

# Mars Special Phenomenon of 2020 Opposition

ALPO Japan, Mars director: Makoto Adachi

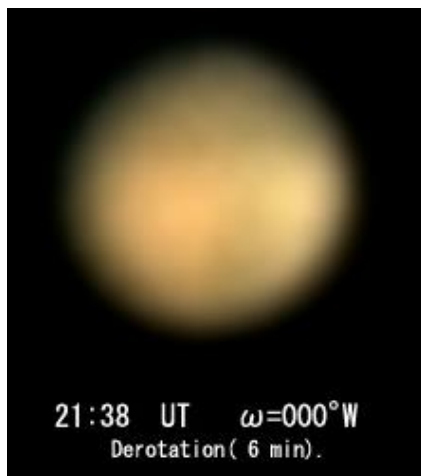
## Preface

What is described here is based on my experience and recorded based on the observations reported on the ALPO Japan's website. Therefore, please note that it is not backed by scientific figures. Also, please be aware that because of observations from the earth, there are many places where observation is not possible due to regional characteristics and weather, etc., and it is not a global one.

2019, Oct. 20

The first Observation Observer : Istvan Csabai ( Hungary,Europe)

2020, Jan. 01



Dust veil is spreading in Xanthe (W53, + 15) area. Since the color tone is different from the vicinity of Eden (340 W to 5 W, +20 to +35), and Nilokeras (50 W, +30) is recorded in the IR, it can be seen that it spreads to this position.

image by: Teruaki kumamori (Osaka Japan)

2020, Jan.01 21h38m (UT)

2020, Feb. 2



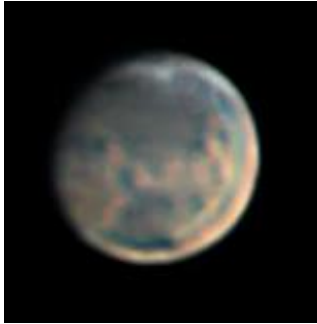
image by:

Paul Maxson (Surprise,Arizona,United States)

2020, Feb.2 14h08m (UT)

In the IR, Hellas (275 ~ 315W, -30 ~ 60) is clearly visible, but in color, the shape is completely invisible. Dust veil is spreading at this position. The range of extension seems to be quite large. This trend continued throughout February.

2020, Feb. 13



The location and size of the SPC, dark central area, and SPC requirements were recorded. It is safe to say that SPC has finally come into view this season.

2020, Feb.13

Image by: Clyde Foster (Centurion, South Africa)

02h58m (UT)

2020, Feb. 21

Dust storm is found near Hellas (275 ~ 315W, -30 ~ 60). There were no previous observations of the area, found after spreading. It seems to have occurred a few days ago.

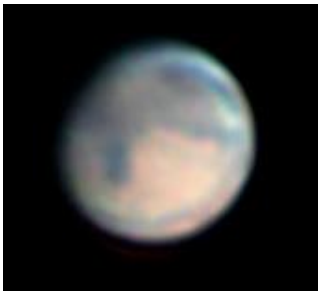
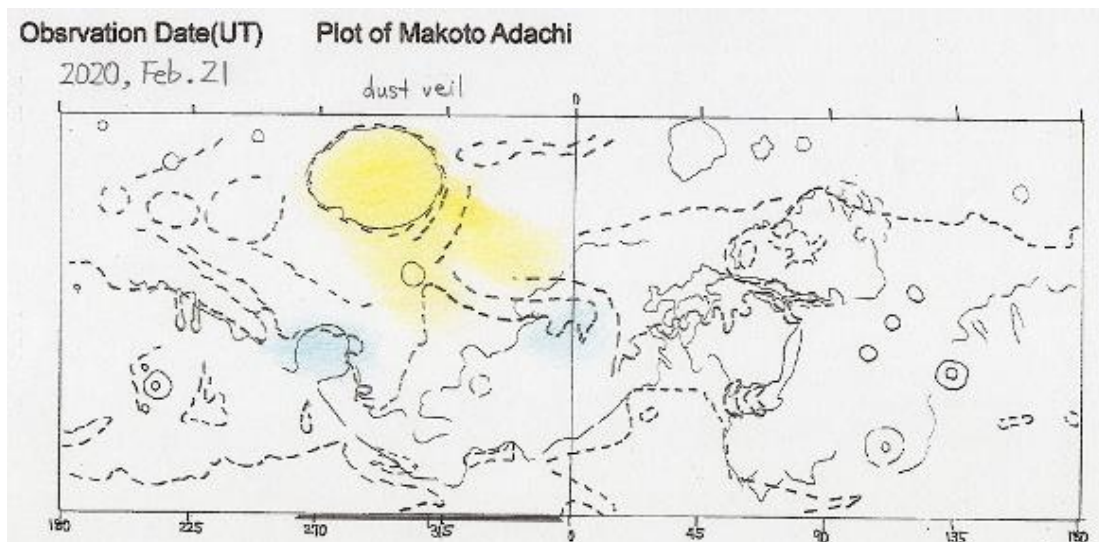


