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

# MARS

**25 November 2009** 

### **OBSERVATIONS**

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CMO 2009/2010 Mars Report #08

OAA Mars Section -

Here we treat the case of the Mars observation made during the period :

16 October ( $\lambda$ =355°Ls) to 15 November ( $\lambda$ =010°Ls) 2009

As is indicated, the northern spring equinox passed during the period, and the new season of the northern hemisphere has begun. Especially we expect soon to see the clear north polar cap (npc) to start thawing. During the present period, the angular diameter δ went up from 7.2" to 8.8", quite large enough to the ccd images. The apparent declination is 21.3°N to 18.5°N, but still higher (from the northern hemisphere) and soon the planet goes high up. The central latitude φ was from 15°N to 18°N, and it became difficult to observed the region near the south circumpolar region. The phase angle ι was from 40° down to 38°, but quite gibbous. However it is a good opportunity to see Valhalla as well as a fine canal to the north of S Sabaeus. The sky condition in Japan this period proved rather fine, but it was extraordinary and the weather in winter continues dismal usually.

♂····· 今回の報告は16 October (λ=355°Ls) から15 November (λ=010°Ls) 2009迄の報告になる。途中 季節は北半球の春分に到達した。この間視直径δは7.2"から8.8"に延び、大きくなったという感じであ る。ccdでも好い像が出てきている。中央緯度φは15°Nから18°Nになって南極方面は見辛くなってき た。位相角は40°から38°に落ちたが、まだ欠けがきつい。ただワルハッラなどを捉えるのは好機であ る。視赤緯は依然高く、直ぐ天頂近くになる。21.3°Nから18.5°Nに降りてきたが、最接近の頃はまた 高くなるので屈折では苦労である。日本の天候はこの期間は恵まれた方であるが、10月後半から既 に冬型が始まって、晴天が見られなくなった。先ず見込みがないと思っていた方がよいかも知れな い。しかし、北極冠が出てくるので、連続観測が望まれる。

O····· We received the observations this time as follows. Note please we have a rule that we don't count any other observation made within 20 minutes.

今回拝受の観測報告は次の如くである。尚、我々は廿分以内になされた他の観測は数え入れない。

AKUTSU, Tomio 阿久津 富夫 (Ak) セブ・フィリッピン Cebu, the Philippines

13 Sets of *RGB* + 5 *Colour* +2R +15 *B* +13 *IR* Images (18 October; 3, 5, 9, 10, 13, 14 November 2009) 36cm SCT@f/36 with DFK21AU04/DMK21AU04

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

3 Sets of RGB + 1 IR Images (2, 4 November 2009) 36cm SCT with a SKYnyx 2-0

FLANAGAN, William D ビル・フラナガン(WFI) Houston, TX, USA

17 Sets of *LRGB* Images (18 October; 1, ~ 5, 11, ~13 November 2009)

36cm SCT@f/36 with a Lu-075M

GORCZYNSKI, Peter ピート・ゴルチンスキー (PGc) コネチカット Oxford, CT, USA

3 Sets of RGB + 3 IR Images (20 October; 2, 9 November 2009)

18cm Maksutov-Casssegrain@f/42 with a DMK21AF04

GRAFTON, Edward A エド・グラフトン (EGf) テキサス Houston, TX, USA

1 Set of LRGB Images (13 November 2009) 36cm SCT@f/39 with an ST402

KINGSLEY, Bruce A ブルース・キングスレイ (BKn) Maidenhead, UK

1 Set of Colour + 5 Sets of IR Images (18, 22 October 2009) 35cm SCT@f/41 with a SKYnyx2-0

KUMAMORI, Teruaki 熊森 照明 (Km) 堺 Sakai, Osaka, Japan

6 Sets of Colour Images (17, 20, 27, 29 October; 6, 8 November 2009)

20cm Dall-Kirkham@f/70 with a DMK21AF04/DFK21AF04

MAKSYMOWICZ, Stanislas スタニスラス・マクシモヴィッチ (SMk) フランス France

2 Sets of Drawings (19 October; 15<sup>#</sup> November 2009)

200, 400×25cm speculum/ 180, 210×15cm Cassegrain\*

MINAMI, Masatsugu 南 政 次 (Mn) 福井 Fukui\*, Fukui, Japan

90 Drawings (20, 21, 24, 27, ~ 31 October; 3, 6, ~ 8, 12 November 2009)

340, 400, 600×20cm Goto ED refractor\*

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

20 Sets of *RGB* + 21 *IR* Images (17, 20, 22, 27, 30 October; 6, 7, 14 November 2009)

25cm speculum@f/60 with a Lu-075M

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

9 Drawings (30, 31, October; 7 November 2009) 320×20cm F/8 speculum

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

9 Drawings (18 October; 12 November 2009) 400×20cm Goto ED refractor\*

**POUPEAU**, Jean-Jacques ジャン=ジャック・プーポー (JPp) フランス Essonne, France

7 Sets of *RGB* + 9 *Colour* + 3 *R* Images (16, 18, 19, 25, 26, 28, 29 October; 5, 6, 10 November 2009) 35cm Cassegrain@f/29 with a SKYnyx2-0

ROSOLINA, Michael マイケル・ロゾリーナ (MRs) ウエストバージニア Friars, WV, USA

1 Colour Drawing (9 November 2009) 400, 500×20cm SCT

SMET, Kris クリス・スメト (KSm) ベルギー Bornem, Belgium

1 Colour Drawing (8 November 2009) 300×30cm Dobsonian

WARREN, Joel ジョエル・ウォーレン (JWn) テキサス Amarillo, TX, USA

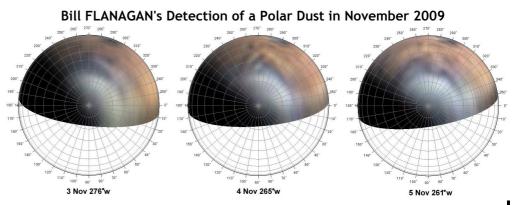
5 Sets of *RGB* Images (24, 31 October; 1, 2, 7 November 2009)

