

```
DataLogger data_log("output/data.nc4");
EventLogger event_log("output/events.txt");
DataLogger net_log("output/network.nc4");
SimulationClock clock(&data_log);
SchedulerAlpha scheduler(&clock);
Sun sun(&clock);
ObservingSystemAlpha system(&sun, &clock, &scheduler, &event_log, &net_log);
DataProcessorTemplate processor;
Battery battery(0.9333, 6, 12.9, 85);
SolarPanel panel(29, 0.06, 0, 0, 0, &sun);
SubsystemPower power_ss(battery, {panel, panel}, 6.2425);
AntennaDipole comm_antenna(30, 0, 0, 0);
ModemUhfDeploy uhf_modem;
SubsystemComm comm(&comm_antenna, &uhf_modem);
AntennaHelical sensing_antenna(30, 0, 0, 0);
SensorCloudRadar cloud_radar("input/nc4/", 10);
SubsystemSensing cloud(&sensing_antenna, &cloud_radar);
std::vector<PlatformOrbit> orbits = PlatformOrbitList("input/tle/cube.tle");
system.Launch(orbits, 0, true, comm, cloud, power_ss, &processor, &data_log);
for (uint64_t tick = 0; tick < 10000; ++tick) {
    system.Update();
    clock.Tick(1);
}
```