



GEO WEEK 2019  
 PACIFIC ISLAND PROGRAM  
 4-7 November 2019

## Deep Dive – Pacific Island Earth Observing Stories

1.30pm-3.00pm, Monday 4th November 2019

Executive Room, National Convention Centre

### Summary:

This event is a deep dive based on local case studies from the Pacific that will provide understanding of application, challenges, and opportunities for Pacific Island organizations and communities to bring EO capabilities and knowledge to bear on sustainable development and economic advancement, disaster risk reduction, or climate change.

The selection of speakers and topics will inform the GEO community of local application or programs that rely on EO products at a variety of spatial and temporal scales, inspire a sense of the user-driven perspectives of the Pacific Islands, and motivate thinking about the most effective ways for the GEO community to work with Pacific Island leaders to advance application of EO in the region.

**Format:** The session will host a panel of 6 speakers. Each panel speaker will provide around 7-10 minutes of remarks, which will be followed by facilitated discussion, live polling and moderated audience questions via Sli.Do.

### Session at a Glance:

Time	Item	Speakers
1:30	<b>Welcome</b>	<ul style="list-style-type: none"> <li>Acknowledgement to Country, <b>Emma Luke</b>, Geoscience Australia</li> <li>Opening remarks, <b>David Helweg</b>, U.S. Geological Survey</li> </ul>
<b>Panel</b>		
1:35	<b>Regional Planning: Biome Mapping</b>	<ul style="list-style-type: none"> <li><b>Roger Sayre</b>, U.S. Geological Survey</li> </ul>
	<b>Situational Awareness: OceanWatch and ReefWatch</b>	<ul style="list-style-type: none"> <li><b>Emily Smail</b>, NOAA-University of Maryland Cooperative Institute for Climate and Satellites</li> </ul>
	<b>Climate Change Adaptation: Local EO</b>	<ul style="list-style-type: none"> <li><b>David Helweg</b>, U.S. Geological Survey</li> </ul>
	<b>EO for Meteorological Services</b>	<ul style="list-style-type: none"> <li><b>David Hiba Hiriasia</b>, Solomon Islands Meteorological Service</li> </ul>
	<b>Stewardship of Geospatial Data</b>	<ul style="list-style-type: none"> <li><b>Snyther Biza</b>, Department of Environment, Climate Change and Emergency Management, FSM</li> </ul>
	<b>MCT: EO Across Boundaries</b>	<ul style="list-style-type: none"> <li><b>Jasmine Mendiola</b>, Rare.org and Micronesia Conservation Trust, FSM</li> </ul>
	<b>Satellite Based Earth Observations – An essential Tool for Securing and Protecting Small Island and Developing State’s Maritime Rights.</b>	<ul style="list-style-type: none"> <li><b>Mark Alcock</b>, Director Boundaries &amp; Georegulations, Geoscience Australia</li> </ul>
2.35	<b>Q&amp;A</b>	<ul style="list-style-type: none"> <li><b>Panel Speakers</b></li> </ul>
<b>Closing</b>		
2.55	<b>Thank you</b>	<ul style="list-style-type: none"> <li><b>David Helweg</b>, U.S. Geological Survey</li> </ul>
	<b>Next Steps – Tomorrow’s Agenda</b>	<ul style="list-style-type: none"> <li><b>Emma Luke</b>, Geoscience Australia</li> </ul>

## The Presenters



**Roger Sayre**

Dr. Roger Sayre is an ecosystems geographer at the U.S. Geological Survey. He is the GEO Ecosystems lead for the production of standardized, robust, and practical global ecosystem classifications and maps for terrestrial, freshwater, and marine environments. In that capacity, he works with Esri scientists and international experts to develop high spatial resolution, first-of-their kind maps of global ecosystems. The maps are intended to be useful for conservation priority setting, ecosystem accounting, and other applications.



**Emily Smail**

Dr. Emily Smail is the Executive Director of the GEO Blue Planet Initiative and a Senior Faculty Specialist at the NOAA-University of Maryland Cooperative Institute for Climate and Satellites. She also serves as the cochair of the GEO AquaWatch Initiative's outreach and user Engagement working group and supports outreach and education

efforts for the NOAA CoastWatch/OceanWatch program. Previously, Dr. Smail worked in informal science education at the Waikiki Aquarium and policy at the United States Senate. She and holds a B.S. in Biology from the Pennsylvania State University and a Ph.D. in Marine Environmental Biology from the University of Southern California.