28cm SCT (⊗2× Barlow) with a DBK21AF04.AS

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

One of them was a detection of the inner structure of Solis L on 18 Oct ( $\lambda$ =356°Ls) at  $\omega$ =077°W, 082°W where Solis L was shown made of a few of smaller dots. These images, though the angular diameter was only  $\delta$ =7.3", show as well Juventae Fons et al, and as well some of Tharsis Montes and Olympus Mons. Ophir was shown to be very bright, and the sinking Nilokeras must have been very dark so that the terminator looks concaved. The nph is large in B, but in LRGB, it looks decreased and the npc seems to be caught a glimpse. These images were taken at Eldorado in TX. b) Another *WFl*'s outstanding contribution is a detection of a polar dust cloud near Utopia. (See Figure below. Constructed by the use of the Jupos.) The polar dust has been frequently known since the activity of the MGS, but as far as we know, *WFl* might have been the first to have been to explicitly show the phenomenon despite  $\delta$ =8.1". *WFl* observed from 1 Nov thru 5 Nov, and he took on 1 Nov ( $\lambda$ =003°Ls) at  $\omega$ =295°W, 303°W, on 2 Nov ( $\lambda$ =003°Ls) at  $\omega$ =287°W(289°W), 292°W, on 3 Nov ( $\lambda$ =004°Ls)at  $\omega$ =276°W, 281°W. Until 2 Nov, Utopia was normal (David

ARDITTI (DAr) took images at  $\omega$ =228°W and proves the east of Utopia is normal), but on 3 Nov there appeared a cloud streak at Umbra between Utopia and Boreosyrtis, and on 4 Nov the aspect around there completely



changed because of a rise of the polar dusts. This kind polar dusts have been known to occur at latest around until  $\lambda$ =030°Ls and so we should be careful (inside the polar cap, dust is visible at least until  $\lambda$ =070°). On 5 Nov this dust dispersed southward brightly and also there is seen a cloud inside Utopia. The images of GORCZYNSKI (PGc) on 9 Nov ( $\lambda$ =007°Ls) at  $\omega$ =214°W show a queer aspect of Utopia if not ghost. Utopia is quite normal however on the images of WFl on 11 Nov ( $\lambda$ =008°Ls) at  $\omega$ =199°W, 204°W. II. a) It is obvious the npc has already been made up, but unfortunately because of the smaller angular

diameter we cannot analyse the details (contrary to the case we did in CMO #349 for the 2007 npc). Even the Dawes slit has not been clear this year and so on: On the other hand the nph is still active. As aforementioned, judged from WFl's B images on 18 Oct ( $\lambda$ =356°Ls) at  $\omega$ =077°W, 082°W, the nph is very large whilst the npc fragments in L is not uniform. Yuki MORITA (Mo)'s images on 27 Oct (λ=001°Ls) at  $\omega$ =124°W still show a disturbance of the nph, but the npc looks to be definite. Jean-Jacques POUPEAU  $(J^2Pp=JPp)$  (introduced to us from Christophe PELLIER (CPl) - see LtE) also seems to show a definite npc on 6 Nov ( $\lambda$ =005°Ls) where the nph is usually stable at  $\omega$ =178°W. However on the same 6 Nov, Mo'simages show that the area of M Acidalium at  $\omega$ =004°W, 014°W is invaded by the nph, and Tomi AKUTSU (Ak)'s images on 9 Nov ( $\lambda$ =007°Ls) at  $\omega$ =337°W, 348°W, 000°W, and on 10 Nov ( $\lambda$ =007°Ls) at  $\omega$ =335°W, 345°W show that the nph covers the northern part of M Acidalium. Ak's images on 13 Nov ( $\lambda$ =009°Ls) at  $\omega$ =307°W, 315°W, 325°W also show the same aspect. If the season is slightly younger the Dawes slit must have been visible. We may need a while to see the totally cleared npc. b) JPp's images on 28 Oct ( $\lambda$ =001°Ls) at  $\omega$ =250°W are interesting. The nph retreated and Utopia is totally visible, but perhaps due to the npc the white northern patch in B consists of three parts. Utopia on the images of JPp on 25 Oct (λ=359°Ls) at ω=257°W, 271°W, and on 26 Oct (λ=360°Ls) at ω=254°W, 262°W, 272°W must be normal, though the nph complicatedly covers there. c) Incidentally we look at the area of M Acidalium: JPp's images on 16 Oct ( $\lambda$ =355°Ls) at  $\omega$ =358°W show that M Acidalium delicately invades inside the npc area. The shape of B is also interesting. PGc's B image on 20 Oct ( $\lambda$ =357°Ls) at  $\omega$ =037°W shows thickly the nph, but his IR one shows M Acidalium and the dark Nilokeras. WARREN (IWn)'s images on 24 Oct ( $\lambda$ =359°Ls) at  $\omega$ =020°W show well the nph in B, but M Acidalium is dull (he needs IR). Mo's set of images on 30 Oct  $(\lambda=002^{\circ}\text{Ls})$  at  $\omega=058^{\circ}\text{W}$ ,  $064^{\circ}\text{W}(066^{\circ}\text{W})$ ,  $074^{\circ}\text{W}$ ,  $084^{\circ}\text{W}$ ,  $094^{\circ}\text{W}$ ,  $100^{\circ}\text{W}$  is a great work: He chased until Nilokeras sank to the terminator. B images are dull, and so the npc might have been thicker. Ak's images on 3 Nov ( $\lambda$ =004°Ls) at  $\omega$ =046°W, 052°W, and on 5 Nov ( $\lambda$ =005°Ls) at  $\omega$ =031°W caught the total aspect of M Acidalium and Nilokeras. Ophir is rather light despite it's near the morning. The nph declined to the morning side. Mo showed that on 7 Nov ( $\lambda$ =006°Ls) at  $\omega$ =345°W, 355°W, the npc faded the morning half of M Acidalium. Teru KUMAMORI (Km) on 8 Nov ( $\lambda$ =007°Ls) at  $\omega$ =360°W also showed that the nph invaded M Acidalium while made darker a part of M Acidalium in L.

