

## MARS

No. 335

25 August 2007

## OBSERVATIONS

Published by the OAA Mars Section

## CMO 2007/2008 Mars Report #06

OAA Mars Section

**T**HIS is the 6<sup>th</sup> report of the present apparition, while the third report concerning the *Noachis Dust Storm*, and shall deal with the observations made during the one-month period

*from 16 July ( $\lambda=277^\circ\text{Ls}$ ) to 15 August ( $\lambda=296^\circ\text{Ls}$ )*

During the period we should say the dust veil still prevailed. The apparent diameter  $\delta$  went up from 6.7" to 7.5", and the central latitude  $\phi$  varied from 15°S to 7°S. The phase angle  $\iota$  was nearly maximal at 43°~44°. The apparent declination  $D$  augmented from  $D = +15^\circ$  to  $+20^\circ$ : Once the planet appears in the eastern sky it rapidly rises high up. So it becomes hard near dawn for the refractor users to observe Mars inside the ocular. After the summer solstice, the time of the sunrise retreats, and the possible observation period a day has become longer. At most we can observe at present every 40 minutes seven times a night.

In July we were annoyed by the rainy days, but as August came in, fine and hot days continued. More than once the temperature inside our dome at midnight read nearly 30°C. It was reported that on 16 August, two Japanese places recorded 40.9°C in screens. The Perseids were refreshing for our eyes.

♂.....今回は今期六回目、ノアキス黄雲については三回目の報告であるが、対象期間は**16July ( $\lambda=277^\circ\text{Ls}$ )から15August ( $\lambda=296^\circ\text{Ls}$ )**迄の一月である。黄雲には餘り大きな變動がなかった。この間視直径 $\delta$ は6.7"から7.5"に延びた。中央緯度 $\phi$ は15°Sから7°Sと北向きになっている。位相角 $\iota$ は43°~44°で最大値に近い。視赤緯 $D$ は $D=+15^\circ$ から $+20^\circ$ と上がっている。東に現れると急速に天空を駆け上る。屈折では甚だ辛い。夏至以後は徐々に日の出が遅くなっている。四十分毎観測で多いときは七回ほど可能である。七月中は梅雨に悩まされたが、八月に入って酷暑となった。ドーム内では30°C近いときがあり閉口した。ペルセウス流星群は休憩中好く見えた。一度はMnの視野の火星を掠めている。

♂..... The observations we received this time with thanks are as follows. We feel the dust enthusiasm is not what it was, but the observation rates are extraordinary for the diameter  $\delta=7''$ .

♂.....今回の報告は次の様に頂いている。黄雲観測はひと頃の熱気はないが、それでも $\delta=7$ 秒角臺としてはべらぼうに多い方である。

**AKUTSU, Tomio 阿久津 富夫 (Ak)** 菲律賓 Cebu, the Philippines

1 Set of CCD Images (11 August 2007)  $f/20 \times 28\text{cm}$  SCT with a DMK21AF04/ToUcam II

**ALLEN, Ethan イーサン・アレン (EAI)** 加利福尼亞 Sebastopol, CA, USA

2 Sets of RGB + 2 IR CCD Images (19, 20, 29 July 2007)  $f/30 \times 30\text{cm}$  spec with a SKYnix 2-0M

**ARDITTI, David デイヴィッド・アーディッチ (DAr)** 英國 Stag Lane, Edgware, UK

6 Sets + 4 IR CCD Images (21\*, 30 July; 1, 3, 5\*\*, 7\*\* August 2007)

$f/33 \times 28\text{cm}$  SCT/ 25cm SCT\* with a DMK21AF04AS/ SKYnix 2-0\*\*

**BIVER, Nicolas ニコラ・ビヴェール (NBv)** 凡爾賽 Versailles, Yvelines, France

4 Colour Drawings (17, 21, 25, 27 July 2007) 507×26cm speculum

- BOSMAN, Richard** リシャルト・ボズマン (*RBs*) 尼德蘭 Enschede, Nederland  
1 Colour CCD Image (16 July 2007) *f*/50@28cm SCT with an ATK-2HS
- FLANAGAN, William D** ビル・フラナガン (*WFl*) 德克薩斯·休斯敦 Houston, TX, USA  
1 Set of CCD Images (12 August 2007) *f*/36@36cm SCT with a Lu075M
- GERSTHEIMER, Ralf** ラルフ・ゲルシュトハイマー (*RGh*) 德國 Habichitswald, Deutschland  
2 Colour + 1 R + 4 IR CCD Images (16, 19, ~22 July; 14 August 2007)  
32cm speculum with a DMK21AF04,
- GHOMIZADEH, Sadegh** サデグ・ゴミザデ (*SGh*) 伊朗·德黑蘭 Tehran, Iran  
9 Colour CCD Images (2, 4/5, 7, ~10, 12, 14 August 2007) *f*/37@28cm SCT with a ToUcam Pro III
- GÓMEZ, Pepe** ペペ・ゴメス (*PGm*) 西班牙·塞維利亞 Santa Bárbara, Sevilla, España  
1 Colour CCD Image (23 July 2007) 12cm refractor with a ToUcam Pro 830K
- GORCZYNSKY, Peter** ピート・ゴルチンスキー (*PGc*) 康涅狄格 Oxford, CT, USA  
7 Colour + 6 IR CCD Images (21 July; 9, 11, 12, 14 August 2007)  
*f*/42@18cm Maksutov-Cassgrain with a ToUcam
- GRAFTON, Edward A** エド・グラフトン (*EGf*) 德克薩斯·休斯敦 Houston, TX, USA  
1 Colour CCD Image (10 August 2007) *f*/39@36cm SCT with an ST402
- HANCOCK, Ian R** イアン・ハンコック (*IHn*) 英國·坎特伯雷 Canterbury, UK  
1 Colour + 2 R CCD Images (19 July; 4, 12 August 2007) *f*/30@25cm SCT with a Lu075M
- HEFFNER, Robert** ロバート・ヘフナー (*RHf*) 名古屋 Nagoya, Aichi, Japan  
9 Colour CCD Images (17\*, 26, ~28, 31 July; 4, 7, 8 August 2007)  
28cm SCT with a Lu075C/DMK21AF04\*
- KINGSLEY, Bruce A** ブルース・キングスレイ (*BKn*) 英國 Maidenhead, UK  
2 Sets of CCD Images (27, 30 July 2007) *f*/36@28cm SCT with with a SKYnix2-0
- KUMAMORI, Teruaki** 熊森 照明 (*Km*) 堺 Sakai, Osaka, Japan  
4 Colour CCD Images (23, 26 July; 9, 15 August 2007)  
*f*/85@20cm Dall-Kirkham with a DMK21AF04/Toucam pro
- LOMELI, Ed** エド・ロメリ (*ELm*) 加利福尼亞 Sacramento, CA, USA  
7 Colour + 4 R + 2 IR CCD Images (16, 20, ~23, 28, 31 July 2007)  
23cm SCT (@Tele Vue 5× Powermate) with DBK21AF04 & DMK21BF04
- MAKSYMOWICZ, Stanislas** スタニスラス・マクシモヴィッチ (*SMk*) 法國 Ecquevilly, France  
4 Sets + 2 Drawings (18\*\*, 21, 25\* July; 5, 12\*\*, 13\* August 2007)  
220~390×20cm refractor, 250, 270×10cm refractor\*, 250, 270×20cm Cass\*\*
- MELILLO, Frank J** フランク・メリッロ (*FMI*) 紐約 Holtsville, NY, USA  
1 R CCD Image (5 August 2007) *f*/25@25cm SCT with a Starlight Xpress MX-5
- MELKA, James T** ジム・メルカ (*JMI*) 密蘇里·聖路易斯 St. Louis, MO, USA  
9 Colour CCD Images (21, 22, 25, 26 July; 1, 7, 11 August 2007)  
*f*/56, 65@30cm speculum with a ToUcam 840
- MINAMI, Masatsugu** 南 政次 (*Mn*) 福井 Fukui, Fukui, Japan  
71 Drawings (19, 23, 27, 31 July; 1, 8, ~15 August 2007) 400, 480, 600×20cm Goto ED refractor\*  
\*Fukui City Observatory 福井市自然史博物館天文臺
- MOORE, David M** デヴィッド・ムーア (*DMr*) 亞利桑那 Phoenix, AZ, USA  
4 Sets of RGB +3 R + 5 IR CCD Images (16, 27, 28 July; 12 August 2007)  
*f*/21, 30@36cm Cass with DMK21AF04
- MORITA, Yukio** 森田 行雄 (*Mo*) 廿日市 Hatsuka-ichi, Hiroshima, Japan  
28 Sets of CCD Images (22, ~27, 30 July; 9, 10 August 2007) 25cm spec with a Lu075M
- MURAKAMI, Masami** 村上 昌己 (*Mk*) 藤澤 Fujisawa, Kanagawa, Japan  
3 Drawings (11 August 2007) 320×20cm *F*/8 speculum

**NAKAJIMA, Takashi 中島 孝 (Nj)** 福井 Fukui, Fukui, Japan

48 Drawings (23, 31 July; 5, 7, ~14 August 2007) 400, 480, 600×20cm Goto ED refractor\*

\* Fukui City Observatory 福井市自然史博物館屋上天文臺

**PARKER, Donald C ドン・パーカー (DPk)** 佛羅里達・邁阿密 Miami, FL, USA

2 Sets of RGB + 4 Colour + 1 R + 2 IR CCD Images (17, 19, 21, 25, 30 July; 5, 9 August 2007)  
f/47@41cm F/6 spec with a SKYnix 2-0M

**PEACH, Damian A デミアン・ピーチ (DPc)** 英國 Loudwater, Buckinghamshire, UK

20 Sets of RGB + 2 Colour CCD Images (18, 19, 24, 28, 30, 31 July; 1, ~3, 5, 7, 9, ~11 August 2007)  
f/40@35cm SCT with a SKYnix 2-0M

**PELLIER, Christophe クリストフ・ペリエ (CPI)** 法國 Seine-St-Denis, France

6 Sets of RGB + 1 R + 12 IR CCD Images (31 July; 1, 4, 10, 11 August 2007)  
f/48, 50@25cm Cassegrain with a SKYnix 2-0M

**TAYLOR, Martin M マーチン・テイラー (MTy)** 英國 Leicester, UK

2 Sets of CCD Images (5, 11 August 2007) 36cm SCT

**TYLER, David デーヴ・タイラー (DTy)** 英國 Flackwell Heath, Buckinghamshire, UK

3 Sets of RGB + 1 Colour Images (18 July; 5, 11 August 2007) f/40@36cm SCT with SKYnix 2-0

**WALKER, Sean ショーン・ウォーカー (SWk)** 新罕布夏 Chester, NH, USA

3 Sets of RGB + 3 Colour + 7 IR CCD Images (26, 29 July; 1, 3, 15 August 2007)  
32cm speculum with a DMK21AF04

**YUNOKI, Kenkichi 柚木 健吉 (Yn)** 堺 Sakai, Osaka, Japan

36 Sets of RGB + 5 Colour\* + 2 B Images (23\*, 30\*, 31 July; 1, 6, ~10, 12, ~14 August 2007)  
26cm speculum with a DMK21AF04/ToUcam pro\*

**Noachis Dust Storm III – A)** We first try to report the status of the Martian surface observed visually from here from the Fukui City Observatory on 14 and 15 August ( $\lambda=296^\circ\text{Ls}$ ). The rainy season ended on 1 August as they say, but a Typhoon came, and then it became very hot. From 7 Aug to 15 Aug NAKAJIMA (Nj) and/or one of us (MINAMI, Mn) observed every night every forty minutes from 01:20JST (16:20GMT) to 05:00JST (20:00GMT) or to 05:20JST, the sun-rising time, and so it was possible to observe the surfaces from  $\omega=245^\circ\text{W}$  to  $\omega=011^\circ\text{W}$  (roughly from M Tyrrhenum to Noachis) repeatedly. The seeing conditions were not necessarily satisfactory, while the days 14 and 15 August were rather preferable. The LCM read from  $\omega=245^\circ\text{W}$  to  $\omega=313^\circ\text{W}$  on the final days. We first note that the Martian surface was still so covered by the thick airborne dust that it was bright, and the surface looks palled with the yellow haze. Another of us (MURAKAMI, Mk) also visually observed that the whole disk showed generally a cream-yellowish tint on 11 Aug ( $\lambda=294^\circ\text{Ls}$ ). We are of the opinion no ccd image at present reproduces this genuine colour of the dusty Mars. The airborne dust looked distributed quite uniformly or monotonously at the region to the east of Syrtis Mj, and Syrtis Mj itself so showed its shape more vividly or classically. There was however shown a more shaded area inside M Tyrrhenum, and especially the area of M Serpentinis and the eastern part of S Sabæus appeared quite dark, though the distribution of the darker areas looked the same as in July. The slight reappearance of the classical dark markings does not necessarily imply a considerable subsiding of the dust pollution since the apparent diameter was increasing. We are so just able to suggest that the Noachis dust storm had not expanded eastward so furiously or no serious surges of dusts were taken place to the east of Syrtis Mj up to M Cimmerium since the markings looked classical though still vague. From the viewpoint of the darkness, the area of M Serpentinis looks extraordinary, and so the anomaly caused by the Noachis dust storm remains still to exist. The eastern part of S Sabæus was dark amalgamated with the dark and wide M Serpentinis. The western part of S Sabæus was still faint or rather invisible (on 14 Aug we observed up until  $\omega=313^\circ\text{W}$  (Mn)), and S Meridian looked

also faintly seen as well as Margaritifer S. For instance refer to MORITA (*Mo*)'s ccd images on the day at  $\omega=316^\circ\text{W}$ . We observed the faintness of S Meridiani at the more favourable angles eg on 9 Aug ( $\lambda=293^\circ\text{Ls}$ ) at  $\omega=333^\circ\text{W}$  (*Mn*) and  $\omega=338^\circ\text{W}$  (*Nj*). A revival or recovering of S Meridiani should be still dubious at present since the more vividness depends on the seeing and the wavelengths we use, and furthermore the apparent diameter is gradually increasing. At least the area must have been haunted by the dust consisting of heavier particles with a certain kind of fallouts. Another observational fact was that the northern desert to the east of Syrtis Mj began to show to us a colour of iron oxide as observed on 14 Aug  $\omega=255^\circ\text{W}$  (*Mn*),  $260^\circ\text{W}$  (*Nj*),  $265^\circ\text{W}$  (*Mn*), and on 15 Aug  $\omega=255^\circ\text{W}$  (*Mn*),  $265^\circ\text{W}$  (*Mn*). This kind of ferrous reddish tint was observed by *Mn* on the occasion of the 2001 Hesperia dust storm at the northern deserts first on 4 and 5 September 2001, the 73<sup>rd</sup> and 74<sup>th</sup> days since the entraining of the Hesperia dust storm on 24 June 2001. This time we became aware of the colour on the 52<sup>nd</sup> day. Though the refractor was identical with the present one including the eyepiece, there are several differences between the two cases: the altitude of the planet in 2001 was quite different and lower. More different was the angular diameter  $\delta$ . In 2001  $\delta=12.9''$  on the 73<sup>rd</sup> day while this time  $\delta=7.5''$  on the 52<sup>nd</sup> day. By this point we should say the time is quite early this time, and hence we may conclude that the present dust storm must be much inferior to the 2001 Hesperia dust storm. We should also report that the north polar hood ( $\eta\text{ph}$ ) looked quite conspicuous partly because the tilt of the north pole is now much towards us. It was however not purely whitish. In the following we review the observational status of the planet this period referring to the other observations (mostly ccd). **B**) Other data show that the area of M Serpentis to Noachis remained the same this period: The fact that the aspect of M Serpentis is dark and wide together with the eastern part of S Sabæus is shown eg on the images by ARDITTI (*DAr*) on 21 July ( $\lambda=280^\circ\text{Ls}$ ) at  $\omega=305^\circ\text{W}$ , by Don PARKER (*DPk*) on 30 July ( $\lambda=286^\circ\text{Ls}$ ) at  $\omega=311^\circ\text{W}$ , by MELKA (*JMI*) on 1 Aug ( $\lambda=287^\circ\text{Ls}$ ) at  $\omega=296^\circ\text{W}$ ,  $302^\circ\text{W}$ , by YUNOKI (*Yn*) on 13 Aug ( $\lambda=295^\circ\text{Ls}$ ) at  $\omega=291^\circ\text{W}\sim 317^\circ\text{W}$ , & on 14 Aug ( $\lambda=296^\circ\text{Ls}$ ) at  $\omega=280^\circ\text{W}\sim 308^\circ\text{W}$ , by *Mo* on 14 Aug ( $\lambda=296^\circ\text{Ls}$ ) at  $\omega=312^\circ\text{W}\sim 336^\circ\text{W}$  (including the one at  $\omega=316^\circ\text{W}$  afore-cited), by KUMAMORI (*Km*) on 15 Aug ( $\lambda=296^\circ\text{Ls}$ ) at  $\omega=297^\circ\text{W}$  and so on. **C**) As to the faint S Meridiani, BOSMAN (*RBs*)'s image on 16 July ( $\lambda=277^\circ\text{Ls}$ ) at  $\omega=358^\circ\text{W}$ , and TYLER (*DTy*)'s on 18 July ( $\lambda=279^\circ\text{Ls}$ ) at  $\omega=326^\circ\text{W}$ , as well as PEACH (*DPc*)'s at  $\omega=333^\circ\text{W}$ , may not show so explicitly, but BIVER (*NBv*)'s drawing on 17 July ( $\lambda=278^\circ\text{Ls}$ ) at  $\omega=341^\circ\text{W}$  shows the faint Meridiani S, and on 19 July ( $\lambda=279^\circ\text{Ls}$ ) *DPc*'s images at  $\omega=327^\circ\text{W}\sim 331^\circ\text{W}$ , and GERSTHEIMER (*R Gh*)'s one at  $\omega=347^\circ\text{W}$  also prove faintly a shape of Meridiani S. These especially show an existence of a thick dust disturbance over Margaritifer S, and this was still also checked on 21 July ( $\lambda=281^\circ\text{Ls}$ ) at  $\omega=341^\circ\text{W}$  by *R Gh*, and at  $\omega=030^\circ\text{W}$  by *DPk* and also on 22 July ( $\lambda=281^\circ\text{Ls}$ ) at  $\omega=359^\circ\text{W}$ ,  $002^\circ\text{W}$  by *R Gh*. This deformed Meridiani S and the dust from Margaritifer S to Eos were still visible, not so differently, on 25 July ( $\lambda=283^\circ\text{Ls}$ ) at  $\omega=354^\circ\text{W}$  on *DPk*'s images, and at  $\omega=012^\circ\text{W}$  on *JMI*'s. The following images also show the aspects, while the dust over Margaritifer S diffused and reduced its intensity: On 26 July ( $\lambda=284^\circ\text{Ls}$ ), *JMI*'s at  $\omega=004^\circ\text{W}$ , on 28 July ( $\lambda=285^\circ\text{Ls}$ ) MOORE (*DMr*)'s at  $\omega=349^\circ\text{W}\sim 004^\circ\text{W}$ , LOMELI (*ELm*)'s at  $\omega=007^\circ\text{W}/008^\circ\text{W}$ , on 29 July ( $\lambda=286^\circ\text{Ls}$ ) ALLEN (*EAL*)'s at  $\omega=352^\circ\text{W}$ ,  $007^\circ\text{W}$  and so on. The contrast between S Sabæus and Meridiani S was well shown on *DPk*'s images made on 30 July ( $\lambda=286^\circ\text{Ls}$ ) at  $\omega=311^\circ\text{W}$  (RRGB). As seen succeedingly from Japan as follows, the general trend remained the same: On 6 Aug ( $\lambda=291^\circ\text{Ls}$ ), *Yn* at  $\omega=358^\circ\text{W}\sim 012^\circ\text{W}$ , on 7 Aug ( $\lambda=291^\circ\text{Ls}$ ), HEFFNER (*RHf*) at  $\omega=012^\circ\text{W}$ , on 8 Aug ( $\lambda=292^\circ\text{Ls}$ ), *Mo* at  $\omega=346^\circ\text{W}\sim 011^\circ\text{W}$ , *Yn* at  $\omega=349^\circ\text{W}\sim 005^\circ\text{W}$ , *RHf* at  $\omega=007^\circ\text{W}$ , on 9 Aug ( $\lambda=293^\circ\text{Ls}$ ) *Yn* at  $\omega=328^\circ\text{W}\sim 338^\circ\text{W}$ , *Km* at  $\omega=357^\circ\text{W}$ , on 10 Aug ( $\lambda=293^\circ\text{Ls}$ ) *Yn* at  $\omega=320^\circ\text{W}\sim 338^\circ\text{W}$  etc. **D**) The area of Solis L was still disturbed. As seen similarly before, *R Gh*'s image at  $\omega=048^\circ\text{W}$  (IR) on 16 July ( $\lambda=277^\circ\text{Ls}$ ) shows a dust core to the NE of Solis L (to the S of Agathodæmon).

