



Presentation

Committees

Papers

Authors

Thematic sessions

Ranking

Feed

Contact

**ACTUAL SCENARIO OF THE NATIONAL RAIN ISOTOPIC MONITORING NETWORK IN BRAZIL**

KIRCHHEIM, Roberto FRANZINI, Andrea <sup>1</sup> IMBIRIBA, Manoel <sup>1</sup> SANTOS, Guilherme <sup>1</sup> MOURA, Idembergue <sup>1</sup> GASTMANS, Didier ATHAYDE, Gustavo <sup>2</sup> MANCUSO, Malva <sup>3</sup> COTA, Stela <sup>4</sup> EVANGELISTA, Balbino <sup>5</sup> LAZAROTTO, Eduardo <sup>1</sup> ISLER, Elias <sup>6</sup>

- 306070

Poster Presentation

**Abstract**

The enormous challenges related to water resources in the country and the lack of continuity in the isotopic monitoring of precipitation in Brazil, led the International Agency for Atomic Energy (IAEA) to promote the Geological Survey of Brazil (GSB) becoming a Collaborative Center (CC) for the dissemination of isotopic techniques applied to hydrology. The suggestion led to the creation of a program that consists of a series of activities, from monitoring isotopes in precipitation (GNIP) to capacity building, training and setting up analytical laboratories. Another striking feature is that it interacts synergistically with national institutions and academic research groups as well. Since 2017, the GSB has been running the aforementioned program through exclusive financial allocation. In 2021, the GSB and the IAEA signed an international agreement adopting a common strategic action plan. This work provides the main results of this work regarding the GNIP network and indicates the future steps to be followed in the national and continental context. Currently, the isotope monitoring network in precipitation is one of the most important activities within the Isotope Program of the GSB in Brazil and is composed of 26 rain collection stations, with another 04 to be installed in the short term. It is planned for the year 2024 to publish and make available all the data generated to date. The formalization of a national scientific network capable of serving as a general repository of isotopic data in the country is on the agenda of the GSB in partnership with other institutions. It should be noted that 05 GNIP stations were strategically installed along borders with neighbor countries as a way of supporting and reinforcing the Latin American isotopic coverage. The existence of a monitoring network operating in IAEA GNIP standards and being part of a national program brings important benefits and at the same time has sustainability. The main future action is to jointly give institutional scope to this network and make it a repository of isotopic information generated in the national territory and to be able to exchange information with neighboring countries.