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CMO 20th ANNIVERSARY





ANNIVERSARY

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with best Wishes CMO Editors:

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2006年丙戌

Thoughts about Our Past and Future as Mars's Amateur Observers

Christophe PELLIER

HE 2005 Mars apparition brought the last 15 years opposition cycle to an end (if we say that a cycle opens with the first opposition that takes place after 000°Ls). Looking back at this cycle, it's clear that is has seen an incredible progress in amateur observations, caused by the CCD revolution. The first amateur Mars CCD images where probably taken during the first apparition of the cycle in 1993, and developed gradually during the next oppositions of 1995 and 1997 (those where certainly the "Don PARKER's years"!). The 1999 and 2001 apparitions, as Mars was getting closer to the Earth, have seen a first evolution with the use of digital cameras, cheaper than the CCDs, but not so efficient. This evolution was suddenly closed in 2003 when came the hour of webcams, which combined high performances with incredible low prices. This also fortunately allows many people with little means (as I was) to participate to the run. But there were again some innovations to come, and in 2005 the quality of amateur's images reached a kind of maturation, with the advent (back in 2004) of the "raw modes" for webcams, and the use of new CCD tools such as firewire cameras and the Lumenera's cameras.

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While we should never say that technical progress is now over in any domains, the next 15 years-cycle could bring new issues. The first one is a deeper discussion about processing methods, which have been liberated by the CCD revolution, but with sometimes uncertain results. The use of various color-assembling methods do bring changes to the data that are rarely analysed; and a small but significant number of images is still over-processed. A second evolution could be an increase of amateur knowledge about Mars itself. I'm always saying that on Mars, the more spectacular (the surface) is the less interesting and the more interesting (the seasonal dynamic of the atmosphere) is the less spectacular, and it rarely catch the eye of people. Nonetheless, in 2005, some discussions raised among amateurs about dust storms and about the remarkable aspect of the north polar hood, and they all have been of the highest quality. My wish for the coming apparitions would be an increase of such kind of talking.

To make a summary, now that our technical tools have reached a kind of maturation, we should get more interested in the results that they can obtain. Here comes the question of the interest of amateur observa-

tions for science. Due to the heavy professional investment on Mars studies, I'm doubtful that our observations could really be that important, to the contrary of the other planets. However, for me another way of looking at this problem has emerged thanks to the technical progress: any amateur is now able to make a bit of science in his backyard under the stars. You don't have to wait for professional results to be communicated: just take your CCD and your telescope and go observing! This is enough to follow many interesting phenomena.

A part of the role of amateur observing projects such as those developed by the CMO/OAA team, the ALPO, the BAA, and the SAF if I can speak for myself, is to facilitate the diffusion of this scientific attitude. These organisations can make the link between pure scientific data and the amateur's images so anyone will be able to understand what he's looking at. This will be my happy conclusion for the 20th CMO anniversary! Happy "Birth Year" to the CMO team and may you keep on doing your fantastic job for long.

With best wishes,

(SAF Mars Section Coordinator)

...... - CMO 2005 Mars Report #16 —

OAA Mars Section

- N this issue, we review the Mars observations made during the period

from 16 December 2005 (λ =341°Ls) to 15 January 2006 (λ =357°Ls)

The Martian season proceeded nearly upto the spring equinox of the northern hemisphere, while the central latitude φ stays still so high up from 20°S to 18°S, that it was difficult to observe the northern limb side. The angular diameter δ was down from 14.4" to 10.4" during the period. The phase angle ι increased from 27° to 37°, and thus the defect of illumination was more apparent. The apparent declination went up from 15.5°N to 18°N, and so Mars shines very high seen from the Northern Hemisphere. However the weather was of a severe winter type in Japan (especially in Fukui, no observation was possible in the latter half of December; on 22 Dec the snow was 65cm deep (while 12cm at Hiroshima)). In England however they enjoyed nice skies this period. As the New Year came around, we had a few chances while our observatory had a snowfall of 88cm on 9 January (-5.6°C at the lowest).

♂・・・・・今回は年越しの16 December 2005 (λ=341°Ls) から15 January 2006 (λ=357°Ls) 迄の一ヶ

月をレヴューする。火星の季節は北半球の春分直前まで行く。但し、φは20°Sから18°Sと高く、北邊

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の觀測は難しい。視直徑δは14.4"から10.4"へと落ちてきた。位相角ιは27°から37°と増し、欠けの蔭は 強くなった。視赤緯は15.5°Nから18°Nとなり、南中時は屈折では首にキツイ。しかし、西高東低はこ の時期支配的で、福井では結局十二月一杯觀測不可能で、一月に入っても日毎の連續觀測は出來なか った。十二月16日には福井で52cmの積雪、22日65cmの積雪になったようで、異例である。この日は 廣島でも12cmと報道された。一月9日には福井で-5.6℃の最低氣温、積雪88cmであった由(三國は然程 ではない)。今回も十二月後半は英國が飛ばしている。

The following list shows (a total of 45) observers who observed and contributed this period (in the period of peak during 16 Oct - 30 Oct we received from 75 observers).

- ADELAAR, Jan ヤン・アデラール (JAd) 尼徳蘭 Arnhem, Nederland
- 1 Set of CCD Images (24 December 2005) f/40⊗23cm SCT with a ToUcam AKUTSU, Tomio 阿久津 富夫 (Ak) 菲律賓 Cebu, the Philippines
 - 4 Colour CCD Images (19 December 2005; 13 January 2006) f/28,35 ⊗ 20cm SCT with ToUcam
- ALDERWEIRELDT, Tom トム・アルデルヴァイレルト (TAI) 比利時 's-Gravenwezel, Belgium 1 Colour CCD Image (7 January 2006) f/33 \otimes 35cm SCT with a B&W modified ToUcam Pro
- ANDERSON, David デヴィッド・アンダーソン (DAd) 南卡羅萊納 nr Greenwood, SC, USA 11 Sets of CCD Images + 1 R (19, 21, 22, 28, 30, 31 December 2005; 4, 10, 11, 12, 13 January 2006) f/38,41,44,47,48 ⊗ 40cm spec with ToUcam 740
- ARDITTI, David デヴィッド・アーディッチ (DAr) 英國 Stag Lane, Edgware, G London, UK 3 Sets of (I)RB Images+4 Colour Images (17, 26 December 2005; 4, 15 January 2006) f/20,28,30,40 ⊗ 25cm D-K Cass with mono ToUcam
- ASADA, Tadashi 淺田 正 (As) 福岡·宗像 Munakata, Fukuoka, Japan 6 RGB Sets of CCD Images (27 December 2005; 11 January 2006) 30cm SCT with a Lu075M
- BOLZONI, Simone スイモーネ・ボルツォーニ (SBI) 義大利 Busto Arsizio, Italia 1 CCD Image + 1 Drawing* (18 December 2005; 3* January 2006) f/20⊗20cm SCT with ToUcam Pro II | 225×12cm speculum*
- BIVER, Nicolas ニコラ・ビヴェール (NBv) 凡爾賽 Versailles, Yvelines, France 2 Colour Drawings (25 December 2005) 700×41cm speculum
- BUDA, Stefan スティーファン・ブダ (SBd) 墨爾本 Melbourne, Australia 1 Set of CCD Images + 1 Colour (19, 22 December 2005) f/35⊗40cm D-K with ToUcam 740
- BUNGE, Robert ボブ・バンジ (RBg) 馬里蘭 Bowie, MD, USA
 - 1 Drawing (18 Decmber 2005) 270×11cm *F*/10 speculum
- **DeGROFF, Kent ケント・デグロッフ (KGr)** 亞利桑那 Scottsdale, AZ, USA 1 Colour CCD Image (21 December 2005) f/34⊗25cm spec with ToUcam 740
- DICKINSON, William H ビル・ディキンソン (WDc) 維吉尼亞 Glen Allen, VA, USA 7 Colour CCD Images (23 December 2005; 1, 2, 13 January 2006) f/30⊗20cm SCT with a ToUcam
- FLANAGAN, William D ビル・フラナガン (WFI) 徳克薩斯・休斯敦 Houston, TX, USA 6 Sets of CCD Images (7, 9, 12, 14, 15 January 2006) //36\igotimes 35cm SCT with a Lu075M
- GASKELL, Martin マーチン・ガスケル (MGs) 内布拉斯加 Lincoln, NE, USA 2 Colour Images (29 December 2005) f/18⊗20cm speculum with ?
- HEATH, Alan W アラン・ヒース (AHt) 長伊頓 Long Eaton, Nottingham, UK 6 Notes (17, 19, 23*, 24 December 2005) 180, 280×25cm speculum 200×20cm SCT*
- HEFFNER, Robert ロバート・ヘフナー (RHf) 名古屋 Nagoya, Aichi, Japan 3 Colour CCD Images (2, 7, 12 January 2006) f/50 ⊗ 28cm SCT with Lu075C
- HERNANDEZ, Carlos E カルロス・ヘルナンデス (CHr) 佛羅里達·邁阿密 Miami, FL, USA

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3 Sets of Colour Drawings (17* December 2005; 2/3, 15 January 2006) 320×25cm spec* | 250,270,350×23cm F/13.5 Maksutov-Cass

- HIDALGO TORTOSA, Emilio エミリオ・ヒダルゴ (EHd) 西班牙 La Carolina, Jaén, España
 - 2 Colour CCD Images (18, 23 December 2005) f/50⊗30cm Dall-Kirkham, ToUcam
- IWASAKI, Tohru 岩 崎 徹 (Iw) 小倉 KitaKyushu, Fukuoka, Japan
 - 4 Drawings (1, 7 January 2006) 400×21cm speculum
- KARRER, Michæl ミハエル・カッレル (MKr) 奥地利 St Radegund, Österreich
 - 1 Colour CCD Image (9 January 2006) f/44 \otimes 18cm Meade Refraktor with a DBK 21AF04
- KOWOLLIK, Silvia シルヴィア・コヴォッリク (SKw) 徳國 Ludwigsburg, Deutchland
 - 4 Colour CCD Images (8, 10 January 2006) f/41⊗15cm spec with a ToUcam 740
- KUMAMORI, Teruaki 熊森 照明 (Km) 堺 Sakai, Osaka, Japan
 - 19 Colour CCD Images (16*, 18, 20*, 22*, 26, 29*, 30 December 2005; 7*, 8*, 12* January 2006) f/88⊗20cm Dall-Kirkham with a ToUcam | f/50⊗60cm Cass* with an ATK-2C
 *ソフィア堺天文臺 Sakai City Observatory
- LOMELI, Ed エド・ロメリ (ELm) 加利福尼亞 Sacramento, CA, USA
 - 8 Sets of CCD Images (10 January 2006) 23cm SCT with a ToUcam Pro
- MAKSYMOWICZ, Stanislas スタニスラス・マクシモヴィッチ (SMk) 法國 Ecquevilly, France 25 Drawings (17, 19, 29, 31 December 2005; 4, 6, 7, 9, 10, 14 January 2006) 200, 250×15cm/10cm refrs
- MELILLO, Frank J フランク・メリッロ (FMI) 紐約 Holtsville, NY, USA
 - 6 Sets of CCD Images (19, 22, 24 December 2005; 7, 10, 13 January 2006) f/20 ⊗ 20cm SCT with ToUcam
- MINAMI, Masatsugu 南 政 次 (Mn) 福井 Fukui, Fukui, Japan
 - 16 Drawings (1, 9, 12 January 2006) 400, 600×20cm Goto ED refractor* *Fukui City Observatory
- MORITA, Yukio 森田 行雄 (Mo) 廿日市 Hatsuka-ichi, Hiroshima, Japan
 - 8 Sets of RGB+8 IR CCD Images (1, 9, 12 January 2006) 25cm spec with a Lu075M
- MURAKAMI, Masami 村上 昌己 (Mk) 藤澤 Fujisawa, Kanagawa, Japan
 - 21 Drawings (17, 20, 28, 30 December 2005; 5, 7, 10 January 2006) 320×20cm F/8 speculum
- NAKAJIMA, Takashi 中島 孝 (Nj) 福井 Fukui, Fukui, Japan
 - 6 Drawings (12 January 2006) 400, 600×20cm Goto ED refractor* * Fukui City Observatory
- NARITA, Hiroshi 成 田 廣 (Nr) 川崎 Kawasaki, Kanagawa, Japan
 - 50 Drawings (16, 20, 24, 25, 27, 28, 30 December 2005; 7, 9, 10, 12 January 2006) 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
 - 5 Sets of CCD Images (18*, 29 December 2005; 4*, 10*, 14 January 2006)
 - f/55, 36 \otimes 41cm F/6 spec with an ST9XE*/Lu075M *with **Tim KAHN**
- PEACH, Damian A デミアン・ピーチ (DPc) 英國 Loudwater, Buckinghamshire, UK
 - 10 Sets of CCD Images (17, 19, 25, 26, 31 December 2005; 4, 11 January 2006)
 - f/40⊗35cm SCT with Lu075
- PELLIER, Christophe クリストフ・ペリエ (CPI) 法國 Seine-St-Denis, France
 - 9 Sets of *RGB* + 7 *IR* +1 *Violet* + 1 *LRGB* Images (18, 25, 28 December 2005; 4 January 2006) f/52-69 \× 21cm Mewlon with Lu075M
- PHILLIPS, Jim ジム・フィッリプス (JPh) 南卡羅萊納 Charleston, SC, USA
 - 1 Colour CCD Image (13 January 2006) f/27⊗20cm F/9 TMB with an ATiK Color
- ROEL SCHREURS, Eric エリック・ロエル (ERI) 墨西哥 México
 - 1 Colour Image (15 January 2006) f/50⊗25cm TEC Mak with Lu075M
- ROSOLINA, Michael マイケル・ロゾリーナ (MRs) 西維吉尼亞 Friars, WV, USA
 - 1 Colour Drawing (13 January 2006) 340×20cm F10 SCT

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SÁNCHEZ, Jesús R ヘスス・サンチェス (JSc) 西班牙・科爾多瓦 Córdova, España

