



# 4-Dimensional Virtual Earth for Ocean Studies and Applications

November 20 2023 [15:00-19:10 JST] DITTO Satellite Event https://ditto.geomar.de/satellite\_events.html

Venue: Miyoshi Hall, JAMSTEC Yokohama Campus Online:

# Program: (Japan Standard Time):

## 15:00-15:30 Welcome and opening remarks by invited guests

Dr. Takeshi Kawano, Executive Director, JAMSTEC, Japan
Prof. Fei Chai (Co-Chair, DITTO Summit 2023, China)
Mr. Gen Totani, (Director for Deep Sea–Earth Scientific Research Ocean and Earth Division, MEXT, Japan)
Prof. Martin Visbeck (Co-Chair, DITTO Summit 2023, Germany)

### 15:30-16:30 Session – 1 Ocean Forecasting (15 mins each) Chair: Masami Nonaka

- Dr. Yasumasa Miyazawa (JAMSTEC, Japan), The JCOPE system for a regional DITTO
- Dr. Dakui Wang (NMEFC, China), NMEFC's user-based ocean operational forecasting services
- Dr. Nariaki Hirose (JMA/MRI, Japan), The MOVE-JPN regional ocean operational forecasting system.
- Dr. Aditya Kartadikaria (ITB, Indonesia), An overview of ocean forecasting systems in Indonesia

#### 16:30-17:30 Session – 2 Ocean Environment (15 mins each) Chair: Yasumasa Miyazawa

- Dr. Haruka Nishikawa (JAMSTEC, Japan), Build and utilize a digital representation of the fish behavior in a fish farming cage
- Dr. Young-Gyu Park (KIOST, Korea), Tracking of floating Sargassum in the Yellow and East China Seas from satellites and modeling
- Dr. Mitsuko Hidaka (JAMSTEC, Japan), Beach litter AI: Implementation for society and toward the digital twin
- Dr. Pravakar Mishra (NCCR, India), Source to sink: Microplastic an emerging contamination in the marine environment.

#### 17:30-18:15 Session – 3 Ocean Applications (15 mins each) Chair: Haruka Nishikawa

Dr. Marie Drevillon (MOi, France), Monitoring the scientific quality of Copernicus Marine Service products Bente Lilja Bye (BLB, Norway), Interoperability for digital twins and downstream services

Dr. Marcos Sotillo (Nologin, Spain), Co-designed downstream tools to enhance uses of operational oceanographic forecast and monitoring services across different end-user communities

# 18:15-18:55: Panel Discussions (Understanding gaps and moving forward to establish DTO) Coordinator: Swadhin Behera

Lead panelists:

Dr. Shuhei Masuda (JAMSTEC, Japan) Dr. Yoichi Ishikawa (JAMSTEC, Japan) Dr. Yosuke Fujii (MRI/JMA, Japan) Prof. Martin Visbeck (Co-Chair, DITTO Summit 2023) Dr. Enrique Alvarez (MOi/OceanPrediction DCC, France)

#### 18:55-19:00: Closing remarks

Dr. Muneo Hori, Director General, VAiG, JAMSTEC, Japan