

# MAIA Applications Updates

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# MAIA Project Status

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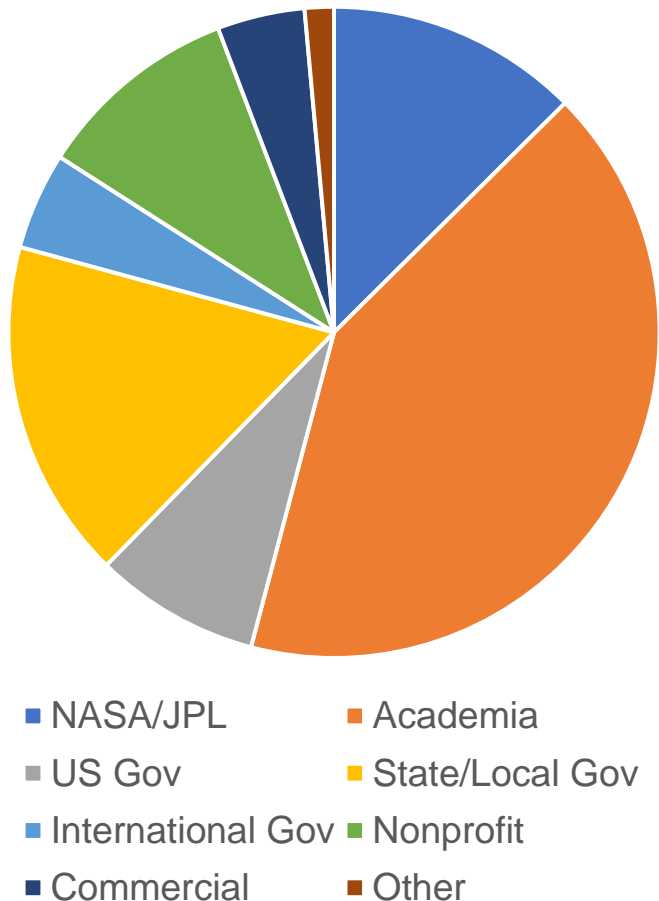
MAIA instrument at JPL

- MAIA instrument is currently undergoing environmental testing at JPL.
- **Estimated instrument delivery: Fall 2022.**
- Software and data system work are keeping pace.
- NASA and the Italian Space Agency ASI are currently working on an agreement for ASI to provide hosting services for MAIA.
- Expected launch under the agreement would be in 2024.

# Early Adopters Stats

The MAIA Early Adopters community has grown to 211 members!

MAIA Early Adopters by sector



MAIA Early Adopters by target

Target Area	EAs
Nonspecific	66
US	21
California	47
NE US	6
SE US	9
Spain	6
Italy	8
Israel	12
Ethiopia	15
South Africa	8
India	3
China	4
Taiwan	1
STAs	60

- Good representation across sectors, including epidemiologists, air quality managers, and environmental justice groups
- **27** Early Adopters have signed data access agreements for MAIA Simulated Data use
- Target-specific engagement is an ongoing goal

# FY22 Accomplishments

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## Eyeing Visibility from Space

### The Upcoming Multi-Angle Imager for Aerosols (MAIA) Investigation

by Abigail Nastan

An upcoming NASA satellite mission will produce data of interest to the study of regional visibility.

- [Airathon crowdsourcing challenge](#)
  - Objective to participants: to create high-performing PM2.5 and NO2 algorithms using satellite data (and other things)
  - Participants: 702 (PM) and 609 (NO2)
  - Entries: 904 (PM) and 359 (NO2)
  - Winning R<sup>2</sup>: 0.81 (PM) and 0.48 (NO2)
- Publication of AWMA EM [article](#) on regional haze analysis
  - Audience: US-based air quality managers and analysts working on regional haze
  - Objective: to lay out how MAIA data could be used for the next round of regional haze state implementation plans (SIPs)



# FY22 Accomplishments

- MAIA-TEMPO Environmental Justice Workshop (workshop slides and recording [here](#))
  - 297 registrants, of which 192 attended live
  - Representatives from 20 environmental justice groups
  - Objectives:
    - Disseminate important MAIA/TEMPO information to environmental justice groups
    - Determine the needs/objectives of EJ groups in regards to satellite AQ data
- Results:
  - Participants rating of self-knowledge about the missions increased from 2.1 to 3.4 out of 5 for MAIA and 2.4 to 3.7 on TEMPO
  - Interest for continued engagement, more demos and more discussion

	Everyone	EJ/ citizen science	AQ Management	AQ/aerosol research	Epidemiology/ health research	I work at NASA/JPL	Other/ unspecified
Finding the products online	3.3	9.5	4.1	1.3	5	2	0.7
Adequate internet speeds for download	1.5	0.5	3.3	0.2	0.5	0.5	0
Compatibility with software/process/system	4.2	4.5	5.6	2.7	2	7.5	1.7
Time to learn new software/tools	4.8	8	5.3	3.1	8.5	9	0
Finding resources to learn about the products	4.2	5	5.1	2	7	6.5	2.3
Time to process into needed information	5.9	9.5	5.6	6.1	8	5.5	8

# FY23 Plans

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- Hold next EA workshop in November; hopefully will be able to cover details of ASI hosting agreement
- Follow-on work from crowdsourcing challenge
  - Disseminate insights and lessons learned
- Continue goal of target-specific outreach
  - Working on translating MAIA materials for target area languages