3 Colour CCD Images (17, 23 December 2005) f/40,45⊗18cm Mak-Cass with Quickcam Pro 4000

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

3 Sets of CCD Images (8, 9, 15 January 2006) $f/31 \otimes 32$ cm spec with Lu075M

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

5 Drawings (17, 20, 22 December 2005; 8, 9 January 2006) 330×20cm F/10 SCT

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

2 CCD Images (1, 12 January 2006) f/36\omega 25 cm spec with a ToUcam Pro

TEICHERT, Gérard ジェラール・タイシェルト (GTc) 法國 Hattstatt, France

4 Drawings (26 December 2005; 5, 11, 13 January 2006) 330, 350×28cm SCT

TYLER, David デーヴ・タイラー (*DTy*) 英國 Flackwell Heath, Buckinghamshire, UK 10 Sets of CCD Images (17, 19, 25, 26 December 2005; 4, 11 January 2006) //38,40,50,55,60⊗35cm SCT with Lu075M

VANDEBERGH, Ralf ラルフ・ファンデベルフ (RVb) 尼徳蘭 Nederland

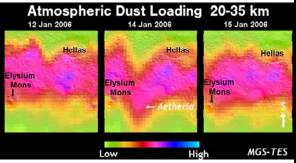
2 Colour CCD Images (7 January 2006) f/35⊗25cm spec with ATK-1HS

WARREN, Joel ジョエル・ウォーレン (JWn) 徳克薩斯 Amarillo, TX, USA

4 Sets of CCD Images (21, 22 December 2005; 11 January 2006) f/30 ⊗ 20cm SCT with ToUcam Pro

Bright Dust at Ætheria: Bill FLANAGAN (WFI) at Houston produced a set of excellent images on 12 Jan (λ =355°Ls) at ω =277°W(00:32GMT)/279°W(00:43GMT) in which a bright dust disturbance was recorded to the west of the Ætheria dark patch (see http://homepage2.nifty.com/~cmons/2005/060112/WFI12Jan06.jpg). Unfortunately, no preceding observation at Europe and the East Coast was done, but this must have been clearly a dust originating at the higher northern district. Seasonally this is typical, but regionally there is known few precedents for the place. WFI also pointed out that there was a bright spot at around Osiridis Pr, but this appeared on the B image so vivid that it mainly consisted of a water condensate if somewhat mingled with airborne dust. It may be very interesting if there exists a quantum resonance between the two. Osiridis Pr was still at the morning side, while the Ætheria dust was after the noon line. About 22 hrs later (so after the dust spent a night), Randy TATUM (RTm) took an image at ω =246°W on 12 Jan (λ =356°Ls) at 23:06GMT: The image shows the dust was weakened. After

about one hour and half on 13 Jan (λ =356°Ls) Bill DICKINSON (WDc) and Jim PHILLIPS (JPh) produced images of ω =271°W (00:48GMT) and ω =274°W (00:59GMT) respectively where the dust trace was visible. On Don PARKER (DPk)'s image on 14 Jan (λ =356°Ls) at ω =250°W, the trace is not clear, but might have influenced the north polar hood (nph; which looks divided on DPk's). However WFl's images on 15 Jan (λ =357°Ls) at



 ω =245°W suggest that the area looks to have returned normal. Another evidence of the occurrence of the dust is provided by TES (http://tes.asu.edu/): the airborne dust at the higher atmosphere (20-35km) was abnormal near the Ætheria area on 14 Jan (natural retardation though the TES image on 13 Jan was incomplete).

Mist Distribution: a) General features: The water vapour is now seen whole over the surface from the morning side to the afternoon, but the density is not uniform. High density distribution is seen at the terminator side (the limb side looks thick also because of the high ι): the southern hemisphere distribution however shows irregularity; several spotted areas being of the lower density. b) Morning mist at Argyre and to its west: The mist over Argyre is seen on the B images by Damian PEACH (DPc) on 17 Dec (λ =342°Ls) at ω =061°W \sim 074°W, by Chris PELLIER (CPl) on 18 Dec (λ =343°Ls) at ω =047°W, by DPc on 19 Dec (λ =343°Ls) at ω =052°W \sim 066°W

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and so on, but this rather implies that the mist density at a large high latitude region surrounding Argyre is quite low: Excepting Argyre the region looking so dark wine coloured. Otherwise CPl's images at ω=054°W, 062°W show a de-concentration of morning mist near the terminator. The mist distribution around Argyre was also seen on DPk's images on 29 Dec (λ =348°Ls) at ω =041°W, on WDc's on 2 Jan (λ =350°Ls) at ω =033°W \sim 043°W, on KUMA-MORI (Km)'s on 11 Jan (λ =355°Ls) at ω =047°W. The present writer (Mn) also observed Argyre's cloud on 12 Jan $(\lambda=355^{\circ}Ls)$ around at $\omega=064^{\circ}W$. DPc's B images on 19 Dec show that the mist at Argyre extends to the west up to the morning terminator. Further west configuration is seen DPk's on 18 Dec (λ =342°Ls) at ω =168°W where the morning mist is visible from Phæthontis to Thyle though it looks split in two because the west of M Chronium (maybe around Paliuri Fr) is quite dark (de-concentration). This is also shown on the images on 21 Dec (λ =344°Ls) by Joel WARREN (JWn) at ω =149°W, by David ANDERSON (DAd) at ω =153°W, by Kent DeGROFF (KGr) at ω=159°W, and on 22 Dec (λ=344°Ls) by Frank MELILLO (FMI) at ω=156°W. Visually Elisabeth SIEGEL (ESg) observed a morning mist patch at Claritas by the use of W58, W15, W80A on 20 Dec (λ =343°Ls) at ω =039°W. In Japan, on 10 Jan (λ =354°Ls) MURAKAMI (Mk) observed the appearance of Phæthontis accompanied by a thick mist at ω =071°W, and Mn with NAKAJIMA (Ni) similarly observed on 12 Jan (λ =355°Ls) around at ω =084°W. Low latitude mist belt from the afternoon to the morning: Some observations cited above suggest that there was a rather thick mist belt at southern lower latitude (around 20°S) from the afternoon limb to the morning side the mist was seen from Deucalionis R through the southern Margaritifer S and particularly thick at the both sides of Agathodæmon (at Ophir and at the area to the north of Nectar including Aurea Cherso). This phenomenon is apparent on Emilio HIDALGO (EHd)'s image on 18 Dec (λ =343°Ls) at ω =059°W, and on DPc's B on 19 Jan and DPk's B on 29 Jan as well as on DAd's on 31 Dec (λ =349°Ls) at ω =035°W. The water vapour near Agathodæmon looked thick even at noon and it was particularly seen on 07 Jan (λ =353°Ls) on Km's images at ω =081°W, 092°W, and Rob HEFFNER (RHf)'s at ω=097°W: These lack the B images, while MORITA (Mo)'s B images on 9 Jan (λ =354°Ls) at ω =081°W~091°W show the situation similar to that observed in late-December. Now t=35°, and hence at ω =091°W Agathodæmon (around Ω =070°W) was 5 hrs after sunrise (consult otherwise the noon line on the grid cited below) Mo's images on 12 Jan (λ =355°Ls) at ω =076°W, 082°W are also instructive. As to further afternoon situation, refer to David ARDITTI (DAr)'s images (slightly blurred) on 17 Dec (λ =342°Ls) at ω =092°W \sim 105°W. The area at Aurea Chersonesus is ground lit and brighter than Thaumasia (Thaumasia is rather shadowy - see DPc's R images on 17 Dec), d) Morning mist and evening one around Hellas: The morning mist over Hellas was nicely shot by Stefan BUDA (SBd) on 22 Dec (λ =345°Ls) at ω =257°W. Mk chased the morning mist over Hellas on 20 Dec $(\lambda=343^{\circ}\text{Ls})$ at $\omega=251^{\circ}\text{W}$, 261°W , 270°W ; it gradually condensed at the northern part. On 4 Jan $(\lambda=351^{\circ}\text{Ls})$ CPl produced excellent series at ω =252°W, 260°W, 278°W corresponding to Mk's. The following ccd images also show the morning mist over Hellas: On 13 Jan (λ =356°Ls), JPh's at ω =274°W, FMl's at ω =277°W, and on 14 Jan $(\lambda=356^{\circ}\text{Ls})$ DPk's at $\omega=250^{\circ}\text{W}$. The Hellas afternoon mist was checked on 22 Dec $(\lambda=344^{\circ}\text{Ls})$ by ESg by the use of W47 at ω =027°W \sim 038°W. As to the ccd, see B images on 25 Dec (λ =345°Ls) by *DPc* at ω =003°W, David TYLER (DTy) at ω =010°W. On 26 Dec (λ =347°Ls) DPc resp DTy showed the limb cloud on B at ω =345°W resp ω =001°W On the day TEICHERT(GTc) recorded it visually at 003°W.

#311 (or in CMO-Web at http://homepage2.nifty.com/~cmomn2/2005Coming_14.htm). The same feature (a bright reservoir at the bottom and the bright swath along the western edge) was seen also this apparition: see Km's on 16 Dec (λ =341°Ls) at ω =341°W, 345°W, AKUTSU (Ak)'s on 19 Dec (λ =343°Ls) at ω =341°W~354°W, and CPl's on 28 Dec (λ =348°Ls) at ω =322°W, 332°W, 335°W. CPl's B images show that the bright part is mingled with the water vapour, and also show a thick morning mist to the west of Hellesponticæ Depressiones. Furthermore RTm's on 1 Jan (λ =350°Ls) at ω =351°W, WFl's on 7 Jan (λ =353°Ls) at ω =329°W, FMl's at ω =305°W, and again

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WFl's on 9 Jan (λ =354°Ls) at ω =316°W etc show the Hellas feature. This must be seen from around λ =320°Ls (as suggest in 1990) but looks to be highly contrasted around from λ =340°Ls.

Acidalium is still visible. An interesting image was secured by Jan ADELAAR (JAd) on 24 Dec (λ =346°Ls) at ω =019°W where the nph to the north of Deuteronilus is weakened. DPk's images on 10 Jan (λ =354°Ls) at ω =296°W however show a thick morning cloud at the area of Deuteronilus, and so Deuteronilus must pop out from the morning cloud as it moves to the afternoon side. The area was well shot by DPc on 25 Dec (λ =346°Ls) at ω =003°W, and its B image shows a normality, while DPk's B on 4 Jan (λ =351°Ls) at ω =349°W shows that the perimeter of the nph is quite broad and dark just like the dark fringe. This DPk image at ω =349°W can be compared with DPc's on 26 Dec at ω =347°W, but unfortunately the latter was under poor seeing. CPl's B on 28 Dec (λ =348°Ls) at ω =335°W may suggest the broad fringe. If we compare these with the excellent images of CPl made on 22 Nov (λ =329°Ls) at ω =341°W, the nph turns out to have retreated at the Deuteronilus area.

Arsia Cloud: As the phase angle increased, it was not easy to chase the Arsia evening cloud, but DPk's B image on 18 Dec (λ =342°Ls, ι =29°) at ω =168°W shows quite clearly the Tharsis cloud. Km's on 30 Dec (λ =349°Ls, ι =33°) at ω =169°W shows a white limb cloud. On 11 Jan (λ =355°Ls) GTc recorded it at ω =173°W, and DPc and DTv shot at ω =182°W and ω =186°W respectively.

 σ 1······The SPC and SPH: The residual south-polar cap (spc) was detected clearly as follows: On 17 Dec (λ =342°Ls) *DPc*'s at ω =063°W, 071°W, *DTy*'s at ω =067°W~090°W, on 18 Dec (λ =343°Ls) *CPl*'s at ω =046°W~061°W, on 19 Dec (λ =343°Ls) *DPc*'s at ω =057°W, 064°W, *DTy*'s at ω =067°W~074°W, and on 25 Dec (λ =346°Ls) Nicolas BIVER (*NBv*)'s at ω =351°W (visual), *DPc*'s at ω =003°W, *CPl*'s at ω =022°W, 028°W. Henceforward, no detection was made perhaps due to the inconvenience that the direction of the deviation of the spc became away. However (as shown below on the grid), the southern pole was still receiving the sunshine on 1 January (more inside if the angle Ω =030°W faced toward us). However even on 1 January the apparent diameter was δ =12.1", and so the condition became worse. In 2007, the same season λ will be attained with δ ~14", but the tilt φ of the northern pole will face toward the Earth, and hence no more chance is expected. The south-polar hood (sph) can be faintly seen on *DPc*'s excellent images on 17 Dec (λ =342°Ls) at ω =063°W, 071°W in the foreground. The sph may be seen on the images by *EHd* on 18 Dec (λ =343°Ls) at ω =063°W, by *SBd* on 19 Dec (λ =343°Ls) at ω =285°W, by *Ak* at ω =341°W~354°W etc. In January, few ccd images were obtained which showed explicitly the sph: Visually IWASAKI (*Iw*) looks to have detected the sph down to Electris on 1 Jan (λ =350°Ls) at ω =149°W, and *ESg* seemed to see the sph by W47 on 8 Jan (λ =353°Ls) at ω =242°W, and she also seems to have detected a bright area inside the sph by W47 on 9 Jan (λ =354°Ls) at ω =211°W.

The NPH: DPc's images on 4 Jan (λ =351°Ls) at ω =264°W, 267°W show that the nph faintly covers Utopia. Since the southern tip of Utopia is also covered, the perimeter must be located at around 40°N. On 11 Jan (λ =355°Ls), DPc resp DTy at ω =182°W resp ω =186°W show the hood edge line to the north of Propontis I and so the border at 40°N. Note here an irregularity of the nph (as aforementioned) on the images of DPk on 14 Jan (λ =356°Ls) at ω =250°W: the nph looks as if split into two because of a dark stain on the perimeter (maybe caused by the preceding Dust at Ætheria). On 15 Jan (λ =357°Ls) WFl's image at ω =245°W proves the nph is weak and may still show the effect. On the other side Mo's B images on 12 Jan (λ =355°Ls) at ω =076°W, 082°W show that the nph extends still to 40°N, but no faint feature because the images processed hard. His R and IR show also the northern limb very white, but this does never show the north polar cap (npc) itself.

color of the NPC: From the view point of season, the present period is important because the npc is under construction, but it is hard to observe the area because the tilt of the northern pole is away. Usually we discuss the disappearance of the nph and the coming of the npc after the vernal equinox, but PELLIER (CPI)

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already alluded to the appearance of the npc at λ =350°Ls (see LtE p0329), and so we here note about the expected aspect of the npc at this season. The well-know chart by W A BAUM (cited once in CMO #109 - 25 Sept 1991- at p0944) shows a plot at λ =350°Ls, but this must correspond to the edge of the nph (quite large compared with the so-called Baum's plateau - around from λ =010°Ls to λ =040°Ls when the thawing halts). Viking's result in 1977/1978 at λ =350°Ls was given by P B JAMES (*JGR* **84** (1979) 8332) showing that the snow line was around 52°N~57°N, and so the areocentric (half) angle ψ was 38°~33°. The Viking result in 1979/1980 was given by P B JAMES *et al*

(*Icarus* **52** (1982) 565): however it shows deductively ψ =34.5° at λ =350°Ls (from the linear thawing - in 1979/1980 they assumed no Baum plateau was absent). JAMES *et al*'s study on the result from the terrestrial observations was published in *Icarus* **71** (1987) 306, and the R images in 1975 gave them the values around ψ =35° (see our review in CMO #130 - 25 Feb 1993 at p1199). In 2002, the season λ =350°Ls reached on 30 March, and the MGS-MOC looks to give the value around ψ =33° (here we cite an image from the NASA/MSSS's *Weekly Weather Report*). So we here assume ψ =35°.



