

## MARS

No. 311

25 October 2005

## OBSERVATIONS

Published by the OAA Mars Section

CMO 2005 Mars Report #12

OAA Mars Section

*CMO Mars Observations during the First Half of October 2005**from 1 October (298°Ls) to 15 October 2005 (307°Ls)*

2005年十月前半(1 Oct~15 Oct)の火星面観測

南 政 次 Masatsugu MINAMI

This time we deals with the period from 1 Oct 2005 ( $\lambda=298^\circ\text{Ls}$ ) to 15 Oct 2005 ( $\lambda=307^\circ\text{Ls}$ ): This period is interesting because it contains  $\lambda=300^\circ\text{Ls}$  where the 1973 dust storm occurred. The apparent diameter  $\delta$  went up from 17.9" to 19.4" large enough to catch the details, and the central latitude  $\phi$  was from  $11^\circ\text{S}$  to  $12^\circ\text{S}$ , enough to see the deep north polar region. The phase angle  $\iota$  rapidly decreased from  $30^\circ$  to  $21^\circ$  changing the aspect of the shade-and-light markings. The Martian altitude at meridian is quite high seen from the NH.

♂.....今回は1Oct( $\lambda=298^\circ\text{Ls}$ )から15Oct( $\lambda=307^\circ\text{Ls}$ )2005を扱うが、1973年の大黃雲の季節 $\lambda=300^\circ\text{Ls}$ を含んでいて重要な季節である。視直径 $\delta$ はこの期間に17.9"から19.4"に延び、充分の大きさになった。中央緯度 $\phi$ は $11^\circ\text{S}$ から $12^\circ\text{S}$ と下がりつつあるが、まだまだ北極域の見える範囲である。位相角 $\iota$ は $30^\circ$ から $21^\circ$ に急速に落ちている。このため明暗模様の様相が変わってくる。南中高度は北半球からは天頂近く屈折では首が痛くなる。

♂.....The observers who contributed this period are as follows: 今回の報告観測者と観測状況は次の通りである。

ADCOCK, Barry バェリィ・アドコック (BA<sub>d</sub>) 墨爾本 Melbourne, Australia

2 CCD Images (14, 15 October 2005) 36cm Schiefspiegler with ToUcam Pro

ADELAAR, Jan ヤン・アデラル (JA<sub>d</sub>) 荷蘭 Arnhem, Nederland

5 Sets of CCD Images (6, 11, 12, 15 October 2005)  $f/40, 35 \times 23\text{cm}$  SCT with a ToUcam

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

29 Colour + 4 IR + 1 Set of CCD Images (2, ~5, 8, 10, ~15 October 2005)  
 $f/28 \times 20\text{cm}$  SCT with ToUcam

ALDERWEIRELDT, Tom トム・アルデルヴァイレルト(TA<sub>d</sub>) 比利時 's-Gravenwezel, Belgium

1 CCD Image (15 October 2005)  $f/33 \times 35\text{cm}$  SCT with ToUcam pro

ANDERSON, David デヴィッド・アンダーソン (DA<sub>d</sub>) 南卡羅萊納 nr Greenwood, SC, USA

1 CCD Image (13 October 2005)  $f/42, 55 \times 40\text{cm}$  spec with a ToUcam 740

ARDITTI, David デヴィッド・アーディッチ (DA<sub>r</sub>) 英國 Stag Lane Observatory, Middlesex, UK

4 CCD Images (1, 4 October 2005)  $f/50 \times 25\text{cm}$  D-K with ATK-IHS II

- ASADA, Tadashi 淺田 正 (As)** 福岡・宗像 Munakata, Fukuoka, Japan  
9 Colour CCD Images (9, 12 October 2005) 30cm SCT with a Panasonic MX5000, ST-5C
- BATISSARD, David ダヴィド・バティサル (DBs)** 法國, Clermont-Ferrand, France  
2 CCD Images (9, 15 October 2005) 35cm SCT with an ATK-1C
- BATES, Donald R ドン・ベーツ (DBt)** 德克薩斯 Houston, TX, USA  
2 CCD Images (1, 14 October 2005)  $f/28, 30 \times 25$ cm spec with a ToUcam
- BOLZONI, Simone スイモーネ・ボルツォーニ (SBI)** 義大利 Busto Arsizio, Italia  
3 CCD Images (12, 13, 14 October 2005) 20cm SCT with ToUcam Pro II
- BOSMAN, Richard リシャルト・ボズマン (RBs)** 荷蘭 Enshede, Nederland  
1 Set of CCD Images (4 October) 28cm SCT with an ATK-2HS
- BUDA, Stefan スティーファン・ブダ (SBd)** 墨爾本 Melbourne, Australia  
1 Set of CCD Images (14 October 2005)  $f/30 \times 40$ cm D-K with a ToUcam Pro
- BUNGE, Robert ボブ・バンジ (RBg)** 馬里蘭 Bowie, MD, USA  
1 Drawing (3 October 2005) 260, 480×43cm  $F/7.8$  spec
- CHAIKIN, Andrew アンドルー・チャイキン (ACK)** 佛蒙特 Arlington, VT, USA  
1 CCD Image (2 October 2005) 28cm SCT with a ToUcam
- CHAVEZ, Rolando ロランド・チャヴェス (RCv)** 喬治亞 Powder Springs, GA, USA  
1 CCD Image (2 October 2005)  $f/50 \times 25$ cm  $F/12.5$  Maksutov with a ToUcam
- DICKINSON, William H ビル・ディキンソン (WDc)** 維吉尼亞 Glen Allen, VA, USA  
3 Colour CCD Images (1, 3 October 2005)  $f/30, 50 \times 20$ cm SCT with a ToUcam Pro II
- FRIEDMAN, Alan アラン・フリードマン (AFd)** 紐約 Buffalo, NY, USA  
2 Sets of CCD Images (18 September, 3 October 2005)  
 $f/45 \times 25$ cm Mak-Cass with B&W firewire webcam (model DMK21BF04)
- FUMEGA UCHA, Camilo カミーロ・フメガ (CFm)** 西班牙 Ourense, España  
1 CCD Image (9 October 2005) 31cm spec with a ToUcam
- GORCZYNSKY, Peter ピータ・ゴルチンスキイ (PGc)** 康涅狄格 Oxford, CT, USA  
3 CCD Images (2, 3, 5 October 2005) 18cm Mak-Cass with a ToUcam
- GRAFTON, Edward A エド・グラフトン (EGf)** 德克薩斯 Houston, TX, USA  
5 Sets of CCD Images (1, 2, 9, 15 October 2005)  $f/39 \times 35$ cm SCT with an ST402
- HEFFNER, Robert ロバート・ヘフナー (RHf)** 名古屋 Nagoya, Aichi, Japan  
2 Colour CCD Images (12, 13 October 2005)  $f/30 \times 28$ cm SCT with Lu075C
- HERNANDEZ, Carlos E カルロス・ヘルナンデス (CHr)** 佛羅里達 Miami, FL, USA  
3 Sets of Colour Drawings (7, 11, 13 October 2005)  
250, 340×23cm  $F/13.5$  Maksutov-Cass
- KARRER, Michael ミハエル・カッレル (MKr)** 奧地利 St Radegund, Österreich  
4 Colour CCD Images (9/10, 12, 13 October 2005) 18cm Meade Refraktor with a ToUcam
- KOVACEVIC, Zlatko F ズラトコ・コヴァチェヴィッチ (ZKv)** 克羅地亞 Republika Hrvatska  
1 Colour Image (12 October 2005)  $f/35 \times 20$ cm SCT with a ToUcam Pro
- KOWOLLIK, Silvia シルヴィア・コヴォツリク (SKw)** 德國 Ludwigsburg, Deutschland  
25 Sets of CCD Images (10, 11, 13, 14, 15 October 2005)  
 $f/41 \times 15$ cm spec with a ToUcam 740
- KUMAMORI, Teruaki 熊森 照明 (Km)** 堺 Sakai, Osaka, Japan  
1 Colour CCD Image (12 October 2005)  $f/88 \times 20$ cm Dall-Kirkham with a ToUcam

**LAU, Canon 劉 佳能 (CLa)** 香港 Hong-Kong

4 R+ 1 Colour CCD Images (13 October 2005)  $f/32$ ,  $59 \times 36$ cm SCT with ToUcams

**LAZZAROTTI, Paolo R パオロ・ラッツァロッティ (PLz)** 義大利 Massa, Toscana, Italia

1 Set of CCD Images (10 October 2005) 32cm Dall-Kirkham with Lumenera Infinity 2-1M

**LOMELI, Ed エド・ロメリ (ELm)** 加利福尼亞 Sacramento, CA, USA

5 Sets of CCD Image (6, 12, 14 October 2005) 23cm SCT with a ToUcam

**MASSÓ MILLEURO, Félix フェリックス・マッソ (FMr)** 西班牙 La Coruña, Galicia, España

2 CCD Images (4 October 2005) 21cm Dall-Kirkham with Quickcam 3000

**MEGNA, Ralph ラルフ・メグナ (RGm)** 加利福尼亞 Borrego Springs, CA, USA

1 CCD Image (2 October 2005)  $f/30 \times 25$ cm SCT with a ToUcam

**MELILLO, Frank J フランク・メリッロ (FMI)** 紐約 Holtsville, NY, USA

3 Colour CCD Images (1, 2, 5 October 2005) 20cm SCT with a ToUcam

**MINAMI, Masatsugu 南 政次 (Mn)** Mt Hamilton, CA, USA

39 Drawings (6, 7, 9, ~15 October 2005) 500,  $600 \times 91$ cm ( $\rightarrow 50$ cm) refractor\*

\* Lick Observatory atop Mt Hamilton

**MOBBERLEY, Martin P マーチン・モッバーレイ (MMb)** 英國 Cockfield, Suffolk, UK

4 Sets of CCD Images (3, 4, 9, 11 October 2005)

$f/50 \times 25$ cm  $F/6.3$  speculum with Lu075M

**MORITA, Yukio 森田 行雄 (Mo)** 廿日市 Hatsuka-ichi, Hiroshima, Japan

11 Sets of CCD Images (6, 8, 12, 15 October 2005) 25cm spec with an ST-5C

**MURAKAMI, Masami 村上 昌己 (Mk)** 藤澤 Fujisawa, Kanagawa, Japan

6 Drawings (1, 2, 13 October 2005)  $320 \times 20$ cm speculum

**NAKAJIMA, Takashi 中 島 孝 (Nj)** 福井 Fukui, Fukui, Japan

10 Drawings (11, 12 October 2005)  $400 \times 20$ cm GOTO ED refractor\*

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

**NARITA, Hiroshi 成 田 廣 (Nr)** 川崎 Kawasaki, Kanagawa, Japan

6 Drawings (1, 2, 13 October 2005)  $400 \times 20$ cm refractor

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

3 Sets of CCD Images (11, 13 October 2005)

$f/60 \times 41$ cm  $F/6$  spec equipped with an ST9XE

**PARKER, Timothy J ティム・パーカー (TPk)** 加利福尼亞 LA, CA, USA

2 Colour CCD Images (3, 15 October 2005) 20cm SCT with a Flea Firewire camera

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

4 Sets of CCD Images (2, 5, 10, 11 October 2005)  $f/40 \times 35$ cm SCT with Lu075

**PELLIER, Christophe クリストフ・ペリエ (CPl)** 法國 Noisy-le-Grand, France

8 Sets of CCD Images (4, 8/9, 9, 13/14, 15 October 2005)

$f/53 \times 21$ cm Mewlon with Lu075M

**PHILLIPS, Jim ジム・フィリップス (JPh)** 南卡羅萊納 Charleston, SC, USA

4 Colour CCD images (9, 14 October) 20cm TMB with an ATiK Color

**ROEL SCHREURS, Eric エリック・ロエル (ERl)** 墨西哥 Mexico

3 Sets of CCD Images (1, 2, 15 October 2005) 25cm TEC Mak with Lu075M/ToUcam

**ROSOLINA, Michael マイケル・ロゾリーナ (MRs)** 西維吉尼亞 Friars, WV, USA

1 Colour Drawing (2 October 2005) 250,  $340 \times 20$ cm SCT

**San EMETERIO SANTOS, Francisco (FEm)** フランシスコ・サン・エメテリオ Santander, España

3 CCD Images (6/7 October 2005) 18cm Maksutov with an ATiK 1C

**SCHULZ, Robert** ロベルト・シュルツ (*RSz*) 奥地利 Wien, Österreich

4 Sets of CCD Image (1, 10, 12, 14, 15 October 2005)  $f/31 \times 32\text{cm}$  spec with Lu075M

**SÁNCHEZ, Jesús R** ヘスス・サンチェス (*JSc*) 科爾多瓦 Córdoba, España

7 Colour + 3R CCD Images (5, 6, 7\*, 9\*, 14 October 2005)

$f/45 \times 28\text{cm}$  SCT/  $*f/50 \times 18\text{cm}$  Mak-Cass with a ToUcam

**SEIP, Stefan** ステファン・ザイプ (*SSp*) 德國 Stuttgart, Deutschland

1 CCD Image (14 October 2005)  $f/45 \times 25\text{cm}$  Mak-Cass with a Firewire (DMK 21BF04)

**SHERROD, P Clay** クレイ・シャロド (*CSr*) 阿肯色 Aso Sky Observatory, AR, USA

11 Colour CCD images (2, ~6 October 2005)  $f/32 \times 40\text{cm}$  RC with a ToUcam Pro

**SIEGEL, Elisabeth** エリサベト・シーゲル (*ESg*) 丹麥 Malling, Danmark

5 Drawings (17 September, 5, 8, 14, 15 October 2005)  $330 \times 20\text{cm}$   $F/10$  SCT

**TATUM, Randy** ランディ・テータム (*RTm*) 維吉尼亞 Richmond, VA, USA

2 CCD Images (1, 2 October 2005)  $25\text{ cm}$  spec with a ToUcam

**TEICHERT, Gérard** ジェラルド・タイシェルト (*GTc*) 法國 Hattstatt, France

2 Drawings (9, 15 October 2005)  $330, 350 \times 28\text{cm}$  SCT

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

5 Sets of CCD Images (5, 9, 10, 11 October 2005)  $f/55 \times 28\text{cm}$  SCT with Lu075

**VALIMBERTI, Maurice** モーリス・ヴァリムベルティ(*MVI*) 墨爾本 Melbourne, Australia

1 Colour CCD Image (14 October 2005)  $f/27 \times 35\text{cm}$  SCT with a ToUcam

**VANDEBERGH, Ralf** ラルフ・ファンデベルフ(*RVb*) 荷蘭 Nederland

6 Colour + 6B Images (7, 8, 10, 12, 14, 15 October 2005)

$25\text{cm}$  spc with ATK-1HS/ToUcam 740

**WALKER, Sean** ショーン・ウォーカー (*SWk*) 馬塞諸薩 Methuen, Ma, USA

6 Colour CCD Images (1, 3, 6 October 2005)

$f/50, 65 \times 18\text{cm}$  Maksutov-Newtonian with a ToUcam

**WARELL, Johan** ヨハン・ヴァレルル (*JWr*) 烏普薩拉 Uppsala, Sweden

4 Sets of CCD Images (7, 8, 9, 14 October 2005)  $f/29 \times 36\text{cm}$  refractor with a ToUcam

**WIRTHS, Mike** マイク・ワースス (*MWs*) 加拿大 Perth, Ontario, Canada

1 IR CCD Image (3 October 2005)  $45\text{cm}$  Dobsonian with Lumenera Infinity 2-2

**The Arsia Cloud and Olympus Mons:** Early this month a lot of good images of the Arsia cloud and the bared Olympus Mons were sent from the side of Europe. The contrast of the Arsia cloud and the bare Olympus Mons is seen on SCHULZ (*RSz*)'s image on 1 Oct ( $\lambda=298^\circ\text{Ls}$ ) at  $\omega=134^\circ\text{W}$ , on PEACH (*DPc*)'s on 2 Oct ( $\lambda=299^\circ\text{Ls}$ ) at  $\omega=123^\circ\text{W}$ , on MOBBERLEY (*MMb*)'s on 3 Oct ( $\lambda=299^\circ\text{Ls}$ ,  $\iota=29^\circ$ ) at  $\omega=150^\circ\text{W}$  and so on. PELLIER (*CPI*)'s good images on 4 Oct ( $\lambda=300^\circ\text{Ls}$ ,  $\iota=28^\circ$ ) at  $\omega=099^\circ\text{W}$  suggested that since  $\iota$  was decreasing, the clear-cut description of the region of Tharsis which was possible when the phase angle  $\iota$  was deep has come to a limit. *CPI*'s B image shows a cloud at Syria Planum preceding Arsia Mons. Arsia Mons was located 6 hours before sunset. BOSMAN (*RBs*)'s images on the day at  $\omega=116^\circ\text{W}$  are well processed and show a fine configuration. On 5 Oct ( $\lambda=300^\circ\text{Ls}$ ,  $\iota=28^\circ$ ), TYLER (*DTy*) gave good images at  $\omega=093^\circ\text{W}$ , SÁNCHEZ (*RSc*) at  $\omega=099^\circ\text{W} \sim 107^\circ\text{W}$ , and *DPc* at  $\omega=106^\circ\text{W}$ , while the details at the region of Tharsis and Olympus Mons are fainter. ADELAAR (*JAd*)'s image on 6 Oct ( $\lambda=301^\circ\text{Ls}$ ,  $\iota=27^\circ$ ) at  $\omega=085^\circ\text{W}$  shows interestingly the area of Ascræus Mons (see also FUMEGA (*CFm*)'s on 9 Oct at  $\omega=083^\circ\text{W}$  and so on). *JSc*'s image on 7 Oct ( $\lambda=302^\circ\text{Ls}$ ,  $\iota=26^\circ$ ) at  $\omega=136^\circ\text{W}$  well shows the evening cloud at Syria Planum. The area then came to be caught at the East Coast: WALKER (*SWk*) gave images of Arsia cloud on 6 Oct ( $\lambda=301^\circ\text{Ls}$ ) at  $\omega=147^\circ\text{W}$ ,  $157^\circ\text{W}$ . PHILLIPS (*JPh*) also showed it on 9 Oct ( $\lambda=303^\circ\text{Ls}$ ) at  $\omega=145^\circ\text{W}$ .

