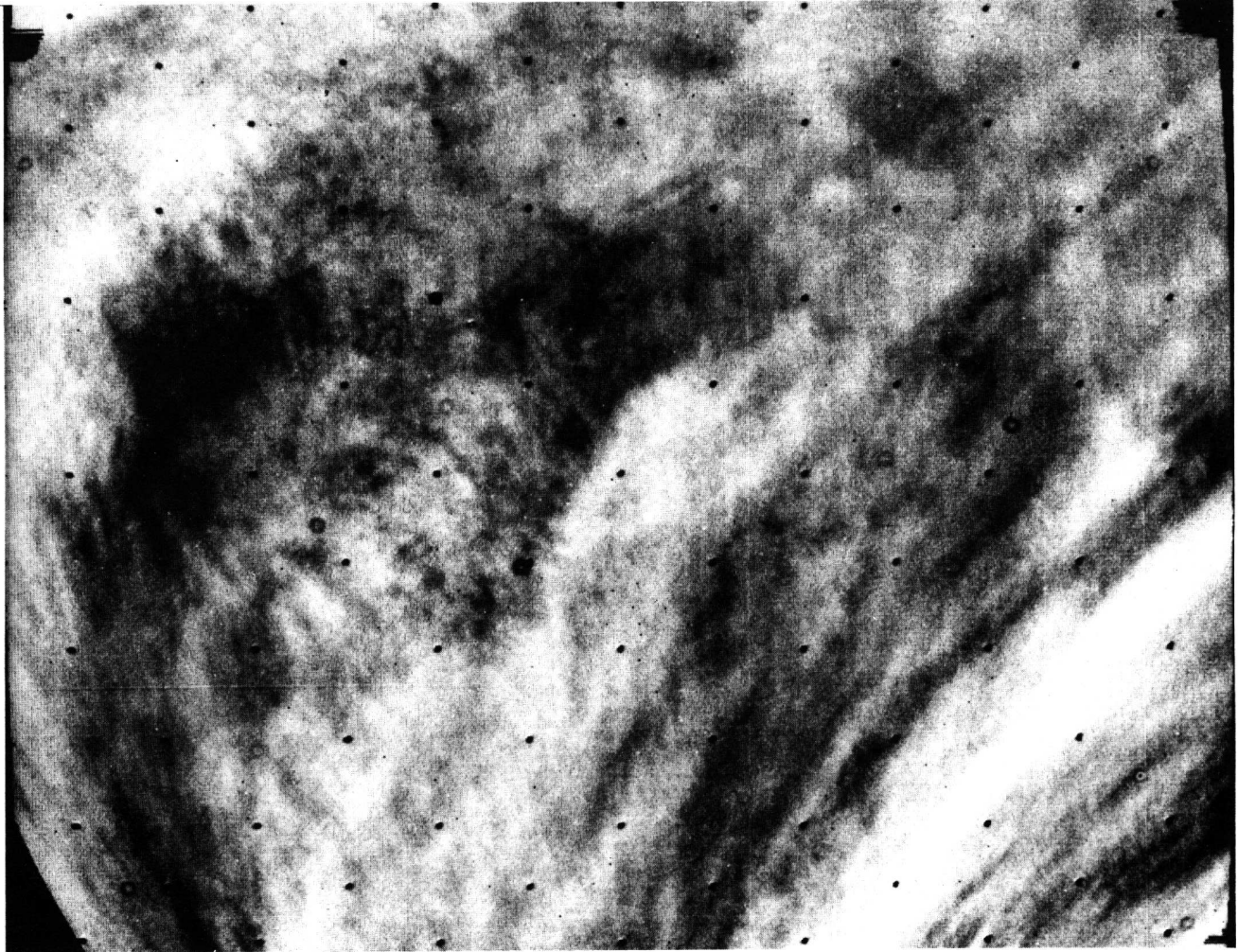


MARINER VENUS / MERCURY 1973

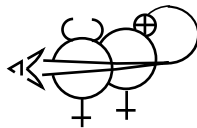
STATUS BULLETIN

Preliminary Science Results of Venus Encounter



This ultraviolet picture of Venus was taken by Mariner 10's television cameras on February 6 from a range of 490,000 miles. The dark features toward the top are part of a dark belt in the Venus clouds over the equatorial region of the planet. Detail within this belt shows rising and descending air currents typical of convection on Earth. To the south of the belt are spiral-like streaks suggesting uniform flow around the planet toward the pole. This photo has received preliminary enhancement by the Image Processing Laboratory at JPL. Further enhancement will remove the dark dots, created by a pattern on the camera's vidicon tube face for geometric calibration.