This time $\lambda=350^{\circ}$ Ls was attained on 1~2 Jan 2006; the tilt φ was -19°, and so the depth d (not width) of the npc of $\psi=35^{\circ}$ can be calculated from the formula $d/2r=1-\cos(\psi-\phi)$, where r is the radius). This formula is originally due to A DOLLFUS (Icarus 18 (1973) 142), and was introduced in 1986 in CMO #003 p0017 (also repeated in CMO #255 -10 Jan 2002: see also the App in CMO-Web: http://homepage2.nifty.com/~cmo/01Note01/index.htm) Now, since ψ - φ =16°, it is easy to see the formula gives the result: d=2r×0.0195. So if we assume a Mars image having a diameter of 50 mm, the depth d of the npc at the CM is only 0.975mm, implying less than 1 mm. The grid adjusted on 1 Jan 2006 shown here also suggests a glimpse of the npc near the northern limb (shown by a dotted line). Since DPc's images on 4 Jan at $\omega = 264^{\circ}W \sim 267^{\circ}W$, as picked out by CPl, was taken at an appropriate angle having a mile stone (ie the dark background of Utopia), CPl's indication that the npc is visible on DPc's image must be right. However we should say it is difficult to measure the depth d from the observations in this apparition since the outskirt remnant of the nph appears thicker seen obliquely at the limb side even if the outskirt cloud is originally thin. How about then at $\lambda=020^{\circ}$ Ls? The season will come on 4 March this year, and 1 January 2006 ($\lambda=350^{\circ}$ Ls) $\phi = 19^{\circ}S$ $t = 34^{\circ}$ then since φ reads 09°S, it looks advantageous. However the npc is on the Baum plateau, and so ψ deceases to 27° so that ψ - φ =18°, eventually implying not so much improvement (just d=1.2mm if 2r=50mm). In 2007, the situation is quite different however: Since $\varphi = 7^{\circ}N$ at $\lambda = 350^{\circ}Ls$ (around 20 Nov 2007), so that $\psi + \varphi = 42^{\circ}$ which leads to the result d = 6.5mm (if 2r = 50mm). Furthermore the angular diameter

Miscellany: a) Bright spot near Alba Patera DPc's images on 17

will be about 14 arcsecs (and $\iota = 27^{\circ}$).

Dec (λ =342°Ls) at ω =063°W, 071°W show a bright spiny spot near the edge of the nph nearly at (Ω =105°W, Φ =40~45°N) an existent near the eastern side of Alba Patera. Since it is bright in R also, it must be a patch of frost or ice crystals. Maybe it is similar to the bright spike once observed in 2001 when the dust prevailed (CMO#249 http://homepage2.nifty.com/~cmo/01Repo13/index.htm). b) Morning Serpentis Mare free from the mist In the preceding issue we reported the fact observed by DPc resp DTy on 26 Nov (λ =331°Ls) at ω =286°W resp 289°W and by WFl on 6 Dec (λ =336°Ls) at ω =295°W; namely the de-concentration of the morning mist over M Serpentis. This can be checked again on DPk's B image on 10 Jan (λ =354°Ls) at ω =288°W, though slightly deformed. c) The bar-like dark EN corner of S Sabæus This apparition the northern half of the eastern S Sabæus looks especially dark in a shape of bar. This period for instance it is still shown on DPc's resp DTy's images on 25 Dec (λ =346°Ls) at ω =003°W resp ω =010°W as well as on CPl's at ω =022°W. On 24 Dec (λ =346°Ls) at ω =350°W, Alan HEATH (AHt) saw S Sabæus even through W47 while Margaritifer S was unseen thru W47.

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プ・・・・・アエテリア黄塵: ヒューストンのフラナガン(WFI)氏の12Jan(λ=355°Ls)ω=277°W(00:32GMT)、279°W(00:43GMT)の像は秀逸で(http://homepage2.nifty.com/~cmons/2005/060112/WFI12Jan06.jpg)、アエテリア暗斑の西に黄塵を冩し出している。残念ながら先行する觀測がヨーロッパで得られていないが、これは北極域に發生する黄塵であろう。この地域でこれ程明確に觀測された例は餘りない。一方、オシリディス・プロモントリウムにも輝點があるが、これはB光に出ているから水蒸氣の方が多いかも知れない。ただ、共鳴はあるかも知れない。ここは未だ午前であるが、アエテリア黄塵は午後に入っている。このほぼ二十二時間後(一回転後)の12Jan(λ=356°Ls)23:06GMTにテータム(RTm)氏がω=246°Wの像を得ているが、黄塵は弱まったようである。一時間半後の13Jan(λ=356°Ls)のディッキンソン(WDc)氏のω=271°W(00:48GMT)、フィッリプス(JPh)氏のω=274°W(00:59GMT)では未だ痕跡が見える。唐那・派克(DPk)氏の14Jan(λ=356°Ls)ω=250°Wの像にもハッキリしないが、やや残っていて北極雲にも影響しているかも知れない(北極雲は二分された)。然し、WFI氏の15Jan(λ=357°Ls)ω=245°Wでは正常に戻っていると考えられる。尚、これを黄塵と考える根據はTESの上空での黄雲像の14Janにアエテリアの上空に黄雲の出っ張りが見える(英文の部のTES畫像参照)。13JanのTES像は失敗しているが、上空に昇るのに一日、二日掛かったということであろう。

♂······霧の分布:a)概況 水蒸氣が全體に亙っており、朝霧と午後の霧が目立つが、朝から午後~ と聯なっている。但し、分布に斑が目立ち、高濃度・低濃度の處が高緯度などに見られるという状況 である。霧の薄いところは暗色部でも濃いワイン色系になる。b)**アルギュレ以西の朝霧** アルギュレ 上の朝雲は、ピーチ(DPc)氏の17Dec(λ=342°Ls) ω=061°W ~074°WのB像、18Dec(λ=343°Ls)ω=047°Wでの~ リエ(CPI)のB像、19Dec(λ=343°Ls)ω=052°W~066°WのDPc氏のB像に出ているが、これは寧ろアルギュレ を除いてアルギュレを囲む高緯度領域の水蒸氣が薄く、アルギュレが目立って居るということで、囲 む領域は寧ろワイン色である。特に、CPI氏のω=054°W、062°Wでは朝縁に脱凝縮が見られる。アルギ ュレの特異性はDPk氏の29Dec(λ=348°Ls)ω=041°WやWDc氏の2Jan(λ=350°Ls)ω=033°W~043°W、熊森(Km) 氏の11Jan(λ=355°Ls)ω=047°W等にも見られ、筆者(Mn)は12Jan(λ=355°Ls)ω=064°Wで検出している。19Dec のDPc氏のB像はアルギュレから西へ霧が流れていることを示すが、更にその西はDPk氏の18Dec(λ= 342°Ls) ω=168°Wにはパエトンティスからテュレに掛けて濃い朝霧が出ている。但しマレ・クロニウ ムの西部(パリウリ・フレトゥム邊り)が濃く出るので二股に分かれている。これは21Dec $(λ=344^{\circ}Ls)$ の ウォーレン(JWn)氏のω=149°W、アンダーソン(DAd)氏のω=153°W、デグロフ(KGr)氏のω=159°W、22Dec (λ=344°Ls)のメリッロ(FMI)氏のω=156°Wにも描冩されている。尚、眼視では20Dec(λ=343°Ls)ω=039°Wに シーゲル(ESg)さんが朝縁クラリタス邊りに朝雲を見ている(W58、W15、W80A)。日本では11Jan(λ= 354°Ls)には村上(Mk)氏がω=071°Wでパエトンティスとその北が朝霧を伴って出て來ているの觀察して いるが、12Jan(λ=355°Ls)にはMnがω=084°W邊りで同じように中島(Nj)氏と共に見ている。 c)著しい低 緯度の霧帶 上の幾つかの像には午後のデウカリオニス・レギオからマルガリティフェル・シヌスの 南部を通ってアガトダエモンを覆う領域へ達する20°S前後の可成り濃い霧帶を描冩しているが、特に 朝方ではアガトダエモンを挾んでネクトルの北側とオピル上では濃くなっている。18Dec(λ=343°Ls` ω=059°Wでのヒダルゴ(EHd)氏の像、19JanのDPc氏のB像、29JanのDPk氏のB像などで明らかである。 31Dec(λ=349°Ls)ω=035°WのDAd氏にも見られるが、アガトダエモンの両側の水蒸氣はお昼頃までは濃 いらしく、太平洋を渡ってから、Km氏の07Jan(λ=353°Ls)ω=081°W、092°W、ヘフナー(RHf)氏の同日 ω=097°Wにも顕著である。これらにはB像がないが、森田(Mo)氏の9Jan(λ=354°Ls)ω=081°W~091°WのB 像では十二月後半の状況である。ι=35°であるから、ω=091°WでアガトダエモンをΩ=070°Wと考えると 日の出後五時間である(正午線は英文の部の經緯度圖参照)。尚、Mo氏の12Jan(λ=355°Ls)ω=076°W、082°W も参考になる。更に午後の状況は(像は不良だが)アルヂッチ(DAr)氏の17Dec(λ=342°Ls)ω=092°W~105°W が參考になる。アウレア・ケルソ邊りは地面がタウマジアに比して明るいと思う。逆に言えばタウマ ジアは可成り暗いのである(17DecのDPc氏のR像を参照)。d)ヘッラスの朝霧、夕霧 ヘッラスの朝霧

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はMk氏が20Dec(λ =343°Ls) ω =251°W、261°W、270°Wとヘッラス朝霧を追っているが、次第に北端が濃く見えるようである。朝霧は22Dec(λ =345°Ls)のブダ(SBd)氏の ω =257°Wの良像に出ている。4Jan(λ =351°Ls) ω =252°W、260°W、278°WのCPI氏の描寫も優れておりMk氏の觀測に對應する。以下、ccdでは13Jan(λ =356°Ls)のJPh氏の ω =274°W、FMI氏の ω =277°W、14Jan(λ =356°Ls)のDPk氏の ω =250°W等に朝霧は窺える。夕霧は22Dec(λ =344°Ls)にESgさんがW47を使い ω =027°W~038°Wで強く濃く検出している他、ccdでは25Dec(λ =345°Ls)にはDPc氏が ω =003°W、タイラー(DTy)氏が ω =010°Wの夫々B光で押さえている。26Dec(λ =347°Ls)にはDPc氏が ω =345°WのB光、DTy氏が ω =001°WのB光、タイシェルト(GTc)氏が003°Wに眼視で紀録している。

3・・・・ヘッラス内部: ヘッラスの内部の様子についてはCMO#311で1990年の状況を述べて置いたが、ほぼ同じ季節にWebの方(http://homepage2.nifty.com/~cmomn2/2005Coming_14.htm)に CMO#113から再引用した様子が今回も再現されている。北部に溜まりがあって、西端に沿って南に明帶が走るわけで以下のccd像に捉えられている: Km氏 16Dec(λ =341°Ls) ω =341°W、345°W、阿久津(Ak)氏 19Dec(λ =343°Ls) ω =341°W~354°W、CPI氏28Dec(λ =348°Ls) ω =328°W、332°W、335°W。CPI氏のB像ではこの邊りに水蒸氣が含まれている事を示す他、デプレッシオニス・ヘッレスポンティカエの西に朝霧が出ている。更に、RTm氏が1Jan(λ =350°Ls) ω =351°W、WFI氏が7Jan(λ =353°Ls) ω =329°W、同じくFMI氏が ω =305°W、再びWFI氏が9Jan(λ =354°Ls) ω =316°Wなどで描寫している。1990年の結果から見ると λ =320°Ls頃から見られるのであるが、 λ =340°Ls頃からコントストが好くなるのかも知れない。

る・・・・・マレ・アキダリウムの朝雲とデウテロニルス:マレ・アキダリウム上の北極雲(及びその變化)は未だ健在であるが、その朝方での様子とデウテロニルス領域との分離で、アデラール(JAd)氏の24Dec(λ =346°Ls) ω =019°Wは興味深い。DPk氏の10Jan(λ =354°Ls) ω =296°Wではデウテロニルスの邊りに濃い朝雲があるから、ここを抜け出すのかも知れない。尚デウテロニルスの邊りはDPc氏の25Dec(λ =346°Ls) ω =003°Wが良像で、デウテロニルスの邊りのB像では正常だが、DPk氏の4Jan(λ =351°Ls) ω =349°WではB光で北極雲の縁がフリンジのように濃く出ている。このDPk像とDPc氏の26Dec ω =347°Wと比較できるが、稍シーイングが悪い。CPI氏の28Dec(λ =348°Ls) ω =335°W(B)ではバンドが濃く出ているかも知れない。尚、CPI氏の良像22Nov(λ =329°Ls) ω =341°Wと比較すると(後者ではデウテロニルスまで詰まっているから)朝雲は退化して來ている。

♂・・・・・アルシア領域: 日没前のアルシア・モンス域は難しくなるが、DPk氏の18Dec(λ =342°Ls、 ι =29°)ω=168°WのBには可成り明確に出ている。Km氏の30Dec(λ =349°Ls、 ι =33°)ω=169°Wには白い。11Jan (λ =355°Ls)にはGTc氏がω=173°Wで紀録し、DPc氏のω=182°W、DTy氏のω=186°Wに見えている。