On the same day GRAFTON (*EGf*) shot a long shadow of Olympus Mons when it was close to the terminator at  $\omega=162^\circ\text{W}$ . Don PARKER (*DPk*) showed a large cloud at Tharsis to the east of Arsia Mons on 11 Oct ( $\lambda=304^\circ\text{Ls}$ ,  $\iota=23^\circ$ ) at  $\omega=113^\circ\text{W}$ . On 12 Oct ( $\lambda=305^\circ\text{Ls}$ ) LOMELI (*ELm*, Sacramento, CA) produced a series of images at  $\omega=142^\circ\text{W}$ ,  $147^\circ\text{W}$ , and  $163^\circ\text{W}$  which show the complex aspect of the Arsia cloud including its preceding clouds. *ELm* made also a set of good images on 14 Oct ( $\lambda=306^\circ\text{Ls}$ ) at  $\omega=143^\circ\text{W}$ . The present writer (*Mn*) observed at Mt Hamilton, CA, the area from 9 Oct to 13 Oct, and obtained good views for example on 11 Oct ( $\lambda=304^\circ\text{Ls}$ ,  $\iota=24^\circ$ ) at  $\omega=156^\circ\text{W}$ ,  $166^\circ\text{W}$ , 12 Oct ( $\lambda=305^\circ\text{Ls}$ ) at  $\omega=157^\circ\text{W}$ , and on 13 Oct ( $\lambda=305^\circ\text{Ls}$ ) at  $\omega=136^\circ\text{W}$ ,  $153^\circ\text{W}$  and so on. He also observed on 7 Oct from 9:20 GMT for nearly one hour a dark spot on the very terminator, as to which he will write on another occasion. Olympus Mons was dull this period, but it will soon be roundish brilliant from morning to evening as the phase angle  $\iota$  decreases enough.

**The NPH and M Acidalium:** Since  $\phi$  was up to a maximum at  $11^\circ\text{S}$ , there was witnessed an interesting interrelation of the white nph with the dark M Acidalium: [http://homepage2.nifty.com/~cmomn2/2005Coming\\_9.htm](http://homepage2.nifty.com/~cmomn2/2005Coming_9.htm). On 9 Oct ( $\lambda=303^\circ\text{Ls}$ ,  $\phi=11^\circ\text{S}$ ), KARRER (*MKr*) took at  $\omega=355^\circ\text{W}$ , and then after 3.5 hours at  $\omega=047^\circ\text{W}$ . AKUTSU (*Ak*) obtained good images of the morning M Acidalium partly covered by the nph at  $\omega=341^\circ\text{W}$ ,  $346^\circ\text{W}$ ,  $351^\circ\text{W}$  on 10 Oct ( $\lambda=304^\circ\text{Ls}$ ). On 12 Oct ( $\lambda=305^\circ\text{Ls}$ ,  $\phi=11^\circ\text{S}$ ) at  $\omega=010^\circ\text{W}$  (23:50GMT), *MKr* produced a typical image. Furthermore this image seems to show a small dust burst inside the nph at the west end of M Acidalium. This is also caught on the image take by KOVACHEVIC (*ZKv*) a bit earlier at  $\omega=002^\circ\text{W}$ . After midnight GMT on 13 Oct ( $\lambda=305^\circ\text{Ls}$ ), KOWOLLIK (*SKw*) chased as follows:  $\omega=036^\circ\text{W}$ (01:37GMT),  $042^\circ\text{W}$ ,  $046^\circ\text{W}$ ,  $056^\circ\text{W}$ , and  $061^\circ\text{W}$ . On 14 Oct, the nph was rather normal (*SEIP(SSp)*'s European image at  $\omega=044^\circ\text{W}$  was soon succeeded by BATES (*DBt*)'s US image at  $\omega=068^\circ\text{W}$  on the day), while on 15 Oct ( $\lambda=306^\circ\text{Ls}$ ) it was more dramatic as shown by the successive images at  $\omega=004^\circ\text{W}$  (by BATISSARD (*DBs*)),  $009^\circ\text{W}$ (by *JAd*) at  $\omega=011^\circ\text{W}$ ,  $016^\circ\text{W}$ ,  $021^\circ\text{W}$ ,  $021^\circ\text{W}$ ,  $026^\circ\text{W}$ ,  $031^\circ\text{W}$ ,  $036^\circ\text{W}$ ,  $041^\circ\text{W}$  (by *SKw*), at  $\omega=017^\circ\text{W}$ ,  $025^\circ\text{W}$  (by *CPl*) and at  $\omega=041^\circ\text{W}$  by VANDERBERGH (*RVb*)). The images on 13, 14, 15 Oct show how the density of the nph was seen variable against the background of the dark M Acidalium.

**The NPH and Utopia:** The area round Utopia is also the place worthy of attention. No drastic phenomenon was seen this period, while those images on 1 Oct ( $\lambda=298^\circ\text{Ls}$ ,  $\phi=11^\circ\text{S}$ ) by *EGf* at  $\omega=236^\circ\text{W}$ ,  $256^\circ\text{W}$ , by DICKINSON (*WDs*) at  $\omega=247^\circ\text{W}$ ,  $256^\circ\text{W}$ , by ROEL (*ERl*) at  $\omega=260^\circ\text{W}$ , and on 3 Oct ( $\lambda=299^\circ\text{Ls}$ ) by FRIEDMAN (*AFd*) at  $\omega=219^\circ\text{W}$ , by *WDs* at  $\omega=241^\circ\text{W}$ , by Tim PARKER (*TDk*) at  $\omega=256^\circ\text{W}$  are interesting. See however MELILLO (*FMI*)'s image on 5 Oct ( $\lambda=301^\circ\text{Ls}$ ) at  $\omega=237^\circ\text{W}$  where there seems to be shown a bright spot following Utopia. Other good images of the area were given on 6 Oct ( $\lambda=301^\circ\text{Ls}$ ) by *ELm* at  $\omega=225^\circ\text{W}$ ,  $245^\circ\text{W}$ , on 13 Oct ( $\lambda=306^\circ\text{Ls}$ ) by Canon LAU (*CLa*) at  $\omega=234^\circ\text{W}$ ,  $246^\circ\text{W}$ ,  $255^\circ\text{W}$ ,  $262^\circ\text{W}$ , and by HEFFNER (*RHf*) at  $\omega=245^\circ\text{W}$ .

**Propontis I:** Located at  $\Phi=35^\circ\text{N}\sim 40^\circ\text{W}$ , Propontis I is also a mile stone to judge the position of the nph perimeter: The following are among the images which show Propontis I: On 3 Oct ( $\lambda=299^\circ\text{Ls}$ ), GORCZYNSKY (*PGc*)'s image at  $\omega=179^\circ\text{W}$ , and WIRTHS (*MWr*)'s at  $\omega=197^\circ\text{W}$ , on 6 Oct ( $\lambda=301^\circ\text{Ls}$ ,  $\phi=11^\circ\text{S}$ ) *SWk*'s at  $\omega=147^\circ\text{W}\sim 157^\circ\text{W}$ , and *JSc*'s at  $\omega=167^\circ\text{W}$ , on 7 Oct ( $\lambda=302^\circ\text{Ls}$ ) *JSc*'s at  $\omega=136^\circ\text{W}$ , on 9 Oct ( $\lambda=303^\circ\text{Ls}$ ), *JPh*'s at  $\omega=145^\circ\text{W}$ , and *EGf*'s at  $\omega=162^\circ\text{W}$ , and *ELm*'s images on 12 Oct ( $\lambda=305^\circ\text{Ls}$ ) at  $\omega=142^\circ\text{W}$ ,  $147^\circ\text{W}$ , on 14 Oct ( $\lambda=306^\circ\text{Ls}$ ,  $\phi=12^\circ\text{S}$ ) at  $\omega=143^\circ\text{W}$  and so on. All show that the nph perimeter at this region is located to the north of  $45^\circ\text{N}$ . The present writer (*Mn*) visually watched Propontis I clearly with its light surrounding on 7 Oct ( $\lambda=302^\circ\text{Ls}$ ) at  $\omega=166^\circ\text{W}\sim 193^\circ\text{W}$ , on 9 Oct ( $\lambda=303^\circ\text{Ls}$ ) at  $\omega=177^\circ\text{W}$ , on 11 Oct ( $\lambda=304^\circ\text{Ls}$ ) at  $\omega=156^\circ\text{W}$ ,  $166^\circ\text{W}$ , and on 13 Oct ( $\lambda=306^\circ\text{Ls}$ ) at  $\omega=153^\circ\text{W}$ : It became however dimmer as it approached the terminator.

**Hellas:** Since the phase angle  $\iota$  decreased less than  $30^\circ$ , no explicit report exists that says it was bright near the morning limb. There are few images that compare with an old image at the same angle, but we may pick out two *SWk*'s images to compare; one on 1 Oct ( $\lambda=298^\circ\text{Ls}$ ,  $\iota=30^\circ$ ) at  $\omega=228^\circ\text{W}$  and the other taken on 25 Aug ( $\lambda=273^\circ\text{Ls}$ ,



$\iota=44^\circ$ ) at  $\omega=229^\circ\text{W}$ . *EGf*'s image on 2 Oct ( $\lambda=299^\circ\text{Ls}$ ,  $\iota=29^\circ$ ) at  $\omega=228^\circ\text{W}$  may show a still shining Hellas wall.

**Argyre:** The present configuration inside Argyre is well seen on the image by *CPI* made on 8/9 Oct ( $\lambda=302^\circ\text{Ls}$ ,  $\iota=25^\circ$ ) at  $\omega=048^\circ\text{W}$ . Otherwise the following images are all equally proving the aspect: on 10 Oct ( $\lambda=302^\circ\text{Ls}$ ), *DTy*'s at  $\omega=068^\circ\text{W}$ , on 11 Oct ( $\lambda=302^\circ\text{Ls}$ ), *DTy*'s at  $\omega=049^\circ\text{W}$ , and *DPc*'s at  $\omega=058^\circ\text{W}$ , and on 14 Oct ( $\lambda=306^\circ\text{Ls}$ ), *SSp*'s at  $\omega=044^\circ\text{W}$ .

**Dust Disturbance at Eos on 13 Oct:** Near at midnight GMT on 13 Oct ( $\lambda=306^\circ\text{Ls}$ ), the images taken by *CPI* at  $\omega=352^\circ\text{W}$  (23:07GMT) showed clearly a sharp stream of dust disturbance from Eos to Chryse, and it was also checked at  $\omega=000^\circ\text{W}$  (23:57GMT). It did not exist one day before as shown by the image of *MKr* on 12 Oct at 23:50 GMT ( $\omega=020^\circ\text{W}$ ) and by the images of *SKw* on 13 Oct at 1:37~3:20GMT. However as stated before *MKr*'s image suggests a bright dust core inside the nph, and so *CPI*'s dust might possibly have been resonant with this. Just soon after *CPI* in France, *JSc* in Spain caught this dust at  $\omega=004^\circ\text{W}$  at 00:02GMT (already on 14 Oct). And furthermore, *SKw* in Germany started from 1:15GMT, and took a series of images every twenty minutes at  $\omega=022^\circ\text{W}$ ,  $027^\circ\text{W}$ ,  $031^\circ\text{W}$ ,  $036^\circ\text{W}$ ,  $041^\circ\text{W}$ ,  $046^\circ\text{W}$ ,  $051^\circ\text{W}$ ,  $056^\circ\text{W}$ , and  $061^\circ\text{W}$  (3:55GMT). Perhaps thus the planet declined low in the west and it appeared on the US: In fact *DBt* made a shot soon after at  $\omega=068^\circ\text{W}$  (at 4:28GMT). Unfortunately the dust was not obvious on the images by *RBv* at  $\omega=030^\circ\text{W}$ , and by *SSp* at  $\omega=044^\circ\text{W}$ . This kind of dust subsides at night and may be reproduced next morning: It did not really become thicker but a remnant existed in a slightly blurred form and moving southward as shown by *DBs* on 15 Oct ( $\lambda=306^\circ\text{Ls}$ ) at 00:40GMT ( $\omega=004^\circ\text{W}$ ), by *JAd* at  $009^\circ\text{W}$ , and by *SKw* at  $\omega=011^\circ\text{W}$ ,  $016^\circ\text{W}$ ,  $021^\circ\text{W}$ ,  $021^\circ\text{W}$ ,  $026^\circ\text{W}$ ,  $031^\circ\text{W}$ ,  $036^\circ\text{W}$ , and  $041^\circ\text{W}$ . *CPI* himself took the images at  $\omega=017^\circ\text{W}$ , and  $025^\circ\text{W}$ .

**Global and Near-By Linkage of the Observations:** Since this time the contributions from the European observers increased, the global network is being established, though there are still large two vacancies over the Pacific Ocean and around the Eurasia region from  $030^\circ\text{E}$  to  $120^\circ\text{E}$  (6 hours). However as the opposition time approaches, it may be possible to observe at 12h GMT at the West Coast at dawn and and at the same time in the evening at the Asia-Oceania region (at 12h GMT=21h JST). The inconvenience of the scanty Eurasia is also overcome for this period: For example, on 5 Oct, *Ak* at the Philippines observed at 21:15GMT ( $\omega=035^\circ\text{W}$ ), and SIEGEL (*ESg*) in Denmark made a drawing at 21:30GMT ( $\omega=039^\circ\text{W}$ ): Both show the activity of the nph over M Acidalium. When it is necessary to chase an pressing phenomenon, one should try to observe early in the evening and also just before dawn. On the other hand, next-door observations may also be necessary: On 10 Oct, *DPc* and his neighbour *DTy* took a rare shock wave-like phenomenon at the same time (see *LiE* on 10 Oct: *DPc* at p0227 and *DTy* at p0228 below).

♂.....**アルシア雲とオリュムプス・モンズ**：タルシス領域の様相は初旬ヨーロッパから良像が澤山届いている。1Oct( $\lambda=298^\circ\text{Ls}$ )のシュルツ(RSz)氏の $\omega=134^\circ\text{W}$ の像、2Oct( $\lambda=299^\circ\text{Ls}$ )のピーチ(DPc)氏の $\omega=123^\circ\text{W}$ の像、3Oct( $\lambda=299^\circ\text{Ls}$ ,  $\iota=29^\circ$ )のモッバーリィ(MMb)氏の $\omega=150^\circ\text{W}$ などにアルシア雲と裸のオリュムプス・モンズとの対照が出ているが、4Oct( $\lambda=300^\circ\text{Ls}$ ,  $\iota=28^\circ$ )のペリエ(CPI)氏の $\omega=099^\circ\text{W}$ の像を見ると、 $\iota$ が大きいときに可能であったオリュムプス・モンズも含めたタルシスの変化に富んだ描寫がもう限界に來ていることを示していると思う。この畫像にはアルシア・モンズに先だってシュリア・プラヌムに雲が出ていることを示している(B光)。アルシア・モンズは日没から六時間ほど前である。同日のボズマン(RBs)氏の $\omega=116^\circ\text{W}$ は描寫が細かいので位置関係がよく分かる。5Oct( $\lambda=300^\circ\text{Ls}$ ,  $\iota=28^\circ$ )のタイラー氏(DTy)の $\omega=093^\circ\text{W}$ 、サンチェス(RSc)氏の $\omega=099^\circ\text{W}\sim 107^\circ\text{W}$ 、DPc氏の $\omega=106^\circ\text{W}$ もタルシスからオリュムプス・モンズに掛けて、検出や描寫が難しくなっていることを示す。6Oct( $\lambda=301^\circ\text{Ls}$ ,  $\iota=27^\circ$ )のアデラルール(JAd)氏の $\omega=085^\circ\text{W}$ ではアスクラエウス・モンズの邊りが興味深い(他にフメガ(CFm)氏の9Octの $\omega=083^\circ\text{W}$ など)。7Oct( $\lambda=302^\circ\text{Ls}$ ,  $\iota=26^\circ$ )のJSc氏の $\omega=136^\circ\text{W}$ ではシュリア・プラヌムの雲が好く出ている。この頃には、この領域はアメリカ西海岸で捉えられて、ウォーカー(SWk)氏が6Oct( $\lambda=301^\circ\text{Ls}$ )  $\omega=147^\circ\text{W}$ ,  $157^\circ\text{W}$ でアルシア雲を捉えている。フィリップス(JPh)氏は9Oct( $\lambda=303^\circ\text{Ls}$ )に $\omega=145^\circ\text{W}$ で撮っている。同

日グラフトン(EGf)氏は $\omega=162^\circ\text{W}$ で縁に来て長くなったオリュムプス・モンスの蔭を捉えている。唐那・派克(DPk)氏は11Oct( $\lambda=304^\circ\text{Ls}$ ,  $i=23^\circ$ ) $\omega=113^\circ\text{W}$ でアルシアから東のタルシスのもっと大きな雲を撮し出した。12Oct( $\lambda=305^\circ\text{Ls}$ )のロメリ(ELm)氏(カリフォルニア・サクラメント)の $\omega=142^\circ\text{W}$ 、 $147^\circ\text{W}$ 、 $163^\circ\text{W}$ の連続像も興味深い。アルシア雲の複雑さやその前方も好く捉えている。ELm氏には14Oct( $\lambda=306^\circ\text{Ls}$ ) $\omega=143^\circ\text{W}$ の良像もある。筆者はカリフォルニアのリック天文臺で9Octから13Oct迄この辺りの夕方を観察したが、11Oct( $\lambda=304^\circ\text{Ls}$ ,  $i=24^\circ$ ) $\omega=156^\circ\text{W}$ 、 $166^\circ\text{W}$ 、12Oct( $\lambda=305^\circ\text{Ls}$ )の $\omega=157^\circ\text{W}$ 、13Oct( $\lambda=305^\circ\text{Ls}$ ) $\omega=136^\circ\text{W}$ 、 $153^\circ\text{W}$ などで好い観測が出来た。尚、7Octには夕縁に来た暗点を9:20GMT頃から一時間許り観察したが、これについてはまたの機会に書く。この期間オリュムプス・モンスはまだ不明確であったが、 $i$ が小さくなるにつれて、反射で朝から晩まで圓く明るくなる。

