

## OCGC Seminar

# Earth's Troposphere Observations with the NRC Convair-580 Research Aircraft

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**Thursday, April 6, 2023, 11:30 AM**

**Carleton University  
Herzberg Laboratories  
Room 3120**

**Jeudi le 6 avril 2023, 11h30**

**Carleton University  
Herzberg Laboratories  
Chambre 3120 HP**

Virtual Format: Zoom Meeting ID: 928 4550 4983; Passcode 016344

<https://carleton-ca.zoom.us/j/92845504983?pwd=VllsUVpRRzNuL3A3Y2lDWUxNRjdlZDZ09>

The troposphere is the lowest layer of Earth's atmosphere, which encompasses the majority of human activities. The troposphere holds almost all of the planetary water vapor and aerosols and is the epicenter of most weather phenomena. Studying the troposphere is important to better understand processes, which can influence various aspects of our lives including health, safety, agriculture, and transportation. Research in this harsh and dynamic environment is challenging and would typically require the use of an interdisciplinary approach and complementary tools to characterize the gas, liquid, and solid particulates suspended in the air. The National Research Council of Canada (NRC) conducts atmospheric studies using the Convair-580, a specialized atmospheric research aircraft equipped with advanced in-situ and remote sensing instruments. This aircraft has been deployed on numerous flight missions, including recent measurements in the frigid Arctic storms and the steaming Texan updrafts. This seminar will provide a brief overview of the scientific activities conducted at the NRC Flight Research Laboratory (FRL), highlight recent measurements, and present short-term research plans.



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