 σ ・・・・・・**南極冠・南極雲**: 南極冠は17Dec(λ =342°Ls)にはDPc氏の ω =063°W、071°W、DTy氏の ω =067°W~090°W、18Dec(λ =343°Ls)のCPI氏の ω =046°W~061°W、19Dec(λ =343°Ls)にはDPc氏の ω =057°W、064°W、DTy氏の ω =067°W~074°W、25Dec(λ =346°Ls)にはビヴェール(NBv)氏の ω =351°W(眼視)、DPc氏の ω =003°W、CPI氏の ω =022°W、028°Wに明白である。この後には明白なccd像は無いが、この方向から見易いのは偏芯しているからであろう。然し、英文の部の經緯度圖でみられる通り、1Janでも南極はまだ日光を受けており、偏芯の方向ではさらに見えるはずである。ただ、1Janで δ =12.1"というのが不利な條件であろう。2007年には同じ λ では δ は14秒臺になるが、 ϕ が北を向いてしまうので今回が最後になるかも知れない。南極雲はDPc氏の良像17Dec(λ =342°Ls) ω =063°W、071°Wの像に南極冠から手前の方に淡く張り出しているのが分かる。南極雲と思われるものは18Dec(λ =343°Ls)のEHd氏の ω =058°W、19Dec(λ =343°Ls)のSBd氏の ω =285°W、Ak氏の ω =341°W~354°Wなどに見えている。一月に入って南極雲が明確に見えるccd像は無いが、岩崎(Iw)氏が眼視で1Jan(λ =350°Ls) ω =149°Wで南極からエレクトリスの方に南極雲が垂れ下がっていると見ている。W47を使うESgさんの8Jan(λ =353°Ls) ω =242°Wでは南極雲が明るく見えるようである。9Jan(λ =354°Ls) ω =211°WではW47で南極雲のなかに輝點を見ている。

|♂・・・・・・北極雲:DPc氏の4Jan(λ=351°Ls)ω=264°W、267°Wは良像で、北極雲がウトピアの上で淡く擴|

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がっていることを示す。ウトピアの先端も淡く覆われておるから 40° N邊りまで淡雲は出ている。 $11Jan(\lambda=355^\circ Ls)$ のDPc氏 $\omega=182^\circ W$ 、DTy氏の $\omega=186^\circ W$ ではプロポンティスIの北側だから、矢張り 40° N邊りか。尚、この邊りで $14Jan(\lambda=356^\circ Ls)$ のDPk氏の $\omega=250^\circ W$ 像では北極雲は奇妙に割れて見える。何か暗色模様があるようで、これは上に述べたアエテリア黄塵の影響かも知れない。 $15Jan(\lambda=357^\circ Ls)$ のWFl 氏の $\omega=245^\circ W$ では顕著ではないが、痕跡はあるかも知れない。一方テンペの邊りの様子はMo氏の $12Jan(\lambda=355^\circ Ls)\omega=076^\circ W$ 、 $082^\circ W$ のB光では矢張り $40^\circ N$ まで張り出しているようであるが、像が硬いのか淡さが出ていない。Mo氏の像ではR、IR共に北邊が真っ白であるから、ウッカリすると北極冠に見えるが、これは北極雲が北邊では厚く見えるのであろう。

♂・・・・・・北極冠の觀測:季節上は北極冠の形成期に當たってこれは重要な時期になるが、今回はφが 南を向いている爲にその觀測は困難である。通常、春分(次回)をもって北極冠を議論するが、CPI氏 が既にλ=350°Lsでの議論をしているので(LtEps2-0329參照)、もともと予想される状況を述べておく。 好く知られたボーム氏の圖(CMO#109-25Sept1991-のp0944に引用)にはこの時期(λ=350°Ls)のプロットも あるが、所謂春分以降のボームのプラトー(北極冠が縮小しない時期)のサイズに比べて可成り大きく、 これは北極雲によるものだろうと思う。ヴァイキングの1977年/1978年期のλ=350°Lsでのジェームズ氏 の結果(JGR84(1979)8332)では、少し錯綜があり雪線が52°N~57°N邊り、從って北極冠の半角ψは38°~33° ということになるが、ジェームズ氏達の1979年/1980年のヴァイキングの結果(Icarus **52**(1982)565)では、 (この年は黄雲の所爲でボームのプラトーは存在しないとされる)北極冠の線形的な縮小により、演繹 的にλ=350°Lsではψが34.5°と出る。ジェームズ達は地上の觀測も拾ったことがあり(Icarus71(1987)306) では1975年に得られたR光像でw=35°を導いているようである(これらのレヴューはCMO#130-25Feb1993 のp1199で行っている)。2002年には30Marにλ=350°Lsに達したが、そのときのMGSの畫像(WeeklyWeather Report)ではψ=33°程度であろうと思う(英文の部に引用)。そこでここではほぼ平均のψ=35°を採用して みる。今回はλ=350°Lsは1~2Jan2006に實現し、そのときの中央緯度は19°Sであるから、ψ=35°の北極冠 の深さdは d/2r=1- cos(ψ-φ)から計算される(rは半徑。この公式はもともとドルフュス氏のIcarus**18** (1973) 142にあるもので、CMO#003p0017で導出法も紹介したほか、CMO#255-10Jan2002でも繰り返している。 CMO-Webではhttp://homepage2.nifty.com/~cmo/01Note01/index.htmの附録參照)。ψ - φ=16°であるか ら、上の公式によって、 $d=2r\times0.0195$ 、從って直徑5cmの火星像を考えても、北極冠の中央の深さdは 0.975mm、つまり1mmにも満たないのである(英文の部に經緯度圖で雪線を示してある。南極の白丸は 90°S線を示す。南極はnoon線の終點で、この時點ではまだ南極は見えている)。多分、北極冠の縁も 含めて未だ北極雲の残滓が存在し、而もこれを球面の縁で眺めるわけだから、北極雲が濃く現れ本體 のd(つまり雪線)を掴むことは難しいであろう。從って、この時期の觀測は今期は困難ということに なる。但し、DPc氏の4Janの像の角度は絶妙な處にあり、CPI氏(LtE)の指摘は正しいであろう。尚、 λ=020°Ls頃になればどうであろうか。今年の場合4Marには實現して、φは09°Sとなるから有利である。 然し、北極冠もプラトーに達してψ=27°程度になるから、ψ-φ=18°で餘り改善されない。5cmの直徑で 見てもd=1.2mmというところである。2007年の場合は $\lambda=350$ °Ls時(20Nov2007頃)、 $\varphi=7$ °N程度と期待さ れるから $\mathbf{y} + \mathbf{o} = 42^{\circ}$ となり、d = 6.5 mm程度になって充分手應えがあるはずである。而も視直徑は14秒 臺になっている(ι=27°)。

♂・・・・・その他:a)アルバ・パテラの輝點 DPc氏の17Dec(λ =342°Ls)の ω =063°W、071°Wには北極雲の朝方縁に明るいスパイク上の突起が見られる。これはアルバ・パテラの東側に當たると思う(105°W、43°N邊りか)。Rでも明るいので、霜か氷結であろうと思う。2001年に似たような突起を見たことがある(CMO#249 http://homepage2.nifty.com/~cmo/01Repo13/index.htm)。 **b)朝のマレ・セルペンティスの朝霧脱凝縮** 前號で26Nov(λ =331°Ls)のDPc氏とDTy氏の夫々 ω =286°W、289°W及び6Dec(λ =336°Ls)にWFI氏の ω =295°Wに現れた朝方のマレ・セルペンティスがB光で濃く見えている様子は、未だ續いているようで、稍變形した形でDPk氏の10Jan(λ =354°Ls)の ω =288°WのB光に出ている。 **c)シヌス・サバ**

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エウスの東北部 シヌス・サバエウスの東部の北端が棒状に強く見えることは未だ25Dec(λ =346°Ls)のDPc氏の ω =003°W、DTy氏の ω =010°W、CPl氏の ω =022°Wで示されているが、24Dec(λ =346°Ls) ω =350°Wのヒース(AHt)氏の眼視觀測に依れば、W47でシヌス・サバエウスは捉えられるそうである(マルガリティフェル・シヌスは見えない)。

 \eth · · · · · · In the next issue we shall review the observations made during a one-month period from 16 January 2006 (λ =357°Ls, δ =10.3") to 15 February 2006 (λ =012°Ls, δ =07.8").

Forthcoming 2005 Mars (15)

Ephemeris for the Observation of the 2005/06 Mars. X April 2006

Masami MURAKAMI 村上 昌己(Mk)

sub-Earth point. The symbols λ , δ and ι 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 2006*.

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Date	(00:00	GMT)	ω	φ	λ	δ		Declination
01	April	2006	232.36°W	01.7°S	032.97°Ls	05.70"	35.5°	+24°56'
02	April	2006	222.74°W	01.5°S	033.42°Ls	05.66"	35.4°	+24°58'
03	April	2006	213.12°W	01.2°S	033.88°Ls	05.63"	35.3°	+24°59'
04	April	2006	203.48°W	01.0°S	034.33°Ls	05.60"	35.2°	+25°01'
05	April	2006	193.84°W	00.7°S	034.79°Ls	05.57"	35.1°	+25°02'
06	April	2006	184.21°W	00.4°S	035.24°Ls	05.53"	34.9°	+25°03'
07	April	2006	174.59°W	00.2°S	035.69°Ls	05.50"	34.8°	+25°04'
08	April	2006	164.94°W	00.1°N	036.14°Ls	05.47"	34.7°	+25°04'
09	April	2006	155.31°W	00.4°N	036.60°Ls	05.45"	34.6°	+25°05'
10	April	2006	145.67°W	00.6°N	037.05°Ls	05.42"	34.5°	+25°05'
11	April	2006	136.04°W	00.9°N	037.50°Ls	05.39"	34.4°	+25°06'
12	April	2006	126.39°W	01.2°N	037.95°Ls	05.36"	34.3°	+25°06'
13	April	2006	116.74°W	01.4°N	038.40°Ls	05.33"	34.2°	+25°06'
14	April	2006	107.11°W	01.7°N	038.85°Ls	05.30"	34.0°	+25°06'
15	April	2006	097.48°W	01.9°N	039.30°Ls	05.27"	33.9°	+25°05'
16	April	2006	087.82°W	02.2°N	039.75°Ls	05.25"	33.8°	+25°05'
17	April	2006	078.18°W	02.5°N	040.20°Ls	05.22"	33.6°	+25°04'
18	April	2006	068.53°W	02.7°N	040.65°Ls	05.20"	33.5°	+25°03'
19	April	2006	058.91°W	03.0°N	041.10°Ls	05.17"	33.3°	+25°02'
20	April	2006	049.25°W	03.3°N	041.55°Ls	05.15"	33.2°	+25°01'
21	April	2006	039.60°W	03.5°N	042.00°Ls	05.12"	33.1°	+25°00'
22	April	2006	029.96°W	03.8°N	042.44°Ls	05.10"	32.9°	+24°59'
23	April	2006	020.32°W	04.1°N	042.89°Ls	05.07"	32.8°	+24°57'
24	April	2006	010.66°W	04.3°N	043.34°Ls	05.05"	32.7°	+24°55'
25	April	2006	001.00°W	04.6°N	043.79°Ls	05.02"	32.6°	+24°53'
26	April	2006	351.36°W	04.8°N	044.23°Ls	05.00"	32.4°	+24°51'
27	April	2006	341.72°W	05.1°N	044.68°Ls	04.97"	32.3°	+24°49'
28	April	2006	332.06°W	05.4°N	045.13°Ls	04.95"	32.2°	+24°47'
29	April	2006	322.39°W	05.6°N	045.57°Ls	04.93"	32.0°	+24°44'
30	April	2006	312.74°W	05.9°N	046.02°Ls	04.90"	31.9°	+24°42'
01	May	2006	303.10°W	06.2°N	046.46°Ls	04.88"	31.7°	
02	May	2006	293.43°W	06.4°N	046.90°Ls	04.86"	31.6°	
03	May	2006	283.77°W	06.7°N	047.35°Ls	04.84"	31.4°	
04	May	2006	274.12°W	06.9°N	047.79°Ls	04.82"	31.3°	+24°29'

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更

Letters to the Editor

佐藤 健 (Takeshi (Ken) SATO 廣島Hiroshima) (註) SATO informed us of an email on 17 Dec from Dr Bradford A SMITH (IAU Commission 16) to him, in which it was reported that SAHEKI's name has been put on an 85 km crater on Mars based on SATO's proposal in 2001. It is provisional at present, while it was approved by the IAU Working Group: Final approval by the IAU will be given on the occasion of the IAU General Assembly which will be held this summer in Prague.

The IAU data of the crater are as follows:

Name: Saheki

Starting latitude: 22.49°S
Ending latitude: 21:0°S
Centre latitude: 21.75°S
Starting longitude: 286.19°W
Ending longitude: 287.7°W
Centre Longitude: 286.97°W

Crater Saheki is thus located near the famous Huygens Crater. See http://planetarynames.wr.usgs.gov/

This News was posted on the Façade of the CMO-Web with the map showing the crater on 1 January 2006. (Ed)

• • • • • • • • Dear Masatsugu, Thank you very much for the greetings card. And also thank you for the picture of Mt Fuji. I remember how Wayne, Gabriel and I were riding on the Shinkan-sen back in 1993 from Tokyo to Kyoto, actually trying to see Mt Fuji from the train, as we knew we would drive right by it. But as we had our seats in the wrong side of the wagon, we did not have much of a view, so it was hard. But all of a sudden, a deep, collective sigh went through the wagon (initiated by the passengers with window seats in the "right" side of the train: "A-hhh". We jumped to our feet to look out the windows on the other side, and there it was. Truly spectacular sight. I readily understand why the Japanese cherish it so much. It was really unique.

As for Mars, I've only been able to observe twice on December 1 and 12 during the first of this month, due to overcast skies, and since the CMO is late anyway, I hope you don't mind if I wait till New Year before sending you my December observations.

This year has been a relatively quiet one for me and my family. Gabriel got his bachelor's degree in computer science this summer, but he is continuing his studies. In July all four of us went to the USA to Wayne's sister

and brother and toured the American Southwest/ all the great places in Arizona/southern Colorado/southern Utah where most of us have been before, but Mira had not, and Gabriel was just a small boy then, so it was a good thing to be able to show them Grand Canyon etc.

