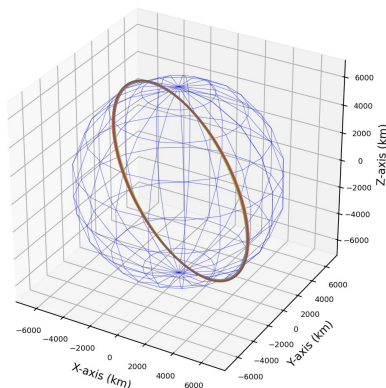
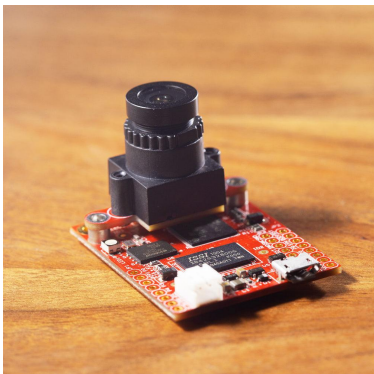


Orbits plotted in the ECE frame as of 09 2024



Blockers

- Lack of concrete power and compute usage numbers: Due to the model/pipeline not being finalized (Lower the better.)
- Access to GPU workstation and start training/testing

Week's Results

- Updated level two requirements.
- Started researching different models and pipelines, including YOLO v8, YOLO v10, and contrastive learning models.
- Initiated research into camera modules, overall architecture, and preprocessing.
- Started working on orbit/imaging sim

By Sunday:

Dataset loading, Earth sim, choose cameras, camera model

Interfaces

- **Compute requirements:** Obtain the required frame rate and other data (gnc), then provide the compute requirements to the avionics team.
- **Cameras:** Collaborate with both the mechanical and avionics teams to finalize the number of cameras and camera architecture
- Both of these tasks will be completed by this weekend.