURE 4

Hovmöller diagram showing monthly rainfall from 1951 to 2014 in the south of the Amazon (mm/month). The 100 mm/month isoline is an indicator of dry months³⁷. Drought years are indicated in the figure. Red lines show the beginning and end of the dry season and yellow lines shows the deviation in the dry season (adapted from Marengo and collaborators³⁵ and updated until 2014).

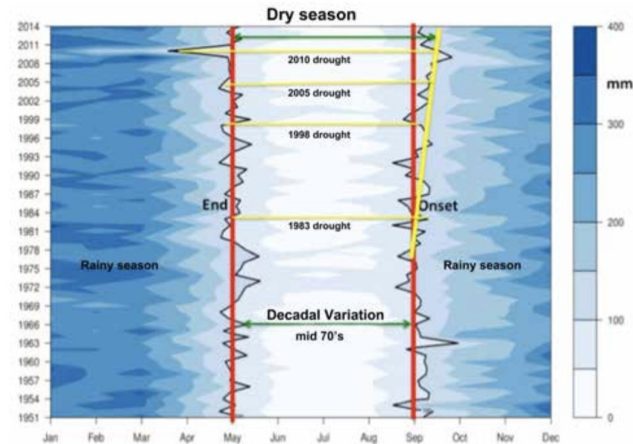
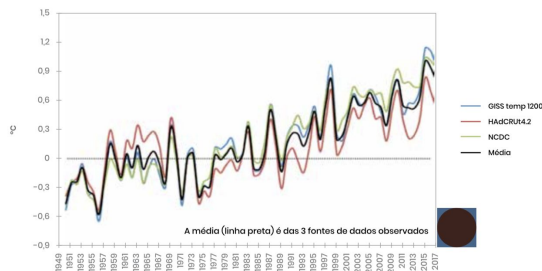


FIGURE 1

Observed temperature change from 1961-1990 obtained from three different data sets from 1949 to 2017 for the Amazon region.

Temperature anomaly observed from 1961-1990 obtained from three Amazon data sources



Data sources:
 GISS-NASA Goddard Institute for Space Studies, USA, NCDC-National Climatic Data Center, USA, HadCRU-Hadley Centre-Climata Research United, UK

La crisis hídrica

La sequía está matando al Casanare

No se sabe a ciencia cierta de quién es la culpa de la tragedia ambiental que ha causado la sequía en la Orinoquía colombiana, donde han muerto miles de chigüiros, reses, tortugas, venados y caimanes por falta de agua.



Un miembro de la Policía observa el municipio de Paz de Ariporo,...



29/04/2016

La sequía extrema, no registrada en medio siglo, afecta a Venezuela y sus niveles de reserva de agua en los embalses que ayudan a generar energía eléctrica. El fenómeno climático "El Niño" ha propiciado que la nación suramericana tome acciones para administrar el vital líquido.

Comment

Brazil is in water crisis – it needs a drought plan

Augusto Getirana, Renata Libonati & Marcio Cataldi

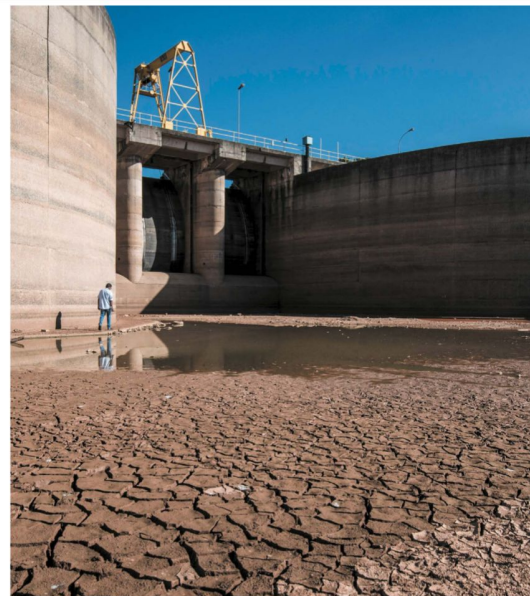
To avoid crop failures and soaring power costs, Brazil needs to diversify sources, monitor soil moisture, model local hydroclimate dynamics and treat water as a national security priority.

