Science Standardised Embedded Drone Data infrastructure (SSEDD) [1]

Submitted by sscott on Mon, 2016-07-11 22:02

Project Overview

After being awarded ClusterSeedFunding at the summer meeting 2015, the Drone Cluster was able to purchase necessary development hardware for (amongst other goals) the purposes of building the proposed Science Standardised Embedded Drone Data infrastructure (SSEDD). The primary purposes of SSEDD are: (1) to make small scale low cost unmanned aircraft systems (UASs) more readily accessible to Earth Scientists, (2) to lower the learning curve required to use such platforms, and (3) to provide a degree of automated data qualification.

While not yet published in a beta form, a mixture of funded and volunteer time, and the hardware funding received, has seen SSEDD already presented to a range of communities where it has received significant support for the concept and design (2015 AGU poster session, 2016 San Diego Embedded Linux and open IoT Conference, 2016 San Diego DroneCode Community Meeting). Further, a recent (July 2016) flight campaign involving agriculture CO_2 monitoring allowed for the testing of some basic functionalities.

This testbed incubation proposal seeks to enable the transformation of SSEDD from its current design and partial implementation state, into a functioning beta release that will be made available for public testing, viewing, and reference in future proposal submissions. This will be possible with a dedicated full month of salaried development time, during which 2 different real world use case test flight campaigns (at The University of Vermont and at The University of Notre Dame) will also be flown, again using the previously funded development hardware.

Jane Wyngaard PhD, Lindsay Barbieri

As the drone cluster has shifted largely to using Open Science Frameworks for project managment, see the most uptodate information on this testbed here: https://osf.io/vszw7/ [2]

Short name: drones_ssedd
Project type: Full project
Enable issue tracker: Yes
Home Page: ESIP Testbed Project: SSEDD [2]

Source URL: https://testbed.esipfed.org/node/9285

Links
[1] https://testbed.esipfed.org/node/9285
[2] https://osf.io/vszw7/