



Regional Wildland Fire Networks:
 Eurasia - Central Asia - Northeast Asia - Southeast Asia - South Asia - Sub-Saharan Africa - Near East - Euro-Alpine - Southeast Europe / Caucasus - Mediterranean - Caribbean / Mesoamerica - South America - North America

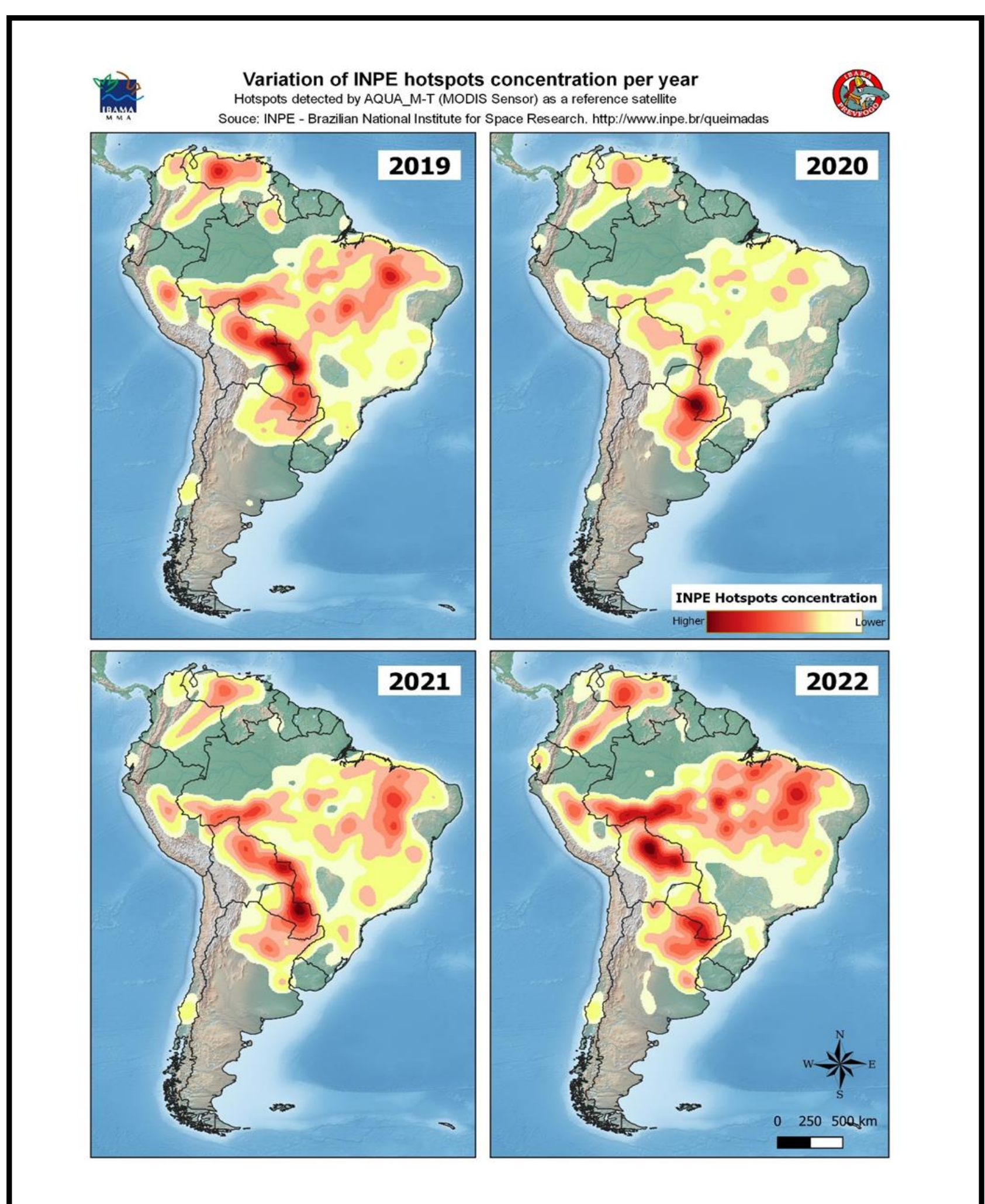


Regional South America Wildland Fire Network

Regional Fire Management Resource Center – South America (RFMRC-SAR)

