

FLIGHT SUMMARY REPORT

Flight Number: 90-002

Date: 3 October 1989

Julian Date: 276

Aircraft #: 706

Sensor Package: Wild Heerbrug RC-10/Hycon HR-732 cameras
Large Area Collectors (LAC)

Purpose of Flight: 89P226
M. Zolensky, NASA-JSC

Area(s) Covered: Southwestern U.S.

SENSOR DATA

Accession #:	03934	03935	-----
Sensor ID #:	034	039	100
Sensor Type:	RC-10	HR-732	LAC
Focal Length:	12" 304.66 mm	24" 609.6 mm	-----
Film Type:	High Definition Aerochrome IR SO-131	High Definition Aerochrome IR SO-131	-----
Filtration:	cc .10B	cc .10B	-----
Spectral Band:	510-900 nm	510-900 nm	-----
f Stop:	4	8	-----
Shutter Speed:	1/200	1/75	-----
# of Frames:	36	67	-----
% Overlap:	60	60	-----
Quality:	Excellent	Excellent	-----
Remarks:			Non-imaging Impact Sampler

Airborne Science and Applications Program

The Airborne Science and Applications Program (ASAP) is supported by three ER-2 high altitude Earth Resources Survey aircraft. These aircraft are operated by the High Altitude Missions Branch at NASA-Ames Research Center, Moffett Field, California. The ER-2s are used as readily deployable high altitude sensor platforms to collect remote sensing and *in situ* data on earth resources, celestial phenomena, atmospheric dynamics, and oceanic processes. Additionally, these aircraft are used for electronic sensor research and development and satellite investigative support.

The ER-2s are flown from various deployment sites in support of scientific research sponsored by NASA and other federal, state, university, and industry investigators. Data are collected from deployment sites in Kansas, Texas, Virginia, Florida, and Alaska. Cooperative international scientific projects have deployed the aircraft to sites in Great Britain, Australia, Chile, and Norway.

Photographic and digital imaging sensors are flown aboard the ER-2s in support of research objectives defined by the sponsoring investigators. High resolution mapping cameras and digital multispectral imaging sensors are utilized in a variety of configurations in the ER-2s' four pressurized experiment compartments.

Camera Systems

Various camera systems and films are used for photographic data collection. Film types include high definition color infrared, natural color, and black and white emulsions. Available photographic systems are as follows:

- * Wild-Heerbrug RC-10 metric mapping camera
 - 9 x 9 inch film format
 - 6 inch focal length lens provides area coverage of 16 x 16 nautical miles from 65,000 feet
 - 12 inch focal length lens provides area coverage of 8 x 8 nautical miles from 65,000 feet

- * Hycon HR-732 large scale mapping camera
 - 9 x 18 inch film format
 - 24 inch focal length lens provides area coverage of 4 x 8 nautical miles from 65,000 feet

- * Iris II Panoramic camera
 - 4.5 x 34.7 inch film format
 - 24 inch focal length lens
 - 90 degree field of view provides area coverage of 2 x 21.4 nautical miles from 65,000 feet

