



Come gather 'round people
Wherever you roam
And admit that the waters
Around you have grown
And accept it that soon
You'll be drenched to the bone
If your time to you is worth saving
Then you better start swimmin'
Or you'll sink like a stone
For the times they are a-changin'
'The Times They Are A-Changin'
Bob Dylan

HOW I WILL USE THE KNOWLEDGE GAINED IN THE PROGRAM?

Flood risk management is a complex multidisciplinary activity that ranges from a woven network of technological innovation to the coordination of various sectors of society and institutions. Particularly in Spain, flash floods account for almost 90% of flood victims. In the northwest, mountain chains favour not only torrential rain concentrated in small catchments, but also heavy rainfall. An increase in intensive short-term precipitation in most of Europe is likely to lead to an increased risk of flash floods⁽¹⁾, particularly in the Mediterranean and eastern Europe.

I would like to work in an international institution where I can integrate the social aspects of flood-related disasters with new technological developments and applying the knowledge acquired during my Masters course.

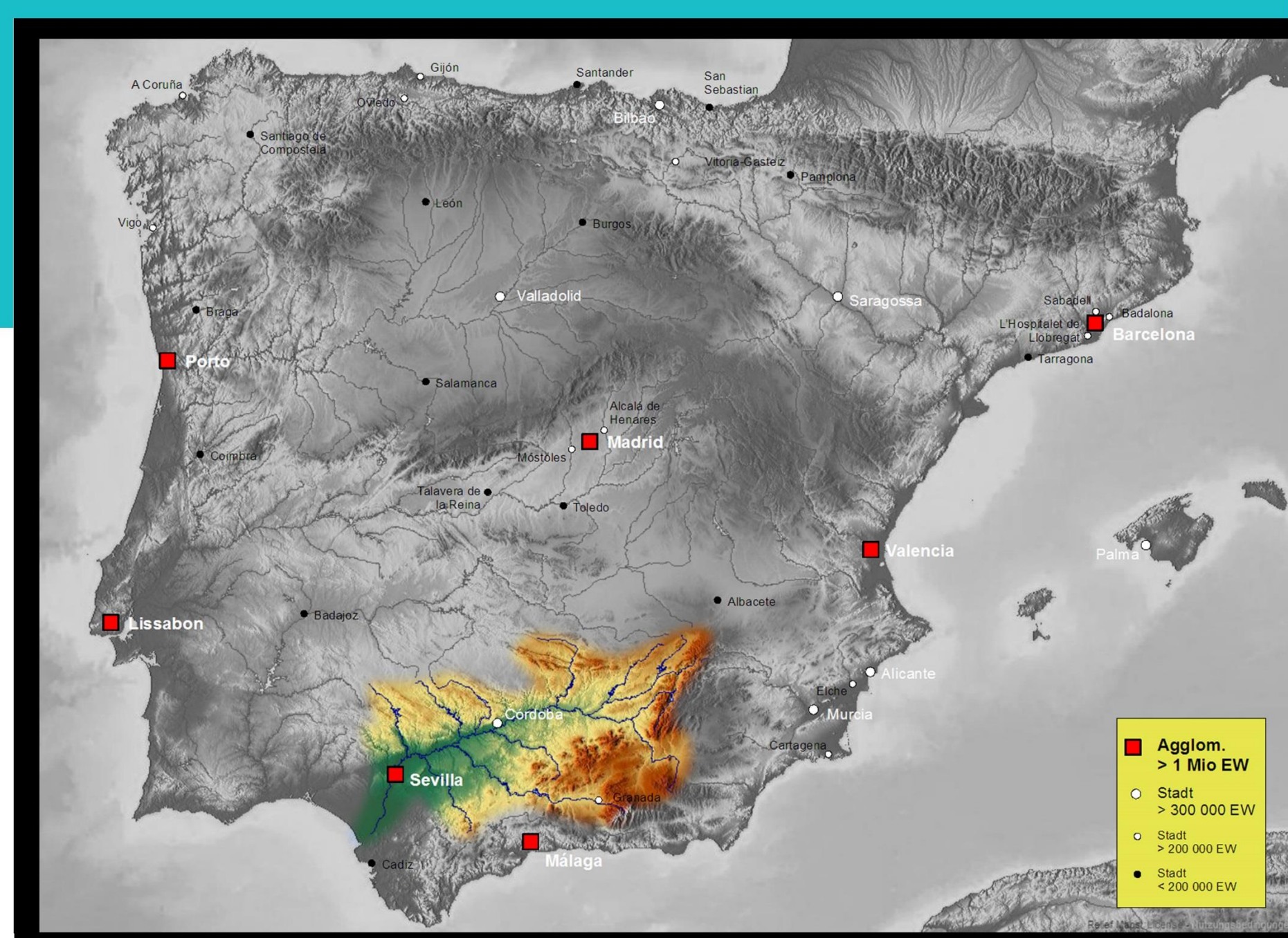
(1) European Environment Agency, 2017. *Climate change, impacts and vulnerability in Europe 2016. An indicator-based report.* EEA Report No1/2017, 410 pp.



