YUCARS Center for Research and Application of Satellite Remote Sensing 山口大学応用衛星リモートセンシング研究センター





Date: 14:30-15:30 March 22th, 2023

Venue: Room No.15, General Education Building

Language: English



Disaster Risk Reduction for Refugees: Example for the Rohingya in Bangladesh **Prof. Peter Sammonds**

Professor of Geophysics and Climate Risks, Inst for Risk & Disaster Reduction, Faculty of Maths & Physical Sciences, University College London(UCL)

Prof. Peter Sammonds works at the interface of natural and social sciences. His research and knowledge exchange is on natural hazard risks, disasters and recovery. He has worked on earthquake mechanics, volcanoes and ice physics in the Arctic. He works on research council, British Academy and Royal Society-funded projects on Increasing Resilience to Environmental Hazards in Border Conflict Zones and Resilience Futures for the Rohingya Refugees. He is currently the Gender and Intersectionality Ambassador for the UKRI network+ GRRIPP project led by the IRDR Centre for Gender and Disaster.

Abstract:

"Rohingyas are a predominantly Muslim minority from the Rakhine State (former Arakan) of Myanmar (former Burma). Since they are not recognized as citizens by Myanmar, Rohingyas have faced widespread discrimination forcing more than one million of them to flee their country since 1970. The United Nations (UN) labelled the Rohingyas as the "world's most persecuted minority". In August 2017, killings, rape, torture and other massive violations of human rights resulted in ethnic cleansing which forcibly displaced Rohingyas, mostly to Bangladesh. Here they are uniquely vulnerable to natural hazard risks. By way of bringing the conceptual structure of general risk model in practice for refugees, we examined the spatial patterns of cyclone risk, flash flood risk and landslide in the Cox's Bazar district and Rohingya refugee camps located on the southeastern coast of Bangladesh. Selected risk parameters were analyzed and integrated though the complementary use of Analytic Hierarchy Process (AHP) and Geographic Information System (GIS) for depicting the hazard risk situations comprehensively at different spatial scales. We then applied a novel method, combining landslide inventory and susceptibility maps, rainfall thresholds and dynamic web-based alert system, has been introduced to develop the landslide early warning system (EWS) by applying advanced geoinformation techniques. The EWS would support the local authorities and international organisations in reducing disaster risks and saving lives from landslides in a humanitarian context."