III. a) We should note that the area Phlegra has become interesting. On 20 Oct ( $\lambda$ =357°Ls), Mo's images at

 $\omega$ =174°W~194°W, and Km's ones at  $\omega$ =191°W, and further Mo's ones on 22 Oct ( $\lambda$ =358°Ls) at  $\omega$ =174°W suggest it, but more clearly JPp's images on 6 Nov ( $\lambda$ =005°Ls) at  $\omega$ =178°W show the details. WFl's images on 11 Nov ( $\lambda$ =008°Ls) at  $\omega$ =199°W, 204°W also show it near the evening side: On these images Utopia was normal, and N Alcyonius is dotted and furthermore a fine line between the Aetheria dark patch and N Alcyonius is visible. His images on 12 Nov ( $\lambda$ =008°Ls) at  $\omega$ =190°W(192°W) looks to show the npc, but the nph invades the morning Utopia. As to the form of the Aetheria dark patch see below. The Phlegra complex is in front on his images on 13 Nov ( $\lambda$ =009°Ls) at  $\omega$ =180°W, (183°W)185°W (in L of these images Hesperia is strangely visible and Valhalla is evident). Ed GRAFTON (EGf) gave also excellent images at  $\omega$ =199°W where the Phlegra complex is clearly seen. The southern limb is bright and looks natural. b) The Aetheria dark patch is caught by every image: DAr's images on 2 Nov ( $\lambda$ =003°Ls) at  $\omega$ =228°W show it to extend southward and in good harmony with the morning greenish Syrtis Mj. WFl's L images on 12 Nov ( $\lambda$ =008°Ls) at  $\omega$ =190°W(192°W) clearly prove that it bends as was seen in 2007. It is also evident on EGf's images on 13 Nov ( $\lambda$ =009°Ls) at  $\omega$ =199°W. c) The fact the area of M Serpentis is very broad and dark was mentioned before: This time JPp's images on 19 Oct ( $\lambda$ =356°Ls) at  $\omega$ =317°W, 322°W show more minutely. It will be more evident as the angular diameter grows. The area is also considerably broad on Bruce KINGSLEY (BKn)'s images on 22 Oct ( $\lambda$ =358°Ls) at  $\omega$ =303°W~307°W (on these images there is seen a fine canal along the northern coast of S Sabaeus: This is well known just like Valhalla, but this time  $\delta$ =7.4"). Ak's images on 9 Nov ( $\lambda$ =009°Ls) at  $\omega$ =337°W show that it extends further south. d) The area of M Sirenum is interesting in relation of the anomaly in 2007, but because of the tilt, it became difficult to judge. However Km's images on 29 Oct ( $\lambda$ =002°Ls) at  $\omega$ =101°W remind us of the 2007 form including the area of Daedalia. JPp's one on 10 Nov ( $\lambda$ =007°Ls) at  $\omega$ =105°W,  $\varphi$ =18°N are also suggestive on this point. This image looks to show the Arsia cloud near the terminator ( $\lambda$ =007°Ls).

IV. a) In the preceding report, the visual observations in Japan were carried out only by Takashi NAKAJIMA ( $N_i$ ). This time we (Mn and Mk) joined. Especially the district Mn lives was blessed with fine weather, and Mn observed every occasion at 15:20 GMT (00:20 JST), 15:20, 16:00, 16:40, 17:20, 18:00, 18:40, 19:20GMT because the Martian new spring equinox has just begun. At 15:20GMT, the planet was quite low and mostly under poor seeing except for a few cases, but our 40 minute observations give us the similar scenes three or four days later, so that the new image could make us reconsider the previous duller images. The planet Mars shines still on 20:00GMT (05:00JST) but it is very high up, and so Mn (because using the refractor) tended to avoid. b) Total number of Mn observations is enormous, and hence we don't review each, but first we try to clear the difference from the ccd image observations. On 27 Oct ( $\lambda$ =001°Ls) around from  $\omega$ =072°W Mn recognised the darkness of a part of Nilokeras, and found it was dark brownish. On the other hand the area around Aurorae S was rather bluish and the colour contrast was quite evident. At  $\omega$ =082°W Solis L was isolated, and the southern limb of the disk is very bright. On 28 Oct ( $\lambda$ =001°Ls) at  $\omega$ =082°W, M Acidalium was also quite dark brownish. These evident colour differences must be difficult to show by the use of the L filter though the latter is powerful in detecting the details. On the day Argyre was also bright, and Xanthe became whitish light and the Equatorial Band Mist (ebm) was suggested (at least on the evening hemisphere). On 29 Oct ( $\lambda$ =002°Ls) at  $\omega$ =072°W, the seeing improved, Chryse-Xanthe was light and the ebm was chased until  $\omega$ =092°W. On 30 Oct ( $\lambda$ =002°Ls) at  $\omega$ =033°W, such a desert of Chryse was reddish inside, but at around  $\omega$ =053°W it became slightly whitish. Mk at Fujisawa also observed and noticed independently that Chryse became whitish from around  $\omega$ =050°W. Mn observed that at  $\omega$ =043°W that the southern limb is narrowly very bright, brighter than the nph. The southern markings looked rather bluish, while the area of M Acidalium was dark brownish. On