**マレ・アキダリウムと北極雲**： $\phi$ が昇ったこともあり早々と北極雲とマレ・アキダリウムの関係が見えている。9Oct( $\lambda=303^\circ\text{Ls}$ ,  $\phi=11^\circ\text{S}$ )のカッラー(MKr)氏の $\omega=355^\circ\text{W}$ 、 $047^\circ\text{W}$ は面白いが三時間半も跳んで中抜きである。東洋でも朝方可能で阿久津氏(Ak)氏が10Oct( $\lambda=304^\circ\text{Ls}$ )に $\omega=341^\circ\text{W}$ 、 $346^\circ\text{W}$ 、 $351^\circ\text{W}$ で朝方のマレ・アキダリウムと北極雲の関係の良像を得ている。12Oct( $\lambda=305^\circ\text{Ls}$ ,  $\phi=11^\circ\text{S}$ ) $\omega=010^\circ\text{W}$ (23:50GMT)のMKr氏の像は典型的な現象([http://homepage2.nifty.com/~cmomn2/2005Coming\\_9j.htm](http://homepage2.nifty.com/~cmomn2/2005Coming_9j.htm))を撮し出しているが、この像から北極雲内、マレ・アキダリウムの西の端で黄塵の爆発があったように感じられる。少し前のコヴァチヴィッチ(ZKv)氏の $\omega=002^\circ\text{W}$ の像にも写っている。たいへん示唆的である。このマレ・アキダリウムは夜半を過ぎてコヴォリク(SKw)さんが13Oct( $\lambda=305^\circ\text{Ls}$ )に $\omega=036^\circ\text{W}$ (01:37GMT)、 $042^\circ\text{W}$ 、 $046^\circ\text{W}$ 、 $056^\circ\text{W}$ 、 $061^\circ\text{W}$ と追跡している。14Octにも同じ追跡があるが、北極雲は普通であった(この日は $\omega=044^\circ\text{W}$ (ザイプ(SSp)氏)、 $\omega=068^\circ\text{W}$ (ベーツ(DBt)氏)と大西洋を上手く渡っている)。15Oct( $\lambda=306^\circ\text{Ls}$ )には少し劇的な変化があり、次の様に追跡されている： $\omega=004^\circ\text{W}$ (バティサル(DBs氏))、 $009^\circ\text{W}$ (JAd氏)、 $\omega=011^\circ\text{W}$ 、 $016^\circ\text{W}$ 、 $021^\circ\text{W}$ 、 $021^\circ\text{W}$ 、 $026^\circ\text{W}$ 、 $031^\circ\text{W}$ 、 $036^\circ\text{W}$ 、 $041^\circ\text{W}$ (SKw氏)、 $\omega=017^\circ\text{W}$ 、 $025^\circ\text{W}$ (CPl氏)、 $\omega=041^\circ\text{W}$ (ファンデベルフ(RVb)氏)。13、14Octの像も含めて、北極雲の対マレ・アキダリウム濃度が日毎変化しているので、これらは好いデータである。

**ウトピアと北極雲**：ウトピアの周辺も北極雲との關聯で注目すべきである。1Oct( $\lambda=298^\circ\text{Ls}$ ,  $\phi=11^\circ\text{S}$ )のEGf氏の $\omega=236^\circ\text{W}$ 、 $256^\circ\text{W}$ 、ディッキンソン(WDs)氏の $\omega=247^\circ\text{W}$ 、 $256^\circ\text{W}$ 、ロエル(ERl)氏の $\omega=260^\circ\text{W}$ 、3Oct( $\lambda=299^\circ\text{Ls}$ )のフリードマン(AFd)氏の $\omega=219^\circ\text{W}$ 、WDs氏の $\omega=241^\circ\text{W}$ 、ティム・パーカー(TDk)氏の $\omega=256^\circ\text{W}$ などが好いシリーズであるが、面白い事は起こっていない。但し、メリッロ(FMl)氏の5Oct( $\lambda=301^\circ\text{Ls}$ ) $\omega=237^\circ\text{W}$ にはウトピア後方に明点がある。他に描寫としては6Oct( $\lambda=301^\circ\text{Ls}$ )のELm氏の $\omega=225^\circ\text{W}$ 、 $245^\circ\text{W}$ 、13Oct( $\lambda=306^\circ\text{Ls}$ )の劉佳能(CLa)氏の $\omega=234^\circ\text{W}$ 、 $246^\circ\text{W}$ 、 $255^\circ\text{W}$ 、 $262^\circ\text{W}$ 、ヘフナー(RHf)氏の $\omega=245^\circ\text{W}$ 等が好い。

**プロポンティスI**：プロポンティスIは $\Phi=35^\circ\text{N}\sim 40^\circ\text{W}$ に位置していて、北極雲との関係を見るのに都合がよいが、餘り人氣が無くて、3Oct( $\lambda=299^\circ\text{Ls}$ )のゴルチンスキイ(PGc)氏の $\omega=179^\circ\text{W}$ 、ワースス(MWr)氏の $\omega=197^\circ\text{W}$ 、6Oct( $\lambda=301^\circ\text{Ls}$ ,  $\phi=11^\circ\text{S}$ )のSWk氏の $\omega=147^\circ\text{W}\sim 157^\circ\text{W}$ 、JSc氏の $\omega=167^\circ\text{W}$ 、7Oct( $\lambda=302^\circ\text{Ls}$ )のJSc氏の $\omega=136^\circ\text{W}$ 、9Oct( $\lambda=303^\circ\text{Ls}$ )のJPh氏の $\omega=145^\circ\text{W}$ 、EGf氏の $\omega=162^\circ\text{W}$ 、12 Oct ( $\lambda=305^\circ\text{Ls}$ )  $\omega=142^\circ\text{W}$ 、 $147^\circ\text{W}$ 、14 Oct ( $\lambda=306^\circ\text{Ls}$ ,  $\phi=12^\circ\text{S}$ )  $\omega=143^\circ\text{W}$ のELm氏の像ぐらいであろうか、何れも北極雲の境界は更に北で、この方面では $45^\circ\text{N}$ 以北だと思われる。筆者は7Oct( $\lambda=302^\circ\text{Ls}$ )に $\omega=166^\circ\text{W}\sim 193^\circ\text{W}$ 、9Oct( $\lambda=303^\circ\text{Ls}$ ) $\omega=177^\circ\text{W}$ 、11Oct( $\lambda=304^\circ\text{Ls}$ ) $\omega=156^\circ\text{W}$ 、 $166^\circ\text{W}$ 、13Oct( $\lambda=306^\circ\text{Ls}$ ) $\omega=153^\circ\text{W}$ 等で北極雲より上のプロポンティスIを明確に見ているが、夕方に近づくに聯れて見難くなった。肉眼ではプロポンティスIの周りが明るい。

**ヘッラス**： $i$ が $30^\circ$ を割って、ヘッラスが朝方明るいという観測報告はないと思う。なかなか $\omega$ を揃えたものが見つからないが、SWk氏の1Oct( $\lambda=298^\circ\text{Ls}$ ,  $i=30^\circ$ ) $\omega=228^\circ\text{W}$ と25Aug( $\lambda=273^\circ\text{Ls}$ ,  $i=44^\circ$ ) $\omega=229^\circ\text{W}$ を比べると好い。但し2Oct( $\lambda=299^\circ\text{Ls}$ ,  $i=29^\circ$ )のEGf氏の $\omega=228^\circ\text{W}$ では未だ明るいといえは明るい。

**アルギュレ**：視直径も大きくなって現在のアルギュレの姿はCPl氏の8/9Oct( $\lambda=302^\circ\text{Ls}$ ,  $i=25^\circ$ ) $\omega=048^\circ\text{W}$ に好く出ている。他に10Oct( $\lambda=302^\circ\text{Ls}$ )のDTy氏の $\omega=068^\circ\text{W}$ 、11Oct( $\lambda=302^\circ\text{Ls}$ )のDTy氏の $\omega=049^\circ\text{W}$ 、DPc

氏の $\omega=058^\circ\text{W}$ 、SSp氏の14Oct( $\lambda=306^\circ\text{Ls}$ ) $\omega=044^\circ\text{W}$ などに過不足無く出ている。

**13Octのエオス黄塵**：13/14Oct( $\lambda=306^\circ\text{Ls}$ )のGMT夜半近く、23:07GMT $\omega=352^\circ\text{W}$ のCPI氏の画像のエオスからクリュセに掛けて黄塵の流れが出現し、23:57GMT $\omega=000^\circ\text{W}$ でも追認されている。一昼夜前、12OctのMKr氏の23:50GMT $\omega=020^\circ\text{W}$ や13Octに入って1:37~3:20GMTのSKwさんの画像には現れていない。但し、MKr氏の像は前述のように北極雲内での黄塵の発生を匂わすもので、これと共鳴するかも知れない。CPI氏が13Octの夜半近くに撮り、その直後14Octの00:02GMTにはJSc氏が $\omega=004^\circ\text{W}$ でこれを捉えている。更に1:15 GMT開始のSKwさんが $\omega=022^\circ\text{W}$ 、 $027^\circ\text{W}$ 、 $031^\circ\text{W}$ 、 $036^\circ\text{W}$ 、 $041^\circ\text{W}$ 、 $046^\circ\text{W}$ 、 $051^\circ\text{W}$ 、 $056^\circ\text{W}$ 、 $061^\circ\text{W}$ (3:55GMT)と二十分ごとに追っている。多分、ヨーロッパ大陸では朝方ギリギリで、次に美國に渡ってアリゾナのDBt氏が $\omega=068^\circ\text{W}$ (4:28GMT)で捉えた。但し奇妙なことに、RBv氏の $\omega=030^\circ\text{W}$ 、SSp氏の $\omega=044^\circ\text{W}$ では目立たない。こうした黄塵は朝方また再生される事があるのだが、15Oct( $\lambda=306^\circ\text{Ls}$ )の00:40GMT  $\omega=004^\circ\text{W}$ でDBs氏が、 $009^\circ\text{W}$ でJAd氏が、 $\omega=011^\circ\text{W}$ 、 $016^\circ\text{W}$ 、 $021^\circ\text{W}$ 、 $021^\circ\text{W}$ 、 $026^\circ\text{W}$ 、 $031^\circ\text{W}$ 、 $036^\circ\text{W}$ 、 $041^\circ\text{W}$ でSKwさんがそれぞれ少し南に拡散した形で黄塵を捉えている。CPI氏自身も $\omega=017^\circ\text{W}$ 、 $025^\circ\text{W}$ で撮っている。

**観測の繋がり**：今回はヨーロッパの観測が多く、地球上観測網は可成り完備されて来ているが、矢張り太平洋とインド大陸前後の空白が大きい。然し、衝前後になるとカリフォルニアでは夜明け12hGMTの観測が可能であろうし、日本では夕方12hGMTには観測を開始できる。またユーラシア大陸を挟んでも、例えば5OctにはフィリピンでAk氏が21:15GMT( $\omega=035^\circ\text{W}$ )に観測し、デンマークのシーゲル(ESg)さんが21:30GMT( $\omega=039^\circ\text{W}$ )にスケッチをされている例がある。どちらともマレ・アキダリウムの上に張り出す北極雲を捉えている。何か事象が起きているときは連続した追跡が必要で、火星が低くても心して夕方早く、また夜明け前を狙うということが必要である。また、10OctにはDPc氏と近くのDTy氏が同時に奇妙な現象を捉えた例もある(10OctのLtE参照)ので、時刻を揃えるのも好い。

♂.....In the next issue we shall review the observations made during the fortnight period from 16 October ( $\lambda=307^\circ\text{Ls}$ ,  $\delta=19.8''$ ) to 31 October 2005 ( $\lambda=316^\circ\text{Ls}$ ,  $\delta=20.16''$ ). During the period the planet Mars is closest to the Earth on 30 October at 13.5h GMT ( $\lambda=315.2^\circ\text{Ls}$ ,  $\delta=20.17''$ ,  $\varphi=14.3^\circ\text{S}$ ).

### Forthcoming 2005 Mars (13)

## Ephemeris for the Observation of the 2005 Mars. VII

### November and December 2005

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◆As a sequel to Part VI in #308 where the *Ephemeris* for September and October 2005 was listed, here is given the *Ephemeris* for November and December 2005. The data are listed for every day at 00:00 GMT (not TDT).  $\omega$  resp denotes the longitude resp latitude of the sub-Earth

point. The symbols  $\lambda$ ,  $\delta$  and  $\iota$  stand for the areocentric longitude of the Sun, the apparent diameter and the phase angle respectively. The apparent declination of the planet is also given. The data are based on *The Astronomical Almanac for the Year 2005*.

Date (00:00GMT)	$\omega$	$\varphi$	$\lambda$	$\delta$	$\iota$	Declination
01 Nov 2005	203.50°W	14.6°S	316.28°Ls	20.16"	05.9°	+16°12'
02 Nov 2005	194.72°W	14.8°S	316.85°Ls	20.15"	05.0°	+16°09'
03 Nov 2005	185.92°W	15.0°S	317.42°Ls	20.11"	04.1°	+16°06'
04 Nov 2005	177.12°W	15.2°S	317.99°Ls	20.08"	03.2°	+16°03'
05 Nov 2005	168.33°W	15.4°S	318.56°Ls	20.04"	02.2°	+16°01'
06 Nov 2005	159.55°W	15.6°S	319.13°Ls	20.00"	01.3°	+15°58'
07 Nov 2005	150.75°W	15.7°S	319.70°Ls	19.93"	01.6°	+15°55'
08 Nov 2005	141.96°W	15.9°S	320.27°Ls	19.87"	01.9°	+15°52'



Date (00:00GMT)			$\omega$	$\phi$	$\lambda$	$\delta$	$\iota$	Declination
09	Nov	2005	133.16°W	16.1°S	320.83°Ls	19.80"	02.2°	+15°49'
10	Nov	2005	124.38°W	16.3°S	321.40°Ls	19.73"	02.5°	+15°46'
11	Nov	2005	115.56°W	16.5°S	321.96°Ls	19.64"	03.4°	+15°44'
12	Nov	2005	106.74°W	16.6°S	322.53°Ls	19.55"	04.3°	+15°41'
13	Nov	2005	097.93°W	16.8°S	323.09°Ls	19.45"	05.1°	+15°38'
14	Nov	2005	089.13°W	17.0°S	323.65°Ls	19.36"	06.0°	+15°35'
15	Nov	2005	080.27°W	17.2°S	324.21°Ls	19.24"	06.9°	+15°33'
16	Nov	2005	071.44°W	17.3°S	324.77°Ls	19.13"	07.8°	+15°30'
17	Nov	2005	062.60°W	17.5°S	325.33°Ls	19.01"	08.6°	+15°28'
18	Nov	2005	053.78°W	17.6°S	325.89°Ls	18.89"	09.5°	+15°25'
19	Nov	2005	044.90°W	17.8°S	326.45°Ls	18.75"	10.3°	+15°23'
20	Nov	2005	036.01°W	17.9°S	327.00°Ls	18.62"	11.1°	+15°21'
21	Nov	2005	027.15°W	18.1°S	327.56°Ls	18.48"	11.9°	+15°19'
22	Nov	2005	018.28°W	18.2°S	328.11°Ls	18.34"	12.7°	+15°17'
23	Nov	2005	009.35°W	18.3°S	328.66°Ls	18.19"	13.5°	+15°16'
24	Nov	2005	000.42°W	18.4°S	329.21°Ls	18.04"	14.3°	+15°14'
25	Nov	2005	351.52°W	18.6°S	329.76°Ls	17.89"	15.0°	+15°13'
26	Nov	2005	342.61°W	18.7°S	330.31°Ls	17.74"	15.8°	+15°12'
27	Nov	2005	333.63°W	18.8°S	330.86°Ls	17.58"	16.5°	+15°11'
28	Nov	2005	324.65°W	18.9°S	331.41°Ls	17.42"	17.3°	+15°10'
29	Nov	2005	315.68°W	19.0°S	331.95°Ls	17.25"	18.0°	+15°09'
30	Nov	2005	306.73°W	19.1°S	332.50°Ls	17.09"	18.7°	+15°09'
01	Dec	2005	297.69°W	19.2°S	333.05°Ls	16.93"	19.4°	+15°08'
02	Dec	2005	288.67°W	19.2°S	333.59°Ls	16.76"	20.0°	+15°08'
03	Dec	2005	279.66°W	19.3°S	334.14°Ls	16.60"	20.7°	+15°09'
04	Dec	2005	270.65°W	19.4°S	334.68°Ls	16.43"	21.3°	+15°09'
05	Dec	2005	261.56°W	19.4°S	335.22°Ls	16.26"	21.9°	+15°10'
06	Dec	2005	252.48°W	19.5°S	335.76°Ls	16.09"	22.5°	+15°10'
07	Dec	2005	243.41°W	19.5°S	336.30°Ls	15.92"	23.1°	+15°11'
08	Dec	2005	234.34°W	19.6°S	336.84°Ls	15.75"	23.7°	+15°13'
09	Dec	2005	225.20°W	19.6°S	337.38°Ls	15.59"	24.3°	+15°14'
10	Dec	2005	216.07°W	19.7°S	337.92°Ls	15.42"	24.8°	+15°16'
11	Dec	2005	206.94°W	19.7°S	338.45°Ls	15.26"	25.4°	+15°17'
12	Dec	2005	197.55°W	19.7°S	338.99°Ls	15.09"	25.9°	+15°19'
13	Dec	2005	188.63°W	19.7°S	339.52°Ls	14.93"	26.4°	+15°22'
14	Dec	2005	179.44°W	19.7°S	340.06°Ls	14.77"	26.9°	+15°24'
15	Dec	2005	170.27°W	19.7°S	340.59°Ls	14.66"	27.3°	+15°27'
16	Dec	2005	161.10°W	19.8°S	341.12°Ls	14.44"	27.8°	+15°29'
17	Dec	2005	151.85°W	19.7°S	341.65°Ls	14.28"	28.2°	+15°32'

Date (00:00GMT)	$\omega$	$\phi$	$\lambda$	$\delta$	$\iota$	Declination
18 Dec 2005	142.62°W	19.7°S	342.18°Ls	14.13"	28.7°	+15°36'
19 Dec 2005	133.39°W	19.7°S	342.71°Ls	13.97"	29.1°	+15°39'
20 Dec 2005	124.18°W	19.7°S	343.24°Ls	13.81"	29.5°	+15°43'
21 Dec 2005	114.90°W	19.7°S	343.77°Ls	13.66"	29.9°	+15°46'
22 Dec 2005	105.61°W	19.6°S	344.29°Ls	13.51"	30.3°	+15°50'
23 Dec 2005	096.35°W	19.6°S	344.82°Ls	13.35"	30.6°	+15°54'
24 Dec 2005	087.08°W	19.6°S	345.34°Ls	13.20"	31.0°	+15°58'
25 Dec 2005	077.75°W	19.5°S	345.86°Ls	13.06"	31.4°	+16°03'
26 Dec 2005	068.43°W	19.5°S	346.38°Ls	12.92"	31.7°	+16°07'
27 Dec 2005	059.12°W	19.4°S	346.90°Ls	12.77"	32.1°	+16°12'
28 Dec 2005	049.81°W	19.4°S	347.42°Ls	12.63"	32.4°	+16°17'
29 Dec 2005	040.45°W	19.3°S	347.94°Ls	12.49"	32.7°	+16°22'
30 Dec 2005	031.09°W	19.3°S	348.46°Ls	12.36"	33.0°	+16°27'
31 Dec 2005	021.73°W	19.2°S	348.98°Ls	12.22"	33.2°	+16°32'
01 Jan 2006	012.40°W	19.1°S	349.50°Ls	12.08"	33.5°	+16°37'

### Forthcoming 2005 Mars (14)

## Water Vapours Seen on the SH from $\lambda=320^\circ\text{Ls}$ to $360^\circ\text{Ls}$ and Hellas at around $\lambda=345^\circ\text{Ls}$ ( $\lambda=320^\circ\text{Ls}$ to $360^\circ\text{Ls}$ 頃の南半球水蒸気縁雲とヘッラス)

Masatsugu MINAMI

南 政 次 (Mn)

The Viking mission in 1977 brought about rather unexpected results in addition to a lot of usual anticipated ones: As an example it revealed a rich distribution of water vapour on the southern hemisphere at the season of southern summer solstice  $\lambda=270^\circ\text{Ls}$ , and secondly, as this may also be related with the former, the water vapour was seen to go down from the southern high-latitude area to lower equatorial region from  $\lambda=330^\circ\text{Ls}$  to  $360^\circ\text{Ls}$ . (These were treated in CMO #108 -25 August 1991-, based on B JAKOSKY et al, *Icarus* **73** (1988) 80, J POLLACK et al, *Icarus* **50** (1982) 259.)

