

Question	Answer
There's no sort of an evolving process that we' building for how we evaluate everything that we do across the board, you know, all all of the programming that we do, all the individual efforts in order to make sure that we're aligning to kind of what is the appropriate use of our resources and time	There isn't a specific evolving process described in the challenge for evaluating all programming efforts. Instead, the focus is on delivering the best solutions for the specific problem outlined in the challenge
There are papers published already on Kalman filter-based tracking algorithms with results of up to 76% accuracy of maneuver detections. Is that sufficient?	While 76% accuracy is notable, there is no predefined sufficiency threshold. The evaluation focuses on overall performance, including false alarm rates and balance. The goal is to identify the best-performing algorithms based on comprehensive criteria
Do we know how many adversary satellites can be tracked at once? Are we assuming we are building new ground tracking radars for this?	There is no assumption about building new ground tracking radars. Participants are expected to use available data, either public or private, to develop their solutions
What is the type of information available to detect friend or foe satellites. Such as an elevated satellite, Radars onboard a satellite in LEO, Laser etc.	The provided data includes 24-hour neutral atmospheric density files at 10-minute intervals. Participants are encouraged to incorporate additional publicly available or proprietary state data for detection
Will DIU/Taplab facilitate access to the required data (observations, tracks, space weather etc.) for our solution/algorithm?	The provided dataset includes neutral atmospheric density files. No additional observations, tracks, or space weather data will be facilitated by DIU/Taplab. Participants are responsible for sourcing their own data if needed
Can the proposer leverage their own data to process and generate the required tracking solution?	Yes, participants are allowed and encouraged to use their own data to develop tracking solutions
<p>From the solicitation's context: > The challenge is to rapidly reacquire maneuvering satellites that may be attempting to evade detection within a contested space environment. Are we assuming we will be given, at some interval, the last known TLE or observational data of the satellite(s)?</p>	<p>The challenge does not provide TLEs or observational data at intervals. Participants are expected to source publicly available data, such as from: https://www.space-track.org/auth/login https://spacebook.com/ https://amostech.com/amos-technical-papers/ The only data provided is a static dataset with neutral atmospheric density files. Participants are encouraged to use these or other data sources to develop their solutions.</p>
<p>We are using the goal_demo.py and associated README.pdf as a guide to access the file contents and examine the data for the challenge. We believe there is ambiguity in the longitude range used that could potentially impact participants.</p>	<p>The dataset is a global set on a lat-line coordinate system designed to be compatible with various geographic information systems. While this is a specific concern, we do not anticipate participants facing difficulty translating the file structure into a geographic framework. If issues arise, participants are encouraged to seek clarification.</p>
<p>We noticed the geotransform data for each of the files is: -2</p>	
<p>Can you help us understand how to access your static TLE dataset? We are able to see the neutral density data.</p>	<p>The challenge does not provide TLEs or observational data at intervals.</p>
<p>While the API output of the proposed solution is well-defined (State vector/TLE), we seek clarification regarding the user inputs. What specific parameters would a user typically input to obtain the relevant tracking solutions?</p>	<p>User inputs might include catalog management of satellites, subsets of objects, or lat-long-defined grids. Notifications about movements or activities of interest are typically expected in real-time</p>
<p>Does the government have a listing of approved data sources that participants may interact with?</p>	<p>The government does not provide a specific list of approved data sources. Participants are encouraged to manage an entire satellite catalog or focus on subsets of objects, particularly within the Indo-Pacific region. Notifications should ideally be delivered in real-time for objects transiting the region, though querying past data for specific timeframes is also valuable. Publicly available or proprietary data sources can be used to build solutions tailored to these requirements.</p>
<p>Pt1) Using algorithm provided: lon_array = origin_x + (x_indices + 0.5) * pixel_width lat_array = origin_y + (y_indices + 0.5) * pixel_height</p> <p>This gives the array ranges: Longitude: 0 to 356 Latitude: -90 to 90 Longitudes are normally expressed between -180 and 180 by most US commercial application</p>	
<p>Pt 2) We are aware of the commonsense assumption to subtract 360 from values greater than 180. However, since this is not specified in the documentation, we just want to verify that there is no error in the data file creation process, and this is a valid assumption.</p>	<p>Subtracting 360 from longitudes exceeding 180 is a valid assumption. However, there are no identified errors in the data. Participants can request clarification if necessary</p>

Are the end users interested in space weather intelligence solutions in the context of this challenge?

Space weather is generally understood to affect the accuracy of orbital parameters, particularly when projecting future conditions. While end users may not directly consume space weather data, they typically expect that the algorithms they rely on take solar activity into account as part of their calculations. This integration helps ensure more accurate predictions and adjustments based on space weather influences.