Brazil has the largest amount of fresh water in the world. Two-thirds of what flows in the Amazon River alone could supply the world's demand. Yet much of the nation now faces drought.

It's the worst in many decades in a nation that grows more than one-third of the world's sugar crops and produces almost 15% of the world's beef.

This year, between March and May, dry weather in Brazil's south-central region led to a 267 km³ shortage of water held in rivers, lakes, soil and aquifers, compared with the seasonal average for the past 20 years (see 'Brazil dries out' and 'Low water mark'). The result? Many major reservoirs have reached less than 20% capacity. Farming and energy generation have been hit. Since July, coffee prices have risen by 30% – Brazil accounts for one-third of global exports. Soya bean prices rose by 67% from June 2020 to May this year. And electricity bills have soared by 130%. Many cities face imminent water rationing.

How has this happened? And what needs to be done?



Jaguari dam is part of the Cantareira system that supplies water to São Paulo, Brazil.

La crisis hídrica

Una inundación arrasa con todo a su paso en Bolivia ...

YouTube

YouTube - Noticias Telemundo · 5 de jan. de 2021



EL TIEMPO
COLOMBIA | BOGOTÁ | MEDELLÍN | CALI | BARRANQUILLA | SANTANDER | BOYACÁ | LLANO | MÁS CIUDADES



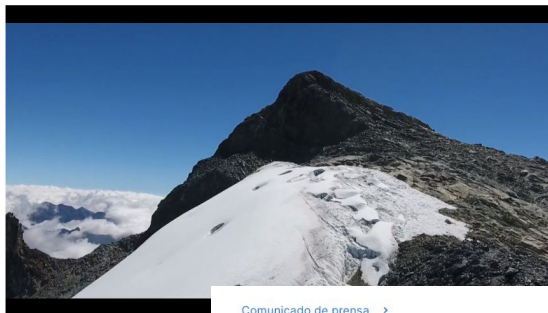
Inundaciones tienen afectadas a 2.330 familias en Casanare

Tras las lluvias del fin de semana se desbordaron los ríos Charité y Cravo Sur, en Yopal. FOTO: Gobernación de Casanare
En Villavicencio, avalancha de sedimentos taponó la bocatomía del acueducto.

El último glaciar de Venezuela ya perdió 99% de su superficie

Por Redacción EDG · 22 julio, 2022

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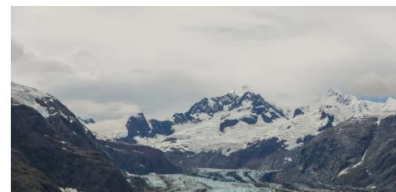


