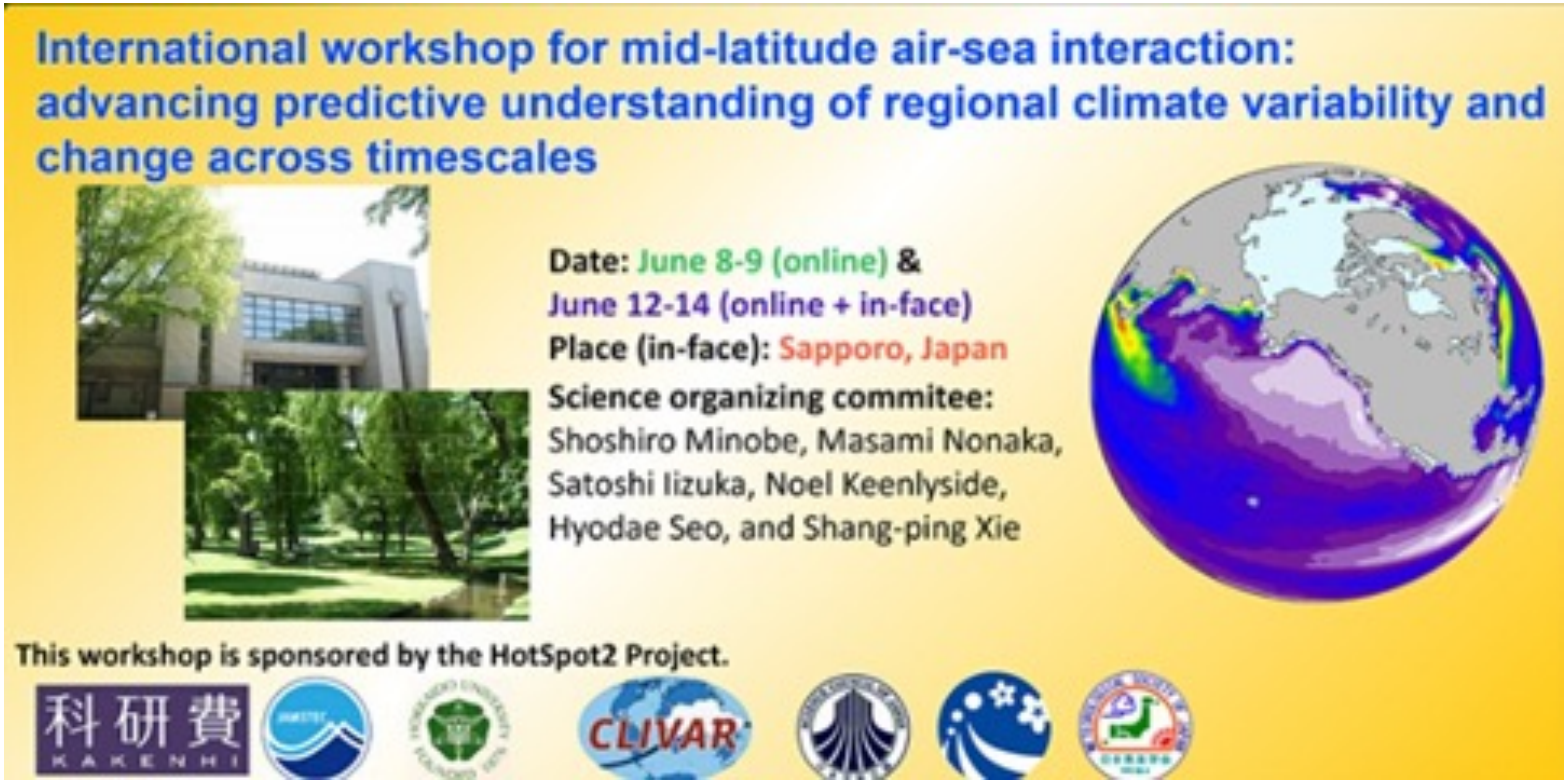


This workshop was closely related to Japanese Hotspot2 project, lead by Masami Nonaka.

- 126 presentations from 14 countries including 54 presentations from abroad. These include 15 early career researchers, who received their PhD in the last five years, and 36 students.
  - Online setting will help a relatively large number of presentations and participants of early career researchers and students from abroad.
  - Presentation awards were given to eight early career researchers and students.

# Notable comments from the breakout sessions

- Many breakout groups recognized high-resolutions and large ensembles are important designs of numerical simulation.
- Signal-to-noise paradox should be examined, because this paradox implies predictable components are underestimated, and the air-sea interaction is a one of potential source of the underestimation.
- The meaning of air-sea interaction in the context of prediction especially for extreme events (e.g., tropical cyclones or explosively developing extratropical cyclones) should be studied including understanding of mechanisms in different regions.
- Increase of observation capability is crucial. For example, autonomous observation platforms, such as wavegliders and saildrones may have big potentials.