COMMUNICATIONS IN 東亞天文學會「火星通信」since 1986

MARS

25 March 2008

OBSERVATIONS

Published by the OAA Mars Section

CMO 2007/2008 Mars Report #15 -

OAA Mars Section -

his time we review the CMO Mars observations made during the period from 16 February (λ =033°Ls) to 15 March 2008 (λ =046°Ls),

during which the apparent diameter δ went down rapidly from δ =10.4" to δ =7.9". Before opposition, it needed one month and a half (from 25 Aug to 11 Oct 2007) for δ to augment this amount of angle, while it is rapider when shrinking as is the case the opposition visits after passing by the perihelion. The central latitude φ moved from φ =2°S to 3°N. On 29 Feb (λ =038°Ls), the tilt of the north pole was bent toward us, but it is not enough to watch the npc sufficiently. The phase angle 1 increased from 32° to 37°. The apparent declination D of Mars is going down to south, and between 13 and 14 March it broke through the point of 26°N downward.

 δ ・・・・・・今回は16Febから15Mar迄の一ヶ月間を概觀する。視直徑 δ は δ =10.4"から δ =7.9"まで急速に縮小 した。日に0.01"の割で小さくなっている。衝前にはこれだけ増加するのに一ヶ月半掛かった(25Aug から11Oct2007迄)のに對し、衝後は縮小が速くなっており、近日點通過後に最接近を迎える接近の特 徴である。季節はλ=033°Lsから046°Lsまで進捗した。中央緯度φはφ=2°Sから3°Nに動いた。29Feb (λ=038°Ls)から北極がこちらを向き始めたが、北極冠は未だ充分に眺められない。位相角ιは32°から37° に増加した。視赤緯Dは南に下がっており、13/14Marに26°Nを切った。

♂······Since the Mars is going away, the total numbers of observers and observations are decreasing. This time we have received the reports from 27 observers. 視直徑が縮小していることもあり觀測者數、 觀測數共に減っている。觀測者數は今回27名であった。最盛期から比べると半減である。

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

7 Sets of *RGB* + 7 *IR* Images (17, 28, 29 February; 11, 15 March 2008) f/33, 45, 57, 77⊗36cm SCT with a DMK21AF04

ALLEN, Ethan T イーサン・アッレン (EAl) 加利福尼亞 Sebastopol, CA, USA

5 Sets of *RGB* + 1 *IR* Images (26 February; 6*, 7* March 2008) f/41⊗31cm speculum with a DMK21AF04 & SKYnyx 2-0M*

AMADORI, Vittorio ヴィットリオ・アマドリ (VAm) 義大利 Soiano del Lago, Italia

2 Sets of RGB + 1 IR Images (18, 24 February 2008) 27cm spec with Vesta Pro

BOSMAN, Richard リシャルト・ボズマン (RBs) 尼徳蘭 Enschede, Nederland

1 Set of RGB + 1 Colour Images (19 February; 5 March 2008) f/70⊗28cm SCT with an ATK-2HS

CASTELLÀ, Jaume ファウメ・カステイヤ (JCt) Badalona, España

3 Sets of RGB + 1 IR Images (22 February; 14 March 2008)

f/50⊗28cm SCT with a DMK21F04.AS

DELCROIX, Marc マルク・デルクロア (MDc) 法國 Tournefeuille, France

- 1 Set of RGB Images (22 February 2008) f/58⊗25cm SCT with SKYnyx 2-0M
- **DUPONT, Xavier** グザヴィエ・デュポン (XDp) 法國 Saint Roch, France
 - 5 Sets of RGB Images (23 February; 1, 12 March 2008) f/53⊗18cm spec with a ToUcam Pro I
- FLANAGAN, William D ビル・フラナガン(WFI) 徳克薩斯・休斯敦 Houston, TX, USA
- **GHOMIZADEH, Sadegh** サデグ・ゴミザデ (*SGh*) 伊朗・徳黑蘭 Tehran, Iran 2 Sets of *RsGB* + 10 *Colour* Images (16, 21, 24, 29 February; 2, 6, ~8, 10, 12 March 2008) //37⊗28cm SCT with a SKYnyx 2-0M
- GORCZYNSKY, Peter ピート・ゴルチンスキー (PGc) 康湼狄格 Oxford, CT, USA 2 Sets of RGB + 2 IR Images (25 February; 6 March 2008)

 f/42⊗18cm Maksutov-Cassegrain with a DMK21AF04
- GRAHAM, David デイヴィッド・グレアム (*DGh*) 英國·北約克夏Catterick, N Yorkshire, UK 4 Drawings (16, 18 February; 4 March 2008) 310, 410× 23cm Maksutov Cassegrain
- HEATH, Alan W アラン・ヒース (*AHt*) 長伊頓・英國 Long Eaton, Nottingham, UK 4 Notes (17, 26, 27 February; 2 March 2008) 180, 280×25cm speculum
- 4 Notes (17, 26, 27 February; 2 March 2008) 180, 280×25cm speculum KIDD, Simon D サイモン・キッド (SKd) 英國 Welwyn, Herts, UK
 - 4 Colour Images (16, 17, 19 February; 3 March 2008) f/50⊗36cm SCT with a DBK21AF04.AS
- KOWOLLIK, Silvia シルヴィア・コヴォッリク (SKw) 徳國 Ludwigsburg, Deutchland
 1 Set of RGB + 1 IR Images (23 February 2008) 80cm Cassegrain* with a DMK21AF04.AS
 *Zollern-Alb Observatory
- MAKSYMOWICZ, Stanislas スタニスラス・マクシモヴィッチ (SMk) 法國 Ecquevilly, France 7 Sets of Drawings (16, 18*, 23/24, 27 February; 1, 5*, 12 March 2008)
 192×~305×15cm speculum, 20cm Cassegrain*
- MELILLO, Frank J フランク・メリッロ (FMI) 紐約 Holtsville, NY, USA 6 Colour + 4 R Images (16, 22, 25 February; 3*, 13* March 2008) 25cm SCT with a ToUcam pro II & Starlight Xpress*
- MINAMI, Masatsugu 南 政 次 (Mn) 福井 Fukui, Fukui, Japan

 22 Drawings (21, 28 February; 8, 10, 12, 15 March 2008) 400, 600, 640×20cm ED refractor*

 *Fukui City Observatory 福井市自然史博物館屋上天文臺
- MORITA, Yukio 森田 行雄 (Mo) 廿日市 Hatsuka-ichi, Hiroshima, Japan 35 Sets of *RGB* + 35 *IR* Images (16, 20, 21, 28 February; 1, 5, 7, 8, 10, ~12, 15 March 2008) 25cm spec with a Lu075M
- MURAKAMI, Masami 村上 昌己 (*Mk*) 藤澤 Fujisawa, Kanagawa, Japan 6 Drawings (8, 11, 13 March 2008) 320×20cm *F*/8 speculum
- NISHITA, Akinori 西田 昭徳 (Ns) あわら Awara, Fukui, Japan 1 Set of RGB + 1 IR Images (15 March 2008) 30cm speculum with a Lu075M
- PARKER, Donald C ドン・パーカー (*DPk*) 佛羅里達·邁阿密 Miami, FL, USA 7 Sets of *RGB* + 1 *Colour* Images (19, 22, 26 February; 1, 2, 4, 11 March 2008) f/47⊗41cm F/6 speculum with a SKYnyx 2-0M
- SHARP, Ian イアン・シャープ (*ISp*) 英國 Ham, West Sussex, UK 2 *Colour* Images (16, 18 February 2008) 28cm SCT with a SKYnyx 2-0M
- TEICHERT, Gérard ジェラール・タイシェルト (*GTc*) 法國 Hattstatt, France 3 Drawings (18, 19, 23 February 2008) 330, 350×28cm SCT

TYLER, David デーヴ・タイラー (DTy) 英國 Flackwell Heath, Buckinghamshire, UK 7 Sets of RGB + 3 Colour + 3 B Images (17, ~20*, 26 February; 7 March 2008) f/50⊗36cm SCT & f/48⊗28cm SCT* with a SKYnyx 2-0

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

3 Sets of RGB Images (23, 25 February; 3 March 2008) 32cm speculum with a DMK21AU04.AS

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

1 Set of RGB Images (1 March 2008) 20cm SCT with a DBK21AF04.AS

decreased: We here choose three sets of images as representatives which show some characteristics of this period: 1) BOSMAN (RBs)'s set of images made on 19 Feb (λ =034°Ls, δ =10.0") at ω =349°W, 2) WALKER (SWk)'s set of images on 10 Mar (λ =043°Ls, δ =8.3") at ω =234°W, and 3) AKUTSU (Ak)'s set on 11 Mar (λ =044°Ls, δ =8.2") at ω =047°W, 056°W. RBs's shows mildly the region from S Sabaeus to the Huygens crater as well as the area of the morning M Acidalium. Note that the eastern part of S Sabaeus looks doubled. SWk's images show a detail of the present status of the areas of the Ætheria dark patch and Valhalla (now ı is large) and furthermore it caught the mist floating over the southern continents showing also that the spr is still free from the hood. It also shows another mist flow to the north of the morning equator. Ak's images are not well processed but show well the present state of the area of Margaritifer S in contrast with the M Acidalium complex. b) Argyre Cloud: There looks to exist no explicit cloud at the spr while the Argyre cloud has still been active (or sometimes less active). It is apparent on the images on 16 Feb (λ =033°Ls) of MELILLO (FMl) at ω =090°W, on 19 Feb (λ =034°Ls) of FLANAGAN (WFl) at ω =090°W, 095°W, 100°W, of Don PARKER (DPk) at ω =104°W, on 22 Feb (λ =035°Ls) of FMl at ω =054°W, 064°W, of DPk at ω=077°W (Argyre exposed) etc. More inside WFl's images on 24 Feb (λ =036°Ls) at ω=047°W, and on 25 Feb (λ =037°Ls) at ω =033°W, 043°W show the cloud. However on the latter it is rather weak at Argyre but extending to the east. See also GORCZYNSKI (PGc)'s set on the day at ω=040°W. FMl's image at ω=076°W shows however as if there is an sph perhaps because of the difference of the processing. The Argyre cloud was also evident on 26 Feb (λ =037°Ls) on *DPk*'s images at ω =034°W, and ALLEN (*EAl*)'s ones at ω =059°W. In March, MORITA (Mo) also showed it on 8 Mar (λ =042°Ls) at ω =069°W~106°W, and Ak on 11 Mar (λ=044°Ls) at ω=047°W, 056°W. On the latter it looks weaker because it is more inside. At Fukui, Nj and Mn watched the Argyre cloud at the evening side on 8 Mar (λ =042°Ls). c) Cloud at the Southern Hellas: The evening haze which floated over the southern Hellas is shown on SWk's images on 3 Mar (λ =040°Ls) at ω=320°W, PGc's on 6 Mar (λ =041°Ls) at ω=320°W, and EAl's on 7 Mar (λ =042°Ls) at ω=323°W, 330°W, 336°W. On the other hand the cloud at the morning side was not explicit as shown by the following images: Mo's on 21 Feb (λ =035°Ls) at ω =258°W, KIDD (SKd)'s on 3 Mar (λ =040°Ls) at ω =255°W, DPk's on 11 Mar (λ =043°Ls) at ω =255°W, FMl's on 13 Mar (λ =044°Ls) at ω =258°W etc. On these however the preceding cloud over Ausonia is quite thick. Mo tried on 20 Feb (λ =035°Ls) to detect the appearance of the morning cloud successively at ω=254°W, 258°W, 268°W, 277°W, but their B did not work well. The cloud or haze which flows out from Hellas to Noachis was caught by CASTILLÀ (JCt) on 22 Feb (λ =036°Ls) at ω =007°W, 021°W, by KOWOLLIK (SKw) on 23 Feb (λ =036°Ls) at ω =330°W, by WFl on 28 Feb (λ =038°Ls) at ω=005°W, 010°W, 015°W, by *DPk* on 1 Mar (λ=039°Ls) at ω=010°W as well as on 4 Mar (λ=040°Ls) at ω= 322°W. Visually the cloud was observed at Fukui (Nj and Mn) on 12 Mar (λ =044°Ls) and 15 Mar (λ = 046°Ls): It was rather light. d) Inside of Hellas: This time there are few images that caught Hellas near the CM, but inside Hellas the northern part looks lighter as well as the NW part as shown on 18 Feb $(\lambda=034^{\circ}Ls)$ by TYLER (DTy) at ω=334°W, on 23 Feb ($\lambda=036^{\circ}Ls$) by DUPONT (XDp) at ω=318°W and by SKw at $\omega=330^{\circ}$ W, on 4 Mar ($\lambda=040^{\circ}$ Ls) by *DPk* at $\omega=322^{\circ}$ W and so on. **e) Equatorial Band Mist**: If the season