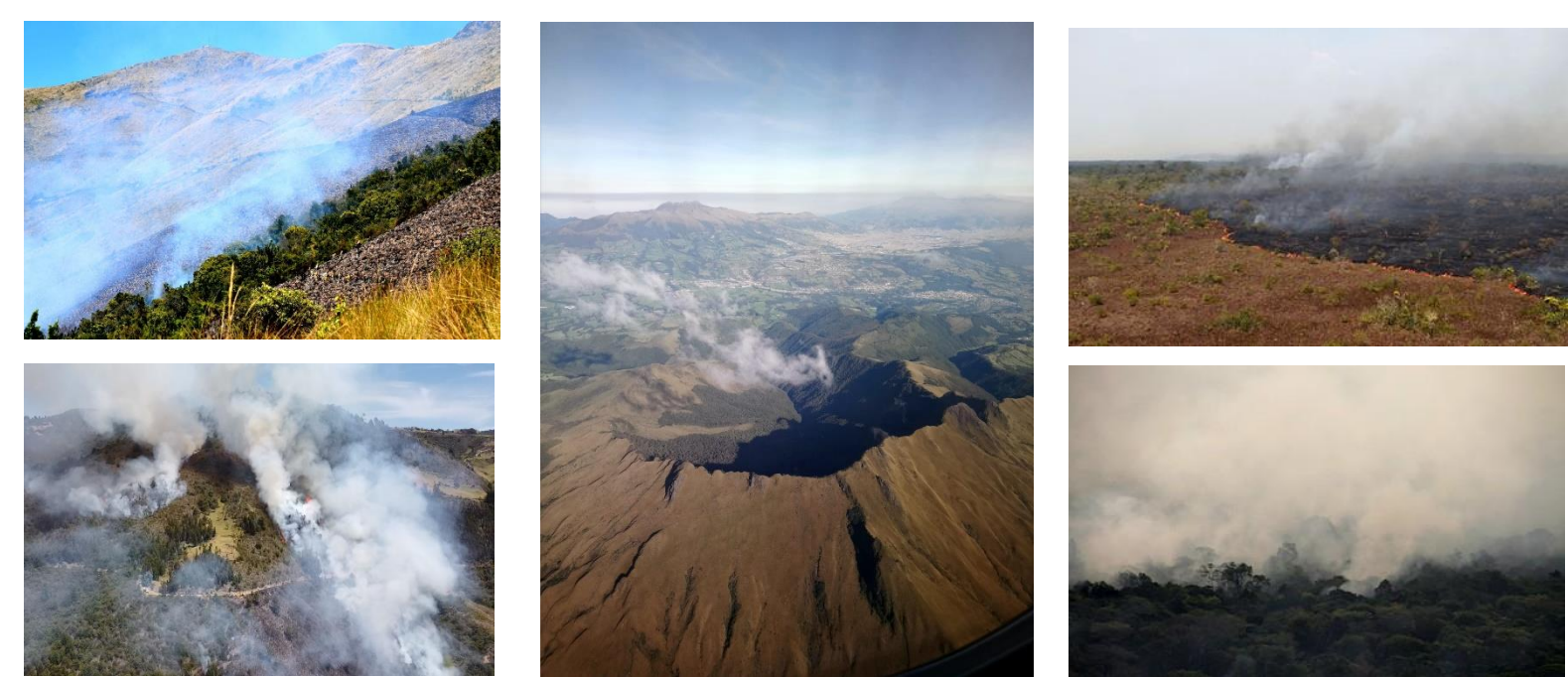


Major Landscape Fire Issues in South America



South America has a land area of 17.8 million km², which are equivalent to 12% of the Earth's surface. It is home to an extraordinary diversity of ecosystems, climates and topography, including the largest area of tropical rainforest, representing 95% of the forest area of the continent.

Three major types of vegetation are equally affected by forest fires in South America: forests, characterized mainly by the Amazon region; agricultural land and open grasslands. In addition to these, the Andean *paramos* are also ecosystems that are heavily affected by forest fires. The *paramo* consists of a collection of neotropical alpine grassland ecosystems that cover the northern high region of the Andes and play a key role in the hydrology of the continent.