image by: Clyde Foster (Centurion, South Africa)

Feb.21 02h48m(UT)

The area from Hellas (275-315W, -30-60) to Sinus Sabaeus (320W-350W, -10) is covered with a yellowish veiled dust storm. (See the figure below) No observations have been made in the same area from this date until 26th.

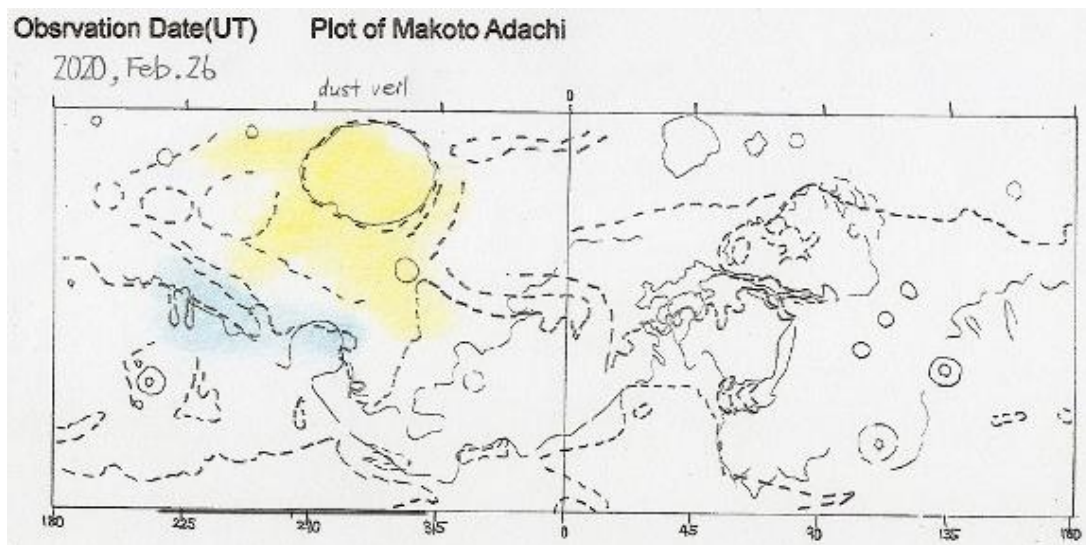


2020, Feb. 26



Edge dust storm from SPC occurred.  
Image by: Clyde Foster (Centurion, South Africa)  
Feb.26 03h01m (UT)

An edge dust storm blew north from the south polar cap. Some parts of the Antarctic cap changed color. This may have been caused by the dust storm that occurred on February 21 in this area, spreading out in a veil, and increasing the temperature. See below for how to spread.



On Feb. 27, the edge of the polar cap became yellower, and it was recorded that it was covered by a dust storm.

2020, Mar. 08

Dust storms occurred in Zephyria (W190, -10) and Aeolis (W210, -10). This is not an edge dust storm.