Comunicado de prensa

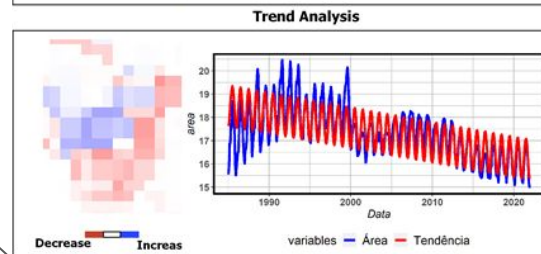
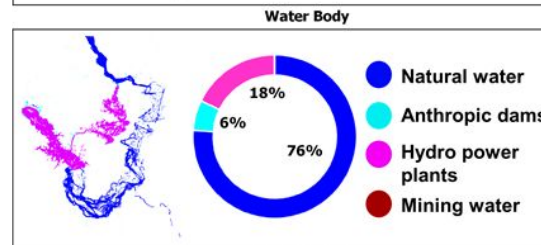
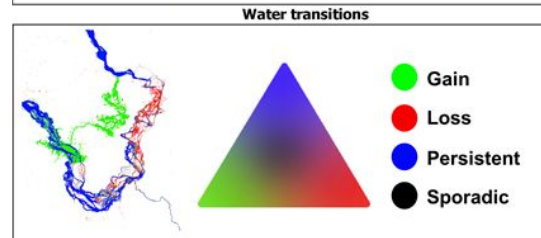
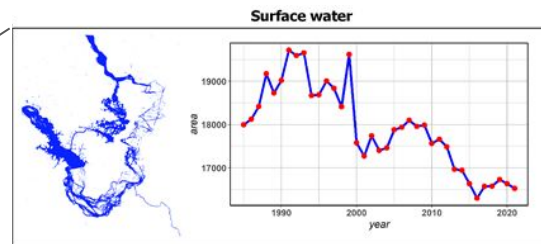
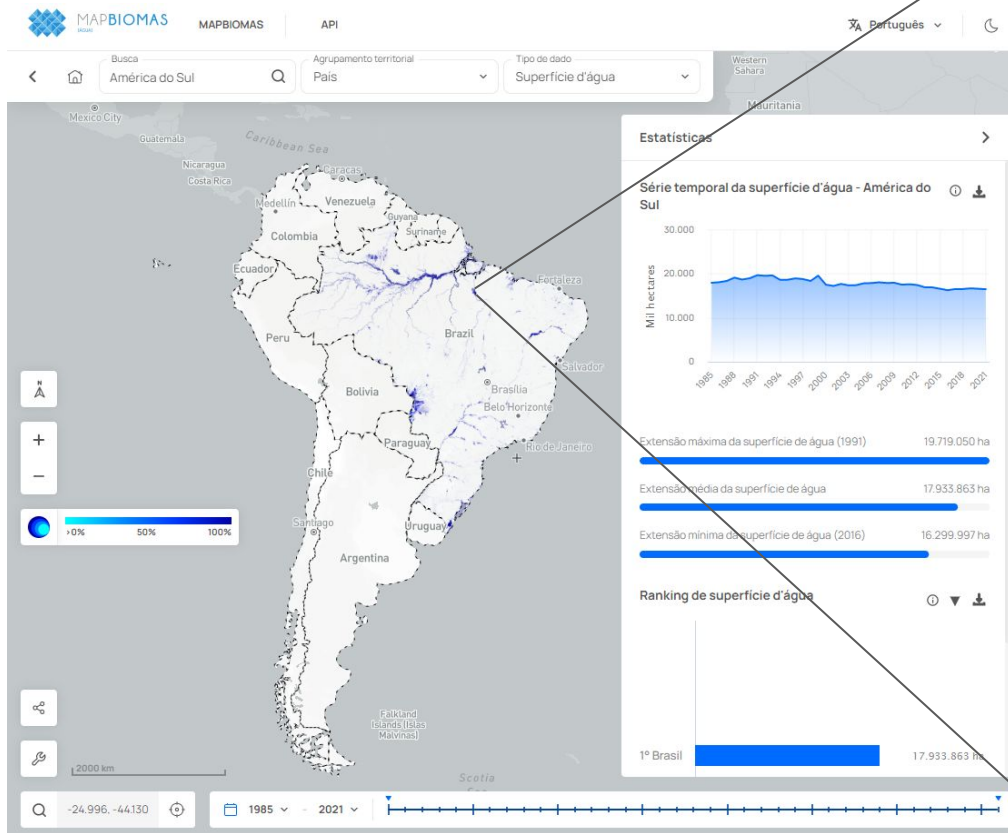
-Luis Daniel Llambi, de Condesar países andinos

La UNESCO alerta sobre la desaparición de algunos glaciares icónicos del Patrimonio Mundial de aquí a 2050

Nuevos datos de la UNESCO ponen de manifiesto el acelerado deshielo de los glaciares de los sitios del Patrimonio Mundial, ya que un tercio de ellos no tendrán más glaciares en 2050. Pero aún es posible salvar los otros dos tercios si el aumento de la temperatura global no supera los 1,5°C en comparación con el periodo preindustrial. Este será un reto importante para la cumbre climática COP27.



¿Hacia dónde vamos?



