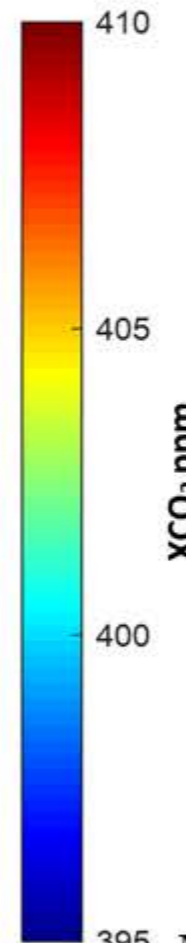
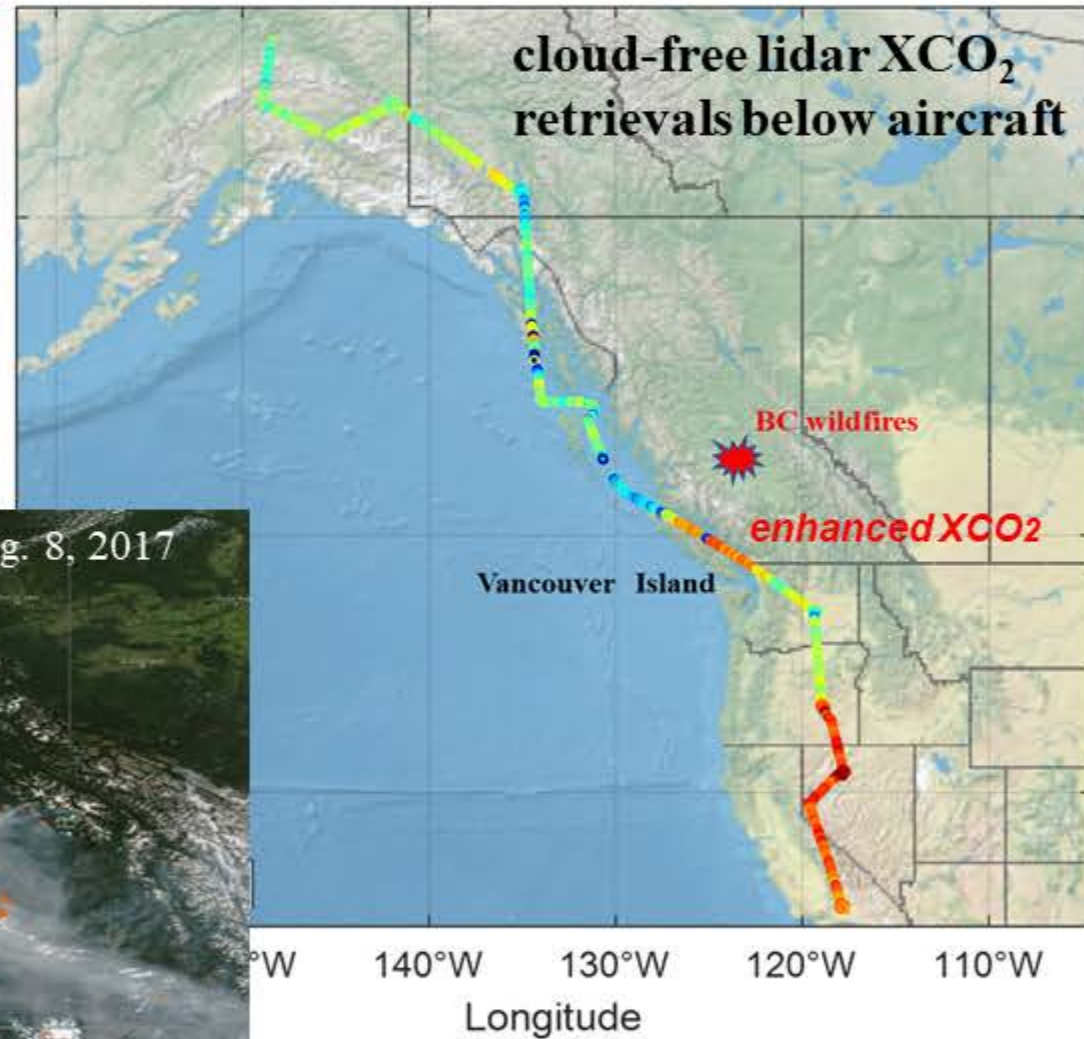
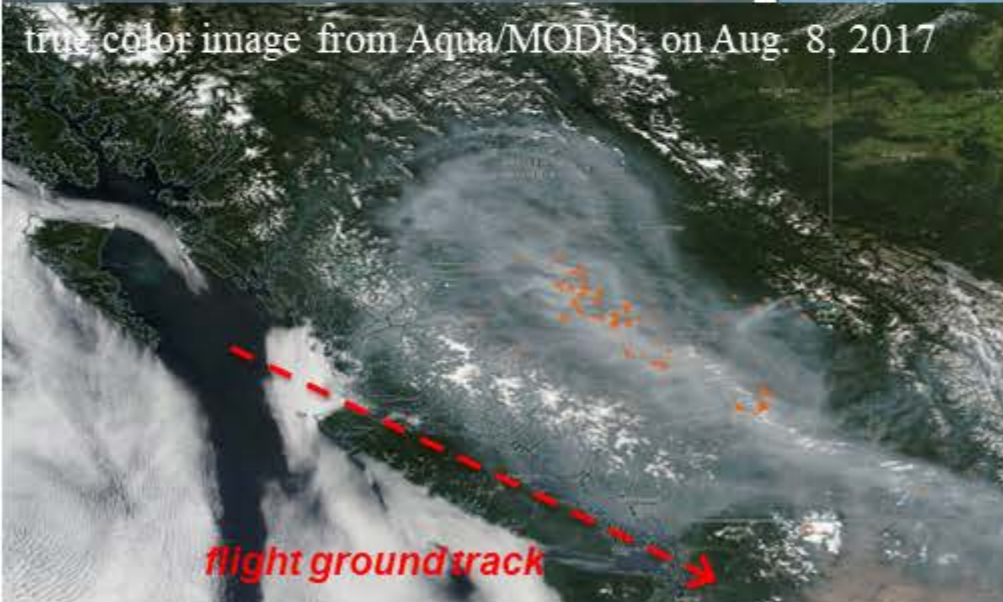


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From the summer 2017 ASCENDS/ABOVE airborne science campaign

Key Points

- NASA Goddard CO₂ Sounder Lidar can accurately measure CO₂ enhancements from wildfires through dense smoke plumes
- This is the first use of lidar to remotely sense CO₂ enhancements from large wildfires
- The results suggested that the estimated CO₂ emissions from wildfires in the global fire emissions inventories were underestimated by more than a factor of 2
- We recommended to deploy this type of active remote sensing technique for future airborne campaigns and spaceborne missions to improve estimates of carbon fluxes

395 Mao, J., Abshire, J. B., Kawa, S. R., Riris, H., Sun, X., Andela, N., & Kolbeck, P. T. (2021). Measuring atmospheric CO₂ enhancements from the 2017 British Columbia wildfires using a lidar. *Geophysical Research Letters*, 48, e2021GL093805. <https://doi.org/10.1029/2021GL093805>.