

MARS

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OBSERVATIONS

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*CMO Mars Observations during the First Half of December 2007
from 1 December (356°Ls) to 15 December 2007 (003°Ls)*

2007年十二月前半(1 Dec~15 Dec)の火星面観測

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Observations here are concerned with those done during a fortnight period just before the northern spring equinox of the planet Mars. Since the closest day is around the corner (on 18/19 December), the apparent diameter δ went up from 15.1" to nearly maximal 15.9". Since opposition will occur on 24 December, the disk was quite roundish and the phase angle was down to $\epsilon=8^\circ$: If it is under 8° , the opposition effect will appear and the disk will be quite brighter, and for example Olympus Mons will shine. The central latitude ϕ was down from 6°N to 3°N .

Unfortunately at the rear side of the Japan islands the weather remains dismal. In 1990, Takashi NAKAJIMA (Nj) acquired 40 numbers of drawings during the first half of December, while this time nothing because of the bad weather. The region facing to the Pacific Ocean is blessed with the starry skies, but the jet stream is above and the seeing condition has been unfavourable.

♂.....今回は火星北半球春分直前の半月(十二月前半)観測である。18/19Decの最接近を迎えて、視直径 δ はこの半月で15.1"から15.9"と最大視直径に近くなった。24Decの衝を控えて、ディスクは圓くなっている。15Decで位相角 ϵ は 8° であった。 8° を下回ると衝効果が起き、次期は像全體が明るくなるであろうし、オリュムプス・モンスなどが輝くであろう。中央緯度 ϕ は 6°N から 3°N へと落ちている。

日本は西高東低で、上空にはジェット気流が走るほか、北陸では全く晴れない。筆者の一人(Mn)は1990年の十二月前半は大津の観測も入れて84枚、福井だけの中島氏は40枚を得ている(今回はゼロ)のに比べると雲泥の違いである。2005年以上に悪い天候であった。

♂.....The contributions we received this time (from 37 observers) are as follows. Don PARKER (DPk) has been active, and in Japan KUMAMORI (Km) observed rather constantly: Km is however annoyed by the high up Mars because he observes at his veranda. A team of UK went to Barbados during this period, but we have not yet received fully their reports. 今回の報告者は37名で、次の様である。天気の違いが出て、バラツキがあるが、フロリダの唐那・派克(DPk)氏の活躍は目覚ましい。熊森(Km)氏も火星が高くなり困っているが、コンスタントに観測している。尚、英のバルバドスの結果は未だ揃わない。

ADELAAR, Jan ヤン・アデラール (JAd) 尼徳蘭 Arnhem, Nederland

1 Set of RGB + 3 Colour Images (4, 13 December 2007) f/50@23cm SCT with a DMK21AF

- AKUTSU, Tomio 阿久津 富夫 (Ak)** 菲律賓 Cebu, the Philippines
10 Sets of RGB + 10 IR Images (3, 6, 8 December 2007) $f/35,57,75 \otimes 20\text{cm}$ SCT with a DMK21AF04
- ALLEN, Ethan T イーサン・アッレン (EAI)** 加利福尼亞 Sebastopol, CA, USA
1 Set of RGB Images (12 December 2007) $f/41 \otimes 30\text{cm}$ speculum with a DMK21AF04
- ANDERSON, David デヴィッド・アンダーソン (DAd)** 南卡羅萊納 nr Greenwood, SC, USA
3 Sets of RGB + 1 IR Images (9, 11, 15* December 2007)
 $f/36, 48 \otimes 33\text{cm}$ spec, $f/56 \otimes 40\text{cm}$ spec* with a ToUcam 740
- ARDITTI, David デイヴィッド・アーディッチ (DAr)** 英國 Stag Lane, Edgware, UK
9 Sets of RGB Images ((24 November); 1, 3, 8, 11, 11/12, 13 December 2007)
36cm SCT with a SKYnyx 2-0
- ASADA, Tadashi 淺田 正 (As)** 福岡・宗像 Munakata, Fukuoka, Japan
3 Colour + 3 B Images (9 December 2007) 30cm SCT with a Lu075M
- BATES, Donald R ドン・ベーツ (DBt)** 德克薩斯・休斯敦 Houston, TX, USA
3 Colour CCD Images (3, 7, 10 December 2007) $f/30, 35 \otimes 25\text{cm}$ spec with a ToUcam Pro
- BOSMAN, Richard リシャルト・ボズマン (RBs)** 尼德蘭 Enschede, Nederland
1 Set of RGB Images (11 December 2007) $f/50 \otimes 28\text{cm}$ SCT with an ATK-2HS
- CHAVEZ, Rolando ロランド・チャヴェス (RCv)** 喬治亞 Powder Springs, GA, USA
2 Sets of RGB Images (12, 13 December 2007) 32cm speculum with a DMK21AU04
- DELCROIX, Marc マルク・デルクロア (MDc)** 法國 Tournefeuille, France
1 Set of RGB + 3 IR + 1 violet Images (12/13 December 2007) $f/58 \otimes 25\text{cm}$ SCT with SKYnyx 2-0M
- DUPONT, Xavier グザヴィエ・デュボン (XDp)** 法國 Saint Roch, France
2 Sets of RGB + 1 Colour + 1 B Images (11/12, 14 December 2007)
 $f/53 \otimes 18\text{cm}$ speculum with a ToUcam Pro I
- FERNÁNDEZ GÓMEZ, Francisco José フランシスコ=ホセ・フェルナンデス=ゴメス (FFn)**
西班牙 Ourense, España
4 Colour Images (5, 6, 12, 15 December 2007) 20cm SCT with a Meade LPI
- FLANAGAN, William D ビル・フラナガン (WFl)** 德克薩斯・休斯敦 Houston, TX, USA
4 Sets of RGB Images (4, 5, 6 December 2007) $f/36 \otimes 36\text{cm}$ SCT with a Lu075M
- FUMEGA Ucha, Camilo カミロ・フメガ (CFm)** 西班牙 Ourense, España
1 Colour Image (14 December 2007) $f/40 \otimes 20\text{cm}$ speculum with a SPC900NC
- GHOMIZADEH, Sadegh サデグ・ゴミザデ (SGh)** 伊朗・德黑蘭 Tehran, Iran
7 Colour + 2 R + 2 B Images (8,~13, 15 December 2007) $f/37 \otimes 28\text{cm}$ SCT with a ToUcam Pro III
- GÓMEZ, Pepe ペペ・ゴメス (PGm)** 西班牙・塞維利亞 Santa Bárbara, Sevilla, España
2 Colour Images (6, 11 December 2007) 13cm Maksutov-Cassegrain with a ToUcam Pro 830K
- GORCZYNSKY, Peter ピート・ゴルチンスキー (PGc)** 康涅狄格 Oxford, CT, USA
9 Sets of RGB + 8 IR Images (1, 2, 5, ~7, 9, 11, 13, 15 December 2007)
 $f/42 \otimes 18\text{cm}$ Mak-Cass with a DMK21AF04
- HANCOCK, Ian R イアン・ハンコック (IHn)** 英國・坎特伯雷 Canterbury, UK
1 Set of RGB + 1 R Images (5, 7 December 2007) $f/30 \otimes 25\text{cm}$ SCT with a Lu075M
- HERNANDEZ, Carlos E カルロス・ヘルナンデス (CHr)** 佛羅里達・邁阿密 Miami, FL, USA
1 Set of Colour Drawings (9 December 2007) 359×23cm Maksutov-Cassegrain
- KUMAMORI, Teruaki 熊森 照明 (Km)** 堺 Sakai, Osaka, Japan
11 Colour Images (1, 3, ~5, 8, 9, 14, 15 December 2007)
 $f/70 \otimes 20\text{cm}$ Dall-Kirkham with a DMK21AF04&DFK21AF04
- LAWRENCE, Pete ピート・ローレンス (PLw)** 英國 Selsey, WS, UK

- 4 RGB Colour Images (11/12 December 2007) $f/67\otimes 36\text{cm}$ SCT with a SKYnyx2-0M
MAKSYMOWICZ, Stanislas **スタニスラス・マクシモヴィッチ (SMk)** 法國 Ecqueville, France
 3 Sets of Drawings (4, 11*, 15 December 2007) 120×~ 225× 20cm Cassegrain, 10cm refractor*
MELILLO, Frank J **フランク・メリッロ (FMI)** 紐約 Holtsville, NY, USA
 3 Colour Images (1, 7, 15 December 2007) 25cm SCT with a ToUcam pro II
MINAMI, Masatsugu **南 政次 (Mn)** 福井 Fukui, Fukui, Japan
 2 Drawings (7 December 2007) 300, 400×20cm Goto ED refractor*
 *Fukui City Observatory 福井市自然史博物館天文臺
MORITA, Yukio **森田 行雄 (Mo)** 廿日市 Hatsuka-ichi, Hiroshima, Japan
 12 Sets of RGB +12 IR Images (1, 4, 7, 9 December 2007) 25cm speculum with a Lu075M
MURAKAMI, Masami **村上 昌己 (Mk)** 藤澤 Fujisawa, Kanagawa, Japan
 15 Drawings (1, 2, 5, 14, 15 December 2007) 320×20cm F/8 speculum
NARITA, Hiroshi **成田 廣 (Nr)** 川崎 Kawasaki, Kanagawa, Japan
 10 Drawings (1, 2, 5, 6, 15 December 2007) 400×20cm Astro ED refractor
PARKER, Donald C **ドン・パーカー (DPk)** 佛羅里達・邁阿密 Miami, FL, USA
 7 Sets of RGB+1UV* Images (1*, 3, 4, 7, 8, 13 December 2007) $f/47\otimes 41\text{cm}$ spec with a SKYnyx 2-0M
PELLIER, Christophe **クリストフ・ペリエ (CPI)** 法國 Seine-St-Denis, France
 3 Sets of RGB +4 IR + 1 Violet Images (15/16 December 2007)
 $f/52\otimes 25\text{cm}$ Cassegrain with a SKYnyx 2-0M
SÁNCHEZ, Jesús R **ヘスス・サンチェス (JSc)** 西班牙・科爾多瓦 Córdoba, España
 2 Sets of RGB + 6 Colour Images (4/5, 7*, 12, 15 December 2007)
 26cm Mak-Cass, $f/40\otimes 25\text{cm}$ SCT* with a DMK21AF04 AS
SAN EMETERIO SANTOS, Francisco **フランシスコ・サン=エメテリオ=サントス (FEm)**
 西班牙 Santander, España
 3 Colour + 1 R Images (12/13 December 2007) $f/50\otimes 18\text{cm}$ Maksutov with an ATIK 1C
SHARP, Ian **イアン・シャープ (ISp)** 英國 Ham, West Sussex, UK
 6 Sets of RGB + 2 Colour Images (2, 5, 6 December 2007) $f/54\otimes 28\text{cm}$ SCT with a SKYnyx 2-0M
SOLDEVILLA-GONZALEZ, José Antonio
ホセ=アントニオ・ソルデビーヤ=ゴンサレス (JSd) 西班牙 Canyelles, España
 1 Set of RGB+1 C+4 B&W Images (4, 6/7, 9 December 2007) 25cm spec with a RCA plug camera
TYLER, David **デーヴ・タイラー (DTy)** 英國 Flackwell Heath, Buckinghamshire, UK
 4 Sets of RGB + 1 Colour Images (2,~6* December 2007)
 $f/50\otimes 28\text{cm}$ SCT with a SKYnyx 2-0 & Lu075M*at Barbados
WALKER, Sean **シヨーン・ウォーカー (SWk)** 新罕布夏 Chester, NH, USA
 3 Sets of RGB + 2 IR Images (6, 9, 11 December 2007) 32cm speculum with a DMK21AF04 AS
WARELL, Johan **ヨハン・ヴァレツル (JWr)** 烏普薩拉 Uppsala, SWEDEN
 1 Set of RGB Images (8 December 2007) $f/19\otimes 28\text{cm}$ SCT with a ToUcam Pro
ZURUTUZA, Ignacio **ナチヨ・スルトウサ (NZr)** 西班牙 La Fresneda, Asturias, España
 4 RGB Colour + 2 IR Images (4, 6, 11, 14 December 2007)
 $f/45, 53\otimes 28\text{cm}$ SCT with a DMK21AF04

♂.....0) **HST and MRO**: Four Mars images taken by the HST during this period were released: they were as follows -- on 1 Dec ($\lambda=356^\circ\text{Ls}$) at $\omega=050^\circ\text{W}$, on 3 Dec ($\lambda=357^\circ\text{Ls}$) at $\omega=225^\circ\text{W}$ & 320°W , on 7 Dec ($\lambda=359^\circ\text{Ls}$) at $\omega=140^\circ\text{W}$. Every enhanced amateur image should be made optimum or moderated on the model of these HST images. The following site shows the images as well as the projection map secured from these images (plus one image from 17 December),

<http://hubblesite.org/newscenter/archive/releases/solar%20system/mars/2007/45/image/b/>

On the other hand, the movies constructed from the images from the MRO-MARCI were given by

http://www.msss.com/msss_images/2007/12/12/ http://www.msss.com/msss_images/2007/12/18/

The first shows the animated mosaics from 3 December to 9 December, and the other from 10 December to 16 December.

