

MIKAS and NIKAS springs photo gallery

SOUTH AMERICA

Note: *The classification of springs is preliminary, the final lists will be established at the end of project.*

Bolivia



MIKAS- Chiflonqqa



View from the distance of Chiflonqqa spring waterfall on the left side of the Toro Toro canyon



Close up view of the Chiflonqqa spring waterfall

Brazil



MIKAS - Baía Bonita



View of Baía Bonita Spring. From: www.aquarionatural.com.br

MIKAS - João Baio



View of João Baio spring (Photo by Alexandre Lobo)



Cycle of discharge variation few meters downstream from the spring. Low discharge (Photo by Alexandre Lobo)

MIKAS - Pratinha



Aerial view of Pratinha Spring (Photo by Alexandre Lobo)



View from the interior of the cave where the Pratinha spring issues (Photo by Alexandre Lobo)

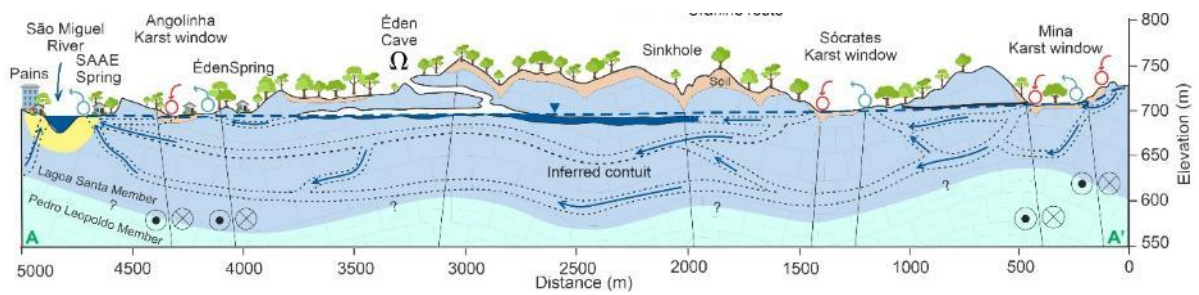


View of the lake in front of the spring with the cave in the background. This lake is used as a water park (Photo by Alexandre Lobo)

NIKAS - Éden



Top view of the karst spring highlighting the dimensions of the channel (Photo by Gabriel Lourenço)



Schematic profile of Éden spring and catchment area. Source: Assunção et al. (2023).

NIKAS - Lagoa do Japonês



Aerial view of the Lagoa do Japonês spring.

Source:

<https://www.t1noticias.com.br/cidades/dificuldade-no-acesso-representa-perigo-e-pode-afastar-turistas-da-lagoa-do-japones/96172/>



Lagoa do Japonês spring issues from a cave in the limestone cliff. Source: <https://vaipassar.com/lagoa-do-japones/>

NIKAS - Gruna da Mamona



View of the cave associated with Gruna da Mamona spring

NIKAS - Poço Azul



*View of Poço Azul spring.
From:*

<https://www.facebook.com/BH.AVALIACOES/photos/a.481050048580558/720474414638119/?type=3>

NIKAS - Rio Azuis



Aerial view of the Rio Azuis spring. Source:

<https://www.aventuraspelonossomundo.com.br/aurora-do-tocantins-serras-gerais/>

NIKAS - Roncador spring



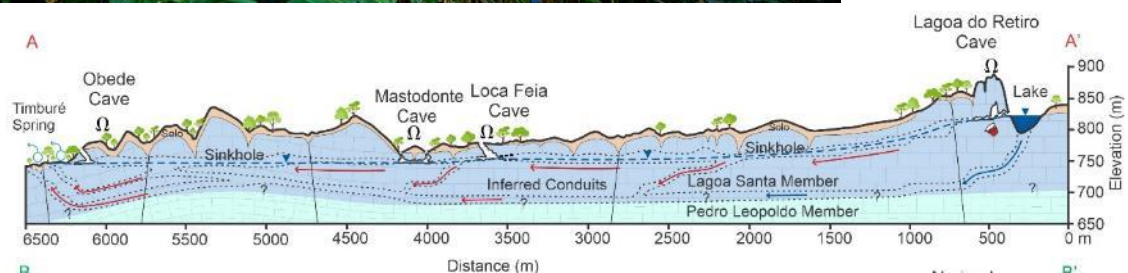
Roncador Spring and the entrance to Santana Cave. Source:

<https://www.loucosporviagem.com/destinos-nacionais/roteiro-no-petar-nucleo-santana-post-2/>

NIKAS - Timburé



Lateral view of the karst spring highlighting the dimensions of the channel that make it attractive for recreational use by the local population (Photo by Gabriel Lourenço)



Cross-section through catchment area. Source: Assunção et al. (2023).

