

ITSC-24: The 24th International TOVS Study Conference in Tromsø, Norway

March 16-22, 2023

David Duncan, Young Scientist Conference Awardee

I was eager to attend the 24th International TOVS Study Conference to present my recent work on assimilating more data from microwave sounding instruments into the ECMWF numerical weather prediction model. This is the premiere international meeting dedicated to satellite sounding data, and its focus on microwave and infrared radiances draws many top-notch scientists in satellite meteorology from around the world.

This was a very productive and stimulating conference as it was the first in-person meeting of this group since 2019 in Canada. The face-to-face discussions were invaluable for reconnecting with old colleagues and making new connections. The conference takes place over a weekend as well, with stimulating working group sessions on the Saturday followed by local excursions on the Sunday to foster team building.

I was fortunate to present three pieces of work at the conference: an oral presentation on better treatment of microwave humidity sounder radiances for data assimilation, a poster on using AMSU-A window channels in all-sky assimilation, and a poster on evaluation of the TROPICS CubeSat with the ECMWF model. The oral presentation led to numerous discussions with colleagues from other NWP centres, as several centres are pursuing all-sky assimilation strategies. There was also significant interest and discussion about the TROPICS CubeSat, with multiple NWP centres preparing for the upcoming constellation launch later this year and two senior members of the TROPICS team in attendance at the conference. The hands-on experience with data from a small satellite like this is very important for full exploitation of such sensors as they proliferate in the years ahead.

I'd like to thank the EMS for supporting me with this award as attending this conference was an extremely valuable experience both professionally and scientifically.