

(14-220413-C) **Celebrating 30+ Years of the Network for Detection of Atmospheric Composition Change (NDACC)**

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The Network for the Detection of Atmospheric Composition Change (NDACC, ndacc.org), an international global monitoring network of more than 108 stations, was established in 1991 in support of the Montreal Protocol's request to monitor stratospheric ozone depletion and the related key variables. Since its inception, NDACC has worked towards the delivery of high-quality reference observations subject to strict measurement and data protocols. Over the past 30+ years, NDACC's goals have broadened to detect climate changes related to natural and anthropogenic variability in the chemical and physical states of the stratosphere and upper troposphere.

NDACC's Working Groups (WG) are organized by ground-based observational techniques (i.e. Brewer, Dobson, Infrared Radiometer, lidar, microwave, sondes, spectral UV, and UV/Visible spectrometry). In addition, NDACC has a Satellite WG and a Theory and Analysis WG; and has established formal collaborative agreements with 10 other Cooperating Networks. Moreover, ad-hoc NDACC theme groups focus on cross-cutting themes like water vapor measurements, and synergistic activities among the instrument Working Groups and/or with other networks.

To meet societal needs for climate mitigation, NDAAC continuously works on assessing its strategy for the further development of the Network. It also adapts its measurement and data protocols to respond to evolving needs for satellite and model validation. A brief history will be provided, major accomplishments of NDACC during its 30+ years of operation will be reviewed, and a forward-looking perspective will be presented.

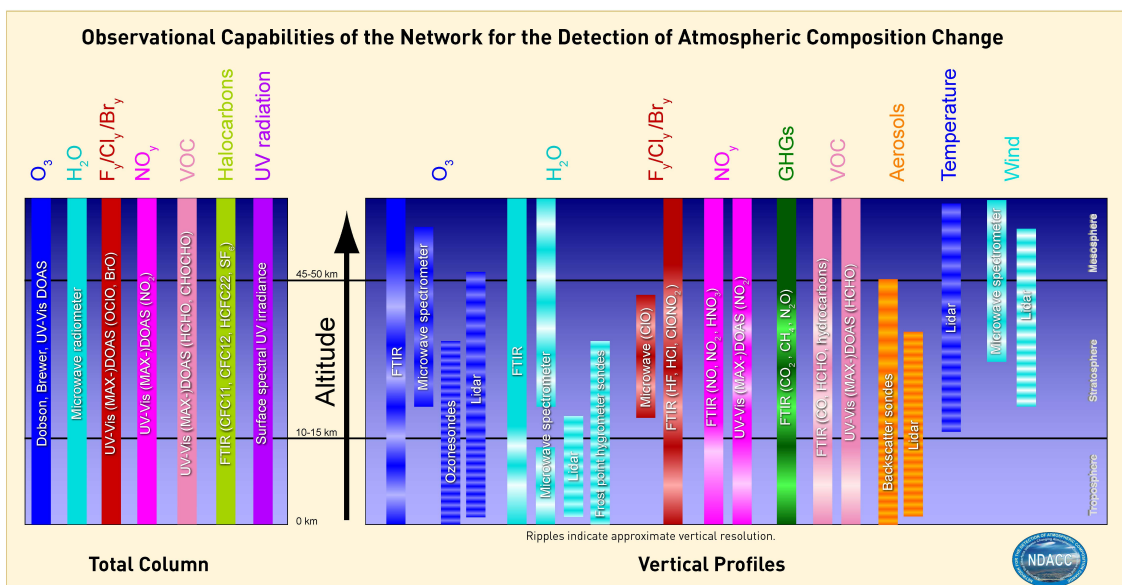


Figure 1. The NDACC Observational Capability Chart provides a summary of the species and parameters whose measurements are archived in the DHF, the instrumental techniques employed for the measurements, and an indication of the approximate vertical resolution of the measurements. Image credit: G. Braathen (WMO, retired).