

## **Blue Horizons: Strengthening the Philippines–Brazil Cooperation in Earth Observation (E.O.) for Marine and Coastal Biodiversity Conservation**

19 August 2025 (Brazil)  
20 August 2025 (Philippines)  
Virtual

### **Abstract**

As global environmental challenges intensify, international collaboration in space science and technology offers transformative solutions for marine and coastal conservation. Blue Horizons brings together leading institutions from the Philippines and Brazil to explore and advance bilateral cooperation in monitoring and protecting vital ecosystems such as mangroves, estuaries, and coral reefs using geospatial and Earth Observation (E.O.) technologies.

Anchored from the Philippine Space Agency (PhilSA) and the Brazilian Space Agency (AEB) signed agreement for cooperation on the peaceful uses of outer space, this webinar highlights the strategic importance of space-based applications in mapping and safeguarding territorial waters. Inspired by Brazil's "Blue Amazon" initiative—a pioneering policy framework for the sustainable management of its vast maritime domain—Philippine authorities seek to deepen engagement with Brazilian counterparts to enhance national and regional conservation efforts.

The event will convene experts from both countries, including representatives from the Department of Environment and Natural Resources (DENR), University of the Philippines Marine Science Institute (UP-MSI), and the University of the Philippines Department of Geodetic Engineering (UP-DGE), alongside Brazilian institutions such as Brazilian Space Agency and the National Institute for Space Research (INPE). Together, these stakeholders will explore synergies in satellite data utilization, coastal ecosystem monitoring, and community-based conservation strategies.

Blue Horizons aims to catalyze a robust framework for scientific exchange, policy alignment, and joint innovation—laying the groundwork for a resilient and biodiverse future across the South Atlantic and Pacific Oceans.

## Objectives

The joint webinar between PhilSA and AEB aims to:

1. **Promote bilateral collaboration** to foster scientific and technical cooperation between the Philippines and Brazil in the field of E.O. for marine and coastal biodiversity conservation.
2. **Share best practices and technologies** for knowledge exchange on remote sensing tools, methodologies, and data applications used in mapping and monitoring marine ecosystems such as coral reefs, mangroves, and seagrass beds.
3. **Highlight joint research initiatives** and present ongoing and potential collaborative projects that utilize E.O. technologies to address biodiversity loss, climate change impacts, and sustainable coastal resource management.
4. **Strengthen capacity building and support training** for government, academia, civil society organizations, and local communities in both countries to enhance E.O. data interpretation and application.
5. **Encourage policy integration** and discuss how E.O. data can inform national and regional policies for marine and coastal biodiversity conservation including marine protected areas (MPAs), blue carbon strategies, and climate resilience planning.

# PROVISIONAL AGENDA

(as of 18 August 2025)

| <u>Time</u>  | <u>Activity</u>  |
|--|--|
| 8:00 AM – 8:15 AM (GMT+8 - PH)<br>9:00 PM – 9:15 PM (UTC-3 - BR)                                   | <b>Welcome Messages</b><br><b>MARCO ANTONIO CHAMON, Ph.D.</b><br><i>President</i><br>Agência Espacial Brasileira (AEB)<br><br><b>GAY JANE P. PEREZ, Ph.D.</b><br><i>Deputy Director General - Space Science and Technology</i><br>Philippine Space Agency (PhilSA)<br><br><b>Keynote</b><br><b>H.E. GILBERTO FONSECA GUIMARÃES DE MOURA</b><br><i>Ambassador Extraordinary and Plenipotentiary</i><br>Embassy of the Federative Republic of Brazil in Manila |
| 8:15 AM – 8:20 AM (GMT+8 - PH)<br>9:15 PM – 9:20 PM (UTC-3 - BR)                                   | <b>Introduction of Speakers and Presentations</b>  |
| <b>I. Monitoring Mangrove Forests in Brazil and the Philippines using Space Science Technology</b> |  |
| 8:20 AM – 8:30 AM (GMT+8 - PH)<br>9:20 PM – 9:30 PM (UTC-3 - BR)                                   | <b>PH SIDE</b><br><b>ALEXIS ANN A. ALCANTARA</b><br><i>Ecosystems Management Specialist</i><br>Coastal and Marine Division<br>Biodiversity Management Bureau<br>Department of Environment and Natural Resources<br>Presentation Title: <b>Management of Coastal and Marine Resources in the Philippines</b>  |
| 8:30 AM – 8:40 AM (GMT+8 - PH)<br>9:30 PM – 9:40 PM (UTC-3 - BR)                                   | <b>ARIEL C. BLANCO, DR. ENG.</b><br><i>Director IV</i><br>Philippine Space Agency<br>Presentation title: <b>Monitoring and Assessment of Mangrove Forests in the Philippines using Satellite Remote Sensing</b>  |
| 8:40 AM – 8:50 AM (GMT+8 - PH)<br>9:40 PM – 9:50 PM (UTC-3 - BR)                                   | <b>BRAZIL SIDE</b><br><b>MILTON KAMPEL, DR.</b><br><i>Full Researcher, Institutional Affairs Officer</i><br>National Institute for Space Research - INPE<br>Proposed title: <b>Mapping and Monitoring Mangrove Forests along the Brazilian Coast Using Satellite Data</b>  |
| <b>II. Mapping and Monitoring of Seagrass and Coral Reef Meadows</b>                               |  |
| 8:50 AM – 9:00 AM (GMT+8 - PH)<br>9:50 PM – 10:00 PM (UTC-3 - BR)                                  | <b>BRAZIL SIDE</b><br><b>MILTON KAMPEL, DR.</b><br><i>Full Researcher, Institutional Affairs Officer</i><br>National Institute for Space Research - INPE<br>Proposed title: <b>Satellite-Based Observation of Coral Reefs and Seagrass Beds along the Brazilian Coastline</b>  |
| 9:00 AM – 9:10 AM (GMT+8 - PH)   | <b>PH SIDE</b><br><b>LAURA T. DAVID, Ph.D.</b><br><i>Professor and Director, Marine Science Institute</i>  |

