

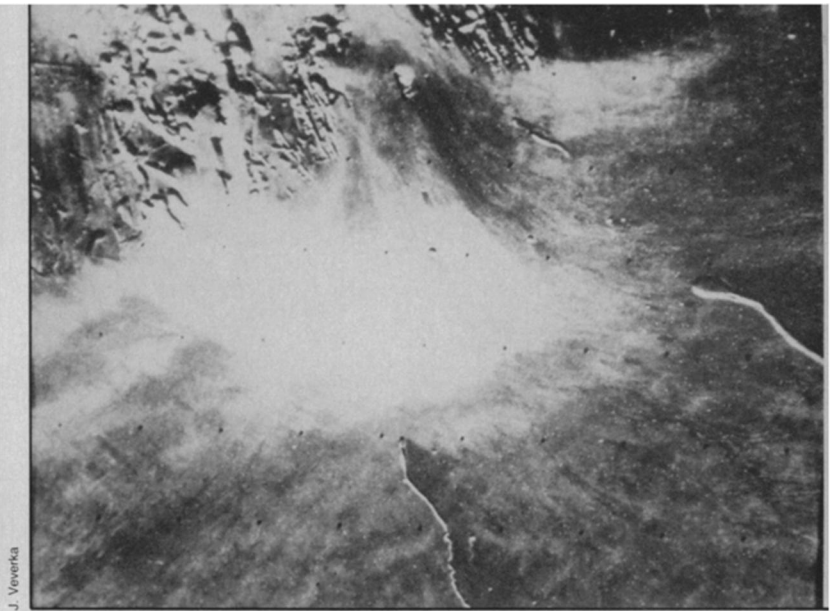
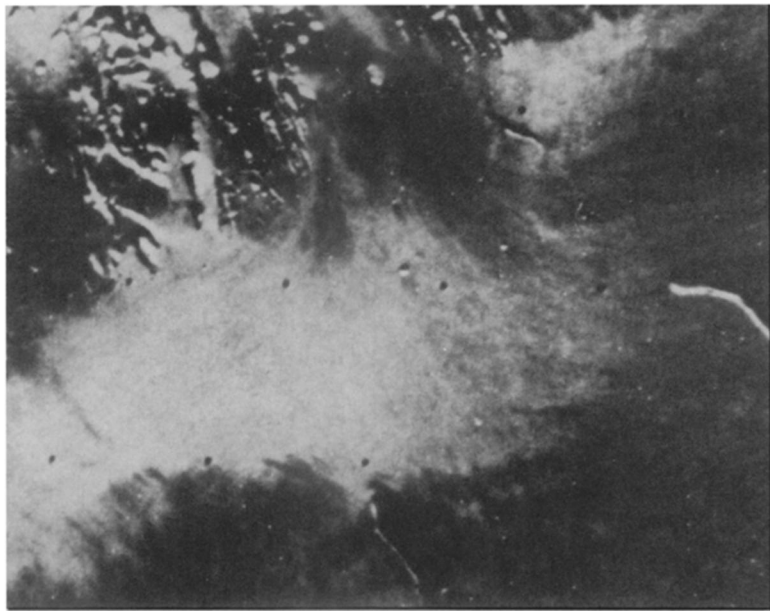
*Dust storm more than 300 kilometers across, apparently being driven eastward by strong winds, was spotted in Argyre basin on Dec. 28 by Viking orbiter 2. Such large basins seem to be favored locations for the formation of dust storms. On earth, a storm this size could blanket Louisville, Terre Haute and Cincinnati.*

# MARS ALBUM 6

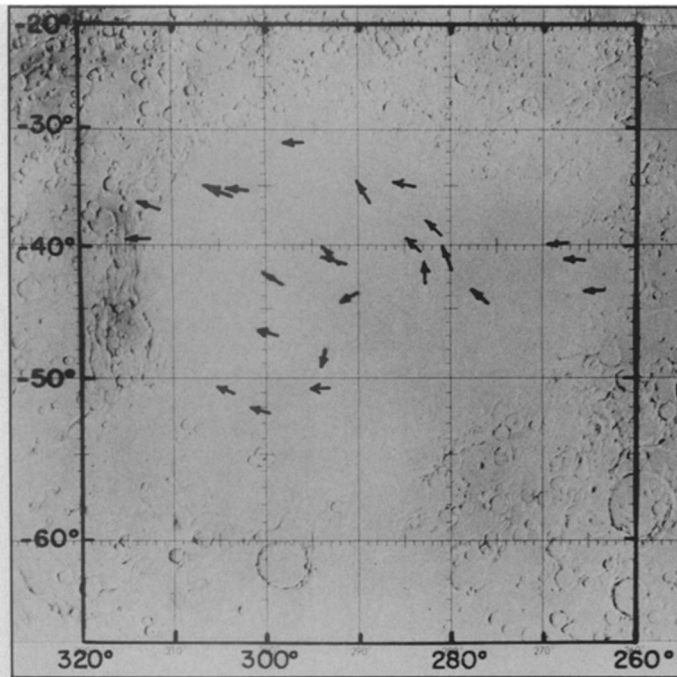
A World of Winds



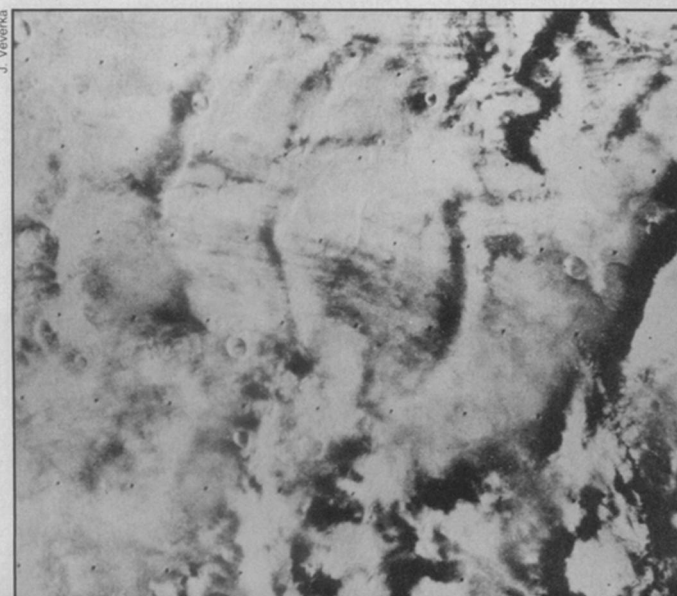
*Circumpolar winds may have molded the bright, ringlike scarps in Viking's first view of the southern cap's layered terrain.*



Only 28 Martian days (about 29 earth days) separate these two images of one flank of the huge volcano Arsia Mons, showing distinct changes in surface brightness due to wind-transport of dust.



Untroubled by the global dust storm that stymied Mariner 9 for months, the Viking orbiters have had the first clear look at the floor of Hellas, revealing long wind streaks on the surface (below) and so much detail that Cornell's Peter Thomas was able to map the wind patterns within the basin (above).



A wind-watcher's paradise is Syria Planum, a broad, near-equatorial dome some 10 kilometers high, bedecked with arcs, fans, streaks and the whole gamut of aeolian features. Large pressure differences produced by surface-heating of the atmosphere atop the rise lead to strong, up-slope winds also thought to account for water-ice cloud condensations and dust storms elsewhere on the planet. Comparison with other regions suggests that redistribution of as little as the top millimeter of surface material can virtually transform the scene in mere days.