



SCHOOL OF PUBLIC HEALTH AND TROPICAL MEDICINE

*Department of International Health and Sustainable Development*

April 25<sup>th</sup>, 2022

RE: TWSC proposal **“Open Source Science for Environmental Justice and Climate Change Resilience on the Gulf Coast”**

Dr. Yaítza Luna-Cruz  
PoC: Transform to OPen Science Training  
NASA Science Mission Directorate  
300 E St SW, Washington, DC 20546, United States

Dear Yaítza,

I am writing to confirm the relevancy of a Topical Workshops, Symposia, and Conference (TWSC) proposal tentatively titled **“Open Source Science for Environmental Justice and Climate Change Resilience on the Gulf Coast”**. In preparation for the Year of Open Science (YOOS), Tulane University and partners would like to propose a series of capacity development workshops under Allowable Focus E. **“Coordinate, communicate, and engage with ... organizations that advance racial equity and support underserved communities”**. We seek to empower EJ and climate change vulnerable communities in the underserved southern Gulf Coast with capacities for accessing and using NASA open earth science in the decisions that affect their communities and environment.

The Gulf Coast has significant economic importance and is the fastest growing coast. At the same time, the region is home to increasing disparities that will be worse under climate change. Disparities in environmental and climate justice follow similar patterns of disparities in socio-economic wellbeing and barriers to enfranchisement of marginalized communities that lack adequate inclusion in the decisions that impact their environment and health. Open source science that promotes aggregating individual voices and observations in a scientifically valid way promises to promote research that is broadly inclusive and therefore has the potential to benefit even the most underserved communities. Unfortunately, the same social and geographically-located barriers concentrated in southern Gulf Coast region that make communities vulnerable also can pose barriers to necessary capacity development to engage in high quality open science.

The recent open source support to the Climate and Economic Justice Screening Tool provides a timely and powerful proof of concept for bringing Open Science and Climate/Environmental Justice communities together to co-create decision support tools. Also for NASA, we hope that capacity development activities can provide sustainability and synergy of the significant NASA investments made in projects such as the Gulf of Mexico Research Initiative and Delta-X in anticipation of the exciting possibilities for the region offered by missions such as GLIMR and SWOT.

The LA Board of Regents and NASA EPS-CoR have supported Tulane University School of Public Health and Tropical Medicine to conduct a stakeholder mapping of Open Source Science and

Environmental/Climate Justice networks, organizations, change makers, and communities along the Gulf Coast in the coming months. This coincides with Tulane University Presidential Initiatives on data literacy and equity, inclusion and diversity. Our Dean has set a goal of being the most diverse Public Health School in the United States. Together, the University has made generous availability of facilities and funds to support initiatives such as this proposed set of TWSC capacity development workshops. This includes use of the excellent facilities and outstanding conference support of our Tulane Bywater Institute Coastal and River Center (<https://bywater.tulane.edu/content/tulane-river-and-coastal-center>).

We would propose 4-6 multi-day workshops beginning in late 2022 and continue through the kick off of YOOS in 2023. These events would concentrate on introducing key approaches to open science to EJ and underserved communities as a much needed introduction for this region to the YOOS. We would dedicate time to specific uses of NASA open earth science through case studies and hands on facilitated problem based learning. The final sessions of the workshop would bring together the identified communities with open source science organizations and experts to co-create open science activities and applications in support of equity and climate/environmental justice. Tulane would seek to partner with our existing and developing network of MSI including longstanding relationships with institutions including University of Texas and organizations that work with underserved communities such as New Orleans' Deep South Center for Environmental Justice or Louisiana Bucket Brigade. Each workshop would invite the communities that would likely most benefit, and will have been identified as part of the stakeholder mapping, such as:

- Frontline, primarily African American and Hispanic, EJ communities and organizations
- Fishing-related small enterprises and communities that often face linguistic barriers to engagement such as the large Vietnamese community on the Gulf Coast
- Tribal communities
- Linguistic and other underserved minority communities at risk of managed or unmanaged retreat from coastal areas
- Citizen scientists, sportsperson organizations, conservation and other groups interested in non-human as well as human environmental injustice
- Others to be identified

Perhaps we could also schedule a shared experience session for cross learning between the workshops at the Fall AGU in 2023.

Our experienced administrative team is eager to contribute to this important initiative. With confirmation of the relevance and basic guidance on budget and timing, we have at the stand by all the necessary elements for a compelling proposal that will ensure that the southern Gulf Coast is not left behind in YOOS – particularly considering the potential value of the NASA open Earth science to the region.

We look forward to your kind response, before submitting our proposal on or before May 13<sup>th</sup>.

Kind regards,

Nathan Morrow, PhD  
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Department of International Health and Sustainable Development  
Tulane School of Public Health and Tropical Medicine