What we recall here may be related with the second result, and may be observable similarly this apparition. That is the observational fact that in 1990, around from  $\lambda=340^\circ\text{Ls}$ , there were observed one or two (sometimes three) patches of the water condensates on the following terminator from the higher to lower latitude (as reported as a *Note* in CMO #108 p933). In short, from the time S

Sabaeus was near the meridian to the time when Hellas was near the morning terminator, several conspicuous condensate patches were witnessed on the at-dawn Noachis when it passed the morning terminator, especially from 3 December 1990 ( $\lambda=344^\circ\text{Ls}$ ) to 10 December 1990 ( $\lambda=347^\circ\text{Ls}$ ) (just from Japan): This is first based on Mn's 65 observations from 3 Dec to 10 Dec and also on Takashi Nakajima (Nj)'s 29 observations from 6 Dec to 10 Dec, while at the same time a lot of observations were made in Japan. On 1 Dec ( $\lambda=342^\circ\text{Ls}$ ), Tohru IWASAKI (Iw) visually watched at  $\omega=322^\circ\text{W}$ , and Tomio AKUTSU (Ak) took a *B* image (B390) at  $\omega=336^\circ\text{W}$ , both show two condensate terminator patches, one at a higher region and the other at Margaritifer S. On 3 December, Isao MIYAZAKI (My) produced three sets of TP images (B390); one at  $\omega=320^\circ\text{W}$  showed the one at the higher region was divided into two terminator patches, and at  $\omega=342^\circ\text{W}$  there was added the third one

over Margaritifer S. The observers of the repeated terminator patches were counted, in addition to the above five, as follows: Naoya MATSUMOTO (*Mt*, *Fujichrome* RD100), Hiroshi ISHADOH (*Id*), Akinori NISHITA (*Ns*, RD100), Masami MURAKAMI (*Mk*), Morimasa NAKAJIMA (*Nk*) and others. *Mt* chased on 9 Dec by RD100 the planet at  $\omega=246^\circ\text{W}$ ,  $256^\circ\text{W}$ ,  $262^\circ\text{W}$ ,  $272^\circ\text{W}$ ,  $281^\circ\text{W}$ ,  $306^\circ\text{W}$ , and  $316^\circ\text{W}$ . From Japan, the observation of the conspicuous patches became impossible around from 10 Dec ( $\lambda=347^\circ\text{Ls}$ ).

Abroad, Don PARKER (*DPk*) was a unique observer at that time who secured the B images. One of his colour images taken on 24 November 1990 ( $\lambda=334^\circ\text{Ls}$ ) shows this kind of patch (he produced B through the colour films). We can say however if we compare *DPk*'s image on 23 Nov at  $\omega=297^\circ\text{W}$  with *My*'s image (Int) made on 7 Dec at  $\omega=295^\circ\text{W}$ , the latter shows the limb cloud patches more clearly and strongly. One month later, *DPk* showed a patch to the south of Hellas on 24 December 2005 ( $\lambda=254^\circ\text{Ls}$ ) by the use of TP equipped with the B390 filter. His image on 31 Dec ( $\lambda=358^\circ\text{Ls}$ ) at  $\omega=280^\circ\text{W}$  shows that the core was much downward compared with the case at the beginning of December, and this was in good accord with case of the Viking result. That is, this kind of phenomenon was a seasonal one.

Hellas even when more inside looked also irregular, and at the western corner a strange swath of light matter prevailed along Yaonis Fr (the northern part of Hellas was a thick haunt as usual). This irregular phenomenon of Hellas was reviewed in CMO #113 p989 (as Note (3)). This was quite apparent on 23 Oct ( $\lambda=321^\circ\text{Ls}$ ) at  $\omega=303^\circ\text{W}$ ,  $313^\circ\text{W}$ : The bright part was not whitish but slightly pinkish. This aspect was also detected by *Iw*, *Ak* and *Mk*. Already *DPk*'s TP photos made on 13 Oct ( $\lambda=315^\circ\text{Ls}$ ) at  $\omega=311^\circ\text{W}$ ,  $317^\circ\text{W}$  show this phenomenon, and so might have occurred before the limb-patch phenomena. He also showed it on 19 Nov, 20 Nov, and 23 Nov. In Japan this was frequently observed in Dec: On 1 Dec ( $\lambda=342^\circ\text{Ls}$ ), *Iw* and *Id* as well as *Mn* observed. *Iw* noted Hellas was not brighter as it approached the evening limb side. In photos, *My* made a series on 3, 5, 6, 7, 8 Dec, and *Ak* also took on 5, 6, 7, 8 Dec. They all show that the bar-like haunt does not show in B, and

so different from the limb clouds. On the other hand, in R it was evident even on the TP images by *Mk* made by the use of 10cm Refr on 8 Dec at  $\omega=291^\circ\text{W}$ ,  $301^\circ\text{W}$ . We should say the haunt is weaker on *Mt*'s R100 images.

Fifteen years ago, any concentrated observations did not reach us except from the Japanese observers, while this apparition we can expect to accumulate globally more complete data of the similar phenomena from around the world, if not dust clouded.

★1977年のヴァイキンの結果の中に、一寸唐突と思われるものが幾つかあって、一つは $\lambda=270^\circ\text{Ls}$ という南半球の夏至に南半球に水蒸気が高密度で観測されていること、もう一つ関係はあると思うが、 $\lambda=330^\circ\text{Ls}$ 邊りから $\lambda=360^\circ\text{Ls}$ に掛けて南極高緯度から次第に水蒸気が北に降りてゆくことである(これに就いてはCMO #108 --25 Aug 1991--で採り上げた。B JAKOSKY et al, *Icarus* **73** (1988) 80、J POLLACK et al, *Icarus* **50** (1982) 259等に據る)。

ここで採り上げるのは、多分後者と関係することではないかと思うが、1990年の $\lambda=344^\circ\text{Ls}$ 頃から(既に衝は過ぎていた)南極冠から赤道帯に掛けて朝縁に霧の塊が幾つも見えていたことである。これについてもCMO#108p933のNoteで報告してあるが、要約すれば、シヌス・サバエウスが南中する頃から、ノアキスが朝縁を通過し、ヘッラスが朝縁にある頃まで顕著な朝雲の塊が二つ玉、三ツ玉として並んだことで、当時の3Decから10Decまでの筆者Mnの65葉、6Decから10Decまでの中島孝(Nj氏)の29葉の観測に基づいている。然し同時に日本国内では多くの観測があり、1Dec( $\lambda=342^\circ\text{Ls}$ )では、岩崎徹(Iw)氏が $\omega=322^\circ\text{W}$ での眼視観測、 $\omega=336^\circ\text{W}$ の阿久津富夫(Ak)氏のB光では高緯度とマルガリティフェル・シヌス上空に寫っている。3Decには宮崎勲(My)氏は三組の写真を撮り、 $\omega=320^\circ\text{W}$ では南極域の雲塊は二つに分かれ、 $\omega=342^\circ\text{W}$ ではマルガリティフェル・シヌス上空のものを加わって三ツ玉になっている。この朝縁雲塊の観測者としては、上の三人(五人)の他、松本直弥(Mt)氏、伊舎堂弘(Id)氏、西田昭徳(Ns)氏(RD100)、村上昌己(Mk)氏、中島守正(Nk)氏などの観測が擧がっている。Mt氏は9DecにはRD100で $\omega=246^\circ\text{W}$ ,  $256^\circ\text{W}$ ,  $262^\circ\text{W}$ ,  $272^\circ\text{W}$ ,  $281^\circ\text{W}$ ,  $306^\circ\text{W}$ ,  $316^\circ\text{W}$ と追跡した。

日本からは10Dec( $\lambda=347^\circ\text{Ls}$ )邊りが最後になるのだが、 $\omega=250^\circ\text{W}$ 邊りからヘッラスの南に雲塊が顕れ、そのまま濃くなり朝縁に残るというパターンで、 $\omega=310^\circ\text{W}$ 邊りではニッ玉になって行くが、デプレッショネス・ヘッレスポンチカエが漆黒の様に濃い爲、雲は二つに分裂してみえるのであらうと思う。尚、當時の外國でB光を撮影しているのは唐那・派克(DPk)氏だけであるが、これより前24Nov( $\lambda=334^\circ\text{Ls}$ )のカラー写真では稍認められる。DPk氏の一ヶ月後の24Dec( $\lambda=254^\circ\text{Ls}$ )ではTPのB光(B390)でもヘッラスの南に出ている。31Dec( $\lambda=358^\circ\text{Ls}$ )  $\omega=280^\circ\text{W}$ 邊りではコアはDec上旬より北へ降りた感があり、これはVikingの結果と合っていると思う。つまり季節変化である。

扱て、この時ヘッラスの様子も異様で、ヤオニス・フレトゥムに沿っては明部の流れがある(CMO#113 p989にNote(3)として纏められている)。23Oct( $\lambda=321^\circ\text{Ls}$ ) $\omega=303^\circ\text{W}$ 、 $313^\circ\text{W}$ で氣附いたことで、ヘッラスの北部はいつものように明部の「溜まり」になっているのだが、これとは別に、ここからヤオニス・フレトゥムに沿ってヘッラス内を棒状に南に明部が延びて異様な形に見えたのであ

る。「溜まり」は白色というよりもピンク色を帯びている。この現象は同時にIw氏やAk氏、Mk氏の観測にも顕れている。後で、調べたところでは、既に13Oct( $\lambda=315^\circ\text{Ls}$ )  $\omega=317^\circ\text{W}$ のDPk氏の画像にも表れているから、上に述べた縁雲の縁雲の現象より早いかも知れないので注意する。他にDPk氏には19Nov、20Nov、23Novの観測がある。日本からよく観察されたのは十二月に入ってからで、1Dec( $\lambda=342^\circ\text{Ls}$ )には筆者の他Iw氏やId氏が観測し、Iw氏によるとヘッラスは夕方に来て明るくならない。写真ではMy氏は3、5、6、7、8Decでヘッラスを聯射し、Ak氏も5、6、7、8Decと撮っている。特徴はB光ではヘッラス近邊はさほどの映りはしないことで、縁雲とは相當に違う。一方R光ではMk氏の10cmによる8Dec $\omega=291^\circ\text{W}$ 、 $301^\circ\text{W}$ のTP写真でも、北部の溜まり、棒状明帯も明確である。Mt氏の9DecのRD100でも白雲系は好く出ているがヘッラスは少し曖昧である。但しR光像でのヘッラス全體は然程1988年と変化している譯ではない。

今回は黄雲の影響があつてどうであろうか、然し、留意して、この地域の追跡を望む。□

## 便り

### Letters to the Editor

●.....中島孝さんのブレラ天文台訪問(CMO306号)で、かつてのトキメキを想起して幸せでした。309号でSHEEHANさんが言及しているLOWELL関係の記事、S&Tの12月号の載るようで楽しみです。

(3 Oct 2005)

佐藤 利男 (Toshio SATO 東京 Tokyo)

●.....『火星通信』309号拝受致しました。有難うございました。臨時のカンパを致しますので、ご笑納下さい。海外からの報告も増え、まことに結構に存じますが、それなりにご苦勞も増えたと拝察いたします。益々のご活躍を祈念致します。(4 Oct 2005)

松本 達二郎 (Tatsujiro MATSUMOTO 尼崎 Hyogo)

●.....Date: Sun, 09 Oct 2005 10:43:46 -0500  
Subject: Images from the 1st and 2nd of October 2005.

Dear M Minami: I am sending some separate images taken the 1st and 2nd of October. The B&W were taken with a LU-075M and the color with the ToUcam. The instrument is a 10" f/20 TEC Maksutov at f/50 and at f/60. Did not take exact time when images were taken due to rain spells. I did send to you a mosaic with the same images a few days ago. Best regards from Mexico.

○.....Date: Mon, 10 Oct 2005 13:39:44 -0500

### Subject: Thanks.

M Minami: I thank you for the inclusion of my images in the Gallery and the work involved in it. Send my respects to you and family.

Eric ROEL SCHREURS (エリック・ロエル Mexico 墨)

●.....Date: Sun, 9 Oct 2005 12:30:49 -0500

From: egraffon@ghg.net (Ed Grafton)

To: marsobservers@yahoo.com

Cc: vzw03210@nifty.com, cmo@mars.dti.ne.jp,

RMckim5374@aol.com, davidpaulmoore@msn.com

Subject: [marsobservers] Mars October 9th

Here are images of Mars taken October 9th 2005 at 07:51 UT from Houston Texas.

<http://www.ghg.net/egrafton/m10-9-05.jpg>

C14 at f/39, taken with a ST402 CCD. Seeing 7/10, Transp. 9/10, Temp 60.9F, Relative Humidity 66%, Red/Grn/Blu @ 80% scale.

○.....Date: Sat, 15 Oct 2005 12:04:18 -0500

Subject: [marsobservers] Mars October 15th

Here are images of Mars taken October 9th 2005 at 06:41 UT from Houston Texas.

<http://www.ghg.net/egrafton/mo-15-05.jpg>

C14 at f/39, taken with a ST402 CCD. Seeing 7/10, Transp. 7/10, Temp 70.3F, Relative Humidity 71%, Red/Grn/Blu @ 80% scale.

○.....Date: Sun, 16 Oct 2005 13:57:54 -0500

Subject: [marsobservers] Mars October 16th

Here are images of Mars taken October 16th 2005 at 07:22 UT from Houston Texas.

<http://www.ghg.net/egrafton/mo-16-05.jpg>

C14 at f/39, taken with a ST402 CCD. Seeing 8/10, Transp.

8/10, Temp 66.3F, Relative Humidity 70%, Red/Grn/Blu @80% scale.

●.....**Date: Mon, 17 Oct 2005 10:11:45 -0500**  
**Subject: [marsobservers] Mars October 17th**

Here are images of Mars taken October 17th 2005 from Houston Texas. Note the anomalous light feature in Chryse.

<http://www.ghg.net/egrafton/mo-17-05.jpg>

C14 at f/39,taken with a ST402 CCD. Seeing 8/10, Transp. 8/10, Temp 65.7F, Relative Humidity 67%, Red/Grn/Blu @ 80% scale.

○.....**Date: Mon, 17 Oct 2005 12:48:13 -0500**  
**Subject: Chryse Anomalous Feature**

The anomalous feature in Chryse is shown in the image at 06:54 UT Oct-17

<http://www.ghg.net/egrafton/mo-17-05.jpg>

and is also present on Clay Sherod's image shown here at 06:35 UT Oct-17

<http://www.arksky.org/asoimg/MarAE66D03.jpg>

The anomaly can also be seen in an image taken by Glenn Schaeffer at 06:22 UT Oct-17

<http://home.houston.rr.com/gschaeffer/mars10-17-05.jpg>

However it is not present on Oct-17 at 01:56 UT taken by Peter Lawrence

<http://www.ghg.net/egrafton/2005-10-.jpg>

It is also not present on an image taken a month ago:

<http://www.ghg.net/egrafton/m9-17-05.jpg>

Comments?

<http://www.ghg.net/egrafton/m9-17-05.jpg>

○.....**Date: Tue, 18 Oct 2005 00:15:14 -0500**  
**Subject: [marsobservers] Mars October 17th**

Yes Joel and it is progressing nicely

<http://www.ghg.net/egrafton/m18.jpg>

○.....**Date: Tue, 18 Oct 2005 04:55:30 -0500**  
**Subject: [marsobservers] Mars October 18th**

Here are images of Mars taken October 18th 2005 from Houston Texas. The dust cloud has moved south quite a bit since yesterday and several core concentrations are visible. It appears another cloud of sorts is on the limb but it is too far from the CM to tell much about it.

<http://www.ghg.net/egrafton/mo-18-05.jpg>

C14 at f/39,taken with a ST402 CCD. Seeing 7/10, Transp. 7/10, Temp 68.7F, Relative Humidity 69%, Red/Grn/Blu @ 80% scale.