1) The NPH/NPC: A glimpse of the border of the north polar cap (npc) can be taken on any excellent images, while the north polar hood (nph), some fragmented, was still present even on 15 Dec ($\lambda=003^\circ\text{Ls}$). See for example FERNÁNDEZ GÓMEZ (*FFn*)'s image at $\omega=327^\circ\text{W}$, and SÁNCHEZ (*JSc*)'s at $\omega=346^\circ\text{W}$ where a cloud protrusion over the npc and the morning cloud is thick. PARKER (*DPk*)'s images on 13 Dec ($\lambda=002^\circ\text{Ls}$) at $\omega=051^\circ\text{W}$ also show several strata of clouds upto quite low latitudes. Out of the images which show the strong morning cloud at the arctic region we pick out the following: On 7 Dec ($\lambda=359^\circ\text{Ls}$), *DPk*'s images at $\omega=117^\circ\text{W}$, on 6 Dec ($\lambda=358^\circ\text{Ls}$), FLANAGAN (*WFl*)'s at $\omega=130^\circ\text{W}$, and GORCZYNSKI (*PGc*)'s at $\omega=116^\circ\text{W}$, and on 3 Dec ($\lambda=357^\circ\text{Ls}$), TYLER (*DTy*)'s at $\omega=106^\circ\text{W}$. On the images on 1 Dec ($\lambda=356^\circ\text{Ls}$) at $\omega=138^\circ\text{W}$ made by *DPk/LAZZAROTTI (PLz)*, several segments and strata are shown. HST's images on 1, 3, 7 December also show thickly the nph though some part of the border of the npc can be looked through. So we tried incidentally to measure the snow line Θ on two images: The trial on the image on 1 Dec ($\lambda=356^\circ\text{Ls}$) at $\omega=050^\circ\text{W}$ implied to us around $\Theta=58.7^\circ\text{N}\pm 0.5^\circ\text{N}$ and on the image on 3 Dec ($\lambda=357^\circ\text{Ls}$) at $\omega=320^\circ\text{W}$ implied $\Theta=59.3^\circ\text{N}\pm 0.5^\circ\text{N}$, smaller than the sizes we expected (we used the formula $\psi = -|\phi| + \cos^{-1}(1 - (d/r))$ where d is the depth, r the radius and ψ is the half width of the npc measured from the centre of the globe). **2) A White Patch near Alba Patera^{bis}:** The white patch to the east of Alba Patera which was caught as a burst on CASQUINHA (*PCq*)'s image on 29 Nov ($\lambda=355^\circ\text{Ls}$) at $\omega=116^\circ\text{W}$ was also observed by several observers as reported in the preceding issue, and this time also the following images show the same phenomenon in some varieties: On the images of *DPk/PLz* on 1 Dec ($\lambda=356^\circ\text{Ls}$) at $\omega=138^\circ\text{W}$ it is weakly seen connected with a strong nph fragment. On the images of *DPk* on 4 Dec ($\lambda=357^\circ\text{Ls}$) at $\omega=122^\circ\text{W}$ it looks dispersed, while the images on 6 Dec ($\lambda=358^\circ\text{Ls}$) by WALKER (*SWk*) at $\omega=108^\circ\text{W}$, 111°W , and by *WFl* at $\omega=130^\circ\text{W}$ it is clear though rather small (a bit also on *PGc*'s at $\omega=116^\circ\text{W}$). On the HST image on 7 Dec, it is evident as a linear form. On 7 Dec ($\lambda=359^\circ\text{Ls}$), *PGc*'s images at $\omega=110^\circ\text{W}$, and *DPk*'s at $\omega=117^\circ\text{W}$ prove quite clearly its presence. Also the same on *DPk*'s images on 8 Dec ($\lambda=359^\circ\text{Ls}$) at $\omega=087^\circ\text{W}$. ALLEN (*EAl*)'s images on 12 Dec ($\lambda=001^\circ\text{Ls}$) at $\omega=093^\circ\text{W}$ also show weakly a trace. These are all taken when the location is on the afternoon side. Its central position is nearly at ($\Omega=100^\circ\text{W}$, $\Phi=42^\circ\text{N}$) while Alba Patera is centred at ($\Omega=110^\circ\text{W}$, $\Phi=40^\circ\text{N}$) so that the white patch is located at the eastern flank of Alba Patera and so may be a precursor of the orographic cloud over Alba Patera. According to the results from the MGS, the cloud above Alba Patera will be at its peak twice around at $\lambda=060^\circ\text{Ls}$ and $\lambda=140^\circ\text{Ls}$. The MGS-MOC images in 2002 show the white segment at around $\Omega=100^\circ\text{W}$ from around $\lambda=355^\circ\text{Ls}$, and hence not so different from this season's. The images of *DPk* on 13 Dec ($\lambda=002^\circ\text{Ls}$) at $\omega=051^\circ\text{W}$ may show the position on the morning side, but it is difficult to judge because the nph fragments flow much around there. **3) Trio los Clouds on Tharsis Montes:** The summit of the southernmost Arsia Mons looks almost always or almost all seasons covered by the evening cloud if the meteorology is not broken by the dust disturbance, and as reported in the preceding issue the fact that the evening cloud cover was spotted implied that the usual meteorology recovered. This time the clouds were formed on the summits of other two northern Montes (Pavonis and Ascraeus); this is also normal if the season proceeded to $\lambda=350^\circ\text{Ls}$. *DPk/PLz*'s images on 1 Dec ($\lambda=356^\circ\text{Ls}$) at $\omega=138^\circ\text{W}$, 150°W show well the three cloud hanging on the Tharsis Montes as well as at Syria Planum. SHARP (*ISp*)'s B image made at Barbados on 2 Dec

($\lambda=356^\circ\text{Ls}$) at $\omega=127^\circ\text{W}$ may also show faintly the trio. On *DPk/PLz*'s on 3 Dec ($\lambda=357^\circ\text{Ls}$) at $\omega=157^\circ\text{W}$ the trio were merged near the terminator. On *DPk*'s on 4 Dec ($\lambda=357^\circ\text{Ls}$) at $\omega=122^\circ\text{W}$ the trio is visible quite inside the disk. *WFl*'s images on 6 Dec ($\lambda=358^\circ\text{Ls}$) quite clearly prove the existence of the trio at $\omega=130^\circ\text{W}$ (otherwise see *PGc*'s faint trio at $\omega=116^\circ\text{W}$). The HST images on 7 December clearly shows the trio (and a bit cloud at the eastern flank of Olympus Mons). Quite near the terminator, they are just trapped as a Tharsis cloud: See *PGc*'s and *MELILLO (FMI)*'s on 1 Dec ($\lambda=356^\circ\text{Ls}$) at $\omega=166^\circ\text{W}$, and $\omega=170^\circ\text{W}$ respectively, *WFl*'s on 4 Dec ($\lambda=357^\circ\text{Ls}$) $\omega=155^\circ\text{W}$, 160°W , and on 5 Dec ($\lambda=358^\circ\text{Ls}$) at $\omega=149^\circ\text{W}$, *PGc*'s on 5 Dec at $\omega=160^\circ\text{W}$, *KUMAMORI (Km)*'s on 14 Dec ($\lambda=002^\circ\text{Ls}$) at $\omega=169^\circ\text{W}$, 172°W , and on 15 Dec ($\lambda=003^\circ\text{Ls}$) at $\omega=159^\circ\text{W}$, 162°W . Visually one of us (*Mk*) observed the Tharsis evening cloud on 14 Dec and 15 Dec ($\lambda=003^\circ\text{Ls}$) and on 15 Dec chased it from $\omega=130^\circ\text{W}$ to 189°W . *SWk*'s images on 6 Dec ($\lambda=358^\circ\text{Ls}$) at $\omega=108^\circ\text{W}$, 111°W suggest that the Tharsis clouds are formed quite earlier inside the disk. These implies it is useful if one tries to take pictures successively from $\omega=120^\circ\text{W}$ to 160°W every twenty minutes to see the formation of the trio and their decay.

4) Water Vapour Band at the 50°S Zone: After the subsidence of the Noachis dust storm, it looks the atmosphere is quite filled with the water vapour as suggested by the images of *BATES (DBt)* on 10 Dec ($\lambda=000^\circ\text{Ls}$) at $\omega=060^\circ\text{W}$ or of *SWk*'s on 11 Dec ($\lambda=001^\circ\text{Ls}$) at $\omega=038^\circ\text{W}$. In the preceding issue, we picked out the case of a stream of the water vapour from the condensate at the morning Hellas as seen on *WFl*'s images on 27 Nov ($\lambda=354^\circ\text{Ls}$) at $\omega=226^\circ\text{W}$ (or otherwise *PCq*'s images of the stream to the south of M Sirenum on 29 Nov ($\lambda=355^\circ\text{Ls}$) at $\omega=116^\circ\text{W}$). This time this kind of water vapour stream band at the 50°S zone was frequently observed. It is possible to see it on *DPk/PLz*'s images on 1 Dec ($\lambda=356^\circ\text{Ls}$) at $\omega=138^\circ\text{W}$ as well as on *ISp*'s resp *DTy*'s on 2 Dec ($\lambda=356^\circ\text{Ls}$) at $\omega=127^\circ\text{W}$ & 180°W resp $\omega=132^\circ\text{W}$, while the stream band is more clearly on the following images (on the HST images it is depicted more moderately however): On 3 Dec ($\lambda=357^\circ\text{Ls}$) *DPk*'s images at $\omega=157^\circ\text{W}$, on 4 Dec ($\lambda=357^\circ\text{Ls}$), *DPk*'s images at $\omega=122^\circ\text{W}$, *WFl*'s at $\omega=155^\circ\text{W}$, 160°W , on 5 Dec ($\lambda=358^\circ\text{Ls}$) *DTy*'s resp *ISp*'s at $\omega=100^\circ\text{W}$ resp $\omega=104^\circ\text{W}$, *WFl*'s at $\omega=149^\circ\text{W}$, *PGc*'s at $\omega=160^\circ\text{W}$, on 6 Dec ($\lambda=358^\circ\text{Ls}$), *SWk*'s at $\omega=108^\circ\text{W}$, *ISp*'s at $\omega=104^\circ\text{W}$, *WFl*'s at $\omega=130^\circ\text{W}$, on 7 Dec ($\lambda=359^\circ\text{Ls}$), *JSc*'s at $\omega=021^\circ\text{W}$, *DPk*'s at $\omega=117^\circ\text{W}$, and on 8 Dec ($\lambda=359^\circ\text{Ls}$), *DPk*'s at $\omega=087^\circ\text{W}$, on 9 Dec ($\lambda=000^\circ\text{Ls}$), *MORITA (Mo)*'s at $\omega=202^\circ\text{W}$ and so on. It runs from E to W, but it looks to stream eastward from the morning condensate. That is, the morning condensate must remain even after the Sun rises higher up. As to the situation around at Hellas, *AKUTSU (Ak)*'s images on 3 Dec ($\lambda=357^\circ\text{Ls}$) at $\omega=263^\circ\text{W}$, 274°W , 285°W and *PELLIER (CPl)*'s on 15/16 Dec ($\lambda=003^\circ\text{Ls}$) at $\omega=270^\circ\text{W}$, 280°W , 306°W are interesting. A vapour stream was originally seen eastward from Hellas, but once Hellas is near at CM and a morning thick condensate appears, a stream looks to precede it.

5) Evening Mist over Syrtis Mj: A faint evening mist was recognised when Syrtis Mj came to the terminator: The mist is apparent on *WARELL (JWr)*'s images on 8 Dec ($\lambda=360^\circ\text{Ls}$) at $\omega=347^\circ\text{W}$, and as well on *LAWRENCE (PLw)*'s images on 11/12 Dec ($\lambda=001^\circ\text{Ls}$) at $\omega=320^\circ\text{W}$, 324°W , 330°W , 347°W . Furthermore the following images show the evening mist: *JSc*'s on 12 Dec ($\lambda=001^\circ\text{Ls}$) at $\omega=352^\circ\text{W}$, *DELCROIX (DMI)*'s on 12/13 Dec ($\lambda=002^\circ\text{Ls}$) at $\omega=322^\circ\text{W}$, 331°W , *ADELAAR (JAd)*'s on 13 Dec ($\lambda=002^\circ\text{Ls}$) at $\omega=325^\circ\text{W}$, 328°W , 003°W , and as well *FFn*'s and *JSc*'s on 15 Dec ($\lambda=003^\circ\text{Ls}$) at $\omega=327^\circ\text{W}$, and $\omega=346^\circ\text{W}$ respectively. On *DPk*'s images on 13 Dec ($\lambda=002^\circ\text{Ls}$) at $\omega=051^\circ\text{W}$ the mist remains up until the end of S Sabæus. On the other hand, *Mk* visually observed that the evening mist appeared quite early when Syrtis Mj and N Alcyonius were on the rhs on 1 Dec ($\lambda=356^\circ\text{Ls}$) already at $\omega=261^\circ\text{W}$, 271°W , 281°W , 291°W . See also *Ak*'s images on 8 Dec ($\lambda=359^\circ\text{Ls}$) at $\omega=258^\circ\text{W}\sim 280^\circ\text{W}$.

6) Chryse Evening Mist: This must remain until Chryse comes to the terminator. This was shown on *FMI*'s ccd images on 7 Dec ($\lambda=359^\circ\text{Ls}$) at $\omega=091^\circ\text{W}$, and also on *HERNANDEZ (CHr)*'s drawings on 9 Dec ($\lambda=360^\circ\text{Ls}$) at $\omega=094^\circ\text{W}/100^\circ\text{W}$.

7) Caralis Fons: The Newton

crater was witnessed on *Isp*'s images on 2 Dec ($\lambda=356^\circ\text{Ls}$) at $\omega=127^\circ\text{W}$ and also on *DPk*'s on 7 Dec ($\lambda=359^\circ\text{Ls}$) at $\omega=117^\circ\text{W}$ and so on. However on *WFl*'s images on 6 Dec ($\lambda=358^\circ\text{Ls}$) at $\omega=130^\circ\text{W}$ it is clearly isolated and we should want to peacefully call it Caralis F. This will show us the present situation of M Sirenum compared with the previous one. The projection map of the HST shows faintly also other two dots which were clearly visible in 2005 to the south of Caralis F as a series. **8) Miscellanea:** As reported previously several times, the areas of around Margaritifer S, around Solis L, around M Tyrrhenum remain unchanged these months (very changed from the aspects in the preceding apparitions) and so we omit reviewing here. The HST images prove well that the area of Aurea Cherso recovered as reported previously, and that the anomaly of the region from Hesperia to Peræa and to Syrtis Mj. The area of Aurea Cherso was shot clearly this time by ANDERSON (*DAd*) on 11 Dec ($\lambda=001^\circ\text{Ls}$) at $\omega=040^\circ\text{W}$. We should like also to remark we forgot to note in the preceding issue that on the images of *WFl* on 27 Nov ($\lambda=354^\circ\text{Ls}$) at $\omega=221^\circ\text{W}$, 226°W , 231°W some shadowy area was appearing to the west of the "doubled canal" to the south of Ætheria, while one of the HST images showed it this time. The HST image on 3 Dec at $\omega=320^\circ\text{W}$ looks to show a polar dust caused by the nph.

