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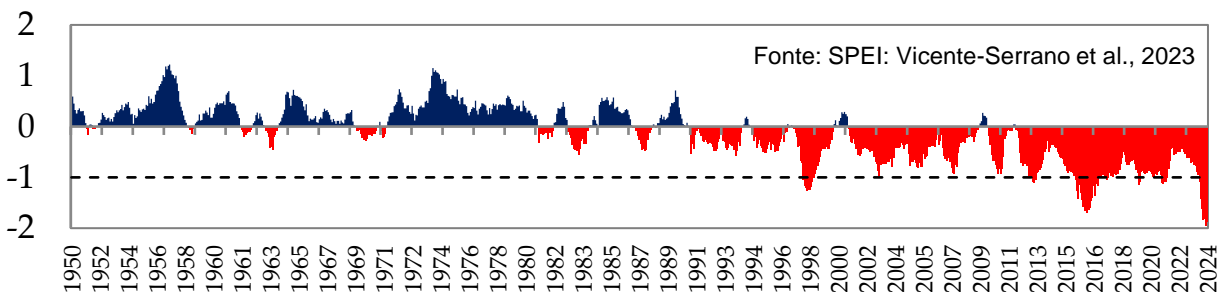
National Center for Monitoring and Early Warning of Natural Disasters of the Ministry of Science, Technology, and Innovation (CEMADEN/MCTI)



1. Extreme Drought Events over Brazil from 1950 to 2019

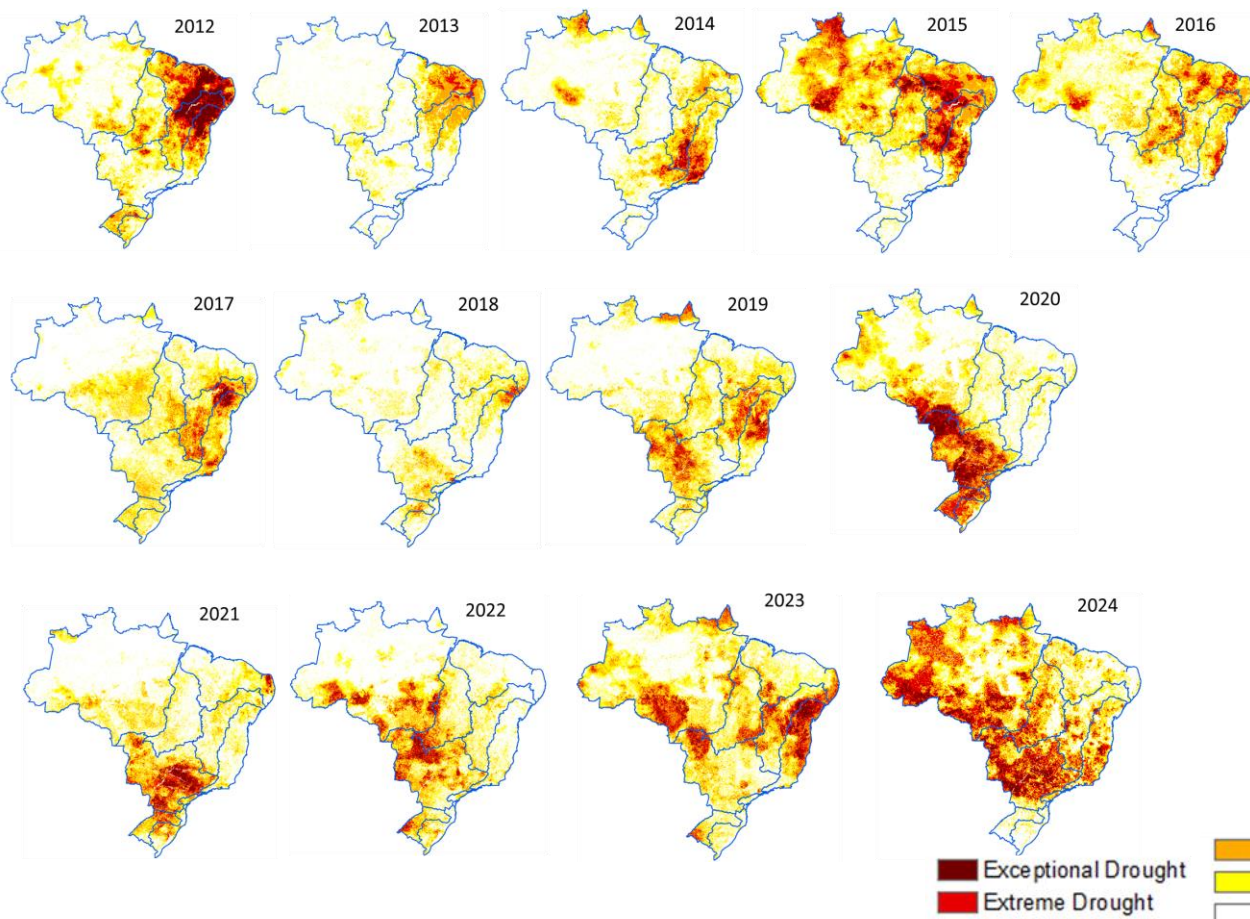
Brazil faces the worst drought in its recorded history (since 1950), severely impacting vital ecosystems like the Amazon rainforest and the Pantanal.