○.....**Date: Wed, 19 Oct 2005 06:13:01 -0500**  
**Subject: [marsobservers] Mars October 19th**

Here are images of Mars taken October 19th 2005 from Houston Texas. The main thrust of the cloud continues to move north in somewhat of a wall configuration while leaving a generally lighter dusty-ness in its wake.

<http://www.ghg.net/egrafton/mo-19-05.jpg>

C14 at f/39,taken with a ST402 CCD. Seeing 7/10, Transp. 7/10, Temp 70.5F, Relative Humidity 72%.

○.....**Date: Wed, 19 Oct 2005 06:57:25 -0500**  
**Subject: Re: [marsobservers] Preliminary results for oct.17th dust**

Glenn Schaeffer sent along another of his shots from the 17th that is at 05:55 UT

<http://home.houston.rr.com/gschaeffer/marsduststorm.jpg>

○.....**Date: Fri, 21 Oct 2005 05:53:48 -0500**  
**Subject: [marsobservers] Mars October 21th**

Here are images of Mars taken October 21th 2005 from Houston Texas.

<http://www.ghg.net/egrafton/mo-21-05.jpg>

C14 at f/39,taken with a ST402 CCD. Seeing 6/10, Transp. 7/10, Temp 73.4F, Relative Humidity 73%.

○.....**Date: Sun, 23 Oct 2005 13:19:26 -0500**  
**Subject: [marsobservers] Mars October 23rd**

Here are images of Mars taken October 23rd 2005 from

Houston Texas.

<http://www.ghg.net/egrafton/mo-23-05.jpg>

C14 at f/39,taken with a ST402 CCD. Seeing 7/10, Transp. 7/10, Temp 63.4F, Relative Humidity 68%.

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

●.....**Date: Sun, 09 Oct 2005 21:31:20 +0200**  
**Subject: Mars, october 8-9th**

Hi all, There have been a totally unexpected clear and steady night, at 9 pm an hopeless front was still dancing near Paris and in just two hours it completely disappeared as a high pressure was growing from the south ! Seeing was good to very good. Interesting to note that the B&W Toucam slightly outperformed the Lumenera (it was used in a quite better moment, although the quality of its raw frames are clearly not as good in term of SNR).

<http://www.astrosurf.org/pellier/M051008-9-CPE> (Lu)

<http://www.astrosurf.org/pellier/M051009-CPE> (TouC)

Best wishes,

○.....**Date: Fri, 14 Oct 2005 23:17:14 +0200**  
**Subject: Mars on october 13th with the dust cloud**

Hi all, here are some images taken on the evening of oct.13th, the bright yellow dust cloud (clouds ?) was crossing Chryse. By looking at the images it's clear that shorter wavelenghts did best in enhancing the dust (the green filter is especially important).

<http://www.astrosurf.org/pellier/M051013-CPE>

The NPH is absolutely thick and was seen white at the eyepiece, as well as the morning mist (my telescope isn't powerful enough to reveal the subtle blue hue of the hood visually, moreover transparency was fair). I will check the dust cloud again tonight. Best wishes

○.....**Date: Sun, 16 Oct 2005 00:41:08 +0200**  
**Subject: Mars on october 15th**

Hi all, on the following night the dust cloud arrived in Eos where it might got trapped in the numerous canyons found there. There's also maybe two hazy dust extensions, also seen on Paolo's latest, the longer but more diffuse one crossing through Pyrrhae regio.

<http://www.astrosurf.org/pellier/M051015-CPE>

Interesting to note the "hole" in the NPH, this might be a front (already seen before). The IR image reveals Mare Acidaliu up to the very north limb. I may have a chance to image it again tonight, although seeing won't be better. Best wishes

○.....**Date: Mon, 17 Oct 2005 19:18:08 +0200**  
**Subject: Re: Mars on october 15th**

Dear Masatsugu, the question of the color of Mars is an important one. I always take much care of color rendition because color is a code that carries on some kinds of information. If you don't get realistic colors, you might make wrong conclusions (this is especially true, for me, for Mars), or some activity would go unnoticed. This supposes that processing avoids unusual methods that don't conserve by definition the real balance, but having said that, getting right colors is always difficult, and I spend much time achieving my color balance according to what I visually saw in the telescope. Nonetheless, I try not to involve personal judgements on colors, and I hope that the differences in colors we might see are only eye differences, not cultural ones... I never know where to put the balance between deep orange and orange-pink (this is what you might call "red-dish"). The pink hue looks subtle and disappear if the sky is less than really transparent. The question of the color of "white" clouds have also been a subject of debate recently in the Mars observer's list, as the NPH became so spectacu-



lar. I really see it white, while many images show it really blue. Although the real color is certainly white-bluish, deep blue is common but must be regarded as an exaggeration. What about you adjusting the color balance on one of my images for example, in a way you see it? It's very simple even if you don't yourself make images. Or please indicate me some images you find ok... Best wishes,

○.....Date: Tue, 18 Oct 2005 21:17:09 +0200  
Subject: Preliminary results for oct.17th dust

Hi all, just a message to send more interesting data on this new dust storm. It seems that it has been observed in France a few hours before Ed's observation in its first stage, extending from the NPH west of Nilokeras.

<http://www.astrosurf.org/pellier/nilokerasdust>

(the cloud seen on Ed's image may be barely visible.) This looks to be a new one, that's also coming from the Acidaliu low pressure. Masatsugu, we're therefore maybe not able to test there your hypothesis of the re-built dust cloud in the morning! I had some doubts on my images, which can't be completely self-speaking, but here are two links to images taken after me that show clearly a yellow zone just west of Nilokeras.

<http://www.fotocs.com/images/Mars/1710/5h13mWeb.jpg>

(Stemm, with a C8)

<http://photos.lacocinelle.net/42/78/204278.jpg>

(Rolf Arcan, with a 16" newtonian) Best wishes

○.....Date: Tue, 18 Oct 2005 23:30:42 +0200  
Subject: Re: Preliminary results for oct.17th dust

Hi Clay, your doubts are legitimates, some more "clear" dust clouds were found to be artefacts in the past. Therefore I'm only basing my analysis on the several images taken just after me. Here is again one, by François Debricon and a C8:

<http://site.voila.fr/archivdeb/photos/1710b.jpg>

The yellowish part of the NPH is also visible. Note however that the bright patch in my R images isn't found on "normal" surface images of the region...

Hi Chris...

This area that you have pointed out actually appears to be more of a clearing within the heavy polar haze, from my interpretation. More observations would be excellent.

DrClay

○.....Date: Wed, 19 Oct 2005 23:41:39 +0200  
Subject: Mars on october 17th

Hi all, here is the complete set of images from the 17th. Seeing has been very good but the sky cleared only at 1H UT.

<http://www.astrosurf.org/pellier/M051017-CPE>

This set shows a possible streak feature near Nilokeras, as imaged by at least four other observers in France the same night. It looks yellowish in RGB and it's visible in R and IR (in green it's mixed with white clouds). The 2nd and 3rd RGB series are most interesting. If real my interpretation is that a new dust cloud developed at the edge of the Acidaliu low pressure during october 16th-17th; it took a streak-like appearance. The complete streak would have then be visible in Europe in the last hours of the night while its southern point, already in Chryse, has been imaged a few hours later in the USA...

By the way congratulations for all the nice images of the storm we've seen in the past days! This one is very nice (it looks to be trapped in Valles Marineris now?).

Best wishes,

**Christophe PELLIER** (クルストフ・ペリエ nr Paris 法)

●.....Date: Mon, 10 Oct 2005 12:03:08 +0900  
Subject: Re: mars image 05 Oct. 2005

阿久津様:こちらは、少し遅れて秋の長雨になりました。デジカメ、少しシーイングが悪いと、処理をしてもディティールはあまり出ないようです。

『日経サイエンス』の10月号に、「砂に隠された湖・変化に富む火星の姿」P.R.クリステンセン（アリゾナ州立大）という記事がありました。そのなかで、いきなり「火星の赤道付近には、「大シュルティス」と名付けられた直径1100kmもの巨大な火山がある」とでてきました。ニリ・パテラの画像があり、巨大な火山である大シュルティスの山頂付近。うんぬん...とありました。大シュルティスが火山という話は聞いた覚えがないので、白尾元理氏に電話で尋ねたところ、2003年の火星図を参照しながらチェックしていたようですが、一応オリュムプス・モンスなどよりもずっと低い、火山地形と見なせるとのことでした。ちょうど、地球ではデカン高原のような平らな地形が、一つの火口からの熔岩で出来たということのようです。

複合した火山地形かもしれませんが、今後、「大シュルティス」は、地域名ではなく火山名となるのでしょうか？

○.....Date: Sat, 22 Oct 2005 21:26:38 +0900  
Subject: Re: ソリス・ラクス黄塵の発展

南様; 20日に撮った、デジカメの画像です。ソリス付近が何か淡いように思っていました。取りあえず、コンポジットと、最低限の明るさ、色調の補正のみです。参考になれば幸いです。

**石橋 力** (Tsutomu ISHIBASHI 相模原 Kanagawa)

●.....Date: Mon, 10 Oct 2005 14:46:07 +0900  
Subject: Mo08Oct\_05 06Oct\_05

06日は好シーイングでしたが、雲が多めでした。

08日はシーイングはよくなかったのですが、良く晴れていました。なかなかうまくいきませんが、撮れたものを送ります。08日のものはWebに載せない方が良くも... ただ、 $\omega = 328^\circ W$ は撮れています...

Webカメラが来るのが楽しみです。

○.....Date: Fri, 14 Oct 2005 00:55:04 +0900  
Subject: Mo12Oct\_05

12Octをお送りします。最近ではSeeingが悪く、あまり良いものが撮れません。今日も晴れていますがSeeingはきのうと変わらずで何とかならないかと、頭を悩ませる毎日です。

○.....Date: Tue, 18 Oct 2005 00:04:17 +0900  
Subject: Mo15Oct\_05

Seeingが悪いので送るのをためらっていましたが、とりあえず、15Octをお送りします。

今日は台風の影響でしょうか、風がやたらに強く、透明度は良いのですが断念しました。

○.....Date: Sun, 23 Oct 2005 01:24:43 +0900  
Subject: Mo19,20Oct\_05

今日(22GMT)は雲が多く観測は難しい状況です。時々雨もぱらついてSeeingは好くないようです。明日(23GMT)には晴れ間が広がると思われますので早い時間から待機しようと思っています。

**森田 行雄** (Yukio MORITA 廿日市 Hiroshima)

●.....Date: Mon, 10 Oct 2005 20:20:09 +0900  
Subject: 10月9日の画像

10月9日の画像をお送りします。撮影時刻は、16

時15分、16時55分、17時36分、18時16分、18時55分です。5回目の撮影の頃から雲が広がり始め、それ以降はできませんでした。

○.....Date: Sun, 16 Oct 2005 10:10:34 +0900

Subject: 10月12日の画像

10月12日の画像をお送りします。雲が出てきたので、25時過ぎで終了しました。撮影時刻は、14:12、14:50、15:30、16:16GMTで最後が6分遅くなったのも、雲間を狙ったためです。

浅田 正 (Tadashi ASADA 宗像 Fukuoka)

●.....Date: Mon, 10 Oct 2005 15:07:53 +0100

Subject: Mars images (October 10th, 2005.)

Hi all, Here are some images from this morning. Again poor seeing with occasional fair moments near the end. Some interesting detail in Blue. A bright cloud is present near the SPC. The Arsia cloud is weak extending into a morning limb haze. Note the line feature on the disk - this is not a CCD artefact as Mars moved around on the chip quite a bit during the capture. Some notable clouds again over Tharsis extending into Ophir/Candor. A weak evening cloud is present over Aram. The NPH appears dense over Acidalium.

In Red note the partial obscuration of Nilokeras, probably associated with the thick NPH. Also various "nuclei" in Melas/Tithonius Lacus.

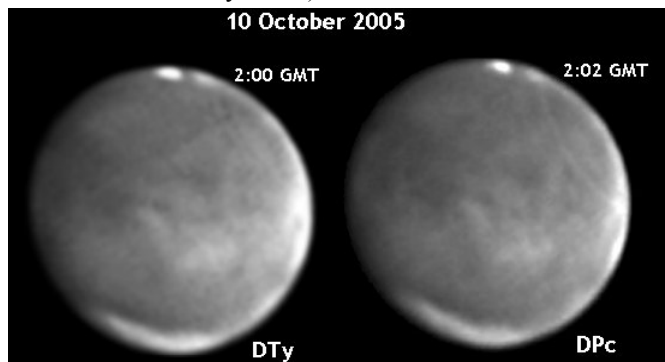
[http://homepage.ntlworld.com/damian.peach/2005\\_10\\_10rgb\\_DAP.jpg](http://homepage.ntlworld.com/damian.peach/2005_10_10rgb_DAP.jpg)

Best Wishes

○.....Date: Mon, 10 Oct 2005 22:28:56 +0100

Subject: Re: Mars 10 Oct 05

Hi Dave, This is most interesting....your Blue image also shows that faint line running across SE Solis Lacus up toward that south polar cloud (though the contrast is a bit weaker it is definitely there.)



I wonder what this feature could be?. It is surely atmospheric as nothing is present in Red.

Any suggestions anyone?. Comparison of our images attached showing the feature. Best Wishes

○.....Date: Wed, 12 Oct 2005 00:43:32 +0100

Subject: Mars images (October 11th, 2005.)

Hi all, Here are some images from Oct 11th. Poor seeing yet again, with the jetstream close by. Similar details to yesterday with some changes.

The southern polar cloud of yesterday is less prominent, and some interesting clumpy cloudiness is present within the NPH. Northern Nilokeras remains obscured in Red. Chryse is dusky in Red. Weak clouds over Tharsis into Candor/Ophir. The Arsia cloud is not present toward the evening limb.

[http://homepage.ntlworld.com/damian.peach/2005\\_10\\_11rgb\\_DAP.jpg](http://homepage.ntlworld.com/damian.peach/2005_10_11rgb_DAP.jpg)

Best Wishes

○.....Date: Mon, 17 Oct 2005 20:34:11 +0100

Subject: Mars images (October 16th, 2005.)

Hi all, Here is the full set of data from October 16th.

Very little dust remains from the Chryse cloud of the days before. The streak I mentioned at Nilivac Lacus is normal appearance and not dust as I already mentioned.

[http://homepage.ntlworld.com/damian.peach/2005\\_10\\_16rgb\\_DAP.jpg](http://homepage.ntlworld.com/damian.peach/2005_10_16rgb_DAP.jpg)

[http://homepage.ntlworld.com/damian.peach/2005\\_10\\_16red\\_DAP.jpg](http://homepage.ntlworld.com/damian.peach/2005_10_16red_DAP.jpg)

[http://homepage.ntlworld.com/damian.peach/2005\\_10\\_16green\\_DAP.jpg](http://homepage.ntlworld.com/damian.peach/2005_10_16green_DAP.jpg)

[http://homepage.ntlworld.com/damian.peach/2005\\_10\\_16blue\\_DAP.jpg](http://homepage.ntlworld.com/damian.peach/2005_10_16blue_DAP.jpg)

Best Wishes

○.....Date: Mon, 17 Oct 2005 22:48:11 +0100

Subject: Mars images (October 17th, 2005.)

Hi all. Here are some images from last night. Fair to poor seeing. Some interesting detail in Blue light. A clumpy evening cloud is present over Libya/Southern Syrtis Major. Hellas is free of mist. The NPH is again thick extending over Acidalium. Note the detail around the SPC in red.

[http://homepage.ntlworld.com/damian.peach/2005\\_10\\_17rgb\\_DAP.jpg](http://homepage.ntlworld.com/damian.peach/2005_10_17rgb_DAP.jpg)

[http://homepage.ntlworld.com/damian.peach/2005\\_10\\_17blue\\_DAP.jpg](http://homepage.ntlworld.com/damian.peach/2005_10_17blue_DAP.jpg)

Best Wishes

○.....Date: Tue, 18 Oct 2005 23:04:01 +0100

Subject: Mars images (October 18th, 2005.)

Hi all, Here are some images from last night. Again poor to fair seeing. Note the dense evening mist over Libya. Also the Chryse dust cloud can just be seen in the images at the morning limb appearing brilliant.

[http://homepage.ntlworld.com/damian.peach/2005\\_10\\_18rgb\\_DAP.jpg](http://homepage.ntlworld.com/damian.peach/2005_10_18rgb_DAP.jpg)

[http://homepage.ntlworld.com/damian.peach/2005\\_10\\_18blue\\_DAP.jpg](http://homepage.ntlworld.com/damian.peach/2005_10_18blue_DAP.jpg)

Best Wishes

**Damian PEACH** (デミアン・ピーチ Bkh 英)

●.....Date: Mon, 10 Oct 2005 22:23:17 +0200

Subject: mars 9/10/05

je vous adresse mon image de mars du 9/10/05 pour votre site. cordialement

○.....Date: Wed, 12 Oct 2005 13:41:27 +0200

Subject: Re: RE:mars 9/10/05

bonjour Mr masami, je vous envoie mon image de mars du 9/10/05, avec les informations complémentaires que vous vouliez, j'ai également retiré l'image de simulation et ajouté l'heure en T.U. j'expédie également cette version sur votre autre adresse. merci bien cordialement.