Colombia



MIKAS - Manantial de Cañaverales



Crystal clear waters of Manantial de Cañaverales. Retrieved from, <https://semanariovoz.com/la-quajira-canaverales-manantial-amenazado-muerte/>

MIKAS - Ventanas de Tisquizoque



Ventanas de Tisquizoque three-tiered waterfall (Photo by Marianela Vargas)



View from the interior of the Ventanas de Tisquizoque cave (Photo by Marianela Vargas)



Panoramic view and outflow of La Venta Creek in Ventanas de Tisquizoque (Photo by Marianela Vargas)

Ecuador



MIKAS - Jumandi cave

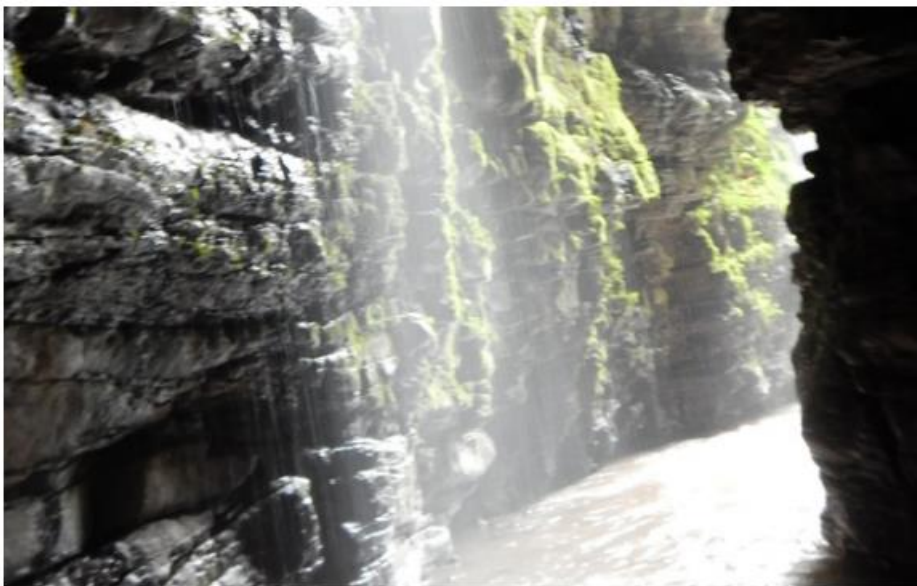


Sinkhole present at Cotundo Petroglyphs geosite



Map of entrance and speleotems inside the Jumandy cave

NIKAS - Rio Cacapishco (Gruta de los Tayos)



*Photos of the Gruta de los Tayos and Cacapishco River (Guía Espeleológica de la Provincia Napo).
From Sánchez Cortez (2017)*

Peru



MIKAS - Maras spring (Male and Female springs)



View of the salt mines of Maras (source: J. Ccopa)

