### **National Aeronautics and Space Administration**

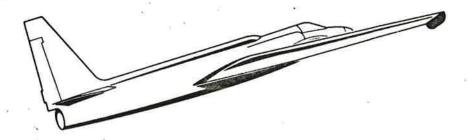
## **Earth Resources Aircraft Project**

# Flight Summary Report

Flight No. 73-173

Date 10 October 1973

**FSR-** 369





EROS DATA CENTER

**Airborne Science Office** 

Ames Research Center, Moffett Field, California

## NASA/ARC Earth Resources Aircraft Project FLIGHT SUMMARY REPORT

Flight No: 73-173 -

Date: 10 October 1973

sensor

Aircraft No: 4

Julian Date: 283

Sensor Package:

A-l Configuration (vertical cameras only) Aerosol Particulate Sampler (APS)

Purpose of Flight:

ERTS-1 Aircraft Support

Proposal No. 275-4

Area(s) Covered:

Northern Sacramento Valley, California

#### SENSOR DATA

| Accession No:      | 01494                           | 01495                           |                        |
|--------------------|---------------------------------|---------------------------------|------------------------|
| Sensor ID No:      | 006                             | 009                             | .024                   |
| Sensor Type:       | HC-730V                         | HR-732                          | Aerosol                |
| Lens Focal Length: | 6" =                            | 24"                             | Particulate<br>Sampler |
| Film Type:         | Aerochrome<br>Infrared,<br>2443 | Aerochrome<br>Infrared,<br>2443 |                        |
| Spectral Band:     | 510-900nm                       | 510-900nm                       |                        |
|                    |                                 | ×                               |                        |
| f Stop:            | 11 *                            | 32 W 11                         |                        |
| Shutter Speed:     | 1/150                           | 1/75                            |                        |
| No. of Frames:     | 32                              | 128                             |                        |
| % Overlap          | 60                              | 60                              |                        |
| Quality            | Good                            | Good                            |                        |
| Remarks .          |                                 |                                 | Non-imaging            |

#### FLIGHT SUMMARY

73-173

This is an ERTS-1 Aircraft Support flight for Proposal No. 275-4 (Poulton) covering a major portion of the Sacramento Valley region (see Track Map).

Most of the imagery obtained was affected by light cirrus cloud cover conditions (see Flight Line Data). All imagery is of good quality and exposure. The color balance, however, is affected to some degree by the cirrus cloud cover. The interframe spacing on the first ten frames of the HR-732 camera film is erratic. This condition is due to slack in the film transport mechanism and does not affect the quality of the imagery.

On this flight the Aerosol Particulate Sampler (APS) was also employed in support of the Planetary Science Applications Branch, NASA-Ames Research Center under the auspices of Dr. Guy Ferry. The sampler is a non-imaging sensor designed to gather high alt cude dust particles for laboratory research. The Track Map and Flight Line Data indicate those segments of the flight during which the sampler was activated.

# FLIGHT NO. 73-173

|        | Check Frame<br>Points Numbers | Time (GMT-hr, min, sec) |          | Altitude, MSL |                     |   |
|--------|-------------------------------|-------------------------|----------|---------------|---------------------|---|
|        |                               | START                   | END      | (feet)        | Cloud Cover/Remarks |   |
| HC730V | A-B                           | 094-006                 | 18:30:50 | 18:43:10      | 65,000              | 10% light cirrus, frs. 095-097;rest clear                       |
|        | C-D                           | 007-014                 | 18:51:37 | 18:59:49      | <u>u</u>            | 10% light cirrus  |
|        | E~F                           | 015-025                 | 19:08:29 | 19:18:45      | n                   | 10% light cirrus  |
| œ.     |                               |                         |          |               | e.                  | ,   |
|        |                               | 12                      |          |               | 4                   |   |
|        |                               |                         |          |               | -                   | , e   |
|        |                               |                         | υ<br>    | 8             |                     | w es  |
|        |                               |                         |          |               |                     | 272 (3 1 (3 × +1 × + 5 )  |
| HR732  | A-B                           | 0001-0051               | 18:30:58 | 18:43:28      | 65,000              | 10% light cimpus for 0005 0015 most class                       |
|        | C-D                           | 0052-0083               | 18:52:03 | 19:00:03      | 03,000<br>II.       | 10% light cirrus, frs. 0005-0015;rest clear<br>10% light cirrus |
|        | E-F                           | 0084-0128               | 19:07:58 | 19:18:19      | 11                  | 10% light cirrus  |
|        | ~                             | 9<br>P                  |          |               |                     | 7   |
|        |                               |                         |          |               | 8                   | , v   |
| APS    | ×                             |                         |          |               |                     | *** was   |
|        | A-F                           |                         | 18:25:   | 19:19:30      | 65,000              | APS #1 and #2 open-seal   |
|        |                               |                         |          |               | *                   | mo #1 and #2 open seal  |
|        |                               | 70                      | _        | 24            | ^                   |   |
|        | L                             |                         |          |               | -                   |   |

