

OBSERVATIONS FOR CLIMATE CHANGE MITIGATION

GUIDING QUESTIONS

1. How can we sustain and improve earth system observations to support long-term climate monitoring and address key challenges in maintaining consistency?
2. What advancements have been made and are needed to improve observational platforms and technologies for tracking GHGs, short-lived climate forcers, and other climate relevant pollutants, including from sectors such as agriculture, shipping and aviation? What approaches are used in observing methane emissions?
3. How can observations of GHGs support and improve transparency and accuracy in national and international climate reporting, and how can these observations complement national inventories to support mitigation strategies?
4. What innovations in ocean observation are advancing our understanding of marine ecosystems and their role in climate mitigation, and how can ocean observations be better utilized to inform mitigation strategies and improve global climate models?



FURTHER INFORMATION ON TOPIC

1. [*IG3IS Urban Greenhouse Gas Emission Observation and Monitoring*](#)
2. [*WMO Greenhouse Gas Bulletin No. 20*](#)
3. [*Report of the second IG3IS Stakeholder and User Summit*](#)
4. [*Greenhouse gas concentrations surge to new record in 2023*](#)
5. [*Executive Council approves G3W implementation plan*](#)
6. [*Resources Dr. Akihito Ito*](#)
7. [*Resources Dr. Yugo Kanaya*](#)

Timeline

Breakout session: 14:45 - 15:15
Reporting back: 15:15 - 15:45



Moderator: Dr. Wenying Su (CEOS-CGMS)
Rapporteur: Dr. Antonio Bombelli (GCOS)
Experts: Dr. Yugo Kanaya (JAMSTEC), Dr. Akihito Ito (University of Tokyo), Dr. Gianpaolo Balsamo (G3W) and Prof. Greg Carmicheal (GAW, G3W)