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## SatNOGS Project

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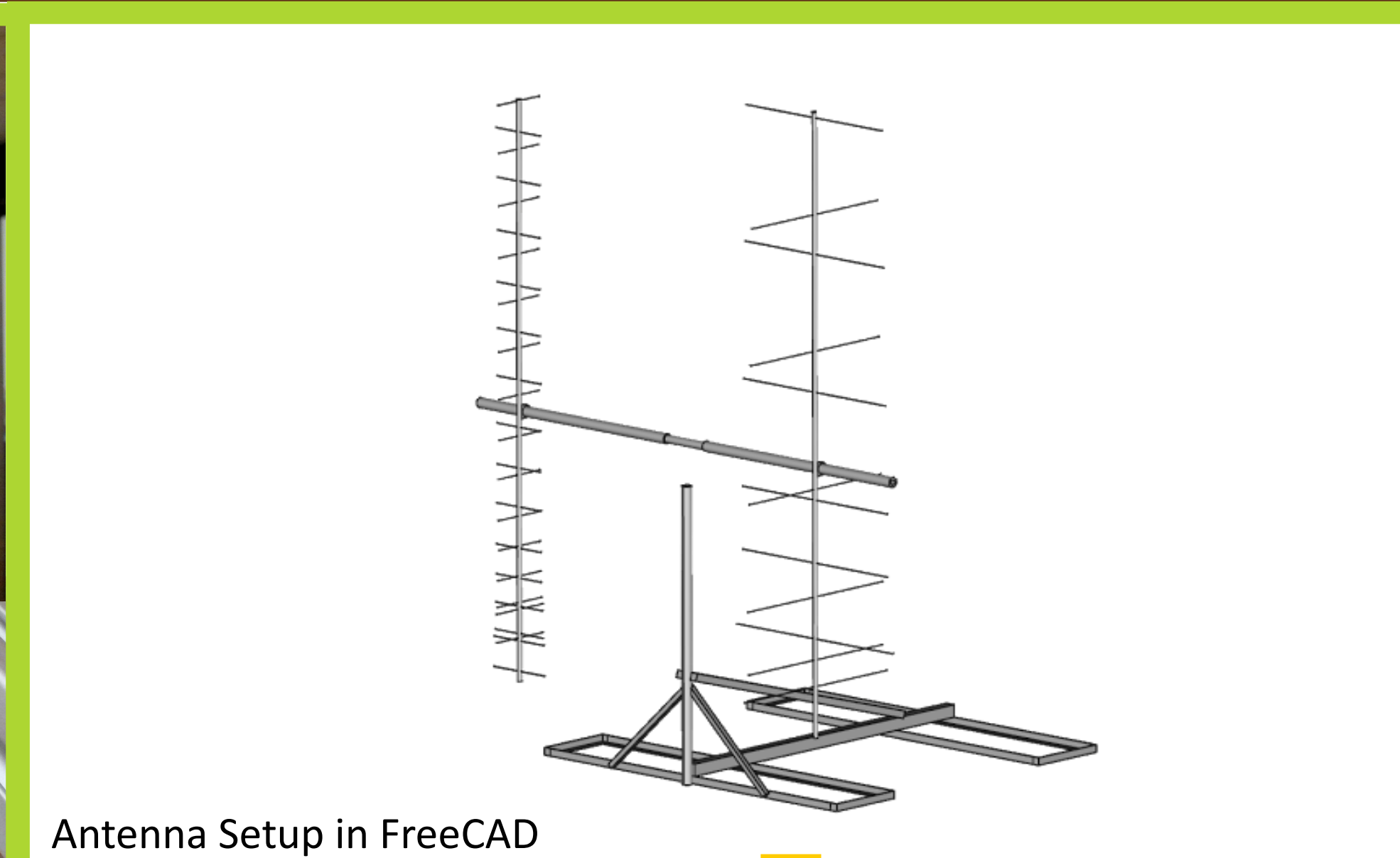
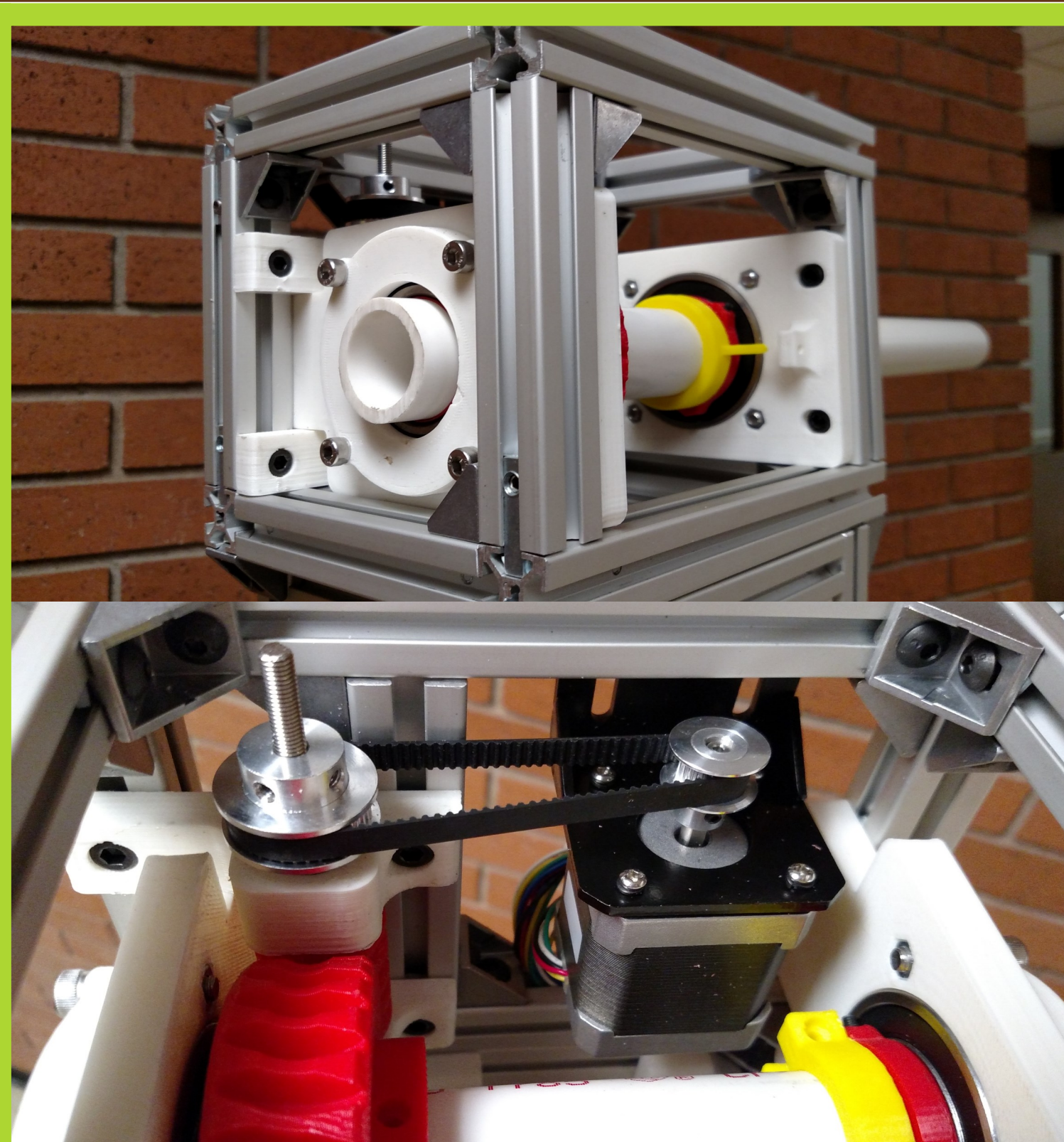
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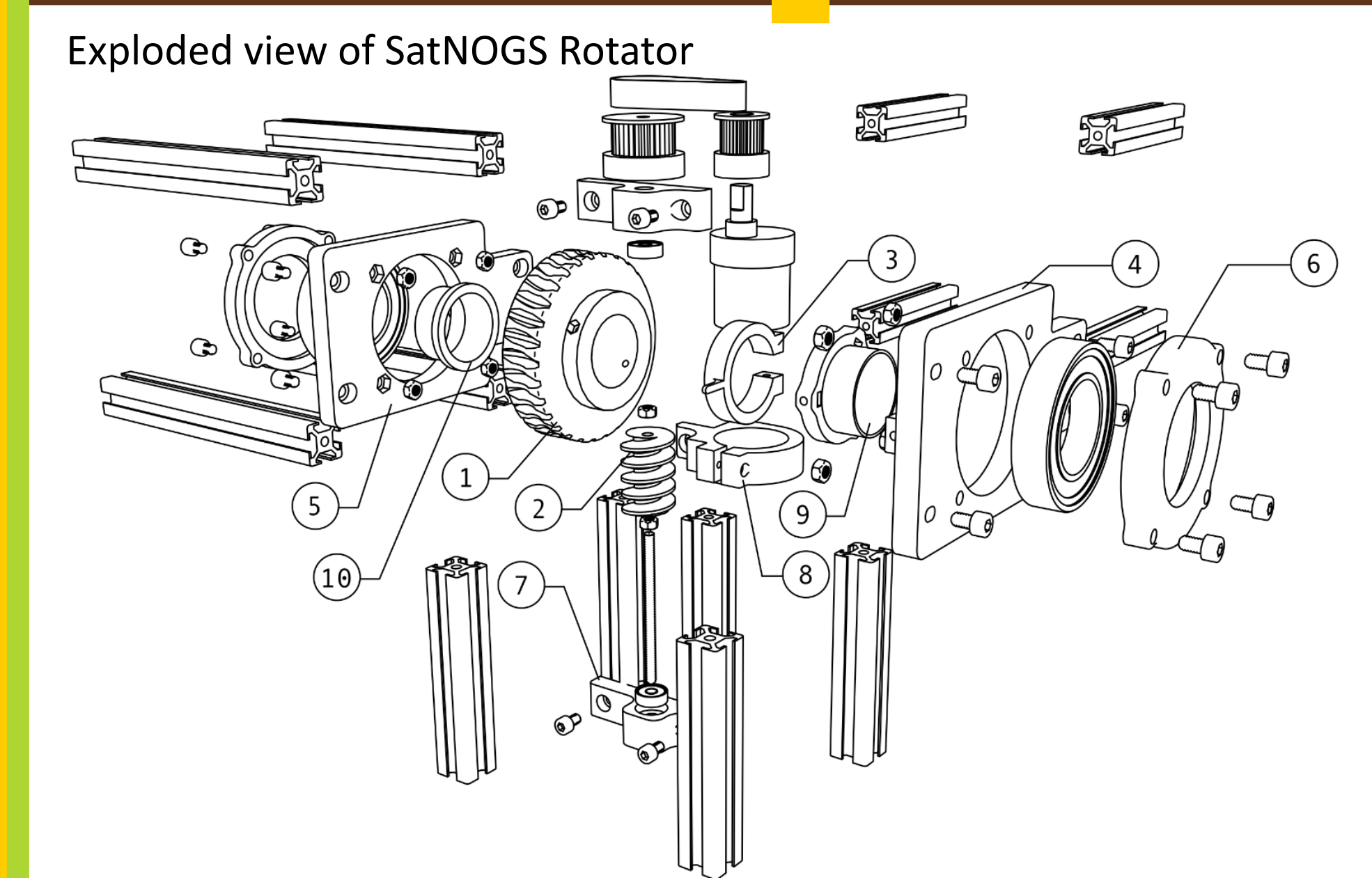
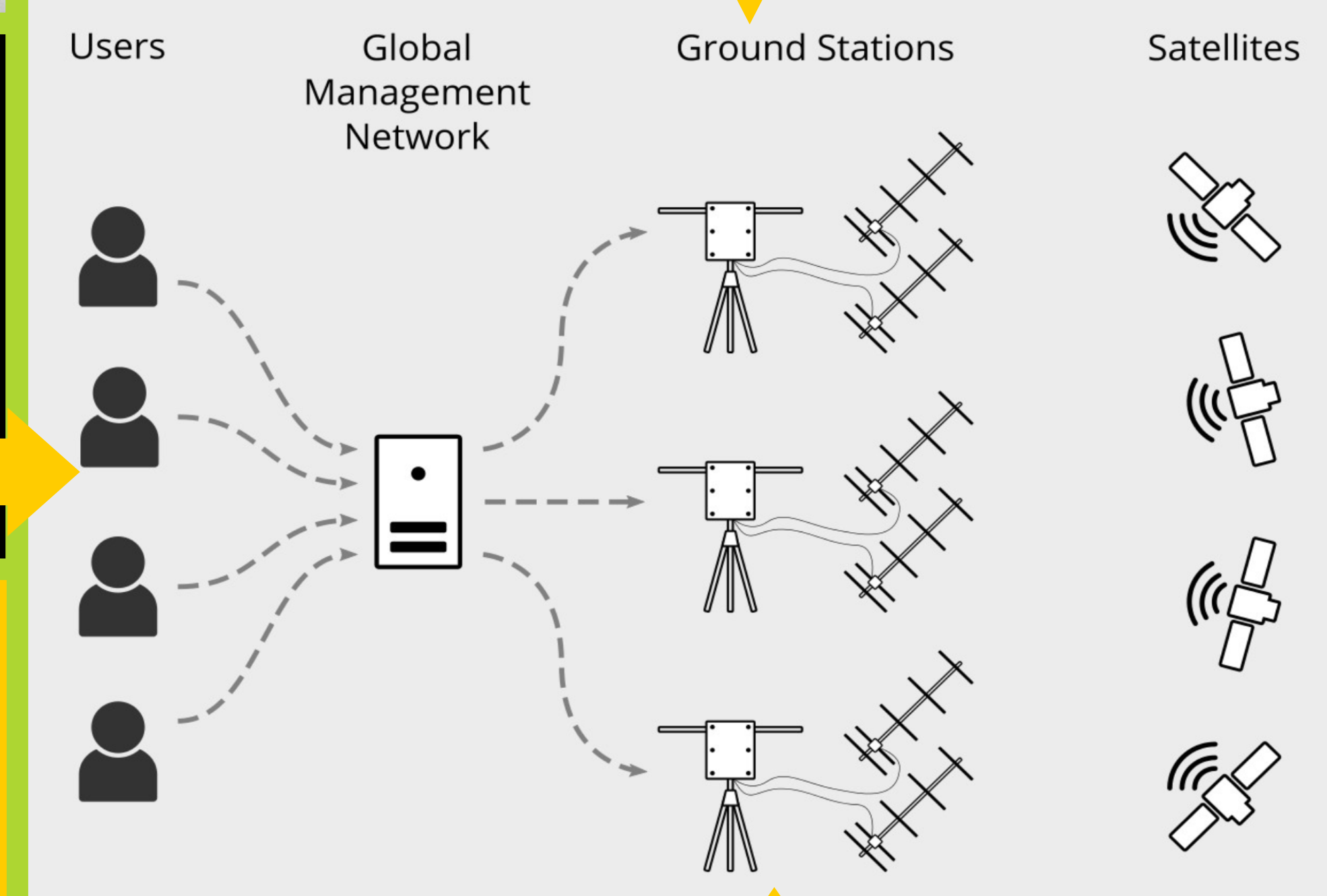
Ashley LeBlanc, John White, Chris Paradiso, Grace Freigang, Paul Flaten, and Dan White, PhD.

## Abstract

Our project is to build and contribute improvements to an existing open source ground station design. This project called SatNOGS (Satellite Networked Open Ground Station) was started a year ago by the Libre Space Foundation in Athens, Greece to address the problem of data downlink from Low Earth Orbiting Satellites. We are most interested in improving the ease of construction of the ground station to enable more people to deploy ground stations.



Antenna Setup in FreeCAD



Exploded view of SatNOGS Rotator

The rotator is created using 3D printed parts and readily accessible raw materials, making ground stations easily deployable across the globe. The SatNOGS web interface network manages ground station schedules and compiles data, allowing for more complete downlink data. A user schedules an observation for the satellite, and the network assigns specific rotators to collect data from the satellite. Observers are then able to access the data via the web browser or a download link. The project is concurrently being worked on by many individuals across the globe, with the Libre Space Foundation serving as the main catalyst.