Standardised Precipitation-Evapotranspiration Index (SPEI over Brazil)



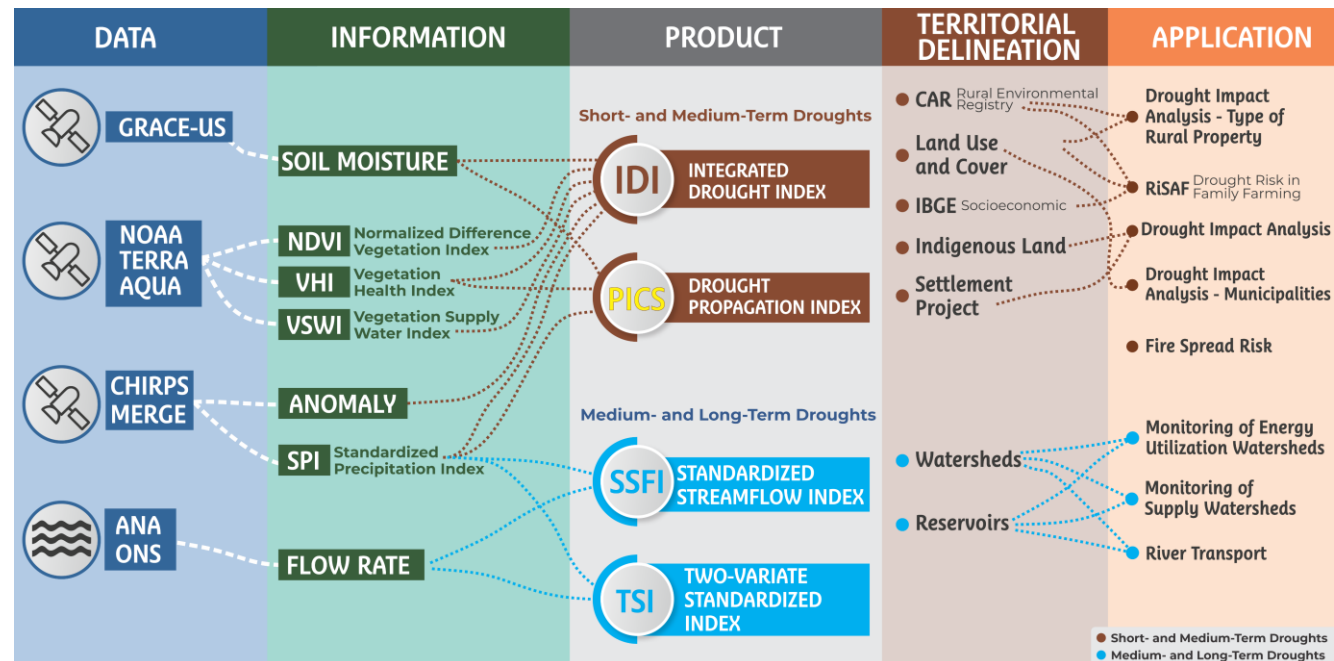
Integrated Drought Index (IDI)

The IDI is regularly updated, offering near real-time monitoring of drought across Brazil and has been used in the reports of Climate of the WMO.



2. Drought Monitoring at CEMADEN

In response to this crisis, at the request of the Presidency of the Republic, the CEMADEN/MCTI assumed the responsibility for monitoring drought impacts in the Brazilian Northeast region from 2012 onwards.



3. Applications of Cemaden's Drought Monitoring in impact mitigation actions

- Garantia-Safra Program of the Ministry of Agrarian Development (MDA): This initiative offers financial support to farmers in Brazil's Northeast and North regions who experience crop losses due to drought. CEMADEN's data helps to pinpoint municipalities most impacted by drought and ensures that assistance is directed to the areas in greatest need.
- CEMADEN's data also plays a crucial role in the recognition of drought emergencies in municipalities. Once the emergency status is officially acknowledged, these municipalities become eligible for direct federal aid.
- CEMADEN's monitoring data is also regularly presented during federal government decision-making meetings, supporting informed policy and action.