Photos: Daniel Segura, DNBC Ibama/Prevfogo.

Climate change and land-use change are projected to make wildfires more frequent and intense, with a global increase of extreme fires of up to 14% by 2030, 30% by the end of 2050 and 50% by the end of the century.

The Pantanal, the largest contiguous wetland in the world with a high diversity of ecosystems and habitat for several endangered species, was impacted by record-breaking wildfires in 2020 (Kumar, 2022), burning one-third of the whole biome (Voiland, 2022). Peaking by August-September, a remarkable 39,000 square kilometers (15,000 square miles) burned in 2020, an area about the size of Switzerland (Voiland, 2022). Fires were fueled by an exceptional multi-year drought, but human-caused fires exacerbated drought effects on natural ecosystem within the Pantanal, with large burned fractions primarily over natural (52%), and low cattle density areas (44%) in 2020 (Kumar, 2022).

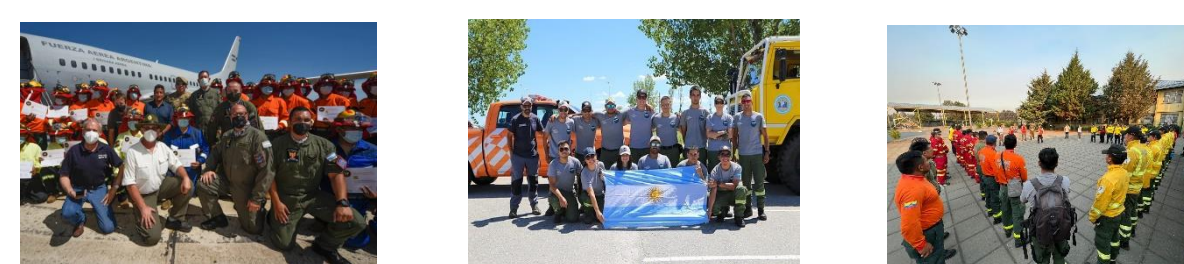
South America Wildland Fire Network

In June 2004 representatives of South American countries met in Curitiba, Paraná, Brazil, to formally establish partnerships and a regional network to enhance international cooperation in wildland fire management. The network is coordinated by the National Center for Wildfire Prevention and Suppression – Prevfogo – part of the Brazilian Institute for the Environment and Renewable Natural Resources – Ibama.

Some Regional Network Activities

International support in fighting forest fires

In 2019, 197 brigade members and equipment were sent from Argentina to Bolivia to help fight the fires in the Amazon.

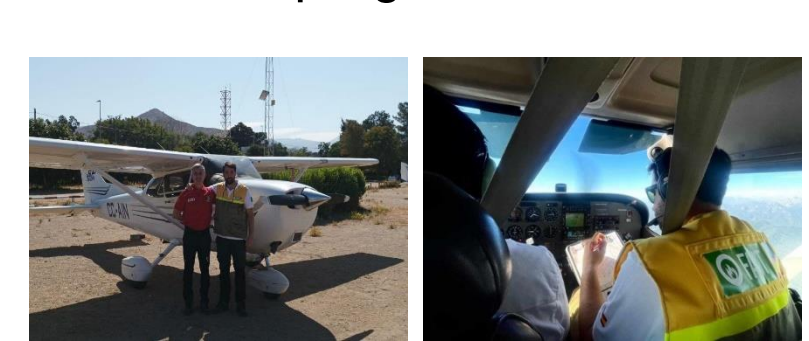


In 2023, combat personnel from 9 countries, Argentina, Brazil, Colombia, Ecuador, Spain, France, Mexico, Portugal, and Venezuela arrived in Chile, totaling 900 people. The country also received financial and combat equipment donations from Canada, the United States and Japan. Likewise, the European Union contributed with its specialists in strategic planning who provided their knowledge and experience for land and air combat.