passes λ =060°Ls, there appears a mist belt along the equatorial band (may be abbreviated as the ebm) as described for example in http://homepage2.nifty.com/~cmo/99Note16/index.htm, while DPk really shot out an equatorial mist near the CM on 11 Mar (λ=043°Ls) at ω=255°W, 271°W. There looks less strong mist appearance at the morning and evening sides perhaps because of the deep phase angle. As noted before SWk's excellent images (especially B) on 10 Mar (λ=043°Ls) at ω=234°W aslo show an expansion of condensate to the north of the morning equator and also earlier images (especailly B image) by XDp on 1 Mar (λ =039°Ls) at ω=253°W, 279°W also show a bit of the mist. See also JCt's B image made on 14 Mar (λ = 045°Ls) at ω =137°W. The ebm will gain its height after λ =100°Ls. f) Morning Mist at Chryse: FMl showed on 3 Mar (λ =040°Ls) at ω =005°W that the Chryse area was bright on the morning side. *EAl*'s images, especially his B image, on 6 Mar (λ =041°Ls) at ω =355°W show the morning mist a bit. On 15 Mar (λ =045°Ls) however Mo produced good sets of images at ω=018°W, 023°W, 032°W, 042°W which all show explicitly the morning mist thick at Chryse in B. It was barriered at Oxus, and it is not like an ebm. See also NISHITA (Ns)'s images on the day at ω =022°W. **g)** Bright Streak along Deuteronilus: Adjacent to Deuteronilus from the north there existed a bright streak, and this time it was so bright at the morning and evening sides that many images caught it especially in B. See SWk's on 23 Feb (λ =036°Ls) at ω =022°W, WFl's on 24 Feb (λ =036°Ls) at ω =047°W, DPk's on 26 Feb (λ =037°Ls) at ω =034°W as well as on 1 Mar (λ = 039°Ls) at ω =010°W. Similarly *DPk*'s images on 2 Mar (λ =039°Ls) at ω =347°W~353°W, and on 4 Mar (λ = 040°Ls) at ω=322°W show it. WFl's images prove that the condensate mist belt exists broader than the streak, and hence it is recognised that the streak was more brightened by the presence of the water vapour. EAl's images on 6 Mar (λ =041°Ls) at ω =355°W do not show it so explicitly in B, and so this must have been a phenomenon in the morning and afternoon. h) Tempe Cloud: DPk's images on 26 Feb (λ = 037°Ls) at ω=034°W show beautifully a cloud trail from Tempe to the morning terminator. WFl's images on 28 Feb (λ=038°Ls) at ω=005°W, 010°W, 015°W, and *DPk*'s on 1 Mar (λ=039°Ls) at ω=010°W show the thick morning cloud at Tempe. See also Mo's images on 15 Mar (λ=045°Ls) at ω=018°W, 023°W, 032°W, 042°W where shown is a thick mist at Tempe in addtion to Chryse. The Cyclonic Typhoon season at Baltia is ahead. i) Evening Mist over Syrtis Mj: If Syrtis Mj is near the limb, the covering mist often makes the tint of Syrtis Mj green-bluish. DPk described it on 2 Mar (λ =039°Ls) at ω =347°W~353°W where Syrtis Mj turned dark blue beneath the evening mist. EAl also succeeded in showing the phenomenon on 6 Mar (λ=041°Ls) at ω=355°W. Mn saw the evening mist certainly gathers over Syrtis Mj on 15 Mar $(\lambda=046^{\circ}Ls)$ at ω=336°W. As to the morning side phenomenon, refer to *DPk*'s images on 11 Mar ($\lambda=043^{\circ}Ls$) at ω=255°W, 271°W. j) The Shadows of Tharsis Montes: Since the phase angle much increased, the higher mountain ridges at the morning side began to cast their shadows to the west. It is interesting to see how the landscape of the mountain area varies on the successive excellent images on 19 Feb (λ=034°Ls, 1=33°) of WFl at ω=090°W, 095°W, 100°W, and then of DPk at ω=104°W. Here Alba Patera is also included in this category, and the west flank of Olympus Mons is also quite shadowed. It is also interesting to see how the lower morning mist avoids Montes and the summits are exposed with the true colours. On 22 Feb (λ =035°Ls, 1=34°) *DPk* shot another image at ω =077°W. See also a shadow of Ascraeus Mons on *EAl*'s images on 26 Feb (λ=037°Ls) at ω=059°W. In Japan, on 8 Mar (λ=042°Ls, ι=36°) Mo at Hiroshima chased at ω=069°W, 079°W, 089°W, 098°W, 106°W and showed some of shadows. On the day the condition was good widely in Japan, and Mk at Yokohama saw a shade of the ridges at ω=040°W~, and at Fukui, Nj and Mn checked a few shadows at ω=067°W~096°W. **k)** Elysium Mons: Mo's set of images on 21 Feb (λ=035°Ls, δ=9.8", t=33°) at ω=258°W shows Elysium Mons bright near the evening limb. This must be the afternoon cloud. SWk's excellent images on 10 Mar (λ =043°Ls, δ =8.3") at ω =234°W don't show any longer the strange bright spot treated in the preceding report. *I) Miscellaneous: RBs*'s set of images on 19 Feb (λ =034°Ls) at ω =349°W shows Depressiones Hellesponticae clearly. This detail was largely given on the images of *SWk* on 23 Feb (λ =036°Ls) at ω =022°W. We have not given this time a detail of the mists at the southern high latitudes, but *Ak*'s set of images on 28 Feb (λ =038°Ls) at ω =182°W gives an example. We also note that *Ak*'s images on 29 Feb (λ =039°Ls) at ω =148°W show a roundish cloud patch a bit to the SW of Olympus Mons which is not also bare.

♂・・・・・a)キーになる像:われわれは最初にこの時期の良像から代表として次の三點を選ぶ。先ず、 ボスマン (RBs)氏の19Feb(λ =034°Ls、 δ =10.0") ω =349°W、ウォーカー(SWk)氏の10Mar(λ =043°Ls、 δ =8.3") ω =234°W、阿久津(Ak)氏の11Mar(λ =044°Ls、 δ =8.2") ω =047°W、056°Wである。RBs氏の像はシヌス・サ バエウスからホイヘンス・クレータ邊り、また朝方のマレ・アキダリウム邊りを適宜に描寫している。 シヌス・サバエウス東部が二重に見えることに注意。SWk氏の像はアエテリア暗斑の邊りの描寫や、(L が大きくなった爲の)バルハッラの描出だけだけでなく、南の大陸の靄の帶を好く捉え、また南極は 雲に未だ覆われていないことを示している他、朝方の赤道北にも奇妙な靄の流れがある。Ak氏の像 は處理は拙いが、マルガリティフェル・シヌスの邊りのこの時期の様子をマレ・アキダリウムなどと對 比して描写している。b)アルギュレ雲:南極地には雲が發達していないが、依然アルギュレ雲は消長 を繰り返している。16Feb(λ=033°Ls)のメリッロ(FMI)氏のω=090°W、19Feb(λ=034°Ls)のフラナガン(WFI) 氏のω=090°W、095°W、100°W、唐那·派克(DPk)氏のω=104°W、22Feb(λ=035°Ls)のFMI氏のω=054°W、 064°W、DPk氏のω=077°W(アルギュレは露呈)等に明白である。もっと内部においても、WFl氏の 24Feb(λ=036°Ls)ω=047°W、25Feb(λ=037°Ls)ω=033°W、043°Wにも見えている。但し後者では稍弱く、 東へ條状に流れている。ゴルチンスキ(PGc)氏の同日 ω =040°Wも參照。FMI氏の ω =076°Wでは處理の違 いで南極雲の様に見えるから注意。26Feb(λ=037°Ls)のDPk氏のω=034°W、アッレン(EAI)氏のω=059°W には明確である。三月に入って、 $8Mar(\lambda=042^{\circ}Ls)$ の森田(Mo)氏の $\omega=069^{\circ}W\sim106^{\circ}W$ 、 $11Mar(\lambda=044^{\circ}Ls)$ のAk氏のω=047°W、056°Wでもアルギュレ雲は、後者では内部で稍弱いが、見えている。福井(Nj&Mn)で は8Mar(λ=042°Ls)に夕方のアルギュレ雲を觀察している。c)ヘッラスの南部〓:ヘッラスの夕方、南 部に漂う夕靄はSWk氏の3Mar(λ=040°Ls)ω=320°W、PGc氏の6Mar(λ=041°Ls)ω=320°W、EAl氏の7Mar(λ= 042°Ls)ω=323°W、330°W、336°Wに出ている。一方、朝方のヘッラスには濃い雲は見當たらない:Mo 氏の21Feb(λ =035°Ls) ω =258°W、キッド(SKd)氏の3Mar(λ =040°Ls) ω =255°W、DPk氏の11Mar(λ =043°Ls) ω =255°W、FMI氏の13Mar(λ =044°Ls) ω =258°W等を参照。これらでは、先行してアウソニアから東に濃 い雲が見えている。尚、Mo氏は20Feb(λ=035°Ls)ω=254°W、258°W、268°W、277°Wで次第に顕わにな るところを追っているが、B光が思わしくない。他方、ヘッラス南部からノアキスの方へ流れる雲は、 カスティーヤ(JCt)氏の22Feb(λ=036°Ls)ω=007°W、021°W、コヴォッリク(SKw)さんの23Feb(λ=036°Ls) ω =330°W、WFI氏の28Feb(λ =038°Ls) ω =005°W、010°W、015°W、DPk氏の1Mar(λ =039°Ls) ω =010°W、及 び4Mar(λ =040°Ls) ω =322°Wに描寫されている。眼視では、アルギュレ雲も含めて福井で12Mar(λ = 044°Ls)、15Mar(λ=046°Ls)に觀測したが、可成り明るいものであった。d)ヘッラス内部:ヘッラスを 中央で捉えた像は少ないのであるが、内部で北部から西北部が稍明るい様子は、18Feb(λ=034°Ls)のタ イラー(DTy)氏のω=334°W、23Feb(λ=036°Ls)のデュポン(XDp)氏のω=318°W、コヴォッリク(SKw)さん のω=330°W、4Mar(λ=040°Ls)のDPk氏のω=322°Wに捉えられていると思う。e)**赤道帶霧ebm**:既に述 べたようにSWk氏の $10Mar(\lambda=043^{\circ}Ls)\omega=234^{\circ}W$ の良像にも赤道北に不思議な靄が出ている。あるいはも っと早く、1Mar(λ=039°Ls)ω=253°W, 279°WのXDp氏のB像にそこ儚く靄が内部で起こっている。DPk 氏も11Mar(λ=043°Ls)ω=255°W、271°Wには特に中央附近で靄の塊を捉えた。ただ、朝夕に稍弱く見え るのは位相角の所爲であろうか。一般にλ=060°Lsを過ぎると、赤道帶に霧の帶が見られる様になるの で、これと関係があろう(http://homepage2.nifty.com/~cmo/99Note16j/index.htm)。尚、JCt氏の14Mar (λ