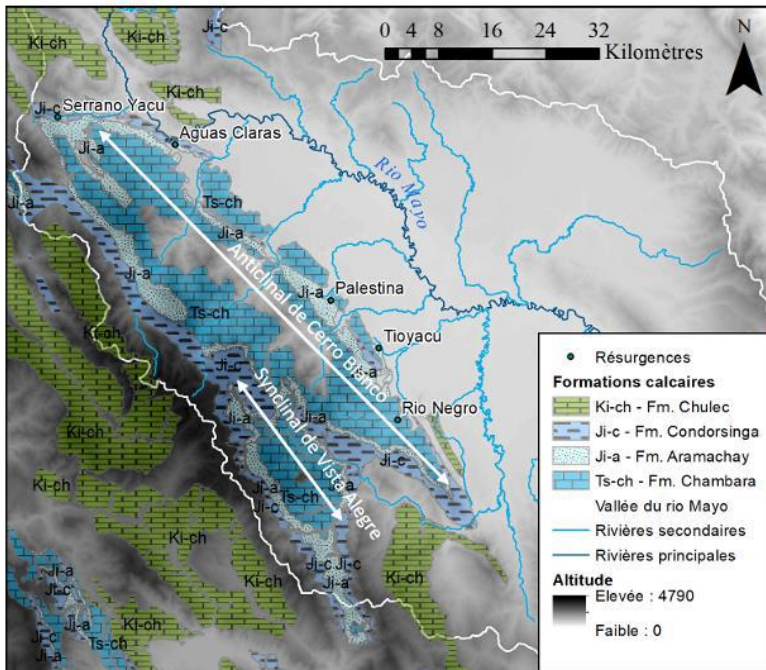


Channels that transport salt water from the male spring (source: N. Luque)



The Salt mines of Maras
(source: N. Luque)

MIKAS – Naciente del Río Serrano Yacu



Hydrogeological sketch map and locations of the four MIKAS springs in the Peruvian Alta Maya area – Serrano Yacu, Aguas Claras, Tio Yacu and Rio Negro (graphics: INGEMMET, 2016).

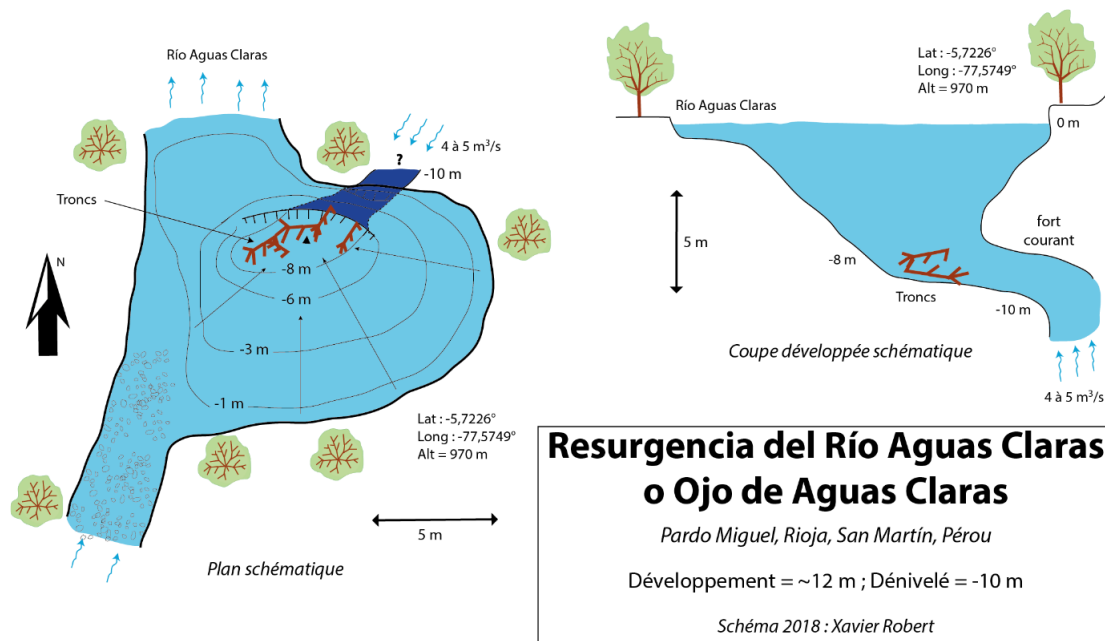


Rio Serrano Yacu spring (source: JL Guyot)

