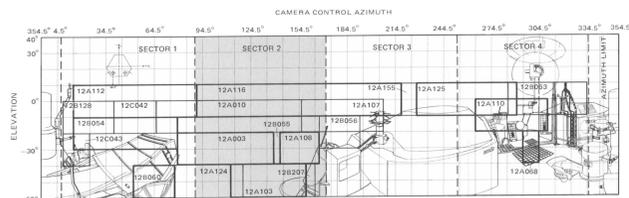




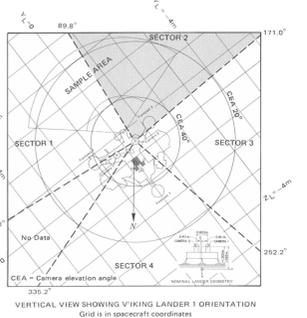
IPL FILE NO. 27 10 11 195106
IPL FILE NO. 001 004
JET PROPULSION LABORATORY
Interior - Geological Survey, Reston, Va., 1980 - G80039



OUTLINE OF CAMERA 2 VIEW SHOWING CAMERA EVENTS USED IN MOSAIC



COMPLETE MOSAIC, MORNING SCENE, CAMERA 2
(Corrected for tilt)



DESCRIPTION OF SCENE

This southeast view of the terrain directly in front of the lander shows a surface strewn with rocks in the centimeter-to-meter size range; several areas interpreted as bedrock are also present (line 275, sample 2700). Much of the near field between the large blocks is blanketed by very fine grained (approximately 100 μm) material, which has been sculptured by the martian winds into tails behind rocks (line 900, sample 2700). Light and dark drifts of this material can be seen in the upper left of the mosaic; these deposits are about 15 m from the spacecraft. Large blocks on the near horizon in the upper left of the mosaic are about 80 m from the spacecraft and lie on the rim of a small (200-m diameter) degraded crater; the largest block is about 3 m across. The far horizon at the upper right is probably a ridge beyond the 3-km nominal horizon.

THE VIKING MISSION

Two Viking spacecraft, each consisting of an orbiter and lander, were launched from Kennedy Space Center on August 20 and September 9, 1975. The Viking 1 spacecraft arrived at Mars on June 19, 1976, and was placed in a highly elliptic orbit around the planet at a periastron altitude of nearly 1500 km. The other camera were used in conjunction with other instrumental methods to find a suitable landing site for the lander. After about 30 days in orbit, the lander was separated from the orbiter, and on July 20, 1976, Viking Lander 1 touched down on the surface of Mars at lat. 22.443° N, and long. 47.368° W (Morris and Jones, 1980) on the west edge of a large basin called Chryse Planitia. It landed in a viable position at a 3° tilt downward in the direction 284.9° clockwise from north.

VIKING LANDER MOSAICS

The Viking Lander camera acquired many high-resolution pictures of the Chryse Planitia and Utopia Planitia landing sites. Each picture is the product of computer processing on Earth of digital-image data transmitted from Mars as a result of "camera events" carried out by one of the lander camera systems. Further computer processing of data from a selected number of these events yielded a total of 10 mosaics. Two pairs of mosaics from Lander 1 data (one mosaic from each camera) consisted of one pair made from data taken in the morning (0700-0800 hours) and one pair made with data acquired in mid-afternoon (1400-1500 hours). Similarly, three pairs of mosaics for the Lander 2 site consisted of one pair between 0700 and 0800 hours, one pair at noon, and one pair between 1700 and 1800 hours.

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VIKING LANDER 1 RECTIFIED PHOTOMOSAIC
MORNING SCENE - CAMERA 2 - SECTOR 2
1980