This guide summarizes the ER-2 instrument suite for the Summer 2019 FIREX-AQ field campaign. The ER-2 flew from its home base at NASA Armstrong Flight Research Center in Palmdale, CA. Flights occurred during only the Western phase of FIREX-AQ, August 2 – August 21, 2019. Final data for some instruments may not yet be available at these links, please contact the indicated person for additional information.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Instrument** | **Contact** | **FIREX-AQ Data Location** | **Instrument Description** | **Satellite Analogs** | **Spectral Range** | **Spectral Resolution** | **Nominal Spatial Resolution @ER-2 Cruise** | **Nominal Swath  @ER-2 Cruise** |
| AirMSPI | [Gerard van Harten](mailto:gerrit.van.harten@jpl.nasa.gov), NASA JPL | NASA ASDC [AirMSPI Project](https://eosweb.larc.nasa.gov/project/airmspi/airmspi_table) | Airborne Multiangle SpectroPolarimetric Imager | MISR, MAIA | 355-935 nm | 8 bands (3 polarimetric) | 10m | 10km |
| AVIRIS-C | [Chuck Sarture](mailto:charles.m.sarture@jpl.nasa.gov), NASA JPL | [AVIRIS Portal](https://aviris.jpl.nasa.gov/dataportal/) | Hyperspectral Vis-SWIR spectrometer | EMIT, SBG | 370-2550 nm | 9.8 nm | 20m | 11km |
| CPL | [John Yorks](mailto:john.e.yorks@nasa.gov), NASA GSFC | [CPL Portal](https://cpl.gsfc.nasa.gov/firex/firex_enter.htm) | 3-channel backscatter lidar with polarization | CALIPSO, CATS-ISS | 355, 532, 1064 nm | - | 200m | (30m vertical) |
| eMAS | [Jeff Myers](mailto:jeffrey.s.myers@nasa.gov), NASA ARC (L1B);  [Rob Levy](mailto:robert.c.levy@nasa.gov), NASA GSFC (AOD) | [eMAS Portal](https://mas.arc.nasa.gov/data/deploy_html/firex-aq_home.html) (imagery); [MAS/eMAS Portal](https://ladsweb.modaps.eosdis.nasa.gov/missions-and-measurements/mas/?path=mas) (data) | Vis-IR scanning spectrometer | MODIS, VIIRS, ABI | 445-2400 nm, 3.7 µm,  6.7-14.0 µm | >40nm  38 bands | 50m | 37km |
| GCAS | [Scott Janz](mailto:scott.j.janz@nasa.gov), NASA GSFC | [FIREX-AQ Archive](https://www-air.larc.nasa.gov/cgi-bin/ArcView/firexaq?ER2=1#JANZ.SCOTT/) | UV-Vis-NIR hyperspectral spectrometer | TROPOMI, TEMPO | 300-890 nm | .2-.4nm | 500m | 16km |
| NAST-I | [Allen Larar](mailto:allen.m.larar@nasa.gov), NASA LaRC | [FIREX-AQ Archive](https://www-air.larc.nasa.gov/cgi-bin/ArcView/firexaq?ER2=1) | IR scanning interferometer | AIRS, CrIS | 3.5-16 µm | 0.25 cm-1 | 2600m | 40km |
| S-HIS | [Joe Taylor](mailto:joe.taylor@ssec.wisc.edu), Univ. Wisconsin | [FIREX-AQ Archive](https://www-air.larc.nasa.gov/cgi-bin/ArcView/firexaq?ER2=1#TAYLOR.JOE/) | IR scanning interferometer | AIRS, CrIS | 3.3-18 µm | 0.50 cm-1 | 2000m | 40km |