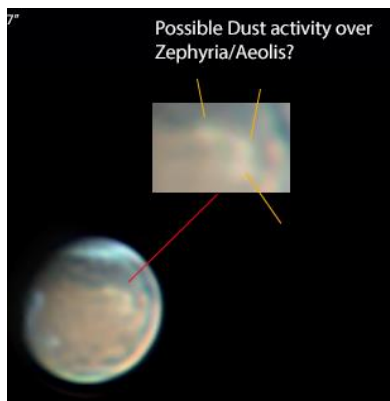
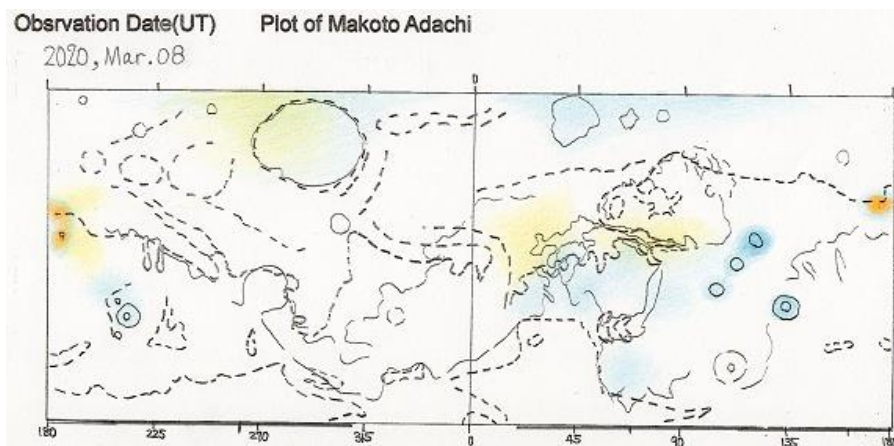


image by: Clyde Foster (Centurion, South Africa)

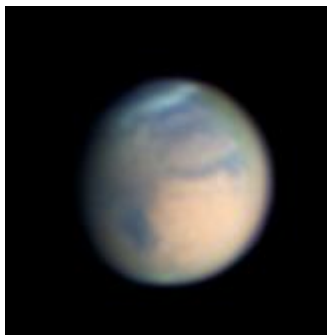
2020, Mar.08 03h18m (UT)

The three light spots at the end of the red line become dust storms. On Mar. 07 the previous day, the area was observed to be dusty, and it appears that the rise in temperature was triggered.

On Mar.09, it was observed that it moved slightly east while spreading. In addition, it became even more diffused on Mar.10.



2020, Mar. 17



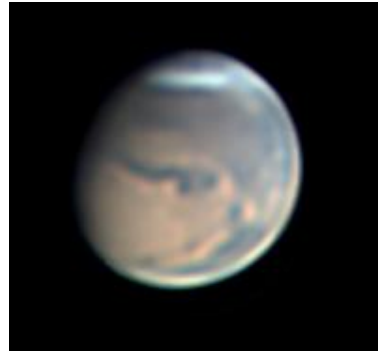
The Large edge dust storm occurred.

Image by: Milika-Nicholas:Adelaide, South Australia

2020, Mar.17 10h38m(UT)

Not a white bar of north-south direction southwest of Hellas (275 ~ 315W, -30 ~ 60), but a dust storm that looks like a white cloud just beyond the terminator. On the next day, Mar.18 became wider as if two were side by side and blew north. Mar.20 records yellowing and fading northward.

2020, Mar. 25



2020, Mar. 25 03h54m (UT)

2020, Mar. 26 03h25m (UT)

Image by: Clyde Foster (Centurion, South Africa)

Mr. Clyde Foster recorded an edge dust storm blow south of Argyre (30W, -50). It looks like a round cloud as shown on the left. Since it is hard to see in the blue image, it can be seen that it is not a frost but a dust storm.

Mar. 26 further recorded the cloud moving north. (Right figure) The movement of the day was clearly recorded.