

*‘ The observation of the planets is a delicate art’  
M. du Martheray*

## **THE GREAT 2001 DUST STORM ON PLANET MARS** **Iakovos N. Stellas**

On the 26th of June 2001 something that was about to become a fantastic event occurred on the surface of the red planet. From the NW side of a huge impact basin called Hellas a dust storm bursted out and was first witnessed from Japan.

There was nothing special or dramatic to the moment as this has been a famous site of emergence for such events of Topical or Regional scale as they are named in terms of dust coverage.



**Figure 1.**

**A. 102mm f/15 achromatic refractor on equatorial mounting manually driven.**

**B. The writer with the...**

**130mm f/10,8 Apochromatic refractor equatorially mounted with stepper motors in both axes and variable frequency oscillator.**

This case meant to be special as in a few days time a tremendous percentage of the surface was dramatically affected by the expansion of the dust.

The dark markings that can be seen through even a modest telescope from earth were hopelessly obscured or faded. After a few days a new storm burst out in the region called Solis Lacus which in its expansion was connected with the previously mentioned storm front, obscuring almost the entire surface. Therefore, we had what we call a global event. The most remarkable thing was that this global event was the seasonally earliest as far as we know considering data from the last three centuries.

The writer observed this remarkable event from a suburb of the city of Athens, Greece using two different refractors as can be seen in **Figure 1A , 1B.**

Using both refractors I made about 32 pencil drawings of the planet and I submitted my results to the British Astronomical Association. Further more I wished to give an idea, to the general public, of the consequences that the dark markings of Mars suffered because of the storm that is, fading or total obliteration.

For this, I made drawings of selected regions of the planet that show the dark markings before and during the storm.

The color drawings were made on Canson paper using soft pastel for artists by 'Rembrandt' and the final finishing touch were given by Photoshop 5.0 in order to give the general idea of what was seen in the eyepiece. The final appearance of the drawings represent the collective accumulation of data that was seen during each observing session through the filters: W23A light red, W80A light blue, W58 Green, all of the series Wratten by Eastman Kodak.