I wish you and your family all the best for the New Year, Sincerely (received 24 December 2005)

Elisabeth SIEGEL (エリサヘート・シーケール Malling 丹麥) (註) The photo of Mt Fuji is the one taken recently by Masami MURAKAMI from his place near Yokohama

• · · · · · · · · Date: Sun, 25 Dec 2005 04:20:48 +0000 Subject: Merry Christmas

Dear Masatsugu, Just a note to wish you a happy Christmas and to thank you for the beautiful card. Since I am getting too fat and lazy to send cards, I'll do it this way. The hurricanes we were hit with in late 2005 seem to have sapped our ambition. However, tomorrow we are having five grand children and other assorted relatives to our home for Christmas. This is difficult, since I no longer have a darkroom to hide in! Best,

Don PARKER (唐那・派克 FL 美)

•••••• Date: Sun, 25 Dec 2005 13:00:58 +0000 Subject: Mars Dec. 17

A sequence of Mars images showing the transit of Solis Lacus. It will be a couple of years before we see this again from here so well, if then.

A new feature here is the use of a narrow-band IR filter (Astronomik IR pro 807nm) for the luminance. This seems good, combined with the R(SG)B from the Trutek filters.

These were taken at different focal lengths (which is a thing the Dall-Kirkham-Dall Cassegrain was designed to achieve, but the actual values are hard to estimate) then normalised to the same size in Photoshop. There is an increase in f from no. 1 to 2 and from 2 to 3. No. 4 is at the same f as 3, but adding a polarising filter. Best results occur above f25. Probably there is no benefit from the polarising filter due to the loss of signal, but it seems to produce a slightly more three-dimensional appearance.

As a Christmas indulgence, here is the cover and inside of the 1971 AE instruments catalogue, showing this telescope. Thanks to Robert for this. Ah, the long-gone days of British telescope manufacture.

Happy Christmas to all who celebrate it.

David ARDITTI (デヴィット・アーディチ Greater London 英)

• · · · · · · · Date: Sun, 25 Dec 2005 13:50:51 -0000 Subject: Mars images (December 17th, 2005.)

Hi all, Here are some images from Dec 17th. Mars is shrinking fast. A misty cloud over Sinus Meridiani, and also the south polar cap looks rather misty. Also a weak morning cloud over Daedelia.

http://homepage.ntlworld.com/damian.peach/2005_12_17rgb_DAP.jpg http://homepage.ntlworld.com/damian.peach/2005_12_17bw_DAP.jpg Seasons greetings to you all! Best Wishes

O · · · · · · · Date: Mon, 26 Dec 2005 23:45:12 -0000 Subject: Mars images (December 26th, 2005.)

Hi all, Here are some images from this evening. Poor seeing, but there seems to be quite alot of mist/haze extending from the SPC into Hellas.

 $\frac{\text{http://homepage.ntlworld.com/damian.peach/2005_12_26rgb_DAP.jpg}{Best\ Wishes}$

Damian PEACH (デミアン・ピーチ Bkh UK 英)

Ser2-0326 CM0 No. 315

• · · · · · · · Date: Mon, 26 Dec 2005 22:50:12 +0900 Subject: Mars-2005-12-26-KUMAMORI

晴れてもシーイングは悪くちょっと撮影気力がなくなってきました。 雲の隙間からの撮影です。

O····· Date: Fri, 30 Dec 2005 09:58:55 +0900 Subject: Mars-2005-12-29-KUMAMORI

穏やかそうな晴れ間だったのですが、この画像の前後は相変わらず悪シーイングでした。

O····· Date: Sat, 31 Dec 2005 11:01:29 +0900 Subject: Mars-2005-12-30-KUMAMORI

薄雲を通しての撮影です。2005年も今日で終わりです。ベランダの隙間からの撮影では今、18時(JST)前後のみ可能ですがそろそろ時間帯的に難しくなってきました。 撮影数は減るとは思いますができる範囲内で続けたいと思っています。

熊森 照明 (Teruaki KUMAMORI 堺 Osaka)

• · · · · · · · Date: Tue, 27 Dec 2005 17:14:38 -0000 Subject: Mars on Christmas day

Hi Guys, This was Mars on the 25th seeing was poor but the avi responded to reggi' C14 @ F38 Lumenera

O····· Date: Tue, 27 Dec 2005 23:38:32 -0000 Subject: Mars boxing day

Hi guys, Here is Mars from Boxing Day Seeing poor and a bit blurred! detailsh hash per the 25th

happy new year

Dave TYLER (デヴィッド・タイラー Bkh UK 英)

• · · · · · · · Date: Tue, 27 Dec 2005 22:26:07 +0100 Subject: Mars on Christmas eve

Hi all, Finally a 2 hour break in the clouds and just on christmas eve, even the seeing was fair to good thanks to the high temps. Nice blue clouds above M Erythraeum and the Protei regio also on the NPC a significant blue cloud best to all

http://home.tiscali.nl/planetadelaar/mars051224.jpg

Jan ADELAAR (ヤン・アテ゛ラールArnhem Holland 荷蘭)

・・・・・・ Date: Thu, 29 Dec 2005 09:29:21 +0900 Subject: 12月27日の画像

南様:(cc村上様); 一ヶ月ぶりに火星の撮像ができましたので、お送りいたします。小さくなってきましたが、もう少し継続しようと思います。

淺田 正 (Tadashi ASADA 宗像 Fukuoka)



• · · · · · · · Date: Sat, 31 Dec 2005 04:47:14 EST Subject: Happy New Year

Masatsugu, From the snowy lands of East Northamptonshire, England!

Richard McKIM (理査・麥肯 BAA Mars 英)

●・・・・・・・ 賀正、火星は完全にリタイアとなりました。老兵は消えてゆくときでしょう。益々のご活躍を祈ります。 (2006年元旦)

村山 定男 (Sadao MURAYAMA 東京 Tokyo)

●・・・・・・2006年の新年おめでとうございます。

十月に八年ぶりで東京に出ましたが、路を忘れ 獨りでは歩けませんでした。昔、大陸で一緒に 仕事をした戰友に會ってたのしく思いました。

以前圓山天文臺にあった25cmは何處に行ったか不明で、小生の跡を繼いだ阮氏が壊したらしい。鏡筒も架臺も古鐵として賣ったとか、彼は私を妬んでケシカラン奴だ、ではまた。

(2006年元旦)

蔡章獻 (CHTSAI臺北 Taipei)

●・・・・・・あけましておめでとうございます。

Lick Obs への遠征や、S&T誌への寄稿など、ご活躍に瞠目しています。

Lowellの滞日中撮影の写真の同定作業は、長兼 弘さん、金文子さん(奈良女子大)などとの情報交換により可成りの新事実が判明しました。東京麻布今井町41番地の家の二代目の住人が HS Palmerであったのには全く驚きました。

(2006年元旦)

佐藤 利男 (Toshio SATO 東京 Tokyo)

●・・・・・・・明けましておめでとうございます。

平 岡 厚 (Hiraoka ATSUSHI, Lowell Society 東京)

• · · · · · · · Date: Sun, 01 Jan 2006 11:18:19 -0600 Subject: Mars 20060101

Here is an image made shortly after the beginning of the new year UT.

http://members.verizon.net/~whd/images/20060101_whd.jpg Happy New Year,

O:.... Date: Mon, 02 Jan 2006 09:59:21 -0600 Subject: Re: RE:Mars 20060101

Masatsugu MINAMI, Thank you for your email, it has been a pleasure to be a part of your excellent work. Here are some images from last night, the seeing was considerably better.

http://members.verizon.net/~whd/images/20060102_whd.jpg Best Regards,

O····· Date: Fri, 6 Jan 2006 10:56:10 -0500 Subject: Mars Features

Here is an image I put together showing mid-latitude albedo features of Mars during the 2005 apparition. It is a composite of color images converted to grayscale taken with a C8 and ToUcam from Sept through Nov. 2005. Regards,

http://homepage2.nifty.com/~cmons/2005/P_C_WDc.jpg

Bill DICKINSON (ウィリアム・ディキンソン VA 美)

25 January 2006 Ser2-0327

•••••• Date: Sun, 1 Jan 2006 16:09:30 -0500 Subject: I sent you an eCard from American Greetings.com

Dear Masatsugu, Happy Brithday! My best wishes for a happy and healthy year. Don

The longer we're friends, the brighter my world. Happay birthday

(註) Don chose here the Chinese letter 輝 which implies "brightness" or "brilliancy". Thanks, Don. (Mn) ① · · · · · · · Date: Sun, 08 Jan 2006 05:01:03 +0000 Subject: Mars Images: SP Hood

Hi All, I have attached some Mars images from 29 December and 4 January taken with Tim Khan's Lumenera 075M camera. Am finally getting around to processing my backlog.

It appears that the South Polar Hood began forming around Ls=348-350°. Best and Happy New Year!

O · · · · · · · Date: Tue, 10 Jan 2006 21:57:03 +0000 Subject: Mars Images

Hi All, I have attached some Mars images from 10 Jan. O....Date: Mon, 16 Jan 2006 18:42:22 +0000 Subject: Mars Images

Hi All, I have attached some Mars images from 14 Jan . Poor conditions:shot through clouds. Dull SPH and NPH still present.

O · · · · · · · Date: Thu, 19 Jan 2006 00:40:00 +0000 Subject: Mars Images

Hi All, I have attached some Mars images from 17 January.

O·····Date: Mon, 23 Jan 2006 19:01:22 +0000 Subject: Mars Images

Hi All, I have attached some Mars images from 22 Jan. Northern vernal equinox. NPH dissipating. Best,

Don PARKER (唐那・派克 FL 美)

• · · · · · · · Date: Mon, 02 Jan 2006 10:11:28 +0100 Subject: Congratulations

Dear Masatsugu, Congratulations on your birthday! And happy New Year, too. I hope the coming year will be kind to you in every possible way.

Winter has come to Denmark now (and all of Europe, as I understand), with quite a bit of snow, light frost, and cloudy skies night and day. Not much chance of Mars observations right now... but things can change fast, of course.

I wish you a very pleasant birthday! Best regards, O····· Date: Wed, 04 Jan 2006 15:35:56 +0100 Subject: RE: RE:Congratulations

Dear Masatsugu, Thank you for the picture of yourself and the Lick refractor. You look good! And much better, I must say, than the Lick, which seems a bit rusty here and there. I hope you had a pleasant birthday!

I've just thrown my December observations in the mailbox for you today. I haven't been able to observe since December 22; we have snow and frost here too (started Dec. 28), and cloudy nights.

Yes, I saw the article about the Saheki crater on the CMO website. That's really great! I'm sure mr. Saheki would have enjoyed that, had he been alive (on the other hand, had he been alive, he wouldn't have had a Martian crater named after him - I know!).

Please find attached a picture that I personally really like. You've probably seen it before, but in case you haven't: it's a Mars Global Surveyor picture from Ganges Chasma, and it has - for obvious reasons - been named "Eyes of Ganges". I think, however, that the Global Surveyor m! ay have caught the very spirit of Mars itself in

this one. Poor guy, I know how he feels. I myself feel exactly like that when the alarm clock rips me out of my sweet dreams every morning at 6:25.

All the best to you and your family,

O·····Date: Mon, 16 Jan 2006 08:56:45 +0100 Subject: All right in the snow?

Dear Masatsugu, I just wondered if you're okay. A week or two ago I saw on Danish TV that Japan had become completely buried in meters and meters of snow (so I did not expect you to get my latest drawings right away! I assume that getting the postal system up and running is one of the minor concerns when a country is almost paralysed by snow and cold).

I do hope you're all right, and that the weather conditions have become milder! Best wishes,

O····· Date: Wed, 18 Jan 2006 10:39:00 +0100 Subject: RE: RE:All right in the snow?

Dear Masatsugu, Thanks for the mail. First of all, let me say that I am sorry if I have given you the impression that all I was concerned about was whether you had received my December drawings! That was not the case. Of course I had noted that I hadn't heard from you yet, but the pictures on Danish TV of up to 4 meters (!) of snow in Japan made me think that it was only natural if you had other things to think of. They showed pictures of people shovelling these several meters of snow down from the rooftops of the houses, for fear that the roofs would collapse under the weight. So gradually I started to worry about your safety, and that had nothing to do with whether you had received my drawings or not! I'm happy to hear that you seem to be fine, and that the weather hasn't been that bad in your part of the country. A collapsed roof can't be much fun (especially if you're beneath it)! · · · · ·

I looked into my old drawings to find those depicting the so-called "*Novus Pons*", and found that it appeared on my drawings from

1992 December 22, 27 1993 January 25, 26, 27, 30; February 1; March 7, 8, 9

As late as December 19, 1992, 3 days before the first sighting of the "Pons", I drew a quite normal-looking Mare Acidalium, with no Pons. At the other end of the period, there are no observations of Mare Acidalium after March 9 until April 13, where the Mare again looked normal, i.e. Pons-free.

I find it very hard to believe that the Pons could be a dust streak, considering that it more or less seemed to stay in place for at least two and a half months. There are a few - very few - observations of Mare Acidalium during the period between Dec. 22 and March 9 where the Pons was not detected, but that could be just a matter of seeing conditions and th! e like. I was not a highly experienced observer at the time, but Johan Warell seems to have seen the same thing as me during that time, and he is definitely a more gifted observer than I ever was. He described the Pons as being located at approximately 50°N, separating M. Acidalium from M. Boreum, and was of the opinion that the Pons was, in fact, a recurrent cloud, which sounds more reasonable than a dust streak, considering its longevity.

This is all that I can say about the Novus Pons. Thank you for the name 'Aryn's nails'!

So far, I've only been able to observe on three evenings

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in January: 8, 9 and 16. Mars is definitely getting small now. I have no problem seeing atmospheric features - limb hazes, clouds - but the surface details are certainly becoming very hard to make out by now.

Thank you again for your long and interesting mail, and let me assure you that you have absolutely nothing to apologize for, as far as I am concerned.

I wish you all the best! Sincerely,

Elisabeth SIEGEL (エリサヘート・シーケール Malling 丹麥)

• · · · · · · · Date: Mon, 2 Jan 2006 15:10:02 -0000 Subject: Mars images (December 31st, 2005.)

