

## 5.149 Development of quasi-realtime model system for SLCPs over Pan-Arctic region.

Presenting Author:

**Masayuki Takigawa**, Institute of Arctic Climate and Environment Research,  
Japan Agency for Marine-Earth Science and Technology, [takigawa@jamstec.go.jp](mailto:takigawa@jamstec.go.jp)

Abstract:

We are developing a global/regional model system over the Pan-Arctic region to reveal the impact of SLCPs emitted over Asia on the climate over the Arctic region. As an application of our study, we are also trying to conduct a quasi-realtime forecast simulation during the ship-borne observation of BC aerosols using research vessel Mirai, which will conduct during August to October 2016. We have applied a global chemical transport model CHASER for the lateral boundary of chemical species. For the Pan-Arctic region, we have applied WRF/Chem. Anthropogenic emission over Asia is based on the REAS version 2.1 inventory, and biomass burning emission is based on FINN. We have already developed similar system for Kanto region including Tokyo in Japan since 2006, and it can capture diurnal and eventual variations of ozone in megacities. Operational calculations including forecast are conducted once a day, and the results is available via web page. The results will be used for the quick analysis of in situ observations, and also offered to the public.