An irregular diffused reflection is seen also at Ophir. *DPk*'s images on 17 July ( $\lambda=278^\circ\text{Ls}$ ) at  $\omega=070^\circ\text{W}$  (R), and on 19 July ( $\lambda=279^\circ\text{Ls}$ ) at  $\omega=049^\circ\text{W}$ ,  $055^\circ\text{W}$  (RRGB) also show the Solis L dust core quite vividly. However the images on 21 July ( $\lambda=281^\circ\text{Ls}$ ) made by *JMI* at  $\omega=053^\circ\text{W}$ , and by *ELm* at  $\omega=071^\circ\text{W}\sim 077^\circ\text{W}$  look to show that the configuration has somewhat changed, while on 22 July ( $\lambda=281^\circ\text{Ls}$ ), *JMI*'s image at  $\omega=041^\circ\text{W}$  as well as *ELm*'s at  $\omega=062^\circ\text{W}\sim 064^\circ\text{W}$  look to show that it was diffused. On the other hand *RHf*'s image on 28 July ( $\lambda=285^\circ\text{Ls}$ ) at  $\omega=100^\circ\text{W}$  that it still survived faintly. This *RHf* image can be compared with *DMr*'s images on 16 July ( $\lambda=277^\circ\text{Ls}$ ) at  $\omega=100^\circ\text{W}$ ,  $110^\circ\text{W}$ : These show a difference concerning the dark expansion from Dædalia to the eastern part of M Sirenum. See also *EAl*'s images on 19 July ( $\lambda=279^\circ\text{Ls}$ ) at  $\omega=106^\circ\text{W}$  (IR), and 20 July ( $\lambda=280^\circ\text{Ls}$ ) at  $\omega=094^\circ\text{W}$ . Eventually refer to the image on 15 Aug ( $\lambda=296^\circ\text{Ls}$ ) at  $\omega=126^\circ\text{W}$  made by WALKER (*SWk*). As to a deformation of Solis L and the remnant of the core, see the images made on 30 July ( $\lambda=286^\circ\text{Ls}$ ) by *Yn* at  $\omega=073^\circ\text{W}\sim 084^\circ\text{W}$ , on 31 July ( $\lambda=287^\circ\text{Ls}$ ) by *RHf* at  $\omega=068^\circ\text{W}$ , by *Yn* at  $\omega=075^\circ\text{W}$ . The image of *RHf* on 4 Aug ( $\lambda=289^\circ\text{Ls}$ ) at  $\omega=044^\circ\text{W}$  shows well the diffused reflection at Ophir. This was also caught by GOMIZADEH (*SGm*) on 10 Aug ( $\lambda=293^\circ\text{Ls}$ ) at  $\omega=058^\circ\text{W}$ . The images of PELLIER (*CPl*) on 10 Aug ( $\lambda=293^\circ\text{Ls}$ ) at  $\omega=105^\circ\text{W}\sim 108^\circ\text{W}$  show the deformation of Solis L itself, and suggest us that the effect of the dust disturbance still continues around here. See also the images on 11 Aug ( $\lambda=293^\circ\text{Ls}$ ) produced by *CPl* at  $\omega=094^\circ\text{W}\sim 105^\circ\text{W}$ , by *DPc* at  $\omega=104^\circ\text{W}\sim 111^\circ\text{W}$ , and by *DTy* at  $\omega=097^\circ\text{W}$ ,  $105^\circ\text{W}$ . **E** The summits of Olympus Mons and Tharsis Montes were checked more apparently this time: the larger grew the angular diameter, the more definite became the spots. From the experience we had in 2001, as shown in: <http://homepage3.nifty.com/~cmohk/267Note13/index.html>, the summits do not increase their darkness; remaining their brownish tint of the calderas, but just the surrounding dust atmosphere increases its brightness. The spots are seen on the ccd images on 26 July ( $\lambda=284^\circ\text{Ls}$ ) by *RHf* at  $\omega=124^\circ\text{W}$ , by *Km* at  $\omega=130^\circ\text{W}$ , on 27 July ( $\lambda=285^\circ\text{Ls}$ ) by *RHf* at  $\omega=108^\circ\text{W}$ ,  $112^\circ\text{W}$ , on 28 July ( $\lambda=285^\circ\text{Ls}$ ) by *RHf* at  $\omega=100^\circ\text{W}$ , on 10 Aug ( $\lambda=293^\circ\text{Ls}$ ) by *CPl* at  $\omega=105^\circ\text{W}\sim 108^\circ\text{W}$ , by *DPc* at  $\omega=120^\circ\text{W}$ , on 11 Aug ( $\lambda=293^\circ\text{Ls}$ ) by *CPl* at  $\omega=094^\circ\text{W}\sim 105^\circ\text{W}$ , by *DPc* at  $\omega=104^\circ\text{W}\sim 111^\circ\text{W}$ , by *DTy* at  $\omega=097^\circ\text{W}$ ,  $105^\circ\text{W}$  and by TAYLOR (*MTy*) at  $\omega=117^\circ\text{W}$ . Visually they were witnessed by *Nj* and *Mn* on 23 July ( $\lambda=283^\circ\text{Ls}$ ) at  $\omega=128^\circ\text{W}$ (*Mn*),  $133^\circ\text{W}$ (*Nj*),  $138^\circ\text{W}$ (*Mn*), and on 27 July ( $\lambda=285^\circ\text{Ls}$ ) at  $\omega=118^\circ\text{W}$  (*Mn*) and so on. **F** The west end of the slim M Sirenum (classical since 1986) showed up at last: Refer to the images of *CPl* on 4 Aug ( $\lambda=289^\circ\text{Ls}$ ) at  $\omega=151^\circ\text{W}\sim 172^\circ\text{W}$ , as well as of *DPc* resp *DTy* on 5 Aug ( $\lambda=290^\circ\text{Ls}$ ) at  $\omega=156^\circ\text{W}/160^\circ\text{W}$  resp  $\omega=162^\circ\text{W}$ , and *DPc*'s on 7 Aug ( $\lambda=291^\circ\text{Ls}$ ) at  $\omega=147^\circ\text{W}$  etc. **G** The region from M Cimberium to M Tyrrhenum had been not so disturbed and so shows their classical figures beneath the rather uniform airborne dust. *RHf*'s IR image on 17 July ( $\lambda=278^\circ\text{Ls}$ ) at  $\omega=207^\circ\text{W}$  shows well M Cimberium, and *Nbv*'s drawings show well the area on 25 July ( $\lambda=283^\circ\text{Ls}$ ) at  $\omega=261^\circ\text{W}$ , and on 27 July ( $\lambda=284^\circ\text{Ls}$ ) at  $\omega=246^\circ\text{W}$ . Especially *DPc*'s images on 1 Aug ( $\lambda=287^\circ\text{Ls}$ ) at  $\omega=192^\circ\text{W}\sim 207^\circ\text{W}$ , 3 Aug ( $\lambda=289^\circ\text{Ls}$ ) at  $\omega=187^\circ\text{W}\sim 191^\circ\text{W}$  are excellent and show up quite a detail of M Cimberium seen through the dust veil for  $\delta=7.1''$ . There looks no deformation about the minor markings. Moving to the US continent, a lot of images were obtained: On 9 Aug ( $\lambda=292^\circ\text{Ls}$ ) by *DPk* at  $\omega=203^\circ\text{W}$ , on 10 Aug ( $\lambda=293^\circ\text{Ls}$ ) by GRAFTON (*EGf*) at  $\omega=199^\circ\text{W}$ , on 11 Aug ( $\lambda=293^\circ\text{Ls}$ ) by *JMI* at  $\omega=197^\circ\text{W}$ , on 12 Aug ( $\lambda=294^\circ\text{Ls}$ ) by FLANAGAN (*WFl*) at  $\omega=194^\circ\text{W}$  and by *DMr* at  $\omega=206^\circ\text{W}$ ,  $211^\circ\text{W}$  etc. The images produced by *EGf* and *WFl* were excellent as well as *DPc*'s and they seem to show a small dust surge near the foot of "ant" at the west-northern plage of M Cimberium. **H** When the angular diameter is small, Syrtis Mj is a standard marking to check the density or intensity. *DPc*'s images on 24 July ( $\lambda=282^\circ\text{Ls}$ ) at  $\omega=289^\circ\text{W}$  as well as KINGSLEY (*BKn*)'s on 27 July ( $\lambda=284^\circ\text{Ls}$ ) at  $\omega=252^\circ\text{W}$  suggest that the upper pollution by airborne dust was indeed not weak, while as the angular diameter increases (and because of some settling of lower dusts) the density of Syrtis Mj looked increased later. See for reference

SWk's series of images on 29 July ( $\lambda=285^\circ\text{Ls}$ ) at  $\omega=280^\circ\text{W}$ , on 1 Aug ( $\lambda=287^\circ\text{Ls}$ ) at  $\omega=268^\circ\text{W}\sim 270^\circ\text{W}$ , and on 3 Aug ( $\lambda=289^\circ\text{Ls}$ ) at  $\omega=248^\circ\text{W}$ ,  $256^\circ\text{W}$ . The brightness of Hellas at the morning side must be because of the deep phase angle ( $i=44^\circ$ ). The photometry observation may however be needed to say something about reflection by the use of the polarisation filters. Later situation may be seen from DPK's images on 5 Aug ( $\lambda=290^\circ\text{Ls}$ ) at  $\omega=250^\circ\text{W}/251^\circ\text{W}$ , and Mo's on 15 Aug ( $\lambda=296^\circ\text{Ls}$ ) at  $\omega=277^\circ\text{W}$  etc. According to our visual observations on the same day as Mo's, Hellas was not so bright even at the morning side. **D** The centre of the spc already deviated from the south pole, and so it was only seen from the side of Solis L. It was vividly shot on the images on 11 Aug ( $\lambda=293^\circ\text{Ls}$ ) made by DPc at  $\omega=104^\circ\text{W}\sim 111^\circ\text{W}$  and by DTy at  $\omega=097^\circ\text{W}$ ,  $105^\circ\text{W}$  beneath the faint airborne dust. The spr looks covered by a haze pall on DPK's image on 9 Aug ( $\lambda=292^\circ\text{Ls}$ ) at  $\omega=203^\circ\text{W}$ , the very side where the spc is away. **D** The nph was not shot by ccd as clearly as we see visually. Any B image has looked to be duller in general.

♂.....ノアキス黄雲III - a) 先ず福井での14Aug、15Augの眼視観測から、状況を述べる：福井の公式な梅雨明け宣言は八月1日になされたが、直ぐに颱風五號がやってきて暫くは雲の多い期間があった。然し、上旬中頃から暑い夏が始まり、皮肉にも立秋と共に、聯日の猛暑となった。これは本土の何處でも同じであったかと思う。7Augから15Augまで足羽山では中島(Nj)氏と筆者(Mn)がほぼ連日01:20JST(16:20GMT)から05:00JST(20:00GMT)もしくは日の出時の05:20JSTまで廿分間観測を繰り返した。その間望遠鏡は休み無しである。期間中、シーイングが思わしくなく観測に堪えない日もあったが、状況は変わりなく追跡出来たと思う。期間中われわれに観測可能な範囲は、 $\omega=245^\circ\text{W}\sim\omega=011^\circ\text{W}$ 迄で、マレ・テュッレヌムからノアキスの範囲に過ぎないが、ここでは14Augと15Augが比較的安定した気流であったので、これらの日( $\lambda=296^\circ\text{Ls}$ )の観測を中心に顧みて、火星面の状況を述べておく。両日では $\omega=245^\circ\text{W}\sim\omega=313^\circ\text{W}$ の範囲であった。先ず火星面は未だ充分浮遊黄塵に蔽われて、火星面は明るく、然程の改善は見られない。まさに黄色い靄で蔽われた感じである。村上(Mk)氏は11Aug( $\lambda=294^\circ\text{Ls}$ )の眼視でクリーム色と記述している。屈折ではクリーム・イエローというところであろう。ただ、シュルティス・マイヨル以東では黄雲は一様な分布らしく、シュルティス・マイヨルの形状も割と明確で、比較的马レ・テュッレヌムにも濃いところがあり、マレ・セルペンティスの邊りは特にヴェールを通して濃く見えている。然し、模様が見え始めているといっても、視直径が大きくなっている段階であるから、黄雲の沈静化に繋がるとは簡単に云えない。そうではなくて、シュルティス・マイヨル以東のアルベド模様が古典的という意味で、この邊りはノアキス黄雲の東進が弱く、擾亂が起こっていない、従って浮遊黄塵も濃くなるということにはなかったと云う点に注目したい。濃度の点から見ると、マレ・セルペンティスの邊りは遙かに異常で、ノアキス黄雲初期からの異常さが残っているように思う。シヌス・サバエウスの東部はこれに喰っ附いて濃い。14Augには $\omega=313^\circ\text{W}$ (Mn)まで観測出来たが、シヌス・メリディアニも稍回復してきている様に見える。同日の森田(Mo)氏の $\omega=316^\circ\text{W}$ でのccd像は、マレ・セルペンティスの濃い様子や、シヌス・メリディアニの稀薄な様子を好く傳えている。このシヌス・メリディアニの邊りの模様の稀薄さは9Aug( $\lambda=293^\circ\text{Ls}$ ) $\omega=333^\circ\text{W}$ (Mn)や $\omega=338^\circ\text{W}$ (Nj)等でもっとよい位置で確認している。マルガリティフェル・シヌスについても、うっすらと出て来ているかというところである。然し、シヌス・メリディアニの回復については以下で詳述するように、シーイングやどの波長で見えるかというの問題もあり、視直径も進捗しているから、黄雲の稀薄化の目安にはならない。充分可成り重い塵粒子からなる黄雲が低空で未だ彷徨っていると考えられる。もう一点注目されたのはシュルティス・マイヨル以東の北半球の砂漠が酸化鐵の赤みを帯びて見えたことで(14Aug  $\omega=255^\circ\text{W}$ (Mn)、 $260^\circ\text{W}$ (Nj)、 $265^\circ\text{W}$ (Mn)、15Aug  $\omega=255^\circ\text{W}$ (Mn)、 $265^\circ\text{W}$ (Mn)など)、こうした砂漠の赤みは2001年黄雲の場合、ヘスペリア黄雲発生後73日、74日経った4Sept、5Sept2001に筆者が観測していたことで、今回は52日目には観測したことになる。使用望遠鏡は同じであるが、兩年の南中高度は餘程違い、視直径も2001年の場合73日目は $\delta=12.9''$ であったのに對し、今回の場合 $\delta=7.5''$ であるから、如