=045°Ls)ω=137°WのB像も見られたい。ebmの最盛期はλ=100°Lsを過ぎてからであろう。f)クリュセ朝 🚼:FMl氏の3Mar(λ=040°Ls)ω=005°W等ではクリュセが朝方明るい。然し、EAl氏の6Mar(λ=041°Ls)ω= 355°WのB像では朝方の霧は未だ強くない。一方、15Mar(λ=045°Ls)になってMo氏がω=018°W、023°W、 032°W、042°Wで良像を得、B光でクリュセに相當な朝靄が立っていることを證明した。ただ、オク ススの邊りでキチンと止まってebmの様にはなっていない。尚、同日、西田(Ns)氏のω=022°Wの像も 參照。g)**デウテロニルス沿いの明條**:デウテロニルスの北側に沿って明條が恒常的に見えるが、今回 は特に朝夕で明るくなったようだ。Bに出ているのが特徴である。SWk氏の23Feb(λ=036°Ls)ω=022°W、 WFl氏の24Feb(λ=036°Ls)ω=047°W、DPk氏の26Feb(λ=037°Ls)ω=034°Wや1Mar(λ=039°Ls)ω=010°W、その 他同じくDPk氏の2Mar(λ=039°Ls)ω=347°W~353°W、4Mar(λ=040°Ls)ω=322°W等。WFl氏の畫像では水蒸 氣帶が幅廣く描冩されているので、水蒸氣によって明帶がより明るくなっていることが分かる。EAI 氏の6Mar(λ=041°Ls)ω=355°WではBで顕わではないので、朝夕の現象と思われる。h)テムペ〓:DPk氏 の 26Feb(λ=037°Ls)ω=034°Wにはテムペから朝方に雲が棚引いている。WFl氏の 28Feb(λ=038°Ls) ω=005°W、010°W、015°W、DPk氏の1Mar(λ=039°Ls)ω=010°Wでは朝雲である。15Mar(λ=045°Ls)のMo 氏のω=018°W、023°W、032°W、042°Wの像でも、クリュセと同じくらいにテムペに朝霧が出ている。 バルティアの颱風シーズンは間近である。**i)シュルティス・マイヨルの夕雲**:シュルティス・マイヨ ルの朝夕に淡い霧に覆われるとシュルティス・マイヨルの地の色が青色系統に換わるが、DPk氏は 2 $Mar(\lambda=039$ °Ls) $\omega=347$ °W~353°Wで表現している。EAl氏の6 $Mar(\lambda=041$ °Ls) $\omega=355$ °Wにも出ている。Mn の15Mar(λ=046°Ls)ω=336°Wの紀録では、確かにリビュアから淡い霧が殘っている。朝方でも起こりえ るが、鮮やかではないかも知れない。然し、朝方の DPk 氏の $\mathrm{11Mar}(\lambda=043^{\circ}\mathrm{Ls})\omega=255^{\circ}\mathrm{W}$, $\mathrm{271^{\circ}W}$ を見ら れたい。但し雲が蒼い譯ではない。j)タルシス山等の蔭:位相角が大きくなっているので高い山は蔭 を西側に落とす。そのためタルシス三山などが朝方で濃く見られる。19 $Feb(\lambda=034$ °Ls、 $\iota=33$ °)にはWFI 氏が ω =090°W、095°W、100°W、DPk氏が ω =104°Wと追っている。オリュムプス・モンスも大きく影を 落とす。アルバ・パテラもこの範疇である。地を這う朝霧が山を避け、山頂が露呈しているのも分か る。22Feb(λ=035°Ls、ι=34°)ω=077°WにはDPk氏が朝方二山を描冩した。また26Feb(λ=037°Ls)ω=059°W のEAI氏の畫像ではアスクラエウス・モンスの蔭が出掛かっている。日本では8Mar(λ=042°Ls、ι=36°) にはMo氏がω=069°W、079°W、089°W、098°W、106°Wと追跡して幾らか陰翳を出している。この日 は全国的に天氣が好く、横浜のMkはω=040°W~で陰翳と朝霧を見、福井ではNj氏とMnがω=067°W ~096°Wで幾つかの山蔭を捉えた。k)エリュシウム・モンス:Mo氏の21Feb(λ=035°Ls、δ=9.8"、 ι=33°)ω=258°Wの畫像ではエリュシウムが午後に明るく見えている。雲と思われる。SWk氏の10Mar (λ=043°Ls、δ=8.3")ω=234°Wに據れば、前回の奇異な明斑はもう出ていないようである。**リその他**:先 のRBs氏の像にはヘッレスポンティカエ・デプレッショニスが描出されているが、SWk氏の23Feb (λ=036°Ls)ω=022°Wにも大きく出ている。今回は南半球大陸の雲帶の記述をしなかったが、Ak氏の 28Feb(λ=038°Ls)ω=182°W等には描冩されている。また、Ak氏の29Feb(λ=039°Ls)ω=148°Wの影像にはオ リュムプス・モンスがやや透けて見えるが、その西南に圓い雲の塊がある(ロール雲)。

♂·····追加報告: We Further Received the following observations which were produced before 16 Feb.

ARDITTI, David デイヴィッド・アーディッチ (*DAr*) 英國 Stag Lane, Edgware, UK 4 Sets of *RGB* Images (4, 8, 9 February 2008) 36cm SCT with a SKYnyx 2-0

GRAHAM, David デイヴィッド・グレアム (*DGh*) 英國·北約克夏Catterick, N Yorkshire, UK 3 Drawings (10, 11*, 12 February 2008) 310×23cm Maksutov Cassegrain & 270×15cm refractor*

HEATH, Alan W アラン・ヒース (*AHt*) 長伊頓・英國 Long Eaton, Nottingham, UK 11 Notes + 6 Drawings* (5, 17*, 24*, January; 4*, 6, 8*, 9, 10*, 11, 12*, 13 February 2008) 180, 280×25cm speculum

MELKA, James T ジム・メルカ (JMl) 密蘇里・聖路易斯 St. Louis, MO, USA

3 Sets of *RGB* + 3 *Colour* + 2 *B* Images (23, 25, 28 January; 3, 11, 14 February 2008) 30cm speculum with a DBK21FA01.AS

PEACH, Damian A デミアン・ピーチ (DPc) 英國 Loudwater, Buckinghamshire, UK 25 Sets of *RGB* + 1 *R* + 2 *B* Images (5*, 6*, 7*, 8,* 9*, 10*, 11*, 14*, 20/21 December 2007) f/40⊗36cm SCT with a SKYnyx 2-0M at Barbados*

TYLER, David デーヴ・タイラー (DTy) 英國 Flackwell Heath, Buckinghamshire, UK 2 Sets of *RGB* Images (15 February 2008) //50⊗36cm SCT with a SKYnyx 2-0

E are thankful to Alan HEATH (AHt) for a set of drawings and detailed notes during the apparition. He seems to have felt that this apparition was a difficult one: The dark features were not as dark as he had expected because of the effect of the preceding dust storm. With his opinion we are completely agree. His summary of observations and a list of Intensity Estimates are recorded in the LtE corner. Jim MELKA (JMl)'s images on 3 Feb (λ =027°Ls) at ω =264°W should have been interestingly reviewed in the preceding issue. Damian PEACH (DPc)'s images are mostly those which he obtained at Barbados just before the opposition time and all are very superb. They show the regions from the donut-like Olympus Mons to S Meridiani at meridian of the disks. His images produced on 7 Dec (λ =359°Ls) at ω =064°W ~092°W, on 8 Dec (λ =359°Ls) at ω =068°W, 076°W, and on 9 Dec (λ =360°Ls) at ω =059°W, 064°W show interestingly the new features from Solis L to its SE in a great detail, including the area of Argyre. The images on 9 Dec and on 10 Dec (λ =000°Ls) at ω =042°W also prove the details of the darkened area of the western Erythraeum. The global mingled mist in B looks to avoid this area. The behaviour of the nph at the vernal equinox time is also interesting at the area of M Acidalium to Alba Patera. David TYLER (DTy)'s images made two months later on 15 Feb (λ =032°Ls) at ω =057°W, 065°W do not show any explicit Albedo change at the area of Solis L to its SE; just the condensate cloud distribution is different.

 δ · · · · · · · In the next issue we shall review the observations made during one month period from 16 March (λ =046°Ls, δ =7.9") to 15 April 2008 (λ =59°Ls, δ =6.3").

南 政 次・村上 昌己 M MINAMI & M MURAKAMI

便り

Letters to the Editor

• · · · · · Date: 2008 February 23

Dear Masatsugu, Enclosed are a few more observations of MARS but all are rather poor. The seeing has been consistently poor and I have had some difficulty in identifying some of the features, so please forgive me any errors. I hope to get a few more observation but must wait and see. Hoping all is well with you.