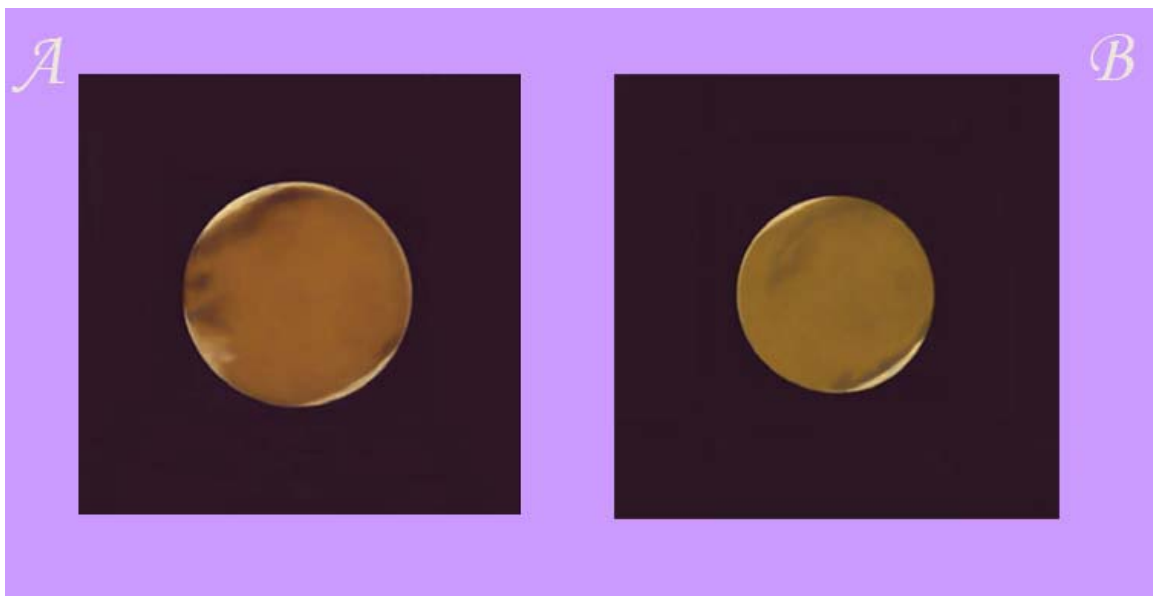
**Figure 2.**

**A. 2001 may 17th 102mm f/15 X180, X300**

**CML = 35deg. Before the storm**

**B. 2001 July 28th 130mm f/10.8 X280**

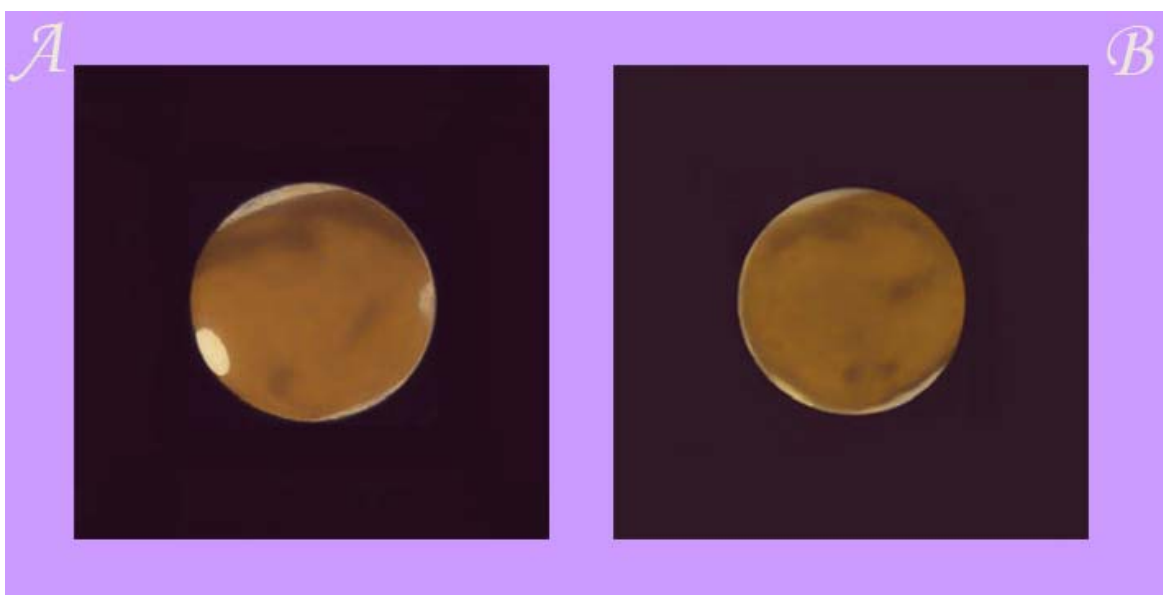
**CML= 70deg. The dark markings on the south part of the globe of fig.2 are highly faded on fig3.**



**Figure 3.**

**A. 2001 June 12th 102mm f/15. X180, X300  
CML= 126deg. The region around Solis Lacus  
before the storm.**

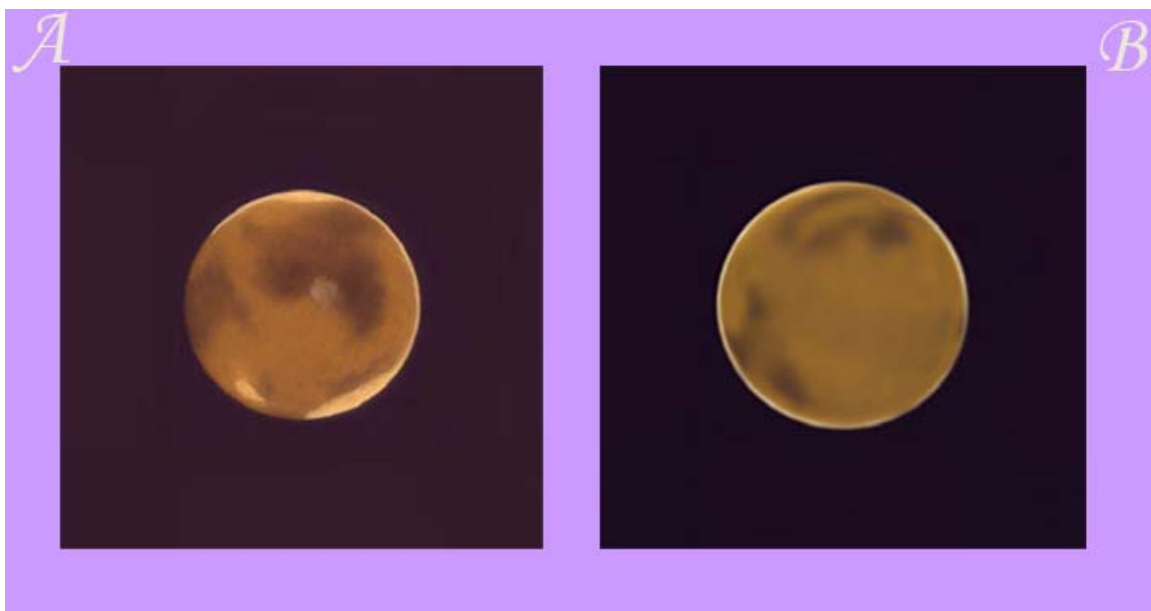
**B. 2001 July 22nd 130mm f/10,8. X280  
CML= 120deg. The marking called Solis Lacus  
(on the left side of fig.3A) is obscured on fig 3B.  
A new marking developed west of Solis Lacus.**



**Figure 4.**

**A. 2001 June 6th . 130mm f/10,8 . X175  
CML= 203deg.**

**2001 July 15th . 130mm f/10,8. X175, X280  
CML=195deg. The regions of Mare Cimmerium,  
B. Mare Sirenum on the south part of the globe  
on fig4A, appear greatly fainter on fig.4B .**



**Figure 5.**

**A. 2001 May 30th . 102mm f/15. X180, X300  
CML=262deg.. The famous Syrtis Major (the  
triangular marking in the West side of the  
globe) can be seen here before the storm in  
all it's glory.**

**B. 2001 June 29th . 130mm f/10.8. X175  
CML=325deg. Syrtis Major is seen on the  
Eastern limb, greatly faint and distorted  
because of the storm. This was my discovery  
obs. of the storm as Syrtis Major was seen  
to be disconnected from Sinus Sabaeus on the West.**