何にも今回は早く、今回の黄雲は2001年の黄雲の規模には及ばないということであろう。他にφが降りてきた所爲もあるが、北極雲が可成り顕著になって来ている。但し純白色ではない。尚、以下ccd観測に依って全體の観測を捲るが、黄色い火星面の色を再現したものは見当たらないと思う。 **b)** マレ・セルペンティスからノアキスに關してこの期には同じ様な状態を續けたと考えて好い。當初からのシヌス・サバエウスの東部とマレ・セルペンティスが喰つ附いて大きく濃い様は、例えば、アーディッチ(DAr)氏の21July( $\lambda=280^\circ\text{Ls}$ ) $\omega=305^\circ\text{W}$ 、唐那・派克(DPk)氏の30July( $\lambda=286^\circ\text{Ls}$ ) $\omega=311^\circ\text{W}$ 、メルカ(JMI)氏の1Aug( $\lambda=287^\circ\text{Ls}$ ) $\omega=296^\circ\text{W}$ 、302°W、柚木(Yn)氏の13Aug( $\lambda=295^\circ\text{Ls}$ ) $\omega=291^\circ\text{W}\sim 317^\circ\text{W}$ 、14Aug( $\lambda=296^\circ\text{Ls}$ ) $\omega=280^\circ\text{W}\sim 308^\circ\text{W}$ 、Mo氏の14Aug( $\lambda=296^\circ\text{Ls}$ ) $\omega=312^\circ\text{W}\sim 336^\circ\text{W}$ (先に引用の $\omega=316^\circ\text{W}$ を含む)、熊森(Km)氏の15Aug( $\lambda=296^\circ\text{Ls}$ ) $\omega=297^\circ\text{W}$ などに共通に見られることである。 **c)** それではシヌス・メリディアニの邊りはどうかという、16July ( $\lambda=277^\circ\text{Ls}$ ) $\omega=358^\circ\text{W}$ のボスマン(RBs)氏の晝像や、18July ( $\lambda=279^\circ\text{Ls}$ )のタイラー(DTy)氏の $\omega=326^\circ\text{W}$ 、ピーチ(DPc)氏の $\omega=333^\circ\text{W}$ には甚だ微妙なところで見えない方であるが、17July( $\lambda=278^\circ\text{Ls}$ )のビヴェール(NBv)氏の $\omega=341^\circ\text{W}$ のスケッチには見えているし、19July( $\lambda=279^\circ\text{Ls}$ )のDPc氏の $\omega=327^\circ\text{W}\sim 331^\circ\text{W}$ 、ゲルシュトハイマー(RGh)氏の $\omega=347^\circ\text{W}$ には確認できる。特にマルガリティフェル・シヌス辺りには濃い黄塵の流れがあり、これは21July( $\lambda=281^\circ\text{Ls}$ ) $\omega=341^\circ\text{W}$ のRGh氏の像、 $\omega=030^\circ\text{W}$ のDPk氏の像、22July( $\lambda=281^\circ\text{Ls}$ )のRGh氏の $\omega=359^\circ\text{W}$ 、002°Wでも未だ確認できる。この變形したシヌス・メリディアニとマルガリティフェル・シヌス(からエオスの掛けての)黄塵の關係は25July( $\lambda=283^\circ\text{Ls}$ )のDPk氏の $\omega=354^\circ\text{W}$ 、JMI氏の $\omega=012^\circ\text{W}$ 等に引き繼がれるが、本質的には餘り變わりがない。以下の晝像にも同じ様な光景が見られるが、次第にマルガリティフェル・シヌス上の黄塵は擴散して明るさは減じるようである：26July( $\lambda=284^\circ\text{Ls}$ )のJMI氏の $\omega=004^\circ\text{W}$ 、28July( $\lambda=285^\circ\text{Ls}$ )のムーア(DMr)氏の $\omega=349^\circ\text{W}\sim 004^\circ\text{W}$ 、ロメリ(ELm)氏の $\omega=007^\circ\text{W}/008^\circ\text{W}$ 、29July( $\lambda=286^\circ\text{Ls}$ )のアッレン(EAl)氏の $\omega=352^\circ\text{W}$ 、007°W。シヌス・サバエウスとシヌス・メリディアニの對照はDPk氏の30July( $\lambda=286^\circ\text{Ls}$ ) $\omega=311^\circ\text{W}$ (RRGB)で好く出ている。大勢は換わらないが日本では6Aug( $\lambda=291^\circ\text{Ls}$ )のYn氏の $\omega=358^\circ\text{W}\sim 012^\circ\text{W}$ 、7Aug( $\lambda=291^\circ\text{Ls}$ )のヘフナー(RHf)氏の $\omega=012^\circ\text{W}$ 、8Aug( $\lambda=292^\circ\text{Ls}$ )のMo氏の $\omega=346^\circ\text{W}\sim 011^\circ\text{W}$ 、Yn氏の $\omega=349^\circ\text{W}\sim 005^\circ\text{W}$ 、RHf氏の $\omega=007^\circ\text{W}$ 、9Aug( $\lambda=293^\circ\text{Ls}$ )のYn氏の $\omega=328^\circ\text{W}\sim 338^\circ\text{W}$ 、Km氏の $\omega=357^\circ\text{W}$ 、10Aug( $\lambda=293^\circ\text{Ls}$ )のYn氏の $\omega=325^\circ\text{W}\sim 338^\circ\text{W}$ 等を参照されたい。 **d)** 次にソリス・ラクスの邊りを見てみる。前號報告から引き續き16July( $\lambda=277^\circ\text{Ls}$ )のRGh氏の $\omega=048^\circ\text{W}$ (IR)にはソリス・ラクスの北東、アガトダエモンの南にダストのコアが見えている。オピルは反射によるものであろう。DPk氏の17July ( $\lambda=278^\circ\text{Ls}$ )  $\omega=070^\circ\text{W}$ (R)、19July( $\lambda=279^\circ\text{Ls}$ )  $\omega=049^\circ\text{W}$ 、055°W(RRGB)にも執拗に残っている。但し、21July ( $\lambda=281^\circ\text{Ls}$ )のJMI氏の $\omega=053^\circ\text{W}$ 、ELm氏の $\omega=071^\circ\text{W}\sim 077^\circ\text{W}$ では少し配置を換えている様であるし、22July( $\lambda=281^\circ\text{Ls}$ )のJMI氏の $\omega=041^\circ\text{W}$ 、ELm氏の $\omega=062^\circ\text{W}\sim 064^\circ\text{W}$ では少し擴散している様に見える。但し、RHf氏の28July( $\lambda=285^\circ\text{Ls}$ ) $\omega=100^\circ\text{W}$ でも稍残っている様にも見える。尚、このRHf氏像は16July( $\lambda=277^\circ\text{Ls}$ )のDMr氏の $\omega=100^\circ\text{W}$ 、110°Wと比較できるが、ダエダリアからマレ・シレヌムに掛けての暗部の發達がみられる。他にEAl氏の19July( $\lambda=279^\circ\text{Ls}$ ) $\omega=106^\circ\text{W}$ (IR)、20July( $\lambda=280^\circ\text{Ls}$ )の $\omega=094^\circ\text{W}$ 参照。最終的には15Aug( $\lambda=296^\circ\text{Ls}$ ) $\omega=126^\circ\text{W}$ のウォーカー(SWk)氏の像を参照されたい。その後のソリス・ラクスの變形やコアの殘滓は30July( $\lambda=286^\circ\text{Ls}$ )のYn氏の $\omega=073^\circ\text{W}\sim 084^\circ\text{W}$ 、31July( $\lambda=287^\circ\text{Ls}$ )のRHf氏の $\omega=068^\circ\text{W}$ 、Yn氏の $\omega=075^\circ\text{W}$ に窺えるが、4Aug( $\lambda=289^\circ\text{Ls}$ )のRHf氏の $\omega=044^\circ\text{W}$ ではオピルの亂反射だけで、10Aug( $\lambda=293^\circ\text{Ls}$ )のゴミザデ(SGm)氏の $\omega=058^\circ\text{W}$ にもオピルが出ているだけである。10Aug( $\lambda=293^\circ\text{Ls}$ )のペリエ(CPl)氏の $\omega=105^\circ\text{W}\sim 108^\circ\text{W}$ ではソリス・ラクスの變形が見られ、未だ黄雲の影響の強いことが感じられる。同じく、11Aug( $\lambda=293^\circ\text{Ls}$ )のCPl氏の $\omega=095^\circ\text{W}\sim 105^\circ\text{W}$ 、DPc氏の $\omega=104^\circ\text{W}\sim 111^\circ\text{W}$ 、DTy氏の $\omega=097^\circ\text{W}$ 、105°Wを参照。 **e)** オリュムプス・モンズとタルシス三山の暗點化は次のようにccdで観測されているが、後になるほどタルシス三山は明確である。なお、2001年の經驗から山頂は黒化するのではなく、通常と同じ茶系色であるが、周りが明るくなってコントラストが強く、濃くなるだけである：26July ( $\lambda=284^\circ\text{Ls}$ ): RHf氏の $\omega=124^\circ\text{W}$ 、Km氏の $\omega=130^\circ\text{W}$ 、27July( $\lambda=285^\circ\text{Ls}$ ): RHf氏の $\omega=108^\circ\text{W}$ 、112°W、

28July( $\lambda=285^\circ\text{Ls}$ ): RHf氏の $\omega=100^\circ\text{W}$ 、10Aug( $\lambda=293^\circ\text{Ls}$ ): CPI氏の $\omega=105^\circ\text{W}\sim 108^\circ\text{W}$ 、DPc氏の $\omega=120^\circ\text{W}$ 、11Aug( $\lambda=293^\circ\text{Ls}$ ): CPI氏の $\omega=095^\circ\text{W}\sim 105^\circ\text{W}$ 、DPc氏の $\omega=104^\circ\text{W}\sim 111^\circ\text{W}$ 、DTy氏の $\omega=097^\circ\text{W}$ 、 $105^\circ\text{W}$ およびテイラー(MTy)氏の $\omega=117^\circ\text{W}$ 。眼視では23July( $\lambda=283^\circ\text{Ls}$ ) $\omega=128^\circ\text{W}$ (Mn)、 $133^\circ\text{W}$ (Nj)、 $138^\circ\text{W}$ (Mn)、27July( $\lambda=285^\circ\text{Ls}$ ) $\omega=118^\circ\text{W}$ (Mn)等である。f) 瘦せたマレ・シレヌムの西端が漸く見えてきた。1986年以來の古典形に近い。CPI氏の4Aug( $\lambda=289^\circ\text{Ls}$ ) $\omega=151^\circ\text{W}\sim 172^\circ\text{W}$ 、DPc氏及びDTy氏の5Aug( $\lambda=290^\circ\text{Ls}$ )それぞれ $\omega=156^\circ\text{W}$ 、 $160^\circ\text{W}$ 、及び $\omega=162^\circ\text{W}$ 、DPc氏の7Aug( $\lambda=291^\circ\text{Ls}$ ) $\omega=147^\circ\text{W}$ など。g) マレ・キムメリウムからマレ・テュッレヌムに亙る領域もともと擾亂が見られなかったことから、上空の浮遊黄塵による覆いがあるだけだと思われる。RHf氏の17July( $\lambda=278^\circ\text{Ls}$ ) $\omega=207^\circ\text{W}$ にもマレ・キムメリウムは出ているが、NBv氏の25July( $\lambda=283^\circ\text{Ls}$ ) $\omega=261^\circ\text{W}$ 、27July( $\lambda=284^\circ\text{Ls}$ ) $\omega=246^\circ\text{W}$ のスケッチにも明確に出ている。特に、DPc氏の1Aug( $\lambda=287^\circ\text{Ls}$ ) $\omega=192^\circ\text{W}\sim 207^\circ\text{W}$ 、3Aug( $\lambda=289^\circ\text{Ls}$ ) $\omega=187^\circ\text{W}\sim 191^\circ\text{W}$ は $\delta=7.1''$ にしてはとびきり良像で、黄雲を透かしてマレ・キムメリウムの可成りの詳細が描寫されている。模様に変形はない様である。美國側に移って、9Aug( $\lambda=292^\circ\text{Ls}$ )のDPk氏の $\omega=203^\circ\text{W}$ 、10Aug( $\lambda=293^\circ\text{Ls}$ )のグラフトン(EGf)氏の $\omega=199^\circ\text{W}$ 、11Aug( $\lambda=293^\circ\text{Ls}$ )のJMI氏の $\omega=197^\circ\text{W}$ 、12Aug( $\lambda=294^\circ\text{Ls}$ )のフラナガン(WF1)氏の $\omega=194^\circ\text{W}$ 、DMr氏の $\omega=206^\circ\text{W}$ 、 $211^\circ\text{W}$ 等の活寫されているが、EGf氏の像やWF1氏の像は良像で可成りの詳細が浮かぶ。特にDPc氏の像と共に蟻シコの足のところに黄塵のコアがある様に見える。h) シュルティス・マイヨルは視直径の小さい内は濃度に関する目安になるが、DPc氏の24July( $\lambda=282^\circ\text{Ls}$ ) $\omega=289^\circ\text{W}$ 、キングスレイ(BKn)氏の27July( $\lambda=284^\circ\text{Ls}$ ) $\omega=252^\circ\text{W}$ 等のccd像を見ると未だ上層の浮遊黄塵は如何にも強そうである。推移はSWk氏の29July( $\lambda=285^\circ\text{Ls}$ ) $\omega=280^\circ\text{W}$ 、1Aug( $\lambda=287^\circ\text{Ls}$ ) $\omega=268^\circ\text{W}\sim 270^\circ\text{W}$ 、3Aug( $\lambda=289^\circ\text{Ls}$ ) $\omega=248^\circ\text{W}$ 、 $256^\circ\text{W}$ が参考になる。ヘッラスが朝方明るいのは $\iota=44^\circ$ と位相角が深い所爲であろうと思う。こういう場合は偏極フィルターを使うと好い。その後の状況はDPk氏の5Aug( $\lambda=290^\circ\text{Ls}$ )の $\omega=250^\circ\text{W}/251^\circ\text{W}$ 、Mo氏の15Aug( $\lambda=296^\circ\text{Ls}$ ) $\omega=277^\circ\text{W}$ 等を見られたい。Mo氏撮影日と同日のわれわれの眼視観測に依れば、ヘッラスは朝方でも然程明るいものではない。i) 南極冠は既に偏芯しているから、ソリス・ラクスの方からしか見えないが、11Aug( $\lambda=293^\circ\text{Ls}$ )のDPc氏の $\omega=104^\circ\text{W}\sim 111^\circ\text{W}$ やDTy氏の $\omega=097^\circ\text{W}$ 、 $105^\circ\text{W}$ には明白に見えている。多分浮遊黄塵を通してであろう。通常でも最も薄い側のDPk氏の9Aug( $\lambda=292^\circ\text{Ls}$ ) $\omega=203^\circ\text{W}$ では靄を被っている様に見える。j) 北極雲について眼視で見られるほど明確に描出したものは得られていない。全體にB像は冴えない。視直径の所爲か。

♂..... WE FURTHER RECEIVED the following work of Damian PEACH at Barbados:

♂..... 追加報告: 次のようにバルバドス島でのピーチ氏の観測の追加報告を受けている。

PEACH, Damian A デミアン・ピーチ (DPc) 巴巴多斯 St. Phillip, Barbados, the West Indies

15 Sets of RGB CCD Images (23, ~29, 31 May; 1, 3, ~6 June 2007)

f/40 $\times$ 35cm SCT with a SKYnix 2-0M

PEACH (DPc) made an expedition to Barbados when the planet Jupiter was at opposition this May/June and also took images of Mars near at dawn almost every morning. Despite the tiny diameter  $\delta=5.6''\sim 5.9''$ , every image he secured looks very superb. The angles cover in LCM from  $\omega=100^\circ\text{W}$  to  $245^\circ\text{W}$  during the period. The Martian season ranged from  $\lambda=243^\circ\text{Ls}$  to  $252^\circ\text{Ls}$ , corresponding to the season when the planet was at opposition in 2003. The images on 24 May ( $\lambda=244^\circ\text{Ls}$ ) at  $\omega=238^\circ\text{W}/240^\circ\text{W}$  show nicely Syrtis Mj at the morning side and some detailed M Cimmerium at the afternoon side as well as the southern continents and the northern deserts. The spc was also clearly shot, just the detachment of Novus Mons being unresolved. The images on 31 May ( $\lambda=248^\circ\text{Ls}$ ) at  $\omega=162^\circ\text{W}\sim 171^\circ\text{W}$  show well the Valhalla shadow since  $\iota$  was large ( $\iota=39^\circ$ ). The season is the very one when Thyles Mons decays, and so a projection is vaguely shot to the direction of M Sirenum. A bright small reservoir of dust a bit beyond is also seen on the images on 4 June ( $\lambda=251^\circ\text{Ls}$ ) at  $\omega=128^\circ\text{W}/131^\circ\text{W}$ . It is interesting to see a repetition of these



phenomena which were observed in details in 2003: As to the decay of Thytes Mons at around  $\lambda=250^\circ\text{Ls}$ , see CMO #279 : <http://homepage2.nifty.com/~cmo/279OAA/index.htm>. The same images on 4 June ( $\lambda=251^\circ\text{Ls}$ ) and those on the final images on 6 June ( $\lambda=252^\circ\text{Ls}$ ) at  $\omega=100^\circ\text{W}$ ,  $107^\circ\text{W}$  show well the shadows of Olympus Mons and some of Tharsis Montes since  $\iota=39^\circ$ . It is interesting to remember Olympus Mons was bright to us at the same Martian season in 2003 since it was near at opposition (in 2005 the shadows were present since  $\iota=47^\circ$ ). Possible Arsia white cloud is not seen on the B images taken these days.

♂..... ピーチ(DPc)氏は木星の衝の頃、西印度諸島内のバルバドスに出掛け、殆ど聯日朝方火星を撮った。視直径 $\delta$ は5.6"~5.9"の頃のものだがどれも素晴らしいものである。収めた角度はLCMで $\omega=100^\circ\text{W}\sim 245^\circ\text{W}$ に亙っている。季節は $\lambda=243^\circ\text{Ls}\sim 252^\circ\text{Ls}$ で、丁度2003年の最接近の頃に相当する。24May ( $\lambda=244^\circ\text{Ls}$ ) $\omega=238^\circ\text{W}/240^\circ\text{W}$ では朝方のシュルティス・マイヨルから夕方のマレ・キムメリウムまで、及びその南北が過不足無く描寫されている。南極冠も綺麗で、但しその朝端にノウス・モンスが分離しているはずであるが、これは判らない。31May( $\lambda=248^\circ\text{Ls}$ )は位相角が $\iota=39^\circ$ だから $\omega=162^\circ\text{W}\sim 171^\circ\text{W}$ で、ヴァルハッタが好く出ている。しかも、テュレス・モンスの崩壊の時、マレ・シレナムの方に飛び出しが出ている。その先の溜まりは4June( $\lambda=251^\circ\text{Ls}$ ) $\omega=128^\circ\text{W}/131^\circ\text{W}$ にも明るく出ている。2003年に詳しく観測されたことが、ここで繰り返されていることが興味深い。 $\lambda=250^\circ\text{Ls}$ 頃のテュレス・モンスの崩壊についてはCMO#279 : <http://homepage2.nifty.com/~cmo/279OAA/index.htm> を参照されたい。4June( $\lambda=251^\circ\text{Ls}$ )  $\omega=128^\circ\text{W}/131^\circ\text{W}$ の画像や、最終の6June( $\lambda=252^\circ\text{Ls}$ ) $\omega=100^\circ\text{W}$ ,  $107^\circ\text{W}$ には $\iota=39^\circ$ であるからオリュムプス・モンスの蔭や一部タルシス山の蔭が出ている。オリュムプス・モンスなどは2003年の同時期には衝に近かったから、この時期明るく輝いていた(一方、2005年には同時期 $\iota=47^\circ$ もあったから、当然蔭であった)。但しアルシアの白雲は可能であるが、今回のBには現れていない。

♂.....REMARK: As was reported in our Façade of the CMO-Web, there was found a precursor of the present Noachis dust cloud. The mosaics which were acquired by the *Mars Reconnaissance Orbiter* (MRO) *Mars Color Imager* (MARCI) well show that a dust was raised at around Eos and it then jumped to the area of Argyre and Noachis, and finally generated a big resonance in Noachis. This was reported by the NASA Mission New and MSSS Image Release on 19/20 July. See for example

[http://www.msss.com/msss\\_images/2007/07/19/Opportunity\\_620\\_0718\\_storm\\_big.jpg](http://www.msss.com/msss_images/2007/07/19/Opportunity_620_0718_storm_big.jpg)

So it is very certain the present Noachis dust cloud had a precursor, but since any dust cloud might not have been grown to be catastrophic if it does not receive a baptism once in the Noachis area in the very southern summer, we shall continue to regard this storm as the Noachis dust storm.