Photos: Ministerio de Ambiente y Desarrollo Sostenible y Secretaría Gestión de Riesgos del Ecuador

Framework Collaboration Agreement between the Chilean National Forest Service (Conaf/Chile) and the Pau Costa Fire Ecology and Fire Management Foundation (FPC/Spain)

Air Operations Coordination (COA) program



Training courses for instructors in Fire Management

Photos: Conaf

Prescribed burning course



International Cooperation of Dirección Nacional de Bomberos de Colombia

Brazil Agreement: Strengthening of attention to fires in large spaces, air rescue, and support and advice for the creation of the USAR Brasilia team.
 Chile Agreement (CONAF): Strengthening of attention to sixth category forest fires
 Guatemala Agreement: Strengthening the Knowledge Exchange of the Indigenous Firefighters Program



Photos: DNBC

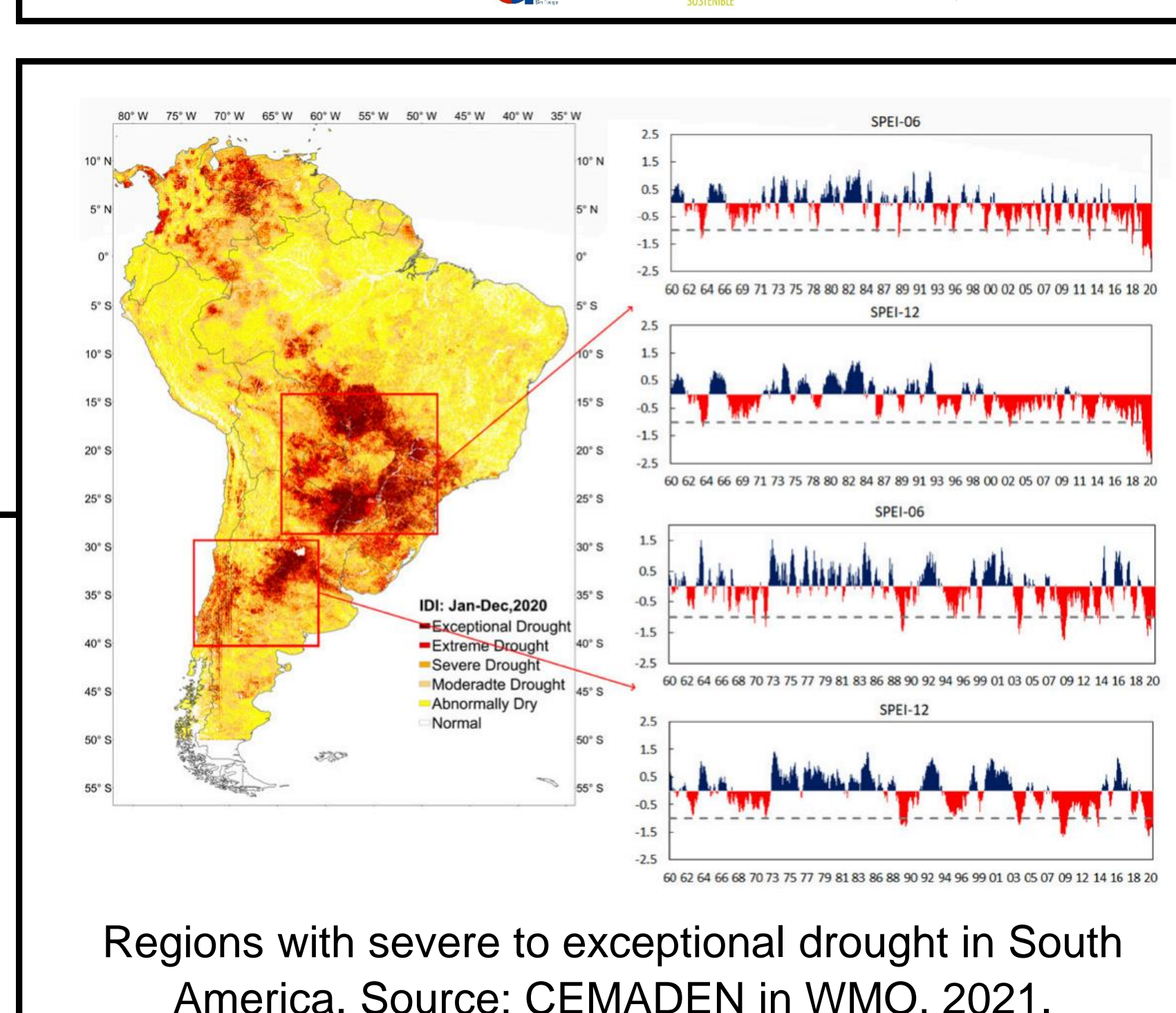
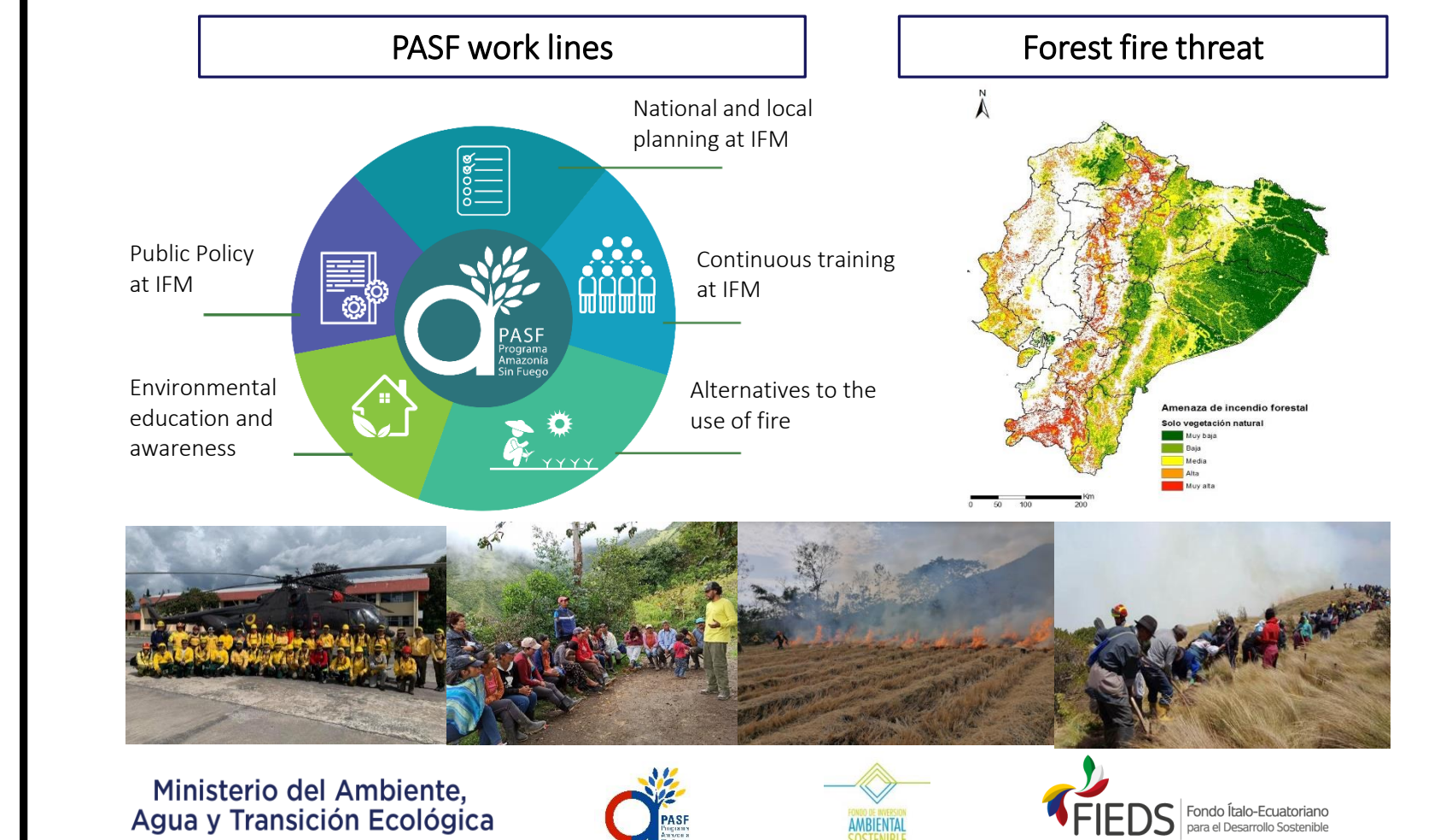
Regional Fire Program for South America

In 2021 and 2022, the program aimed to strengthen the region's technical and human resources, the alliance between partners and cooperation between countries participating in the program to prevent, manage and respond to forest fires, especially in the vast Amazon territory. This program involves Brazil, Peru, Colombia and Ecuador.