An example of a flash flood is the Biescas disaster in Spain in 1996, where 160 mm of rain fell in 1 hour producing a flash flood that killed 87 people in a campsite.

WHY I CHOOSE FLOOD RISK MANAGEMENT

The Erasmus Mundus Flood Risk Management Program at UNESCO-IHE is expressly designed to cover a wide range of topics, from natural drivers and processes to models, decisions and socio-economic consequences and institutional environment, and is therefore an important advance in Water education for Europe. Water is related to all aspects of nature and society, and I am very enthusiastic about the possibility of actively contributing to the good management of water resources. Being a hydrogeologist will allow me to use my knowledge and skills to actively contribute in a challenging environment and on significant issues positively.



Map of Guadalquivir river basin in Spain. Source: <http://www.maps-for-free.com>.



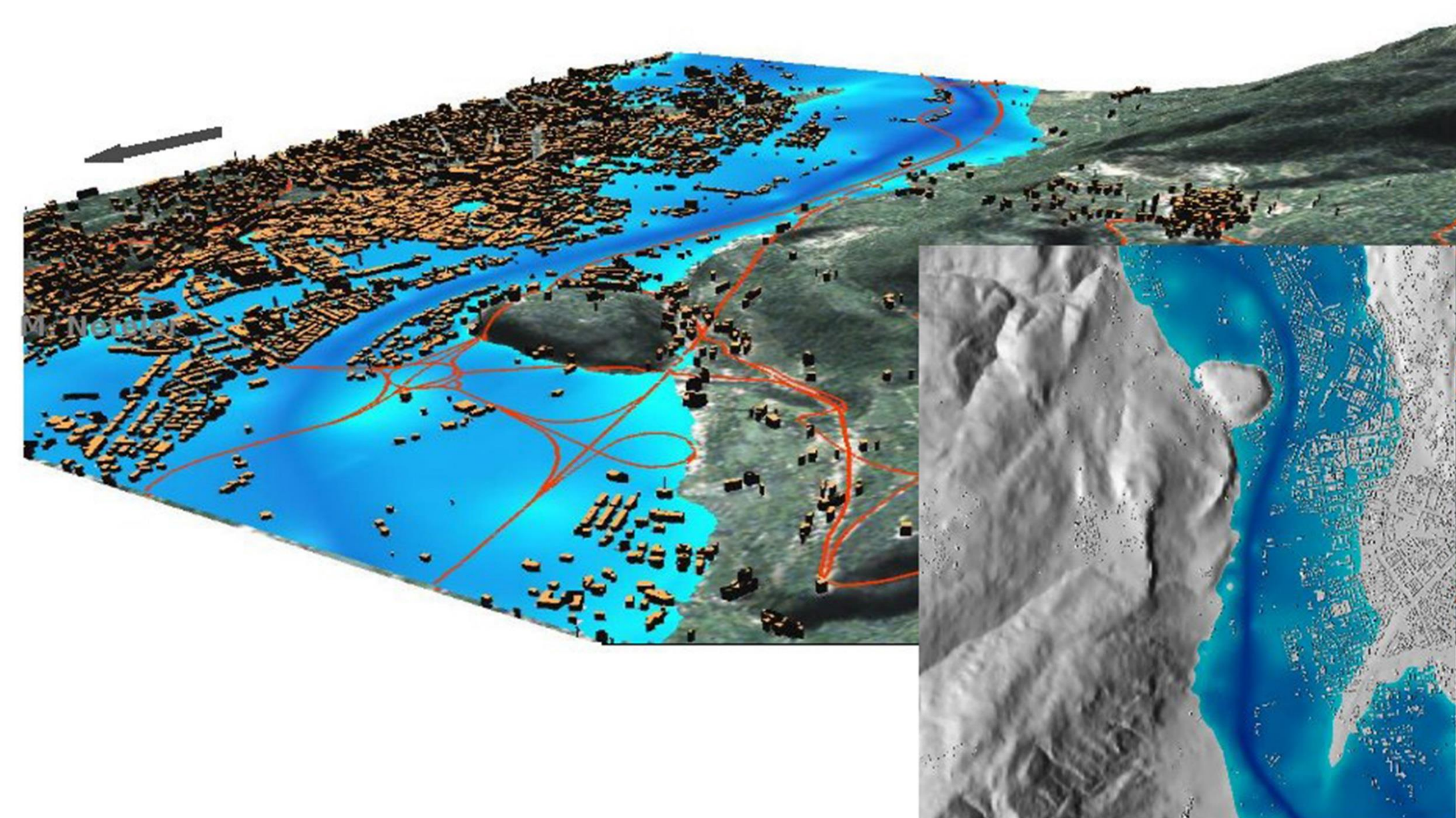
Javier de la Cruz

Country of Origin: Spain
Educational Background:
2018: M.Sc. Flood Risk Management, UNESCO-IHE, Netherlands
2015: M.Sc. Hydrology and Water Resources Management, UAH, Spain
2014: B.Sc. Geology, UCM, Spain

BACKGROUND

My name is Javier de la Cruz. I graduated in **Geology** at the **Complutense University of Madrid (UCM)**, Spain, in 2014. During my undergraduate studies I became interested in hydrology and natural hazards. After obtaining my degree, I studied a **master's degree in Hydrology and Water Resources Management (UAH)**.

