CAP – NASA DRF Wildfire Mitigation Partnership

Data-Driven Decision Making for Wildfire Identification, Assessment, and Response

[Operated by CAP and Supported by NASA Data and Reasoning Fabric (DRF)]

CAP/Wildfire:

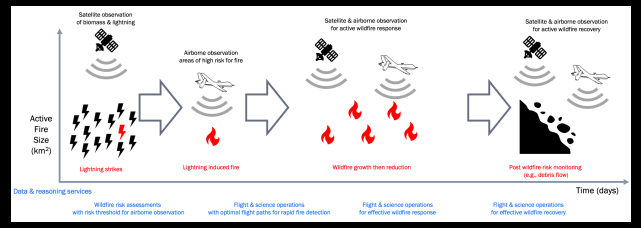
- CAP operates manned and unmanned flights, in coordination with CalFire and other government entities in the state of California, to collect aerial imagery data of regions sustaining recent lightning strikes and, therefore, are more likely to have a fire started there.

NASA/DRF:

- The Data & Reasoning Fabric (DRF) marketplace is based on an open foundational ecosystem of data and reasoning exchange between systems that must seamlessly interplay to manage complex and/or dense airspace operations.

NASA/DRF - CAP/Wildfire Collaboration:

- The California Wing of CAP and the DRF Team came together during Fall of 2020. NASA DRF Team gathered an understanding of CAP's operational process flow for their wildfire reconnaissance missions and, in collaboration with CAP, has been able to identify a preliminary set of technology areas that can be enabled/enhanced by DRF to potentially bring forth improved accuracy and reduced latency in the data used by CAP in mission critical decision making.

Services useful for wildfire detection that will be explored through this partnership are:

- Target Selector
- Mission Planner
- Feature Detector and Trend Analyzer
- Mission Status Monitor
- Global Intelligence Manager and Communicator