♂.....0) HSTとMRO : この時期のHSTの像が発表された。1Dec($\lambda=356^\circ\text{Ls}$) $\omega=050^\circ\text{W}$ 、3Dec($\lambda=357^\circ\text{Ls}$) $\omega=225^\circ\text{W}$ 、 320°W 、7Dec($\lambda=359^\circ\text{Ls}$) $\omega=135^\circ\text{W}$ ~ 140°W である。次でそれらの像が見られるが、これらには強調画像には見られない穏やかな「空気」が醸されているので参考にされたい :

<http://hubblesite.org/newscenter/archive/releases/solar%20system/mars/2007/45/image/b/>

また、これらから得られた投影図も発表されている。(他に17Decの像もある。) 一方、

http://www.msss.com/msss_images/2007/12/12/ http://www.msss.com/msss_images/2007/12/18/

にはこの期に関するMRO-MARCIの動画があり、それぞれ3Dec~9Dec、10Dec~16Decのものが迎れる。

1)北極雲と北極冠 : 北極冠の存在は好く垣間見られるが、15Dec($\lambda=003^\circ\text{Ls}$)に到っても未だ北極雲は吹っ切れていないようだ。フェルナンデス=ゴメス(FFn)氏の $\omega=327^\circ\text{W}$ 、サンチェス(JSc)氏の $\omega=346^\circ\text{W}$ には北極冠上から北極雲の吹き出しがあるし、朝雲が強い。13Dec($\lambda=002^\circ\text{Ls}$)の唐那・派克(DPk)氏の $\omega=051^\circ\text{W}$ では、可成りの低緯度まで何層にも雲の層が出ている。朝方の北極雲が強いのは例えば、7Dec($\lambda=359^\circ\text{Ls}$)のDPk氏 $\omega=117^\circ\text{W}$ 、6Dec($\lambda=358^\circ\text{Ls}$)のフラナガン(WFl)氏の $\omega=130^\circ\text{W}$ 、ゴロティンスキ(PGc)氏の $\omega=116^\circ\text{W}$ 、3Dec($\lambda=357^\circ\text{Ls}$)のタイラー(DTy)氏の $\omega=106^\circ\text{W}$ にも見られる。1Dec($\lambda=356^\circ\text{Ls}$) $\omega=138^\circ\text{W}$ のDPk/ラツァロッチ(PLz)氏の画像には北極雲の破片・層が幾つも見える。HSTの1、3、7Decの何れにも北極雲は強いが、北極冠が窺える。そこで因みに雪線 Θ を測ってみたが、1Dec($\lambda=356^\circ\text{Ls}$) $\omega=050^\circ\text{W}$ の像では $\Theta=58.7^\circ\text{N}\pm 0.5^\circ\text{N}$ 邊り、3Dec($\lambda=357^\circ\text{Ls}$) $\omega=320^\circ\text{W}$ の像では $\Theta=59.3^\circ\text{N}\pm 0.5^\circ\text{N}$ 邊りとなった。何れも豫想したより、サイズが小さい。測定はCMO#003の方法に據った。**2)アルバ・パテラ近傍の白斑bis** : カスキニア(PCq)氏が29Nov($\lambda=355^\circ\text{Ls}$) $\omega=116^\circ\text{W}$ でバーストを記録したアルバ・パテラ東の白斑は前回にその他の観測も報告したが、その後も次のように記録されている。1Dec($\lambda=356^\circ\text{Ls}$) $\omega=138^\circ\text{W}$ のDPk/PLz氏像では弱くなっているが、4Dec($\lambda=357^\circ\text{Ls}$) $\omega=122^\circ\text{W}$ のDPk氏像では稍擴がり、6Dec($\lambda=358^\circ\text{Ls}$)のウォーカー(SWk)氏の $\omega=108^\circ\text{W}$ 、 111°W 、WFl氏の $\omega=130^\circ\text{W}$ では細い筋状でハッキリしている(PGc氏の $\omega=116^\circ\text{W}$ でも少し)。7Dec($\lambda=359^\circ\text{Ls}$)のHST像では線條に明確である。同日のPGc氏の $\omega=110^\circ\text{W}$ 、DPk氏の $\omega=117^\circ\text{W}$ でもハッキリ出ている。DPk氏の8Dec($\lambda=359^\circ\text{Ls}$) $\omega=087^\circ\text{W}$ でも同様である。12Dec($\lambda=001^\circ\text{Ls}$) $\omega=093^\circ\text{W}$ のアッレン(EAl)氏像にも稍出ている。以上はホボタ方の影像である。白斑の位置は($\Omega=100^\circ\text{W}$ 、 $\Phi=42^\circ\text{N}$)中心、アルバは($\Omega=110^\circ\text{W}$ 、 $\Phi=40^\circ\text{N}$)中心であるから、その東山腹にあり、山岳雲の奔りかも知れない。MGSに據ればアルバは $\lambda=060^\circ\text{Ls}$ 、及び $\lambda=140^\circ\text{Ls}$ 邊りで二度ピークを迎える。2002年のMGSの影像では、この雲片は盛衰があるが、 $\lambda=355^\circ\text{Ls}$ 邊りから強くなっている様であるから、ホボ今回と一致する。尚、13Dec($\lambda=002^\circ\text{Ls}$)のDPk氏の $\omega=051^\circ\text{W}$ などでは朝方はどうかというところだが、朝霧に紛れて分からない。**3)タルシス山の雲** : 南端のアルシア山の夕雲は殆ど全季

節常時見られ、ただ前回報告の現象はノアキス黄雲の後、気象が回復してきた証しとして重要であった譯であるが、今回はパウオニス、アスクラエウス・モンズにも懸かってきた。 $\lambda=350^\circ\text{Ls}$ 以降では正常である。DPk/PLz氏の1Dec($\lambda=356^\circ\text{Ls}$) $\omega=138^\circ\text{W}$ 、 150°W には三つ並んで出ているほか、シュリア・プラナム邊にも先行する雲がある。バルバドスのシャープ(ISp)氏の2Dec($\lambda=356^\circ\text{Ls}$) $\omega=127^\circ\text{W}$ のBには幽かに出ているか。DPk/PLz氏の3Dec($\lambda=357^\circ\text{Ls}$) $\omega=157^\circ\text{W}$ では遅くトリオは崩れる。DPk氏の4Dec($\lambda=357^\circ\text{Ls}$) $\omega=122^\circ\text{W}$ では可成り内部でトリオが見える。Wf1氏の6Dec($\lambda=358^\circ\text{Ls}$) $\omega=130^\circ\text{W}$ では三山雲が明白で(他にPGc氏の $\omega=116^\circ\text{W}$ に幽かに)、7Dec($\lambda=359^\circ\text{Ls}$)のHST像にはトリオは明白な上、オリュムプス・モンズの東山腹に小さい夕雲が見える(その季節のはじまりである)。その他深い夕方のタルシス雲は1Dec($\lambda=356^\circ\text{Ls}$)のPGc氏の $\omega=166^\circ\text{W}$ 、メリッロ(FMI)氏の $\omega=170^\circ\text{W}$ 、4Dec($\lambda=357^\circ\text{Ls}$)のWf1氏の $\omega=155^\circ\text{W}$ 、 160°W 、5Dec($\lambda=358^\circ\text{Ls}$)のWf1氏の $\omega=149^\circ\text{W}$ 、PGc氏の $\omega=160^\circ\text{W}$ 、熊森氏の14Dec($\lambda=002^\circ\text{Ls}$) $\omega=169^\circ\text{W}$ 、 172°W 、15Dec($\lambda=003^\circ\text{Ls}$) $\omega=159^\circ\text{W}$ 、 162°W などに出ている。筆者達の一人(Mk)も14Decと15Dec($\lambda=003^\circ\text{Ls}$)にタルシスタ雲を観測し、15 Dec には $\omega=130^\circ\text{W}$ から 189°W まで追ったが、シーイングが冴えなかった。6Dec($\lambda=358^\circ\text{Ls}$)のSWk氏の $\omega=108^\circ\text{W}$ 、 111°W ではかなり早い時期から、タルシス雲の形成が見られるので、好条件のとき $\omega=120^\circ\text{W}\sim 160^\circ\text{W}$ を廿分刻みで追跡すればトリオの成立、その崩れが追求できるであろう。

4) 50°S帯の水蒸気の帯：黄雲後水蒸気が増えていることは、ベーツ(DBt)氏の10Dec($\lambda=000^\circ\text{Ls}$) $\omega=060^\circ\text{W}$ やSWk氏の11Dec($\lambda=001^\circ\text{Ls}$) $\omega=038^\circ\text{W}$ の像などから明らかだが、特に前回27Nov($\lambda=354^\circ\text{Ls}$) $\omega=226^\circ\text{W}$ のWf1氏の像や29Nov($\lambda=355^\circ\text{Ls}$) $\omega=116^\circ\text{W}$ のPCq氏の像に現れた50°S帯に奔る雲の帯が今回も何度となく観測されている。1Dec($\lambda=356^\circ\text{Ls}$) $\omega=138^\circ\text{W}$ のDPk/PLz氏像、2Dec($\lambda=356^\circ\text{Ls}$)のISp氏の $\omega=127^\circ\text{W}$ 、 180°W 、DTy氏の $\omega=132^\circ\text{W}$ 等にも顕れていると思うが、3Dec($\lambda=357^\circ\text{Ls}$)のDPk氏の $\omega=157^\circ\text{W}$ 、4Dec($\lambda=357^\circ\text{Ls}$)のDPk氏の $\omega=122^\circ\text{W}$ 、Wf1氏の $\omega=155^\circ\text{W}$ 、 160°W 、5Dec($\lambda=358^\circ\text{Ls}$)のDTy氏の $\omega=100^\circ\text{W}$ 、ISp氏の $\omega=104^\circ\text{W}$ 、Wf1氏の $\omega=149^\circ\text{W}$ 、PGc氏の $\omega=160^\circ\text{W}$ 、6Dec($\lambda=358^\circ\text{Ls}$)のISp氏の $\omega=104^\circ\text{W}$ 、SWk氏の $\omega=108^\circ\text{W}$ 、Wf1氏の $\omega=130^\circ\text{W}$ 、7Dec($\lambda=359^\circ\text{Ls}$)JSc氏の $\omega=021^\circ\text{W}$ 、DPk氏の $\omega=117^\circ\text{W}$ 、8Dec($\lambda=359^\circ\text{Ls}$)のDPk氏の $\omega=087^\circ\text{W}$ では明確である。森田(Mo)氏の9Dec($\lambda=000^\circ\text{Ls}$) $\omega=202^\circ\text{W}$ でも朝のアウソニアから發していると思う。尚、像によっては強く出ているが、HST像ではもっと穏やかに描寫されている。筋は東西に互るが、朝霧から東へ流れているように見える。朝霧が残ったものであろう。ヘッラス周辺に関しては阿久津(Ak)氏のヘッラス中心の像、3Dec($\lambda=357^\circ\text{Ls}$) $\omega=263^\circ\text{W}$ 、 274°W 、 285°W やペリエ(CPI)氏の15/16Dec($\lambda=003^\circ\text{Ls}$) $\omega=270^\circ\text{W}$ 、 280°W 、 306°W が参考になろう。ヘッラスから東へ流れるが朝霧が出るとそこからも流れる。

5) シュルティス・マイヨルの夕霧：シュルティス・マイヨルが夕没するとき霧に隠れるのが淡いながら確認されている。ヴァレル(JWr)氏の8Dec($\lambda=360^\circ\text{Ls}$) $\omega=347^\circ\text{W}$ に出ている他、ローレンス(PLw)氏が11/12Dec($\lambda=001^\circ\text{Ls}$)に $\omega=320^\circ\text{W}$ 、 324°W 、 330°W 、 347°W と追っている。他に次の像を参照：JSc氏:12Dec($\lambda=001^\circ\text{Ls}$) $\omega=352^\circ\text{W}$ 、デルクロア(MDc)氏:12/13Dec($\lambda=002^\circ\text{Ls}$) $\omega=322^\circ\text{W}$ 、 331°W 、アデラル(JAd)氏:13Dec($\lambda=002^\circ\text{Ls}$) $\omega=325^\circ\text{W}$ 、 328°W 、 003°W 、また15Dec($\lambda=003^\circ\text{Ls}$)のFFn氏の $\omega=327^\circ\text{W}$ 、JSc氏の $\omega=346^\circ\text{W}$ 参照。尚、13Dec($\lambda=002^\circ\text{Ls}$)のDPk氏の $\omega=051^\circ\text{W}$ にはシヌス・サバエウスの先端まで残っている。一方、東の方では、われわれの一人(Mk)の1Dec($\lambda=356^\circ\text{Ls}$) $\omega=261^\circ\text{W}\sim 291^\circ\text{W}$ のノドゥス・アルキュオニウスの見える環境での観測では、夕霧は早くから出ている。他にAk氏の8Dec($\lambda=359^\circ\text{Ls}$) $\omega=258^\circ\text{W}\sim 280^\circ\text{W}$ を参照。

6) クリュセタ雲：これはクリュセにも續くと思われる。FMI氏の7Dec($\lambda=359^\circ\text{Ls}$) $\omega=091^\circ\text{W}$ のccd像、ヘルナンデス(CHr)氏の9Dec($\lambda=360^\circ\text{Ls}$)の $\omega=094^\circ\text{W}/100^\circ\text{W}$ のスケッチにはこれが出ている。

7) カラリスの泉：ニュートン・クレーターはISp氏の2Dec($\lambda=356^\circ\text{Ls}$) $\omega=127^\circ\text{W}$ やDPk氏の7Dec($\lambda=359^\circ\text{Ls}$) $\omega=117^\circ\text{W}$ 等に出ているが、Wf1氏の6Dec($\lambda=358^\circ\text{Ls}$) $\omega=130^\circ\text{W}$ では綺麗に分離してカラリスの泉らしくなった。これで元のマレ・シレナムとの比較が容易である。HSTの投影圖には2005年にカラリスの南に連鎖して見えた二点が辛うじて見えている。

8) その他：前回まで述べたようなマルガリティフェル・シヌス周辺やソリス周辺、マレ・テュレナム周辺には變化が餘り見られないので、今回は略す。HST像では、既に述べた様にヘスペリアからペラエアまでおかしいこと、細かいことで

はアウレア・ケルソ邊りがシッカリしていることは好く出ている。今回アウレア・ケルソの邊りはアンダーソン(DAd)氏の11Dec($\lambda=001^\circ\text{Ls}$) $\omega=040^\circ\text{W}$ の像にも見える。もう一つは確認だが、HST像にはアエテリア以南の「二重運河」の西にも暗影が出ていることである。これは既にWF1氏の27Nov($\lambda=354^\circ\text{Ls}$) $\omega=221^\circ\text{W}$ 、 226°W 、 231°W 等に確認出来ることであつた。尚HSTの3Dec $\omega=320^\circ\text{W}$ の像は北極雲に依って引き起こされた極型の黄塵を撮していると思われる。

♂.....In the next issue we shall review the observations made during a fortnight period from 16 December ($\lambda=003^\circ\text{Ls}$, $\delta=15.9''$) to 31 December 2007 ($\lambda=011^\circ\text{Ls}$, $\delta=15.5''$).

