



“From ground to orbit: combining in-situ and satellite monitoring of water resources for adaptation to climate change”

Wednesday 12th November, from 11:20-12:35

Only in English

Embrapa Amazônia Oriental, Travessa Dr. Enéas Pinheiro Marco, C.P. 48 - BELÉM, Pará, Auditorium A2

Organized by:



Context:

Satellite data are transforming climate change adaptation in **agriculture** by providing **comprehensive, near real-time monitoring of water resources**. These insights support smarter irrigation management, improved agricultural planning, and decision-making even in remote areas. Integrating satellite missions such as SWOT and TRISHNA with ground observations **enhances water management accuracy and strengthens initiatives like One Water Vision**. Beyond data, these tools also help build capacity, enabling technical experts, local stakeholders, and basin organizations to learn, apply, and share innovative practices, even with limited prior experience in satellite technologies.

This side event will bring together experts, organizations, and stakeholders interested in satellite-based water monitoring for climate adaptation in agriculture. It will **showcase earth observation missions, share the latest developments from the One Water Vision initiative**, and **foster international collaboration**, including exchanges with Brazil. Participants will discover concrete applications for agriculture and irrigation, explore opportunities for cooperation, and gain practical skills and knowledge to directly support local and productive sectors.

Program

INTRODUCTION (10 MIN)

- **Ms. Murielle Trouillet**, Deputy Director of International Relations, French National Research Institute for Agriculture, Food and Environment (INRAE)
- **Mr. Rémi Boyer**, Lead Project Manager, International Office for Water (OiEau)

MODERATION

- **Mr. Alain Bernard**, Lead Project Manager, International Office for Water (OiEau)

PANELISTS

Space Agencies and Satellite Tools for Agricultural Monitoring: Capabilities and Innovations

1. **Mr. Eric Brel**, Applications Engineer - CNES/Guiana Space Center (7 min)
2. **Mr. Frank Martin Seifert**, Earth Observation Applications Engineer, European Space Agency (ESA) (7 min)

Practical Applications and Case Studies in Agriculture: From Local to Global Perspectives

3. **Mr. Daniel Medeiros Moreira**, Cartographic Engineer - Service Geology of Brazil (SGB) (7 min)
4. **Dr. Rodrigo Zambrana**, Remote Sensing Expert, International Office for Water (OiEau) and Institute for Research for Development (IRD) (7 min) INBO's partner
5. **Dr. Robert Stefansky**, Chief of Applied Climate Services Section - World Meteorological Organization (WMO) (Remotely) (7 min)

Q&A (15MIN)

CONCLUSION (5 MIN)

- **Dr. Stefan Uhlenbrook**, Director Hydrology, Water and Cryosphere - World Meteorological Organization (WMO)

Participating Organizations



European Space Agency