Red Sudamericana

Primer taller Sudamericano de MapBiomás Água
24 à 28 de noviembre - Brazil



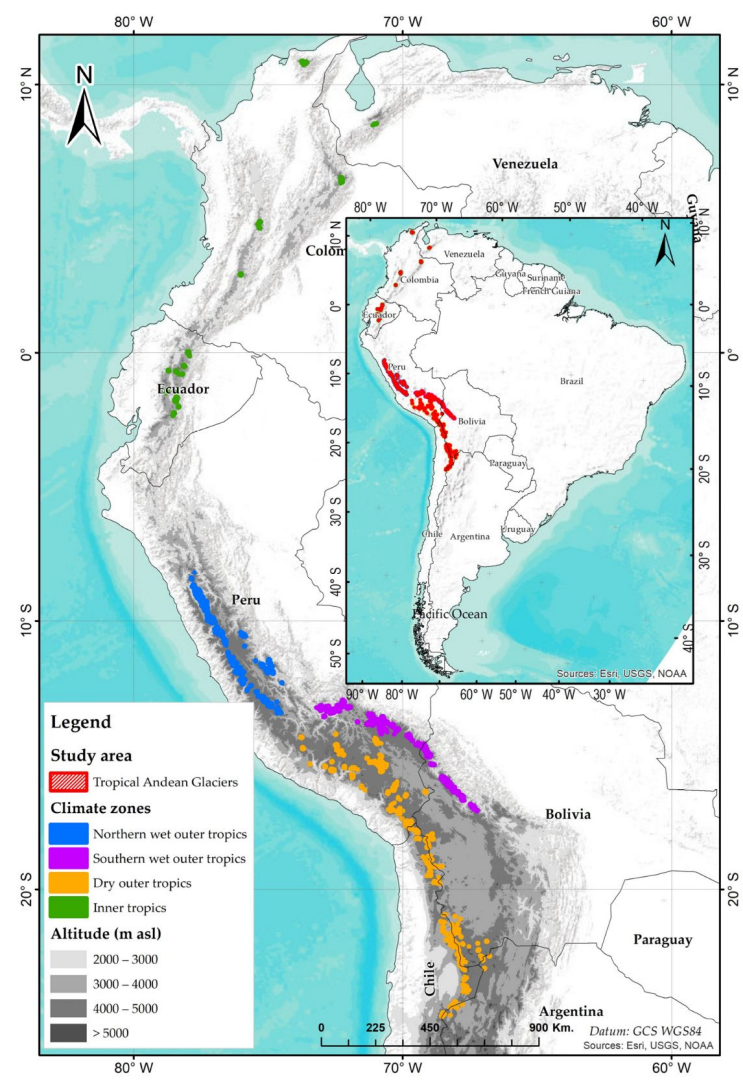
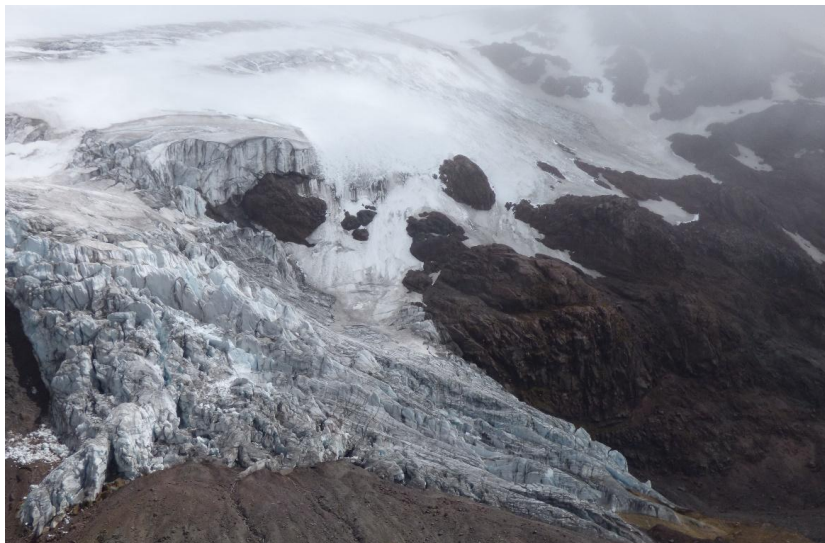
Resultados - Mapeo de Glaciares



Article

Mapping Three Decades of Changes in the Tropical Andean Glaciers Using Landsat Data Processed in the Earth Engine

Efrain Yury Turpo Cayo ^{1,2,*}, Maria Olga Borja ³, Raul Espinoza-Villar ², Nicole Moreno ¹, Rodney Camargo ⁴, Claudia Almeida ^{2,5}, Kathrin Hopfgartner ¹, Christian Yarleque ⁶ and Carlos M. Souza, Jr. ⁷



Resultados - Mapeo de Glaciares

1990 - 2020

Pérdida total de 42% de la área de glaciares (1020 Km²)