Forthcoming 2007/2008 Mars (16)

Ephemeris for the Observations of the 2007/2008 Mars. VIII February 2008 (Revised)

Masami MURAKAMI 村上 昌己(Mk)

As a sequel to the Ephemeris VII (in CMO#339), we here list the necessary elements of the Ephemeris for the physical observation of Mars from 1 February 2008 to the end of February 2008. The data are listed for every day at 00:00 GMT (not TDT). ω and φ denote the longitude and latitude of the sub-Earth point respectively. The symbols λ , δ and ι stand for the areocentric longitude of the Sun, the apparent diameter and the phase angle

respectively.

From this apparition, we also add the column of the Position Angle Π of the axis rotation, measured eastwards from the north point: This is useful to determine the north pole direction from the p \leftarrow . The apparent declination D of the planet is also given at the final column. The data here are basically based on *The Astronomical Almanac for the Year 2008*.

Date (00:00GMT)	ω	φ	λ	δ	ι	Π	D
30 January 2008	258.80°W	2.6°S	24.69°Ls	12.27"	25.8°	-29.4°	+26°42'
31 January 2008	249.69°W	2.6°S	25.15°Ls	12.15"	26.3°	-29.4°	+26°41'
01 February 2008	240.57°W	2.5°S	25.62°Ls	12.03"	26.7°	-29.4°	+26°40'
02 February 2008	231.43°W	2.5°S	26.08°Ls	11.92"	27.2°	-29.3°	+26°39'
03 February 2008	222.29°W	2.5°S	26.55°Ls	11.80"	27.6°	-29.3°	+26°38'
04 February 2008	213.13°W	2.5°S	27.01°Ls	11.68"	28.0°	-29.3°	+26°37'
05 February 2008	203.97°W	2.4°S	27.47°Ls	11.57"	28.4°	-29.3°	+26°37'
06 February 2008	194.79°W	2.4°S	27.93°Ls	11.45"	28.8°	-29.3°	+26°36'
07 February 2008	185.60°W	2.3°S	28.39°Ls	11.34"	29.1°	-29.2°	+26°35'
08 February 2008	176.40°W	2.3°S	28.85°Ls	11.22"	29.5°	-29.2°	+26°34'
09 February 2008	167.20°W	2.2°S	29.31°Ls	11.11"	29.9°	-29.1°	+26°33'
10 February 2008	157.98°W	2.1°S	29.77°Ls	11.00"	30.2°	-29.1°	+26°32'
11 February 2008	148.75°W	2.1°S	30.23°Ls	10.89"	30.6°	-29.0°	+26°31'
12 February 2008	139.51°W	2.0°S	30.69°Ls	10.78"	30.9°	-29.0°	+26°31'
13 February 2008	130.27°W	1.9°S	31.15°Ls	10.68"	31.2°	-28.9°	+26°30'
14 February 2008	121.01°W	1.8°S	31.61°Ls	10.57"	31.5°	-28.8°	+26°29'
15 February 2008	111.74°W	1.7°S	32.06°Ls	10.47"	31.8°	-28.7°	+26°28'
16 February 2008	102.47°W	1.6°S	32.52°Ls	10.36"	32.1°	-28.7°	+26°28'
17 February 2008	093.19°W	1.5°S	32.98°Ls	10.26"	32.4°	-28.6°	+26°27'
18 February 2008	083.90°W	1.4°S	33.43°Ls	10.16"	32.6°	-28.5°	+26°26'
19 February 2008	074.60°W	1.3°S	33.89°Ls	10.06"	32.9°	-28.4°	+26°25'
20 February 2008	065.29°W	1.2°S	34.34°Ls	09.96"	33.1°	-28.3°	+26°24'
21 February 2008	055.97°W	1.1°S	34.79°Ls	09.87"	33.3°	-28.2°	+26°24'
22 February 2008	046.65°W	0.9°S	35.25°Ls	09.77"	33.6°	-28.1°	+26°23'
23 February 2008	037.32°W	0.8°S	35.70°Ls	09.68"	33.8°	-27.9°	+26°22'
24 February 2008	027.98°W	0.7°S	36.15°Ls	09.58"	34.0°	-27.8°	+26°21'
25 February 2008	018.64°W	0.6°S	36.60°Ls	09.49"	34.2°	-27.7°	+26°20'
26 February 2008	009.29°W	0.4°S	37.06°Ls	09.41"	34.4°	-27.6°	+26°19'
27 February 2008	359.93°W	0.3°S	37.51°Ls	09.32"	34.5°	-27.4°	+26°19'
28 February 2008	350.56°W	0.2°S	37.96°Ls	09.23"	34.7°	-27.3°	+26°18'
29 February 2008	341.19°W	0.0°N	38.41°Ls	09.15"	34.9°	-27.2°	+26°17'
01 March 2008	331.81°W	0.2°N	38.86°Ls	09.06"	35.0°	-27.0°	+26°16'
02 March 2008	322.43°W	0.3°N	39.31°Ls	08.98"	35.2°	-26.9°	+26°15'

便り

Letters to the Editor

●.....Date: Sun, 9 Dec 2007 23:51:22 -0600
Subject: Bates Mars image 12/10/2007 - Good seeing!

Hello Friends: As the Holiday Season quickly approaches, Mars is bringing a wealth of gifts to anxious telescopes here on earth.

A break in the clouds tonight, along with record high temps (80°F during the day, 70°F when this image was taken) brought steady skies. Mars is almost perfectly round now, and the North Polar cap is quite large. Mare Erythraem and Mare Acidalium revealed vast detail in the eyepiece. The disc is rather small, but with a careful eye, you can see much. I barely had time for one image before thick clouds rolled in. I am panning to take some time off from work over the next few weeks, and hope to devote much time to observing and imaging Mars. I wish everyone good health, and good observing!

○.....Date: Fri, 21 Dec 2007 20:01:34 -0600
Subject: Bates Mars Images 12/20 - 12/21 2007

Hello All: Early this week, I took off and drive 600 miles each way to far west Texas near the McDonald Observatory to find the best skies for imaging Mars. Although the weather was warm and clear, the seeing was terrible! Over 2 nights, I was unable to obtain a single usable image! I then drove home to Houston, and found excellent skies in my own backyard! Moral to the story: Don't try to find steady skies, let them find you!

I have enclosed two images taken last night. The first was taken when the planet was about 55° above the local horizon. Syrtis Major was clearly visible, and I would estimate the seeing to be around 7 out of a 10 point scale. I then took another image when Mars was at its highest point, around 83°, but found that my alt/azimuth drive had trouble keeping the planet in the frame. On inspections of the image I saw an extension that joined Mare Erythraem to Niliacus Lacus. My map calls this area Oxia Plaus.

Nice to have the planet so high in the sky, but as I said, it's tough on a Dobsonian to view directly overhead. I had to bend over backwards like a limbo artist to see through my Tel-Rad. If skies are clear, it should be interesting to see the Mars on Christmas Eve with a full Moon nearby.

I can't believe that 2007 is almost over! It's also hard to think that we will have to wait around 16 years before Mars is clearly visible in our telescopes. This hobby sure gives you a perspective on the fleeting nature of our time here on earth. Better enjoy it while we can! I toast my glass to all the Mars Observers out there. Clear skies, keeping looking up, and all the best in 2008! Peace on Earth,

Don BATES (ト・ン・ベーツ Houston TX 美)

●.....Date: Mon, 10 Dec 2007 00:21:11 +0100
Subject: Mars 7th December

Hello: A new series showing a white spot at the south border and the jet stream over mare Acidalium.

http://astrosurf.com/astropasion/Mars2007/20071207_jrs.jpg
Jesús SÁNCHEZ (ハス・サンチェス Córdoba 西)

●.....Date: Mon, 10 Dec 2007 07:25:50 +0000

Subject: Mars 8 December

Hi All, I have attached some Mars images from 8 December. The interesting cloud streak at 45-50° S. latitude is crossing the disk. Solis Lacus is small, triangular. Nectar is not visible. The NPC is visible trough fragmenting NPH. Best,

○.....Date: Sat, 15 Dec 2007 01:30:29 +0000
Subject: Mars 13 December

Hi All, I have attached Mars images from 13 December, taken under poor conditions. There is little evidence of the NPC. There are many arctic clouds, thick NPH remnants, a PM limb cloud over Edom and delicate hazes over Margaritifer. Best,

○.....Date: Mon, 17 Dec 2007 02:28:55 +0000
Subject: Mars repeats from 7 and 8 Dec.

Hi All, It seems that the gamma on my monitor was messed up when I precessed the December 7th and 8th images. I have re-sent them. Sorry! Best,

○.....Date: Sun, 23 Dec 2007 06:07:40 +0000
Subject: Mars 21 December

Hi All, I have attached two sets of images from 21 December. The NPC is well formed. Note the bright localized cloud around 50° south on the AM limb. From this a delicate cloud steak extends eastward across the Hellespontus and southern Hellas. This is a similar cloud formation observed in Dec., 2005 at Ls=335°. Best,

Don PARKER (唐那・派克 Miami FL 美)

●.....Date: Mon, 10 Dec 2007 10:30:14 +0900

Subject: Mars-2007-12-08&09-KUMAMORI

ベランダの間隙から挑戦していますが、撮影可能時間が短くなり撮影間隔をとることができなくなってきました。

○.....Date: Sat, 15 Dec 2007 10:24:34 +0900
Subject: Mars-2007-12-14-KUMAMORI

Tharsis の山岳雲?だけがめだっていますが、シーイングが悪くて詳細は写りません。

○.....Date: Sun, 16 Dec 2007 07:16:05 +0900
Subject: Mars-2007-12-15-KUMAMORI

昨日以上にシーイングが悪くて眼視では良く分かりませんが画像処理をすると、それなり?の像が出てくるので自分でも不思議です。

○.....Date: Mon, 17 Dec 2007 14:02:37 +0900
Subject: Mars-2007-12-16-KUMAMORI

僅かしかない撮影可能時間帯に雲がやってきました。撮影可能時間は十五分程度しかありません。シーイングも悪いし意欲がそがれてしまいそうです。

○.....Date: Tue, 18 Dec 2007 21:25:44 +0900
Subject: Mars-2007-12-17-KUMAMORI

シーイングが悪くて、画像処理をいじりすぎたかもしれません。

○.....Date: Wed, 19 Dec 2007 22:17:24 +0900
Subject: Mars-2007-12-18-KUMAMORI

接近日になってきたのですが、シーイングは好転しないのでやる気を失いそうです。が、できるだけのことはしようと思っています。

撮影時に雲がやってきて、雲を通しての撮影でした。

○.....Date: Fri, 21 Dec 2007 02:03:55 +0900
Subject: Mars-2007-12-19&20-KUMAMORI

19日は接近日でしたが、シーイングは最悪で、まともな像にはなりません。20日は、やや良くなりましたが、ほんの少しだけです。よろしくお願いたします。

熊森 照明 (Teruaki KUMAMORI 堺 Osaka)

●.....Date: **Mon, 10 Dec 2007 13:28:03 +0900**

Subject: **火星画像 AKM071208**

こんにちは、先週末の火星画像です。北極雲が透けてきました。前回のAKM071206の画像は届いているでしょうか？

○.....Date: **Mon, 10 Dec 2007 14:07:02 +0900**

Subject: **RE:火星画像 AKM071208**

お返事ありがとうございます。RGB画像は上3つです。

○.....Date: **Fri, 14 Dec 2007 11:02:04 +0900 (JST)**

Subject: **年末帰国**

こんにちは、12月も中旬になり、クリスマス、年の瀬を迎えていよいよ、2007年もラストとなりました。セブでは相変わらず日中は暑く、残暑が続いた状態で、日本のような12月の雰囲気は全くなくて、季節感がないのは寂しいです。

年末には一時帰国し、年明けの9日にはまたセブに戻ります。この時期は日本とフィリピンとの温度差が最もあり、体の調節が一番辛い時なんですけど、それでも戻るのやはり日本が良いからですね。皆さんを体を労わり、年末をお過ごしください。

○.....Date: **Tue, 18 Dec 2007 14:56:38 +0900**

Subject: **火星画像 AKM071217**

こんにちは、昨夜の火星です。こちらは天気が悪く、夜晴れず、火星が見られない日が多いです。今年は天気がおかしいですね。また風が強くて像がブレ、イメージは悪いです。タルシス山系にかかる雲が見えます。

阿久津 富夫(Tomio AKUTSU セブThe Philippines)

●.....Date: **Tue, 11 Dec 2007 01:30:56 +0800**

Subject: **Re: 臺北天文臺70年**

拝復、CMO#339の陶さんの文の訳文をさっそく読みました。これでよいと思います。

白川静氏の本は読んだことがありますけど、漢字に関するものでなく、支那の神話に関する本でした。

日本の漢字を戦前の状態に引き戻すことはむずかしいです。たとえば読、続、売、などは戦前はなかった字で、台湾では通じません。戦前は讀、續、賣でしたが、台湾では今もこれを使っています。豊は戦前から日本で使われていましたが、台湾では豊でないかわからない人が多いのです。

お母様がとうとう逝去なされたとのこと、お悔やみを申しあげます。

蔡章獻氏と私とはともに1923年(大正12年)の生まれですが、蔡氏は年初の生まれ、私は年末の生まれです。

先ずはこれまで。お体を大事に。 草々

賴 武揚 (W.-Y. LAI 臺北 Taiwan)

●.....Date: **Mon, 10 Dec 2007 19:06:04 -0500**

Subject: **Mars Observation (December 9, 2007)**

Dear Minami, Murkami, and CMO Members, I would like to apologize for my lack of participation to date for the current Mars apparition. I have been very busy in the Emergency Room (Pediatrics) and have had very little time to observe. I have been following the outstanding observations and images posted on this excellent forum.

