



Kristel Chanard

Research Scientist

Institut de Physique du Globe de Paris

1, rue Jussieu - 75238 Paris cedex 05

chanard@ipgp.fr

Paris,
July 22, 2022

Dear Selection Committee,

My name is Kristel Chanard, and I am an early career research scientist at the Institut de Physique du Globe de Paris, in France. My research focuses on understanding how the Earth's shape, gravity field and rotation change in response to variations in continental hydrology, oceans and the atmosphere, and what role these changes may play in triggering small earthquakes. Answering these questions has great potential, from monitoring the evolving climate, to further our understanding of what controls seismicity. Yet, it comes with scientific and technological challenges that are intimately related, and requires hand-in-hand improvements of observing facilities, and of our understanding of solid Earth-climate interactions. In fact, a variety of emerging research fields call for scientists like myself to combine geodesy and seismology, science and technology, in order to tackle some of today's pressing scientific and societal questions.

I truly believe that the merger of IRIS and UNAVCO into the EarthScope Consortium is a major step towards bringing together communities and advancing cutting-edge geophysics. It is my pleasure to apply for a position to serve on the first EarthScope Consortium Board of Directors. My application is driven not only by my research interests, but also by my desire to contribute to building scientific and educational resources that will ultimately benefit the merged community. I have engaged in several activities over the past few years that I feel would enable me to contribute positively and substantially to the work of the Board.

First, I am a member of the research team responsible for the International Terrestrial Reference Frame (ITRF), which provides the basis for all modern positioning, orbit determination, and Earth orientation measurements. This entails working with the Geodesy and Geophysics communities to improve and maintain global geodetic networks, and advance the reference frame definition. Then, I lead and participate in scientific working groups of the International Association for Geodesy (IAG), and serve as a member of the Earth Rotation and Reference Systems Service (IERS) Directing board. Trying to establish strategic orientations for the IERS that best benefit the IAG scientific community has been a tremendous experience. I also participate in building and managing ground geodetic networks, including the Nepal GNSS network, and in scientific discussions investigating the European Space Agency next generation gravity mission. I appreciate maintaining my involvement with observing facilities because quality and innovative observations are key to improve our understanding of a number of geophysical processes. Finally, I am involved in educational activities, including teaching interdisciplinary courses, supervising students, and participating in various outreach programs. In particular, I hope to train a diverse and inclusive group of future scientists by taking action to face challenges minorities have to overcome.

In conclusion, I would be honoured to join the EarthScope Board of Directors along with others who share my enthusiasm for seismology and geodesy. I sincerely hope my scientific, field, and educational background will enable me to best serve the organisation.

Sincerely,
Kristel Chanard

A handwritten signature in black ink, appearing to read "Kristel Chanard", written in a cursive style.