♂.....<sup>ひとこと</sup>一言 : CMO-Webのファサードで七月下旬に報じた様に、七月19/20日にNASAのMission NewsやMSSSのImage\_Releaseで発表されたMars\_Reconnaissance\_Orbiter搭載のMARCI(Mars\_Color\_Imager)によるモザイク像によると、24Juneのノアキス黄雲発生前に、21June頃にエオスの邊りで黄塵が立ち上がり、その共鳴黄塵が23June頃にアルギュレからノアキスに轉移して 24Juneから25~26June頃にノアキスで爆発したようである。このモザイクは

[http://www.msss.com/msss\\_images/2007/07/19/Opportunity\\_620\\_0718\\_storm\\_big.jpg](http://www.msss.com/msss_images/2007/07/19/Opportunity_620_0718_storm_big.jpg)

等で見られる。従って、今回のノアキス大黃雲には先驅があることは確かだが、南半球夏型の黄雲がノアキス地方を経て大黃雲になり得るであろうと言う意味で、依然今回の黄雲をノアキス黄雲と呼ぶことにする。

♂.....In the next issue we shall review the observations made during a one-month period from 16 August ( $\lambda=296^\circ\text{Ls}$ ,  $\delta=7.5''$ ) to 15 September 2007 ( $\lambda=314^\circ\text{Ls}$ ,  $\delta=8.8''$ ). On 15 September the apparent declination D will attain  $D=22.75^\circ\text{N}$

Forthcoming 2007/2008 Mars (11)

# Ephemeris for the Observations of the 2007/2008 Mars. V

## September and October 2007 (Revised)

Masami MURAKAMI 村上 昌己 (Mk)

As a sequel to the Ephemeris IV (in CMO#332), we here list some necessary elements of the Ephemeris for the physical observation of Mars from 1 September 2007 to 31 October 2007. The data are listed for every day at 00:00 GMT (not TDT).  $\omega$  and  $\varphi$  denote the longitude and latitude of the sub-Earth point respectively. The symbols  $\lambda$ ,  $\delta$  and  $\iota$  stand for the areocentric longitude of the Sun, the apparent diameter and the phase

angle respectively. From this apparition, we also add the column of the Position Angle  $\Pi$  of the axis rotation, measured eastwards from the north point: This is useful to determine the north pole direction from the  $p \leftarrow$ . The apparent declination  $D$  of the planet is also given at the final column. The data here are basically based on *The Astronomical Almanac for the Year 2007*.

Date (00:00GMT)	$\omega$	$\varphi$	$\lambda$	$\delta$	$\iota$	$\Pi$	$D$
01 September 2007	203.03°W	2.8°S	305.81°Ls	08.14"	44.3°	-32.7°	+21°54'
02 September 2007	193.40°W	2.6°S	306.40°Ls	08.18"	44.3°	-32.5°	+21°59'
03 September 2007	183.78°W	2.3°S	306.99°Ls	08.23"	44.3°	-32.3°	+22°03'
04 September 2007	174.16°W	2.1°S	307.57°Ls	08.27"	44.3°	-32.1°	+22°08'
05 September 2007	164.55°W	1.9°S	308.16°Ls	08.31"	44.3°	-31.9°	+22°12'
06 September 2007	154.94°W	1.6°S	308.75°Ls	08.36"	44.3°	-31.7°	+22°16'
07 September 2007	145.33°W	1.4°S	309.33°Ls	08.41"	44.3°	-31.5°	+22°20'
08 September 2007	135.73°W	1.1°S	309.92°Ls	08.45"	44.2°	-31.2°	+22°24'
09 September 2007	126.13°W	0.9°S	310.50°Ls	08.50"	44.2°	-31.0°	+22°28'
10 September 2007	116.53°W	0.7°S	311.08°Ls	08.55"	44.2°	-30.8°	+22°32'
11 September 2007	106.94°W	0.4°S	311.66°Ls	08.60"	44.1°	-30.6°	+22°35'
12 September 2007	097.35°W	0.2°S	312.24°Ls	08.64"	44.1°	-30.4°	+22°39'
13 September 2007	087.76°W	0.0°N	312.82°Ls	08.69"	44.0°	-30.1°	+22°42'
14 September 2007	078.18°W	0.2°N	313.40°Ls	08.74"	44.0°	-29.9°	+22°45'
15 September 2007	068.60°W	0.5°N	313.98°Ls	08.79"	43.9°	-29.7°	+22°48'
16 September 2007	059.03°W	0.7°N	314.55°Ls	08.84"	43.9°	-29.5°	+22°51'
17 September 2007	049.46°W	0.9°N	315.13°Ls	08.89"	43.8°	-29.2°	+22°54'
18 September 2007	039.89°W	1.1°N	315.71°Ls	08.94"	43.8°	-29.0°	+22°57'
19 September 2007	030.33°W	1.3°N	316.28°Ls	09.00"	43.7°	-28.8°	+22°59'
20 September 2007	020.77°W	1.5°N	316.86°Ls	09.05"	43.7°	-28.6°	+23°02'
21 September 2007	011.22°W	1.7°N	317.43°Ls	09.10"	43.6°	-28.3°	+23°04'
22 September 2007	001.67°W	1.9°N	318.00°Ls	09.16"	43.5°	-28.1°	+23°06'
23 September 2007	352.12°W	2.1°N	318.57°Ls	09.22"	43.5°	-27.9°	+23°08'
24 September 2007	342.58°W	2.3°N	319.13°Ls	09.27"	43.4°	-27.7°	+23°10'
25 September 2007	333.04°W	2.5°N	319.70°Ls	09.33"	43.3°	-27.4°	+23°12'
26 September 2007	323.51°W	2.7°N	320.27°Ls	09.39"	43.2°	-27.2°	+23°14'
27 September 2007	313.98°W	2.9°N	320.84°Ls	09.45"	43.1°	-27.0°	+23°16'
28 September 2007	304.46°W	3.1°N	321.40°Ls	09.51"	43.0°	-26.8°	+23°18'
29 September 2007	294.94°W	3.3°N	321.97°Ls	09.57"	42.9°	-26.6°	+23°19'
30 September 2007	285.42°W	3.5°N	322.53°Ls	09.64"	42.8°	-26.3°	+23°21'
01 October 2007	275.92°W	3.6°N	323.10°Ls	09.70"	42.7°	-26.1°	+23°22'
02 October 2007	266.41°W	3.8°N	323.66°Ls	09.77"	42.5°	-25.9°	+23°24'
03 October 2007	256.91°W	4.0°N	324.22°Ls	09.83"	42.4°	-25.7°	+23°25'
04 October 2007	247.42°W	4.2°N	324.78°Ls	09.90"	42.3°	-25.5°	+23°26'
05 October 2007	237.93°W	4.3°N	325.34°Ls	09.97"	42.2°	-25.3°	+23°27'
06 October 2007	228.45°W	4.5°N	325.89°Ls	10.03"	42.0°	-25.0°	+23°29'
07 October 2007	218.97°W	4.7°N	326.45°Ls	10.10"	41.9°	-24.8°	+23°30'
08 October 2007	209.50°W	4.8°N	327.01°Ls	10.17"	41.7°	-24.6°	+23°31'
09 October 2007	200.03°W	4.9°N	327.56°Ls	10.25"	41.6°	-24.4°	+23°32'
10 October 2007	190.58°W	5.1°N	328.12°Ls	10.32"	41.4°	-24.2°	+23°33'
11 October 2007	181.12°W	5.2°N	328.67°Ls	10.39"	41.2°	-24.0°	+23°34'
12 October 2007	171.68°W	5.4°N	329.22°Ls	10.47"	41.0°	-23.8°	+23°35'

Date (00:00GMT)	$\omega$	$\varphi$	$\lambda$	$\delta$	$\iota$	$\Pi$	$D$
13 October 2007	162.24°W	5.5°N	329.77°Ls	10.54"	40.9°	-23.6°	+23°36'
14 October 2007	152.80°W	5.6°N	330.32°Ls	10.62"	40.7°	-23.4°	+23°37'
15 October 2007	143.38°W	5.8°N	330.87°Ls	10.69"	40.5°	-23.3°	+23°38'
16 October 2007	133.96°W	5.9°N	331.42°Ls	10.77"	40.3°	-23.1°	+23°39'
17 October 2007	124.55°W	6.0°N	331.97°Ls	10.85"	40.1°	-22.9°	+23°40'
18 October 2007	115.14°W	6.1°N	332.51°Ls	10.93"	39.8°	-22.7°	+23°41'
19 October 2007	105.74°W	6.2°N	333.06°Ls	11.01"	39.6°	-22.5°	+23°42'
20 October 2007	096.35°W	6.3°N	333.60°Ls	11.10"	39.4°	-22.4°	+23°43'
21 October 2007	086.97°W	6.4°N	334.15°Ls	11.18"	39.1°	-22.2°	+23°44'
22 October 2007	077.60°W	6.5°N	334.69°Ls	11.27"	38.9°	-22.1°	+23°45'
23 October 2007	068.23°W	6.6°N	335.23°Ls	11.35"	38.6°	-21.9°	+23°46'
24 October 2007	058.87°W	6.7°N	335.77°Ls	11.44"	38.3°	-21.7°	+23°47'
25 October 2007	049.52°W	6.8°N	336.31°Ls	11.53"	38.1°	-21.6°	+23°48'
26 October 2007	040.18°W	6.9°N	336.84°Ls	11.61"	37.8°	-21.5°	+23°49'
27 October 2007	030.85°W	7.0°N	337.38°Ls	11.70"	37.5°	-21.3°	+23°50'
28 October 2007	021.52°W	7.0°N	337.92°Ls	11.79"	37.2°	-21.2°	+23°51'
29 October 2007	012.21°W	7.1°N	338.46°Ls	11.89"	36.9°	-21.1°	+23°53'
30 October 2007	002.90°W	7.1°N	338.99°Ls	11.98"	36.5°	-20.9°	+23°54'
31 October 2007	353.61°W	7.2°N	339.53°Ls	12.07"	36.2°	-20.8°	+23°55'
01 November 2007	344.32°W	7.2°N	340.06°Ls	12.17"	35.9°	-20.7°	+23°57'
02 November 2007	335.05°W	7.3°N	340.59°Ls	12.27"	35.5°	-20.6°	+23°58'
03 November 2007	325.78°W	7.3°N	341.12°Ls	12.36"	35.2°	-20.5°	+24°00' - - -

## 便り

## Letters to the Editor

●.....Date: *Wed, 25 July 2007 09:47:00 +0200*  
 Subject: *mars obs. last 25th*

Dear sirs, Please find my recent observations about mars last 25th morning with my 100mm refractor at 250x/270x with excellent views: Syrtis Major seems dim. Hope this will satisfy the mars observationnal research program.

As I advised you lastly this is my last day here at office et my mail box will be transfered to: stsmas at tiscali.fr, thanks a lot for considering.

Have good receipt of the present document. My best regards, truly yours

○.....Date: *Tue, 7 Aug 2007 11:51:10 +0200*  
 Subject: *Re:Mars\_4th\_august\_2007*

Bonjour Christophe, dear Minami san, Here are the last documents collected this morning with the 20cm cassegrain. Images were only average to good, but better than the last 5th. Some notes are incorporated with. Have good receipt of the present. With my best regards.

**Stanislas MAKSYMOWICZ**

(スタニスラス・マクシモヴィッチ Ecqueville 法)

●.....Date: *Wed, 25 July 2007 19:18:25 -0700*  
 Subject: *Mars Dust Storm Image July 25th*

Hi Masatsugu, Image recorded on July 25, 2007 at 11:02UT with very good seeing. SPC visible and extensive dust-cloud band over Hellespontus and Chalce. Noachis is dust covered. Sinus Meridiani mostly covered with an anomalous dark area west of it. West of that is a huge bright dust cloud covering parts of Margaritifer

Sinus and extending a long way Northward. There is a bright circular dust cloud over Eos. Good seeing.

○.....Date: *Thu, 26 July 2007 15:37:33 -0700*  
 Subject: *RE:Mars Dust Storm Image July 25th*

Hi Masatsugu, Yes, you are right and Noachis is still dust covered! Would you like to know why I went out on June 25th to image? I was hoping to see the mountains of Mitchell, although I new I would probably be too late. And I was, but was just in time to catch the dust in Noachis! What luck. It doesn't look like the storm is diminishing, does it to you? Bye for now.

○.....Date: *Fri, 27 July 2007 12:29:24 -0700*  
 Subject: *Fwd: Martian Dust Storm Rages On*

Hi family and friends, I and another amateur astronomer Sean Walker had our pictures of the Martian dust storm published on spaceweather.com. This is the same storm that I and Dave Moore discovered on June 24th and 25th (<http://spaceweather.com/archive.php?month=06&day=28&year=2007&view=view>), that a month later is planet wide. And to think, all I wanted to image on June 25th was the south polar cap! Sincerely,

○.....Date: *Fri, 27 July 2007 20:22:54 -0700*  
 Subject: *Mars Dust Storm Image July 26th*

Hi Masatsugu, Pretty much the same features as on the 25th. Sincerely,

○.....Date: *Wed, 1 Aug 2007 19:36:55 -0700*  
 Subject: *Two images of Mars*

Hi Masatsugu, Here they are separately and together on one frame, whatever is best for you. Sincerely,

○.....Date: *Wed, 8 Aug 2007 18:12:56 -0700*  
 Subject: *images on August 7th*

Hi Masatsugu, They're pretty fuzzy because of lousy seeing. Sincerely,

○.....Date: *Sun, 12 Aug 2007 21:19:34 -0700*  
 Subject: *Aug 11 image*

Hi Masatsugu, Numerous dust clouds in the desert and

mare. Sorry about the hot edge. Sincerely,

○ · · · · · *Date: Thu, 23 Aug 2007 19:06:32 -0700*  
*Subject: Images on August 23rd*

Hi Masatsugu, Please see attached. Thanks.

**Jim MELKA** (ｼﾞﾑ・ﾓﾙｶ St Louis MO 美)

● · · · · · *Date: Wed, 25 July 2007 22:54:56 +0900*  
*Subject: Jupiter last night Re: RE:Mars - 2007/07/17*

Dear Minami-san, How have the skies been in Fukui this week? Hope the conditions have been favorable there.

I have set the alarm a few times the past week but have gotten clouded out each time. I did get some data from July 23rd UT in between clouds but seeing was really poor. Here is a Jupiter image from last night.

Will send some Mars images as soon as the skies finally clear. Best regards,

○ · · · · · *Date: Fri, 27 July 2007 21:29:05 +0900*  
*Subject: Olympus Mons - Mars 2007/07/26*

Dear CMO, Here is an image of Mars and Olympus Mons from this morning with the LU075C as you recommended. Seeing was ok, but I spent a lot of time adjusting the image scale and imaging parameters as this was the first time to use the Lumenera in quite a while.

Olympus Mons is surprising very prominent!! SPC is visible, other features seem faint or slightly obscured. NPH is slightly visible and the blue color was very evident during the imaging session. Tokai has now officially ended the rainy season, which is a great relief! after the long & frustrating rainy season as we have discussed. Hokuriku has not yet finished the rainy season according to the weatherman, but I hope you have clear skies in Fukui this weekend!

I have high hopes for Solis Lacus this weekend with a decent weather forecast predicted and relatively steady upper level winds. Will send more images this weekend.

Have a good weekend, and clear and steady skies. Best,

○ · · · · · *Date: Sat, 28 July 2007 19:16:59 +0900*  
*Subject: Tharsis - Mars 2007/07/27*

Dear CMO, An image of Mars and the Tharsis region in "kitai-hazure" seeing. Will send more images possibly tomorrow. Best,

○ · · · · · *Date: Sun, 29 July 2007 00:34:09 +0900*  
*Subject: Dust in Solis - 2007/07/27 18:54 UT*

Minami-san, Just a quick reply and an additional image from this morning, before I eat a late dinner and prepare for day number three of Olympus Mons / Solis.

Attached is my best image this season although the seeing just really never quite improved. I have learned a lot from imaging low Jupiter in terms of processing, which has helped this early apparition in poor conditions. If the seeing would just get over 4-5+, I can send you some super high quality images.

Dust appears in Solis, OM and Tharsis region again visible, NPH blue, SPC in view. Please upload to the gallery at your convenience (tomorrow is fine) with my 19:13 image.

I hope you get some cloud breaks this a.m. session and a quick end in Hokuriku to the persistent seasonal rain

front. Will send images again tomorrow. Best,

○ · · · · · *Date: Mon, 30 July 2007 20:18:54 +0900*  
*Subject: Mars - 2007/07/28 - Dust continues in Solis L.*

Dear CMO, Here is another image of dusty Solis Lacus, this one in the worst imaging conditions among the last three days. Transparency was not that great and for some reason seeing just has not improved. I think it must be a local-seeing factor. Frustrating, but it was clear so I send another image 'til conditions can improve.