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31 Oct ( $\lambda$ =002°Ls) Mn saw that Chryse became whitish from around  $\omega$ =053°W, but Mk observed so already from around  $\omega$ =031°W. On 3 Nov ( $\lambda$ =004°Ls) when the seeing was poor, but Mn observed at ω=034°W~044°W that the area of M Erythraeum has a light and shade and the darker part is similar to the one we observed in 2007. Margaritifer S and the neighbourhood recovered but looks light bluish. On the day Mn saw the ebm from around  $\omega$ =054°W observation. On 6 Nov ( $\lambda$ =005°Ls), Hellas came into sight; its southern end was whitish bright. At  $\omega$ =016°W a mist was seen to the north of S Sabaeus, and M Acidalium cut into the nph. At  $\omega$ =025°W the southern limb of the disk was whitish bright. On 7 Nov ( $\lambda$ =006°Ls) Hellas was bright near the terminator, and Mk regarded that it was slightly off-white at  $\omega$ =320°W, 330°W. Mn saw S Sabaeus definitely and its north was reddish. On 6 Nov, 7 Nov there was seen a broad dark band extending to the south from M Serpentis. Notable is that on 7 Nov at  $\omega$ =016°W, Mn observed a large thin mist covers largely the southern higher latitude region. It looked slightly off-whitish, but the southern limb was very white. On the opposite side the white polar core looked roundish: Its intrinsic part must have been the npc. On 8 Nov ( $\lambda$ =006°Ls), the evening Hellas was whitish bright from  $\omega$ =298°W and  $\omega$ =337°W until it sank beyond the terminator. At  $\omega$ =337°W, S Sabaeus was definite and M Serpentis was dark and broad. On this occasion, it looked a vast off-whitish mist covers the southern higher region down from the southern limb. Mn observed with Nj on 12 Oct ( $\lambda$ =009°Ls): Both recorded that Hellas was particularly whitish bright. At  $\omega$ =280°W~289°W, there was observed an evening mist over Libya: This was also checked on 14 Nov ( $\lambda$ =009°Ls) by Mo at  $\omega$ =304° and also by Ak at  $\omega$ =307°W, 315°W. On the latter images, the dark band from M Serpentis extends further south. c) Mn checked Valhalla on 20 Oct ( $\lambda$ =357°Ls,  $\iota$ =40°) at  $\omega$ =199°W, and saw the Arsia cloud on 21 Oct ( $\lambda$ =358°Ls) at  $\omega$ =125°W~158°W. d) Any must feel that Hellas was yellowish in any ccd images. The THEMIS (13 Nov 2009 at 21:32:03 GMT) proves that in some moment from 27 Oct ~4 Nov there was a small dust inside Hellas, but during the period from 4 Nov to 10 Nov, Hellas was cool. The cold Hellas was not well shot during this period in contrast to the nph (see however the images by Mo and Ak on 14 Nov). However the whitish brightening Hellas is also a puzzle. It is slightly early if it was due to a fallout of snow or CO2, and so maybe a covering.

♂····· I. a) 今回は少なくとも二つの重要な観測がフラナガン(WFI)氏に依って齎された。その一つ はソリス・ラクスの内部構造である。WFI氏の18Oct( $\lambda$ =356°Ls) $\omega$ =077°W、082°Wに於いて、ソリス・ ラクスの内部が幾つかの斑點からなっていることが示されている。このイメージにはδ=7.3"にも拘わ らず、ユゥエンタエ・フォンスが出ているし、他にも細かい斑点が出ている。タルシス山やオリュム プス・モンスなども見えているようである。オピルが非常に明るく描写され、沈み行くニロケラスが 非常に濃いらしく縁で凹んでいる。北極雲はBでは大きいがLRGBでは萎んで見え、北極冠が見える ようである。この像はテキサスのエルドラドに遠征して撮られた由である。b) WFI氏のもう一つの功 績は、極性の黄塵の發生をウトピア近くで捉えたことである。筆者達の記憶ではこのδで描出された のは初めてではないかと思う。WFI氏は1Novから5Novまで連続し、1Nov( $\lambda$ =003°Ls)には $\omega$ =295°W、  $303^{\circ}W$ 、 $2Nov(\lambda=003^{\circ}Ls)$ に は $\omega=287^{\circ}W(289^{\circ}W)$ 、 $292^{\circ}W$ 、 $3Nov(\lambda=004^{\circ}Ls)$ に は $\omega=276^{\circ}W$ 、 $281^{\circ}W$ 、4Nov $(\lambda=004^{\circ}\text{Ls})$ には $\omega=265^{\circ}\text{W}$ 、 $268^{\circ}\text{W}$ 、 $270^{\circ}\text{W}$ 、 $5\text{Nov}(\lambda=005^{\circ}\text{Ls})\omega=256^{\circ}\text{W}$ 、 $261^{\circ}\text{W}$ で観測したものである。2Novまではウトピアは正常であったと思われるが(アーディッチ(DAr)氏が $\omega$ =228°Wで撮像している)、3Nov にはウトピアとボレオシュルティスの間のウムブラに雲が入り込み、4Novにはここからウトピア内 部に掛けて全く違う様相を醸したわけである。極性の黄塵であることは間違いない。MGSでも少な くともλ=030°Ls辺りまでは好く見られたことであるので今後も注意すると好い(内部ではλ=070°Ls頃で| も見えている)。5Novにはこの黄塵は南に拡散し、ウトピア内には雲が闖入している。9Nov(λ= 007°Ls)ω=214°Wのゴルチンスキー(PGc)氏の像ではゴーストでなければウトピアはおかしな形である。