I was finally able to make an observation of Mars on December 9, 2007 (06:25 and 06:50 U.T.). The hard side of Mars was visible and I was able to detect several

albedo features as noted. I welcome any comments on my observation.

Date: December 9, 2007

Time (U.T.): 06:25 (left image) and 06:50 (right image)

CM: 094.2°W (left image) and 100.3°W (right image)

Ls: 360° (Northern Spring/Southern Autumn) De: 4.4°N

Instrument: 9-inch (23-cm) F/13.5 Maksutov-Cassegrain

Magnification: 359x Filters (Wratten): None

Seeing: 6-7/10 Transparency (1-6): 3/10

○.....Date: **Wed, 19 Dec 2007 10:12:48 -0500**

Subject: **Mars Observations (December 16, 2007)**

Dear Mr. Murakami, My best wishes and happy holidays to you, Dr. Minami and the members and families of CMO. I made a series of Mars observations while visiting a friend (Michael Palermi of Jupiter, Florida). The observations were made on December 16, 2007 ((01:50-02:45 U.T.). I noted a good amount of detail over the regions between Syrtis Major and Mare Erythraeum. The first observation (left image) was made using an excellent Orion XT10 (10-inch (25-cm) F/4.8 Dobsonian reflector. The middle and right images were made using a 7-inch (18-cm) aperture stop over a 20-inch (52-cm) F/3.5 Newtonian reflector producing an unobstructed F/10 focal ratio (1,778 mm focal length). I welcome any comments on my observations.

Date (U.T.): December 16, 2007

Time (U.T.): 01:50 (left image), 02:15 (middle image), and 02:45 U.T.

(right image) CM: 334.3° (left image), 340.3° (middle image), and

349.7° (right image) Ls: 003.0° (Early Northern Spring/Southern Autumn)

De: +3.3°, p 0.99, Dia.: 15.9"

Seeing (1-10): 5-6, Antoniadi (I-V): III Transparency (1-6): 5-6

Carlos HERNANDEZ (カルロス・ヘルナンデス FL 美)

●.....Date: **Tue, 11 Dec 2007 23:43:53 +0100**

Subject: **Mars images Aug-Dec**

Dear friends, Enclosing the few Mars imaging observations I have managed to acquire this fall from Uppsala, not much to write home about in terms of detail or sheer numbers but hopefully they may have some value.

Wishing you all a wonderful Christmas and New Year,

Johan WARELL (ヨハン・ヴァレール Uppsala 瑞典)

●.....Date: **Wed, 12 Dec 2007 06:45:22 +0900**

Subject: **『火星通信』#338拝受**

昨日、『火星通信』#338届きました。いつもありがとうございます。また、シュトーレンも届きました。お心遣いありがとうございます。奥様にも、よろしくお伝えください。

○.....Date: **Sat, 15 Dec 2007 11:53:36 +0900**

Subject: **12月9日の画像**

12月9日に撮影した画像を添付いたします。熊森さんに負けていますね。こちらも天候不順です。ご報告まで。

淺田 正 (Tadashi ASADA 宗像 Fukuoka)

●.....Date: **Wed, 12 Dec 2007 09:14:54 -0800**

Subject: **RE: Dec. 11, 2007 Image**

Masatgugu, Sorry for the confusion. The date is correct. The times are wrong. Please correct the times as you see fit. thanks

○.....Date: **Sat, 15 Dec 2007 12:27:22 -0800 (PST)**

Subject: **MARS IMAGE DEC. 15, 2007**

Attached is my image from Dec 15, 2007. I think I have the time correct. My times always refer to the red image. The color is taken about 5 minutes before and the blue is about 5 minutes after. Best Wishes,

David ANDERSON (デヴィッド・アンダーソン SC 美)

●.....Date: *Wed, 12 Dec 2007 12:37:17 -0800*
 Subject: *Mars 12/11*

Poor conditions forced me to use a red filter with no IR block to squeeze a bit more detail this evening.

○.....Date: *Tue, 18 Dec 2007 10:19:15 -0800*

Subject: *Amateur vs. Hubble comparison (2007)*

Hubble released its Opposition 07 collection today- They need to tweak the color balance <g>!

Here is a comparison between the Hubble shot from 12/1 and my image from 12/9.

Obviously, the Hubble shot is resized to match my image scale. I also took the liberty to balance the Hubble version to present it a bit more natural appearing. Enjoy,

○.....Date: *Wed, 19 Dec 2007 12:42:48 -0800*

Subject: *Mars 12/19/07*

Fair to good seeing last night. Actually, I was lucky it was clear at all. Enjoy,

○.....Date: *Fri, 21 Dec 2007 03:06:18 -0800*

Subject: *RE: Hubble vs C-14*

Paolo, as an American taxpayer, I paid for the Hubble, as have all Americans, so I find such comparisons refreshing. I'm also pleased that we share the data with the world for free. A good reference for all.

○.....Date: *Fri, 21 Dec 2007 18:28:22 -0800*

Subject: *RE: Hubble vs C-14*

He can, as can everyone. After three months, all Hubble data is public domain; one only needs to search out the raw files and do with them as you wish:

<http://archive.stsci.edu/>

Perhaps in a cloudy spell I'll work up some of their data. Sean Walker

○.....Date: *Fri, 21 Dec 2007 22:11:51 -0800*

Subject: *Mars 12/22, 1:42 UT*

Fair conditions early before the clouds rolled in (here on Earth). Nothing particular of note.

Sean WALKER (シヨーン・ウォーカー S&T 美)

●.....Date: *Wed, 12 Dec 2007 15:32:16 +0100*
 Subject: *Submit photo*

Dear sir: Submit my latest photo of Marte planet.

DATE: 2007.12.12 23:04 UT

Made by 127/1500 Maksutok/Cassegrain Scope + Philips Toucam Fun 830 K+ Barlow x3. No filter.

Sevilla (37°23'46" N, 5°59' 41"W), Spain, Saludos,

Pepe GÓMEZ (ペペ・ゴメズ Sevilla 西)

●.....Date: *Wed, 12 Dec 2007 17:01:21 +0100*
 Subject: *Mars 2007 /12/11 22h42 UT*

Hi Guys, Mars this morning, just before the clouds rolling in.

http://www.astrofotografie.nl/mars_2007_12_11.htm

Richard BOSMAN (リチャルト・ボスマン Enschede 蘭)

●.....Date: *Thu, 13 Dec 2007 09:05:09 -0600*
 Subject: *Mars Images - 04, 05 and 06 December*

Dear Masatsugu & Masami, Attached are Mars images from December 04, 05 and 06. The weather hasn't been cooperating much here lately. The seeing was pretty variable on all three of these nights but I got some reasonable images on the 6th. The blue images have been very interesting lately showing the development and evolution of the cloud features. In fact the image on the 6th seems to show some shadows being cast by the clouds near the evening terminator just S of the NPH in the Tempe and Arcadia regions. Best regards,

○.....Date: *Mon, 17 Dec 2007 10:13:08 -0600*

Subject: *RE: Mars Images - 04, 05 and 06 December*

Dear Masatsugu, ...I had a clear night last night finally! I should be sending the images to you soon. Weather doesn't look too good for the remainder of the week. Makes me really appreciate how lucky we were in 2005 to have consistent clear skies here around opposition time. Clear Skies!!

○.....Date: *Wed, 19 Dec 2007 10:41:44 -0600*

Subject: *Images 17-December-2007*

Dear Masatsugu, Attached is a set of images from 17-December. M Acidalium is prominent and appears darkened.

Thanks for the HST image from 7 December. According to the HST website, the CM is 140°W on this image.

My image from 6 December is at 130°W, only 10° difference. I think the HST image does show that my so-called shadow on terminator is really a darkened albedo feature as you suggest. On the HST image this feature is also visible on the terminator but there is no cloud directly to the west of it.

However, it is always encouraging to see how that our amateur images are showing the same features as the HST images. It gives me more confidence that small features on our images are real and not just some artifact of processing.

The weather here has also not been cooperating a lot. Hopefully some clearer skies near the end of the week.

Best regards,

○.....Date: *Sat, 22 Dec 2007 10:08:08 -0600*

Subject: *non title*

Dear Masatsugu and Masami, Attached is a set of images from 21 December. I managed to sneak these in on one clear night between cloudy days. Best wishes,

Bill FLANAGAN (ビル・フナカゴン Houston TX 美)

●.....Date: *Thu, 13 Dec 2007 09:22:20 +0000*
 Subject: *Mars 11/12 December 2007*

Hi all, Here are a few Mars captures from a cold and frosty UK night (11/12 December). Best regards,

○.....Date: *Thu, 13 Dec 2007 09:26:17 +0000*

Subject: *Recent solar images Dec 11-12 2007*

Hi all, Here are some recent shots of the Sun taken through a CaK PST. Note the high latitude active region coming into view across the north-eastern limb on the full disk shot and magnified on the result from the 12th December.

http://www.distantstars.co.uk/gallery/Sol07/2007-12-11_13-26-58_CaK_full_1024.jpg

http://www.distantstars.co.uk/gallery/Sol07/2007-12-11_13-26-58_CaK-final.jpg

http://www.distantstars.co.uk/gallery/Sol07/2007-12-12_11-43-24_CaK.jpg

○.....Date: *Tue, 18 Dec 2007 11:14:56 +0000*

Subject: *Re: Mars 11/12 December 2007*

Dear Masatsugu, Thank you for your kind words and apologies for missing out the address mentioned. I have been away from home quite a number of times and tiredness has been catching up with me I fear. I will endeavour to include the address on all subsequent postings. Best regards,

○.....Date: *Wed, 19 Dec 2007 11:25:12 +0000*

Subject: *Mars at closest approach, 18 Dec 2007*

Hi all, Here's an image of Mars taken about an hour before closest approach on the 18th December. Reasonable seeing at times but the transparency was poor. Best regards,

○.....Date: *Fri, 21 Dec 2007 10:00:14 +0000*

Subject: *Hubble vs C-14*

Inspired by a comparison done earlier this month by Sean Walker, I thought I'd go and retrieve one of this

years Hubble opposition shots to see how it compares against my Mars capture of the 18th. I was quite taken aback at the fine detail similarities. Although every effort is made to ensure no artificial detail is introduced into each processed image, it's somewhat comforting to have a base reference to confirm you've got it more-or-less right. A great testament to the fantastic equipment that amateurs have to 'play' with these days.

Seasons greetings to you all.

○.....Date: **Fri, 21 Dec 2007 10:51:12 +0000**

Subject: Re: Hubble vs C-14

Calm down Paolo for goodness sake. My comparison was simply for me to confirm that I wasn't making anything up. One of the biggest issues for imaging is that we lack up to date references to occasionally check that what we are doing is actually correct. I don't know Mars that well so it's not possible for me to do that from direct observation or from thus far gained knowledge. I'm continually and genuinely amazed at what amateurs can achieve these days but at the fine detail end there's always a worry that the processes used may introduce stuff that simply isn't there. In this respect I welcome the comparison process because it allows me to check my methods are correct and not making anything up.

I don't believe I said anything to denigrate the work of the Hubble Team - you're the one that's introduced that thought. Perhaps it was the mention of the C-14 which made your blood boil? I know you're a fan ;)

Pete LAWRENCE (ピート・ローレンス Selsey 英)

●.....Date: **Thu, 13 Dec 2007 22:08:11 +0100**
Subject: Mars 13 december

Hi all, Some might have read that I suspected a dustevent but after all the images processed (pfff...) there seems little evidence...it remains a strange bright patch on the limb, maybe there is still a small amount airborne or so but can't be seen against the planet. There seems a extension of the NPH in the Ismenius Lacus region, further on the southside of the morninglimb bright blue vapours or ice. So you might have guessed...very tired right now. best wishes

○.....Date: **Sat, 15 Dec 2007 18:10:41 +0100**
Subject: Re: Mars 13 december

Hi Fellows, A bit more detail squeezed out especially the last 2. best wishes.

○.....Date: **Tue, 18 Dec 2007 22:16:19 +0100**
Subject: Mars 16 december

Hi All, Conditions were only fair during this capture, cold temps and fast small scale turbulence. best wishes

○.....Date: **Fri, 21 Dec 2007 21:16:50 +0100**
Subject: Mars 19 december

Mars just after the closest approach, regretly seeing isn't cooperating lately so turned down the focal ratio to keep some contrast, color seems somewhat muted. best

Jan ADELAAR (ヤン・アデルール Arnhem 荷蘭)

●.....Date: **Fri, 14 Dec 2007 14:31:57 -0800**
Subject: Mars 12 December 2007

Hi Masatsugu, Here's a view of Solis Lacus on 12 December. My first image in over a month... We've had very poor seeing here in the states for quite a while now. The water on Mars is definitely on the move!

Hope you are in good health and getting some nights of good seeing at the observatory. Best Wishes,

○.....Date: **Sun, 16 Dec 2007 15:06:57 -0800**

Subject: Re: Mars 12 December 2007

Hi Masatsugu, Nice to hear from you as well. To bad I missed inclusion in #339... I will be spending Christmas vacation with my wife's family in the high desert of New Mexico. I'm bringing my telescope and the long term jet stream forecast looks favorable. Hopefully I will have steady skies this opposition after all! The weather here has been very unstable. It might be due to the "La Niña" effect.

I'm very sorry to hear about your mother's passing away. My heartfelt condolences. Best Wishes,

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

●.....Date: **Sat, 15 Dec 2007 18:50:49 +0100**
Subject: TR: Mars 2007.12.12

Hello all, Mars under good seeing conditions, from violet to IR 1μ:

<http://astrosurf.com/delcroix/images/planches/me.php?y=2007&m=12&d=12>

We can see a haze on the limb near Syrtis Major, and NPH breaking in Cydonia. Steady skies,

Marc DELCROIX(マルク・デルクロア Tournefeuille法)

●.....Date: **Sun, 16 Dec 2007 09:51:26 +0700**
Subject: Re: 年末帰国

阿久津様(CCの皆様方) セブからの惑星画像の送信、ありがとうございます。フィリピンはクリスマスを間近に控え、一年で一番華やいだ季節を迎えていることと思います。

私の方は、ベトナムに来て二ヶ月が過ぎましたが、年末年始、そして来年2月上旬の旧正月(テト)期間中も帰国しません。これで三年連続、ベトナムで新年を迎えることになります。

こちらは、フィリピンほどクリスマスは多くはないのですが、滞在地のホーチミン市は仏米統治時代の影響もあって、クリスマスは華やいだ雰囲気となります。ホテルがサイゴン大教会のすぐ近くなので、周辺の道路ではクリスマスイブの晩は交通規制が行われ、大変なにぎわいになります。

ベトナム南部は、11月末に乾期に入りました。夕刻のスクールがなくなり、毎日好天です。日中の気温は30℃を越えますが、こちらでは一番しのぎやすい季節です。

サイゴンの空にも、毎晩火星が爛々と輝いています。望遠鏡がありませんので、お送りいただいた画像を拝見し、接近中の火星を偲んでおります。

宮崎 勲(Isao MIYAZAKI ホーチミン Vietnam)

●.....Date: **Sun, 16 Dec 2007 13:55:04 -0600**
Subject: Happy 150th birthday--E.E. Barnard

Please celebrate with me the 150th anniversary of the birth of E.E. Barnard! What a guy!