Best regards and clear skies,

○ · · · · · *Date: Wed, 01 Aug 2007 21:21:37 +0900*  
*Subject: Mars - 2007/07/31 - Dust in Argyre*

Dear CMO, Here is a Mars image from this morning, July 31st UT. Typical poor conditions. Dust is showing in Argyre and continuing in Solis Lacus. I had some decent seeing around 19:41 UT, but the image processing is not going well due to the bright sky. Will send later this week if time permits.

Despite the rainy season and poor seeing, this is my eighth imaging session this month. Perhaps one more image and then will take a break for a while as no major developments are occurring and the SPC will soon be gone (I'm also not that fond of gibbous Mars).

Best regards and hope the typhoon passes us quickly,

○ · · · · · *Date: Sun, 05 Aug 2007 01:06:44 +0900*  
*Subject: Phoenix Mars Lander*

Minami-san, Here is a story on the Phoenix lander headed for Mars' northern latitudes to search for organic compounds:

<http://abcnews.go.com/Technology/wireStory?id=3447091>

Thanks for forwarding Peach's Barbados images btw.

Will send an image tomorrow if the sky clears in the a.m. here (the moon is popping in and out between clouds currently). Clear skies,

○ · · · · · *Date: Sun, 05 Aug 2007 23:15:19 +0900*  
*Subject: Mars - August 4th - Dust core near Auroræ S*

Dear CMO, Here is an image of Mars from this morning August 4th UT. Some decent seeing at the end though transparency was very poor with occasional passing clouds. Prominent dust core near Auroræ Sinus (\*please let me know the exact location/nomenclature for that area), Eos is bright as well Argyre. SPC clearly visible. Margaritifer S. and Sinus Meridiani on the evening limb obscured and not visible. Best regards and clear skies this week,

○ · · · · · *Date: Thu, 09 Aug 2007 00:38:25 +0900*  
*Subject: Mars 2007/08/07 - obscured features continue*

Dear CMO, An image from this morning August 7th UT. Almost had some good seeing but the clouds rolled in. Argyre again bright, Margaritifer S., Sinus Meridiani and Sinus Sabæus are covered over/obscured. Noachis looks dusty/whitish, NPH is prominently blue.

Hope all is well and best regards,

○ · · · · · *Date: Fri, 10 Aug 2007 15:36:11 +0900*  
*Subject: Mars - 2007/08/08*

Dear CMO, Here is another image of bright Argyre / the obscured features around Margaritifer, Meridiani etc. I used larger image scale than usual as transparency was good. NPH is really starting to become pronounced.

Hope all is well in Fukui, and have a good O'bon holi

day. Best regards,

○ · · · · · **Date: Sun, 12 Aug 2007 14:22:26 +0900**  
**Subject: Re: RE:Mars - 2007/08/08**

Dear Minami-san, Thank you for your e-mail. I hope the dental pain you are suffering from quickly subsides. I also hope I have your stamina and dedication to Mars when I'm your age. Please continue the great work you do on Mars! I appreciate as always the detailed information and explanations you provide on the red planet. Most recently concerning Ophir and the reflectivity of that area (I still do believe the image shows a prominent dust core).

Well, I was hoping to reply with an image of Mars but passing clouds at the wrong timing and local seeing that just never seems to improve precluded obtaining quality images. I used to occasionally get at least 5+ seeing just before/after sunrise here, but every morning there is a strong and cold breeze blowing downwind combined with "phantom" low clouds that don't show up on satellite imagery. Kind of at the peak of frustration, so as I mentioned before, maybe 1 more image - hopefully of Syrtis Major - and then I will take a break until opposition.

Have a good O'bon and hope you are able to observe this week despite your painful condition.

Attached is a low altitude Jupiter image of the SEB activity from last night (seeing at the zenith was probably 9-10, but of course not so good at 30 degrees).

Best regards as always,

○ · · · · · **Date: Wed, 15 Aug 2007 00:26:08 +0900**  
**Subject: Jupiter last night -**



Minami-san, Thank you for forwarding Damian's images. Here is Jupiter from last night in good seeing - if only we could have such seeing for Mars. Seeing is forecasted to be good in the a.m. so I have the alarm set. If the clouds stay clear, I will send an image from the session later in the week. Best regards,

○ · · · · · **Date: Sat, 18 Aug 2007 15:02:36 +0900**  
**Subject: Re: RE:Jupiter last night -**

Minami-san, Good to hear you had improved seeing

conditions in Fukui. It indeed has been unseasonably hot this week making Jupiter imaging impossible in the later half of the O'bon holiday.

I did get an image of Mars from the 14th UT but haven't processed it yet. Preliminary look shows Noachis with a regular shape (cleared up) and a clear but dull Hellas with no detail inside; ring feature not visible.

I had some very good visual views on the 14th in daylight around 20:15 UT with Syrtis Major, the tiny SPC and the NPH all readily visible. Probably the best visual view for this apparent diameter I've ever had.

As I mentioned, I will take a break from Mars for a while but will send as many images as I can during opposition and in 2008.

Looking forward to your upcoming Mars reports and hope you have excellent observing conditions in Fukui in the coming weeks. Best regards,

○ · · · · · **Date: Mon, 20 Aug 2007 20:48:23 +0900**  
**Subject: Mars - 2007/08/19**

Dear CMO, Here is an image of Mars and clear Mare Cimmerium from this morning Aug 19th UT. Seeing was not good as is the norm here this early season, but I tried to get some type of image out of the session. Best regards,

○ · · · · · **Date: Tue, 21 Aug 2007 19:21:27 +0900**  
**Subject: Mars - 2007/08/20**

Dear CMO, Here is an image of Mars from this morning Aug 20th UT. Seeing was fair but imaged into daylight. Best regards,

**Robert HEFFNER** (ロバート・ヘフナー 名古屋 Aichi)

● · · · · · **Date: Thu, 26 July 2007 02:57:41 -0700**  
**Subject: Mars 26 July**

Excellent conditions this morning.

○ · · · · · **Date: Sun, 29 July 2007 08:50:26 -0700**  
**Subject: Mars 2007-7-29**

Good seeing conditions, though rolling fog made it difficult to sustain consistent levels. 7.0"

○ · · · · · **Date: Wed, 1 Aug 2007 13:39:07 -0700**  
**Subject: Mars August 1**

Still dusty on Mars, though no thick patches- perhaps things will settle out soon. Syrtis Major seems "thin" in my image, but conditions were only fair.

○ · · · · · **Date: Fri, 3 Aug 2007 07:21:07 -0700**  
**Subject: RE: Mars 1st august 2007**

Good conditions this morning, though transparency was low due to humidity.

○ · · · · · **Date: Sun, 5 Aug 2007 18:59:39 -0700**  
**Subject: Jupiter 8/6**

fair conditions- wish Jupiter was about 20 degrees higher!

○ · · · · · **Date: Wed, 15 Aug 2007 08:16:26 -0700**  
**Subject: Mars 08/15**

Fair seeing this morning, but transparency was poor; only managed to record in IR. Nix Olympia very dark and obvious. Perhaps a hint of the SPC.

○ · · · · · **Date: Wed, 15 Aug 2007 08:18:19 -0700**  
**Subject: Jupiter 15 August**

Fair seeing, but very poor transparency. Forced to record at 15fps.

○ · · · · · *Date: Tue, 21 Aug 2007 08:40:03 -0700*  
*Subject: Recent Mars images*

My appologies for not sending you these. Three images dated 8/21, 8/18, and 8/15. Details in images.

**Sean WALKER** (シヨーン・ウォーカー S&T 美)

● · · · · · *Date: Thu, 26 July 2007 05:51:53 +0000*  
*Subject: Mars 25 July*

Hi All, I have attached a Mars image from 25 July. Dust continues: general obscurations with several bright dust clouds. Best,

○ · · · · · *Date: Fri, 27 July 2007 02:19:29 +0000*  
*Subject: Jupiter 25 July*

Hi All, I have attached a Jupiter image from 25 July.

○ · · · · · *Date: Mon, 30 July 2007 20:35:41 +0000*  
*Subject: Jupiter 29 July*

Hi All, I have attached some Jupiter images from 29 July. Best,

○ · · · · · *Date: Wed, 01 Aug 2007 05:12:06 +0000*  
*Subject: Mars 30 July*

Hi All, I have attached a Mars image from 30 July. The atmosphere remains dusty, with Meridiani Sinus and M. Serpentis obscured. Best,

○ · · · · · *Date: Fri, 03 Aug 2007 20:16:23 +0000*  
*Subject: Jupiter 3 August*

Hi All, I have attached some Jupiter images from 3 August. Best,

○ · · · · · *Date: Mon, 06 Aug 2007 02:59:31 +0000*  
*Subject: Jupiter 4 August*

Hi All, I have attached a Jupiter image from 4 August.

○ · · · · · *Date: Tue, 07 Aug 2007 20:24:22 +0000*  
*Subject: Mars 5 August*

Hi All, I have attached some Mars images from 5 August. Atmosphere still dusty. Hellas very bright for the season. Appears to be dust, although the Themis data shows less dust opacity over Hellas. Some dust "fingers" in Tyrrhenum and along eastern Syrtis Major. Best,

○ · · · · · *Date: Wed, 08 Aug 2007 23:19:43 +0000*  
*Subject: Jupiter 8 Aug.*

Hi All, I have attached a Jupiter image from 8 August.

○ · · · · · *Date: Sat, 11 Aug 2007 03:07:14 +0000*  
*Subject: Mars 9 August*

Hi All, I have attached some Mars images from 9 August. Trivium-Cerberus was faintly visible. Elysium was not bright. A "new" half-tone streak curving north to Hyblæus from Tritonis S. is visible. Eridania and Electris are bright for the season -- dust? Cimmericum and Sirenum display normal form but were washed out in red light. Best,

○ · · · · · *Date: Tue, 14 Aug 2007 23:20:43 +0000*  
*Subject: Jupiter 14 August*

Hi All, I have attached a Jupiter image from 14 August. Best,

**Don PARKER** (唐那·派克 Miami FL 美)

● · · · · · *Date: Thu, 26 July 2007 08:52:23 -0700*  
*Subject: Mars 20 July - Revised*

Hi Masatsugu, I revised my image from 20 July. The color correction improves the view of the dust haze over the south polar region. Best regards,

○ · · · · · *Date: Fri, 27 July 2007 07:47:46 -0700*  
*Subject: Re: On your 15 July images*

Hi Masatsugu, Great job with CMO #334! At the end of the observation report you mention the storm of 1956, and draw some parallels between the two storms. Do you have any further reading on the 1956 storm that you can direct me to?

Yes, Damian's images are very informative as a references, Christophe's as well. Damian's blue image of 28 Aug. 05 is an excellent example: the view of the Arsia cloud is strikingly different at CM 111.3 versus CM 136.1. Now I see exactly what you were looking for. I was not aware of how important the projection effect is in showing atmospheric vapor. This is obvious now, based on your description. As the storm evolves, I will make an extra effort to acquire high quality blue images. Thanks as well for the link to CMO #321. I enjoyed the reading. Best wishes,

○ · · · · · *Date: Fri, 27 July 2007 08:00:57 -0700*  
*Subject: Re: Mars 20 July - Revised*

Hi Masatsugu, You're welcome. I have been set up and ready to go for the last four days. Unfortunately, every morning we have had thick fog, making it impossible to acquire images. As soon as I get a clear morning, I'll send more images. Best,

○ · · · · · *Date: Tue, 31 July 2007 07:05:33 -0700*  
*Subject: Mars 29 July 2007*

Hi Masatsugu, Attached is Mars on 29 July. Conditions were a bit better than usual. Note the chaos in the IR image versus the blandness of the RGB image. In IR, there appears to be a bright, compact dust cloud over Argyre. There's a more diffuse cloud possibly covering Lunæ Lacus and extending north over Niliacus Lacus. The SPC is visible in all wavelengths: IR & R,G,B. Best wishes,

○ · · · · · *Date: Sat, 04 Aug 2007 10:46:09 -0700*  
*Subject: Re: Mars 29 July 2007*

Hi Masatsugu, Thanks for the link to Kunihiko Okano's talk on the LRGB method. The lack of a suitable high-L channel that will accurately reproduce the Martian atmosphere using the LRGB method is certainly an outstanding issue. I think the idea of combining information from V for luminance is interesting. However I assume that by combining V light with IL in some fashion will still produce an inaccurate simulation of what the human eye would see. I will try some experiments, mixing violet with IL this apparition and let you know if I get any interesting results.

In terms of references to the 1956 Noachis dust storm, I am interested in the parallelism between the storms of 56, 71, 73 & the current storm. If you could be so kind as to send the brief references you have on the 56 storm, I would be very grateful. Martins article on the storm of 71 looks interesting as well. I would appreciate it if you could send me the paper version of the CMO. Your work is very important to me and I would like to collect hard copies of the CMO. I will certainly continue to send you the information I acquire on Mars. · · ·

I agree with your premise that the preceding minor phenomena of the 56 & 71 storms may have been missed as there were no orbiters with the capabilities of the

MRO visiting Mars at those times. I was particularly impressed with the MARCI time-lapse movie of the South Polar Region, 20 June ~ 18 July 2007:

[http://www.msss.com/msss\\_images/2007/07/19/630\\_718\\_spolar\\_small.mov](http://www.msss.com/msss_images/2007/07/19/630_718_spolar_small.mov)  
It's a privileged sight to see the dust spiral up around the pole.

I will be on summer vacation between the 6th and 14th of August so I will not be able to send images then. Hopefully, I will get a chance to image before I go but we have had dense morning fog every day this week. This is normal during the summer at my location as I live close to the ocean. Best wishes,

○ · · · · · **Date: Thu, 23 Aug 2007 16:25:33 -0700**  
**Subject: Mars 21 August 2007**

Hi Masatsugu, Here's dusty Mars on 21 August. Conditions were fair (finally!). I was able to increase my focal length to  $F/36$  and zoom in a bit. At longer wavelengths the albedo features are coming back. In green they still look quite weak. In blue, the NPH is visible and there's a hint of dark Olympus Mons. Electris looks very dusty.

I received your package with the information on the 1956 & 1971 dust storms. Thank you so much for sending this information! It is priceless to me. I am amazed at the similarities between the 1956, 1971 and 2007 storms. For example: S. Ebisawa's description of the westward storm flow along Electris and Eridania that forms a large white cloud belt parallel to the southern maria precisely matches my observation on 12 July 2007.

Thanks again! Best wishes,

**Ethan ALLEN** (イーサン・アレン Sebastopol CA 美)

● · · · · · **Date: Thu, 26 July 2007 15:22:32 +0100**  
**Subject: Jupiter 24th July UK**

Hi guys thin cloud added to "the difficulties", but it is always fascinating to see a Jovian moon appear to increase in brightness as it moves onto Jupiter's dark limb. Best wishes

○ · · · · · **Date: Thu, 26 July 2007 21:27:34 +0100**  
**Subject: Active Loop prominence**

Hi guys, I don't know what classification you would give this little beauty, maybe a class 2 d ? flare loop or coronal loop? Whichever it is, it was quite small but very fast acting. I first captured it at 1152ut as being quite interesting floating material. We had a bit more clear sky a little later and I went back to it, to see it had dramatically changed, and obviously moving. I took another 5 frames at minute intervals, when more cloud came. The focal length was 180 inches 150 mm aperture for  $f/30$  with a Daystar ATM filter. Best wishes

○ · · · · · **Date: Sun, 5 Aug 2007 21:46:50 +0100**  
**Subject: Aug 4th Solar**

Hi Guys, I have just had a sunny week in Devon, with no scopes. Fortunately the weather is still on our side

now that I'm back.

There was plenty of activity down the Eastern limb on the 4th. image 1642 is the same prom imaged at 1444. The limb adjacent to small spot 0966 had some prom activity too. There was an interesting very bright prom brewing on the Western limb, I imaged that one today, the 5th (images to follow). Best wishes

○ · · · · · **Date: Mon, 6 Aug 2007 15:14:10 +0100**  
**Subject: Mars 5th Aug**

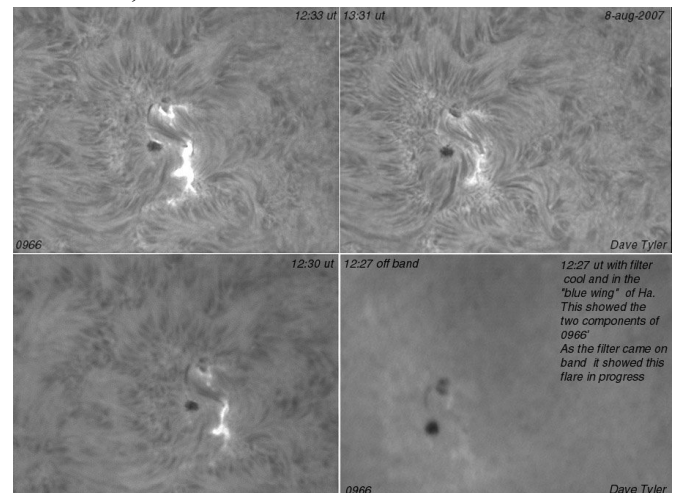
Hi Guys, Although looking dusty, Mare Sirenum, Mare Cimmerium and Mare Chronium are visible. I did not capture the polar cap, was that me, or has that got dust too Richard? C14 @  $f/40$  Skynix 2.0 Trutek filters inc type 1 red. Seeing was good, with a little flaring going on, on the bright limb.

