

General Info

Project Title:	Imaging Spectroscopy and Thermal Imaging for CA Delta Studies	Status:	Open
Request Type:	Normal	Log Number:	
NASA Funded:	Yes	Fiscal Year:	2013
ROSES Call:	No	Contract Grant # (if applicable):	
Flight Hours Requested (if known):	14 hours		
Rationale for use of NASA Facilities:			

For Aircraft Use Only

Flight Hours	Cost Estimate
For Approval:	Due Date:
Approved:	Flight Hours:
Flown:	MPC:
	Integration:
	Other:
	Current Total:
	Comments:

Piggyback Request: No

FR ID: 20130404-140058

No related requests

PI & Funding

Principal Investigator

None provided

Funding Source

Bradley Doorn - Water Resources Program for Applied Sciences

NASA HQ Science Concurrence

Bruce Tagg - NASA - SMD Airborne Science Program

Woody Turner - NASA - SMD Biological Diversity

Diane Wickland - NASA - SMD Terrestrial Ecology

Associated Users

Ian B. McCubbin - NASA Jet Propulsion Laboratory

Susan L. Ustin - University of California Davis

Simon J. Hook - NASA Jet Propulsion Laboratory

Science Objectives and Mission Concept-of-Operation

Science Objectives:

Collection of Visible to Short Wave Infrared Imaging Spectrometer and Thermal Multi-spectral data over the legal limit of the CA Delta and the Yolo by-way. This data collection will serve as a pilot study for the State of California Department of Water Resources to assess the utility of NASA Remote Sensing Data for study the complex region and ecosystems of the CA Delta.

Mission Concept-of-Operation:

This project will utilize the HypsIRI Airborne Prep mission payload of AVIRIS, MASTER, and DCS on the NASA ER-2 on a non-interference basis. The mission plan is to fly the legal limit of the delta with the ER-2 flying at 28,000 ft to collect 8 m AVIRIS data and 22 m MASTER data. State of CA field teams will be able to schedule field activities based on the established HypsIRI Airborne Prep mission schedule.

Supported Satellites

Satellite #1:	Landsat 7
Satellite #2:	LDCM - Landsat Data Continuity Mission
Satellite #3:	HypsIRI - Hyperspectral Infrared Imager

Additional Contact

This field provides the aircraft leads with an additional contact who is not already listed in this FR. (This field has been modified from "advanced notification" to "additional contact").

None provided

Aircraft

For more information on ASP Supported Aircraft, Other NASA Aircraft, and the sensors listed here, please view the Airborne Science Portal [Platforms](#) and [Instrumentation](#) pages.

Aircraft: ER-2
Multi-Aircraft Mission: No
Mission Location: DAOF
Foreign Airspace: No
Instrument Communications via Satellite:
Bandwidth:
Comments Regarding Bandwidth:
Sensor #1: AVIRIS C (Classic)
New Integration?: No
Ground Resolution or Altitude: 8 m
Sensor #2: MASTER
New Integration?: No
Ground Resolution or Altitude: 22 m
Sensor #3: DCS
New Integration?: No

Flight Plans

Flight Lines

None provided

Flight Boxes

None provided

Flight Points

None provided

Data Collection Window

Start Date 05/01/2013 **End Date** 10/01/2013
Satellite Overpass: Supported satellites (Landsat 7, LDCM, HypSPIRI) are listed in the Supported Satellites section.
Time of Day: morning **Weather Conditions:** clear
Tidal Cycle: low
Cloud Cover: 10%(Max)
Sun Angle Limits: below 50 degrees solar elevation

Attached Files

Name	Size	Date
Delta_sciencewaypoints.kml	2 KB	04/04/2013
SAC_DELTA_MAP.PDF	1 KB	04/04/2013