<http://www.vanderbilt.edu/news/releases/2007/12/7/a-stellar-conversation-with-dr-bill-sheehan>

Bill SHEEHAN (ウィリアム・シーハン MN 美)

●.....Date: **Mon, 17 Dec 2007 10:26:45 +0900**
Subject: Re: FW:Happy 150th birthday--E.E. Barnard

ごぶさたしております。井上正男監、大西直樹ほか訳、シュトラウス著、パーシヴァル・ローエル、彩流社、2007、3800円、の出版はご存知とおもいます。出版記念会は二月中旬以降です。

バーナードはアメリカ的なセルフメイドマンとして興味ありました。長岡半太郎(奇妙なことに望遠鏡分解能を徹底的に計算している。ベッセル関数の腕試しとしか評価されてないが、しかも金星過日の黒滴現象にしか適用してない)の先生の

メンデンホールも整備されていないコースでえらくなった物理学者ですが、なかなか面白く調べたことがあります。

昨年藤田先生の白寿の集まりがお弟子たちであった由。

横尾 廣光 (Hiromitsu YOKOO 狛江 Tokyo))

●.....Date: **Mon, 17 Dec 2007 10:41:21 +0100**
Subject: [Fwd: Descriptif du projet de meeting international pour labélisation AMA2009]

Dear Masatsugu, You will find enclosed the presentation of the Workshop of Mars observers and historians which was submitted by Nicolas Biver on December 15. With best wishes.

>◆.....Date: **Sat, 15 Dec 2007 20:11:38 +0100 (CET)**
>Subject: **Descriptif du projet de meeting international pour labélisation AMA2009**

>Veillez trouver et attache un descriptif plus detaille de ce
>projet de manifestation (soumis le 15 nov 2007) pour
>labélisation AMA 2009. Sincerement, **Nicolas Biver**

Francis OGER (フランス・オジェ nr Paris 法)

●.....Date: **Tue, 18 Dec 2007 00:50:09 -0000**
Subject: **Mars 2dec from Barbados**

Hi Guys, Our 5 man imaging trip to Barbados is now over and we are all back in the UK. We had Damian on a C14 Bruce Kingsley on a C11 Leon De Ste Croix on C11, Ian Sharp C11 with whom I shared some sky time, and my own station a 6 inch vixen for solar imaging in White and H α on Ian's "EQ6 Go To", during the daytime Oh yes it also got pointed at M42 with a DSLR at the focus. Many thanks to Ian for sharing.

The weather was nicely hot, but windy after the first couple of days. The best seeing was in breezy conditions, just when you were getting nice images on the chip, it was flying all over it! The all night imaging sessions were often interrupted by torrential rain. In spite of all this some nice stuff was captured at chosen moments.

I managed to capture Mars, Saturn, and the plentiful solar goings on. Here is a Mars from the first night. The ever changing NPH clouds were the highlight of the Mars images for me. Seeing was calm but only fair.

Many thanks too, go to Ian's wife Sue and Damian's wife Tiffany for feeding us all. Quite a task! Best wishes

○.....Date: **Thu, 20 Dec 2007 20:57:15 -0000**
Subject: **Mars 3rd dec barbados**

Hi Guys, Imaging Night 2, calm but iffy seeing. Although at 13 North, the much higher altitude than the UK seems to allow the colours allow to "come through" I fancy. Mars appearing to rotating only 9° per day does make for the images being a little samey from day to day, but the NPH clouds change quite a bit. Best wishes

○.....Date: **Thu, 20 Dec 2007 21:23:25 -0000**
Subject: **Mars 19Dec UK**

Hi Guys, Phew it was cold this night, My dome would not shut with ice on the tracks, good job I was seated at the Lappy or my butt would have fallen off. Big culture shock from 25C imaging, at 13 north. Insect spray and rum and coke.

Anyway back to reality seeing was pretty good last night. Nice visual in the bino at 450x, before capturing at 2300. Not a big fan of rrgb, but in this case it did not change the colour much and gave more detail in the final image. Not a lot going on in the NPH, but the altitude did have an hour to go, and "reddish" area is interesting.

I like this area, taking in both Gomer and S Major. Best wishes

○.....Date: **Thu, 20 Dec 2007 22:01:18 -0000**
Subject: **Mars 4th Dec**

Hi again Guys, Here is the Solis Lacus region from the 4th Dec. Its interesting to compare the subtle brightenings in the blue channel with the RGB image. Best wishes

○.....Date: **Thu, 20 Dec 2007 22:53:46 -0000**
Subject: **Mars 5th Dec Barbados**

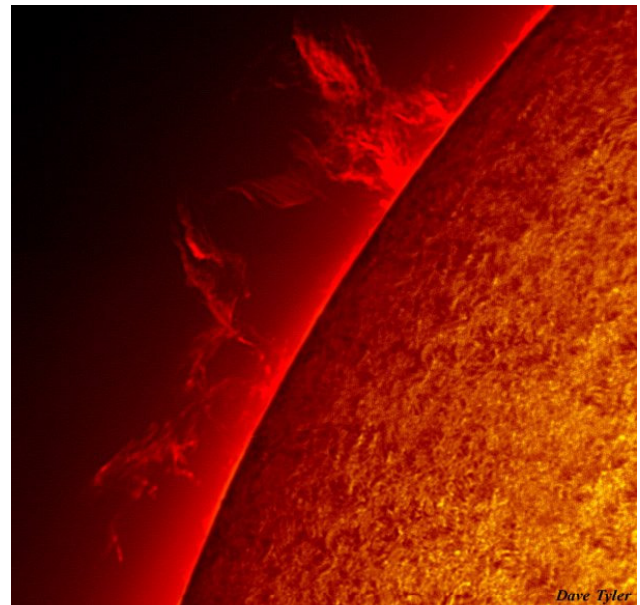
Hi Guys, Another of the Solis Lacus region in slightly better seeing. The polar clouds were putting on a nice display. best wishes

○.....Date: **Thu, 20 Dec 2007 23:12:01 -0000**
Subject: **Mars dec 6th Barbados**

Hi Guys, This image was with a colour cam, to ensure a colour capture in the cloud gaps. At last a bit more detail is appearing on the disc. Best wishes

○.....Date: **Thu, 20 Dec 2007 23:41:11 -0000**
Subject: **Solar Prom 2-Dec Barbados**

Hi guys, A bit of solar now. The one was taken at



07:43 am local Barbados time, my first glimpse in H α of the sun from there. Vixen 150mm stopped to 4.5 inches. Daystar .6 A filter with LU 075 CCD. Best wishes

○.....Date: **Fri, 21 Dec 2007 11:50:37 -0000**
Subject: **Re: Mars 3rd dec barbados**

Hi Richard, Yes this time you are right, the seeing was rarely very good there was constant cloud interruption for the RGB's as well as torrential downpour interruptions. The high winds during decent seeing made things very difficult too. I was using Ian's C11 to grab a few RGB's, and then hand it back to him, catching the best seeing of any night was a matter of luck. I am very grateful to Ian to enable me to get what images I did over the two weeks. I am sure Damian and his C14 will have got some better stuff throughout his nightly vigil.

I focussed mainly on the sun, in Barbados this time, it was far less frustrating.

Damian and I had commented before the trip, that it was quite easy to "max out" on the available detail on Mars, per scope, even in just fair seeing.

We did not expect to achieve much more resolution there. The number of clear nights, was a big attraction, as was the operating temperature. A lot of Data was obtained in spite of the weather. AND it was great fun !! best wishes

◆.....Date: **Thu, 20 Dec 2007 22:32:28 +0100**
Subject: **Re: Mars 3rd dec barbados**

Hi David, nice Mars images. If I may be honest, I expect more higher resolution from the paradise, Barbados. Was the seeing not so well in on Barbados? Regards **Richard BOSMAN**

○ · · · · · **Date: Fri, 21 Dec 2007 16:21:02 -0000**
Subject: Saturn C11 Barbados 10 dec

Hi Guys, I managed an RGB of Saturn on this evening, 10 days into the holiday (did I say "HOLIDAY") into the



sleep deprived twilight zone ! Seeing was good. The view in the binos on the C11 was excellent. A small spot also on one of Jim Phillips' images, is just visible in the colour image, but more clearly seen on the HC green.

Best wishes

○ · · · · · **Date: Fri, 21 Dec 2007 20:40:43 -0000**
Subject: early 0978

Hi guys , imagine my delight, having taken my vixen 4000 miles with only proms and granulation to image, this small beginings flare turned into a photogenic beast of a group. best wishes

○ · · · · · **Date: Sun, 23 Dec 2007 00:44:10 -0000**
Subject: Mars 21 Dec

Hi Guys, I notice Mars is looking a little drab this past week, we all seem to be suffering from it. An opposition effect is suggested. Seeing for this image, Mars was jittering in the mist, but of stable form. Best wishes

Dave TYLER (デヴィッド・タイラー Bkh 英)

● · · · · · **Date: Tue, 18 Dec 2007 08:57:22 +0000**
Subject: First Mars Images from Barbados

Hi all, As you have heard from Dave Tyler, we (Damian Peach, Dave Tyler, Bruce Kinsley, Leon De Ste Croix and Myself) have just returned from an exhausting and frustrating 2-week imaging trip to Barbados.

Here are my first night results taken on 2nd Dec 2007
<http://tinyurl.com/2z7ay7>
<http://tinyurl.com/ypfg5f>

We were beset by equipment failures and worse than expected weather and seeing. Most nights the early star tests were spectacularly good with 9-10/10 seeing, but often this seeing deteriorated as Mars came up! However, having said all of that, I enjoyed the trip hugely and learned a great deal.

Those wondering why Barbados was chosen should read Damian's excellent article in the latest BAA journal.

More images to follow over the next week or

○ · · · · · **Date: Thu, 20 Dec 2007 12:20:30 +0000**
Subject: Mars Trio 19-20 Dec 2007

Hi all, First time back imaging in the cold! Seeing wasn't too bad, transparency was not good. I think I had some dew on the inside of the corrector after the Barbados trip - now drying it out! Here are three images:

<http://tinyurl.com/3yrdna>

○ · · · · · **Date: Thu, 20 Dec 2007 17:59:59 +0000**
Subject: Mars from Barbados 05-Dec-2007

Hi all, Two more images from 5th Dec 2007 with Solis Lacus nicely in view.

<http://tinyurl.com/2cgy2c>

<http://tinyurl.com/yt47qa>

○ · · · · · **Date: Sat, 22 Dec 2007 18:05:32 +0000**
Subject: Mars 06-Dec-2007 from Barbados

Hi all, Still working my way through the AVIs taken from Barbados. These from 6th Dec represent the best seeing so far: 3 images here:

<http://tinyurl.com/2hmlcj>

The best one with colour channels here:

<http://tinyurl.com/25wy7e>

Best Regards and Merry Christmas

○ · · · · · **Date: Sun, 23 Dec 2007 11:34:34 +0000**
Subject: Saturn from Barbados 06-Dec-2007

Hi all, Didn't have much luck with Saturn whilst on the trip - seemed to coincide with cloud, wind or bad seeing. Also, the one night where I was forced in by sheer tiredness after hours on Mars (when the seeing had worsened anyway) the other guys got great Saturn results as the seeing picked up again! Nothing worse than getting the "you missed a great Saturn session" treatment in the morning from a smug Peach!! ;-)

Anyway, here is my best Saturn from the trip about 3000 frames at 23 fps each channel.

<http://tinyurl.com/ywpcy6>

Regards

Ian SHARP (イアン・シャープ WS 英)

● · · · · · **Date: Wed, 19 Dec 2007 11:33:13 +0100**

Subject: "IWCMO" Mars observer meeting in Meudon 2009, update

Dear all, and thanks Masatsugu for your E-mail and support while you were certainly affected/occupied by the death of your mother.

As some of you may have already received it from Francis, I submitted a proposal (details on the 15th of December, initial deadline on the 15th of November) to the French committee of the International Year of Astronomy 2009 to get support from them for this meeting. These were all sent in a rush way on the very last day as I am still quite busy until mid-january (including New Year's eve when I will be on mission ... to observe comet 8P/Tuttle!) and I apologize for not having asked much of your approval before.

The text is in french, but if you want to take a look at it:

<http://wwwusr2.obspm.fr/~biver/IWCMO/iwcmo.pdf>

I have actually made a very preliminary web page for the meeting on:

<http://wwwusr2.obspm.fr/~biver/IWCMO/>

In the next steps, I think we should complete the SOC and start establishing some scientific program before first announcement.

I would be inclined to also include talks and special speakers about modern exploration of Mars by spacecrafts: I can ask to colleagues but you may also have names to suggest. Regards,

Nicolas BIVER (ニコラ・ビヴァール Meudon 法)

● · · · · · **Date: Wed, 19 Dec 2007 20:58:54 +0100**
Subject: mars obs 18.12

Dear Christophe, dear Minami san, dear Richard, to all, Here is the documents done lastly, seeing conditions

were excellent, in the 150mm newton. This concerns the features

- from CM 233-244° on the 18th dec. Some comments are given in the attached files for few only. Hellas is brilliant in V colour, white hazing is present at the terminator side but with a slighter activity than some days ago. Cimmerium mare and hesperia seems to be visible in V light (blue clearing?). Syrtis Major is filtered by hazing at the limb (its width is too narrow).

Remain yours and will respond to your kind comments if any. Have good receipt of the present. With my best regards.