CAMERA FLIGHT LINE DATA
 FLIGHT NO. 90-002

Accession No. 03934

Sensor #
 034

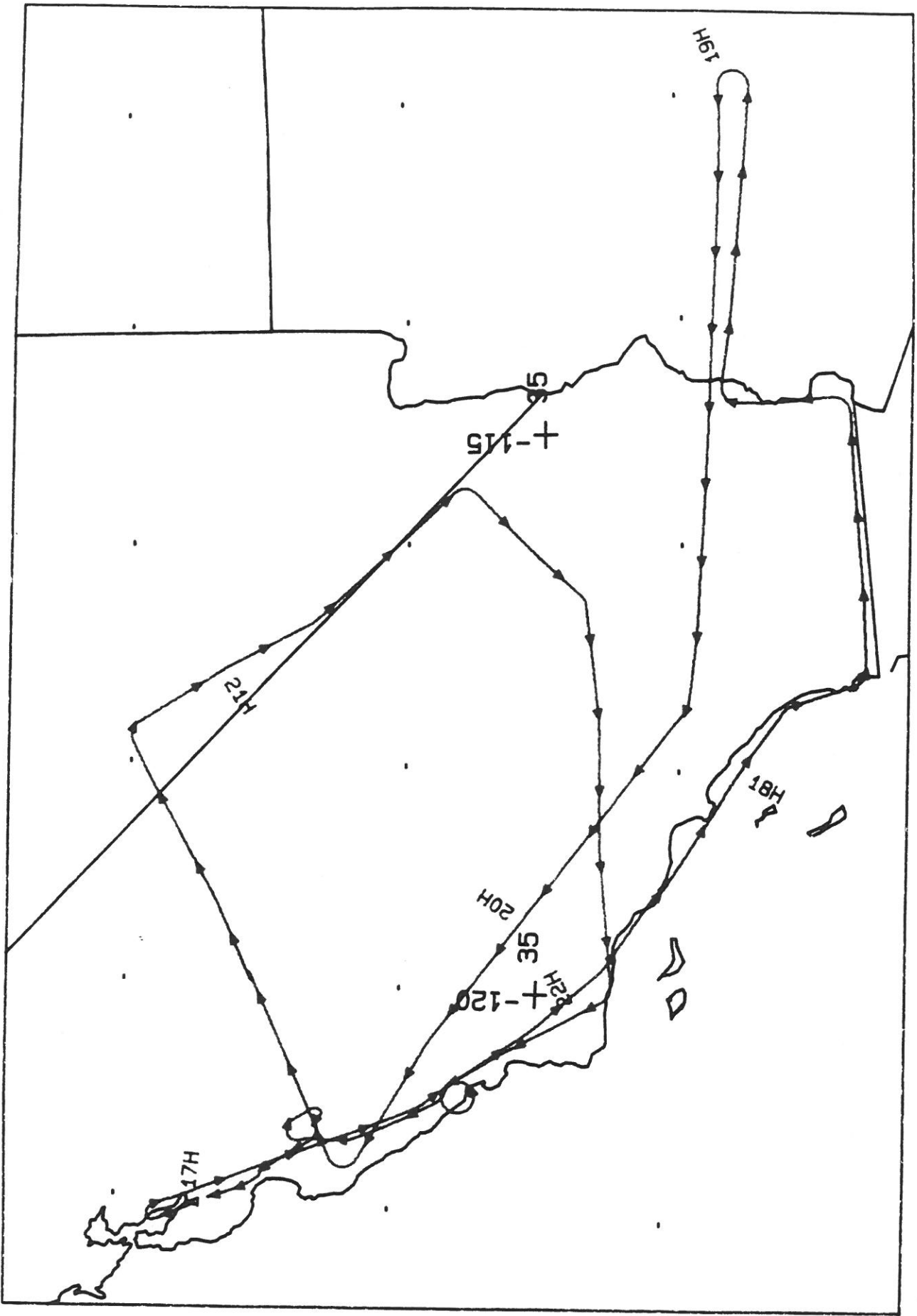
Check Points	Frame Numbers	Time (GMT-hr, min, sec)		Altitude, MSL feet/meters	Cloud Cover/Remarks
		START	END		
A - B	4550-4585	18:12:17	18:28:21	65000/19800	10-20% cumulus (frames 4550-4552); frame 4584 oblique