但しWFI氏の11Nov( $\lambda$ =008°Ls) $\omega$ =199°W、204°Wではウトピアは正常である。

II. a) 北極冠は既に出來ているはずであるが、2007年のように(CMO#349で行ったような)精緻な分析 は出來ない。理由は視直径が小さく、ドーズのスリットのような現象は捉えがたくなっているし、北 極雲は相変わらず盛んであるからである。先に挙げたWFl氏の18Oct(λ=356°Ls)ω=077°W、082°Wのイ メージを見てもBから北極雲は相当に大きいものと判断され、L像では流石に北極冠の片鱗が見える が整っては居ない。森田(Mo)氏の27Oct( $\lambda$ =001°Ls)ω=124°Wでは未だ北極雲の擾乱が見えるが、北極冠 はシッカリしてきている感じであるし、比較的北極雲の擾乱の少ない地方でプーポー(ʃ²Pp=JPp)氏の 6Nov (λ=005°Ls)ω=178°Wで北極雲が落ち着いて北極冠の形が出てきていると思って好い、といった状 況である。然し、同じ6NovでもMo氏のω=004°W、014°Wではマレ・アキダリウムの方に北極雲が延び て活発であるし、期間末になっても、阿久津(Ak)氏の9Nov(λ=007°Ls)ω=337°W、348°W、000°W、や10Nov (λ=007°Ls)ω=335°W、345°Wでは未だ北極雲はマレ·アキダリウムの方に延びている。Ak氏の13Nov (λ=009°Ls)ω=307°W、315°W、325°Wを見ても同じである。もう少し早い時期ならばドーズのスリット が見られたであろう。北極冠がクリアになるのはもう少し先である。b) [Pp氏の28Oct(λ=001°Ls)]  $\omega$ =250 $^{\circ}$ Wの北極域は面白い。北極雲は後退してウトピアは明確であるが、北極冠の作用したものか、B像では北極域が三玉になっている。なお、JPp氏の25Oct(λ=359°Ls)ω=257°W、271°W、26Oct(λ=360°Ls)  $\omega$ =254°W、262°W、272°Wでは北極雲に覆われてウトピアは正常であろう。f c)序でにマレ・アキダリウ ム方面を見ておくと、 $16Oct(\lambda=355^{\circ}Ls)\omega=358^{\circ}W$ のJPp氏の画像では北極冠がマレ・アキダリウムに入っ ている。Bが興味深い。PGc氏の20Oct(λ=357°Ls)ω=037°WではBでは北極雲が濃いがIRではマレ・アキ ダリウム・ニロケラスが明確である。ウォーレン(JWn)氏の24Oct( $\lambda$ =359°Ls) $\omega$ =020°WはB雲がよく出て いるが、マレ・アキダリウムがシッカリしない(IRも必要)。Mo氏の30Oct(λ=002°Ls)ω=058°W、064°W (066°W)、074°W、084°W、094°W、100°Wは力作で、濃いニロケラスの夕没まで追っているが、Bは平 凡で、ただ後半北極冠が出てきているかも知れない。Ak氏の3Nov(λ=004°Ls)ω=046°W、052°W、 5Nov(λ=005°Ls)ω=031°Wはマレ・アキダリウムとニロケラスの全貌を捉え、オピルも朝方にしては明 るい。北極雲は朝方に傾く。Mo氏の $7Nov(\lambda=006^{\circ}Ls)\omega=345^{\circ}W$ 、 $355^{\circ}W$ では北極雲がマレ・アキダリウ ムの朝方半分を淡化させている。熊森(Km)氏の8Nov(λ=007°Ls)ω=360°Wでも北極雲はマレ・アキダリ ウムに入り込みマレ・アキダリウムの一部を暗化させている。

III. a) プレグラの辺りが面白くなっている。20Oct(λ=357°Ls)のMo氏のω=174°W~194°W、Km氏の ω=191°W、Mo氏の22Oct(λ=358°Ls)ω=174°Wでもそれとなく判るが、JPp氏の6Nov(λ=005°Ls)ω=178°W では稍詳細が判る。WFl氏の11Nov(λ=008°Ls)ω=199°W、204°Wでは夕方だがプレグラがよく判り、こ れではウトピアは正常、ノドゥス・アルキュオニウスも見え、その間の細線も出ている。彼の 12Nov(λ=008°Ls)ω=190°W(192°W)では北極冠が分かると思うが、北極雲が朝のウトピアを侵している。 13Nov(λ=009°Ls)ω=180°W、(183°W)185°Wではプレグラ・コンプレックスは正面である(このL像では ヘスペリアの辺りが妙な分離の仕方をし、ワルハッラが見えている)。グラフトン(EGf)氏の同日の ω=199°Wでもプレグラ・コンプレックスは明確である。ただ、南端が明るくなっていて自然に見える。 **b)** アエテリアの暗斑は大抵の像に見えているが、DAr氏の $2Nov(\lambda=003^{\circ}Ls)\omega=228^{\circ}W$ では浅葱色のシュ ルティス・マイヨルと共に暗斑は南へ延びて見えるが(IRでも)WFl氏の12Nov(λ=008°Ls)ω=190°Wでは 途中で屈曲して2007年型であることが判る。EGf氏の13Nov(λ=009°Ls)ω=199°Wでも明確である。c) マ レ・セルペンティスのあたりが太くなっていることは前回に述べているが、JPp氏の19Oct(λ= 356°Ls)ω=317°W、322°Wで 稍詳細が判るようになった。キングスレイ(BKn)氏の22Oct(λ=358°Ls) ω=303°W~307°Wでは可成り太い(この像ではシヌス・サバエウスの沿って北側に細線が見えるが、  $\delta$ =7.4"である)。Ak氏の $9Nov(\lambda=009^{\circ}Ls)\omega=337^{\circ}W$ では可成り南まで延びている。d)マレ・シレヌムの邊 りは2007年との関係で興味のあるところであるが、φの所為で見辛くなっている。ただKm氏の29Oct (λ=002°Ls)ω=101°Wではダエダリアのところも含めて2007年の様子を彷彿とさせる。JPp氏の10Nov

