

Altitude of core head was estimated from the most detailed topographical map available at [ftp://geofp.ibge.gov.br/cartas\\_e\\_mapas/bases\\_cartograficas\\_continuas/bc25/rj/versao2018/](ftp://geofp.ibge.gov.br/cartas_e_mapas/bases_cartograficas_continuas/bc25/rj/versao2018/) (IBGE, 2018). Detailed information is available at *Nota Técnica* in annex (nota-tecnica\_bc25\_rj\_2018-05-23.pdf). DEM generation method and detailed information is available at the Metadata document, in annex (Metadados\_MDE\_RJ25.pdf). Vertical accuracy is ~1m, with the DEM classified every meter.

Present water level at Salgada Lake is at 0m msl for both the vectorized topo map and DEM. One year monthly observation of the water level at the lake, yields an average of a few centimeters of depth, with no water being the most common (personal communication from Douglas Rosa da Silva; Kátia Leite Mansur & Leonardo Fonseca Borghi de Almeida, authors of *Distribution and Growth Morphology of the Recent Microbialites: the Case of Lagoa Salgada, Rio de Janeiro – Brazil*, in annex).

Thus, the Salgada Lake core top is considered to be at present-day sea level.

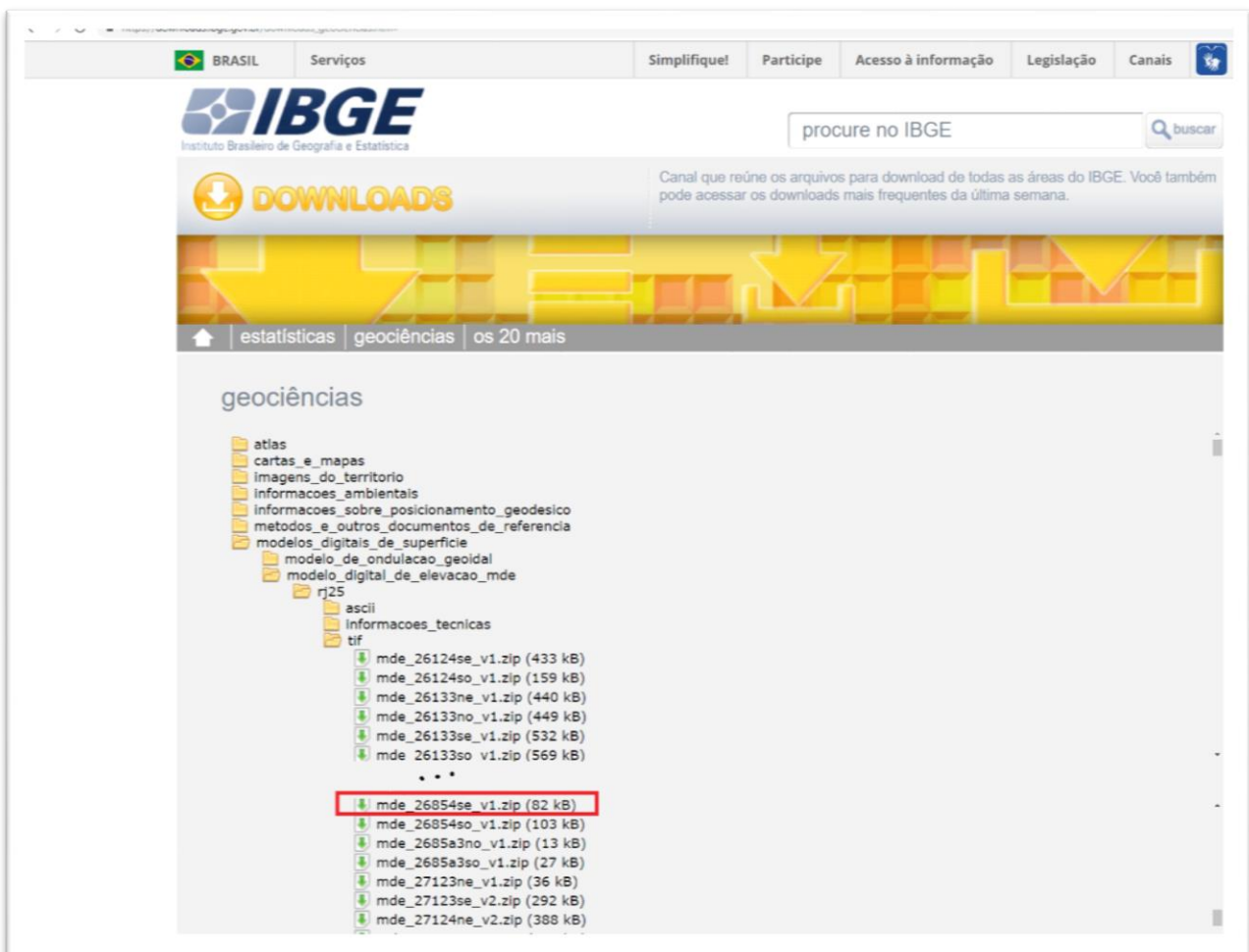


Fig 1: Screen capture of chosen DEM for the area, available at [https://downloads.ibge.gov.br/downloads\\_geociencias.htm#](https://downloads.ibge.gov.br/downloads_geociencias.htm#)

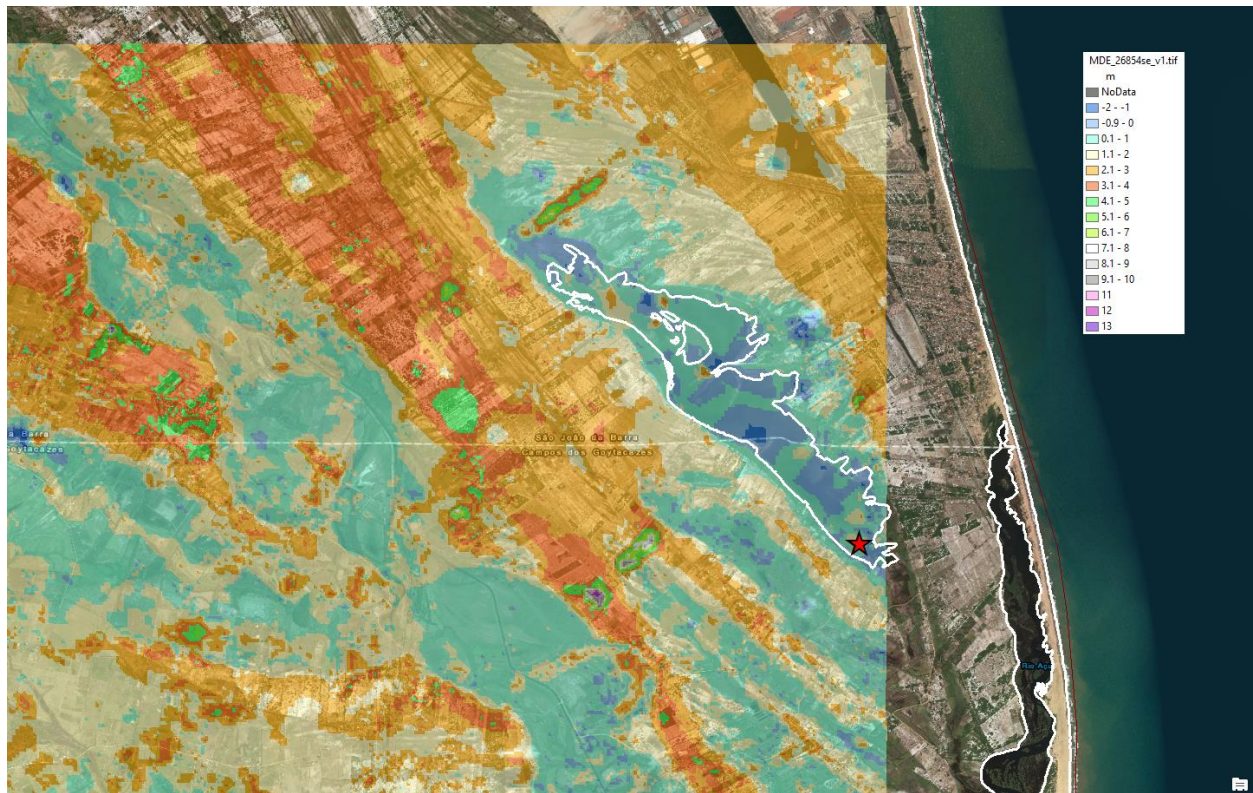


Fig 2: IBGE DEM draped over Sentinel-2 imagery. White line is 0m msl (above). Core site: red star. The excavation for Porto do Açu is observed in the north of the satellite imagery (below).