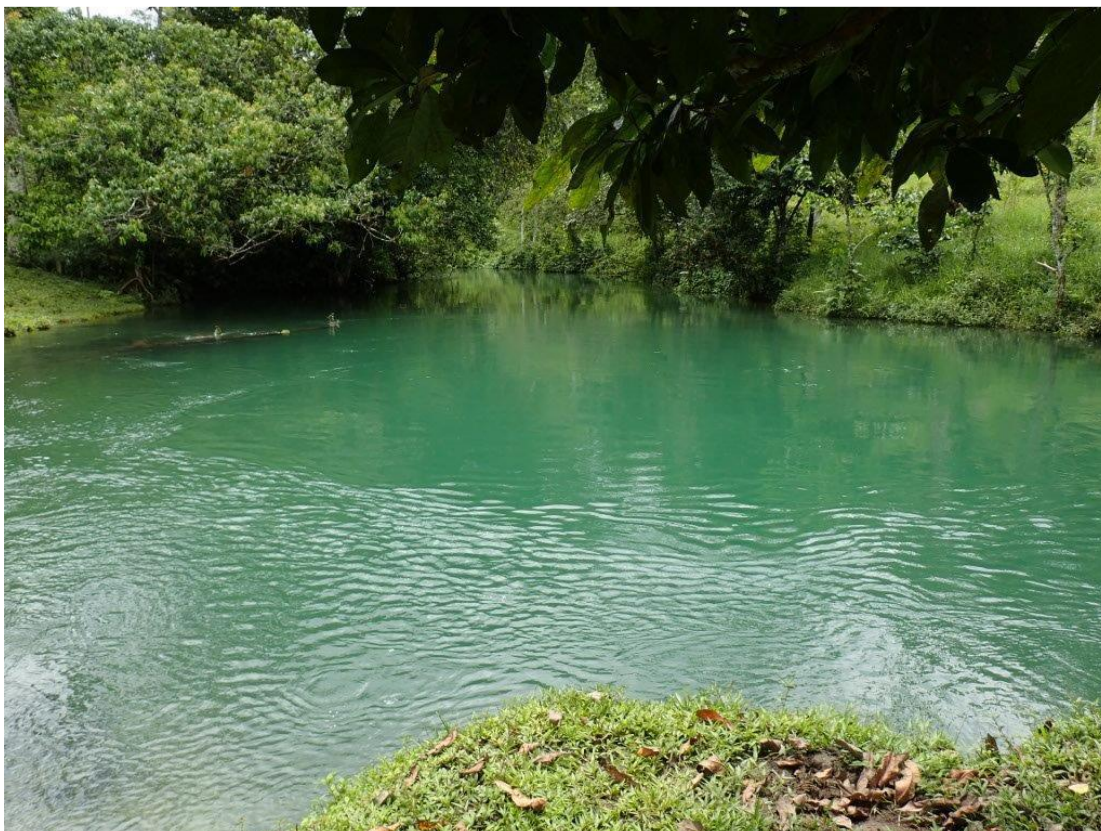


Rio Serrano Yacu downstream the spring (source: JL Guyot)