**David Helweg**

Dr. Dave Helweg is Senior Liaison for Insular Relations in the U.S. Geological Survey National Climate Adaptation Science Center. Helweg leads development of methodologies to conduct strategic initiatives, developing partnerships, and identifying the key science support needs of U.S. Department of Interior Office of Insular Affairs and partner organizations in the U.S. Affiliated Pacific Islands (USAPI) and U.S. Virgin Islands (USVI). He develops working partnerships that produce science products in support of the mission of the Office of Insular Affairs to provide technical assistance to the territories of American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands, as well as the freely associated states of the Federated States of Micronesia, the Republic of the Marshall Islands, and the Republic of Palau under the Compacts of Free Association. He engages with leaders in the Office of Insular Affairs, USAPI and USVI,

transforms their priorities for natural and cultural resource management, and the well-being of human communities, into science objectives, and identifies which program(s) in USGS are well-suited to provide technical assistance for those science objectives. Dave spends his free time with his family and participating in native forest restoration on his home Hawai'i Island.



**David Hiba Hirasia**

Mr. Hirasia is the Director of the Solomon Islands Meteorological Service.

Mr. Hirasia held a Bachelor of Science (Maths and Physics) from the University of the South Pacific, Fiji in 1998. After graduation, in 1999, he taught in senior secondary schools teaching Mathematics and Physics till 2006 when he joined the Solomon Islands Meteorological Service as a Senior Climate Officer working mainly on data rescue and digitization.

Under the support from the Australian Government and the World Meteorological Organisation, he was fortunate to be offered a scholarship to do a graduate diploma in meteorology with the Australian Bureau of Meteorology Training Centre in Melbourne in 2007.

He became the Deputy Director, Solomon Islands Meteorological Service in 2010 and working as the

Head of Weather Forecasting Services until 2014 when he was promoted to the Director's position.

In 2016/2017, Mr. Hiriasia was offered a WMO Fellowship and graduated with a Masters in Meteorology and climate with Management from the University of Reading, United Kingdom.



#### **Snyther Biza**

Mr. Snyther Biza is the GIS and Data Officer at the Federated States of Micronesia National Government with the Department of Environment, Climate Change and Emergency Management. Native of the Federated States of Micronesia (FSM), Snyther Biza, based on his education at the College of Micronesia-FSM and in Australia, has become an expert in GIS, and a college-level professor in mathematics and related disciplines for more than ten years. Upon completion of his MA at UQ in Brisbane, Australia, Snyther became a faculty member of mathematics and basic GIS with the Mathematics and Sciences division at the College of Micronesia-FSM. During his college tenure from 2008 to early 2019, Snyther also became one of the GIS consultants and a geospatial trainer for FSM's national projects that requires geospatial capacity development. Several of these projects include FSM's state-wide assessment and resources strategies, FSM's states important forest resource areas mapping, and FSM's climate change impacts projections using sea-level rise modelling. During his free time, Snyther spends time with his family, and on occasions, he can be found

on his 19-foot motorboat, out fishing with his fishing mates.



#### **Jasmine Mendiola**

Ms. Jasmine Mendiola is the Senior Program Implementation Manager at Rare.org for the Micronesian region covering the FSM, Palau and Marshall Islands. Rare is an international conservation organization that concentrates on behavior change to support conservation efforts and sustainable management, in partnership with the Micronesia Conservation Trust (MCT). Descendent of the Dipwinmen Clan and native woman of the island of Pohnpei, Federated States of Micronesia, Jasmine Mendiola grew up in a naturally rich environment – where water was never scarce, where green is everywhere and where fish was abundant. Mendiola pursued both her interests – social and natural sciences – at the College of Micronesia. She has worked at the Western and Central Pacific Fisheries Commission and the Australian Embassy in Pohnpei. For over five years Mendiola was the Assistant Director to the Marine and Environmental Research Institute of Pohnpei (MERIP), a local NGO focusing on improving livelihoods through sustainable aquaculture. Simultaneously, Mendiola occupied a few part-time roles assisting the Pacific Resources for Education and Learning (PREL) organization and serving as the FSM Fisheries Ambassador; even working short-term contracts with the Food and Agriculture Organization of the United Nations as a National Aquaculture Consultant. Mendiola

serves in the civic society advising and supporting environmental NGO's and several youth groups, and holds high responsibility in her extended family unit and her community.

**Mr Mark Alcock**, Director, Boundaries & Georegulations, Geoscience Australia

Mark has been the Director of Georegulation since 2008, where he is responsible for leading the Australian scientific and technical program that manages Australia's offshore boundaries. This includes assistance to the Pacific region to secure its marine jurisdiction rights.

He chairs the International Hydrographic Organisation S-121 Maritime Limits and Boundaries Project Team, a body established in answer to a 2004 United Nations General Assembly Resolution tasked with improving the United Nation's systems for sharing and publicising maritime limits and boundaries.



**Ms Emma Luke**, GEO Ministerial Taskforce's Government and International Strategy Advisor A firm believer in science for development, Ms Luke has over 18 years experience in the Australian government in international science roles, working mainly across the Asia Pacific. Career highlights include leading the APEC Earth and Marine Observations initiative (2015) and program coordinator for the ASEAN-based SPS Capacity Building Programme and the Australian Plant Pest and Disease Database. She holds a BSc. with honours in biological sciences and completing her Masters in Marine Sciences & Management and enjoys underwater photography in her spare time.