

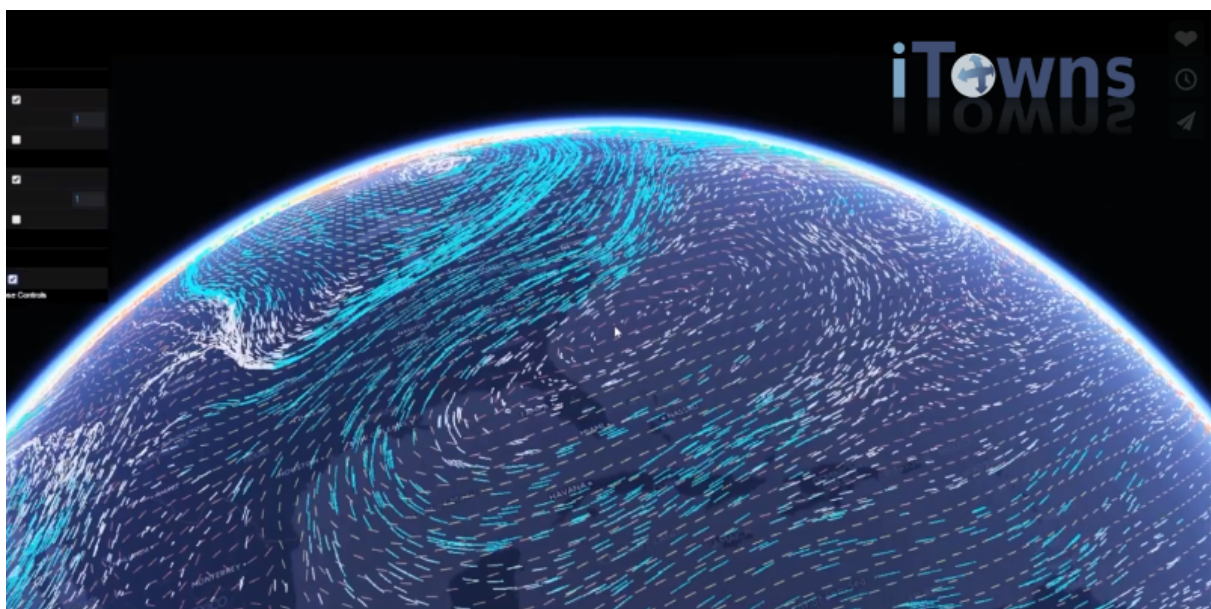
Postdoc - Geovisualization – 18 months.

Geovisualization of climate data and their uncertainties for global climate change understanding.

Context

We are seeking a postdoc to participate in the ERA4CS¹ european project URban CLIMate Services (URCLIM)² aiming at providing urban climate services. Our purpose is to propose methods and tools to assess the impacts of the climate change on an urban environment and on urban planification. The urban environment is particularly vulnerable to the climate change, due to the growing of its population and related infrastructures. Researchers in meteorology and in geographic information sciences need to integrate and co-visualize both geographic data describing the urban space and data simulating the climate, in order to observe and analyze such phenomena, through space and time.

Visualization and interaction with heterogeneous data (in representation, semantics, geometry, temporality, scale, etc.) requires methods to favor their **co-visualization**, to facilitate the **representation** of various uncertainties from data acquisition and underlying models, and to help the **interaction** based on exploration and navigation between data and representations, according to targeted uses (natural phenomena observation, spatio-temporal analysis, etc.) and for various users (citizens, practitioners, meteorologists, stakeholders, etc.).



¹ <http://www.jpi-climate.eu/ERA4CS>

² <http://www.jpi-climate.eu/nl/25223460-URCLIM.html>

Task

The task is to design and implement methods, according to the profile of the postdoc, of rendering and stylization techniques adapted to climate data, of uncertainty visualization, or of interaction for climate and geographic data exploration. These methods will be implemented in the open source iTowns geovisualization platform³.

Expected profile

PhD in Geographic Information Sciences, Information Visualization, or Computer Graphics.

Skills

Geovisualization, information visualization, graphic semiology, interactive realtime rendering.

Web Visualization (Javascript, WebGL, ...).

Interests for climate change.

Conditions

The postdoc is funded by the European URCLIM project and will take place at the LaSTIG lab of IGN, GeoVIS team, in Saint-Mandé (94, close to Paris), for 18 months, starting in Autumn 2018. Applications have to be sent for the March, 1st 2018.

Applications

To apply, please submit a CV, a motivation letter and a link to the PhD thesis and main publications to Charlotte Hoarau : charlotte.hoarau@ign.fr and Sidonie Christophe : sidonie.christophe@ign.fr

³ Open source 2D-3D Visualization platform: <http://www.itowns-project.org/>