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| 10:00 PM – 10:10 PM (UTC-3 - BR)   | University of the Philippines Diliman – College of Science<br>Proposed title: <b><i>Application of Space Technologies for Monitoring Benthic Habitats in the Philippines</i></b>  |
| <b>III. Space Technology for Biodiversity: Strengthening the Space Ecosystem through Diplomatic Relations between Brazil and Philippines</b> |   |
| 9:10 AM – 9:20 AM (GMT+8 - PH)<br>10:10 PM – 10:20 PM (UTC-3 - BR)   | <b><u>PH SIDE</u></b><br><b>The Maritime and Ocean Affairs Office (MOAO)</b><br>Department of Foreign Affairs<br>Proposed title: <b><i>Integrating Space Diplomacy for Marine and Coastal Biodiversity Conservation</i></b>   |
| 9:20 AM – 9:30 AM (GMT+8 - PH)<br>10:20 PM – 10:30 PM (UTC-3 - BR)   | <b><u>BRAZIL SIDE</u></b><br><b>EDEN CLABUCHAR MARTINGO, MR.</b><br><i>Deputy Head of the Division of the Sea, Antarctica, and Space</i><br><b>Ministry of Foreign Affairs (Itamaraty)</b><br>Proposed title: <b><i>International Cooperation for Remote Sensing and Environmental Monitoring: Brazil's experience and future prospects</i></b> |
| 9:30 AM – 9:50 AM (GMT+8 - PH)<br>10:30 PM – 10:50 PM (UTC-3 - BR)   | <b><u>Moderated Q&amp;A</u></b><br><b>KRITZMAN G. CABALLERO, MR.</b><br><i>Chief for International Cooperation</i><br>Philippine Space Agency   |
| 9:50 AM – 9:55 AM (GMT+8 - PH)<br>10:50 PM – 10:55 PM (UTC-3 - BR)   | <b><u>Synergies, Prospects, and Way Forward</u></b><br><br><b>ATTY. NOELLE RIZA D. CASTILLO</b><br><i>Director for Space Policy and International Cooperation</i><br>Philippine Space Agency<br><b>DR. MÁRCIA ALVARENGA DOS SANTOS</b><br><i>Head of International Cooperation</i><br>Brazilian Space Agency                                    |
| 9:55 AM – 10:00 AM (GMT+8 - PH)<br>10:55 PM – 11:00 PM (UTC-3 - BR)  | <b><u>Closing Remarks</u></b><br><br><b>MS. VANESSA BAGO-LLONA</b><br><i>Deputy Assistant Secretary</i><br>Office of American Affairs<br>Department of Foreign Affairs (DFA)  |

**Emcees:**

**Mr. Juan Oliveira Bomfim**  
*First Secretary*  
Embassy of Brazil in the Philippines

**Ms. Justine Karla Villasante**  
*Science Research Specialist II*  
Space International Cooperation Division  
Philippine Space Agency