

Geo-environmental study of Tilcara  
(Jujuy, Argentina)

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Tilcara, a town in the Humahuaca ravine, 84 Km north of San Salvador de Jujuy, is built over the alluvial fan of the Huasamayo river of the Grande river.

As a consequence of its place of location, Tilcara is constantly exposed to the frequent swelling of the Huasamayo river and to the dense flows that come down through its riverbed.

Significant amounts of money are invested annually in different projects to try to solve the problem. However, the materials and the designs of such projects are inappropriate because the research done up to the moment does not deeply analyze or explain how the dense flows generate, which constitutes a menace to the Tilcara site.

Our study explains the formation of the dense flows and suggests alternative works to minimize these problems.