○ · · · · · **Date: Tue, 7 Aug 2007 14:41:28 +0100**  
**Subject: spot 0966 5th-6th aug**

Hi Guys, Here are a few images of 0966, the little spot with a big attitude. I find it awesome that such a small spot can be the centre of such a massive amount of activity in the chromosphere. Best wishes

○ · · · · · **Date: Thu, 9 Aug 2007 16:35:12 +0100**  
**Subject: solar flare 8th aug**

Hi Guys, Spot 0966, a second component was visible on the 8th, as well as a small flare. The flare was under-



way as I started observing, in very poor seeing. It had died down an hour later. 150mm @  $f/30$  Daystar ATM H $\alpha$  filter. Best wishes

○ · · · · · **Date: Sun, 12 Aug 2007 08:57:06 +0100**  
**Subject: Mars 11 aug**

Hi Guys, Not a bad morning for Mars. Many of the well known features are shown, including Mare Sirenum. Olympus Mons, Tharsis, Solis Lacus, the South polar cap and many more. It's still lacking in contrast due to dust, but it seems to be imaging a little clearer. Although Solis Lacus is notably "obscured/changed"? Best wishes

○ · · · · · **Date: Tue, 14 Aug 2007 18:43:25 +0100**  
**Subject: Mars 11th aug (2)**

Hi guys, Here is another from the 11th, a little earlier than the last one, along with the raw data. Best wishes

○ · · · · · **Date: Wed, 15 Aug 2007 22:17:57 +0100**  
**Subject: solar images from the 10th**

Hi Guys, here are some solar images from the 10th. I see 0966 has now been renamed 0968 since the addition of a spot to the general H $\alpha$  disturbance and the disap-

pearance of the first one, in H $\alpha$  that is. The PA of the handsome proms is as composed. Best wishes

**Dave TYLER** (テヴァイト・タイラー Bkh 英)

●.....Date: Fri, 27 Jul 2007 07:36:10 +1000  
Subject: Jupiter from Australia - 25th July 2007

Hi all, This image is from Wednesday night in average seeing. The seeing threatened to be good (as Anthony experienced!) but local clouds kept disturbing the air and wobbling Jupiter about. This image was captured between breaks in the clouds.

Io is the brightish patch on the NEB, about 1/3 of the way in from the right. Thanks for looking.

○.....Date: Tue, 07 Aug 2007 13:14:18 +1000  
Subject: Uranus from Australia - 6th August 2007

Hi all, This is my first image of Uranus for 2007. Transparency wasn't great due to some dew forming on the mirror, but seeing was fairly reasonable.

This image is LRGB, with 800 frames of Luminance @ 15fps and 300 frames of R/G/B colour data @ 7.5fps each.

Hmm, not a very exciting target and very frustrating to get on the chip of the CCD at > 11m focal length. I'm not sure if I'll try for Uranus again this year.

Thanks for looking.

**Mike SALWAY** (マイク・ソルウェイ NSW 澳)



●.....Date: Fri, 27 July 2007 09:34:03 +0900  
Subject: Re: 遅れ

> そちらは梅雨明けでしょうか、こちらは未だです。

一応明けたことになっていて日中は暑いのですが、雲が多く、深夜から早朝にかけて曇り空のようになっています。日が昇ると晴れてきて、また夕方から雲が切れることもあります。

木星は夕方なので三夜ほど撮像しましたが、火星は熊森さんや比嘉さんの画像を見ると私には難しいと考えて、まだ撮影していません。

..私は降圧剤さえ飲んでおけば安心と、お酒も辛いものも従来どおり、飲み食いしています。テニスも回数は減りましたが、続けています。

> 学生部長とはまたまた忙しい仕事ですね。消耗しないように。

雑用が多いのですが、適当にサボりながらこなしています。早く任期が終わるように祈るような気持ちです。

**浅田 正** (Tadashi ASADA 宗像 Fukuoka)

●.....Date: Fri, 27 July 2007 15:05:00 -0700  
Subject: Mars - July 27, 2007

Greetings from monsoon stricken Arizona! A nice open hole in the sky this morning for observing Mars. Seeing was fairly stable providing me the best imaging

so far. I seem to have developed an artifact (almost a double image) in my images on the lower right area of Mars. Not sure what it is yet (I suspect collimation and focus) but it has ruined my blue and green images, so no RGB images today. It fools registax too. Any ideas what it may be?

SPC is continuing to become more visible. Bright clouds all over the disk this morning. Thanks

○.....Date: Sat, 28 July 2007 08:35:07 -0700  
Subject: Mars - July 28, 2007

All, I keep adding more people back to my address book, so if this is your first email in a while from me, it is because I deleted my old list and started over. Sorry

I did find my nemesis yesterday and it turned out to be a collimation problem. The secondary was slightly off. (Cassegrains are so finicky!) The artifact is gone this morning after getting up extra early to star tweak the primary.

Clouds intervened but I did manage one short burst around 0430 AM then had to wait an hour for clouds to clear before any more imaging could take place.

It is interesting to see from one day to the next, changes in the dust clouds, patterns, and and albedos appearing and disappearing. Thanks

○.....Date: Sun, 12 Aug 2007 12:36:06 -0700  
Subject: Mars - August 12, 2007

Hey everyone, I was able to get out and image this morning. It was still hot at 4 AM, 90 degrees and humid. Despite heavy breezes the seeing was pretty good for Phoenix. I would like to have been able to see what the seeing would have been like without the wind. Of course it quit blowing as dawn approached. I was greeted by a few Perseids as well.

This side of Mars looks a bit more normal, but still obscured some by dust. Thanks

**Dave MOORE** (テヴァイト・ムーア Phoenix AZ 美)

●.....Date: Fri, 27 July 2007 20:22:48 +0900  
Subject: Mars-2007-07-26-KUMAMORI

相変わらず何が見えているのか良く分かりませんが、2001年を思い出しています。

○.....Date: Fri, 10 Aug 2007 09:56:37 +0900  
Subject: Mars-2007-08-09-KUMAMORI

何とか模様が見え始めているのでしょうか、明け方に起きるのはなかなか辛いです。眼視ではまだほとんど何も見えません。

○.....Date: Fri, 17 Aug 2007 07:15:14 +0900  
Subject: Mars-2007-08-15-KUMAMORI

日中の暑さが明け方まで残り、望遠鏡周りの気流も安定しない状態です。画像処理もまだまだ安定しませんが、何とか模様は写ってきました。

○.....Date: Mon, 20 Aug 2007 09:21:48 +0900  
Subject: Mars-2007-08-19-KUMAMORI

夕方から曇り、雷も鳴りましたが、雨は僅かで気温の低下もなく蒸し暑い朝を迎えての撮影でした。ベランダの隙間(隣の)から火星撮影できるのは、一時間程度しかなく、途中で夜明けを迎えます。Hellasが一番明るく見えていました。

**熊森 照明** (Teruaki KUMAMORI 堺 Osaka)



●.....**Date: Sat, 28 July 2007 16:34:03 +0100**  
**Subject: Mars Images (July 28th, 2007.)**

Hi all, Here are some images from this morning. Poor seeing unfortunately but at least it wasn't raining.

The contrast of the markings in red light is considerably reduced. Syrtis Major/Mare Tyrrhenum are weakly seen. Syrtis looks rather bluish located on the f.limb.

[http://www.damianpeach.com/mars07/m2007\\_07\\_28rgb\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_07_28rgb_dp.jpg)

Best Wishes

○.....**Date: Wed, 1 Aug 2007 22:47:06 +0100**  
**Subject: Mars images May-June 2007**

Dear Masatsugu, Here are 13 nights of Mars images taken during May-June mostly under very good seeing during my trip. No dust obvious anywhere on the Planet, and cloud activity was also very low. The arsia cloud was absent. Looking back to my images of July 22nd 2005 (Ls=254°) the cloud was weakly visible then. The tharsis volcanoes appear as dark spots in the later sessions. I think there is also some hint at rifting in the SPC but this at the resolution limit for such a small diameter.

Was nice to see Mars again before the dust intervened!

○.....**Date: Wed, 1 Aug 2007 22:55:18 +0100**  
**Subject: Mars images (May 23,~29,31, June 1,3,~6th.)**

Hi all, Here is a belated long series of Mars images from May-June before the storm began mostly under very good seeing.

[http://www.damianpeach.com/mars07/m2007\\_05\\_23rgb\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_05_23rgb_dp.jpg)

[http://www.damianpeach.com/mars07/m2007\\_05\\_24rgb\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_05_24rgb_dp.jpg)

[http://www.damianpeach.com/mars07/m2007\\_05\\_25rgb\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_05_25rgb_dp.jpg)

[http://www.damianpeach.com/mars07/m2007\\_05\\_26bw\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_05_26bw_dp.jpg)

[http://www.damianpeach.com/mars07/m2007\\_05\\_26rgb\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_05_26rgb_dp.jpg)

[http://www.damianpeach.com/mars07/m2007\\_05\\_27rgb\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_05_27rgb_dp.jpg)

[http://www.damianpeach.com/mars07/m2007\\_05\\_28rgb\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_05_28rgb_dp.jpg)

[http://www.damianpeach.com/mars07/m2007\\_05\\_29bw\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_05_29bw_dp.jpg)

[http://www.damianpeach.com/mars07/m2007\\_05\\_29rgb\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_05_29rgb_dp.jpg)

[http://www.damianpeach.com/mars07/m2007\\_05\\_31bw\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_05_31bw_dp.jpg)

[http://www.damianpeach.com/mars07/m2007\\_05\\_31rgb\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_05_31rgb_dp.jpg)

[http://www.damianpeach.com/mars07/m2007\\_06\\_01rgb\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_06_01rgb_dp.jpg)

[http://www.damianpeach.com/mars07/m2007\\_06\\_03rgb\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_06_03rgb_dp.jpg)

[http://www.damianpeach.com/mars07/m2007\\_06\\_04rgb\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_06_04rgb_dp.jpg)

[http://www.damianpeach.com/mars07/m2007\\_06\\_05rgb\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_06_05rgb_dp.jpg)

[http://www.damianpeach.com/mars07/m2007\\_06\\_06rgb\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_06_06rgb_dp.jpg)

○.....**Date: Thu, 2 Aug 2007 23:42:01 +0100**  
**Subject: Mars 2007 page**

Hi all, Just a note to say I added the Mars 2007 section to my website at:

<http://www.damianpeach.com/mars07.htm>

All imagery will be available there throughout the apparition. Best Wishes

○.....**Date: Fri, 3 Aug 2007 22:54:50 +0100**  
**Subject: Jupiter with Oval BA & Ganymede - May 26th, 2007.**

Hi all, Here is a set of Jupiter images from May 26th showing Oval BA and Ganymede. Lots going on across this hemisphere. Note the "strange area" between the STrD-2 and the end of the closed circulation ahead of the GRS. Ganymede shows clear markings, and the markings are the same in all images across this session.

[http://www.damianpeach.com/barbados07/2007\\_05\\_26\\_0448ut\\_dp.jpg](http://www.damianpeach.com/barbados07/2007_05_26_0448ut_dp.jpg)

Best Wishes

○.....**Date: Sat, 4 Aug 2007 15:11:35 +0100**  
**Subject: Jupiter with GRS rising - May 31st, 2007.**

Hi all, Here is a set of images from May 31st. GRS is appearing on the right. NTrZ disturbed, with spot Z prominent. Altitude was only 49deg for this image set...a testament to the tremendous stability experienced from the island....

[http://www.damianpeach.com/barbados07/2007\\_05\\_31\\_0551ut\\_dp.jpg](http://www.damianpeach.com/barbados07/2007_05_31_0551ut_dp.jpg)

○.....**Date: Sat, 4 Aug 2007 22:36:54 +0100**  
**Subject: Jupiter with South Equatorial Disturbance - May 25th, 2007.**

Hi all, Here is a set from May 25th, 2007. The SED is prominent, as is the little orange "donut" of the NNTZ little red spot. The SEB revival has begun a few days before this image, and is already showing a diagonal rift with brilliant source eruption.

[http://www.damianpeach.com/barbados07/2007\\_05\\_25\\_0457ut\\_dp.jpg](http://www.damianpeach.com/barbados07/2007_05_25_0457ut_dp.jpg)

○.....**Date: Sun, 5 Aug 2007 14:35:57 +0100**  
**Subject: Jupiter with SEB revival source - May 25th, 2007.**

Hi all, Here are some further images from May 25th showing the SED and SEB revival source. GRS is disappearing at left.

[http://www.damianpeach.com/barbados07/2007\\_05\\_25\\_0413ut\\_dp.jpg](http://www.damianpeach.com/barbados07/2007_05_25_0413ut_dp.jpg)

○.....**Date: Mon, 6 Aug 2007 14:06:37 +0100**  
**Subject: Jupiter with SEB revival source - May 25th, 2007.**

Hi all, Apologies as my webserver was down. Here is a working link to this set:

[http://www.damianpeach.com/barbados07/2007\\_05\\_25\\_0413ut\\_dp.jpg](http://www.damianpeach.com/barbados07/2007_05_25_0413ut_dp.jpg)

○.....**Date: Mon, 6 Aug 2007 18:48:33 +0100**  
**Subject: Jupiter in Methane Band (May 23,~27,29,30th)**

Hi all, Here is a series of Methane Band 889nm images from late May. Tough going using single exposures of several secs and winds affecting some sessions!

[http://www.damianpeach.com/barbados07/2007\\_05\\_23ch4\\_dp.jpg](http://www.damianpeach.com/barbados07/2007_05_23ch4_dp.jpg)

[http://www.damianpeach.com/barbados07/2007\\_05\\_24ch4\\_dp.jpg](http://www.damianpeach.com/barbados07/2007_05_24ch4_dp.jpg)

[http://www.damianpeach.com/barbados07/2007\\_05\\_25ch4\\_dp.jpg](http://www.damianpeach.com/barbados07/2007_05_25ch4_dp.jpg)

[http://www.damianpeach.com/barbados07/2007\\_05\\_26ch4\\_dp.jpg](http://www.damianpeach.com/barbados07/2007_05_26ch4_dp.jpg)

[http://www.damianpeach.com/barbados07/2007\\_05\\_27ch4\\_dp.jpg](http://www.damianpeach.com/barbados07/2007_05_27ch4_dp.jpg)

[http://www.damianpeach.com/barbados07/2007\\_05\\_29ch4\\_dp.jpg](http://www.damianpeach.com/barbados07/2007_05_29ch4_dp.jpg)

[http://www.damianpeach.com/barbados07/2007\\_05\\_30ch4\\_dp.jpg](http://www.damianpeach.com/barbados07/2007_05_30ch4_dp.jpg)

○.....**Date: Mon, 6 Aug 2007 20:16:22 +0100**  
**Subject: Mars Images (July 30th, 2007.)**

Hi all, Here are some images from July 30th under extremely poor seeing....

[http://www.damianpeach.com/mars07/m2007\\_07\\_30rgb\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_07_30rgb_dp.jpg)

○.....**Date: Mon, 6 Aug 2007 22:01:25 +0100**  
**Subject: Mars Images (July 31st, 2007.)**

Hi all, Here are some images from July 31st. Poor-Fair seeing. Dust obscuration is significant over this hemisphere.

[http://www.damianpeach.com/mars07/m2007\\_07\\_31rgb\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_07_31rgb_dp.jpg)

○.....**Date: Thu, 9 Aug 2007 20:19:19 +0100**  
**Subject: Mars images (August 1st, 2007.)**

Hi all, Here are some images from August 1st. Excellent seeing conditions allowed some good images, and despite the hazy Martian atmosphere some finer albedo details were captured, albeit with considerably reduced contrast from normal.

[http://www.damianpeach.com/mars07/m2007\\_08\\_01rgb\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_08_01rgb_dp.jpg)

[http://www.damianpeach.com/mars07/m2007\\_08\\_01red\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_08_01red_dp.jpg)

[http://www.damianpeach.com/mars07/m2007\\_08\\_01gb\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_08_01gb_dp.jpg)

○.....Date: Mon, 13 Aug 2007 17:46:43 +0100
Subject: Mars images (August 11th, 2007.)

Hi all, Here are some images from Aug 11th. Some very good seeing near dawn. All of the Tharsis volcanoes can be seen, and Olympus is remarkably dark. Solis Lacus is partially seen, though still mostly obscured by dust and looks rather chaotic.

http://www.damianpeach.com/mars07/m2007\_08\_11rgb\_dp.jpg

http://www.damianpeach.com/mars07/m2007\_08\_11bw\_dp.jpg

○.....Date: Mon, 13 Aug 2007 19:24:37 +0100
Subject: Mars images (August 10th, 2007.)

Hi all, Here are some images from the 10th. Fair seeing. Olympus is again well seen.

http://www.damianpeach.com/mars07/m2007\_08\_10rgb\_dp.jpg

○.....Date: Mon, 13 Aug 2007 20:12:31 +0100
Subject: Mars images (August 9th, 2007.)

Hi all, Here are some images from the 9th under very poor seeing....

http://www.damianpeach.com/mars07/m2007\_08\_09rgb\_dp.jpg

○.....Date: Mon, 13 Aug 2007 22:01:30 +0100
Subject: Mars images (August 7th, 2007.)

Hi all, Here are some images from Aug 7th. Fair seeing. Olympus Mons is located very close to the terminator.

http://www.damianpeach.com/mars07/m2007\_08\_07rgb\_dp.jpg

○.....Date: Tue, 14 Aug 2007 23:17:47 +0100
Subject: Mars images (August 5th, 2007.)

Hi all, Here are some images from Aug 5th. Olympus Mons is almost exactly at the terminator in the first image.

http://www.damianpeach.com/mars07/m2007\_08\_05rgb\_dp.jpg

○.....Date: Wed, 15 Aug 2007 22:07:57 +0100
Subject: Mars images (August 3rd, 2007.)

Hi all, Here are some images from August 3rd in pretty decent seeing:

http://www.damianpeach.com/mars07/m2007\_08\_03rgb\_dp.jpg

http://www.damianpeach.com/mars07/m2007\_08\_03bw\_dp.jpg

○.....Date: Wed, 15 Aug 2007 22:09:07 +0100
Subject: Mars images (August 2nd, 2007.)