De los (1020 Km²) 40% corrió en la última década

- Perú (41,19%),
- Bolivia (42,61%),
- Ecuador (36,37%),
- Colombia (60,19 %),
- Chile (47.24%),
- Argentina (45.47%)
- Venezuela (96.93%)

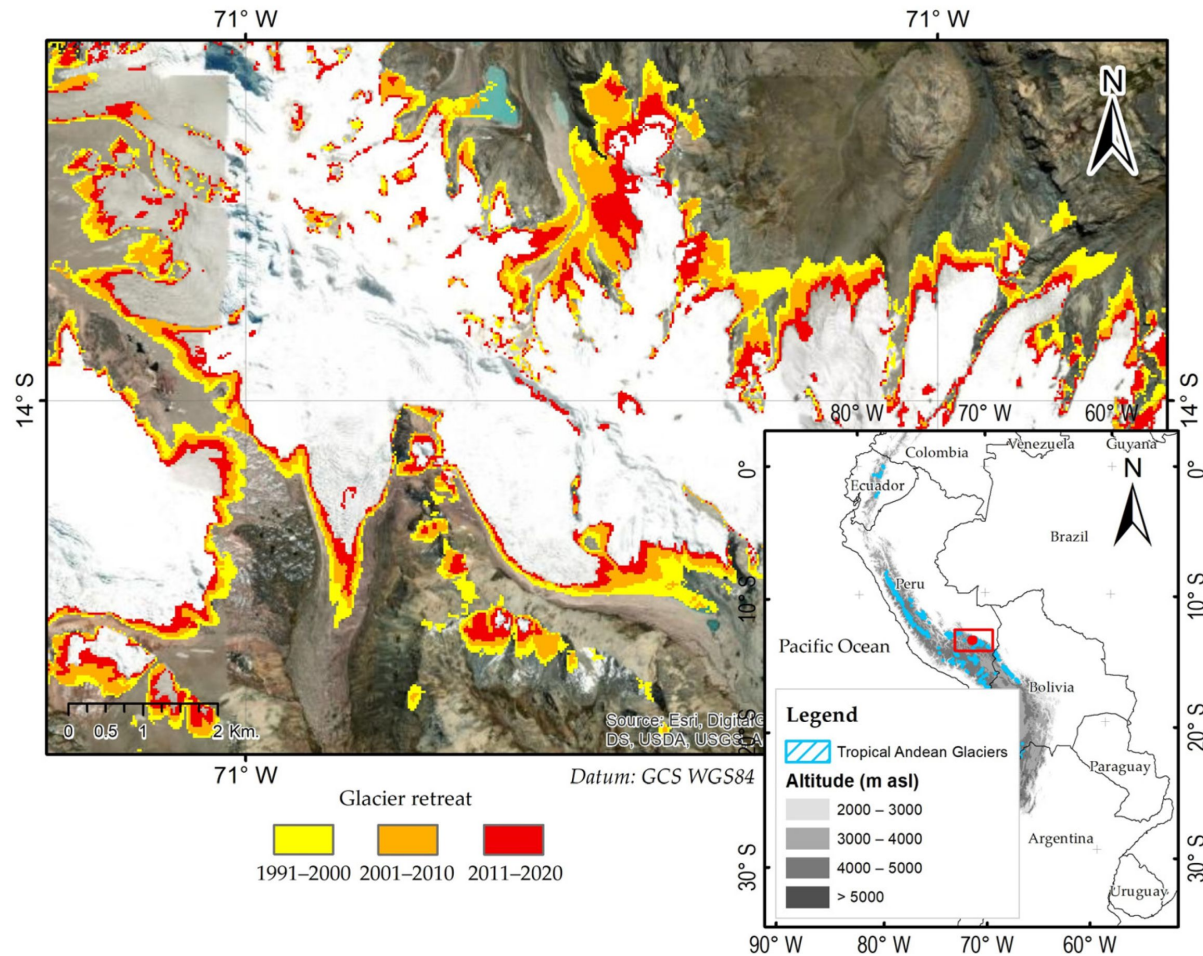


Figure 13. Map of glacier cover loss by decade from 1990 to 2020 in the Vilcanota Cordillera (mountain range) in southern Peru.

Gracias