The Naval Research Laboratory (NRL) is the lead institution for MIGHTI. The interferometric technique was co-invented by NRL and has heritage from the SHIMMER (Spatial Heterodyne Imager for Mesospheric Radicals) instrument, which successfully flew onboard STPSat-1 from 2007-2009.

MIGHTI is equipped with onboard calibration sources that can track and quantify thermal drifts simultaneously with the atmospheric measurements.

The ICON mission is led by the University of California, Berkeley, and is the newest NASA Explorer mission scheduled for launch in the summer of 2017.