TEN YEARS AGO (144)

---CMO #194 (25 August 1997) pp2139-2150---

CMO #194には、この期16回目のOAA MARS SECTION Reportとして16 July 1997 ~15 Aug 1997の期間の観測がまとめられている。当時の火星は、赤緯が南緯10度台に下がり、視直径は6秒角台(δ=6.9"~6.0")にまで小さくなって、夕方の観測時間は短くなっていた。北極側に大きく傾き(φ=25°N~22°N)、欠けも大きく(ι=40°~39°)、季節は北半球の夏の盛りを過ぎたところ(λ=149°Ls~164°Ls)であった。観測報告は追加分も含めて、国内七名、国外六名の方々から寄せられている。石橋(Is)氏の写真報告をのぞいては全員スケッチの報告であり、今と比べると隔世の感がある様にみえるが、観測の本質部分是不変である。

日本からは、M\_Acidaliumの夕方に見えるところから始まり、Syrtis\_Mj南中からElysiumあたりが午前側に見えるところまでが観測範囲であった。暗色模様には大きな変化はなく六月発生 of 黄雲の影響は認められなかった。北極冠は、季節が進んでいるものの、七月中は小さく認められていたが、八月になると見え難くなっていった。

LtEは、Richard\_W\_SCHMUDE (USA), Sam\_WHITBY (USA), Richard McKIM (UK), Wolfgang MEYER (Germany), Giovanni QUARRA (Italy), Johan WARELL (Sweden)の外国の各氏からのものがある。国内からは、山本進(滋賀)、石橋力(神奈川)、岩崎徹(北九州)、日岐敏明(長野)、伊舎堂弘(沖縄)の各氏の来信が紹介された。

南氏の「一点一点・一天天」は、「前事不忘、後事之師」の火星観測に関するエッセイである。巻末には、中島孝氏のシー・エム・オー・フクイから、会計報告と、カンパのお願いが掲載されている。

TYA(24)は今から廿年前のCMO#037(25\_August\_1987号)が取り上げられている。火星は27Aug1987には「合」となり、1988接近へ向けて朝方の空へ移った。この号では早速次回接近の観測情報が"Coming\_1988\_Mars"として連載が開始された由。他には写真関係の記事と、来信の紹介、沖縄金環食直前の頃で、惑星観測者懇談会の案内がなされた。 村上昌己 (MK)

ISSN 0917-7388
Communications in Mars Observations
火星 通信 No. 194
No. 16 / 1996~1997
25 August 1997
Published by the OAA Mars Section
---OAA MARS SECTION--- 南 最次 MMINAMI
この期は今年十六回目の報告で、16 Julyから15 August 1997までの観測を扱う。最も観測は困難になっているが、薄明中に上手く火星を捉えれば、未だ観測は可能である。困難の理由は視直径よりも、火星が天球を南に降りているからである。逆行中で、既にスピカの東へ出て、八月中旬で南緯12度となり、大接近を目前に過ぎて、ボヤボヤしている直ぐ西南に落ちてしまう。視直径は16Hyには6.9秒角、15Augでも6.0秒角で、それほど小さい距離ではない。季節はこの期149°Lsから164°Lsに延びた。中央緯度は25°Nから22°Nに降りて来ている。位相角ιは40°から39°と回復しつつある。
This is the 16th OAA report of this apparition, and mainly treats the period from 16 July through 15 August 1997.
The Mars observation has been more difficult, but if we catch the planet by a finder around the time of Sundown, we can obtain still a better image. The difficulty is not because of the apparent diameter δ, but because the planet is already far east of Spica, Vir, and declined very southwards (~12° in mid-Aug). The diameter δ itself was 6.9" arc on 16 July and 6.0" arc on 15 August. The season proceeded from 149° Ls to 164° Ls during the period. The central latitude φ was 25° N down to 22° N. The phase angle ι also decreased from 40° to 39°.
この期に関する観測の報告は次の通りである:
We received with thanks the following observations this time:
HIKI, Toshiki 日岐 敏明 (HK) 茨城・長野 Minowa, Nagano, Japan
3 Drawings (26, 27 Jly; 11 Aug) 340x16cm speculum
ISHADOH, Hiroshi 伊舎堂 弘 (IH) 群馬 Naha, Okinawa, Japan
3 Drawings (18, 20 Jly; 14 Aug) 530x1cm speculum
IWASAKI, Tohru 岩崎 徹 (IW) 北九州・小倉 Kja-Kyushu, Japan
12 Drawings (18, 20, 21, 22, 24, 25, 30 Jly) 400x21cm speculum
MINAMI, Masanaga 南 最次 (Ma) 福井 Fukui, Japan
34 Drawings (18, 19, 22, 23 Jly; 1, 2, 3, 8, 11, 15 Aug) 480,600x20cm refractor\*
MURAKAMI, Masami 村上 昌己 (MK) 群馬 Fujisawa, Kanagawa, Japan
8 Drawings (18\*, 19\*, 20 Jly; 3\* Aug) 315x10cm ref\*/370x15cm spec/ /400x20cm ref\*/(多摩天体観測所 Tama Astro-Observatory)
NAKAJIMA, Takashi 中島 孝 (NJ) 福井 Fukui, Japan
17 Drawings (18, 19, 20 Jly; 2, 11, 15 Aug) 480,600x20cm refractor\*
SCHMUDE, Richard W, Jr リチャード・シュムード (RS) ジョージア GA, USA
3 Drawings (3, 6 Aug) 380x51cm speculum
2 1 3 9

Here are some images from August 2nd under very poor seeing conditions. Best Wishes

○.....**Date: Fri, 17 Aug 2007 20:58:40 +0100**  
**Subject: Jupiter with Oval BA - May 28th, 2007.**

Hi all, Here is a set of images from May 28th showing Oval BA.

[http://www.damianpeach.com/barbados07/2007\\_05\\_28\\_0557ut\\_dp.jpg](http://www.damianpeach.com/barbados07/2007_05_28_0557ut_dp.jpg)

○.....**Date: Sat, 18 Aug 2007 15:13:21 +0100**  
**Subject: Mars images (August 17th, 2007.)**

Hi all, Here are some images from Aug 17th. This hemisphere has cleared allot since a month ago, though there is still significant airborne dust reducing contrast, and some areas also seem obscured (Mare Acidalium etc.) Nilokeras is faintly seen. Solis Lacaus and Auroræ Sinus are visible, Solis Lacus looking "altered" to its pre-storm appearance. Ascræus Mons is seen near the bright limb.

[http://www.damianpeach.com/mars07/m2007\\_08\\_17rgb\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_08_17rgb_dp.jpg)

[http://www.damianpeach.com/mars07/m2007\\_08\\_17bw\\_dp.jpg](http://www.damianpeach.com/mars07/m2007_08_17bw_dp.jpg)

○.....**Date: Mon, 20 Aug 2007 13:39:10 +0100**  
**Subject: Jupiter with STRD1 & 2 - May 23rd, 2007.**

Hi all, Here is a set from May 23rd showing the section of south tropical zone between STRD-1 and 2 (both STRDs lie at either side of the disk. Oval BA is just appearing at right.

[http://www.damianpeach.com/barbados07/2007\\_05\\_23\\_0437ut\\_dp.jpg](http://www.damianpeach.com/barbados07/2007_05_23_0437ut_dp.jpg)

Best Wishes

**Damian PEACH** (デミアン・ピーチ Bkh 英)

●.....**Date: Sat, 28 July 2007 20:41:31 -0700**  
**Subject: Mars July 28, 2007**

More Mars coverage-a bit difficult to make out any familiar markings. Best Wishes,

○.....**Date: Wed, 1 Aug 2007 14:48:30 -0400**  
**Subject: Mars July 31, 2007**

Dust still obscuring familiar features on this side of the globe. Best Wishes,

○.....**Date: Sat, 18 Aug 2007 12:46:17 -0400**  
**Subject: RE:Mars July 21, 2007**

Been a while for imaging Mars - conditions haven't been favorable for a couple weeks. Some observations from yesterday morning. Best Wishes,

○.....**Date: Tue, 21 Aug 2007 16:01:00 -0700**  
**Subject: Mars August 20, 2007**

Images from yesterday morning. A dark Olympus Mons near the terminator. Best Wishes,

○.....**Date: Wed, 22 Aug 2007 16:34:11 -0700**  
**Subject: Mars August 21, 2007**

RGB and IR images from yesterday morning. Best Wishes,

**Ed LOMELI** (エド・ロメリ Sacramento CA 美)

●.....**Date: Fri, 27 July 2007 18:52:46 EDT**  
**Subject: Re: Mars July 27th**

Hi, An early morning Mars at seven arc secs. Syrtis Major looks reasonably clear here, yet the Hellas Basin appears very reflective to me both visually, and photographically. Best Wishes

○.....**Date: Mon, 30 July 2007 15:32:42 EDT**  
**Subject: Re: Mars Images (July 24th, 2007.)**

Morning all, Up early for a look at Mars. Seeing was

very poor, but much notably - the weather on Mars itself. Dust seems to be obscuring everything at the moment. Hesperia region can be seen, and Sinus Gomer is just discernable. Using Damien's Mars image maps in Jupos really help to enrich observations. They have become an invaluable tool. Thanks Damien.

Our thoughts go out to two little rovers on a barren, and hostile Planet. Best regards

**Bruce KINGSLEY** (ブルース・キングスレイ UK 英)

●.....**Date: Mon, 30 July 2007 17:13:09 +0200**  
**Subject: Mars 27th july 2007**

Dear Mars observers, Here is one my my latest drawing of Mars. I actually also observed it this morning (3:23 UT July 30), but did not scan the sketch yet. Weather was not very favourable in northern France this July, but luckily, sometimes when the sky was to be clear and relatively stable, this was at the time to observe Mars (morning twilight around 5h30 local time)... clearing up just before or getting cloudy minutes after... Generally, Mare Cimmerium and Tyrrhenum seem to show their usual shape, but quite dimmer than usual, I think. Syrtis Major was not really seen (except a bit of its northern part), this longitude seeming quite obscured by dust. The SPC was guessed, or at least a brighter region on the south pole limb. Clear Skies,

○.....**Date: Mon, 30 July 2007 17:19:00 +0200**  
**Subject: Re: Mars 17, 21, 25 july 2007**

Dear CMO coordinators, Richard,... To complete my previous e-mail, here are my drawings of the red planet done since my July 14 observation - all with the 25.6-cm Newtonian, ×507 magnification.

Thank you also for continuing on sending me the CMOs, and let me also know if you wish me to send you printed copies of my drawings by regular mail, too.

Regards,

○.....**Date: Tue, 31 July 2007 10:39:19 +0200**  
**Subject: RE:Re: Mars 17, 21, 25 july 2007**

Dear Masatsugu, Many thanks for your long e-mail. I must apologize for not having talked much to you earlier about the plan to get a Mars observers,... international meeting in Meudon in 2009 - although I got the e-mails about the project,...

I just talked yesterday afternoon to Francis Oger about this project, before he leaves to Japan and probably visit you in the coming weeks. He suggested we put this plan to hold such a meeting in France in 2009 at the agenda of the september SAF council meeting - and I will support it as another council member. I did do a lot with the SAF for the IWCA III (International Workshop on Cometary Astronomy) meeting in Meudon/Paris in June 2004 and we shall use this experience for an upcoming Mars meeting.

By the way the IWCA IV should be in Japan in July 2009 (at the time of the great solar eclipse): I haven't decide yet, but will probably try to go there - we should just avoid the 2 meetings to overlap! Clear Skies,

**Nicolas BIVER** (ニコラ・ビヴァール Versailles 法)

●.....Date: Tue, 31 July 2007 08:57:11 +0100  
Subject: RE: Mars image 2007 July 19th

Hello again, yes, please do. I'm still learning how to better process my pictures and Mars being so small at present presents a particular challenge.

In my raw data from the morning of July 27th it seemed that Hellas (or clouds over it) was brilliant for about 20 minutes after rounding the limb, but I am still struggling to get the data combined to into an acceptable image to submit. Hopefully I'll have more for you soon regards for now

○.....Date: Sat, 4 Aug 2007 17:16:52 +0100  
Subject: Mars image 2007 August 4th

Gentlemen, another picture of Mars, taken this morning is attached, only in red light again, I'm afraid. Still finding it very difficult to capture anything like the wealth of detail seen visually in a photograph and this is the best of a poor bunch. The subtle differences in tone and small detail drawn this morning in very good seeing are lost in my attempts to catch them with the camera. I am still drawn to a comparison to observing Venus rather than a more conventional aspect of Mars. Only the deep south at this longitude (180 degrees) beyond Mare Sirenum / Mare Chronium seemed completely obscured by creamy yellow clouds, elsewhere at least some detail was seen.

best wishes for now

○.....Date: Sun, 12 Aug 2007 20:18:03 +0100  
Subject: Mars image August 12th

Gentlemen, please find attached a Mars image from this morning, not great, but at least in colour now! Still finding it hard to capture anything like the detail seen visually in a photograph, but the improvement in altitude of Mars by dawn now does help, even if the disk remains so small. Hope this is of interest. best regards

Ian HANCOCK (イアン・ハンコック Canterbury 英)

●.....Date: Wed, 01 Aug 2007 00:38:53 +0200  
Subject: Mars, 31 July 2007

Hi all, The long wavelengths do show the classical dark markings and no obvious dust cloud is detected. However, the RGB image is still very poorly contrasted because of the lifted dust.

<http://www.astrosurf.com/pellier/M070731-CPE>

Best wishes

○.....Date: Thu, 02 Aug 2007 09:12:52 +0200  
Subject: Jupiter on July 31th

Hi all - my 9th set of the apparition... :-//

<http://www.astrosurf.com/pellier/J070731-CPE>

○.....Date: Fri, 03 Aug 2007 15:23:49 +0200  
Subject: Mars 1st August 2007

Images of the same area near mare Cimmerium. The RGB is still dusty but as Don said, the IR image show the markings to be recovering at these longitudes.

<http://www.astrosurf.com/pellier/M070801-CPE>

Regards

○.....Date: Sun, 05 Aug 2007 10:14:40 +0200  
Subject: Mars 4th August 2007

Hi all, Finally a bit of good seeing yesterday morning.

<http://www.astrosurf.com/pellier/M070804-CPE>

No active dust clouds is detected, so maybe the storm

has just began the decay phase. However the markings are still not clear in red light, even if they are now detected in green (cf. Larry's latest). Regards

○.....Date: Mon, 06 Aug 2007 15:05:58 +0200  
Subject: Jupiter 4th August 2007

Very good seeing for the altitude during twilight.

<http://www.astrosurf.com/pellier/J070804-CPE>

○.....Date: Mon, 13 Aug 2007 19:04:55 +0200  
Subject: Mars, 10 and 11 August 2007

Hi all, <http://www.astrosurf.com/pellier/M070810-CPE>  
<http://www.astrosurf.com/pellier/M070811-CPE>

In complement to Damian's better ones. I think that the Tharsis volcanoes show well first because of their shadows but also thanks to the airborne dust (just like in 2001). The most important information for me is the proven absence of the Arsia cloud (see the B image from the 11th, it's dark). This can only happen if the atmosphere is really dusty (again look for 2001's classical images). Contrast in visible light remains weak. Best wishes

○.....Date: Mon, 13 Aug 2007 19:42:41 +0200  
Subject: Jupiter 10 and 11th August

Hi all, some testimony images, no chance to escape from the binning mode of imaging :-//

<http://www.astrosurf.com/pellier/J070809-CPE>

<http://www.astrosurf.com/pellier/J070810-CPE>

○.....Date: Tue, 14 Aug 2007 11:19:49 +0200  
Subject: Re: Mars, 10 and 11 August 2007

Dear Richard, I was also thinking that the dust was settling a bit (or at least at those longitudes) but I have seen this morning images on CMO and ALPO Japan of the other side of the planet, where vast regions look completely bland with dust (Sinus Meridiani is completely invisible). So the storm is still raging. Regards

Christophe PELLIER (クリストフ・ペリエ nr Paris 法)

●.....Date: Tue, 31 July 2007 23:15:00 +0330  
Subject: mars

Hi Mr Masami MURAKAMI, thank you very much for your E.mail i sent one image from 31 July for your site when you admire put in your site & I want tell you tomorrow I send information about my photography .

equipment : celestron C11 f38 & focal length 2700 mm  
=ToUcam pro mono III = IR Cut filter+ astronomic RGB filter  
+losmandy G 11 mount , this image I took in IRAN Tehran  
.Latitude: 35.68, Longitude: 51.32. & our UTC Time 3.30 h  
minus with GMT. Many Cheers

○.....Date: Fri, 10 Aug 2007 07:28:02 +0330  
Subject: mars

Hello Mr MINAMI, I sent one nice image for you i think the storm slowly had go.i don,t konw exactness.

○.....Date: Tue, 14 Aug 2007 09:55:16 +0330  
Subject: mars 14

Hi Mr MINAMI, I took one image from 14 August PLS see you it . And I want tell you , I will go for Deepsky photography out of Tehran & i can not mars image send to you at this time after 10 days i start again & mars feature also to be better. Cheers

Sadegh GOMIZADEH

(サデク・ゴミザデ Teheran 伊朗)

●.....Date: Wed, 1 Aug 2007 23:50:45 +0900  
Subject: お礼

・・・火星は22日～27日、30日と撮ってはいますが処理が遅れています。170°W～110°W、90°W迄は撮っていますので、また送ります。オリュムポス・モンスがはっきりと見えていました。

○.....Date: Fri, 17 Aug 2007 00:04:28 +0900  
Subject: Mo08 14Aug\_07

村上さんよりメールを頂きました。  
とりあえず8日と14日の画像をおくりします。

○.....Date: Tue, 21 Aug 2007 00:32:40 +0900  
Subject: Mo15, 16, 17, 18Aug\_07

15,16,17,18日を処理しましたのでお送りします。  
19日は撮れませんでした。

○.....Date: Tue, 21 Aug 2007 23:52:47 +0900  
Subject: RE:Mo15, 16, 17, 18Aug\_07

メール有難うございます。現在撮り貯めている

日時は

22July	152～172°W	23July	142～161°W
24July	134～155°W	25July	125～141°W
26July	112～131°W	27July	111～122°W
30July	094～102°W	09Aug	335～357°W
10Aug	329～352°W		

となっています。出来るだけ早めに処理しようとは思っているのですが…

○.....Date: Wed, 22 Aug 2007 22:25:12 +0900  
Subject: RE:Mo15, 16, 17, 18Aug\_07

撮ったSetは40分毎です。が、20分で撮り直したものもあり、28 Setsと思います。

雷が多く、帰ってからの処理に苦慮しています。

森田 行雄 (Yukio MORITA 廿日市 Hiroshima)

↗

## ときどき歳時記

### (2)◆旧暦のすすめ◆旧暦カ

レンダーでスローライフを楽しんでいる方々がいるという。旧暦のほうが、春の

七草・桃の節句などに季節的ずれを感じる事が無く、生活感覚や行事に即しているという事らしい。以下に述べるが、旧暦では二十四節気の正月中「雨水」を一月におくことを基準にしているから、太陽暦とずれが出て来て当然といえる。

「雨水」(黄経330°)は太陽暦では二月下旬に訪れる。◆様々な季節行事を旧暦で行うのが現在でも各地に残っている。有名な用瀬もちがせの「雛流し」も今年も(三月3日でなく)四月19日行われている。確かに桃の花の季節である。◆星好きのわれわれにも馴染みの「七夕」は七月初旬では本州各地は梅雨のさなかで、星空もままならぬのは例年のことである。新暦ではまず七日月は望めない。今年の七夕は旧暦では八月19日になった。午後8時のベガの地平高度を比べても東京では50°と、80°の違いがあり、八月ともなれば既に空は暗く、上弦前の七日月は西に傾き、南東の空には、牽牛・織女が高く昇っていて、七夕星を見るにも、やはり旧暦の方が適しているのである。◆月の満ち欠け(朔望月=約29.5日)を元に作られた太陰暦では、ひと月は29日か30日間で、朔日(1日)が新月で15日が満月となり、日月食の起きる日付はほぼ決まっている。潮の満ち干などにも関連づけられ、人間の生活リズムとも合っているとされるが、太陽暦より年間で11日少なく、続けて使っていると、四季のある中緯度の国では季節がずれてしまう。◆

そこで考案されたのが、現在旧暦といわれる太陽の動きを加えた太陰太陽暦で、一年を二十四等分して二十四節気(冬至から冬至までなど太陽の南中高度を元に定めたと思われる)として、それをもとに十九年に七回の閏月を加えて季節を調整している。◆二十四節気は、立春正月節・雨水正月中などと十二ヶ月に二つの節気(節・中)を割り当てていく。節気の間隔は(15.2日=365.25日/12)で、二つの節気の日数は一朔望月よりも長いことから、太陰暦の一ヶ月間に二十四節気の「中」を含まない月が現れる。この月を閏月とする。年によっては十三ヶ月の年があるということになる。◆初春・迎春などの賀詞があるとおり、春の始まりの、立春・雨水ころを年初とするのが農耕民族には感覚的に合ったのだろう。◆ただ、旧暦側から見ると、こういうこともある。今年がそうなのだが、旧暦で雨水の日が朔日(新月)のすぐ後だと、正月節の立春(黄経315°)は前年十二月に入ってしまう(今年は二月4日が立春、二月18日が春節であった)。そこで、『古今和歌集』冒頭 卷第一 春歌上に「ふるとしに春立ちける日よめる」として

年の内に春は来ひととせにけり一年を

去年とやいはむ今年とやいはむ 在原元方

などとなる。暦日と節気のずれは古より公家たちには関心事であったみえる。◆新暦側から見ると、立秋(黄経135°)は八月8日前後である。以後、更に暑くなるうがなべて残暑である。風は秋風、季語は秋となる。◆山歩きは遠ざかって久しいが、自然の中で、スローライフを楽しみたいと思う心境はいまもある。

(村上 昌己 Mk)

●.....Date: Thu, 2 Aug 2007 20:57:16 +0100  
Subject: Saturn 2007 April 28

This is my last Saturn image from the 2006/7 apparition. No spots seen on this date. Now have to get up to date with the Jupiter, Venus and Mars backlogs!