Hi all, Here are some images from the 31st under poor seeing conditions. There is some morning mist over Hellas/Yaonis Fretum. Also a small evening cloud over Ausonia. The NPH remians brilliant. The SPC remnant could not be seen.

http://homepage.ntlworld.com/damian.peach/2005_12_31rgb_DAP.jpg
O·····Date: Fri, 6 Jan 2006 18:42:21 -0000
Subject: Mars images (January 4th, 2006.)

Hi all, Here are some images from the 4th. Fair to good seeing. As Christophe already mentioned Hellas shows a misty bulge on the morning terminator, while there is also a misty cloud over Libya. There does seems some mistiness over the SPC also.

http://homepage.ntlworld.com/damian.peach/2006_01_04rgb_DAP.jpg
....Date: Wed, 11 Jan 2006 23:38:48 -0000
Subject: Mars images (January 11th, 2006.)

Hi all, Here are some images from this evening. Fair seeing conditions. Some interesting cloud details. The SPH is notably present in blue light. Also a bright orographic cloud over Arsia Mons, and also a mist over Ausonia. The NPH remians brilliant.

Valhalla is prominent in Red along with the Propontis complex. Elysium remians mist free.

http://homepage.ntlworld.com/damian.peach/2006_01_11rgb_DAP.jpg
O·····Date: Tue, 17 Jan 2006 21:00:24 -0000
Subject: Mars images (January 17th, 2006.)

Hi all, Here are some images from this evening. Seeing was poor as we are currently under the jetstream. Weather has been really poor this month with seemingly endless overcast days!. Solis Lacus is back in view here. Some bright cloud over Candor. Also some light mist over Ausonia. The NPH remains prominent and bright. A faint SPH is present. There is no Arsia Mons cloud, and Ascraeus/Olympus can be seen in the R image as faint dusky spots. Olympus is also dark in Blue.

Hi all, Here are some images from the 20th. Very poor seeing. Note the bright mist over Chryse on the limb, while there is also faint mist over Argyre and Daedelia/Southern Solis Lacus. The NPH remians brilliant.

http://homepage.ntlworld.com/damian.peach/2006_01_20rgb_DAP.jpg
.....Date: Mon, 23 Jan 2006 16:20:30 -0000
Subject: Mars images (January 21st, 2006.)

Hi all, Here are some images from the 21st. Good seeing. Lots of interesting cloud activity. Argyre is well defined and bright in Blue. The SPH is nicely defined. Also a bright cloud across Daedelia. Also weak mists across Candor/Ophir and Tharsis. The NPH remians bright.

Ascraeus Mons dark in red, and very dark in blue. Olympus Mons on the terminator appears very dark in the 1837ut image. Arsia Mons is a dark spot in Red.

http://homepage.ntlworld.com/damian.peach/2006_01_21rgb_DAP.jpg http://homepage.ntlworld.com/damian.peach/2006_01_21bw_DAP.jpg

O····· Date: Mon, 23 Jan 2006 17:42:46 -0000 Subject: Mars images (January 22nd, 2006.)

Hi all. Here are some images from yesterday. Good seeing. Ascraeus Mons is prominent toward the terminator as a small dark spot. Not as much cloud acivity as the 21st. Argyre is rather less misty than the day before. Also the SPH is much weaker.

 $\frac{http://homepage.ntlworld.com/damian.peach/2006_01_22rgb_DAP.jpg}{Best\ Wishes}$

Damian PEACH (デミアン・ピーチ Bkh UK 英)

• · · · · · · · · Date: Mon, 02 Jan 2006 21:33:36 +0000 Subject: Mars Dec. 26

Some Mars images from Boxing Day. The blue image is common to both LR(SG)B composites and shows faint mists spreading in from the terminator.

Happy 2006 to all.

O····· Date: Sat, 07 Jan 2006 00:33:55 +0000 Subject: Mars Jan. 04

Poor conditions for my first images of Mars this year.

O:----
Date: Mon, 16 Jan 2006 01:09:20 +0000

Subject: Mars Jan

The cloud that has blanketed the south of England every night bar one so far this year just thinned sufficiently to see Mars through it, for a while, tonight. Very poor, windy conditions, but surprisingly the R image does show just Olympus M.

O····· Date: Sun, 22 Jan 2006 22:16:23 +0000 Subject: Mars Jan 21

Fairly good results on Mars last night, I think, considering the seeing was not great and the planet is only 9.9" diameter. Solis Lacus is on the meridian and blue clouds are visible over Memnonia and Argyre.

For the first time, I have made a precise calculation of the EFR of the D-K-D Cassegrain plus $1.6 \times$ Powermate combination, based on measuring the size of Mars in the frame, assuming a chip diagonal of 4.5 mm (from Sony/Philips data sheet), and using the tabulated angular diameter of the planet. I was surprised that the answer is as high as 59, EFL 15000mm. No wonder it's so hard to keep on the chip. I had previously thought it was about f40. (The formula is F=206265d/ θ , where F is the EFL in mm, d is the height of the image on the chip in mm, and θ is the angular diameter in seconds of arc.)

David ARDITTI (デヴィッド・アーディチ Greater London 英)
http://www.davidarditti.co.uk/observatory

• · · · · · · · Date: Tue, 3 Jan 2006 02:15:12 -0500 Subject: Mars Observation (January 2/3, 2006)

I made an observation of Mars on January 2-3, 2006 (23:50 and 00:30 U.T., respectively) under average to good seeing conditions (5-7/10). A good amount of detail may still be noted over the planet if one is patient. Hellas appeared very bright (8/10) towards the preceding limb. I welcome any comments that you may have on my observation.

Instrument: 23-cm *F*/13.5 Maksutov-Cassegrain Magnification: 248x, 271x, and 348x

O····· Date: Sat, 14 Jan 2006 21:24:33 -0500 Subject: Mars Observation (January 15, 2006)

I made an observation of Mars on January 15, 2006 (00:20 and 00:45 U.T.) under average seeing conditions (4-5/10, with very brief moments of 6/10). Mare Cimmerium and Mare Tyrrhenum were prominent on the

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CM. A very bright (8/10) cloud was visible over Hellas. I welcome any comments that you may have on my observation.

Carlos HERNANDEZ (カルロス・ヘルナンデ ス FL 美)

• · · · · · · · Date: Tue, 3 Jan 2006 09:42:41 -0000 Subject: Saturn SPR Spot

Hi Guys, Here is an image showing the current SPR Spot recorded one the three dates shown. Seeing on the 24th was not good and the spot not too clear.

I have put the images into Jupos to try and get a reasonably accurate "fix" on its position, but being close to the pole errors are magnified. I would estimate an accuracy of plus or minus 3 degrees at best. The spot will be imagable from the UK again in the early hours of Thursday, if it is still around and conditions permit.

Best wishes and Happy new year to all

O·····Date: Thu, 5 Jan 2006 23:51:03 -0000 Subject: Mars on the 4th

Hi Guys, Here is a set from the 4th in workable seeing. Mars was 11.6 " dia., the incredible shrinking planet! There are still plenty of clouds to be seen. Mag was increased to about f 60

O····· Date: Thu, 12 Jan 2006 14:04:59 -0000 Subject: Mars 11-Jan 06

Hi Guys, A clear night at last, seeing was manageable. Mars is showing some interesting detail in Blue, with the S PR becoming increasingly covered in blue cloud. Also some interesting sunrise highlight areas "glowing" there. C14 @F55

O····· Date: Mon, 23 Jan 2006 14:10:40 -0000 Subject: MARS 21 JAN 06

Hi guys, We were blessed with a couple of sundowns of good seeing this week. Here are some rgbs from the 21st. The smaller strip was taken at about f 53 and the larger at close on f 60 using a $3\times Tel$ ' barlow plus 120mm of filter block and extension on a f11 C14

Lumenera 075 and truteck filters in the f60 shot some were taken with an IR red and some with the type 1 Trutek wide red.

The clouds are putting on a nice display. What is pleasing is that under decent seeing, plenty of detail is still obtainable even with Mars being under 10 arc secs in dia. Best wishes

O····· Date: Mon, 23 Jan 2006 16:32:24 -0000 Subject: Mars 22-jan -06

Hi Guys, Here are some more images from our good spell of seeing. These are all at f 60 with the C14. Unlike the previous day Olympus mons hasn't peeped into the sunshine. Best wishes

Dave TYLER (デヴィッド・タイラー Bkh UK 英)
http://www.david-tyler.com/

• · · · · · · · Date: Tue, 03 Jan 2006 13:55:19 +0100 Subject: Mars, december 18, 25, 28th

Dear all: I wish you a happy new year 2006!

Here are some of my last results in december. The last two sets have been taken during my hollidays in western France. Seeing was good every time.

http://pellier.christophe.club.fr/M051218-CPE.jpg http://pellier.christophe.club.fr/M051225-CPE.jpg http://pellier.christophe.club.fr/M051228-CPE.jpg With best wishes,

O····· Date: Thu, 05 Jan 2006 21:25:57 +0100 Subject: Mars, january 4th, 2006

Hi all, here are my first images of the year. Seeing was

very good and many details can be seen in the small

http://pellier.christophe.club.fr/M060104-CPE.jpg

Just a last word, Hellas is forming like a bulge in the terminator in these images, and this was also evident visually. It must be due to its brightness (white mist, and surface albedo) in comparison with other regions.

O····· Date: Sat, 07 Jan 2006 13:17:25 +0100 Subject: Mars at same Ls but differents De, 1992 / 2006

Hi all, here is a comparison I have made with one of Damian's images and one old HST's from the apparition of 1992-1993. Both images have been taken at the same season (only a few weeks before southern autumn/northern spring) but at very different "De" and the perspectives are interesting. At Ls 350 the seasonal NPC is fully formed and already nicely lightened by the Sun. By looking closely where the very edge of the north cap lies, I think it's possibly seen on Damian's image.

NOVEMBER 1st 1992
HST
D. PEACH
Ls 350 / De +11,9
Ls 351 / De -18,6

http://pellier.christophe.club.fr/compa9206.jpg
O·····Date: Mon, 23 Jan 2006 22:54:16 +0100
Subject: Mars, january 23th

Hi all, My ATK-1HS has finally been nicely repaired by a friend of mine and I got a run with it tonight along with the Lumenera!

http://www.astrosurf.org/pellier/M060123-CPE

The ATK produces bigger images despite shorter focal lenght because of chip caracteristics, and performed very well (10 fps) but technical quality looks a step higher with the Lumenera (better SNR, contrast, and no gain artefact thanks to the 12 bits; 15 and 7,5 fps). Mars is now entering southern autumn. Argyre looks filled in with a thick white cloud and Ascraeus is also seen as a red spot (as in Damian, Dave and David's latest). I've got the feeling that cloud-building in the south is more important in moderate latitudes (~30-60°S) than in the SPR. This was maybe true also for the old images of the 1990 apparition? Best wishes,

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

・・・・・・・ Date: Tue, 3 Jan 2006 18:20:46 +0900 Subject: Mars - 2006/01/02 10:43UT CMOさま、新年あけましておめでとうございます。2005年は大変お世話になりました。今年も宜しくお願いいたします。

さて、あまり意味のない画像ですが、投稿させていただきます。今回は695nmのIRpassフィルターを使用しました。Best regards,

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O · · · · · · · Date: Sat, 14 Jan 2006 12:52:01 +0900 Subject: RE: Mars - 2006/01/12 9:44UT

The bright edge is due to seeing conditions (darkening the image removes this, but that is not honest process-

If there is no useful data in the image please disregard. O · · · · · · Date: Fri, 20 Jan 2006 14:05:05 +0900 Subjest:?

Dear CMO, Here is an old Mars observation from 2005/10/19 14:59UT. The orographic cloud can be seen in blue, and many details can be seen in the image.

I will re-process some of my images from over opposition and will send later this month or next. I have learned a lot about processing this season.

Always learning more. Best regards,

O····· Date: Sat, 21 Jan 2006 02:28:01 +0900 Subject: Old observation #2 - 2005/11/12 14:22 UT. Dear CMO, Here is another old Mars observation from 2005/11/12 14:22 UT. Best regards.

O · · · · · · · Date: Sat, 21 Jan 2006 12:38:29 +0900 Subject: RE: Old observation #2 - 2005/11/12

南さま、ご連絡ありがとうございました。ご指 摘どおり、画像の内容に間違いがありました。 申し訳ございませんでした。添付ファイルは訂 正した画像です。 12 November 12:21GMT (ω=288°W) の画像もこれから再度処理するつもりですので、 Revised画像を送らせていただきます。そのとき の撮影はジェット気流が強くて、シーイングが あまり芳しくはなかったので、模様を少し強調 し(過ぎ)てしまいました。しかし、現在のひどい シーイングと小さい視直径に慣れたせいか、昨 日、その当時のAVIを見たら、割りと模様などが 写っているようです。再度処理をします。以前 は画像処理にRegiStax3だけを使用しましたが、 現在はFitsのファイルを扱えるDeconvolutionソフ ト等を合わせて使用しています。

ロバート・ヘフナー (Rob HEFFNER 名古屋 Aichi)

• · · · · · · · Date: Thu, 5 Jan 2006 19:01:42 -0800 Subject: Re: RE; Mars October 23, 2005

Hello Masatsugu, Thank you for your warm and generous response of which I'm honored to receive. As well, I'm very happy to have my humble images posted on the CMO website.

I remember a message posted by you from Mt. Hamilton on October 22 which I have included below as well as my response to you. Initially, I did not notice that your message may have been forwarded by Masami Murakami to the Mars Observers website.

Never been to Mt. Hamilton myself, but it is probably around 3 hours to arrive there from Sacramento; someday I shall visit.

I'll be sure to include your e-mail address in my future submissions. Best Regards.