Kindest regard,

○ · · · · · · Date: 2008 March 9

Dear Masatsugu, Enclosed is what will be my final contribution of MARS for the current apparition. I apologise in advance of any mis-identification of some features as the awful seeing has made some difficult.

Currently I am experimenting with a fan on the telescope and early indications are that there is an advantage though only slight. Saturn will be an ideal target upon which to test this.

In the meantime, my Best Wishes to you all.

MARS 2007/8 SUMMARY OF OBSERVATIONS

Between 2007 October 21 and 2008 March 2 a total of 25 observations of the planet were made. Located in Gemini Mars was ideally placed for observation in the British Isles and a diameter of 15.9" on 2007 December 16. Opposition was 2007 December 24.

The TELESCOPE used was the 10-in (250mm) Newtonian Reflector with magnifications of $\times 175$ and $\times 278$. An apodizing screen was used at times with some improvement of image though I think this was mainly reduction of glare. SEEING conditions were poor throughout. Rarely better than S4 on the Antoniadi Scale and consistently unsteady image made identification of some features uncertain.

COLOUR FILTERS were used at times, these being Wratten 25 (RED), Wratten 15 (YELLOW), Wratten 80a (BLUE), Wratten 44a (BLUE) and Wratten 47 (BLUE) Generally speaking, the red filter increased the darkness of features by one point on the intensity scale. Blue (W44a) showed features but much weaker and BLUE (W47) usually showed a blank disc but NPR bright and West limb bright.

BLUE CLEARING Nothing really obvious seen this apparition but Syrtis Major was strongly suspected on 2007 Dec 10 and Mare Acidalium was seen vaguely and weak on 2008 Jan 5

INTENSITY ESTIMATE made on the scale of '0' for the pole cap and '10' the black background sky. A total of 96 estimates were made in integrated light and the results are given in accompanying table.

COLOUR A pink colour seen in Aeria on 2007 Dec 10 and Xanthe on 2008 Feb 12

A GENERAL COMMENT - I had the impression that the dark features were not as dark as I would have expected. I could not make Syrtis Major darker than 6 at best seeing whereas an intensity of 7 has been seen at earlier apparitions. The consistently unsteady seeing may have contributed to this.

All in all, this has been a disappointing apparition, particularly as the planet was so well placed and of reasonable image size.

INTENSITY ESTIMATES MARS 2007/8 -REGION----No. ESTIMATES- -AVERAGE Sinus Meridiani 5 5.2 Sinus Sabaeus 5.0 Deucalionis Regio 23 1.0 1.0 Arabia 0. 0 4. 0 Aeria 1 3 Mare Serpentis 4.0 Boreosyrtis Iapygia 2 5 3 2 3 1 5.0 5. 5 2. 0 Syrtis Major Libya 0.0 Hellas 5. 0 3. 0 Mare Hadriacum Trinacria 0. 0 5. 2 2. 5 3. 0 <u>Ausonia</u> 1 5 2 2 5 Mare Tyrrhenum Hesperia Thoth Mare Cimmerium 5. 0 0.0 Eridania 1 5 1 Trivium Charontis 3. 0 0. 0 3. 8 5. 5 2. 5 Elysium 3 Panchaia Mare Sirenum 4 Phoenicis Lacus 1.0 Amazonis Scandia 1.5 Ceraunius Solis Lacus Mare Erythraenm 4. 0 4. 6 6 2 Vulcani Pelagus Sinai Coprates 2.0 0.0 Argyre Margaritifer Sinus 5. 0 4. 3 5. 3 Nereidum Fr Niliacus Lacus 6 Mare Acidalium 1.0 Chryse Mare Boreum 4.0 TOTAL 96

Alan HEATH (アラン・ヒース Long Eaton Nott 英)

• · · · · · · Date: Sat, 23 Feb 2008 18:03:18 -0800 Subject: Mars February 23

Very good seeing tonight; hope it holds out for Saturn also. Note the sunrise limb clouds, and dark streak in the northern desert.

O···· Date: Tue, 26 Feb 2008 09:34:12 -0800 Subject: Mars February 25

Fair to poor seeing last evening, but still worth a shot. Mars seems to be shrinking 0.1" per day as we race ahead of it in our orbit.

O····· Date: Mon, 3 Mar 2008 07:33:07 -0800 Subject: Mars March 3

Poor seeing this evening, but since I was out, I grabbed a series of clips. Hellas notably bright in the eyepiece (indeed, brighter than the NPC, though image doesn't convey this as much) limb clouds also prominent at the evening terminator east of Syrtis Major.

O · · · · · · Date: Thu, 13 Mar 2008 09:28:32 -0700 Subject: Mars March 10

Fair to good seeing this evening. Many clouds, especially in Eurethreum and just north of the equator.

O····· Date: Tue, 18 Mar 2008 11:55:45 -0700 Subject: Mars 3/17/2008

Poor seeing this evening. Unable to get focus through the Green filter, thus the result presented here uses a blend of red and blue to make green. Bright clouds over Tharsis, as well as across the south, near the polar region.

Sean WALKER (ショーン・ウォーカー S&T 美)

• · · · · · · Date: Sun, 24 Feb 2008 15:27:25 +0100 Subject: Mars 2008.02.22

Dears, Mars under bad conditions:

http://astrosurf.com/delcroix/images/planches/me.php?y=2008&m=2&d=22 Region north of Sinus Sabeus has a bright albedo. Clear skies.

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

• · · · · · · Date: Sun, 24 Feb 2008 17:36:04 -0000 Subject: Mars images (December 5th, 2007.)

Hi all, Here are some images from Dec 5th under some very good seeing at times. Fascinating aspect in the Blue images showing the developing orographic clouds over Tharsis with time. Note the small cloud developing over Olympus in the final image. Also extensive delicate clouds across Candor into Chryse. A nice cloud streak crossing the disk to the south. Olympus Mons can be seen in the colour images as a donut like feature, while the other volcanoes (esp Ascraeus/Arsia) can be seen as small spots.

Hi all, Here are some images from Dec 6th. Periods of near perfect seeing allowed perhaps my best set of the apparition, and possibly my best ever set at δ =15". I think the limit here was set more by the telescope aperture than anything else. Extensive delicate clouds across Tharsis again buliding in intensity over time. These clouds connect up with a band of patchy clouds extending across Candor/Chryse and around Juventae Fons. Also allot of cloud structures around the NPC/NPH and also remarkable cloud streaks in the far southern latitudes. Note again Olympus Mons clearly seen in the desert as a "donut like" feature with the ever present

http://www.damianpeach.com/mars07/m2007_12_06rgb_dp.jpg http://www.damianpeach.com/mars07/m2007_12_06red_dp.jpg http://www.damianpeach.com/mars07/m2007_12_06green_dp.jpg http://www.damianpeach.com/mars07/m2007_12_06blue_dp.jpg

O····· Date: Wed, 5 Mar 2008 23:27:45 -0000 Subject: Mars images (December 7th, 2007.)

wedge shaped desert feature nearby.

Hi all, Here are some images from Dec 7th. Chryse to Solis Lacus is seen. Lots of misty clouds/haze around the NPC.

http://www.damianpeach.com/mars07/m2007_12_07rgb_dp.jpg http://www.damianpeach.com/mars07/m2007_12_07red_dp.jpg http://www.damianpeach.com/mars07/m2007_12_07green_dp.jpg http://www.damianpeach.com/mars07/m2007_12_07blue_dp.jpg

O····· Date: Sun, 9 Mar 2008 16:43:10 -0000 Subject: Mars images (December 8th, 2007.)

Hi all, Here are some images from Dec 8th showing Chryse/Solis Lacus.

 $http://www.damianpeach.com/mars07/m2007_12_08rgbred_dp.jpg \\ http://www.damianpeach.com/mars07/m2007_12_08grnblue_dp.jpg$

O····· Date: Tue, 11 Mar 2008 22:53:12 -0000 Subject: Mars images (December 9th, 2007.)

25 March 2008

Ser2-0889__

Hi all, Here are some images from Dec 9th in very good seeing. A nice view of Chryse/Aurorae Sinus/Solis Lacus. The distinct albedo difference between Aurorae Sinus/Protei Regio and Pyrrhae Regio/Margaritifer Sinus is quite prominent.

http://www.damianpeach.com/mars07/m2007 12 09rgbred dp.jpg http://www.damianpeach.com/mars07/m2007 12 09grnblue dp.jpg O····· Date: Sat, 15 Mar 2008 14:40:26 -0000 Subject: Mars images (December 10th, 2007.)

Hi all, Here are some images from Dec 10th. Some interesting cloud activity around the NPC, with quite extensive clouds over Tempe. Also a weak cloud over Edom on the limb.

http://www.damianpeach.com/mars07/m2007_12_10rgbred_dp.jpg http://www.damianpeach.com/mars07/m2007 12 10grnblue dp.jpg

O····· Date: Sat, 15 Mar 2008 21:15:20 -0000 Subject: Mars images (December 11th, 2007.)

Hi all, Here are some images from the 11th

http://www.damianpeach.com/mars07/m2007 12 11rgb dp.jpg

O····· Date: Sun, 16 Mar 2008 00:46:13 -0000 Subject: Mars images (December 14th, 2007.)

Hi all, Here are some images from Dec 14th. Mediocre seeing, and clouds prevented anything further.

http://www.damianpeach.com/mars07/m2007 12 14rgb dp.jpg

O····· Date: Wed, 19 Mar 2008 23:47:15 -0000 Subject: Mars images (December 20th, 2007.)

Hi all, Here are some images from Dec 20th in pretty good seeing at times - my first from the UK after returning from overseas. Syrtis Major is well placed showing lots of albedo variation. Hellas looks pretty featureless. http://www.damianpeach.com/mars07/m2007 12 20-21rgb dp.jpg http://www.damianpeach.com/mars07/m2007 12 20-21red dp.jpg http://www.damianpeach.com/mars07/m2007_12_20-21green_dp.jpg http://www.damianpeach.com/mars07/m2007_12_20-21blue_dp.jpg

Best Wishes

Damian PEACH (デミアン・ピーチ Bkh 美)

..... Date: Sun, 24 Feb 2008 21:05:59 -0000 Subject: Latest Mars observations

Dear Dr Minami, I attach my latest observations of Mars for the current apparition. At long last, we have enjoyed some settled anticyclonic conditions with blue skies by day, but bitterly cold nights, when the temperature has been the wrong side of zero! Still, by day, the frost covered fields, hedges and trees took on a special beauty, and by night their pallid glow in the light of the Moon was quite haunting. We have also had a number of vivid orange, sometimes red, sunsets and sunrises, which the meteorological people have put down to ice crystals suspended in the atmosphere. The ice has also been encrusted on the sides of my telescope at the end of the observing sessions in question. Seeing has at last been good on some of the nights I observed. If only this opportunity had presented itself nearer to opposition when the Martian disc was a little larger, but I suppose it's a case of better late than never! All the very best,

O · · · · · Date: Sun, 16 Mar 2008 16:18:52 -0000 Subject: Recent Mars observation

Dear Dr Minami, I attach my most recent observation of Mars from 2008 March 4. Given the area of the martian disk visible at the time of the observation, I would have expected Syrtis Major to be present at the preceding limb, but didn't record it. Perhaps the disk diameter was too challenging, being about 8 arc seconds, and the seeing not being quite good enough. I'm sure the feature would be there; it's simply that I didn't see it!