MARINER VENUS/MERCURY 1973 PROJECT OFFICE
Jet Propulsion Laboratory California Institute of Technology
National Aeronautics and Space Administration
Pasadena, California



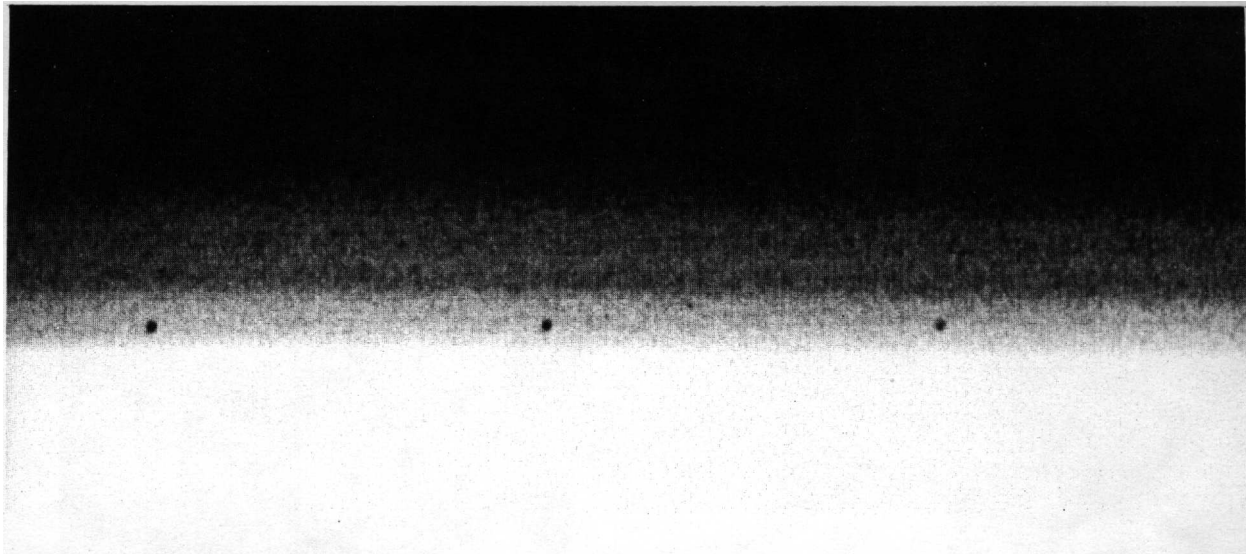
7 February 1974
BULLETIN NO. 19
Part 1



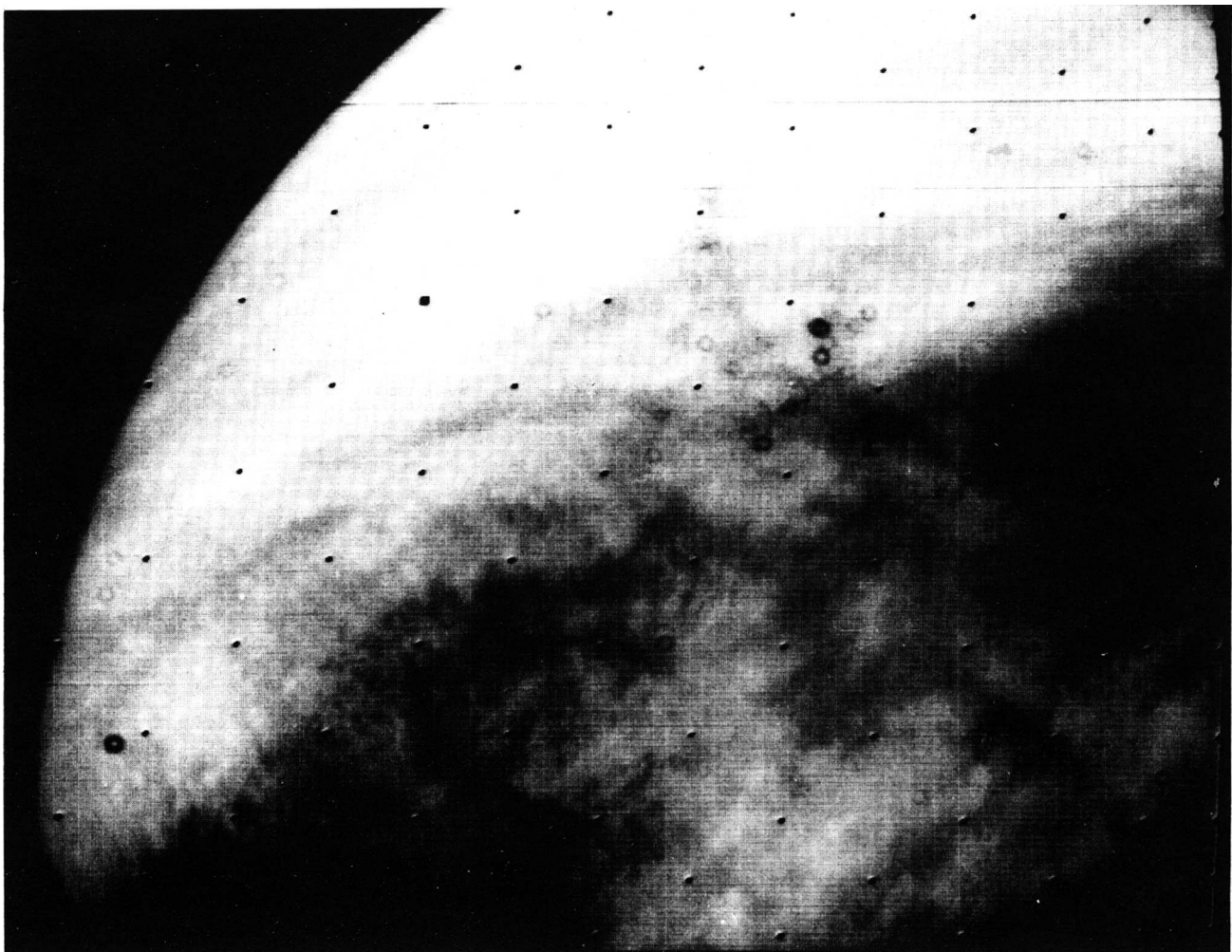
The nearly full planet Venus is portrayed in this mosaic of television pictures taken 24 hours after Mariner 10 made its closest approach to Venus. Taken from a distance of about 440,000 miles, the photos show cloud patterns visible only in ultraviolet light. Features as small as 10 miles can be resolved. (Venus is about 7560 miles in diameter.) The south ecliptic pole is near the bottom of the mosaic and the morning terminator is to the right. Cloud patterns show the general circulation of Venus' upper atmosphere. Minor blemishes in the photo will be removed by computer processing.



Mariner 10 television cameras took the pictures mosaicked into this view of Venus from 14:00 to 14:30 PDT on 6 February from about 525,000 miles. This television sequence was one of six conducted one day after Mariner 10 flew past Venus enroute to Mercury. The cloud patterns, seen only in ultraviolet light, show the general circulation of the upper atmosphere of Venus. The south ecliptic pole is in the bottom frame and the morning terminator is at right



Haze layers on the limb of Venus were Photographed by Mariner 10 in orange light. The thickness of the haze above the clouds is about 6 kilometers and appears to cover the entire planet. Three or perhaps four layers appear on this narrow angle frame taken near the equator 15 minutes after closest approach to Venus on February 5. The three black dots in the lowest haze layer are used for corrections for geometric distortion on the television camera.



This picture of Venus was taken February 6 by Mariner 10 at a distance of about 490,000 miles. It is a segment of a mosaic of pictures taken through ultraviolet filters. The dark belt at the bottom straddles the planet's equator. Detail within the belt shows rising and descending air currents typical of convection on Earth. To the north of the belt are several spiral-like streaks suggesting uniform flow around the planet toward the pole. There appear to be no storms at these high latitudes.