Stanislas MAKSYMOWICZ

(スタニスラス・マクシモウイッチ Ecquevilley 法)

●.....Date: *Thu, 20 Dec 2007 03:51:21 +0100*
Subject: *Mars from 18.12.07*

Dear Observers, here my last Mars with 665 bn IR Filter. RGB was not possible, the Seeing in visible light was too bad. Eyepieceprojection, f-eff = 8 m, 8" Newton, black/white videomodul. Visual Observing showed some bluewhite Dust over NPH and Aeolis. Picture was captured at 23:32 ut.

○.....Date: *Thu, 20 Dec 2007 23:25:53 +0100*
Subject: *ir-gb Mars from 18/19.12.07*

Dear Observers, now I finished all my sequences from the night 18/19.12.07 and here are my results:...

@ David: thanks to your comment, it was the reason to try the "ir-gb" with my mad blue data.

@ Masatsugu: please change the picture at the cmo galery from 19.12. to 18.12. It was half an hour before midnight (GMT)... Best wishes

○.....Date: *Fri, 21 Dec 2007 21:15:02 +0100*
Subject: *Mars from 20.12.07*

Hi all, last night I had really good seeing and saw some clouds over Hellas, a very bright NPH and a lot of details. best wishes

○.....Date: *Sat, 22 Dec 2007 02:16:51 +0100*
Subject: *Mars from 21.12.07*

Hi all, here my observations around midnight 20/21.12.07. The seeing was not so excellent as 1 hour before, but still over average. So I still could catch the cloud over Hellas. best wishes

○.....Date: *Sat, 22 Dec 2007 02:37:31 +0100*
Subject: *Mars from 21.12.07, next series...*

Hi all, this is my last result from the night 20/21.12.07. Seeing was decreasing, but still a bit better than average. But with the colours I had some Problems. RGB-Technique is new to me, I am just a "beginner" and learn by doing ;-))...best wishes

○.....Date: *Sun, 23 Dec 2007 05:16:00 +0100*
Subject: *Re: Mars 21 Dec*

Hi David,

> I notice Mars is looking a little drab this past week, we all seem to
> be suffering from it. An opposition effect is suggested.

I dont believe in an opposition effect: the blue channel is really too dark, green a little bit too dark and red is ok. This happens, if you have high humidity near ground level or up in the atmosphere (500 m - 10.000 m). Especially at inversion weather, as we had last week...

For naked eye you dont see any difference between dry or humidity air on the sky. Looking through a telescope, you also dont see any difference. Because our eye has a logarithmic sensitivity scale and makes an "white balance" every time we have enough light. But a ccd-camera with its linear sensitivity scale gets less photons in the

filtered light. This is a "optical-physical" effect. Steam reduces the blue and green light intensity...

Back to Astropraxis: I always look during daytime on airplanes. If they have a long condensing stripe, we have high humidity and I enhance the intensity of the blue channel. Then the colour looks good :-))... A little bit humidity (fog) often is combined with low wind velocity in the Atmosphere. In such nights I often have excellent Seeing. Use for the blue channel either longer exposure times or higher gain...

"Old" datasets can be reprocessed by enhancing the blue and green signal during rgb colour balance. To show, what I discuss, I did this procedure with a picture of David Arditti, which he posted earlier this day. Left Davids Mars, right my reprocessing try... best wishes

○.....Date: *Sun, 23 Dec 2007 09:18:40 +0100*
Subject: *Mars from 21/22.12.07*

Hi all, here my first sequenz of Marspictures from friday night. Cirrusclouds, weak fog and bright Moon made some problems during my observations, but I still got some nice shots of the clouds over Hellas, Mare Sirenum, and at the equator on the limb. best wishes

Silvia KOWOLLIK

(シルビア・コウリク Ludwigsburg 徳)

●.....Date: *Fri, 21 Dec 2007 11:24:53 +0100*
Subject: *Re: Hubble vs C-14*

The difference as seen lately with HST vs. backyard telescopes managed by VERY SKILLED imagers (who I admire a lot) is worth AT ALL the money difference. People making this comparison should be aware of the extra-huge effort must be done to increase just slightly the performance at this very high quality level. The performance/price ratio tends to be an horizontal line and that means we should spend some hundred of thousands dollars/euro to improve, say, 2 times only our best results taken so far. We should have a new house somewhere in the Tropics, buy a dome with an expensive telescope inside, say goodbye to our job, say goodbye to the social life, and many sacrifices more. Given this realistic perspective, the HST cost isn't any longer that huge...

Further, it's too easy to scale down by a factor 2 or even more HST images to match our own planet size. I think this is simply unfair and disrespectful with those people (and are huge in number) who spent part of their life in planning, building and making possible the Hubble Space Telescope project! We won't be thankful enough to these persons! Needless to recall here the huge HST contribute to the community. I guess how many among you would be happy in spending money to buy a big observatory together with other amateurs making part of a specific group and then kid around the images taken with that instrument if compared to our own scope! I find no fun and no utility in all of this.

I'm very happy to be part of the vertical growing progress we're living since several years, but I'm also aware of how many limits are still to be passed through by our valued community. We should go ahead seriously to keep our progress growing fast over a regular basis, we all have to learn more and more to rise the bar any day more. I know little, but I know for sure the twit isn't the key. That said, I welcome any image posted here and I'll enjoy as always with any. But, please, be respectful with anyone's job.

Have a Great Christmas holiday!

○..... Date: Fri, 21 Dec 2007 12:23:17 +0100
Subject: Re: Hubble vs C-14

I'm totally calm, Pete, seriously! :-) My comment, although carried in through a reply to your message, is for everybody.

Reading comments in various forums, most of the

people is seriously diminishing HST job (and all the people behind of it) and overrating backyard telescopes. Simply, I don't like this. Comparisons are most welcome, but they must be honest to be of some utility. The usual widely downscaled HST image is ALL BUT precisely

TEN YEARS AGO (148)

---CMO #198 (25 December 1997) pp2191-2210---

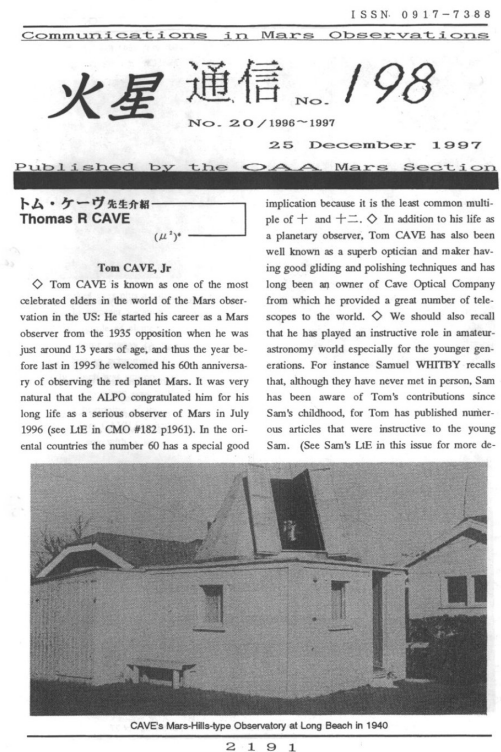
観測期も終わり一段落で、この号は「トム・ケーブ先生紹介・Thomas CAVE」が南氏により英文で草された。ウェブページに全文が転載されているので、次のURLからご覧いただける。<http://homepage2.nifty.com/~cmo/Members.htm> ケーブ氏は、1935年の接近(当時13歳)から火星観測を始めたキャリアの持ち主で、1995年接近の観測で60年間の遷層の観測を醸した事になる。代表的な接近期の観測に関しては本文に詳しい。また、ケーブ氏は鏡面研磨と望遠鏡制作でも知られ、1951年にCave Optical Companyを設立して1980年まで続けた。当時の様子は<http://www.frobenius.com/cave.htm> と <http://www.backyardvoyager.com/Cave.html> が参考になる。上記のCMOのWeb頁も本社のWebにリンクされている。次のThomas Cave's Observatory: http://www.cerritos.edu/ladkins/Cave/thomas_cave_observatory.htm も参考になる。残念ながら2003年の世紀の大接近を前にした6月に亡くなられた。

OAA MARS SECTION Reportは、リチャード・シムード(RSc)氏からの10Dec97の報告が採り上げられた。これは、マーズ・グローバル・サーベイヤー(MGS)が11月下旬にノアキスに黄塵を観測したニュースがあり、その確認の為の観測の様である。δは4.5秒角だった。また、森田行雄(Mo)氏からは多数の追加報告があった。1996年11月から1997年1月にかけてのTP写真13組と1996年12月から1997年3月にかけてのCCD画像91組であり、2ページを使って概観されている。森田氏の写真からCCD撮像への切り替え時期で、タイムリーな報告が出来なかった。

LtEは、Samuel WHITBY (USA), Giovanni QUARRA (Italy), Holger HAUG (Germany), Richard McKIM (UK), Richard SCHMUDE Jr (USA), Francis OGER (France) の外国の諸氏から、日岐敏明(長野)、伊舎堂弘(沖縄)、森田行雄(広島)の国内の各氏からの便りがある。WHITBY氏の便りには南氏の質問に答えてCave氏

のことについて触れているところがある。筆者の通信文もダイジェストで「藤澤だより」として紹介されている。他にコラム記事がいくつかあり、南氏の「夜毎餘言・LIV」は、●贈答●というタイトルでの、コミュニケーション論である。CMO Click (12) には、当時火星近くにあった探査機の情報がある。マーズ・パスファインダーの故障と、MGSの軌道修正作業の変更について記されている。巻末はIMWのニューズレターで、11月末のMGSの黄塵検出のレター等二通が転載された。TYA(28)は、CMO#041(10Dec1987)とCMO#042(25Dec1987)の内容の紹介である。20年前の1987年12月には、朝方の空に戻った1988年接近の火星の観測が始まったことが取り上げられている。物理表の掲載も始まった。他は来信中心の構成だった。シー・エム・オー・フクイは、カンパの報告と、1998年正月に計画された福井での懇談会の参加者の案内が載せられている。

村上 昌己 (MK)



reflecting the reality and thus the comparison is unfair. We all live in free countries, so everyone's free to add comparisons in to check ground details genuinity (that's great) but some respect should be due to thirty parts. I'm pretty sure you should feel as offended if I'd compare an image of mine to an image of your's heavily downscaled and also blurred. Or am I mistaking? I well know you are not denigrating the HST team, but you're feeding the denigration by common people. For the first time in eons, Astronomers (notice the "A") are seriously cooperating with amateurs and I would be extremely disgusted if Astronomers would hear those voices!! The same should be with you, Pete, isn't it? To build a wall takes weeks, to put it down is a matter of minutes.

I can't understand at all what the 'C14 mention' has to do here...

Paolo LAZZALOTTI(パオロ・ラッツァロッチ Tuscany義)

●.....Date: Fri, 21 Dec 2007 12:07:30 +0900
Subject: Fw: Miyamoto

南政次様、お母さまにはご永眠の由、謹んでご冥福をお祈り申し上げますと共に、お悔やみ申し上げます。

火星の Miyamoto クレーターが命名されました。それを伝える IAU Mars Task Group の Chairである Dr. Bradford A. Smithからのメールを転送します。この文中にはありませんが、USGSの Gazetteer of Planetary Nomenclatureによれば、命名は 2007年 12月18日付です。Mars Science Laboratory は 2009年秋に打ち上げ、2010年夏に火星に到着して走り回る予定になっています。Miyamotoが着陸地点に決定するとよいですが---

なお、この命名については Brad Smithさんのほか、USGSの Jennifer Blue 女史、京都情報大学院大学の作花一志教授に大変お世話になりました。特に作花さんには「宮本正太郎論文集」をご提供頂くなど、「共同提案者」の立場でご協力頂きました。

来る年が、より良き年になりますように！

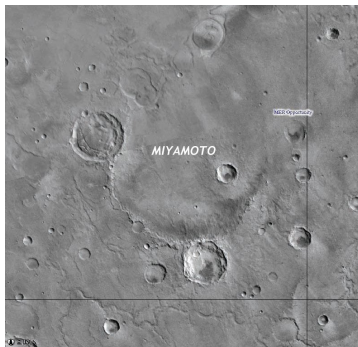
----- Original Message -----

From: Brad Smith To: Takeshi Sato
Sent: Wednesday, December 19, 2007 12:39 AM
Subject: Miyamoto

Dear Ken, I am pleased to tell you that we have named a crater on Mars for Shotaro Miyamoto. The name has now been approved by the IAU and is official. I am attaching an image of the crater. It is a degraded crater but it has attracted a lot of scientific interest and is being considered as a landing site for the Mars Science Laboratory. The information that appears in the official IAU database is listed below.

I hope that you are well. Let me take this opportunity to wish you the Happiest of Holidays and Good Health for the coming New Year. With very best regards, Brad

Name: Miyamoto,
Starting latitude: 1.5S,
Ending latitude: 4.0S,
Center latitude: 2.88S,
Starting longitude: 5.67W,
Ending longitude: 8.2W,
Center longitude: 7.0W,
Size: 160
CT: AS, ET: JA, FT: AA,
Map: I-2531, Quad: MC-19
Reference: "Collection of Shotaro Miyamoto's Scientific Papers", Kyoto School of Computer Sciences, Kyoto, Japan, 1993
Origin: Shotaro; Japanese astronomer (1912-1992).



佐藤 健 (Takeshi (Ken) SATO 廿日市 Hiroshima)

●.....Date: Fri, 21 Dec 2007 14:23:07 +0000
Subject: Re: Mars 3rd dec barbados

Hi Richard (BOSMAN), Much of what Dave said is correct. It was my 4th trip to the island, and without doubt the most frustrating. Weather was rarely good, despite it being the "dry season". Far more cloudy and showery than what ive had on the previous trips. But looking back at all the data there was allot of decent seeing, and on a few nights some superb seeing.

Dave is right though in Mars is easy to "max out" on, especially in red light. Its the only Planet that doesnt seem to need really great seeing to produce an excellent result (which is likely due to all the contrasty detail being in the red part of the spectrum where the atmosphere is more tranquil.) I think ive had such nights in the UK already this apparition (Nov 16th) and definatly had some while away.

I guess i cant complain really given how successful my last three trips were. You cant expect perfect weather every time, but the seeing there on the whole was still loads better than what you get here in winter time...

Best Wishes

○.....Date: Fri, 21 Dec 2007 14:36:06 +0000 (GMT)
Subject: Re: Hubble vs C-14

Hi all, Seems this issue is rather a can of worms...