○.....Date: Sat, 15 Oct 2005 12:52:24 +0200

Subject: mars du 15/10/05

bonjour, je vous envoie ma mars du 15/10/05 pour votre site, j'ai intégré toutes les infos dont vous avez besoin sur l'image. bien cordialement

**David BATISSARD**

(ダヴィッド・バティサル Clermont-Ferrand 法)

●.....Date: Tue, 11 Oct 2005 09:16:37 +0900

Subject: 火星画像 08 Oct.(GMT) 2005

先週末の土曜日の夜、Chris宅に預けてある28cmSCT(C-11)で火星を撮りました。丁度、バギオ市(ルソン島)のJohn Nassさんにもお会いできて、楽しい一時を過ごす事が出来ました。C-11は光軸はそれなりに合わせてありますが、火星像が二重になってしまいます。筒内気流もありますが、今だ改善出来ておりません。Chrisも悩んでいます。私のC-8は口径が小さいので、起こらない様ですが、これについてわかる方は御教授下さい。

○.....Date: Tue, 11 Oct 2005 16:10:05 +0900

Subject: Mars images on 10 Oct. 2005

今朝の火星は気流も良く、画像、眼視とも良く見えていました。北周辺の雲は白でなく青みかかった

色彩でした。ATKカメラが使えずToUcamで白黒のB.G.R.IR像は感度不足で本来のイメージとは違います。特にB光はとても使えない画像となりました。

●.....Date: Mon, 24 Oct 2005 15:53:41 +0900

Subject: Re: ソリス・ラクス黄塵の発展

セブの阿久津です。アメリカでの滞在はいかがでしたか? ソリス・ラクスの黄塵付近は私の西側の場所からでは観測できません。同じ階の東側には知り合いがいますので今夜から少しの時間だけ移動して撮りたいと思います。

10月28日に一時帰国します。11月6日までの九日間は日本にいますのでその間は日本で火星を見ます。次回は12月25日帰国予定です。来年も行かされそうな計画がありますが半分諦めています。業務命令ですので仕方ありません。

阿久津 富夫(Tomio AKUTSU セブ The Philippines)

●.....Date: Tue, 11 Oct 2005 09:16:33 +0200

Subject: Mars 2005-10-09 and 2005-10-10

Dear Sirs, after a period of bad weather we had good seeing conditions, two recent results enclosed.

Best Regards,

Michael KARRER (ミヒヤエル・カッター St Radegund 奥)

●.....Date: Tue, 11 Oct 2005 12:34:07 +0100

Subject: Re: Mars 10 Oct 05

Hi Damian, Yes I noticed it too on my image on the left there, taken within a few minutes of each other from stations about a mile apart. My image being the later one. I put it into an animation just for fun, and then noticed that Mars appears to rotate under the feature. As the images in the animation are taken through two different scopes i.e. a C11 and a C14 I think it is safe to assume it is not from within. My first guess was that we both took the image through a very high up atmospheric effect in the Earth's atmosphere. My second thought is it is the sun reflecting off a weather front on Mars. The trail of a Martian fireball perhaps? I have my blue image initiated at 0209. Cheers

●.....Date: Thu, 20 Oct 2005 23:45:23 +0100  
Subject: Martian White clouds

Hi guys, I thought I would draw your attention to the white clouds that are forming at the Martian sunset, regardless of longitude the pattern is shown here on Jim Phillips's image as well as my own. Bets wishes

Dave TYLER (デヴィッド・タイラー Bkh 英)

●.....Date: Tue, 11 Oct 2005 23:05:25 +0200

Subject: Mars 11 october

Hi all, finally some good transparency but louzy seeing, Ir image is the only one to bring some details, at least Mars has sufficient diameter to show something. The NPC seems to shrink somewhat

<http://home.tiscali.nl/planetadelaar/mars051011.jpg>

●.....Date: Thu, 20 Oct 2005 22:16:11 +0200

Subject: Mars 18 october

Hi all, I can't keep up with my data, this is one of the latest showing the duststorm on the limb, seeing was very poor with hard wind regretly we won't see this area anymore for a while, btw I have some (not a whole lot) dust evidence south of Niliacus on the 16th Chris, results will follow later in the week. best

<http://home.tiscali.nl/planetadelaar/mars051018.jpg>  
groeten

Jan ADELAAR (ヤン・アデラー Arnheim 荷蘭)

●.....Date: Tue, 11 Oct 2005 18:29:05 -0400

Subject: Mars Observation (October 11, 2005)

I made a pair of observations of Mars on October 11, 2005 (05:30 and 06:15 U.T.) under average to good (6-7/10) seeing conditions. A wealth of detail was visible over the Martian disk that was almost impossible to render. The Solis Lacus region was very complex as depicted. A W-cloud was noted over the Tharsis region, especially in blue light (Wratten 38A). I welcome any observations on my observations.

●.....Date: Thu, 13 Oct 2005 14:47:32 -0400

Subject: Mars Observation (October 13, 2005)

I made a pair of observations of Mars on October 13, 2005 (06:00 and 06:35 U.T.) under average to good (6-7/10) seeing conditions. A wealth of detail was again visible over the Martian disk that was very difficult render. The Solis Lacus region was very complex and mottled within. A W-cloud was again noted over the Tharsis region, especially in blue light (Wratten 38A). I welcome any comments on my observations.

Carlos HERNANDEZ (カルロス・ヘルナンデス Miami, FL 美)

●.....Date: Wed, 12 Oct 2005 01:12:30 +0200

Subject: mars from 10. October

I am back at home, didn't see the annular eclipse over the Mediterranean Sea, a single cloud on the sky was at the wrong place at that time...

Here my Mars from yesterday, just a small NPH, no clouds over other parts of mars surface...

best wishes

●.....Date: Wed, 12 Oct 2005 03:55:22 +0200

Subject: mars from 11 October 05

this night we have heavy fog, so I can only send you my mars from 11 October at 1:46 GMT.

I am really surprised, how much detail I can see with a small 6 inch Mirror on my balcony in a 80.000 People City!!! best wishes

●.....Date: Sun, 16 Oct 2005 09:08:15 +0200

Subject: mars from 14.10.2005

here my marspictures from 14.10.2005. Seeing was not as good as the day before, but still better than average. At the NPH I saw a small bright spot during all the observing time, which rotated with the Planet.

Also at the region left of Sinus Meridiani I saw a weak blue cloud, the Morning Limb was bright and at the Terminator was a bright white cloud over the equatorial region, which is best shown as a bright spot in green channel, because the ToUcam has double time green pixels...

The colour balance is not exact in all pictures, weak fog sometimes "killed" colours...

It was extremely cold (2°C) and wet, I had to dry my Laptop display every 5 Minutes! best wishes

●.....Date: Mon, 17 Oct 2005 19:29:49 +0200

Subject: mars from 17.10.05

tonight the Seeing was fast changing, between average and worst, I tried to catch good moments.

The weather will change now in Germany, it shall be cloudy and later on raining the next days. best wishes

●.....Date: Tue, 18 Oct 2005 03:54:25 +0200

Subject: Chryse very bright and "to roundish" ???

Dear Masatsugu, dear Masami, 1:55 GMT, Seeing here is very poor (3-4/10), but I believe, there is something unusual at Chryse Region. It seems to be too bright and "roundish" - it reminds me of the Hellas Basin... best wishes

●.....Date: Tue, 18 Oct 2005 05:41:53 +0200

Subject: seems to be really a dust storm...



Here a "Quick and dirty" added picture between 2 regular avis with only 600 pictures, more I cannot process "live" in 20 minutes...

I am going on observing... corrected pictures will follow...

○.....Date: Tue, 18 Oct 2005 08:49:33 +0200

Subject: first correct added Dust storm at 2:44 GMT

Mn> It looks like. Continue to chase. Here I am waiting another >two hours, but the condition is not good.

Seeing was terrible the whole night, but I took avis until 5:04 GMT, then Mars was too deep over the rooftops, the sky was blue and I had no more contrast...

This is my first correct added Mars from 2:44 GMT ( $\omega=008^\circ\text{W}$ ), I have to process 14 more pictures (0:44 - 5:04 GMT) **How Exciting!!!** best wishes

○.....Date: Tue, 18 Oct 2005 23:52:57 +0200

Subject: marspictures yesterday/today

Here are my first results, I tried to compare yesterdays pictures with todays pictures...more pictures will come soon... best wishes

○.....Date: Wed, 19 Oct 2005 05:01:38 +0200

Subject: Duststorm over Chryse continues...

We have thin cirrus clouds, and the Moon is very close to Mars, but I am sure, I saw a bright area over Chryse. Here my first processed Picture (at 1:24 GMT). Seeing is better than yesterday, and a comparison with yesterdays picture shows that the dust storm has grown up or went northwestwards...

I will continue observing... best wishes

○.....Date: Wed, 19 Oct 2005 05:37:31 +0200

Subject: Dust storm has grown double sized!

Now (3:17 GMT) Chryse has completely turned into my sight: The dust cloud is double sized bigger than yesterday, roundish with unsharp contour. In North-South direction it goes from Sinus Aurorae to Niliacus Lacus.

The clouds on sky over Ludwigsburg have turned into thicker, and so I can only observe visually:

At horizon I now see an free sky, maybe I get a second chance for my webcam... best wishes

○.....Date: Wed, 19 Oct 2005 06:14:47 +0200

Subject: Re: Dust storm over Chryse continues...

Mn> Thank you for information. Continue, and take pictures at > the same "angles" as yesterday. Did you take at 008 degs W ?

I tried to take pictures at the same angels as yesterday. But twice I was "clouded over", just tried it anyway. Light curve was changing very fast/heavy, so I cannot say now, how the pictures will be : But I got some good results at other times, the same angels like yesterday...

Still observing between clouds... best wishes

○.....Date: Wed, 19 Oct 2005 07:30:02 +0200

Subject: Marspictures from 18.10.2005

Here my next charge of yesterdays pictures (013 - 027°W), compared with own pictures of 16.10.05.

The dust storm is seen good, even if the seeing was very poor yesterday... best wishes

○.....Date: Wed, 19 Oct 2005 07:55:24 +0200

Subject: latest pictures of 18.10.2005

Here my latest comparisons (032 -042°W) from yesterday, now I proceed the pictures from this night...

○.....Date: Thu, 20 Oct 2005 07:19:10 +0200

Subject: mars from 20.10.05

Today it rained, but at midnight the sky became clear and so I could take a few pictures of Mars. It seems, the Dust activity goes on...

Now (4:00 GMT) we have heavy fog, so I cannot observe ... This picture is from 2:44 GMT and I believe that it shows a bit the dust near the morning limb. The dust cloud has been separated into 3 smaller clouds southwards...

I have a question: - the small spot left of sinus Meridiani - is this crater Schiaparelli? best wishes

○.....Date: Fri, 21 Oct 2005 04:00:24 +0200

Subject: Mars from 20.10.2005

Here my Mars from 20.10.05. At 3:00 GMT weather changed, the humidity was rapidly grown and at 3:24 the fog was so strong, that all colour went away from my pictures and I had to change to longer exposure time and higher gain. So my last picture is not very good...

○.....Date: Fri, 21 Oct 2005 05:46:45 +0200

Subject: Re: Mars from 20.10.2005

Mn> It is very important and meaningful to check the morning >dust, and so yours are very precious.  
> I hope you are active this night also.

Sorry, I am ready for observing, but we have a clouded sky. Sometime I see the Moon as a shadow behind the clouds, that's all until now : So I am processing the avis from 19.10.05, they are heavy to do...

I hope, you will have better weather tonight...

best wishes

○.....Date: Sat, 22 Oct 2005 06:33:20 +0200

Subject: 22.10.05, Duststorm is ongoing...

4:30 GMT: the seeing is terrible, but Mars is between clouds on the sky and we have hardly wind: I can see the dust storm has changed position up to south, it is now near/over Mare Erythraeum and Aurorae Sinus, and a smaller storm has moved northwards over Chryse and Nilokeras, hard to say exact, where, but still bright yellow near morning limb. NPH is still deep blue and some smaller blue clouds over Mare Serpentis I also see... best wishes

○.....Date: Sat, 22 Oct 2005 09:05:47 +0200

Subject: mars from 19.10.05

Here are the best pictures from 19.10.05. I took them between clouds, so I could not take in my normal rhythm... best wishes

○.....Date: Sun, 23 Oct 2005 03:48:06 +0200

Subject: mars from 22.10.05

Here my marspictures from 22.10.05: this was the last chance to observe Chryse, tonight it is raining in Ludwigsburg... The seeing was very poor between fast moving clouds on sky, so the pictures don't show a lot of details. best wishes

○.....Date: Sun, 23 Oct 2005 05:48:21 +0200

Subject: Dust activity is ongoing

Rain has stoppd: I can see Mars clearly between a few clouds. Seeing is under average, but I see a huge bright spot westward of Mare Erythraeum... Picture was taken at 03:16 GMT, quick and dirty added...

○.....Date: Mon, 24 Oct 2005 05:26:50 +0200

Subject: Dust storm activity is ongoing

3:20 GMT, Sinus Meridiani is well in my sight now, and I see a bright Spotbetween Mare Erythraeum and Argyre. The rest of morning limb is normal bright and thick. The NPH is not so blue as yesterday, but this may be an effect of humidity here, everything is wet...

Seeing/Transparency is much better than yesterday, so I hope on some good Pictures... best wishes

**Silvia KOWOLLIK** (シルヴァ・イア・コウ・オリク Rudwigsburg 徳)

●.....Date: Wed, 12 Oct 2005 01:32:48 +0200

Subject: Mars 2005/10/10

Dear Mr Minami & Murakami! Have this set of Mars images from me, taken at with my 12.5" Newton and Lumenera LU075M cam. A new filter shifter enables the easier (and faster switch!) of filters. regards

●.....Date: Mon, 17 Oct 2005 22:54:20 +0200

Subject: Mars sets 2005 Oct. 12, 14, 15

Have my latest sets of Mars for publishing in your Mars magazine and OAA website. Massive air turbulence hinders me to reach better image quality on 14th and 15th, but the images instead contain some information especially the blue images. On 12th Oct. I have a problem with my mount-speed was not correctly, but I masteredit ! regards

**Robert SCHULZ** (ロバート・シュルツ Wien 奥)

●.....Date: Tue, 11 Oct 2005 23:33:44 +0000  
Subject: Mars Images

Hi All, I have attached some Mars images from 11 October. Increasing clouds with "W-Cloud" beginning to form over Tharsis. Best,

○.....Date: Tue, 18 Oct 2005 08:37:10 +0000  
Subject: Dust cloud in Chryse

Hi All, I have attached some Mars images from 17 and 18 October showing the rapid appearance of a dust cloud in southern Chryse, first detected by Ed Grafton and Clay Sherrod on 17 October. Best,

**Don PARKER** (唐那・派克 Miami FL 美)

●.....Date: Thu, 13 Oct 2005 17:17:39 +0900  
Subject: Mars - 2005/10/12 16:09

Dear CMO, Hi guys! Work and weather have kept me away from imaging Mars, and last night I was lucky to get a quick break in the clouds (was supposed to be clear). I have included a Red and Green channel image. I'm excited about imaging Mars at opposition and peak disk size of 20.2"-just hope the seeing/weather cooperates. Best regards,

○.....Date: Sun, 23 Oct 2005 19:38:43 +0900  
Subject: Dust storm development comparison over Solis Lacus - Mars observation - 2005/10/22 13:32 UT

CMOさま、ダストストームの画像を送らせていただきます。宜しくお願い致します。(必要であれば、追加画像もあります。只シーイングがひどかった。)

**ロブ・ヘフナー** (Rob HEFFNER 名古屋 Aichi)

●.....Date: Thu, 13 Oct 2005 07:25:28 -0700  
Subject: Mars October 12th

Here's a submission from October 12, 2005. Forgive me in my haste, the B/W images at the bottom correspond to the red, green and blue color channels.

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

●.....Date: Fri, 14 Oct 2005 00:11:20 +0900  
Subject: Mars-2005-10-12-KUMAMORI

明るくなってきた火星に合わせて、ペランダの望遠鏡を端に移動し隣との隙間から一時間ほど見ることができるようになりましたが、建物沿いに気流が流れ、見え味は宜しくありません。

○.....Date: Wed, 19 Oct 2005 07:45:31 +0900  
Subject: Mars-2005-10-18-KUMAMORI

天頂に近づくに連れシーイングは少しでも良くなりますが時間は限られていますので、この辺が限界かなと思います。

**熊森 照明** (Teruaki KUMAMORI 堺 Osaka)

## TEN YEARS AGO (122)

---CMO #168 (25 October 1995)---

火星は、1 October 1995 には視直径は4.4"角、西空に低く観測は難しくなっていた。OAA Mars Section では、16 Sept 以降に観測報告はなく、南氏の数回の報告が紹介されているが、観測時間も短く十分な成果は得られていない。大津と福井を往き来して観測していた様子が偲ばれる。

この号では、巻頭からRMk氏が JBAA105(1995)117-134 に発表したBAA火星課の1992/93年接近のレポートを紹介している。目新しいところはないとしているが、10ページを割いての和文・英文併記の大作である。My氏その他、南氏の紹介でId, Mo, Hg氏などが本文の中に登場するという。此の接近は、1993年の年初に最接近となった小接近で、伊舎堂(Id)氏によるガンゲスの濃化( $\lambda=334^\circ\text{Ls}$ )やエリュシウム付近の突発的明るさを捉えた森田(Mo)現象( $\lambda=038^\circ\text{Ls}$ )などが観測されている。

『夜毎餘言』(XLIX)は、"Go Dutch"として、南氏の1986年の臺北滞在時のエピソードを紹介して、台湾を含めて極東・東南アジア諸国と我が国との、彼我をみるスタンスの違いを御自身の体験を振り返り語っている。戦争をはさんでの互いの意識のズレは、現在も変わっていないのは明らかなことである。アマチュア天文家の交流の一環として、「使わなくなった望遠鏡をプレゼントしよう」という動きが当時あった(今でもあるか?)こともとりあげ、相手の国情や文化を良く理解しないままでの、押しつけのような善意は決して実を結ばないことを説いている。

LtEには、Roy CERRETA、木村精二氏、松本達二郎氏、永井靖二氏の各氏他に、私(Mk)の近況を伝える便りも掲載されている。タイに皆既日食を観望に行ったのもこの期間のことで、帰国直後の便りがコラム記事で紹介されている。まだ湘南台にいるころのことで、元気良くあちこちを動き回っている自分のことを、懐かしく読み返した。

村上 昌己 (Mk)





●.....Date: *Thu, 13 Oct 2005 16:14:14 +0100*  
 Subject: *Mars on 12th October*

Dear friends, I send you the following new image of Mars, taken yesterday evening, 12th of October. Poor seeing, other data on the image.

If you wish, in my site Sheratan you could see various pictures of the 3rd October annular solar eclipse. Clear skies!

**Simone Bolzoni** (シモネ・ボルツォーニ Busto Arsizio 義)  
<http://astrosurf.com/sheratan>

●.....Date: *Fri, 14 Oct 2005 15:04:38 +0200*  
 Subject: *Submission Mars image for CMO/OAA Gallery*

may be you want to add my attached Mars image to the CMO/OAA Gallery. Thank you in advance.