O · · · · · · · Date: Wed, 11 Jan 2006 16:59:57 -0800 Subject: Mars January 10, 2006

Finally some more observations. Looks like bad weather is back again though. Best Wishes,

○ · · · · · · · · Date: Sat, 21 Jan 2006 14:20:17 -0800 Subject: Mars January 20, 2006

Good afternoon, Conditions were still not good with a jet stream overhead, but here are some more images from Thursday night here. Best Wishes,

Ed LOMELI (エト・ロメリ Sacramento CA 美)

• · · · · · · Date: Thu, 05 Jan 2006 20:35:42 +0900 Subject: 明日の観望会について

南さま: 新年明けましておめでとうございます. 本年もよろしくお願いいたします。

さて明日の観望会ですが、天気予報では、雪/ 曇で、開催は無理のようです。こちら足羽山の 積雪は市内とはやはり多いですし、しかも、明 日から明後日にかけても大雪が予想されていま す。ということで、万が一、晴れたとしても、 一般の人が夜間にアクセスする状況ではありま せん。特に帰りの運正寺側に下る道路が、慣れ ない方にとっては非常に危険です。

お正月時点では、降雪も小康状態になり、せっ かくの新年企画なので、以下のようにもくろん でいました。--もしも、確実に晴れが予想され た場合は、ドームまでの通路を除雪し、十名く らいずつドーム内に入ってもらい、順番に望遠 鏡をのぞいてもらう。他の人は、屋上に出るド アの内側(博物館内)で待機してもらう。また、 問い合わせの方には、駐車場は確保できません とアナウスする。先生方用の駐車場としては、 三軒茶屋の前か、もしくは通常の駐車場にも数 台のスペースはあります。

が、現時点の状況では取りやめにしたほうが無 難だと思っております。ちなみに、本日5日、梅 田は藤島神社側からのぼり、いつもの駐車場に 駐車してあります。

また別件ですが、「福井県国際交流会館」を通 じた観望会の広報について会館のHPへの投稿は できなくなりました。今までの、情報コーナー がPDF形式になり、簡単には更新できなくなった のと、しかも、内容も原則、交流会館主催のも のか、あるいは外国人向けの行事が中心のよう です。http://www2.interbroad.or.jp/fia-net/ で、 お手軽な情報(交換)コーナーが無いという状況 のようです。案内リーフレットのような印刷物 なら、従来どおり置かせてもらえます。せっか く始めた広報ルートだったのですが・・・。

在福井の外国人さん向けのPRについては、春 までに、また何か考えましょう。以上でござい ます。

梅田 美由紀 (Miyuki UMEDA 自然史博物館 Fukui City Museum of Natural History 福井)

..... Date: Fri, 06 Jan 2006 15:07:18 -0500 Subject: RE:2005 Mars apparition -- second try!

Dear Masatsugu, Thank you very much for your reply. I apologize for the delay in responding -- I was out of the office for a week and a half.

>As to Bill Sheehan's article in the S&T December 2005 issue, I >suffered a disappointment. What do you mean by a confused red line on >the map at the first page? It is utterly different from the route >Lowell took in 1889 to and from Noto, especially the return route >being completely wrong. Position of Anamidzu is not exact, and it >does not show the fact Lowell took a boat from Wakura to Anamidzu. >Anybody who read the Lowell book will quite wonder since the Tenryu >River line is utterly neglected. I suppose Bill (as well as the S&T) >will lose a reputation (especially in Japan) unless you will not try >to publish a corrected map in a coming issue.

I'm sorry to hear that you're disappointed with the article.

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The red line showing Lowell's route, including the position of Anamidzu, was based on a map that Bill had supplied to us. Our artist just copied the hand-drawn route from his map. I'll check with Bill as to what had happened.

>Lowell's description of "Down the Tenriugawa" is a highlight, in >addition to the Harinoki-Toge trouble, of the latter part of Lowell's >trip, though neglected in Bill's article.

>http://homepage3.niftv.com/~cmomn3/LProads1.htm

Unfortunately, Bill had to leave out a lot of details about Lowell's trip because of space limitations in the magazine.

>As to the dust activity in October, I am now writing a short review >of the observations for a belated CMO issue, and I will inform you of >the URL if it is uploaded (within this year).

Can you please give me some more information or a detailed summary of these observations? My deadline to finish the article is early next week.

Thank you very much. I wish you and your family a Peaceful, Prosperous New Year! Best regards,

Edwin L AGUIRRE (S&T編集部 NY 美) eaguirre@SkvandTelescope.com

• · · · · · · Date: Sun, 8 Jan 2006 17:45:28 +0100 Subject: 07 Jan 2006 mars image

Dear Sirs, Please find attached an overview of my combined Mars images, taken on 07 january, 2006 from 's-Gravenwezel, Belgium (51.2°N, 4.5°E) at 20:57 UT. The seeing was fair (5-6/10). The image was made with a Black & White modified ToUcam Pro 840, with broadband IR pass, G and B filters. The combined color image is an IR-IR-G-B combination. (IR used as Red image in RRGB). The telescope used is a 35 cm SCT @ f/33. Best Regards,

Tom ALDERWEIRELDT

→ Harold HILL's Ob-

serving Note for the

drwaing made on 1 Jan-

uary 1993; cited from

CMO #128 - 25 Jan 1993

issue - p1177.

(トム・アルデルヴァイデルウト 's-Gravenwezel 比利時)

• · · · · · · · Date: Mon, 09 Jan 2006 10:07:16 +0900 Subject: Mars-2006-01-07&08-KUMAMORI

寒いながらも少し気流が良くなりまた。太陽 湖の北側は淡いながらもダストの帯のように見 えますがこれ以上は残念ながら詳しくは写らな いのでハッキリとしません。

O · · · · · · Date: Fri, 13 Jan 2006 20:01:45 +0900 少し寒気が緩んで穏やかになってきました♪ が、シーイングは結構暴れています。

O·····Date: Fri, 20 Jan 2006 09:05:12 +0900 Subject: Mars-2006-01-18-KUMAMORI

風も弱く晴れたのですが、上空はさざ波のよ うに気流の乱れが繰り返され詳細は見えません。

熊森 照明 (Teruaki KUMAMORI 堺 Osaka)

• · · · · · · Enclosed are my Mars observation to date. The poor seeing has been a great disappointment especially as the planet has been a decent size and well placed for the UK.

You asked about Harold Hill. A sad loss of one of this country's greatest observers. He was 85.

He took ill on 23rd October 2005 with a mild stroke but he developed a chest infection and died on 30th October. He was a nature lover and first class photographer but did not use his camera on astronomical objects. Harold would draw exactly what he saw at the eyepiece and was well known for his Solar, Lunar and Planetary work. Many years ago he worked as a mining surveyor and was an accomplished draughtsman. He would always welcome anyone with a real interest in astronomy but disliked those who professed enthusiasm without foundation. Originally he used a 12-inch f/6 reflector and later a 10-inch reflector. Only just over a year before he died he bought an 8-inch Maksutov and with which he made his most recent drawings of Mars. He had made around 40 drawings of the planet at the present apparition before his untimely death.

The BAA awarded him the Merlin Medal but he would never join any local society. The world has lost a most dedicated astronomer and his work can be seen in "A Portfolio of Lunar Drawings" published by Cambridge University Press in 1991. The beauty and artistry of his work, the accuracy and attention to detail is truly remarkable. Harold Hill will be missed by his many friends but his drawings will live on, testimony to a most gifted man and an inspiration to us all.

I acknowledge an appreciation of Harold Hill by Eric Strach which provided some background information.

Very Best Wishes to all for 2006.

(postmark dated 9 January 2006)

Alan HEATH (アラン・ヒース Long Eaton UK 英國) 註) We are very sorry to hear of the sudden death of Harold HILL (Lancashire, UK). It was widely known he was an excellent Lunar observer with his drawings. He

1177_

25 Jan 1993

P Observing Notes by H HILL on 1 Jan 1993 at 20:30 GMT (ω=302 W) by use of a 25 cm spec

×286 Seeing & Transparency not good enough

for × 343.

NPC noticeably smaller in size than a week ago. The cap clear and bright but the contrast band was not v. distinct. Syrlis Major has a blunt aspect to the north - dark sage-green. Libya + Hellas whitish. Faint shadings in The Casius + Colar. regions. Continued impression of both Nilosyptis & Astabores but both difficult to grasp. Ismenius Locus a grey smudge. M. Acidalium very dark at the following limb.

Handd Hill

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was also one of our Mars colleagues. His colour drawings were impressive with a delicate reddish-orange tint of deserts and a grey-brownish colour of markings (he made use of a 25cm f10 Newtonian in 1992/1993): In addition, his hand-writing Notes created a good impression and we once cited his Observing Note made on 1 January 1993 on our page (CMO #128 - 25 Jan 1993 issue - p1177) which we reproduce here again. It was interesting that he otherwise used the terminology "Sinus Forcosus" instead of S Meridiani. He was absent for a while, but in 2003 he came back to contri-

bute to us with several colour drawings (CMO #277), and he also communicated on 11 January 2005 that he had increased the aperture of his Maksutov-Cassegrain from 15cm to 20cm f/20 to use in the coming apparitions (CMO #310). It is regrettable that we cannot any longer hear from him again. We sincerely hope Harold's soul rest in peace.(CMO Eds)

• · · · · · · Date: Mon, 9 Jan 2006 18:15:43 -0600 Subject: saheki crater

Dear Masatsugu Minami, I have just looked at your /

----CMO #171 (25 January 1996)----

CMO #171 was the memorial issue of CMO's 10th Anniversary. It consisted of 24 pages, and the first page was numbered p1767, and hence we published a total of 1766 pages in the preceding ten years. The first page shows a ccd colour Mars of Don PARKER made on 4 Feb 1995 ($\lambda=0.55$ °Ls, $\omega=2.75$ °W). The opening messages to the Anniversary were given by Don PARKER, Wolfgang MEYER, Tohru IWASAKI, Hiroshi ISHADOH and Masami MURAKAMI.

Don began as "Congratulations on the tenth anniversary of the CMO. It is hard to believe that ten years have passed since I received issue #1, but I am quite sure that as I get older, the Earth is spinning faster! The first issue was published only a few months before the tragic death of our mutual friend, Charles F. "Chick" Capen. Chick was my mentor, and his demise was not only a personal loss but also a loss of his encyclopedic knowledge of Mars. The CMO has fortuitously helped to fill some of this void with its emphasis on historical data as applied to current observations. It has become major reference resource for the ALPO Mars Section. --- Chick was a firm believer in international cooperation in Mars studies. Because of its rotation rate, the Red Planet virtually demands that observers be spread around the Earth if



quality work is to be done. Early on, he introduced me to the elegant work of Osawa and Saheki and showed how such observations are essential for filling in the complete picture of the apparition. ...", and he closed as "May the next ten years be even more interesting and exciting for amateur Mars astronomers!" Every phrase expressed by Don PARKER in this article is impressive even now, and among the phrases, his allusion to the work of the emails was interesting and pertinent: "A more satisfactory solution" than "the telephone communications used in 1988 and 1990 between the OAA, BAA and ALPO" "would be correspondence via electronic mail - almost instantaneous and, relatively inexpensive, and capable of reaching a large numbers of observers." Don also suggested that the CMO should play a leading role in "minimising the possibility of false alarms."

Masami MURAKAMI (Mk) confesses here he first did not well fit in with the CMO for a while even after he joined (from the 1990 apparition): He really needed a few years to be accustomed to the CMO method of observation and realise its true efficiency. As another effect, he writes that he became to feel no resistance to wrestle with an English-Japanese Dictionary to read the CMO. At that time he was not yet an editor of the CMO, while he soon started to build the CMO-Web in mid-1996. Really the era of Internet was coming.

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web site. This is great! I am euphoric over the designation of the crater on Mars with the name Saheki. You can well understand how much this means to me. Please convey my warmest congratulations and best wishes to Takeshi Sato-san, my good friends, and the beautiful Saheki family who entertained me so graciously on my visit to their home.

This is the greatest honor an observer of Mars can possibly wish for, and none is more deserving than Saheki.

William P SHEEHAN (ビル・シーハン MN 美)

• · · · · · · Date: Tue, 10 Jan 2006 17:45:45 +0100 Subject: Mars from 8.1.06

Dear Observers, here is my Mars from 8.1.06. After nearly one month with mad weather, it is my first picture

I am astonished, how much I still can see now on that very small Planetsurface. During last Opposition in 2003 I just saw the smal but bright Ice-Cap. In the past two years I learnd a lot about picture processing, the Mars surface and an effective method of focal length stretching:-))... Best wishes

This issue carries the column of "Ten Years Ago" which naturally treated the first issue published on 25 Jan 1986. At first Editors were composed of Tadashi ASADA (As), Takashi NAKAJIMA (Ni), and the present writer (Mn). Mn went to Taipei to observe the 1986 Mars in Feb and stayed there for ten months, and so during Mn's long absence, As edited the CMO and sent out the printed versions from Fukuoka.

in the new year...

CMO #171 also contained several routine articles in addition to LtE (from 27 persons). The OAA Mars Section corner reported the final observation of Tom CAVE made on 1 June 1995 (δ =6.3") at Mt Wilson. The 1994/1995 Mars Note (6) dealt with the recession of the 1995 north polar cap based on a total of 25 drawings made by David GRAHAM (λ=035°Ls~090°Ls). The 1994/1995 Mars Note (7) reviewed Don PARKER's 1995 ccd Mars (spent 8 pages): This is the second of the review (first one was in CMO #164 p1671) and treated the period after opposition at λ =058°Ls~111°Ls. Here were contributed 21 B&W images and 58 colour images, and we picked out a total of 23 images to print on our pages (including colour covers). Figure 16 (colour) shows a comparison of DPK's colour image on 28 Feb 1995 and HSTs on 25 Feb 1995 at around ω =030°W (originally the comparison made by Don himself). These results will be very useful in planning the observations of the coming 2007 and 2010 Mars. For instance it is pointed that the npc seen from around from $\omega=110^{\circ}W$ at $\lambda=062^{\circ}Ls$ shows a protrusion from the edge of the npc (near the inlet of Rima Borealis), which might have been caused by the irregularity of the thawing speed near the perimeter.

The issue also has a column on Astronomical Phenomena in Feb 1996 written by Mk, and 一點點。 一天天 written by *Mn* picked out a high-handed absurd statement in "ÉPHÉMÉRIDES ASTRO-NOMIQUES 1996" of the SAF: It insists (even now) that the UT (or Temps Universel) is "incorrectly" called GMT by many persons, especially by most of navigators and journalists. It says that the GMT is different from the TU by 12 hrs since GMT starts from at noon. Mn criticised this queer statement since the astronomical day in GMT was changed to start at midnight long time ago from 1 January 1925. "It is quite natural for any navigator to keep his or her time back at the prime meridian as if living at the home port." Mn incidentally cited the turning-over system of France which is different from the English way: If the English coin is turned over in the French way, the Queen is made upside-down.

