

SUCCESS CASES OF THE STATE OF MINAS GERAIS/BRAZIL

WATER RESOURCES

Weather Alert System

Weather alert System are very short-term warnings, lasting a maximum of 2 hours, indicating the occurrence of storms in a specific municipality or micro-region.

To issue alerts, real-time monitoring of mesoscale meteorological systems is required, in which severe storms are included. Monitoring is based on meteorological radar scans and images from geostationary satellites, which makes it possible to monitor the life cycle of the active system.

From the detection of a storm with severe weather signatures, it is extrapolated in time and space, when and where this storm will be acting in the future, thus inferring the municipalities that should be impacted by the occurrence of hail, windstorms, intense rain and /or tornadoes and we issue alerts for these through the State Civil Defense Coordination – CEDEC.

Alerts issued - Mesoregions/MG

Tabela 1: Quantidade de Alertas Emitidos por Mesorregião

Mesoregions	MESORREGIÕES	ALERTAS (2023/2024)	Alerts issued
	Sul de Minas	7995	7,995
	Metropolitana de Belo Horizonte	7912	7,912
	Zona da Mata	7026	7,026
	Triângulo Mineiro	4970	4,970
	Norte de Minas	4310	4,310
	Vale do Jequitinhonha	3478	3,478
	Oeste de Minas	2886	2,886
	Central Mineira	2665	2,665
	Vale do Jequitinhonha	2018	2,018
	Campo das Vertentes	1987	1,987
	Noroeste de Minas	1550	1,550
	Vale do Mucuri	641	641
Total period	TOTAL PERÍODO	47438	47,438

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Drought Monitor

The Drought Monitor is a process in which regular and periodic monitoring of the drought situation is carried out, with results presented through a Map, the Drought Monitor Map.

The preparation of this Map is carried out monthly, with reference to the previous month, presenting the consensus results found through the meteorological, hydrological and agricultural indicators calculated from the integrated database, belonging to the Union and the states. The Drought Monitor Map reflects the short-term (last 3, 4 and 6 months) and the long-term (last 12, 18 and 24 months), indicating the evolution or improvement of the drought in the region.

The process aims to integrate technical and scientific knowledge, based on a common understanding of drought conditions, such as: Its severity (divided into 5 categories), spatial and temporal evolution, in addition to its impacts on the various sectors involved.

It is a monitoring tool that can be used by decision-making institutions to strengthen Monitoring, Preparedness, and Early Warning mechanisms.

Minas was the first state to participate in the expansion of the monitor to regions beyond the Northeast of Brazil, starting the process as a validator of the map in November 2018. As of September 2019, IGAM began the training process of preparing the map, becoming part of the team authoring the Map in January 2020.

WATER RESTRICTION STATIONS IN THE STATE OF MINAS GERAIS

Strategic Management Units	Dry Period 2023	Dry Period 2024
Tributaries of the Upper São Francisco River	2	3
Tributaries of the Middle São Francisco River	0	0
Tributaries of the Grande River	0	0
Tributaries of the Doce River	0	0
Tributaries of the Mucuri, São Mateus, Jequinhonha and Pardo Rivers	0	0
Tributaries of the Paranaíba River	0	1
Tributaries of the Paraíba do Sul River, Preto River (Itabopoana), São João River and Caparaó River	0	1
Total	2	5

For more information [click here](#).