All the best,

David GRAHAM (デイヴィッド・グレアム NYs 英)

• · · · · · · Date: Tue, 26 Feb 2008 00:27:55 +0000 Subject: Mars 22 Feb.

Hi All, I have attached some Mars images from 22 Feb. Many clouds over Tharsis, Arcadia, and Tempe with hazes over Acidalium and eastern Chryse. Note very bright cloud in eastern Argyre -- possible dust. Best,

O · · · · · Date: Sat, 01 Mar 2008 00:11:19 +0000 Subject: Mars 26 Feb.

Hi All, I have attached some Mars images from 26 Feb. The bright localized cloud remains over Argyre. Terminator clouds and a prominent cloud streak is seen over Tempe and western Acidalium. Best,

O · · · · · Date: Tue, 04 Mar 2008 22:38:10 +0000 Subject: Mars 1 March

Hi All, I have attached some Mars images from 1 March. Best,

O····· Date: Fri, 07 Mar 2008 05:51:08 +0000 Subject: Mars 2 March; Blue Syrtis Cloud

Hi All, I have attached some images from 2 March showing the appearance of a weak "Blue Syrtis Cloud." This phenomenon strengthens as Syrtis Major approaches the limb. It is most often seen during northern spring and early summer and should become more prominent is the coming weeks. Visually it can be striking, especially when viewed through a yellow filter, when it turns a bright green. Best,

O:.....Date: Tue, 11 Mar 2008 23:28:12 +0000 Subject: Mars 4 March

Hi All, I have attached some belated Mars images from March 4. Zea Lacus was visible on the floor of Hellas. Cloud extended from Noachis across the Hellespontus into Hellas. There are numerous cloud streaks in the north. Best.

O····· Date: Thu, 13 Mar 2008 23:27:59 +0000 Subject: Mars 11 March

Hi All, I have attached some Mars images from 11 March. An equatorial cloud band (ECB) is visible across Libya into Elysium. The orographic cloud is prominent over Elysium. Blue Syrtis cloud remains visible. Best,

O····· Date: Fri, 21 Mar 2008 03:29:03 +0000 Subject: Mars 11 and 16 March

Hi All, I have attached some Mars images from March 11 and March 16, the latter being taken in excellent seeing. Mars continues to be very cloudy. Best,

O····· Date: Sat, 22 Mar 2008 03:44:02 +0000 Subject: Mars 20 March

Hi All, I have attached some Mars images from 20 March. There were brilliant clouds on the PM limb, covering Ascraeus and Pavonis Montes but not Arsia Mons. A small orographic is seen over Olympus Mons. Southwest of Olympus, bright clouds were again seen in Amazonis near CM. There were no significant clouds over the SPR. Best,

Don PARKER (唐那·派克 Miami FL 美)

..... Date: Tue, 26 Feb 2008 10:14:45 -0600 Subject: Mars 24-February-2008

Dear Masatsugu & Masami, Attached is a set of Mars images from February 24. Transparency wasn't great but I managed to get one set of exposures in before the passing clouds got in the way too much. Best regards,

O · · · · · · Date: Sun, 2 Mar 2008 14:46:28 -0600 Subject: Mars - 25 and 28 February 2008

Dear Masatsugu & Masami, Attached is a set of Mars

images from February 25 and 28. The images from the 25th show the bright cloud over Argyre to be diminishing but there is an interesting streak of clouds flowing eastward from it. There is a nice bright cloud over M. Acidalium just near the morning terminator showing on the February 28th images. Best regards,

Bill FLANAGAN (ビル・フラナガン Houston TX 美)

• · · · · · · Date: Tue, 26 Feb 2008 11:22:55 -0000 Subject: Prom 25th Feb

Hi Guy, Here are some images of a few of the events as seen yesterday. Seeing was good. The little $H\alpha$ disturbance cought my eye as a tiny bright spot whilst oberving visually at about 85x, as opposed to narrow field on screen scanning, of the solar surface. I currenly have no method for positioning these events, if they are "out of shot" of the limb on my field of view. Best wishes

O····· Date: Wed, 27 Feb 2008 22:15:30 -0000 Subject: Mars 26-feb-2008

Hi guys here's a set of mars from yesterday. Nothing much to comment on, other than it will be only 2secs smaller in a months time. C14 @f50. Bets wishes

O · · · · · · Date: Thu, 28 Feb 2008 21:39:53 -0000 Subject: Solar activity 27 feb 2008

Hi Guys, A bit of solar action was concentrated in one quadrant on the 27th. An H α disturbance with some minor spots, which I take to be 0983, was imaged. The two proms were the largest I could find. The one at PA 275 was about 39000 miles high and the pair at PA 215 were around 25000 miles high. Best wishes

O····· Date: Fri, 29 Feb 2008 17:51:24 -0000 Subject: mars 15-feb2008

Hi Guys, I'm clearing a bit of backlog following a lot of clear nights. Seeing was quite good for this evening. The image shows a massive cloud over a very wide region around Argyre, among others. Best wishes

O····· Date: Sat, 1 Mar 2008 13:23:49 -0000 Subject: Mars 17 Feb 2008

Hi Guys, Here is a triplet of Marses from the 17th Feb I have squeezed on the blues for cloud info. Seeing was good . C14 @ f50 Skynyx 2.0 @ 85fps R & G 42 fps for Blue. Best wishes

O····· Date: Sun, 2 Mar 2008 19:45:52 -0000 Subject: mars 18 feb 2008

Hi Guys, We had some fine seeing on the 18th, although Mars was dancing about a bit, the form was good and the detail held well. Registax rules! The seeing was a little better for the 17:09 ut image, and a faint cloud is visible over Hellespontus. I have added a 2005 image, taken with virtually the same equipment, when Mars was over 18" dia. (it is now 10.1".) Higher contrast was much easier to obtain in those days, I feel that Mars is still has a lot of dust in its atmosphere, after the earlier storms. Best wishes

O····· Date: Tue, 4 Mar 2008 00:37:54 -0000 Subject: Mars 19-feb-2008

Hi Guys, Yet another night of good Mars seeing on the 19th. Two features catch my eye, one is the change in appearance of Sinus Sabeaus as the sun rises? Maybe shadows are filling the area, before it appears later as two main components. This is echoed in the green images too. And two, the ruddyness in what I think is the Depressio Erythraea area. The clouds brought into view by Mare Aciladium, are quite lovely. The images are enlarged 175%, from the C14 @ f50. Best wishes

O····· Date: Tue, 4 Mar 2008 20:19:57 -0000 Subject: MARS 20-FEB-2008

Hi Guys, They were taken with my portable set-up, in Selsey on the south coast of England. Scope was a C'Fibre C11 and a Celestron CI 700 mount. Seeing was not too good but it was usable. best wishes

O····· Date: Wed, 5 Mar 2008 14:03:18 -0000 Subject: cats on the sun

Hah ha ha ha ha, wonderful Masatsugu. I am very glad that my observation has been confirmed, and there are indeed cats on the sun. This is why cats are sunworshipers! Thank you

(註) See CMO #326 for another cat on the Sun. (Ed) ① · · · · · · Date: Thu, 6 Mar 2008 09:19:24 -0000 Subject: Sun 3-3-2008

Hi Guys, The solar surface was more interesting than the small proms visible on the 3rd of March. Best wishes $\bigcirc \cdots Date$: Thu, 6 Mar 2008 12:54:42 -0000 Subject: the Sun 4-mar-2008

Hi Guys, There were a couple of proms, qualifying for the name, at over 30sec of arc high. 1220ut was, with my set-up, visible to 15800 mile high, and 1217ut was visible to19500miles high (calculated from pixel counting, pixel size and effective focal length of scope).

best wishes

O···· Date: Thu, 6 Mar 2008 22:25:45 -0000 Subject: saturn opposition

Hi Guys, Well I've finished making some sort of sense out of all the Saturn image data, gathered in poor seeing over the 10 days up to opposition. With the rings now at a more shallow angle to us now, I was wondering just how this would affect the normal brightening of the rings, and dimming of the globe with colour changes, that we see at opposition. Seeing plays a big part in the consistency of the data gathered as the changes are only a little more than varitions in processing and seeing. Nevertheless here are two montages of the more relevant images gathered. I feel that the blue channel changed mostly. I leave you to judge for yourselves.

I will point out that the colours of the 24th's RGB seem a little less vibrant and the rings are a little brighter on the 24th due to the blue image's brighter rings. This is what I have come to expect since many of us witnessed the blazing diisplay of ring brightening and globe changes on the 13 Jan 2005, in superb seeing.

Best wishes

O····· Date: Fri, 7 Mar 2008 16:37:51 -0000 Subject: solar image 5thMar2008

Hi Guys, Here's a nice fluffy mushroom of prominence, quite unusual. 28421 miles high, or there abouts. Plus or minus a 268 mile pixel or two. Best wishes

O····· Date: Mon, 10 Mar 2008 08:36:05 -0000 Subject: Re: mars 7-mar-2008

Yes David (ARDITTI), good point to clarify, as long as one doesn't increase the focal ratio in an attempt to maintain the "earlier" image scales, indeed, as each square meter of the martian surface appears smaller to us, we get more of them in a one arc second square of the scopes /camera's "normal" sampling, thereby maintaining a constant image brightness.

But, if we try to maintain our resoloution by increasing our focal ratio, as did Richard Bosman who put out an excellent image with his C11 increased to f70, the extra distance then makes things more difficult as the brightness received per unit chip area has dropped. cheers

Order: Thu 13 Mar 2008 12:56:25 -00000

O····· Date: Thu, 13 Mar 2008 12:56:25 -0000 Subject: setting Moon

Hi Guys the moon looked great setting low in the west last night. C14+ DSLR. Best wishes

25 March 2008 Ser2-0791

O····· Date: Fri, 21 Mar 2008 17:58:37 -0000 Subject: saturn 19 Mar colour changes

Hi Guys, Saturn showed itself at last, reasonable transparency with poor, but not dire seeing. The image indicates some subtle colour changes since early February.