CAMERA FLIGHT LINE DATA
 FLIGHT NO. 90-002

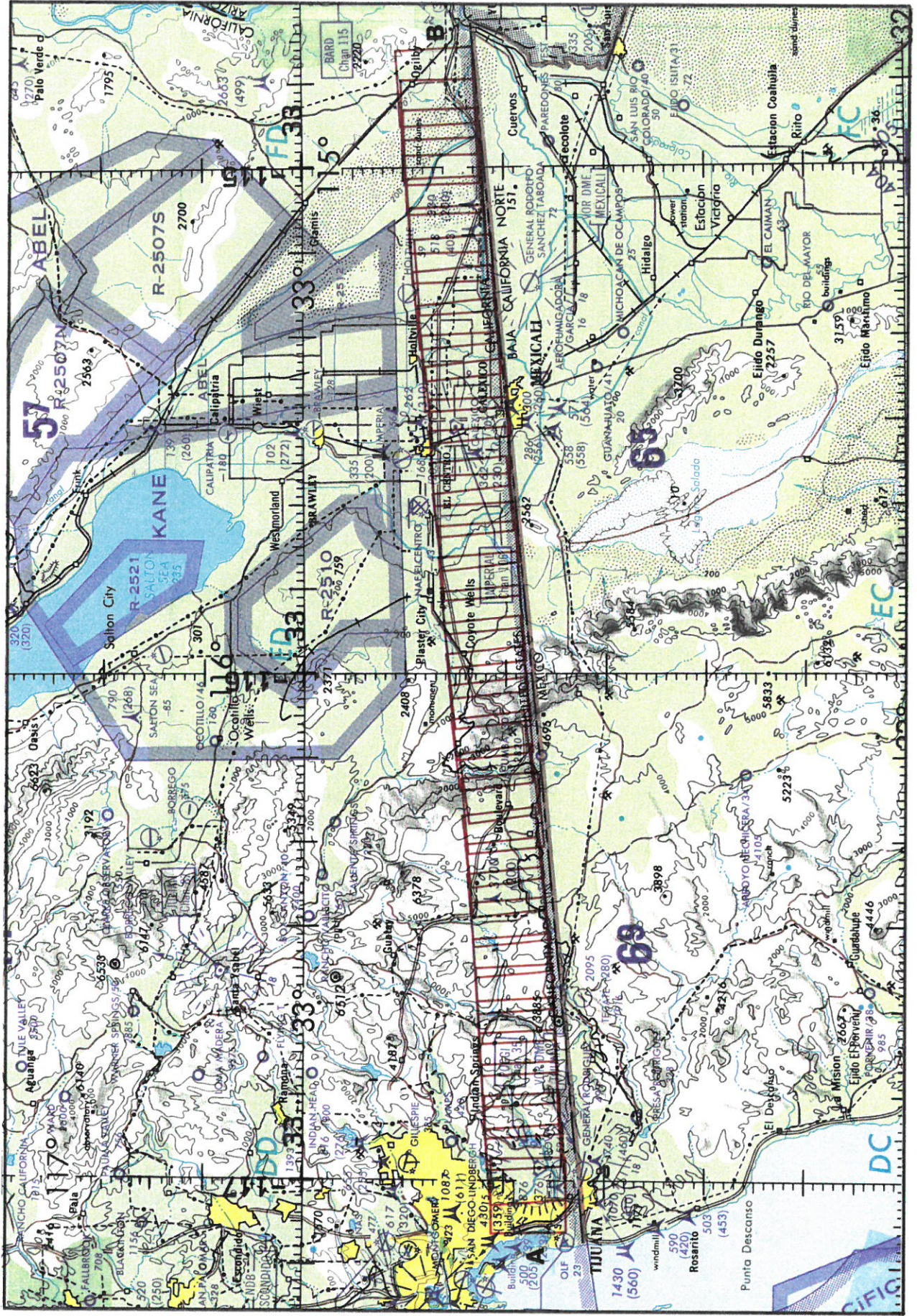
Accession No. 03935

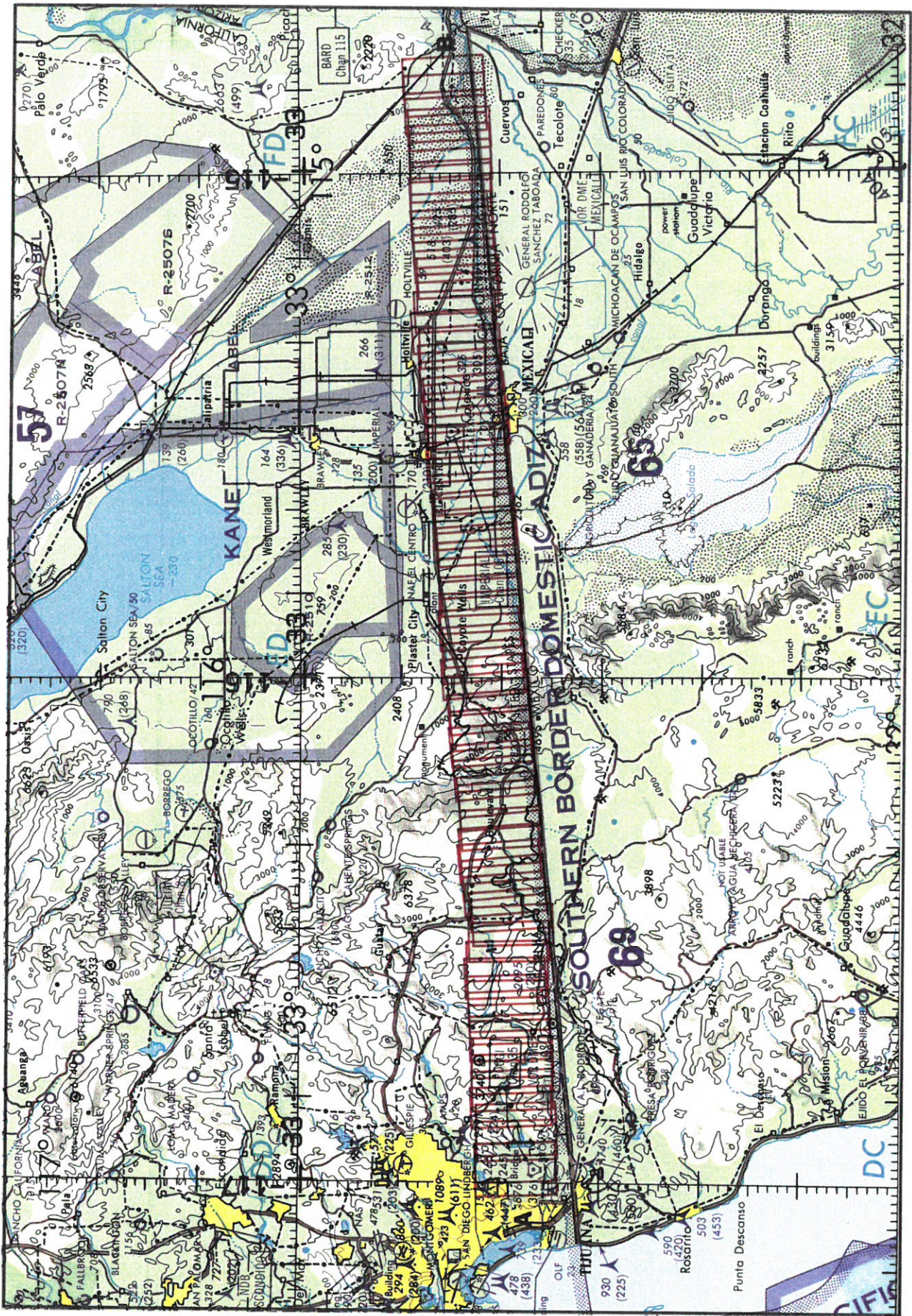
Sensor #
 039

Check Points	Frame Numbers	Time (GMT-hr, min, sec)		Altitude, MSL feet/meters	Cloud Cover/Remarks
		START	END		
A - B	0001-0067	18:12:09	18:28:21	65000/19800	10% cumulus (frames 0001-0002)



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