Photo: Suelene Couto/USFS

Forest fire reduction program through integrated fire management actions "Amazon without Fire" in the highlands and coastal regions of Ecuador (PASF)

Objective: To mitigate the incidence of forest fires in the highlands and coast regions of Ecuador, through the implementation of integrated fire management actions, contributing to protect the environment and improve the living conditions of the communities.



Regions with severe to exceptional drought in South America. Source: CEMADEN in WMO, 2021.

Amazon Cooperation Treaty Organization

Elaboration of the "Protocol to combat forest fires in the Amazon" – within the scope of the Leticia Pact and "Memorandum of Understanding on Cooperation and Mutual Assistance for Integrated Fire Management" that bring perspectives of bilateral and multinational cooperation between the countries of the Amazon Basin.

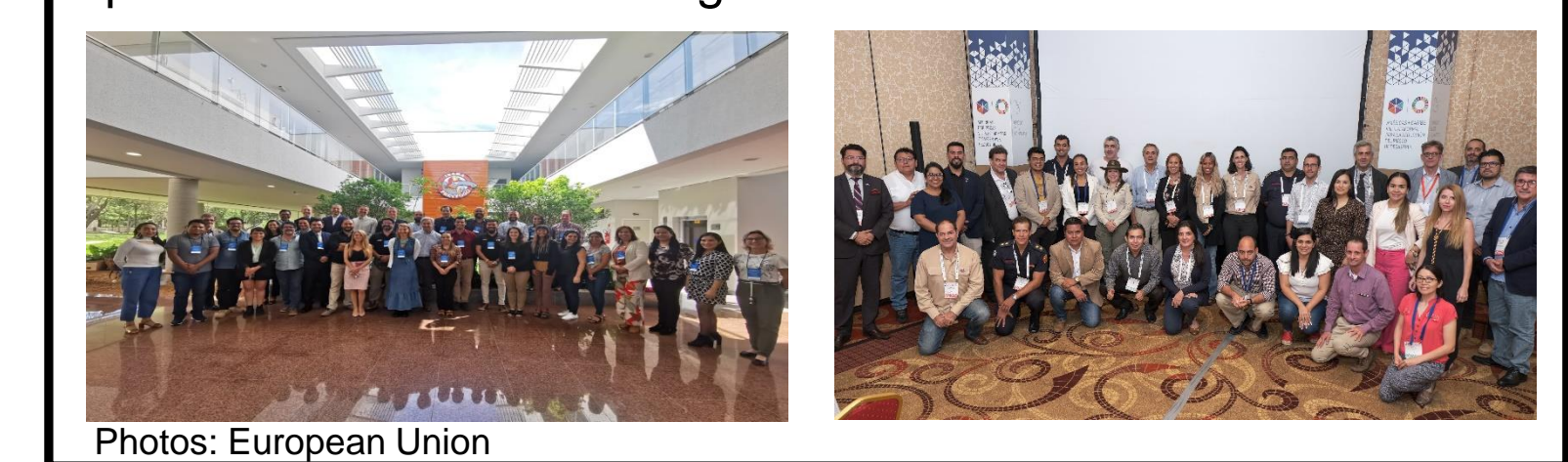
Fire-Adapt Project

With the objective of evaluating the role of integrated fire management in adapting to climate change for ecosystem services in tropical and subtropical regions, the Project started in 2023 and will extend until 2026. Funded by the European Union and participation of Argentina, Bolivia, Brazil, Colombia, Spain, France, Italy, Mexico, Portugal and the United Kingdom.

Funded by the European Union

Group of Specialists in Forest Fires of Latin America and the Caribbean (GEFF LAC)

Created in 2021, it is an initiative of the European Union which aims to facilitate the exchange of knowledge and good practices in the management of forest fires, which, together with the harmonized information provided by the Global Wildfire System (GWIS) can lead to strategic actions to minimize the impact of wildfires in the region and improve fire policies at national and regional levels.