 $(\lambda=007^{\circ}\text{Ls})\omega=105^{\circ}\text{W}$ 、 $\phi=18^{\circ}\text{N}$ も然りである。夕端にアルシア雲が出ているようである。

IV. a) 前回の我が国の眼視観測は中島(Nj)氏だけであったが、今回は我々(Mn&Mk)が参加した。幸い 北陸も天候に恵まれたので、北半球の春分でもありMnは毎回15:20、16:00、16:40、17:20、18:00、18:40、 19:20GMTと押して敢行した。正確には毎日少しずつズレがあるのだが、1、2°Wの差で次の場面に移 るので支障はない。15:20GMTでは低空で、二三度を除いてシーイングの状態は悪いが、二三日する と同じ場面が好い状態で見られるので、先の朧気な状態を後で確認出來ることになる。20:00GMTも シーイングの好い状態で可能であるが、今度は火星が高くなり屈折では体勢が崩れるので敬遠した。 尚、期間中Nj氏にご不幸があり(御母堂ご他界、享年97歳)、Mnの単独行が多くなった。b) 観測の数 は多いので、いちいちレヴュー出來ないが、ccd像との違いを強調しておく。 $27Oct(\lambda=001^{\circ}Ls)\omega=072^{\circ}W$ 辺りからニロケラスの濃いのが確認出來、色は濃い茶系統である。一方アウロラエ・シヌス辺りは青 色系でハッキリ違いが出る。ω=082°Wではソリス・ラクスが分離し、像南端は滅法明るい。 28Oct(λ=001°Ls)ω=082°Wにはマレ・アキダリウムも濃い茶系統で見え、アルギュレは明るい。クサン テが明るく、赤道帶霧が出ている。29Oct(λ=002°Ls)ω=072°Wではシーイングが好く、クリュセ-クサ ンテが明るく赤道帶霧は $\omega$ =092°Wまで追えた。30Oct( $\lambda$ =002°Ls) $\omega$ =033°Wではクリュセなど砂漠が赤味 を帯びて見える。ω=053°W辺りからクリュセが白くなって行く。Mkの藤沢での観測によればω=050°W 辺りから明るくなる。なお、Mnのω=043°Wでは南端が北極雲より明るい。依然南半球は青っぽいの に対し、マレ·アキダリウム方面は濃茶である。31Oct(λ=002°Ls)でもMnはω=053°Wからクリュセが白 くなって行くのを見たが、Mkは既に $\omega$ =031°Wから見ている。 $3Nov(\lambda$ =004°Ls)はシーイングは不好で あったが、ω=034°W~044°Wでマレ・エリュトゥラエウムが依然2007年の濃淡を残していることを確認 した。マルガリティフェル・シヌスなどは復活しているが、浅葱色である。ω=054°Wから赤道帯霧を 見ている。6Nov( $\lambda$ =005°Ls)にはヘッラスが見えてきて、南端は白く明るい。 $\omega$ =016°Wにはシヌス・サ バエウスの北に靄があり、マレ・アキダリウムが北極雲に食い込んでいるのが見える。ω=025°Wでは 像の南端が白く明るい。7Nov(λ=006°Ls)にはヘッラスが夕方で明るく、Mkはω=320°W、330°Wで稍黄| 色味を帯びているとしている。Mnはω=347°Wでシヌス・サバエウスが明確で砂漠の赤味を見ている。 6Nov、7Novにはマレ・セルペンティスから南へ矢張り太い筋が延びているのが見える。 尚Mnは7Nov のω=016°Wで、南極地方が大きく薄い靄で覆われて居ることを見た。珍しい現象である。南端は勿論 白く明るいのであるが。なお、北極雲のコアは圓くなっているので北極冠であろう。8Nov(λ=006°Ls) の夕方のヘッラスは $\omega$ =298°Wから $\omega$ =337°W辺りで隠れるまで白く明るかった。 $\omega$ =337°Wではシヌス・ サバエウスは明確でマレ・セルペンティスは大きく太い。尚、この時も南極方面から薄い靄があるよ うな感じであった。12Oct(λ=009°Ls)にはNj氏が復活したが、ヘッラスが矢鱈白いのを記録している。 ω=280°W~289°W迄リビュアに靄が出ていたが、これは14Nov(λ=009°Ls)のMo氏のω=304°WやAk氏の  $\omega$ =307°W、315°Wに出ている。後者ではマレ・セルペンティスの南への延長が濃い。c) その他Mnは 20Oct(λ=357°Ls、ι=40°)ω=199°Wでワルハッラ、21Oct(λ=358°Ls)ω=125°W~158°Wでアルシアの雲を見て いる。d) ヘッラスは多くのccdでは余り明るく出ていない。寧ろダスティにみえる。THEMIS (13Nov 2009 at 21:32:03GMT)で見ると27Oct~4Novまでは小さい黄塵がヘッラスで立ったようであるが、4Nov から10Novまではヘッラスは冷えている。この辺りの違いがあろうかと思う。ただし、白く輝くヘッ ラス南部の正体は分からない。まだ降霜には早いように思うので、雲の類か。然し矢鱈白いのである。 なお、ccdではL画像で詳細や濃淡を狙うことが多く、白も含めて色彩の再現には弱いのではないか と考えられる。

3····· 追加報告: We Further Received as follows:

POUPEAU, Jean-Jacques ジャン=ジャック・プーポー (*JPp*) フランス Essonne, France
10 Sets of *RGB* + 8 *Colour* + 11 *R* + 4 *IR* Images (22, 27 July; 6, 12, 19, 20, 23 August;
13, 21, ~23, 25, ~27 September; 2, 3, 13, 15 October 2009)