After working as a Geologist for three years in my country, I decided to enroll in the **Erasmus Mundus Flood Risk Management Program at UNESCO-IHE**.

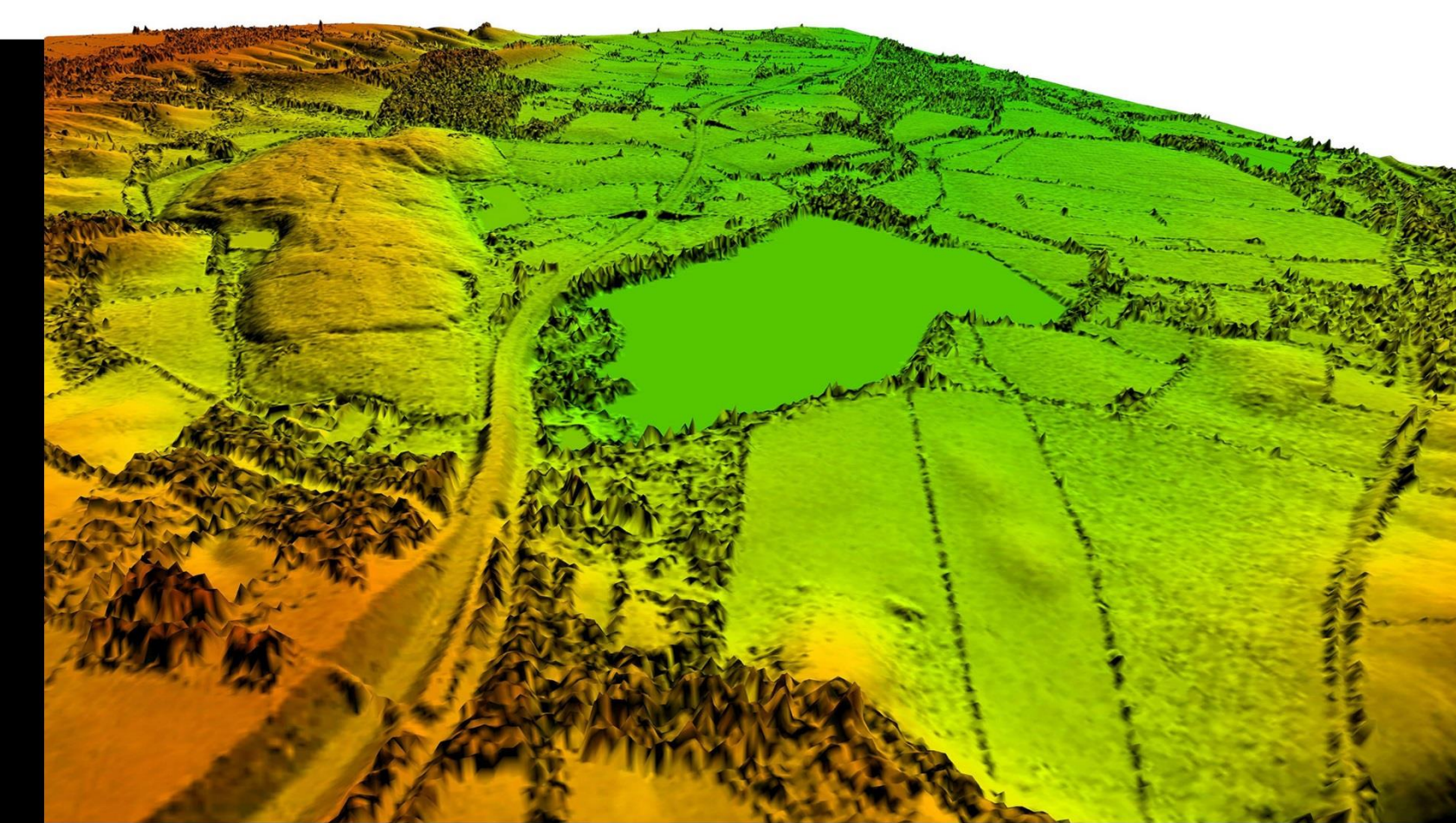


Trento: flooding 1966. Source: <https://grass.osgeo.org/>

PREVIOUS RESEARCH AND RESEARCH INTERESTS

As a geologist, I have worked for an environmental company in Spain, monitoring the hydrological and methodological data of the Guadalquivir River Basin (Spain). Recently I have been working as an imagery analyst performing extraction of terrain, topographic and urban features from high resolution satellite data for the work program of the UNGSC / SGIT-GIS, in order to provide geo-spatial services to the United Nations field missions operations.

My research interests are in line with the use of remote sensing data for flood forecasting, flood mapping, scenario-analysis and also numerical modeling for contaminant transport and remediation systems of contaminated sites.



Bluesky remote sensing data for WSP Smart Consulting. Source: <http://geoinformatics.com/>



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