



# PACIFIC REGION TECHNICAL NOTES

79-025

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The Satellite Views the Moon

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## INTRODUCTION

On the morning of March 21st, 1978 at 1845Z, an inexplicable warm object was detected over the Earth's horizon by the satellite IR radiometer. It was a matter of great curiosity and a subject of speculation among the operational staff at the Pacific Weather Center for a brief period of time. The mystery was solved in about one-half hour with the reception of the next visual picture. It revealed the familiar face of Earth's Moon.

It was the first known "satellite sighting" of the moon by PWC staff. It proved to be of interest for several reasons:

1. It may be of rare occurrence.
2. The moon has travelled a large distance relative to a point on the Earth's surface in only 30 minutes. This is an indication of the large speed the satellite must maintain to remain geostationary.
3. There is extreme contrast between the IR radiometer data and the visual data for the lunar surface.

Author's Note: As of August 10, 1979, no other known "satellite sighting" of the Earth's moon has been observed by the PWC staff.

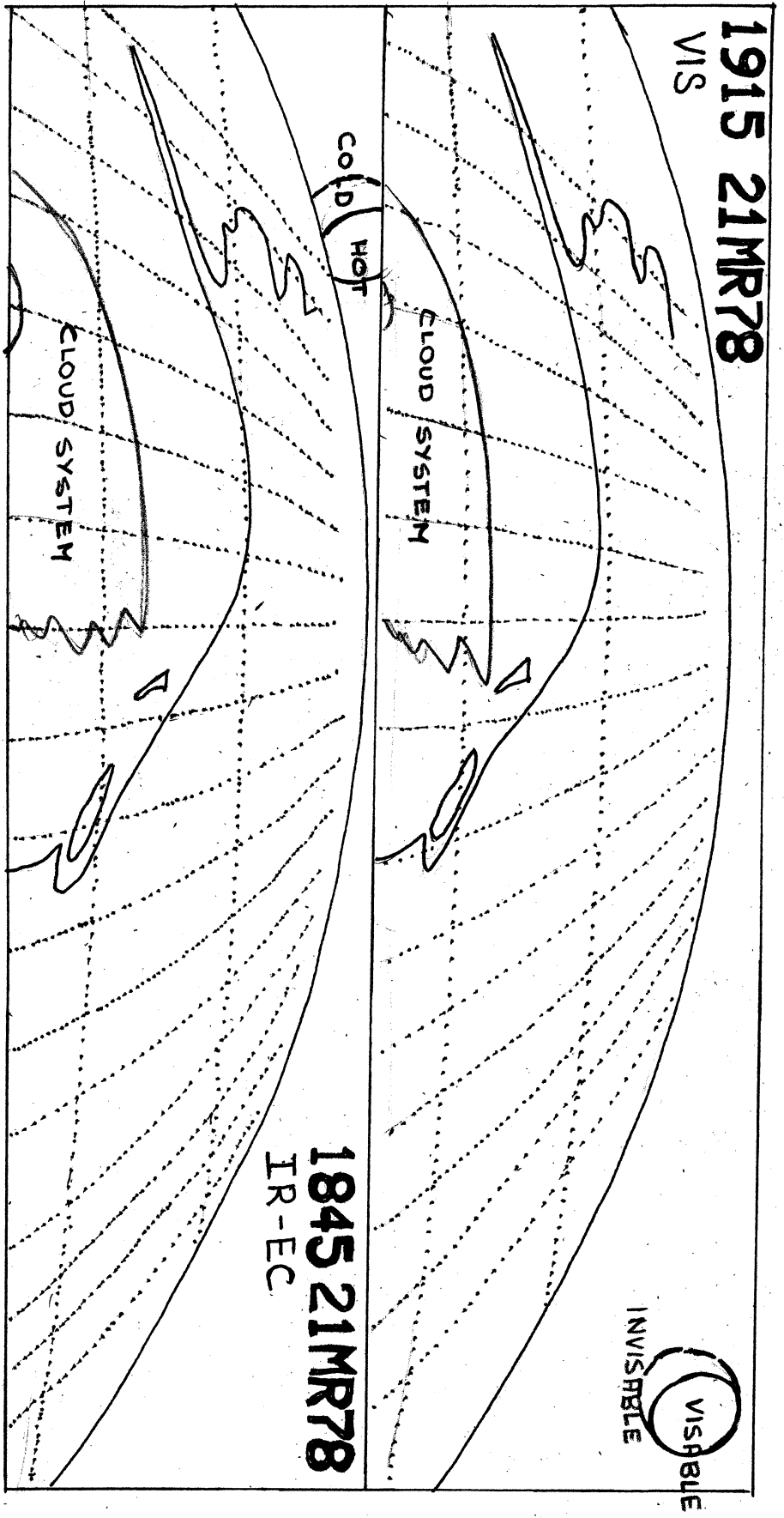


FIGURE 2.  
 SKETCH OF THE EARTH'S AND MOON'S SURFACE INDICATING SOME IMPORTANT  
 EFFECTS REVEALED BY IMAGERY.

1915 21MR78



1845 21MR78

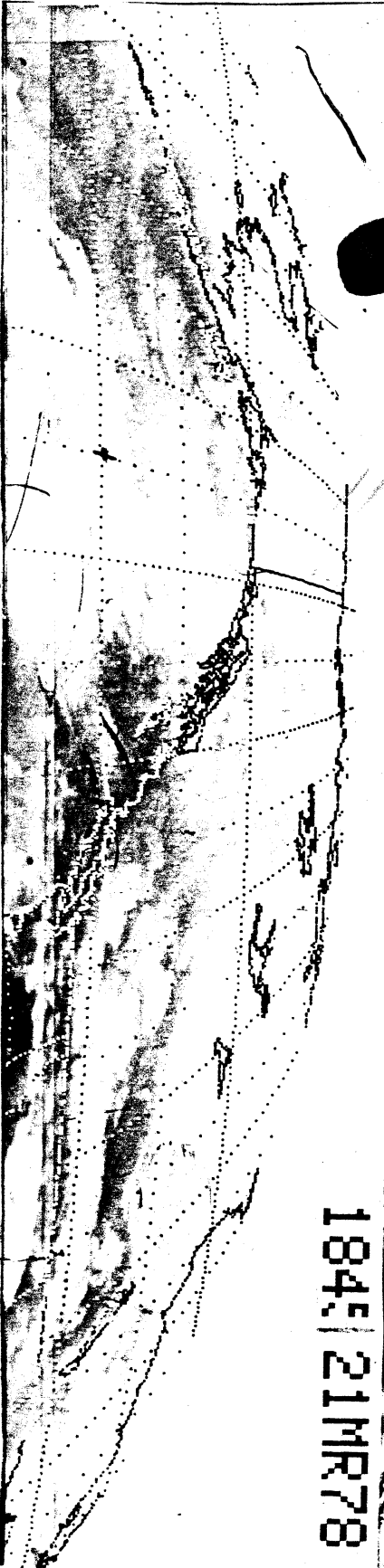


FIGURE 1.  
SATELLITE IMAGES TAKEN MARCH 21 1978 1845Z (BELOW) AND 1915 (ABOVE)

1915 21MR78



FIGURE 1.  
SATELLITE IMAGES TAKEN MARCH 21 1978 (1845Z (BELOW) AND 1915 (ABOVE))