O····· Date: Fri, 21 Mar 2008 20:26:14 -0000 Subject: Dual purpose solar Lunar

Hi Guys, There was a nice prom on the sun this morning, this gave me chance to test out a handy bitza scope on the sun. (bitza this and bitza that). The old Taylor Hobson, poorly colour corrected TV camera lens, a 16 inch f4, is stopped to 60mm with a red ERF. I grafted on a feathertouch focuser and mounted it piggyback on my C14. A 4x powermate puts it up to f27, so the Daystar filter can work happily. With this set-up I can keep an eye on the sun, whilst keeping the C14 ready and collimated for and instant Mars or Saturn session should the sky clear. Had the weather been more stable today I would have put the 6 inch vixen up for a better view of the prominence. Still using the Lumenera I can get almost the whole moon on the chip, or fill a DSLR chip with a barlow added. What was spooky, when pointing it at the moon at prime focus, was that the moon just sat there with no movement from turbulence, it was like the computer had frozen I had to nudge the scope to make sure it was live. The screen image looking very much like the final stacked image, except about a fifth of the moon was missing. Best wishes

O····· Date: Sun, 23 Mar 2008 20:18:15 -0000 Subject: Saturn storm 22nd March

Hi Guys, Although seeing once again was only fair, it was fair enough to pick up the storm. It appears noticably bigger and brighter in the green channel, than the red channel. Best wishes

O····· Date: Sun, 23 Mar 2008 21:17:53 -0000 Subject: Mars 22nd March

Hi Guys, It was at least clear, but seeing was poor. No change there then! C14 F50 Skynix CCD

Dave TYLER (デヴィド・タイラー Bkh 英)

• · · · · · · Date: Tue, 26 Feb 2008 15:30:15 -0800 Subject: Mars Images from Jan and Feb 2008

Hi Masatsugu, Sorry for the delay in sending these. Sincerely,

Jim MELKA (ジム・メルカ St Louis MO 美)

••••• Date: Tue, 26 Feb 2008 22:32:17 +0100 Subject: MARS drawing 23 February 2008

Very good seeing early this evening. Here is my last drawing of 23 February 2008. Best wishes and good observing!

Gérard TEICHERT(シ゛ェラール・テシェール Hattstatt法)

• · · · · · · Date: Wed, 27 Feb 2008 09:27:01 -0800 Subject: Mars 26 February 2008

Hi Masatsugu, Here's Mars on 26 February. Argyre is very cloudy. The clouds there have thickened since my last observation of this area a month ago. Ascraeus Mons is dark, peeking out of the morning mists. The NPC is bright with several faint notches on the perimeter (see green & blue). Best Wishes,

O····· Date: Mon, 10 Mar 2008 08:29:05 -0700 Subject: Mars 6 & 7 March 2008

Hi Masatsugu, Here's Mars on 6 & 7 March 2008. These sequences may weakly show the Syrtis Blue Cloud. Best wishes,

O····· Date: Tue, 11 Mar 2008 10:46:12 -0700 Subject: Re: Mars 6 & 7 March 2008

Hi Masatsugu, Thanks for the great article on the blue cloud. The figures detailing the dispersion are excellent. I particularly enjoyed the description of the reflection angles before & after opposition. The behavior of light has always fascinated me. Hopefully, I can get the morning blue cloud before old Mars gets to small! Best wishes,

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

• · · · · · · Date: Fri, 29 Feb 2008 22:23:54 -0600 Subject: Image: 03-01-08 0225UT

Greetings everyone, A difficult target at 9.1 arcsec for an 8 inch scope. Seeing was average. I can see 2 faint (faintness due to lack of aperture) clouds over Argyre and Chalce. Its hard to believe, but in my 6 years of Mars imaging, this is the first real shot of the NPC I've ever caught. I hope to have a few more chances at decent results before this rather disappointing 2007/2008 season with Mars is over.

http://marswatch.amaonline.com/03-01-080225.jpg Regards,

Joel WARREN (ジョエル・ウォーレンAmarillo TX 美)

• · · · · · · Date: Sun, 2 Mar 2008 14:44:42 +0100 Subject: Mars images

Hello, Here are my last images of Mars, by poor seeing and a lot of wind, there are however light nuances on the blue channel

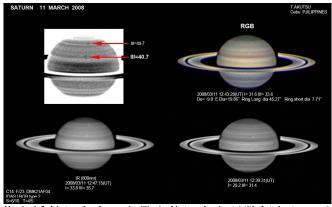
Xavier DUPONT (グザヴィエ・デュポンSaint Roch法)

●·····Date: Mon, 3 Mar 2008 10:40:07 +0900 Subject: 火星画像 AKM080228.AKM080229

おはようございます。先週の火星画像を添付します。小さくなりましたが気流が良いとまだまだいけます。オリュムプス・モンスが正面で見えています。

〇····· Date: Fri, 14 Mar 2008 10:39:03 +0900 Subject: 火星画像 AKM080311他

おはようございます。3月11日の火星画像を添付します。天気が回復しつつありますが、その後は雲が出、夜は晴れていません。土星と木星の画



像も添付します。土星本体に白斑が数個あり、その一つです。気流が良くないと分かりません。このような白斑は撮像技術の進歩で捉えることが出来るようになりましたが、10年も前では無理だった記憶があります。

明け方の木星も観測シーズンになり、数回撮り始めました。永続白斑「BA」の左前方に高気圧の渦が見られ、大赤斑と同じタイプの小赤斑です。メタンバンドでは明るく見えます。昨年のSTrD-2から変わったものらしく今後の追跡観測で仔細が判ると思います。日本では低空の南空で厳しい観

測ですが、セブでは今年も60度近くなり、その点は有利です。

来週の19日に日本に帰国、25日戻る予定です。 〇・・・・・ Date: Tue, 18 Mar 2008 15:53:39 +0900 Subject: 火星画像 AKM080315

こんにちは、3月15日の火星です。急なんですが、明日日本へ戻ります、セブには25日に戻ります。 毎回、日本滞在が短くなります。月を画像も添付します。

阿久津 富夫(Tomio AKUTSU セブThe Philippines)

• · · · · · · Date: Tue, 4 Mar 2008 08:38:34 -0000 Subject: Mars 3.3.2008

Dear all, Mars last night. Image bouncing around rather a lot, but some detail captured. Best Wishes

O····· Date: Thu, 20 Mar 2008 08:31:04 -0000 Subject: Mars 19th March 2008

Dear All, Mars last night. Seeing only fair. All the best, **Simon KIDD** (サイモン・キット Herts 英)

• · · · · · · Date: Thu, 06 Mar 2008 06:55:57 +0900 Subject: Re: FW:Jupiter +

南 様:

> いよいよ木星のシーズンですな。これは澳大利亞からですが。

前回も今回も転送いただき、ありがとうございます。そろそろ木星にもとりかかろうと思います。 火星は数も質も貧弱で、恐縮です。もう私の機械 ではダメですが。

○····· Date: Tue, 11 Mar 2008 07:14:34 +0900 Subject: Re: FW:Jupiter + GRS - 南 様:

> 前略、これもオーストラリアからです。

ありがとうございます。

静香が京都大学総合人間学部に合格しました。4 月からは京都で生活することになります(文系ですが)。ご連絡まで。

すが)。ご連絡まで。 ○・・・・・ Date: Tue, 18 Mar 2008 00:05:19 +0900 Subject: 入学祝拝受

南 様:・・・・たいへん恐縮しております。

先週の水曜と木曜に、家内と静香は上洛し、入 学手続きと住むところを決めてまいりました。烏 丸丸太町より府庁前に近いところで、そこしか無 かったと申しておりますが、自転車で通学すると のことです。昔私が住んでいたところの傍のラー

TEN YEARS AGO (151)

----CMO #201 (25 March 1998) pp2243 -2258----

この号、#201から表紙の体裁が更新されている。現在の形の最初の号である。巻頭は、1996/97 Mars Sketch (3) として "Clouds at the Tharsis Ridge and Olympus Mons, Morning and Evening"「タルシス三山とオリュムプス・モンスの朝夕雲」が掲載されている。北半球の春から夏頃の山岳の見え方の比較的長いMn氏の解説で、朝方の低い霧の上に現れる黒い山頂部や、午後から発生する山岳雲の様子を1982年や1997年の観測報告から伊舎堂弘氏のスケッチなど七葉、比嘉保信氏のccd像など三像と共に解説している。HSTの画像も二像採り挙げられている。CMOのWebではhttp://homepage2.nifty.com/~cmo/97Note03.htm に掲載されているので、直ちに参照可能である。

LtEは、Thomas CAVE† (USA), 岩崎恭輔(USA), Samuel WHITBY (USA), Giovanni QUARRA (Italy), André NIKOLAI (Germany)各氏の国外からのものと、国内からは、宮崎勲氏(沖縄)、比嘉保信氏(沖縄)のお便りがとりあげられている。筆者の「藤沢便り」もある。QUARRA氏がマイアミにパーカー(DPk)氏とヘルナンデス(CHr)氏を訪ねた折に撮した両氏の写真が大きく紹介されている。

南氏の「時時間間」は「爾汝の交わり」と題して、「先生」 という言葉から、日台での漢字感覚の違いへ進み、『火星通信』で使用している外国名の漢字表記を解説している。

巻末の「シー・エム・オー・フクイ」にはカンパ受領のお礼 と、お便りのない方へ次号からの発送停止を予告している。

TYA(31)は CMO#047(10Mar1988)と CMO#048(25Mar

1988)が取り上げられている。廿年前当時、火星は朝方の「いて座」にあって、まだ観測条件は整っていない。報告者は三名と少ないが、三月上旬には視直径は6秒角をこえて、天候も落ち着いて観測が捗ったとの記述が見える。記事には、リチャード・マッキム(RMk)氏のCircularの紹介がある。また、阿久津(Ak)氏のレポートで、「第二回・惑星観測者懇談会」の報告があった。ほかには、パーカー(DPk)氏の1986年の写真記事の連載が続いていた。 村上 昌己 (Mk)

メン屋さんとか食堂を教えたりしております。

もう一つ。南さんに仲人していただいた、私共の結婚式にも出席していた一本君(ビールを送ってくれた)が付属天文台の教授に4月からなるそうです。これから京都に行く機会が増えそうな気がします。以上、お礼まで。奥様にもよろしくお伝えください。

淺田 正 (Tadashi ASADA 宗像 Fukuoka)

••••• Date: Sun, 09 Mar 2008 00:59:09 +0100 Subject: Mars from 23. February 2008

Dear Masatsugu, hi all, here my Mars from 23.2.08. On this evening I had the chance, to use the 80 cm Mirror of the Observatory Zollern-Alb for 1 hour between 2 guided tours with visitors... We had very good conditions this night, so I could use a $2.5 \times Barlow-Lens$ to enlarge the focal length up to 20 Meter...