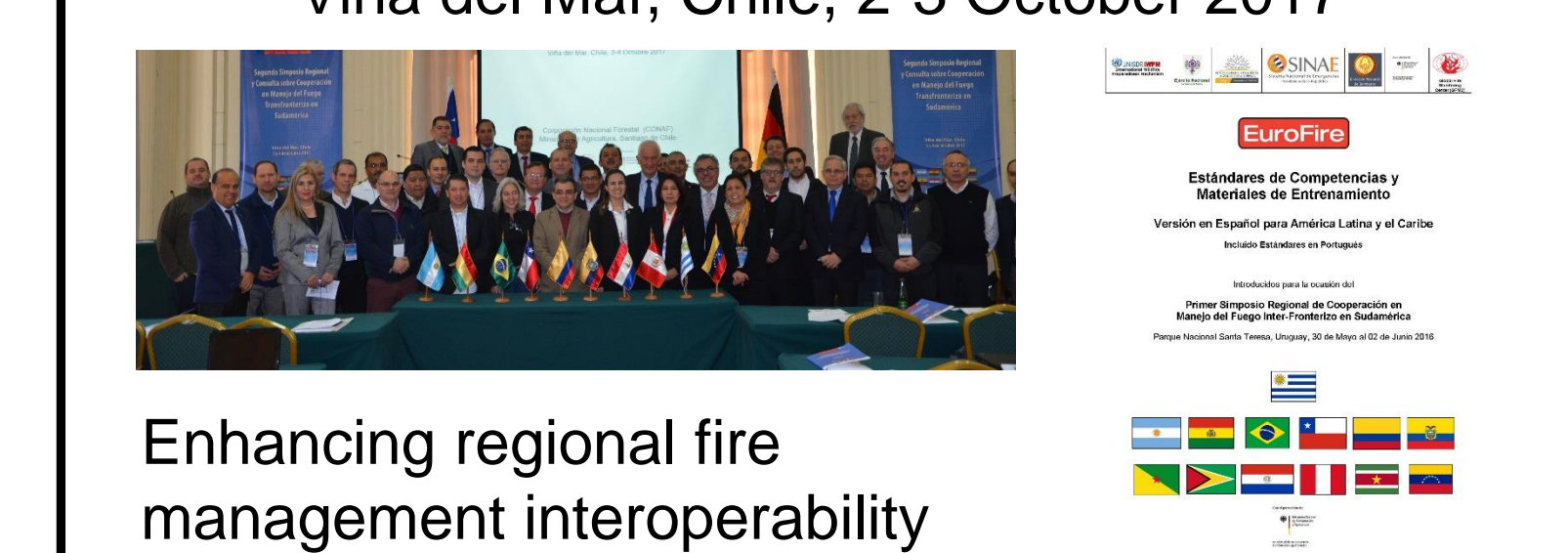


Photos: European Union

Recommendations

- Promote land management through the implementation of integrated fire management actions
- Recognize the role of fire as an element that must be managed
- Promote local, national and international inter-institutional articulation
- Develop regulations according to the present reality and future projections
- Generate capacities in the different actors and roles to address the problem
- Generate information and research that informs better decisions
- Make integrated fire management strategies visible as climate change mitigation and adaptation actions
- Rescue ancestral knowledge incorporating society in general as part of the solution
- The 8th Conference must contribute as an imperative mandate to all countries with a high risk of forest fires, which must guarantee the financial resources and the structure or system in charge of its management, in the same way, international cooperation in all its interventions or projects. They must consider the risk component in the face of forest fires, taking as a premise, that natural spaces cannot be preserved if their risks are not managed.

Follow-up of the Second Regional Consultation on Cross-boundary Cooperation in Fire Management in South America



Enhancing regional fire management interoperability

References

Kumar, S.V., A. Getirana, R. Libonati, C. Hain, S. Mahanama, N. Andela 2022: Changes in land use enhance the sensitivity of tropical ecosystems to fire-climate extremes, *Sci. Rep.* 12, 964, doi:10.1038/s41598-022-05130-0.
 Voiland, A. NASA Earth Observatory. A Human Fingerprint on the Pantanal Inferno, 2022. Available on <https://earthobservatory.nasa.gov/images/149398/a-human-fingerprint-on-the-pantanal-inferno>

Website of the Regional South America Wildland Fire Network: <https://gfmc.online/globalnetworks/southamerica/SouthAmerica.html>
 Website of the Regional Fire Management Resource Center – South America: <http://cemaf.org/>