**Stefan SEIP** (シュテファン・サップ Stuttgart 德)

●.....Date: *Fri, 14 Oct 2005 22:42:50 +0100*  
 Subject: *Mars a long time ago*

It has been continuously cloudy for such a long time in London, I have been reduced to re-processing images from 10 days ago.

This e-mail is also to remind those in the vicinity about the "Mars Party" at the Stag Lane Observatory, which is definitely on tomorrow, Saturday, as the forecast is that it will clear in the afternoon. More details on

<http://www.darditti.dircon.co.uk/starparty.html>

**David ARDITI** (デーヴィッド・アーティ Edgware 英)

●.....Date: *Sat, 15 Oct 2005 11:56:19 +0200*  
 Subject: *Re: Mars on october 13th with the dust cloud*

Christophe: Very good your images including this new dust cloud. I think is very well registered thanks to the good color balance of your RGB images. I have observed last 14th and the cloud is poorly seen because bad seeing.

**Jesús SÁNCHEZ** (ヘスス・サンチェス Córdoba 西)

●.....Date: *Sat, 15 Oct 2005 12:45:49 +0200*  
 Subject: *Re: Mars on october 13th with the dust cloud*

Hi Chris, A very nice set of images showing the dust cloud so finely. The NPH is now very prominent at those longitudes, it looks like white-to-cyan at my eyepiece and it's fabulous!! I love so much this Mars side, it's my favourite! I'd like to see that expanding even more!!

○.....Date: *Tue, 18 Oct 2005 10:46:04 +0200*  
 Subject: *Re: Dust cloud in Chryse*

Hi Donald (PARKER), This is the second time in 5 days a dust event is there in the same place!! This new event looks as bigger than the previous one recorded on Oct. 13th by myself!!

**Paolo LAZZAROTTI** (パオロ・ラッツァロッティ Massa 義)

●.....Date: *Sat, 15 Oct 2005 09:13:28 EDT*  
 Subject: *BAA Mars Dust Storm Alert 15.10.05*

**BRITISH ASTRONOMICAL ASSOCIATION**

**MARS SECTION DUST STORM ALERT, 15.10.05**

From the Director, Dr R.J.McKim

The apparent activity notified in the former email alert did not develop further. Indeed, there is considerable doubt whether the E. Chryse event was real or just due to misinterpretation of a somewhat overenhanced image. In any event, on the evening of October 13, a really definite local storm was apparent in red and green images taken by Christophe Pellier (France). The event was located NW of Mare Erythraeum, overlapping the desert area of telescopic Chryse. (Without measuring the images it seems to be centred - very roughly - near long. 40 deg., and latitude 0

deg.) It looked to be a bright yellow cloud on Pellier's RGB composite image, elongated in a north-south direction with brighter cores at the N. and S. ends. Areographically, the event corresponds in location to the E. end of the Valles Marineris.

Occurring at  $L_s = 306$  deg., this dust storm - in terms of both martian Date and location - is similar to the large regional storm that took place at  $L_s = 315$  deg. (2003 December 13) near the end of the last opposition.

It also resembles local or regional events from the 1990 and 1992 oppositions in a very similar location that occurred at  $L_s = 308$  deg. and 316 deg. respectively. (For full details of the 2003 event, see the '6th Interim Report' on Mars at its 2003 opposition, available at the BAA Mars Section homepage,

[http://www.britaastro.com/mars\\_](http://www.britaastro.com/mars_) for the historical storms see the writer's monograph on 'Telescopic martian dust storms', BAA Memoirs, volume 44 (1999).) Other historical examples could be quoted, at similar  $L_s$  and in a similar location, right back to 1879.

Historical records show that the present event is unlikely to develop into a planet-encircling event, but it could still lead to a sizeable regional storm. The seasonally latest encircling storm began in 1924 December at  $L_s = 311$  deg., but only storms beginning in Hellas, Noachis or near Solis Lacus achieved encircling status.

The nights of October 13/14 and 14/15 were cloudy at the Director's observatory in Northamptonshire, England and at most other UK sites. Other reports are awaited with interest!

Good luck with your observations.

○.....Date: *Fri, 21 Oct 2005 05:16:18 EDT*  
 Subject: *Martian White clouds and polar hood*

Hello Dave, You will notice the sunset clouds are mostly equatorial or nearly so. This is typical for this season, and a similar thing is apparent in the corresponding season for the N hemisphere. However, certain sites are more favoured than others. A few nights ago I watched the Libya-Isidis cloud rotating towards the sunset terminator. While on the topic, let me draw attention to the very bright white spot seen on the Nf limb in E. Tempe/Nilokeras with the CM around longitude 10 degrees. This was absolutely brilliant to me in the early hours of October 20 when watching the longitudes of the Chryse-Eythraeum dust storm. Best wishes

**Richard McKIM** (理查・麥肯 BAA Mars 英)

●.....Date: *Sat, 15 Oct 2005 18:21:50 +0200*  
 Subject: *Re: Mars on october 13th with the dust cloud*

Dear all, I observed Mars visually with relatively good seeing on Oct. 11.1, 14.1 and 15.0 (last night) with roughly CML 50--10. I will send the drawings (40.7cm x700) monday but did not notice anything abnormal in Chryse (no details changed much at the 1-2" level between the 3 nights, or only in the weak contrast features... Otherwise the white cloud (or NPC?) on Mare Acidalius has now also a clear dark rim to the north, separating it from the rest of the NPH. There may have been a yellow cloud on Oct.9.2 around CML 85 +40-50 N (next to Tempe) (?) Clear Skies,

○.....Date: *Mon, 24 Oct 2005 11:59:14 +0200*  
 Subject: *Mars on 17 and 23 October*

Dear all, Here are my latest drawings of Mars (except the one from last night, Oct. 23.9). The last one, 23 October 4:25 UT, was done when Mars was a bit lower (seeing not as good as the earlier one on the 23rd), but nearly at exactly same CML as on October 17: we can look at the difference due to ongoing dust storm - especially a bright zone from Argyre to Noachis, cutting the usually dark lane around Longitude 15 and 30 South.

Generally, though on the limb, the region around Argyre

(probably extending lightly to Chryse) looked more yellowish and bright than usual.

Regards and clear skies,

**Nicolas BIVER** (ニコラ・ビヴェール Versaille 法)

●.....Date: Sat, 15 Oct 2005 19:23:44 +0800  
 Subj: Mars images captured with B&W toucam\_20051013

Dear Masami MURAKAMI, I had modified my Toucam pro 740 with a B&W CCD chip, in the past few days, I captured some shoot of mars for testing, here are the result.

[http://twastro.twbbs.org:23/non-cgi/usr/11/11\\_78.jpg](http://twastro.twbbs.org:23/non-cgi/usr/11/11_78.jpg)  
[http://twastro.twbbs.org:23/non-cgi/usr/11/11\\_78\\_1.jpg](http://twastro.twbbs.org:23/non-cgi/usr/11/11_78_1.jpg)  
[http://twastro.twbbs.org:23/non-cgi/usr/11/11\\_78\\_2.jpg](http://twastro.twbbs.org:23/non-cgi/usr/11/11_78_2.jpg)  
[http://twastro.twbbs.org:23/non-cgi/usr/11/11\\_78\\_3.jpg](http://twastro.twbbs.org:23/non-cgi/usr/11/11_78_3.jpg)  
[http://twastro.twbbs.org:23/non-cgi/usr/11/11\\_78\\_4.jpg](http://twastro.twbbs.org:23/non-cgi/usr/11/11_78_4.jpg)

Best regards

**Canon LAU** (劉佳能 Hong-Kong 香港)

●.....Date: Sun, 16 Oct 2005 13:57:23 +0900  
 Subject: Re: お断り

画像の件、了解しました。ご自由にお使い下さい。  
 沖縄地方は、昨晚台風20号の影響で雲が広がった以外は天気が良く、毎晩火星が爛々と輝いています。ただ、seeingは良くありません。撮像しても、シャープな像はなかなか得られません。今日、ミーニシ(新北)と呼ばれる北からの季節風が吹きました。シーイングは今後更に悪くなることと思います。

Lick天文台での観測、実りあることを祈念しております。

**宮崎 勲** (Isao MIYAZAKI うるま Okinawa)

●.....Date: Sun, 16 Oct 2005 21:14:13 +1000  
 Subject: Mars image 14th October

Attached is an image of Mars taken on the 14th October UT. Probably the best seeing that we have had here so far, but 35deg altitude is still too low for good images...Regards

●.....Date: Mon, 24 Oct 2005 00:07:42 +1000  
 Subject: Mars 23rd October - poor conditions

Here is an image of Mars taken about an hour ago, just before cloud cover. Seeing was very poor with Mars at only 23 degrees altitude, but the dust activity over Solis L. can be identified. Best Wishes

**Maurice VALIMBERTI**

(モーリス・ヴァリンベルティ Mebourne 澳)

●.....Date: Sun, 16 Oct 2005 09:09:42 -0500  
 Subject: Mars on October 16

Mars imaged with intermittent "earth clouds" passing through, view of Solis Lacus region. Note the prominent and small clouds near the southern polar area; minimal exposure of the NP hood at this longitude, and this restricted to very high northern latitudes, except for very bright and large knot/cloud near terminator.

●.....Date: Tue, 18 Oct 2005 01:05:05 -0500  
 Subject: Re: DUST STORM in Chryse...

I confirm this very bright and distinct, segmented new feature, centered near CM 57 degrees; we are imaging it at this time and getting good results. The dust has the character of a "V", with pointing toward the north.

●.....Date: Tue, 18 Oct 2005 03:15:32 -0500  
 Subject: Re: RE:DUST STORM in Chryse...

Attached is a sequence over two hours in unsteady seeing; the newly developed "V-shaped" dust storm in CHRYSE is well seen in this series of four images, CM 41 through 70. The feature has greatly developed overnight into a large and bright cloud and likely will be

spreading quickly in the next few days. It appears that the cloud is sheared or separated by regional topography to the south.

●.....Date: Tue, 18 Oct 2005 10:10:48 -0500  
 Subject: Chryse Dust Storm, Oct. 18

A new image clearly showing the beautiful and intense yellow dust cloud in southern Chryse

●.....Date: Wed, 19 Oct 2005 01:15:29 -0500  
 Subject: Re: Dust Storm expanding

Actually from my early images which I am working on at this time, the storm has actually morphed a bit, changing shape considerably, but appears to be about the same area coverage and the same intensity as Oct. 18. Will post a very steady image in a couple of hours showing this....

●.....Date: Wed, 19 Oct 2005 04:31:20 -0500  
 Subject: Mars Oct. 19, Changing Dust Storm in Chryse

Very notable and curious changes in the dust "event" in Chryse in just the past 24 hours; note that the characteristic "V" shape of Oct. 18 has totally given way for a more linear, streak-like feature which is somewhat less pronounced. A comparison image between these two Dates is in preparation showing the remarkable transformation of this feature....will post shortly.

●.....Date: Wed, 19 Oct 2005 04:55:25 -0500  
 Subject: Mars 24-hour Rapid Change in Dust Storm

Showing the 24-hour change in the Chryse Dust cloud between Oct. 18 and 19, centered on CM 50; very interesting comparison showing incredibly rapid morphological change and area coverage.

●.....Date: Thu, 20 Oct 2005 03:23:12 -0500  
 Subject: Cloudy Day on Mars - Oct 20

A cloudy day on Mars to say the least; under poor conditions and imaging through high cirrus aiding in contrast and color, I was able to obtain an image that shows very distinct coloration differences on major cloud activity on the Red Planet. A very interesting view.

The yellow dust storm seen on the CM has morphed greatly since Oct. 18 and 19 and now has spread its way southward as can be easily noted in the full color and green images. In addition to this rapidly changing feature, note the very bright concentration (seen best on the terminator) just preceding Mare Sirenum (far left on terminator). Also there is a remarkably bright blue concentration seen clearly very near the northern pole that is likely associated with the thick northern polar haze seen through this longitudinal span.

More high blue clouds are suspected on the right limb, over the area of Solis Lacus, not seen in full view this morning because of approaching earth clouds.

●.....Date: Fri, 21 Oct 2005 04:29:14 -0500  
 Subject: Dusty Mars on October 21

The dust storm is spreading and beginning to segment and intensify in many areas on Mars; a comparison of the past FOUR days will be posted soon but this image shows moments of some fairly good seeing conditions over a period of about two hours. The dust cloud is undoubtedly quite yellow and perhaps is thickening in density as it spreads southward.

●.....Date: Sun, 23 Oct 2005 04:11:52 -0500  
 Subj: Spreading Martian Dust, NPC activity - Oct. 23

The yellow dust storm is spreading westward (celestial) and southward on Mars as indicated in tonight's images and reports by others; clouds prevented observations of the Solis Lacus region directly, but clearly there is intense yellow activity on the eastern limb.

More curiously to me at this point is the intense bright

spot that first became evident around October 18 on images here at ASO; it is quite pronounced and scintillating at about CM 5 deg, and is NOT axially aligned with the NCP of Mars, but rather offset in relation to the SPC; I do not believe this odd feature to be a polar cap per se, and indications of brightening could indicate some transient activity due to solar heating near the pole. This really deserves careful scrutiny I believe and I look forward to observations and comments from others.

**Clay SHERROD** (クレイ・シェットロ ASO, AK 美)  
<http://www.arksky.org/asoimg>

●.....Date: Sun, 16 Oct 2005 10:54:25 -0700  
 Subject: Mars Observations, Oct 15th

My Mars observations for Saturday morning. Seeing poor, constant fast, very fine turbulence. No dew. Video used for stacking was acquired and processed at 16-bits/pixel.

**Tim PARKER** (ティモシー・パーカー JPL CA 美)

●.....Date: Sun, 16 Oct 2005 19:54:04 -0400  
 Subject: HST Mars imaging this opposition

Folks, I have really been enjoying the many spectacular telescopic images that you all are acquiring during this year's close approach. Apparently, Don Parker is not the only person who has sold his soul to the devil in exchange for phenomenal seeing... Keep those great views coming!

I hope someone is archiving all of these to a web site, as in previous oppositions.

For anyone who wants to push the limits of their equipment and compare your resolution/calibration directly to HST's, I wanted to let you know that a group of colleagues from the "Hubble Heritage" team and I will be observing Mars with HST on Oct. 28 and Nov. 7. The specific observing times are:

Oct. 28 @ 09:08 UTC

Nov. 7 @ 04:10 UTC

There is some chance that these times may change as the telescope scheduling finalizes, but that's what I know about as of now.

The Oct. 28 slot is near actual closest approach, and the Nov. 7 slot is very close to zero phase angle (the 3-dimensional angle from Sun to Earth to Mars), something that hasn't happened this well since HST has been up there.

You might notice in your own imaging that, all other things being equal, Mars' brightness could increase by between 10% to 30% during those few days around Nov. 7 when the phase angle is less than 1 degree. The details of just how much the surface brightens at these almost perfectly back-scattering angles is a subject of some scientific interest, and will be a focus of our Nov. 7 observations.

We didn't get much HST Mars time this year, and it's only been because of the good will of the Hubble Heritage folks at STScI that we got any at all. Ah, well, it's hard to complain... We DO have 3 working orbiters, another on the way, and 2 working spacecraft on the surface... Good times...

Thanks again for forwarding all those great images.

**Jim BELL** (ジム・ベル Cornell Univ 美)

●.....Date: Mon, 17 Oct 2005 09:23:18 -0700  
 Subject: Mars photo Oct. 12

I send to you my photo of Mars, 12 October 2005.

Best wishes from Croatia,

**Zlatko KOVACEVIC** (ズ・コヴァチェヴィッチ Virovitica 克)

●.....Date: Mon, 17 Oct 2005 15:02:36 -0500

**Subject: Re: Chryse Anomalous Feature**

Hello Ed and list, I've just been looking all of my maps, including the Atlas of Mars. It shows somewhat of a valley in that exact area, shaped exactly like the anomaly in your image. A pie/wedge shape. Evening mist/fog forms over a valleys, but its not visible in your blue channel. Perhaps the sunlight is somehow illuminating it. All guesses on my part. Regards,

○.....Date: Mon, 17 Oct 2005 15:12:43 -0500

**Subject: Re: Chryse Anomalous Feature**

Here is a link to a PDF file showing the area in question. You can see on it how albedo features form a pie shaped wedge. I had called it a valley, but it would well be a raised plateau or just smooth plains. I think its a combination of albedo features and sunlight at just the right angle illuminating it. Once again, guesses on my part.

<http://ralphaeschliman.com/mars/mwsm.pdf>

It also happens to be the Viking I landing site. Regards,

○.....Date: Mon, 17 Oct 2005 23:20:18 -0500

**Subject: DUST STORM in Chryse...**

Hello everyone, It appears a large dust storm is currently in progress in Chryse. I believe, based on the image, it is 2 clouds, headed south, leaving trails. Much like the 2003 storm. This was imaged LOW on the horizon. Hopefully I can get some better images in the next few hours.

<http://marswatch.amaonline.com/10-17-052225.jpg>

Regards,

○.....Date: Tue, 18 Oct 2005 00:11:34 -0500

**Subject: Re: RE:DUST STORM in Chryse...**

Hello everyone, Here is about an hour and twenty minutes of rotation after my first image. Conditions a bit better, but not what I was hoping for. I'll image again at 06:00 UT and 07:00 UT.

<http://marswatch.amaonline.com/10-17-052340.jpg>

Regards,

○.....Date: Tue, 18 Oct 2005 00:21:01 -0500

**Subject: Re: [marsobservers] Mars October 17th**

Looks like 2 central cores, leaving trails as I had suspected. Looking at your excellent image Ed, it appears they are headed in different directions based on the trails, but I don't know how likely that is. Congratulations on capturing it so early in formation. Regards,

○.....Date: Tue, 18 Oct 2005 22:37:25 -0500

**Subject: Dust Storm expanding**

Hello everyone, I just took a shot, low on the horizon just to get an idea of what is going on. The dust storm has really increased in size. Take at 03:15 UT. I'll have better quality later, this is just to give you an idea.