To edit this memorial issue in January 1996, Mn returned home on the 20th day from Kyoto, received by Nj at Fukui, and we edited #171 from 21st to 23rd Jan at Mikuni. NISHITA (Ns) was however off with a cold, but after a while he printed the cover by a colour printer (taking one night) memorially this is the only one unique edition having colour pages we ever made. Finally on 27th Jan 1996 we (Ni, Ns and Mn) finished printing and sent out in the evening from Fukui. (Mn)

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O····· Date: Wed, 11 Jan 2006 00:49:52 +0100 Subject: Mars from 10.1.06

Dear Observers, this is my Mars from 10.1.06. Best wishes

Silvia KOWOLLIK (シルウ ゚ィア・コウ ゚ ォッリク Ludwigsburg Germany 徳)

(註) *SKw*'s image on 10 January 2006 was the last one we received this apparition. Thanks a lot, Silvia, for your nice contributions during the 2005 apparition. (*Mk&Mn*)

• · · · · · · · Date: Tue, 10 Jan 2006 22:16:18 +0100 Subject: Mars: CCD-sets 2006 Jan.8 and Jan.9

Dear Mr. Minami & Murakami! After one month of bad weather (much snow!) the sky cleared up two days ago see my Mars results included in this mail! regards

Robert SCHULZ (ロヘールト・シュルツ Wien 奥)

• · · · · · · · Date: Wed, 11 Jan 2006 12:55:10 -0800 Subject: Image taken 11 Jan 2006

Attached is my image taken 11 Jan 2006. Still fighting clouds and poor seeing,

O····· Date: Tue, 10 Jan 2006 05:34:01 -0800 Subject: Image for 10 Jan 2006

Attached is my image taken 10 Jan 2006. The clouds moved in preventing a blue image.

O·····Date: Wed, 11 Jan 2006 12:55:10 -0800 Subject: Image taken 11 Jan 2006

Attached is my image taken 11 Jan 2006. Still fighting clouds and poor seeing,

David ANDERSON (デイヴィッド・アンダーソン SC 美)

●・・・・・・Sent: Wed, January 11, 2006 2:36 PM Subject: Re: 佐伯氏火星クレーターに関して

村上昌巳様、お世話になっております。

『朝日新聞』の記者さんに私のE-meilアドレス、 電話番号を教えていただいて結構です。よろし くお願いします。

佐藤 健 (Takeshi (Ken) SATO 廣島 Hiroshima)

・・・・・・・ Date: Thu, 12 Jan 2006 11:14:14 +0900 Subject: 1月11日の画像

南様:(cc村上様) 明けましておめでとうございます。 一月11日の画像をお送りいたします。 画像の上方向が北からずれてしまいました。(特に最初のセットのG光。)お許し下さい。

O····· Date: Sun, 15 Jan 2006 21:13:13 +0900 Subject: Re: FW:Mo01,09,12Jan_06

>淺田さんはRegiStax使っていましたっけ?

RegiStax は使っていません。自作の選別プログラムと、ステライメージの最大エントロピー法です。森田さんの画像のほうが良いので、私も使ってみようかと思います。

達田 正 (Tadashi ASADA 宗像 Fukuoka)

●・・・・・・ Date: Thu, 12 Jan 2006 13:59:31 +0900 Subject: 『朝日新聞』の件

南政次様、**あけましておめでとうございます**。 今年もよろしくお願い申し上げます。

メールを頂きながら、返事が送れたこと申し 訳ありません。実は、母が正月の三が日を過ぎ てから、急に身体のむくみがひどくなり、同時 にむくみによる心臓への負担が大きくなり息苦 しいということで緊急に8日に入院しました。これまで躊躇していましたが、10日から透析を開始しましたところ心臓の苦しさ及び身体のむくみもかなり改善され、その後の経過はよく安心しております。

昨年のシーハンさん南様のS&Tの記事及びその翻訳したものを、今年の元旦に佐伯家の家族が集まったところで(父が生存中から家族全員が毎年元旦に集まります。今年は十八名参集しました)、皆に配布し披露することが出来ました。シーハンさん、南様には非常に素晴らしい記事を作って頂き大変感謝しております。学術雑誌で、個人を取り上げた形での記事はあまりありませんので、恭範(今年は帰国せず)も非常に喜んでおりました。

さて、火星のクレータへの命名の件、推薦してくださった佐藤健様が言われるように2001年のシーハンさんの論文等が強力に後押ししてくれたものと感謝しております。『火星通信』Webのサヘキクレータの紹介記事有難うございました。非常によく出来ているので喜んでおります。松本達二郎様より1月4日付のお手紙で、ホイヘンスとサヘキ火口の対の写真送っていただきました。非常に鮮明な写真なので驚いております。

佐藤健様から今回のサヘキクレータに関して、Smithさんのメールや85kmの大きさの程度、ほかのクレータとの比較及び他の火口の名前についての詳細な説明を頂いております。超巨大ではないが、大型であることで佐藤健様も喜んでおられました。なお、朝日新聞の杉本さんの件了解いたしました。どうも有り難うございました。

反射望遠鏡のお話大変興味深く読ませて頂きました。個人の家から庭に持ち出し星を覗くのなら体力等考慮すれば20cmは適当な大きさだったのかもしれません。誇りに思って望遠鏡大事に保存します。

今年は地球温暖化がどこに行ったのかと思う ぐらい寒い日々と雪の被害等が出ております。 風邪も流行の兆しを見せております。くれぐれ もお身体お大事にお過ごし下さい。取り急ぎご 返事申し上げます。今後共よろしくお願い申し 上げます。

追伸:写真どうもありがとうございました。1985年ならばまだ元気だったときの父の70歳ぐらいの写真です。よい記念になります。プリントして母に渡します。大変喜ぶと思います。

○·····Date: Thu, 19 Jan 2006 08:27:54 +0900 Subject: 『朝日新聞』

南政次様、メールどうもありがとうございました。昨日18日(水)午後3時に朝日の杉本氏が来訪されました。資料(OAAの追悼集、日本暦学会の追悼集、昨年12月号のS&Tの父の写真及びスケッチのコピー、佐藤氏の火星のクレーターの大きさを比較した手紙(佐藤氏からは了承を得ております)のコピー)等を参考にお渡ししました。

ただ、父の業績については小生もわかりかね ますので、南様にお尋ねくださいと言っており 25 January 2006 Ser2-0335

2006年(平成18年) 1月21日

陆凯

(夕刊)

調下

32歳)=佐伯雅夫さん提供

orting Saheki's Crater (the photo shows SAHEKI, 32 of age) ったものです。10秒角台まで小さくなって来ま したが、気流が良いセブではまだまだ出来そう

Dear observers, I returned from Japan on 10th Jan. It

was very cold in Japan where I tried to take Mars

The Asahi Shimbun (evening edition on 21 January 2006) reporting Saheki's Crater (the photo shows SAHEKI, 32 of age)

ます。なお、父が観測したのは輝点、閃光、怪 光どの言葉が適当かわかりかねますので、よろ しくお伝え下さい。二、三日以内に連絡がある と思いますので、その折にはぜひよろしくお願 いします。・・・

取り急ぎご連絡申し上げます。寒い折くれ ぐれもご自愛下さい。

○・・・・・・ Date: Sat, 21 Jan 2006 18:08:17 +0900 Subject: 『朝日新聞』の夕刊

南政次様、拝啓、火星のサヘキクレータの命名に関しましては、大変お世話になり誠に有難 うございます。心より感謝しております。

さて、本日の『朝日新聞』夕刊に父の記事が 載りましたのでご送付申し上げます。18日(水) 午後に取材に来られて、本日の朝に不明な点(佐 伯がサヘキかサエキなど)を尋ねる電話があり、 もしライブドア関係等の大きな事件がなければ 夕刊に載せるとの連絡を受けました。第1面に紹介記事、第10面に本文と2部に構成されておりま 本文のスペースも十分であるのでよか・南様の記事と同じものとなりました。なお、父の業績でいております。 事と同じもの様に連絡を取っております。 いたのですが、本日の電話では連絡は上手くいかなかったようで、誠に残念に思っております。

今後ともよろしくお願い申し上げます。寒い 折くれぐれもお身体ご自愛ください。取り急ぎ ご連絡申し上げます。敬具

佐伯 雅夫 (Masao SAHEKI 伊丹 Itami, Hyogo)

• · · · · · · · Date: Sat, 14 Jan 2006 14:43:13 +0900 Subject: Mars image 13 Jan, 2006

こんにちは、一月10日からセブ島に戻っています。正月は日本でユックリ過ごしました。寒さはすこし辛いものがありましたが、やはり日本のほうが何かと良いとつくづく感じました。火星は日本でも見ましたがあの気流の悪さでは意欲が出ませんでした。13日の画像はセブ島で撮

ったものです。10秒角台まで小さくなって来ましたが、気流が良いセブではまだまだ出来そうです。

土曜日

4版 10

images, but could obtain no good image.

O・・・・・・・ Date: Wed, 18 Jan 2006 13:30:49 +0900 Subject: セブから

こんにちは、先週からセブ島に着いて一週間が経ち、正常の生活に慣れてきました。天気は思ったより悪く、曇りの日がかなりあります。気温は22~30℃位ですが、湿度がないので余り暑く感じません。日本と比べれば別世界の気温ですが、寒さ知らずの環境で体調管理には注意しています。15日はセブ島最大のお祭りがあり、見に行ってきました。色彩感覚の違いを覆いた感じました。ここは常夏の島を再認識しました。

阿久津 富夫 (Tomio AKUTSU セブ The Philippines)

••••••• Date: Sun, 15 Jan 2006 15:53:22 +0900 Subject: Mo01,09,12Jan_06

やっと一月のものが処理できましたのでお送りします。12日は久しぶりに好Seeingで、もう少し早めに帰れれば良像が撮れたのにと思うと悔しいのですが、仕方ありません。撮り始めて雲が出始め、曇ってしまいました。次の日は雨でしたが、やはり雨の前は気流が落ち着く様です。

天気予報では広島は晴れマークが続いていますが、夕方から曇り始め、明け方は晴れる事が 多く、予報通りにはいかないようです。

Lu075はようやく少し慣れてきて、2000枚前後撮ってSeeingが良いと、その中の1800~1900枚、悪いと700~800枚の合成で作っています。1秒間に60枚前後(画像の大きさで変化します)で撮っています。115枚で撮る事も出来ますが、B光はほとんど写らなくなります。効率よく撮るにはやはり今の形が一番良いようです。もう少し、感度が良いと十分なのですが、薄雲が掛かるとB光

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は写らなくなってしまいます。後の処理はRegiStax v3.0.1.24を使用しています。ウェーブレット変換でかなりの良像になりますが、本当の良像だけを取り込めば、まだ、像は良くなりそうです。(集まった像を一つずつ見てみると中には良くないものが多々入っています。なかなかそこまでの時間がありませんが。)

十一月8日より処理できていませんが、また送っていきますのでよろしくお願いします。

O····· Date: Fri, 20 Jan 2006 01:10:43 +0900 Subject: Mo18Jan 06

18日の画像をお送りします。時間が余り無く、 11:53のものだけですが、Seeingはまずまずでした。 前回のものより1.5倍大きくしてあります。

森田 行雄 (Yukio MORITA 廿日市 Hiroshima)

●・・・・・・ Date: Tue, 17 Jan 2006 11:39:11 +0900 Subject: 1月前半の観測結果の報告について

十二月後半は、悪天候や諸般の事情のため、スケッチを報告することができませんでしたが、 一月15日締め分は微々たる数ですが、昨日普通便でコピーを発送しました。

一気に視直径が小さくなっていて、寂しいば かりです。

仕事が忙しい時期に入ってきました。05年シーズン末のように、いずれ週末観測者化することは避けられないと思います。

今年もよろしくお願いいたします。

岩崎 微 (Thoru IWASAKI 小倉 KitaKyushu)

• · · · · · · · · Date: Tue, 17 Jan 2006 13:47:35 -0700 From: Rik Hill To: Donald Parker Subject: Catalina Sky Survey

Well this isn't Mars but there are some Mars-crossers involved I thought this might be of interest:

http://uanews.org/cgi-bin/WebObjects/UANews.woa/9/wa/SRStoryDetails?

ArticleID=12119

We worked pretty hard to get here!

Rik HILL (リック・ヒル LPL AZ 美)

• · · · · · · · Date: Thu, 19 Jan 2006 17:21:58 +0100 Subject: Mars 060118

Dear all, Here a observation of mars again the weather isn't so cooperating lately, as you can see the bright cloud over Candor (as Damian reported) still excist, also from another member of our Dutch group reported that it was very bright visually around 19:15 ut and extended way to the west of the NPC, it also vissible on my image. Seeing was fair atmost, sometimes double images in the frames best to all

http://home.tiscali.nl/planetadelaar/mars060118.jpg

Jan ADELAAR (ヤン・アテ゛ラール Arnhem Holland 荷蘭)

●・・・・・・・ Date: Sat, 21 Jan 2006 16:50:55 +0900 Subject: アサヒコム関西に掲載

杉本@朝日新聞です。本日の大阪本社の夕刊に 掲載された記事はアサヒコム関西にも掲載され ました。ありがとうございました。

○・・・・・・ Date: Sun, 22 Jan 2006 09:53:16 +0900 Subject: 全国に掲載

みなさま、杉本@朝日新聞です。佐伯さんの記事は、朝日新聞の四本社すべてに掲載されました。 大阪本社 (ほぼ本州の西半分と四国) 西部本社 (山口と九州) は21日(土)夕刊、 東京本社 (ほぼ東日本、記事はかなり削られている) 名古屋本社 (東海三県)は22日(日)朝刊です。ありがとうございました。

(記事は一定期間たつと消されてしまう様です)

杉本 深 (Kiyoshi SUGIMOTO 『朝日新聞』 大阪本社・科学医療部 Asahi Osaka)

(註) 今回の記事は杉本潔記者がCMO-Webの表紙でSaheki_Craterのことを知りMk氏の連絡を取り、Mk氏がアレンジしたことから始まりました。 (CMO_Fukui)

 $\Rightarrow \Rightarrow \Rightarrow$

シー・エム・オー・フクイ

- 中 島 孝 Ni ──

★二十年間、かわらぬご支援有難うございました。今後とも宜しくお願い申し上げます。不一

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

『火星通信』<mark>#315</mark> (25 January 2006) 編集:南 政 次(Mn)、村上 昌已(Mk)、中 島 孝(Nj) 西田 昭徳(Ns)、常間地 ひとみ(Ts)

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