○.....Date: Fri, 3 Aug 2007 01:23:32 +0100  
Subject: Jupiter 2007 July 17

Here are some images of Jupiter and Europa taken on the 17th in good conditions for London, just before I went to France to try to get some from a lower latitude. Turbulence following GRS is well-seen. The GRS itself has a dark S edge and centre. S Trop disturbance is visible on the f side with a hint of the dark spots circulating round it. There are also some interesting brick-red spots in the NEB N edge.

○.....Date: Wed, 8 Aug 2007 01:44:22 +0100  
Subject: Jupiter 2007 July 19

During late July I visited Olly Penrice's excellent observing "retreat" Les Granges, in Haute Provence, France. Part of the motivation for this was to be able to image Jupiter with about 7 deg. more altitude than is possible from London. I used Olly's 10" Meade LX200 (wedge-mounted), with my own filters, Barlow, and DMK camera. Here is the first evening's results.

○.....Date: Fri, 17 Aug 2007 21:36:14 +0100  
Subject: Mars 2007 July 21

Here is a Mars image from my stay in France, through Olly Penrice's Meade. Dia. 7". Classical albedo features visible through the dust using IR, slight evidence of SPC.

○.....Date: Thu, 23 Aug 2007 00:30:39 +0100  
Subject: Mars 2007 July 30

In these images, Mare Cimmerium is quite clear, plus Cerberus to the N, plus the SPC.

I am surprised that they are shown with much more contrast than in the images from my "neighbours" Damian Peach and Bruce Kingsley from the same night. Could be just "lucky seeing". In any case, there is a lot of dust obscuration acting here as well.

○.....Date: Thu, 23 Aug 2007 02:27:46 +0100  
Subject: Mars 2007 August 01

Slightly clearer again than the last set, but marred by a strong edge-effect. IR here used as luminance. The limb brightness in G/Y is perhaps not entirely an artificial effect, but indicative of the dustiness?

○.....Date: Thu, 23 Aug 2007 22:36:15 +0100  
Subject: Mars 2007 August 03

In these images, Mare Sirenum is visible, with an interesting streak in Memnonia, about the centre of the disk.

○.....Date: Thu, 23 Aug 2007 23:45:33 +0100  
Subject: Mars 2007 August 05

My first shots with the Lumenera. These do not appear to be particularly successful compared with my DMK shots. However, I was underestimating at first the extent to which the Lumenera needs extra image amplification to compensate for the bigger chip compared to the DMK (and Toucam). In subsequent sessions (still to be sent) I did increase the image scale further. It needs to be about 150% of that used with the quarter-inch chip cameras. Here the images were just blown up 300% in Photoshop. Mare Sirenum visible again.

○.....Date: Fri, 24 Aug 2007 18:10:59 +0100  
Subject: Mars 2007 August 07

Another set with the C11/Luminera, this time capturing faintly (my first for this apparition) Olympus Mons on the terminator.

**David ARDITTI** (テウァイト・アデイチ Edgware ME 英)

●.....Date: Mon, 6 Aug 2007 00:26:28 +0100  
Subject: Mars 2007-08-05 MMT LR(G)B

Dear All, An image of Mars from this morning, not much good, but the best I could do. It's LR(G)B with the red from an IR 742 filter. Low contrast presumably due to dust and no ice cap. All the best!

○.....Date: Sat, 11 Aug 2007 23:33:08 +0100  
Subject: Mars 2007-08-11

Dear All, Mars at 05:00UT this morning IR R(G)B in variable seeing, but mostly reasonable, from Leicester UK. Regards

**Martin M TAYLOR** (マーチン・テーラー Leicester 英)

●.....Date: Mon, 6 Aug 2007 22:23:46 EDT  
Subject: Mars: August 5, 2007

Hi - I have attached my latest image of Mars August 5th at 9:55 UT to be posted. Thank You,

○.....Date: Tue, 7 Aug 2007 00:11:16 EDT  
Subject: Re: Uranus from Australia - 6th August 2007

Mike - Excellent images of Uranus!

DON'T GIVE UP!!! Yes, it is kind of disappointed at first when imaging Uranus. But you never know. Already, it is showing smaller storms in larger professional telescopes and one of these storms could be big enough to appear in amateur scopes. Uranus is going through edge-on to us this year and it is not to be missed.

Try B&W imaging with a red filter say Wr. #25 or RG610 where the contrast is the strongest. You still may pick up the brightening of the SPR which is starting to tilt away from us. You have Uranus' moons which you see in a straight line like Jupiter's moons. Also, the moons are going through the mutual events of occultations, eclipses and transits like you see on Jupiter every six years. Yes, the Mutual Events of Uranus' moon is VERY DIFFICULT. I wouldn't say it is impossible. But amateurs with larger scopes may be lucky to see one or two events under the best condition.

So, if you plan it carefully in advance I believe you can succeed!

**Frank MELILLO** (フランク・メリッロ Holtsville NY 美)

●.....Date: Tuesday, 7 Aug 2007 21:31+0900  
Subject: ご無沙汰しております。

ご無沙汰しております。柚木です。今シーズンも観測の真似事の撮像を始めました。拙い画像ですがよろしくお願ひします。

**柚木 健吉** (Kenkichi YUNOKI 堺 Osaka)

●.....Date: Thu, 9 Aug 2007 18:18:24 +0900  
Subject: 『火星通信』 拝受

南様、昨日、『火星通信』がセブに着いております。いつもありがとうございます。先週、セブに

戻ってきました。セブは連日曇りで星が見えない状態です。日本では地元のお祭り関連の行事参加が今回のメインとなり、日本帰国がアツと言う間に過ぎてしまいました。日本の方がこの季節は暑いですね。今回、C-14鏡筒(重さ約20kg)を手荷物でセブへ持って来ました。C-14ともなると流石に大きくなり、手荷物の限界かなと思いましたが、結果的に何のトラブルも無く持ち込めたのはとても幸運でした。赤道儀は船便で送りましたので早ければ8月末には着く筈です。しかし、フィリピンでは日程は読めないのが困ります。9月にはC-14で火星観測が出来るものと願っていますが、まだまだハードルがあります。



赤道儀は船便で送りましたので早ければ8月末には着く筈です。しかし、フィリピンでは日程は読めないのが困ります。9月にはC-14で火星観測が出来るものと願っていますが、まだまだハードルがあります。

●.....Date: Mon, 13 Aug 2007 13:32:02 +0900  
Subject: 火星画像 AKM070811

南、村上様、ご無沙汰しております。先週末から晴れはじめ、星が見えるようになってきました。これは一時的なものでしょう。火星画像をChris宅のC-11で撮像しましたので添付します。今回から持参したDMK21AF04に変えましたが、BJ-41Lよりも良い結果が出そうです。

火星画像に使うギリシャ文字のフォントがありませんので添付ファイルで送ってくださいますか？ お願いいたします。

●.....Date: Mon, 13 Aug 2007 18:09:40 +0900  
Subject: RE:火星画像 AKM070811

郵便事情が悪いのはこの国では仕方ない事で全てがフィリピンなんです。日本と比べると情けないくらいひどい事が多くて呆れてしまいます。その中でも良いことは気流が安定している事でこれが私の救いになっています。他は期待できません。このことを肌で自覚できる迄二年を要しました。

C-14筒の移動はものが大きく機内持ち込みが出来ないので預けました。投げないように書いてもらい、筒もプチプチの断衝材を三重に巻き、衝撃による割れを防いだところ、何の故障も無く、セブに持ち込めました。no charge, no Taxだったので苦労して持ってきた甲斐がありました。

●.....Date: Tue, 21 Aug 2007 11:54:23 +0900  
Subject: 木星画像 070819

こんにちは、今回よりDMKカメラに変えて画像を取っています。機能把握に時間がかかるようですが、感度は良好です。

**阿久津 富夫**(Tomio AKUTSU セブThe Philippines)

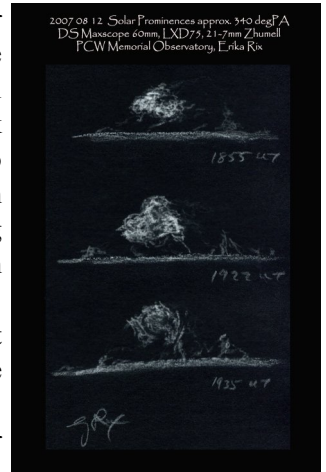
(註) Tomio AKUTSU stayed at home in Japan for a while at the end of July, and when he returned to Cebu, he was successful to carry his C-14 tube (weighed 20kg) with him safely to the Cebu airport. The photo here cited was taken at Cebu. Other apparatuses are still on the way by ship, and he hopes he will be able to shoot Mars from September by the C-14. (Ed)

●.....Date: Sun, 12 Aug 2007 18:45:35 -0400  
Subject: h-alpha sketches 2007 08 12

The white light filter views of the new active region showed better detail than h-alpha with a very dark umbra. But h-alpha had two very defined plage areas with a hairline filament among them. Adjusting the Etalon brought out numerous lightened areas branching out from both this region and the larger plages of 10966.

Please excuse the poor color sketch of the two regions. I'm still working on my technique and with the heat today, it wasn't very pleasant to view.

**Erika RIX** (エリカ・リックス Zanesville OH 美)



●.....Date: Mon, 13 Aug 2007 09:05:14 -0700

Subject: Mars Images - August 9 & 12

Gentlemen, I am submitting a set of images from August 9 and August 12. Regards,

●.....Date: Wed, 15 Aug 2007 18:22:16 -0700  
Subject: Mars Image - 2007-August-11

Gentlemen, I am submitting a set of images from August 11. Regards,

**Peter GORCZYNSKI** (ピート・ゴールチンスキイ CT 美)

●.....Date: Tue, 14 Aug 2007 03:36:38 EDT  
Subject: Re: Mars, 10 and 11 august 2007

Cher Christophe et al, Many thanks for these excellent results. Please note the change in orientation of Solis Lacus (and latered surrounding details, especially to the west (IAU)). To me the area most strongly recalls the early drawings and crude photos from the 1926 and 1928 apparitions.

It seems the dust is slowly settling. If anyone is doing polarisation measurements I would be interested in nay details. With best wishes

**Richard McKIM** (理查・麥肯 Peterborough 英)

●.....Date: Sun, 19 Aug 2007 08:47:43 -0500  
Subject: Mars August 19th

Here is an observation on August 19th at 11:11 UT from Houston Texas. Seeing 7/10, transparency 4/10.  
<http://www.ghg.net/egrafton/08-19-07.jpg>

●.....Date: Mon, 20 Aug 2007 14:25:19 -0500  
Subject: Mars 20 August 10:46 UT

Here is an observation on August 20th at 10:46 UT from Houston Texas. Seeing 6/10, transparency 7/10.  
<http://www.ghg.net/egrafton/08-20-07.jpg>

●.....Date: Fri, 24 Aug 2007 08:33:04 -0500  
Subject: Mars 8-24-07 11:17 UT

Obsevation from Houston Texas 8-24-07 at 11:17 UT, seeing 7/10, transparency 7/10.  
<http://www.ghg.net/egrafton/08-24-07.jpg>

**Ed GRAFTON** (エド・グラフトン Houston TX 美)

**Ser2-0720**

●.....Date: **Mon, 20 Aug 2007 13:48:42 +0200**  
 Subject: **Mars 20 August 2007**

Dear Masatsugu, I send you a new image from 20 August. The marsian atmosphere seems to clear off (?). Three images from the last week will follow. With best wishes

Camera: DMK 21AF04 at 685nm / ToUCam Pro 740 for RGB  
 Telescope: 12,5" Newton (f= 11m)

○.....Date: **Wed, 22 Aug 2007 00:02:34 +0200**  
 Subject: **Mars 20 August 2007**

Dear Masatsugu, thank you for your friendly mail, which i received yesterday.

In the attachement i send you the announced images from 14., 17. and 18. August. Seeing at 17. August was a whole catastrophe (the altitude of the sun was about 15°). With best wishes

**Ralf GERSTHEIMER**

(ラルフ・ゲルシュトハイマー Habichitswald 徳)

●.....Date: **Mon, 20 Aug 2007 16:19:17 -0500**  
 Subject: **Mars - August 12, 2007**

Dear Masatsugu, I finally made it out to our club's observing site in Columbus, Texas and was able to get

some images of Mars. Attached is the image that I acquired on the morning of August 12. Mars is still pretty much hidden behind the trees in my backyard so I have to make a trip out of town to get a clear shot at it. The weather's been pretty rainy and cloudy here lately so its been tough to image Mars this summer. Hopefully the weather will cooperate better in the fall and winter!

I hope everything is going well for you in Japan!

Best Regards,

○.....Date: **Tue, 21 Aug 2007 17:13:30 -0500**  
 Subject: **RE: Mars - August 12, 2007**

Dear Masatsugu, I'm looking forward to getting some more Mars images. It should soon begin to rise above the trees here in the early morning hours. I'm going to have a look this morning and see how close it is.

It looks like we have managed to dodge Hurricane Dean! Hopefully our luck will continue this season.

The meeting in Paris in 2009 sounds interesting. I hope to be able to make it there! Best Regards,

**Bill FLANAGAN** (ビル・フラナガン Houston TX 美)

☆☆☆

シー・エム・オー・フクイ

中島 孝 Nj

★前回報告以降、佐藤 利男(395)様、フランシス・オジェ(Francis OGER)(396)様よりカンパを頂戴しました。有難うございました。不一

★この夏、フランスのオジェさんをご夫妻で長野県でペルセウス流星群を見られた後、久しぶりに三国と福井市自然史博物館天文台を訪問され、八月18日と19日の夜を天文台で過ごされました。オジェさんはパリ大の数学者ですが、ソルボンヌの天文台でSAFの観望会を担当するそうで、現在SAFのgeneral\_secretary(フラマリオンが占めていた地位)として活躍されています。南さんと三国で2009年の計画について詳しく話し合った様です。

★Francis OGER, *secrétaire général* of the SAF, visited Mikuni and the Fukui City Observatory with his wife Yoko and spent two nights with us at the Observatory on 18 and 19 August. Unfortunately the planet Mars looked obscured by the Noachis dust, but he was able to catch some shade and light aspects. Here is a photo inside the dome. From left to right: NAKAJIMA, OGER and MINAMI on the morning of 20 August JST. The refractor is pointing to the planet Mars. (Nj)



☆ **Kasei-Tsushin CMO** (Home Page: [http://www.mars.dti.ne.jp/~cmo/oaa\\_mars.html](http://www.mars.dti.ne.jp/~cmo/oaa_mars.html))

『火星通信』 #335 (25 August 2007) 編集: 南 政次(Mn)、村上昌己(Mk)、中島 孝(Nj)  
 西田 昭徳(Ns)、常間地 ひとみ(Ts)

Edited by: Masatsugu MINAMI, Masami MURAKAMI, Takashi NAKAJIMA,  
 Akinori NISHITA and Hitomi TSUNEMACHI

発行 Published by/for: 東亜天文学会 OAA 火星課 Mars Section

☆ Any e-mail to CMO is acknowledged if addressed to

[cmo@mars.dti.ne.jp](mailto:cmo@mars.dti.ne.jp) (Masami MURAKAMI at Fujisawa)

[vzv03210@nifty.com](mailto:vzv03210@nifty.com) (Masatsugu MINAMI at Mikuni-Sakai)

☆ Usual mails to CMO are acknowledged if addressed to

Dr Masatsugu MINAMI, 3-6-74 Midori-ga-Oka, Mikuni, Sakai City, Fukui, 913-0048 JAPAN

☎ 913-0048 福井県坂井市三国町緑ヶ丘3丁目6-74 南 政次 (☎/FAX 0776-82-6222)