In January I won a DMK 21AF04.AS - I am still learning, how to use this spectacular black/white camera for RGB Images on planets... Best wishes

Silvia KOWOLLIK

(シルウ、ィア・コウ、ォッリクLudwigsburg德)

• · · · · · · Date: Sun, 9 Mar 2008 21:55:29 +0900 (JST) Subject: Mo16 20 21 28Feb_08

2月後半の像をお送りします。Seeingにはあまり恵まれず、良い像はありません。上空の気流状態を調べて(以前送って頂いたもの)見てはいますが、なかなか良い日は無いものです。

3月に入ってから久しぶりに良い日(8日)がありましたので、また処理してお送りします。

O····· Date: Thu, 20 Mar 2008 06:49:17 +0900 Subject: Mo1 5 7 8Mar_08

昨日から始めてやっと8日まで出来ました。このあとは10日12:40 13:10 11日11:51 12:30 13:11 13:50 12日11:26 11:50 12:30 13:10 13:50 14:32 15日12:03 12:12:30 13:11 13:50 と撮ってはいますが今からです。最近また少し忙しくなってきましたが、出来るだけのことはしたいと思います。Seeingの良い日が続きますと後が大変です。

O····· Date: Mon, 24 Mar 2008 02:52:00 +0900 Subject: non title

お電話有難うございます。早速、15Marを処理しました。13時以降はSeeingが悪くなりましたがそれまでは、クリュセに朝霧が発生しているのがわかります。

森田 行雄 (Yukio MORITA 廿日市 Hiroshima)

• · · · · · · Date: Mon, 10 Mar 2008 02:40:57 +0000 Subject: Re: mars 7-mar-2008

On 8 Mar 2008, at 17:57, David Tyler wrote:

- > Hi Guys, Mars is still showing some detail at 8.5 secs dia. The dusky
- > "circular patch" slightly low of centre, is Olympus Mons / Nix Olympica.
- > http://www.damianpeach.com/images/mars/mars_2005dp_labeled.jpg.
- > Over the past month, I see from Jupos,
- > http://jupos.privat.t-online.de/ download, that the light time from Mars has increased
- > from 6.9mins to 9,1mins over the past month, this means Mars'
- > surface now appears to the CCD 1.738 times as dim as it was a month
- > ago, making imaging even more difficult.

Not right, Dave. You are assuming that the intensity decreases as the square of the distance, but it does not, it remains constant. The brightness of each tiny unit area (say a square arc second) of the surface, in other words, a starlike point, falls with the square of the distance, but the area in arcseconds also falls with the square of the distance. Hence the intensity remains constant. This accords with my observations. A given exposure and gain

on a given telescope now gives the same saturation as it did at opposition. All this assumes the illumination is constant, which it almost is, but not quite, because of the eccentricity of Mars' orbit.

O····· Date: Thu, 20 Mar 2008 22:15:50 +0000 Subject: Saturn 2008 February 11

Here, a bright spot is visible south of the STB at approx. III=245. This is interesting as bright spots, in my experience, normally show up most strongly in the green, or equally in green and red. This is a pink spot, being only apparent in red.

http://www.darditti.dircon.co.uk/sat2008-02-11-DLA.jpg
O····Date: Fri, 21 Mar 2008 18:17:55 +0000
Subject: Saturn 2008 February 12

Fairly good seeing this night. The double or elongated high southern latitude spot to which Pete Lawrence refers on March 11 is at a longitude of about III=295. It is just visible here as well in my G 00:19 image (if you know it is there), showing up green in the RGB.

http://www.darditti.dircon.co.uk/sat2008-02-12-DLA.jpg
O·····Date: Sat, 22 Mar 2008 01:10:01 +0000
Subject: Mars 2008 February 04

After an interregnum in my Mars processing, here are some images from poor seeing in early February, when the planet was 11.6 " diameter. Cloud prevented capture of a blue close to the time of the first red, so the one from 28 minutes later has had to be used. Olympus is well on the disk in the 2nd set. On the other side, cloud north of Solis Lacus is forming in the evening.

http://www.darditti.dircon.co.uk/mars2008-02-04-DLA.jpg

.... Date: Sun, 23 Mar 2008 02:00:26 +0000
Subject: Mars 2008 February 08

Seeing none too good, nevertheless, Mars looked distinctly cloudy on this date, with cloud not only around the evening limb, but also swathes across the globe from the northern hemisphere morning terminator.

The rapid rate of shrinkage is impressive looking at the February pictures in succession. Diameter down to 11.1" on this date.

http://www.darditti.dircon.co.uk/mars2008-02-08-DLA.jpg
O·····Date: Sun, 23 Mar 2008 19:33:32 +0000
Subject: Mars 2008 February 09

A very similar view to the previous evening, but a sharper red (G and B not up to much though). EW swathes of cloud across the planet.

http://www.darditti.dircon.co.uk/mars2008-02-09-DLA.jpg **David ARDITTI** (デヴィット・アーディチ Edgware ME 英)

• · · · · · · Date: Wed, 12 Mar 2008 06:02:14 EDT Subject: Mars in 2001

Dear Masatsugu, I am writing to ask you for a jpeg file of your drawing of Mars dated 2001 July 16, which was published in CMO no. 257. (Page 3258) The time is not given but the CML is 84 degrees.

Please can you email me a copy for reproduction in my 2001 Mars report, now virtually completed? It has been an unusually complex opposition to analyse!

I am slowly catching up with these reports, but they consume a huge amount of time in preparation.

Many thanks in advance

O····· Date: Wed, 12 Mar 2008 15:22:05 EDT Subject: Re: Mars in 2001

Dear Masatsugu, Thank you for looking for the old drawing from 2001. Your CMO website has the drawing uploaded but does not allow the copying of the image, •

I will let you know about Meudon nearer the time.

Meanwhile I am revisiting my studies of Antoniadi's life done as long ago as 1993, and am adding a lot of new information discovered about him and his family since then. Nearby Peterborough is on the new high speed train link to Paris, via the new international terminal at London St.Pancras, so one hopes it may be possible. I have taken the rail trip several times, most recently in 2001 through the channel tunnel. Yours Ever

O····· Date: Sun, 16 Mar 2008 17:36:10 EDT Subject: Re: Mars in 2001

Dear Masatsugu, Thank you for the drawing which is perfect for my purposes, the published one being too contrasty and dark. The 2001 report is finished. With the dust storm and the Edom and NPH phenomena it was a very complex apparition and even cutting down on the fine detail the report is already very long.

I have a question for you. After 2001 February there were no certain CCD records of the tiny NP cap. However, there were visual sightings. I am thinking that the visual records may really have been sightings of small patches of NP hood rather than the ground cap, including a record by Don Parker in June, in red light. The reason for thinking this is based upon the Ls value being quite late in June, compared with the seasonal time of formation of the NPH in 1999, and also as stated, that the CCD records tend to be of the hood, not cap. My own observations do not help with this problem, and the CMO does not say much explicitly about the cap in this period.

I wonder whether you can offer an opinion based upon your personal visual work, during (say) 2001 January to June? With best wishes

June? With best wishes O·····Date: Thu, 20 Mar 2008 13:04:42 EDT Subject: Re: Mars in 2001

Dear Masatsugu, Many thanks for going through the drawings so quickly. I completely agree with you that the NPC must have been evident until April 2001; after that, it seems that any observer who claimed to see the 'cap' was mistaken in view of the tilt (and indeed the season), but may instead have seen a small patch of NPH occasionally. This all agrees nicely with seasonal dates and past years.

I just have to draw the SPC recession curve to finish the 2001 report, before sending it for refereeing, hopefully next week. I must say it has been an extraordinarily long and complex report to write. And now there are 2003 and 2005 to face!

With kind regards

Richard McKIM (理査・麥肯 Peterborogh 英)

• · · · · · · Date: Sun, 16 Mar 2008 14:28:37 -0500 Subject: Re: RE:Mars in 2001

Dear Masatsugu, What a magnificent drawing of Mars! -- it puts me in mind again of that splendid opposition of 2001, the flares, and the Great Dust Storm. Best,

Bill SHEEHAN (ウィリアム・シーハン MN 美)

●·····Date: Wed, 19 Mar 2008 13:05:44 +0900 Subject: 平信

南政次様 大分暖かくなってまいりましたが、お変わりないご様子にて、大慶に存じます。さてこのたびはご丁寧なお便りを頂き、かえって恐縮しております。ご放念のほど願いあげます。

火星のほうは、2月中休みまして3月に再開しましたが、シーイング、透明度ともに悪く、ピントも合わない状況で、今回の接近は終わりかなと思っていますが、5倍のバーローを入手したので、

もう少し頑張ろうかという所です。

OAAは2月末の評議員会で今後のことの相談があり、理事長に中野主一さん、事務局 原田昭と原田昭と、事務局 原田昭ととのは、編集 田中利彦さんの体制で進めるこで進めるとにかく長谷川先生に留任して頂内生なり、会長はとにかく長谷川先生に留任見になりました。 菊岡さんが突然他界(脳内ととになりました。 朝継ぎがなく、 引きをしたのこと)されたので、引継ぎがなく、 引きといるらず、帳簿等も当ながないます。会員し配とのことが、東等も当ないます。 会員し顧にないただといますが、 軌道に乗るまず表にといますが、 会員し顧にないただといますが、 会計なことは事務にていたがありますが、 会計なことは事務にていたがありますが、 会計なことは事務にあるとの事です。

時候不順の折からますますご自愛のほど願い上 げます。草々_

松本 達二郎(Tatsujiro MATSUMOTO尼崎Hyogo)

•····· Date: Wed, 19 Mar 2008 22:29:11 +0900 Subject: Re: お詫び

南政次様、牧野です。ご無沙汰しています。カンパ記載の件、全く構いません。気になさらないでください。

ところで、私も今月末で退職となりました。まだまだと思っていましたが、とうとう定年です。 これからもう少しゆっくりと星に親しめるのではないかと楽しみにしています。

では、今後ともよろしくお願い致します。

牧野 彌一 (Ya-ichi MAKINO 富山 Toyama)

In addition to the main white spot there was a double

• · · · · · Date: Fri, 21 Mar 2008 02:36:44 +0000 Subject: Re: Saturn 2008 February 11

elongated spot further south as indicated on this image. http://www.digitalsky.org.uk/saturn/2008-02-11_01-50_02-13_Comparison_Red.jpg I'm still working on this data but the three red channels I have at approximately 10 minutes separation show the double spot clearly rotating in sync with the planet. This is easier to see on a rotation animation but I'm still working on this. I've not determined the veracity of the other 'features' visible on the high contrast images yet they may be real or they may be artifact. The seeing varied over the observing session which may give rise to delicate structure appearing under steady seeing but disappearing under the slightest hint of turbulence. Of course this makes it nigh on impossible to verify whether they are real or not and I'd have to fall on the side of caution. Best regards,

Pete LAWRENCE (ピート・ローレンス Selsey 英)

• · · · · · · Date: Sat, 22 Mar 2008 15:09:29 +0100 Subject: mars obs 21st march

Hi to all, Minami san, Just to say that there is an EBC cloud accessible visually on my 6" reflector with 300x with excellent images (4/5) just after the sunset time, without filter, with the blue dichromatique astronomik filter (higher contrast) and the W47 at 240×. It covers from the limb to the terminator: south of sinus meridiani (may be partially covered), margaritifer sinus partially, aurorae sinus partially, chryse partially, candor, tarsis, tithonius. Its density is proheminent at the limb (more) and the terminator and covers the central meridian area but not occult them, just diminishing their contrast. Arcadia is bright white at the terminator. NPH/NC is bright white on a part and the SPC/SPH is brighter white than

25 March 2008 Ser2-0895

NPH/NC. Drawings given nextly, no time for scanning them at present but be sent nextly. Best regards.