MIKAS – Naciente del Río Aguas Claras

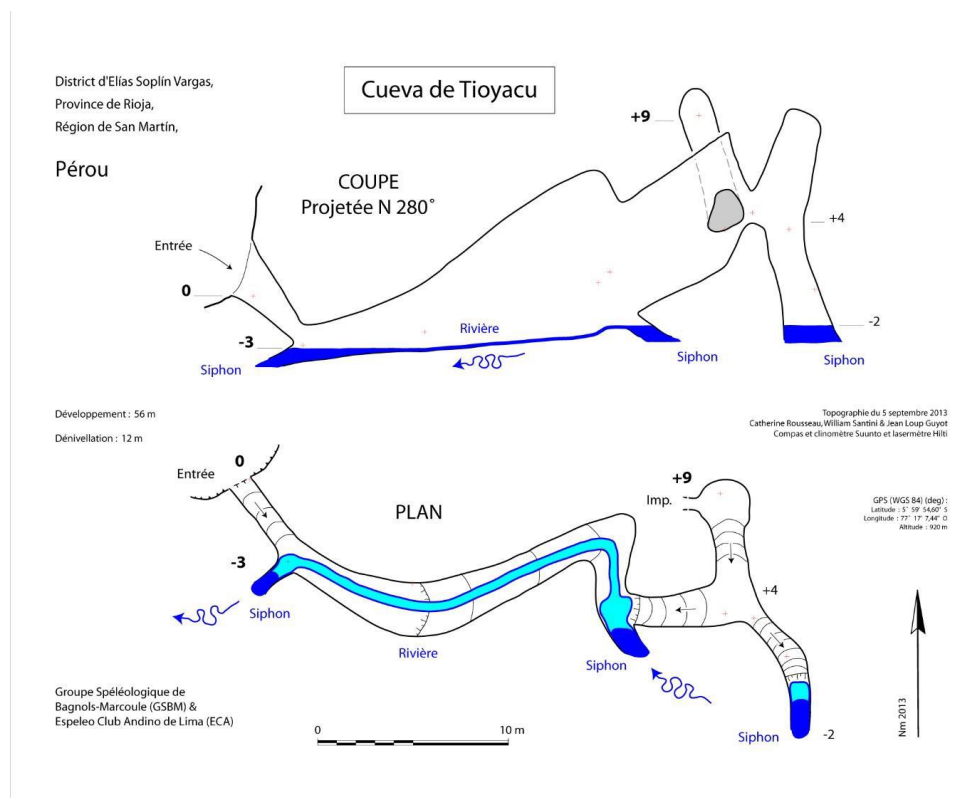


Siphon section of the spring of Rio Aguas Claras (X. Robert, 2019)



Rio Aguas Claras spring (source: JL Guyot)

MIKAS – Naciente del Río TioYacu



Cave-Siphon section of the spring of the Rio TioYacu (ECA-GSBM, 2013)



Rio TioYacu spring (source: JL Guyot)



Rio TioYacu spring recreational park (source: JL Guyot)

MIKAS – Naciente del Río TioYacu

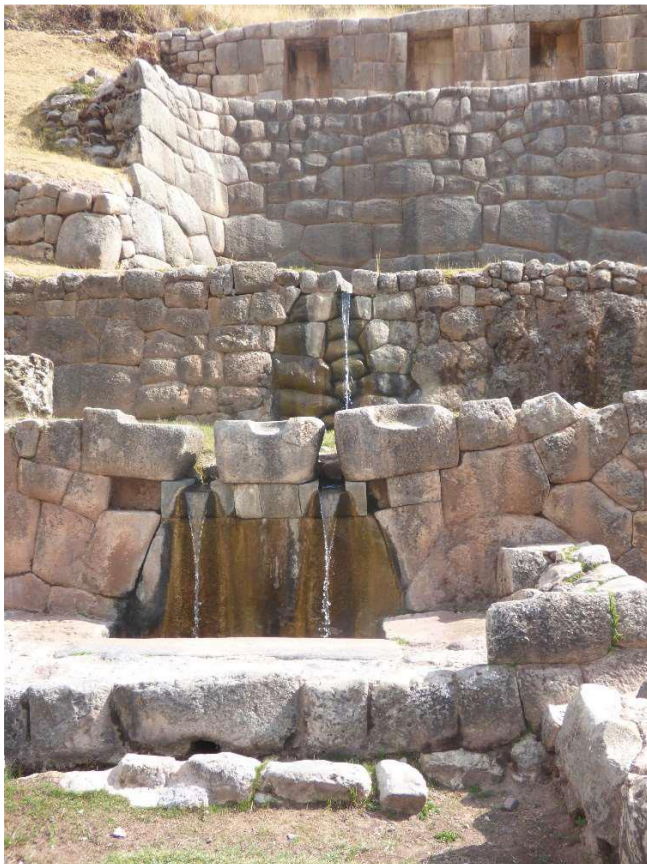


Rio Negro spring (source: JL Guyot)



Discharge zone of the Rio Negro spring (source: JL Guyot)

MIKAS – Tambomachay



Tambomachay spring (source: J. Ccopa)



Tambomachay spring (photo by Z. Stevanović)

NIKAS - Cueva de Palestina / Naciente del Río Jordán



Cueva de Palestina



Río Jordan, downstream of the Cueva de Palestina

NIKAS - Río Seco – Río Soloco



Cueva del Rio Seco entrance (source: JL Guyot)



Spring of Rio Soloco in flood period, downstream the Cave (source: JL Guyot)