<http://marswatch.amaonline.com/2215image.jpg>

Regards,

○.....Date: Wed, 19 Oct 2005 01:23:05 -0500

**Subject: Image Dust Storm 10-19-05 04:50 UT**

Hello list, This has to be one of my more interesting Mars images. Since seeing was very good, I was able to detect dust cores. There is much yellow haze around these cores, and I do believe Chryse certainly has quite a bit of haze in it. I also believe there is a new dust core, or front, in south Chryse. There is much cloud/haze/fog activity on both the PM and AM terminators. As I stated earlier, Mars looks kind of surreal. Note the BLUE color channel. Also, I do not try to enhance color. The ToUcam usually shoots a bit blue, and all I do is take it down once knotch. Quite an interesting image.

<http://marswatch.amaonline.com/10-18-052350.jpg>

Regards,

○.....Date: Wed, 19 Oct 2005 12:01:20 -0500



**Subject: Image updated 10-19-05 04:50**

Another imager had detected a "squall line" of dust from Mare Erythraeum to Ophir. I decided to reprocess my image and sure enough, buried in the data was this squall line. I stacked fewer frames and captured finer detail. Also included is a high contrast enlargement of the dust storm.

<http://marswatch.amaonline.com/10-18-052350.jpg>

Regards,

○.....Date: Thu, 20 Oct 2005 09:43:05 -0500

**Subject: Re: Dust storm 10-18 to 10-20**

Very nice Sean. For those who haven't seen it, I had some remarkable seeing last night. Attached is the image. I do not enhance color in my images and the dust is causing a surreal looking Mars. That bright spot in the NPH I thought might be the NPC. Richard Schmude e-mailed me and told me he feels it is snowfall. Dust storms and snow storms. Quite amazing.

○.....Date: Thu, 20 Oct 2005 13:59:20 -0500

**Subject: Image/3 hour rotation of dust storm**

Hello everyone, All info on image. Large pic, so you might have to click the lower right hand side to get full details.

<http://marswatch.amaonline.com/10-20-053hourRotation.jpg>

P.S. Dust storms and snowfall. Just like the Texas Panhandle.

○.....Date: Fri, 21 Oct 2005 11:06:10 -0500

**Subject: Image 10-21-05**

Hello everone, I corrected a couple of things on this image. I was a bit too tired and missed a few things this morning. The dust storm is really amazing and complicated. Transparent areas, multiple clouds and speading into Solis Lacus. On images from the 20th, it appeared to be weakening some, but based on last nights images, I'd say its becoming much more complex. I just compared this image to Ed Graftons latest, shot about the same time, and they match up quite nicely, so what you see are real features it would seem, not artifacts. I'll try and ge a composite today to show the rotation and spreading of the storm. Best wishes, any comments or corretions I need to make would be appreciated.

<http://marswatch.amaonline.com/10-21-050205.jpg>

Best wishes,

○.....Date: Sat, 22 Oct 2005 04:30:23 -0500

**Subject: DUST STORM 10-22-05 08:25 UT**

Hello list, What can I say about this image? Well, I wish I would of used 5fps when seeing was excellent over the past week since the storm started. Check out the structure of the cloud, how delicate it is. I didn't adjust a single bit of the color, and I lightly processed it. This is just a first run, so I should get improvement tomorrow after some sleep. Mars and the scope get all the credit, I'm just a sleep deprived guy along for the ride. My new processing style helped a bit too I guess. Only Dr. Tony Phillips, the ALPO, CMO and Don Parker have permission to use this image as they see fit. Anyone else please e-mail me. Image is linked and attached.

<http://marswatch.amaonline.com/10-22-050325.jpg>

○.....Date: Sat, 22 Oct 2005 12:08:06 -0500

**Subject: DUST STORM 10-22-05 08:25 UT reprocessed**

Hello everyone, Here is my final version from 10-22-05 08:25 UT. It is also attached for those who can receive it. I did my best to try and capture how intricate the dust cloud is w/o overprocessing it. Didn't touch the color at all. Since I mostly got rid of that arc that has been plaguing many images lately, the disc looks a bit smaller compared to other images. Its because the arc is almost gone and I got

the edges very sharp. All opinions and comments, good or bad, appreciated. I'm always looking to learn. :)

<http://marswatch.amaonline.com/10-22-050325.jpg>

Best wishes,

○.....Date: Mon, 24 Oct 2005 01:03:33 -0500

**Subject: Image Dust Storm 10-23-05 04:45 UT**

Hello list, Still lots of dust. Looks denser to the south of Mare Erythraeum than it had been. Not sure about that though. And, I think there might be 2 seperate cloud making up the big cloud of dust. It is slowly working its way towards Hellas. Note in the blue and green color channels how the dust cloud and the thin veil of dust over Mare Erythraeum form an upside down triangle. I'll try and get a few more images tonight. I'd really like to see what is going on in Solis Lacus. Seems to be where all the fun is at. :)

<http://marswatch.amaonline.com/10-22-052345.jpg>

○.....Date: Mon, 24 Oct 2005 03:28:59 -0500

**Subject: Dust Storm Image 10-24-05 07:45 UT**

Hello everyone, The dust storm appears to be intensifying, with a large, arcing, bow shaped band of dust surrounding Solis Lacus, heading towards Phaethontis. All info is on the image. I'm going to try and shoot one more image, but won't have it processed till tomrrow.

<http://marswatch.amaonline.com/10-24-050245.jpg>

Best wishes,

**Joel WARREN** (ｼﾞｮｴﾙ・ｳｵｰﾚﾝ TX 美)

●.....Date: Mon, 17 Oct 2005 22:51:19 +0200

**Subject: 15 OCT 2005 image**

Dear Sirs, Please find attached 1 Mars image, taken on 15 october from 's-Gravenwezel, Belgium (51.2°N, 4.5°E) under moderate seeing (5/10). A black & white modified ToUcam Pro was used with IR, R,G and B filters. The final image is an IR-RGB composite. Taken with a 35 cm SCT telescope @ f/33, the IR-luminance image was 1800 frames, the RGB channels 600 frames each.

*Note:* the duststorm right of Oxia Palus and just below Margaritifer Sinus is visible near the terminator.

Best Regards,

**Tom ALDERWEIRELDT**

(ﾄﾑ・ｱﾙﾃﾞﾙｳﾞｴｲﾃﾞﾙﾄ 's-Gravenwezel 比利時)

●.....Date: Tue, 18 Oct 2005 09:42:50 +0900

**Subject: Re: 『火星通信』 #310、 発送しました**

昨日、火星通信拝受しました。ありがとうございました。このところ、晴れたかと思えば北風が強く吹き、像がメロメロで全く撮像できません。報告もしばらくご無沙汰いたしております。最接近も間近となり、少々焦っています。

**松本 直弥** (Naoya MATSUMOTO 佐世保 Nagasaki)

●.....Date: Mon, 17 Oct 2005 20:40:54 -0500

**Subject: Mars (3 images from Bates)**

Dear Colleagues, Prime time for Mars is finally here. My general impression is that although Mars is better positioned, the albedo markings show less contrast than in 2003. Solis Lacus looks less like a giant eye, and more like a mushroom-shaped extension. Overall seeing conditions here in south Texashave been average to below average. In the eyepiece, the planet appears very reflective, very pale orange to gold-yellow in color. Best to all,

○.....Date: Tue, 18 Oct 2005 06:01:43 -0500

**Subject: Re: Fw: RE:DUST STORM in Chryse...**

The off-again-on again dust activity in Chryse is definitely

on again! I took the attached image of Mars at 04:41 UT on 2005 Oct. 18. At around 07:30 UT there was a much larger light area over Chryse. It was perhaps a mixture of dust and clouds. It was the brightest thing on the center of the planet (much brighter than it had appeared earlier visually and also much lighter than in the attached photo), but it was a pale white, not yellowish. I tried to image it I could not get the images right. What I saw tonight is one of the fastest changes I've seen on Mars.

**Martin GASKELL** (マーチン・ガスケル Univ Nebraska, NE 美)

●.....**Date: Tue, 18 Oct 2005 14:27:38 +0200**  
**Subject: Re: Fw: RE:DUST STORM in Chryse...**

Dear Masami, I had made an image from Oct 16th, which I had attached. I was a little bit worry about the less contrast in image. Maybe the dust storm was apparently. 1:50GMT, Ls307. Telescope: Zeiss AS 100/1000, 2UCamPro. Thanks for your immediate information.

Best wishes

**André NIKOLAI** (アントン・ニコライ Remshalden 徳)

●.....**Date: Wed, 19 Oct 2005 01:10:46 -0500**  
**Subject: Mars 20051019 Dust Storm**

Here is a set of images from this morning. The dust storm has changed shape, two noticeable bands.

[http://members.verizon.net/~whd/images/20051019\\_whd.jpg](http://members.verizon.net/~whd/images/20051019_whd.jpg)

Time for bed... Regards,

**Bill DICKINSON** (ウィリアム・ディキンソン VA 美)

●.....**Date: Wed, 19 Oct 2005 09:43:19 -0400**  
**Subject: Mars sketch 10.19.05**

Hello, Please find attached my sketch made this morning.

It shows the dust storm in the Chryse region. My notes are here: 8" SCT f/10 Mag: 338×& 254× Seeing: 4/10 Transparency: 3/6 Temp: 51°F Wind calm, Ls 309° CM: 046°-054° De -12.3° Dia: 19.7" Alt: ~63° Phase: 98% Magnitude: -2.0: **Notes:** South Polar Cap (SPC) very small and bright. Blue cloud over Meridiani Sinus on p. limb. Dust storm extending south from Chryse and obscuring the following part of Margaritifer Sinus, Eos, and preceding part of Aurorae Sinus. Dust cloud prominent in red light and integrated light (IL). North Polar Hood (NPH) appears blue. I made another sketch about two hours after this one which I will send soon. Thank you,

**Michael ROSOLINA** (マイケル・ロズリーナ WV 美)

●.....**Date: Wed, 19 Oct 2005 15:49:33 +0000**  
**Subject: Mars 10-19**

Dear Masami, Attached are two images from this morning. Seeing was 7/10 and trans. 4/5. I used a 25.4 cm f/12 refl., 3×barlow, UV-IR block, ToUcam Pro, Registax 3, Photoshop Elements and Iris. The dust storm appears to be over Valles Marineris. Quite impressive with the yellow filter at the eyepiece! Sincerely,

**Randy TATUM** (ランディ・テータム VA 美)

●.....**Date: Wed, 19 Oct 2005 12:21:35 -0400**  
**Subject: Dust cloud in Chryse, 10-18 to 10-19**

Here are images taken of approximately the same CM, first was captured 10-18, 3:04 UT, while the second is from 10:19, 3:52 UT. Poor seeing both nights. 7" MN @f/50, ToUcam pro 740 IR+R/G/B

○.....**Date: Sat, 22 Oct 2005 10:24:06 -0400**  
**Subject: Re: RE:Re: FW:Mars 10-22, 2:40 UT**

I'm covering the dust storm news for Sky & Telescope, if you have anything to add to my coverage, I'd appreciate a

comment:

[http://skyandtelescope.com/news/article\\_1617\\_1.asp](http://skyandtelescope.com/news/article_1617_1.asp)

Thank you,

**Sean WALKER** (ショーン・ウォーカー MA 美)  
Assistant Editor, Sky & Telescope

●.....**Sent: Friday, October 21, 2005 4:01 AM**  
**Subject: RE: Dust storm at the southern Chryse**

Thought you might like to see a pre-dust image on Oct 16 and dusty images on Oct 18 and Oct 19th. Please see my web page at

[http://www.st-charles-astro.org/dokuwiki/doku.php?id=member\\_pages:melka:melka](http://www.st-charles-astro.org/dokuwiki/doku.php?id=member_pages:melka:melka)

Keep up your good work.

**Jim MELKA** (ジム・メルカ St Louis Mo 美)

●.....**Date: Fri, 21 Oct 2005 11:11:51 -0200**  
**Subject: RE: Dusty Mars on October 21**

Hello all, I was out this morning imaging as well. The dust storm has moved South and there is a major portion/new outbreak centered on Solis Lacus. Images will follow later.

○.....**Date: Fri, 21 Oct 2005 14:21:25 -0200**  
**Subject: Mars this morning**

Three bright dust storm centers. Two above (South of) the original area of outbreak and one right in the middle of Soli Lacus.

○.....**Date: Sat, 22 Oct 2005 18:21:13 -0200**  
**Subject: Mars Dust Storm**

Hello All, My images have been too yellow lately. Here's my mosaic with the color adjusted FYI.

**Jim PHILLIPS** (ジム・フィリップス Charleston SC 美)

●.....**Date: Mon, 21 Nov 2005 16:41:57 -0600**  
**Subject: mars observations**

Dear Masatsugu, I arrived back in Willmar and have been observing the dust storm with my C-10. Fantastic!

Hope you all are having good skies these last nights of your visit. Delighted you could come over and use the Great Refractor, ..... Best wishes,

**Bill SHEEHAN** (ウィリアム・シーハン MN 美)

●.....**Date: Fri, 21 Oct 2005 15:19:45 +0000**  
**Subject: Mars: 2005-10-21**

Hello, enclosed are my Mars images from this morning. I see some light regions above Solis Lacus. 31cm f/6 Cave Newtonian, 9mm Ortho Eyepiece projection.

**Rolando CHAVEZ** (ロラント・チャヴェス GA 美)

●.....**Date: Fri, 21 Oct 2005 12:20:39 -0400**  
**Subject: mars under construction**

Hi all -The dust storm is doing quite a number on the map of Mare Erythraeum and moving into Solis Lacus. Only had time for a quick look at the red filtered image before work this morning - hope to have a color comparison later in the day. best,

○.....**Date: Fri, 21 Oct 2005 15:28:10 -0400**  
**Subject: dust images**

Greetings -I wanted to forward these two preliminary studies of the dust activity.

I hope to have some time later today to generate full color versions with a little better detail and notation. best wishes,

**Alan FRIEDMAN** (アラン・フリートマン Buffalo NY 美)

●.....**Date: Sun, 23 Oct 2005 01:03:12 -0400**  
**Subject: RE: From Mt Hamilton**

Dear Masatsugu, Thank you for your message about your observing sessions on Mt. Hamilton. I had been wondering



if you had followed through with your planned visit, hoping that you could use the 36" refractor. You are right that the telescope is a national treasure, to astronomers anyway. It is good to read about the deep blue sky above Mt. Hamilton. I hope that you will share some of your drawings with the readers of the CMO. ....

I hope you will enjoy your stay in the United States and that everyone will make you feel welcome, even if most of your visit is on a remote mountain top.

David and Tyler are doing well in school. David is a sophomore at VCU, still a merit scholar. Tyler has no more

### -----CMO 2005 Notice #01-----

●.....Date: Tue, 18 Oct 2005 13:43:12 GMT  
From: "Masami MURAKAMI" <cmo@mars.dti.ne.jp>  
Subject: Dust storm at the southern Chryse

Dear Mars Colleagues, Masami and I (CMO) received an email from Silvia KOWOLLIK, Germany, at 1:55 GMT on 18 October (today) informing lively that the area of Chryse was unusual and looked roundish bright at  $\omega=355^\circ\text{W}$ , and subsequently she sent us a raw image taken at just before 3h GMT. Meanwhile Joel WARREN dispatched an image taken on 3:23 GMT. So the area of Chryse came to the American continents.

Since I am staying here at the west coast (at Mt Hamilton), the planet was to be caught after 5h GMT, while the sky condition was poor this evening, and so I did not expect. However, though the seeing condition was terribly poor (furthermore clouds passing), it was apparent, from the outset of the session at 5:30 GMT ( $\omega=048^\circ\text{W}$ ), that the southern Chryse was dusty bright, really looking roundish. I don't detail my observations here, but this is a real dust storm: I observed then at  $\omega=057, 067, 077, 087$  and  $096^\circ\text{W}$  until 8:50 GMT. The seeing gradually recovered but the area went to the terminator side.

After staying inside the big dome for 3 hours, I came down to check the internet to find the images made by Don PARKER who already took a good set of images at 4:41 GMT ( $=034^\circ\text{W}$ ) and by Dr Clay at 5:01( $\omega=041^\circ\text{W}$ ) to 7:02

signs of asthma. Best wishes,

Sam WHITBY (サム・ホイットビー Hopewell VA 美)

●.....Date: Sun, 23 Oct 2005 18:07:27 +1000  
Subject: Dust storm images

Please find attached my Mars images from 22nd of October. The dust storm over Solis Lacus is plainly visible despite the horrific seeing we had here in Melbourne.

Regards

Stefan BUDA (ステイファン・ブダ Melbourne 澳)  
☆☆☆

( $=070^\circ\text{W}$ ). We also received a final version of the precious image by KOWOLLIK at 2:44 GMT ( $=008^\circ\text{W}$ ), which was already uploaded in our CMO Gallery.

We should add that today's dust storm if seen through naked eyes looked much bigger and brighter, looked as if bounded by a shadowy roundish band, apparently brighter than the following Ophir. Around from  $\omega=087^\circ\text{W}$ , the eastern border became fainter and finally the dust looked mingled with the evening white mist. The Lick refractor was used with its OG stopped down to 50cm with a magnification of 500 $\times$ . Bill SHHEHAN was not here: I was helped by Rem STONE and Tony MISCH.

At present, GRAFTON's image at 6:42 GMT ( $\omega=065^\circ\text{W}$ ) and GASKELL's one at 4:41 GMT ( $\omega=036^\circ\text{W}$ ) have been reported.

I think this is a rare case in that the onset dust was chased from an early moment (KOWOLLIK) and to the evening. This dust was of course was related with the precursor found by Ch PELLIER on 13/14 October. The off-again on-again series of the dust disturbances are not rare: For instance in the case of December 2003 dust storm, it repeated first an on-but-off-again jumps even before 12 December as shown by TES.

Anyway it was gone, and may be subsided at night, but tomorrow it will make a quantum jump.

With best wishes,

Masatsugu MINAMI (CMO/OAA) at Mt Hamilton

シー・エム・オー・フクイ

中島 孝 Nj

★前回報告以降、佐藤 利男様(365)、松本 達二郎様(366 : 361に続くご寄付)、牧野 弥一様(367)、永井 靖二様(368)、岩崎 徹様(369)よりカンパを頂戴しました。有難うございました。不

☆ 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』#311 (25 October 2005) 編集 : 南 政次(Mn)、村上 昌己(Mk)、中島 孝(Nj)

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

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