I think its great to compare, and that we can even compare our imagery in a reasonable fashion to hubble images is a massive achievement for us poor ground based folk. However, this latest crop of HST Mars images is rather below par compared to the 2005 data set as the image scale seems allot lower (probably due to not being able to use the ACS camera which failed earlier this year.) In reality the full resolution HST data is considerably beyond what we can achieve (just look at the full resolution 2005 HST data.)

As i said though, that we can even compare our imagery and it holds up reasonably well never ceases to amaze me. Who would have thought 10yrs ago we'd be able to do this?...

And when you consider the enormous price difference in amateur +scope against HST...that premium of image quality really does cost a fortune...

Damian PEACH (デミアン・ピーチ Bkh 英)

●.....Date: Fri, 21 Dec 2007 20:20:00 +0100
Subject: non title

Dear Mr. MURAKAMI, feel free to add my recent Mars from Dec 19, 2007 image to your gallery.

Thank you. Best regards

Stefan SEIP (シュテファン・ザイプ Stuttgart 德)

●.....Date: Fri, 21 Dec 2007 12:35:45 +0000
Subject: Re: Mars 3rd dec barbados

You shouldn't rush a good thing... I am sure Damian's pics will be well worth the wait to see them processed with the minute care for which Damian is famed. I am sure he will get them out as fast as he can, consistent with his usual standards.

○.....Date: Fri, 21 Dec 2007 12:51:46 +0000
Subject: Re: Hubble vs C-14

I do have some sympathy with what Paulo is saying. Also, I think this issue has been sharpened by a linguistic issue: Paulo, as a Latin, and the word "versus" is Latin, is reading literally "Hubble vs C-14": "Hubble against C-14" - a challenge, perhaps a gladiatorial one, after all, he makes the Gladius!

There does seem to be a bit of a fashion for these Hubble-amateur comparisons, not just in Mars imaging. I think we can see which detail is real and which false quite well from comparing amateur images with other amateur images. The identification of artefacts becomes quite easy with experience of looking at many amateur results. The fact our images are mutually consistent is the check. The comparisons with Hubble can be read as denigrating the Hubble team when I know quite well they are not intended by the authors that way at all. I agree with Paulo that we should take care with this. And also be aware that given words have different implications to people educated in different languages!

Happy Mars Opposition, Christmas, and New Year. I won't wish clear skies to all, as then there would be a world water shortage.

○ · · · · · **Date: Fri, 21 Dec 2007 15:05:38 +0000**
Subject: Mars 2007 November 15

About a month behind with these, I am afraid. Anyway, it was poor seeing. The new albedo pattern in Aethiopia is visible.

<http://www.darditti.dircon.co.uk/mars2007-11-24-DLA.jpg>

In December so far we have had quite a lot of clear weather, but appalling seeing, with the exception of one night, of which more anon.

○ · · · · · **Date: Fri, 21 Dec 2007 16:59:46 +0000**
Subject: Mars 2007 December 03

Slightly better seeing than on the 1st. Solis Lacus area visible. Brightness of the NPH in blue is striking.

<http://www.darditti.dircon.co.uk/mars2007-12-03-DLA.jpg>

○ · · · · · **Date: Fri, 21 Dec 2007 23:56:51 +0000**
Subject: Mars 2007 December 08 and 11

Some more images from very bad seeing in mid December. Hubble they are not. It's about keeping up the watch in all conditions so far as possible. There are better to come.

<http://www.darditti.dircon.co.uk/mars2007-12-08-DLA.jpg>

<http://www.darditti.dircon.co.uk/mars2007-12-11-DLA.jpg>

Earlier today, I sent out a mail entitled "Mars 2007 November 15" when it should have been titled "Mars 2007 November 24". Apologies, the label on the image was correct. Some of the images disappeared from my server earlier today, but I think I have restored them now.

○ · · · · · **Date: Sat, 22 Dec 2007 17:15:40 +0000**
Subject: Mars 2007 December 12

Between the early morning of the 11th and the late evening, there was an absolute transformation in seeing. I have already sent out the poor images I captured in the morning. This set spans midnight of the 11th-12th, and I expect will be my best of the apparition, being very close to the closest approach date of Mars. Captured at 30fps.

Reds:

<http://www.darditti.dircon.co.uk/mars2007-12-12-rDLA.jpg>

Greens:

<http://www.darditti.dircon.co.uk/mars2007-12-12-gDLA.jpg>

Blues:

<http://www.darditti.dircon.co.uk/mars2007-12-12-bDLA.jpg>

RGBs:

<http://www.darditti.dircon.co.uk/mars2007-12-12-rgbDLA.jpg>

○ · · · · · **Date: Sun, 23 Dec 2007 16:58:36 +0000**
Subject: Mars 2007 December 13

Following the good seeing of 24 hours earlier, it was back to the usual rubbish. Downsized to preserve decency.

<http://www.darditti.dircon.co.uk/mars2007-12-13-DLA.jpg>

○ · · · · · **Date: Sun, 23 Dec 2007 20:22:27 +0000**
Subject: Saturn 2007 December 12

<http://www.darditti.dircon.co.uk/sat2007-12-12-DLA.jpg>

The good seeing for Mars on this morning prompted me to go for Saturn, though still at quite a low altitude. Seeing was not as good as it had been earlier.

However, these images reveal some details, particularly in the green channel, which is given in slightly and very sharpened versions here. There seem to be several features in the N hemisphere G image, but, most convincingly, a small bright oval in the mid-NTB, arrowed, which is also visible in the RGB. There is possibly an irregularity in the N edge of the NTB following this, and some dark features in the N, but I am less convinced of these.

○ · · · · · **Date: Mon, 24 Dec 2007 02:39:55 +0000**
Subject: And finally...

An object from beyond the solar system.

Merry Christmas.

David ARDITTI (デヴァイット・アデーチ Edgware ME 英)

● · · · · · **Date: Sat, 22 Dec 2007 00:57:02 +0100**
Subject: Mars, 15-16 december 2007

Hi all, Finally a week with generally good conditions for the greatest apparent diameter for this apparition.

http://www.astrosurf.com/pellier/M071215_16a-CPE

(visible images)

http://www.astrosurf.com/pellier/M071215_16b-CPE

(IR, violet)

Mars has now entered its northern spring. Best wishes

○ · · · · · **Date: Sat, 22 Dec 2007 20:08:12 +0100**
Subject: Re: Hubble vs C-14

Processing HST images found in the archives is very easy. I have probably 90% of all HST Mars images ever



NGC 2264 The Christmas Tree Cluster and Cone Nebula
David Arditti, Stag Lane Observatory, Edgware, Middlesex, 2007 December 13
Skywatcher 80mm ED refractor @f4.7, Artemis 285 camera, 2x2 pixel binning,
H1 alpha, OH1 and blue filters, total exposure 2.5 hours in 5 minute subexposures



taken in my personal collection (there is a lot), and you

have just to apply a very moderate and very thin wavelet to end the job, or even, just let the image as it is, for some. They come in fits format and it's just a cooled 16 bits CCD image. (By the way Damian did process some HST images at least on Jupiter over the last years)

Attached is my processing of the HST data from 9 may 2003. Processing of details was just a weak wavelet pass and then color assembling with IRIS. Best wishes

○……………Date: Sun, 23 Dec 2007 22:44:00 +0100

Subject: Mars 16 december 2007

Hi all, fair to poor seeing for the 16th, before better nights.

<http://www.astrosurf.com/pellier/M071216-CPE>

In case I don't send the next sets before the 25th, merry christmas to everyone! Best wishes

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

●……………Date: Mon, 24 Dec 2007 04:30:39 +0900

臺北天文臺70年 (その2)

文/ 陶蕃麟・譯/ 賴武揚

(承前) 地上でこのような變遷があった間、天上では火星は規則正しく地球に接近したり、遠離って行ったりした。火星の観測は圓山の傳統の観測項目であって、蔡臺長の得意の技でもあった。臺長が小さな薄暗い電燈の下で直径10cmの火星圖を描いているのを見て、私はうらやましかった。

1986年(民國75年)の火星準大接近のとき、日本の東亞天文學會の火星専門家南政次博士が臺灣大學に招かれて講義に来たついでに、圓山天文臺で火星の観測をおこなうことになった。そこで、張麗霞と陳培堃(PK)と私の三人で観測グループを作って観測のお供をして、火星のスケッチと撮影をした。このときに、「観測」とはどんなことであるかとの見識をひろめた。

當時毎晩火星が地平線に見え始めると、グループのメンバーは走馬燈のように二つの観測室と事務室の間を駆けまわった。40分ごとに20分間の観測時間がまわってくる。観測しない20分間は、見たばかりのディテールを回想して、文字による補充説明を書き留めた。天の東方が白むまで或いは火星が西の地平線に沈むまでこれが續く。そして昼間は日常の業務を執行しなければならなかった。今になってあの火星大接近を回想すると、いったいどうやって生活していったのだろうかと思議でならない。ただ確かなことは、メディアが押しかけて騒ぐことがなく、一切が太平であっ

Subject: Mo01 04 07 09 Dec 07

ようやく出来ましたのでお送りします。

次回は12月16 17 19 20日と撮っています。時々Seeingの良い時がありますが、ほとんどはぼやぼやですね。休み中に今までのものを処理して送ろうと思っています。

森田 行雄 (Yukio MORITA 廿日市 Hiroshima)

●……………Date: Mon, 24 Dec 2007 00:42:59 +0100

Subject: Mars, December 23th

Hi friends, This is my first contribution to your interesting Mars website. This image was done on December 23th 2007, at 21h 24m UT from Zaragoza (SPAIN). The telescope was a Mewlon 180 with a Klee 2.8x barlow. Best regards.

Alberto BERDEJO(アルベルト・ベルデホ Zaragoza 西)

☆☆☆

た。その直前に来たハレー彗星回歸のときの、全臺灣がメディアによって狂亂させられていた状況とは違っていた。

南博士の観測は、蔡臺長のやり方とは、天地の差があった。蔡臺長の観測は休暇のレジャー活動のようなもので、丹念に手をいれて、一枚のスケッチを仕上げたが、南政次博士のは強行軍で、素速く、かつ正確に重點と細部を把握しなければならなかった上に、持續的に變化を追うのであった。

二年後(1988年)に南政次博士がまた圓山へ観測に来られたが、そのときは圓山天文臺の人事がすっかり變わって、三人グループは解散していた。(南註：但し陶蕃麟さんは観測を私と一緒に續けた。後述。写真はスケッチ中の陶蕃麟さんと筆者)

振り返って民國74-75(1985-1986年)のハレー彗星回歸の場合を考えると、そのときはメディアが擧^{こぞ}って報導したので、臺灣の民衆が觀星熱に沸いたが、それに対応する圓山天文臺は規模が小さすぎた。臺灣各地からハレー彗星の情報を求められて、臺北市に隸属する小さな機關にすぎない天文臺が、全國で最も重要なハレー彗星情報の提供所になり、ハレー彗星を見るに最も適した時間と見える位置を毎日發表しなければならなかった。幸いに、このときには臺灣産の少壯學徒の存在に



より、必要な資料を計算して各界の需要に應えることが出来た。もしもハレー彗星回帰がなかったら、圓山天文臺はそのまま圓山に残されて老朽して行き、天文科學教育館へ發展することもなかったであろうし、今のように回顧することもなかったであろう。

(註1) 黒點の緯度-時間の變化圖は蝶々の形をしているので、この名がある。

(註2) 黒點は11年の周期で増減するが、使用した望遠鏡の違いと観測者の異同によって、観測で得られた数値は違って来る場合があるが、増減の状態は一致する。

以上が陶蕃麟さんの名文の頼武揚さんによる名譯である。陶さんには一寸思い違いがあつて、1986年と1988年がゴツチャになっているようである。私が最初に臺北に行ったのは民國75年で、この時のことを大接近として思い出しているようである。実際には、1986年も「二つのドームを駆けめぐる」様な活動をしたけれども陶蕃麟さんは二年後の大接近の方が好く活躍したように私は憶えている。因みに『火星通信』62號から67號まで繙くと、筆者の最終期1988年十月には陶蕃麟さんは43枚、十一月には36枚のスケッチ、十二月にも24枚のスケッチを行っている。私は十二月27日まで臺北で観測、30日には福井で観測しているので、最後まで付き合つて貰つたことになる。PKも少なくとも九月には写真を撮っている。

最後の1986年のハレー彗星最盛期に関する天文臺の活躍は私は直に見聞きしている。遠征や天文臺の電話の應對などもたいへんであったが、情報を緻密に差配した陶蕃麟さんの誇りであつたらうと思う。

ところで最初にスプートニクの話が出てくるが、これについては頼武揚さんに特別の思い出があるようで、十月廿日附の私信で次のように述べられている：

「最初のスプートニクの部分を訳しながら思い出したが、あれは私が計算したのを蔡さんが新聞に出した予報です。台湾上空を夜間通過する機会は案外に少なく、台湾で予報が出されたのはあの一回きりです。どうやって計算したかというのと、スミソニアン天文台から来た予報に、計算する方法がついていたので、加減乗除だけで計算ができました。その晩80分間隔で三回台北の上空を通しました。

私の家族は家の前の道路で天を仰いで待ちました。当時家の前の道路は交通が頻繁ではなかったので、道端に立って天を仰いでいても危険がありませんでした。計算した時刻に、計算した方向から来るのを小学生の姪が真っ先に見つけて歓声をあげました。第一回と第二回の通過は計算どおりで、私は子供たちからたいへん尊敬されました。ところが第三回は、見えなかったので、調べたら時間か、方角かどちらか計算違いをしたことがわかりました。(頼武揚)」。

スプートニクは1957年十月から始まったのだが、当時臺灣では「中國人造衛星觀測委員會」というのが設立されていて、蔡章獻さんは幹部だった様である。臺北觀測隊に後に臺灣初のノーベル化學賞を授かる李遠哲氏が含まれていたのが蔡章獻さんの自慢であつた。(Mn)

シー・エム・オー・フクイ

中島 孝 Nj

★前回報告以降、松本 達二郎様(398)、熊森 照明様(399)よりカンパを頂戴しました。有難うございました。不一

☆ Kasei-Tsushin CMO (Home Page: http://www.mars.dti.ne.jp/~cmo/oaa_mars.html)

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