#### 35cm Cassegrain@f/29 with a SKYnyx 2-0

Jean-Jacques POUPEAU (JPp) is a newcomer for us, as introduced by Christophe PELLIER (CPl) (as aforementioned, and also see LtE), but JPp already has had a high technical skill in planetary astronomy. His observation site is in Essonne, to the south of Meudon. The following is a rough review of his preceding observations: The images on 27 July ( $\lambda$ =311°Ls,  $\delta$ =5.3") at  $\omega$ =080°W show Solis L as a dark spot, may be next to the image by Ralf GERSTHEIMER (RGh) on 20 June ( $\lambda$ =289°Ls,  $\delta$ = 4.8") at  $\omega$ =063°W. On 12 Aug ( $\lambda$ =320°Ls) at  $\omega$ =268°W, 276°W, JPp's images show the nph to the north of Utopia in B. The images on 20 Aug ( $\lambda$ =324°Ls,  $\delta$ =5.6") at  $\omega$ =189°W suggest a new aspect around Phlegra. These images also separate M Chronium near the spr. On 23 Aug ( $\lambda$ =326°Ls,  $\delta$ =5.7") at  $\omega$ =154°W Arsia Mons covered by an evening cloud was shot, and in R, Olympus Mons looks to be shown in a shadowy spot. φ=02°N and the nph is clear in B but not in R. The images on 13 Sept ( $\lambda$ =338°Ls,  $\delta$ =6.1") at  $\omega$ =318°W prove clearly the broadness of M Serpentis which may be slightly separated from Yaonis Fr (see #363). No B image here, but in RGB the nph is active while dull in R. On 21 Sept ( $\lambda$ =342°Ls,  $\delta$ =6.3") at  $\omega$ =241°W, Utopia is shown popped out from the nph. In R the southern extension of the Aetheria dark patch is evident. The images on 22 Sept ( $\lambda$ =342°Ls) at  $\omega$ =226°W and 23 Sept ( $\lambda$ =343°Ls,  $\delta$ =6.4") at  $\omega$ =212°W, 232°W are similar, but different about the appearance of Syrtis Mj. The latter may need an image at ω=222°W. RGh's image on 22 Sept was made at  $\omega$ =221°W, and shows a fine line between the Aetheria dark patch and N Alcyonius: This marking was also trapped by JPp as well. On 25 Sept ( $\lambda$ =344°Ls,  $\delta$ =6.5") at  $\omega$ =207°W JPp shows a complex aspect around Phlegra. The nph began to be thick and show up also in R. The images on 26 Sept ( $\lambda$ =344°Ls,  $\delta$ =6.5") at  $\omega$ =181°W show nicely the complex around the area to the east of Phlegra to Propontis I. This area will become a topic when the angular diameter grows up. The nph is still weak in R. The images on 3 Oct ( $\lambda$ =348°Ls,  $\delta$ =6.7") at  $\omega$ =112°W is interesting showing the area from Solis L to M Sirenum in some details: The aspect we saw in 2007 looks to remain a bit. The npr is still thick in B while weak in R. A good scene was shot on 13 Oct ( $\lambda$ =353°Ls,  $\delta$ =7.1") at  $\omega$ =027°W where M Acidalium was covered by the nph but the Dawes slit was not visible. Nilokeras was quite dark. Ophir is clear but the morning one is not so bright. Further interesting scene was obtained on 15 Oct ( $\lambda$ =354°Ls,  $\delta$ =7.1") at  $\omega$ =007°W, 014°W where M Acidalium was largely covered by the nph in which a fine slit perpendicular to Dawes' is visible in both LRGB. The nph's form in B is also interesting.

いるようである。25Sept( $\lambda$ =344°Ls、 $\delta$ =6.5") $\omega$ =207°Wではプレグラ辺りが再び出始める。北極雲が濃くなりRにも写り始める。26Sept( $\lambda$ =344°Ls、 $\delta$ =6.5") $\omega$ =181°Wではプレグラの東からプロポンティスIに掛けての描写が好い。今後ここは問題になるだろう。Rでは北極雲が未だ弱い。3Oct( $\lambda$ =348°Ls、 $\delta$ =6.7") $\omega$ =112°Wは重要で、ソリス・ラクスからマレ・シレヌムに掛けての様子を稍詳しく描写している。どうも2007年の様相を引きずっている様子である。未だ北極雲はBのみでRでは出ない。13Oct ( $\lambda$ =353°Ls、 $\delta$ =7.1") $\omega$ =027°Wは興味のある場面で、マレ・アキダリウムを白雲が覆うがドーズのスリットは出ない。ニロケラスが濃い。オピルは明確だが朝方で然程明るくない例。15Oct( $\lambda$ =354°Ls、 $\delta$ =7.1") $\omega$ =007°W、014°Wではマレ・アキダリウムを北極雲が大きく覆うが、ドーズのスリットとは直角に亀裂が出ている様である(両方のLRGBで)。Bでは北極雲の境界の様子が面白い。

 $^{\circ}$  In the next issue we shall review the observations made during the period from 16 November ( $\lambda$ =010°Ls,  $\delta$ =8.8") to 15 December 2009 ( $\lambda$ =024°Ls,  $\delta$ =11.2").

南 政 次・村上 昌己 M MINAMI & M MURAKAMI

### Forthcoming 2009/2010 Mars (9)

# Ephemeris for the Observations of the 2009/10 Mars. V

December 2009 and January 2010

-Masami MURAKAMI 村上 昌己(Mk) ┛

S a sequel to the preceding Ephemeris, we here list the necessary elements of the Ephemeris for the physical observation of Mars from 1 December 2009 to 31 January 2010: The data are listed for every day at 00:00GMT (not TDT).  $\omega$  and  $\varphi$  denote the longitude and latitude of the sub-Earth point respectively. The symbols  $\lambda$ ,  $\delta$  and  $\iota$  stand for the areocentric longitude of the Sun, the apparent diameter and the phase

angle respectively. we also add the column of the Position Angle  $\Pi$  of the axis rotation, measured eastwards from the north point: This is useful to determine the north pole direction from the  $p \leftarrow$ . The apparent declination of the planet is also given at the final column. The data here are basically based on *The Astronomical Almanac for the Year 2009 & The Astronomical Almanac for the Year 2010*.

