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The 2024 Quadrennial Ozone Symposium (QOS 2024)

Name : Tianliang Yang

Affiliation : Graduated school of "Science studies" Laboratory of oAMo (GradeoD2o)

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Tonga volcano eruption, the impact of this event on atmospheric ozone changes is still under continuous attention.

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Pic1 Venue layout



Pic 2 Boulder campus of Colorado university



Pic 3 Me while speaking <Supervisor's name> Tomoo Nagahama

QOS 2024 is the 36th ozone scientist meeting held at the University Memorial Center (UMC) of the University of Colorado Boulder, US. I couldn't be more glad to see ozone scientists from all over the world gathering every four years and to have my oral presentation done firstly overseas.

The city, Boulder, is located at the foot of the Rocky Mountains, with an altitude of more than 1,600 meters and high visibility. Therefore, we can see mountains everywhere when walking on campus. Also, the sports of hiking and cycling are popular with the local people.

Although there were six different sessions in QOS 2024, all oral presentations were held in the same venue at UMC and the rooms on both sides of the venue were used for coffee breaks and poster presentations. It was my honor to give the oral speech, statistical analysis of the middle and upper atmospheric ozone variations

during solar eclipse using AURA/MLS data, in session 1: stratospheric ozone. The results showed the short-term effects of solar radiation changes during solar eclipse events on atmospheric ozone at altitudes of 45-70 km (upper stratosphere and lower mesosphere); The presentation also compared the Aura satellite data with JEM/SMILES and confirmed the changes in the chemical model during the whole solar eclipse process. As a participant, I learned a lot from different studies on stratospheric ozone. The ozone layer recovery was reported in the news recently and the efforts of the Montreal Protocol are obvious to all. But the recovery rate obtained through different mathematical methods is still controversial, and the so-called ozone hole still has the risk of seasonal occurrence. In addition, after the

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