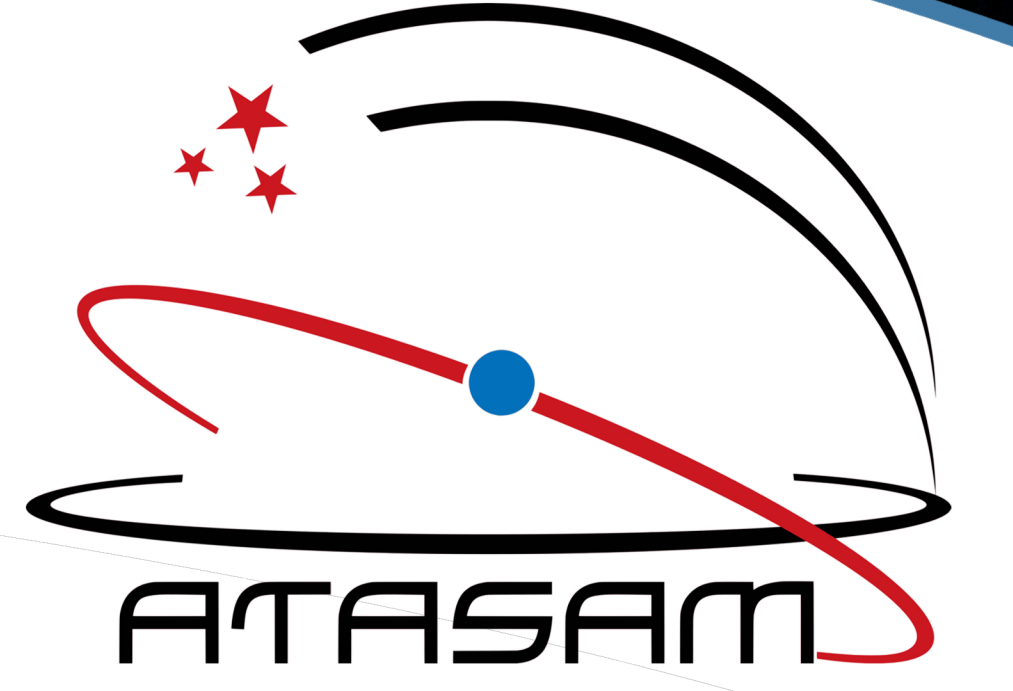




DAG (Doğu Anadolu Gözlemevi - Eastern Anatolia Observatory) project is an ongoing observatory project which will house a 4-meter diameter Optical/Infra-Red telescope with active and adaptive optics at 3170m elevation in Erzurum, Turkey. Telescope is going to have two Nasmyth platform measuring 4m by 3m. One platform will have adaptive optic system and instruments for diffraction limited observations, and the other will be used for seeing limited instruments. DAG telescope is planned to be autonomous in a way that the observatory control system will select targets depending atmospheric, meteorological and astronomical conditions. Ongoing observations of these conditions, and the already collected data creates a solid statistics of past to look future. DAG-OPT is planning to be a platform for users who will apply for observing time on DAG telescope on which users will plan every detail of their observation run during proposing process.

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DAG-OPT

Eastern Anatolia Observatory Observation Proposal Tool

Continuous observations of Turbulence Profile and Seeing with MASS/DIMM and GDIMM instruments which creates turbulence statistics of the site and feedback to Adaptive Optics System of DAG. By use of turbulence statistics in OPT, user will be able to calculate their best observation parameters (i.e. exposure time) and schedule of observation windows.

Alongside of turbulence observations, meteorological measurements collect data continuously. OPT will have Seasonal variations of Temperature, Wind Speed and Directions, Humidity, Pressure and Cloudiness values as variables thus users will be able to know when is best to observe their objects.

Science cases' limits will be adjustable for different type of objects (e.g. Point or extended source, Magnitude, Color etc.) Therefore users will stay in observatory limits while they specify their object selection criteria.

DAG Telescope has 4 meter primary mirror with Active Optics. The telescope is 3 mirror system with 2 Nasmyth platforms. Effective focal length of the telescope is 56 meters. First light planned to be taken in 2021.

Diffraction limited platform is going to have K-Mirror derotator embedded in Altitude motor gap, Adaptive Optics with 468 actuators on Diffraction limited platform, Coronagraph and first-light NIR imager with 1 arcmin field of view.

Seeing limited Nasmyth platform is going to have 14 arcmin unvignetted science field of view at focus. Not any instruments decided yet.

Since DAG will be a VISUAL and Near InfraRed telescope, the observatory is located at the summit of one of the highest mountains in Turkey. DAG is going to close the Longitude gap for the "big telescopes" around the Earth.

Coordinates of DAG:
Latitude: 39°46'51.1032"N
Longitude: 41°13'35.4216"E
Altitude: 3170m

Telescope operators (astronomers, engineers and technicians) will conduct all the operations of the observatory. The decision on proposal selection is going to be made by the OPT. The proposals that pass the OPT simulations, will be accepted and included into the pool. Afterwards the scheduling system will decide when is the best time to observe each project depending on the conditions coming from the OPT.

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