O · · · · · · Date: Sun, 23 Mar 2008 08:26:41 +0100 Subject: mars obs 21st march.

Dear Christophe, dear Minami san, dear Richard, to all, Here are the documents done lastly, seeing conditions were good to excellent, in the 150mm newtonian, observations was stopped by the clouds after. This concerns the features - from CM 58°W to 66°W on the 21st March. Some comments are included with the drawings: EBC cloud.

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゛ィッチ Ecquevilly 法)

••••• Date: Mon, 24 Mar 2008 01:55:46 +0100 Subject: Mars, 14th March 2008

Dear Minami, Here is a new image of Mars taken on 14th March. Olympus Mons is visible close to the CM as well as the shadow of Ascraeus Mons and Arsia Mons. Also, some large cloud bands are also visible.

Best regards,

Jaume CASTELLÀ (ファウメ・カステーヤ Badalona 西)



Forthcoming 2007/2008 Mars (19) -

Ephemeris for the Observations of the 2007/2008 Mars. X May and June 2008

- Masami MURAKAMI 村上 昌己(Mk)

As a sequel to the Ephemeris IX (in CMO#342), we here list the necessary elements of the Ephemeris for the physical observation of Mars from 1 May 2008 to 30 June 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 $\lambda,\,\delta$ 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	П	D
01	May	2008	111.39°W	12.3°N	65.82°Ls	5.76"	35.7°	-12.2°	+22°54'
02	May	2008	101.78°W	12.6°N	66.26°Ls	5.73"	35.6°	-11.9°	+22°47'
03	May	2008	092.16°W	12.8°N	66.70°Ls	5.70"	35.5°	-11.6°	+22°41'
04	May	2008	082.54°W	13.0°N	67.13°Ls	5.67"	35.4°	-11.3°	+22°34'
05	May	2008	072.92°W	13.2°N	67.57°Ls	5.63"	35.3°	-10.9°	+22°27'
06	May	2008	063.30°W	13.4°N	68.00°Ls	5.60"	35.2°	-10.6°	+22°20'
07	May	2008	053.68°W	13.6°N	68.44°Ls	5.57"	35.1°	-10.3°	+22°12'
08	May	2008	044.05°W	13.8°N	68.88°Ls	5.55"	35.0°	-10.0°	+22°05'
09	May	2008	034.42°W	14.1°N	69.31°Ls	5.52"	34.9°	-9.6°	+21°58'
10	May	2008	024.78°W	14.3°N	69.75°Ls	5.49"	34.8°	-9.3°	+21°50'
11	May	2008	015.15°W	14.5°N	70.19°Ls	5.46"	34.7°	-9.0°	+21°42'
12	May	2008	005.51°W	14.7°N	70.63°Ls	5.44"	34.6°	-8.6°	+21°35'
13	May	2008	355.87°W	14.9°N	71.06°Ls	5.41"	34.5°	-8.3°	+21°27'
14	May	2008	346.23°W	15.1°N	71.50°Ls	5.38"	34.4°	-8.0°	+21°19'
15	May	2008	336.58°W	15.3°N	71.94°Ls	5.35"	34.3°	-7.6°	+21°10'
16	May	2008	326.94°W	15.5°N	72.37°Ls	5.33"	34.2°	-7.3°	+21°02'
17	May	2008	317.29°W	15.7°N	72.81°Ls	5.30"	34.1°	-6.9°	+20°54'
18	May	2008	307.64°W	15.9°N	73.24°Ls	5.27"	34.0°	-6.6°	+20°45'
19	May	2008	297.98°W	16.1°N	73.68°Ls	5.25"	33.9°	-6.3°	+20°36'
20	May	2008	288.32°W	16.3°N	74.12°Ls	5.22"	33.8°	-5.9°	+20°28'
21	May	2008	278.67°W	16.5°N	74.55°Ls	5.20"	33.6°	-5.6°	+20°19'
22	May	2008	269.00°W	16.8°N	74.99°Ls	5.17"	33.5°	-5.2°	+20°10'
23	May	2008	259.34°W	17.0°N	75.43°Ls	5.15"	33.4°	-4.9°	+20°01'
24	May	2008	249.67°W	17.2°N	75.87°Ls	5.13"	33.3°	-4.5°	+19°51'
25	May	2008	240.01°W	17.4°N	76.30°Ls	5.10"	33.2°	-4.2°	+19°42'
26	May	2008	230.34°W	17.6°N	76.74°Ls	5.08"	33.1°	-3.8°	+19°33'
27	May	2008	220.66°W	17.7°N	77.18°Ls	5.06"	33.0°	-3.5°	+19°23'
28	May	2008	210.99°W	17.9°N	77.61°Ls	5.04"	32.9°	-3.1°	+19°13'
29	May	2008	201.31°W	18.1°N	78.05°Ls	5.01"	32.7°	-2.8°	+19°03'
30	May	2008	191.63°W	18.3°N	78.48°Ls	4.99"	32.6°	-2.4°	+18°54'
31	May	2008	181.95°W	18.5°N	78.92°Ls	4.97"	32.5°	-2.0°	+18°44'
01	June	2008	172.26°W	18.7°N	79.36°Ls	4.95"	32.4°	-1.7°	+18°33'

Date (00:00GMT)		ω	φ	λ	δ	1	П	D	
02	June	2008	162.57°W	18.9°N	79.79°Ls	4.93"	32.2°	-1.3°	+18°23'
03	June	2008	152.88°W	19.1°N	80.23°Ls	4.91"	32.1°	-1.0°	+18°13'
04	June	2008	143.19°W	19.3°N	80.67°Ls	4.89"	32.0°	-0.6°	+18°02'
05	June	2008	133.50°W	19.4°N	81.11°Ls	4.87"	31.8°	-0.2°	+17°52'
06	June	2008	123.80°W	19.6°N	81.54°Ls	4.85"	31.7°	+0.1°	+17°41'
07	June	2008	114.10°W	19.8°N	81.98°Ls	4.83"	31.5°	+0.5°	+17°30'
08 09	June	2008 2008	104.40°W 094.70°W	20.0°N 20.1°N	82.42°Ls 82.86°Ls	4.81" 4.79"	31.4° 31.3°	+0.9° +1.2°	+17°19' +17°08'
10	June June	2008	094.70 W 084.99°W	20.1 N 20.3°N	83.30°Ls	4.79 4.77"	31.3°	+1.2 +1.6°	+17 08 +16°57'
							31.0°		
11 12	June June	2008 2008	075.28°W 065.57°W	20.5°N 20.7°N	83.74°Ls 84.18°Ls	4.75" 4.73"	31.0° 30.9°	+2.0° +2.3°	+16°46' +16°34'
13	June	2008	055.86°W	20.7 N 20.8°N	84.62°Ls	4.73"	30.9°	+2.3 +2.7°	+16°23'
14	June	2008	046.14°W	21.0°N	85.05°Ls	4.70"	30.6°	+3.1°	+16°11'
15	June	2008	036.43°W	21.2°N	85.49°Ls	4.68"	30.5°	+3.4°	+15°60'
16	June	2008	026.71°W	21.3°N	85.93°Ls	4.66"	30.4°	+3.8°	+15°48'
17	June	2008	016.99°W	21.5°N	86.37°Ls	4.65"	30.2°	+4.2°	+15°36'
18	June	2008	007.26°W	21.6°N	86.81°Ls	4.63"	30.1°	+4.5°	+15°24'
19	June	2008	357.54°W	21.8°N	87.25°Ls	4.61"	29.9°	+4.9°	+15°12'
20	June	2008	347.81°W	22.0°N	87.69°Ls	4.60"	29.8°	+5.3°	+15°00'
21	June	2008	338.08°W	22.1°N	88.13°Ls	4.58"	29.6°	+5.6°	+14°48'
22	June	2008	328.34°W	22.3°N	88.57°Ls	4.57"	29.5°	+6.0°	+14°36'
23	June	2008	318.61°W	22.4°N	89.01°Ls	4.55"	29.3°	+6.4°	+14°23'
24 25	June June	2008 2008	308.87°W 299.13°W	22.5°N 22.7°N	89.45°Ls 89.90°Ls	4.54" 4.52"	29.2° 29.0°	+6.8° +7.1°	+14°11' +13°58'
26	June	2008 2008	289.39°W 279.65°W	22.8°N 23.0°N	90.34°Ls 90.78°Ls	4.51" 4.49"	28.9° 28.7°	+7.5° +7.9°	+13°46' +13°33'
27 28	June June	2008	279.63°W 269.90°W	23.0°N 23.1°N	90.78°Ls 91.22°Ls	4.49" 4.48"	28.7° 28.6°	+7.9° +8.3°	+13°33' +13°20'
29	June	2008	260.15°W	23.1°N 23.2°N	91.67°Ls	4.47"	28.4°	+8.6°	+13°20'
30	June	2008	250.40°W	23.4°N	92.11°Ls	4.45"	28.3°	+9.0°	+12°54'
01	July	2008	240.65°W	23.5°N	92.55°Ls	4.44"	28.1°	+9.4°	+12°41'
O I	July	2000	210.03 11	23.3 14	72.33 LIS	7,77	20.1	· <i>J</i> • T	. 12 71

シー・エム・オー・フクイ ---

———————— 中島 孝 Nj —

- ★前々号報告以降、**牧野 弥一**様(405)よりカンパを頂戴しました。前号で報告すべきところ遺漏がありました。申しわけありません。有難うございました。
- ★今回、佐藤 健様より火星課宛てにP・ローヱルの三部作 "Mars", "Mars and Its Canals", "Mars as the Abode of Life"(ローヱル天文台売店にてご購入)の寄贈を受けました。有難うございました。
- ★引き続き、皆さまのご支援有難うございます。しかし、最近全体にカンパ数が減少していますので、印刷部数を減らすことを考えています。最近比較的お便りの無い方について発送を控えることがあるかも知れませんが、ご容赦下さい。以上謹白

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

『火星通信』#344 (25 March 2008) 編集:南 政 次(Mn)、村上 昌己(Mk)、中 島 孝(Nj) 西田 昭徳(Ns)、常間地 ひとみ(Ts)



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発行 Published by/for: 東亞天文学会 OAA 火星課 Mars Section

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