Date (00:00GMT)			ω	φ	λ	δ	ι	П	D
01	December	2009	217.46°W	19.3°N	017.20°Ls	09.89"	35.0°	1.8°	+17°59'
02	December	2009	208.13°W	19.3°N	017.67°Ls	09.97"	34.8°	$2.0^{\circ}$	+17°57'
03	December	2009	198.82°W	19.3°N	018.14°Ls	10.05"	34.5°	2.1°	+17°56'
04	December	2009	189.51°W	19.3°N	018.61°Ls	10.13"	34.2°	2.3°	+17°54'
05	December	2009	180.22°W	19.3°N	019.09°Ls	10.22"	34.0°	2.4°	+17°53'
06	December	2009	170.93°W	19.3°N	019.56°Ls	10.30"	33.7°	2.5°	+17°52'
07	December	2009	161.65°W	19.4°N	020.03°Ls	10.38"	33.4°	$2.6^{\circ}$	+17°51'
08	December	2009	152.39°W	19.4°N	020.50°Ls	10.47"	33.1°	2.7°	+17°50'
09	December	2009	143.14°W	19.4°N	020.97°Ls	10.56"	32.7°	$2.8^{\circ}$	+17°50'
10	December	2009	133.89°W	19.4°N	021.44°Ls	10.64"	32.4°	2.9°	+17°49'
11	December	2009	124.66°W	19.4°N	021.91°Ls	10.73"	32.0°	3.0°	+17°49'
12	December	2009	115.44°W	19.3°N	022.38°Ls	10.82"	31.7°	3.1°	+17°49'
13	December	2009	106.24°W	19.3°N	022.84°Ls	10.92"	31.3°	$3.2^{\circ}$	+17°50'
14	December	2009	097.04°W	19.3°N	023.31°Ls	11.01"	31.0°	3.2°	+17°51'
15	December	2009	087.86°W	19.3°N	023.77°Ls	11.10"	30.6°	3.3°	+17°51'
16	December	2009	078.69°W	19.3°N	024.24°Ls	11.19"	30.2°	3.3°	+17°53'
17	December	2009	069.53°W	19.2°N	024.70°Ls	11.29"	29.8°	3.4°	+17°54'
18	December	2009	060.38°W	19.2°N	025.17°Ls	11.38"	29.3°	3.4°	+17°56'
19	December	2009	051.25°W	19.2°N	025.63°Ls	11.47"	28.9°	3.4°	+17°58'
20	December	2009	042.13°W	19.1°N	026.09°Ls	11.56"	28.4°	3.4°	+18°00'

	Ser∠	2-11	.98							
Dat	e (00:00GM	(T)	ω	φ	λ	δ	ι	П	D	
21	December	2009	033.02°W	19.1°N	026.56°Ls	11.66"	28.0°	3.5°	+18°02'	
22	December	2009	023.93°W	19.0°N	027.02°Ls	11.75"	27.5°	3.5°	+18°05'	
23	December	2009	014.84°W	19.0°N	027.48°Ls	11.84"	27.0°	3.5°	+18°08'	
24	December	2009	005.78°W	18.9°N	027.94°Ls	11.94"	26.5°	3.4°	+18°11'	
25	December	2009	356.72°W	18.9°N	028.41°Ls	12.03"	26.0°	3.4°	+18°14'	
26	December	2009	347.68°W	18.8°N	028.87°Ls	12.13"	25.5°	3.4°	+18°18'	
27	December	2009	338.66°W	18.8°N	029.33°Ls	12.22"	25.0°	3.3°	+18°22'	
28	December	2009	329.64°W	18.7°N	029.79°Ls	12.31"	24.4°	3.3°	+18°26'	
29	December	2009	320.64°W	18.6°N	030.25°Ls	12.41"	23.9°	3.2°	+18°30'	
30	December	2009	311.66°W	18.6°N	030.70°Ls	12.50"	23.3°	3.1°	+18°35'	
31	December	2009	302.68°W	18.5°N	031.16°Ls	12.59"	22.7°	3.1°	+18°40'	
01	January	2010	293.72°W	18.4°N	031.62°Ls	12.68"	22.1°	3.0°	+18°45'	
02	January	2010	284.77°W	18.3°N	032.08°Ls	12.77"	21.5°	2.9°	+18°50'	
03	January	2010	275.83°W	18.2°N	032.53°Ls	12.85"	20.8°	2.8°	+18°56'	
04	January	2010	266.93°W	18.2°N	032.99°Ls	12.94"	20.2°	2.7°	+19°02'	
05	January	2010	258.02°W	18.1°N	033.45°Ls	13.02"	19.6°	2.6°	+19°08'	
06	January	2010	249.12°W	18.0°N	033.90°Ls	13.10"	18.9°	2.4°	+19°14'	
07	January	2010	240.24°W	17.9°N	034.36°Ls	13.18"	18.3°	2.3°	+19°21'	
08	January	2010	231.38°W	17.8°N	034.81°Ls	13.26"	17.6°	2.2°	+19°27'	
09	January	2010	222.52°W	17.7°N	035.26°Ls	13.33"	16.9°	2.0°	+19°34'	
10	January	2010	213.67°W	17.5°N	035.72°Ls	13.41"	16.2°	1.8°	+19°41'	
11	January	2010	204.84°W	17.4°N	036.17°Ls	13.48"	15.4°	1.6°	+19°48'	
12	January	2010	196.03°W	17.3°N	036.62°Ls	13.55"	14.7°	1.5°	+19°55'	
13	January	2010	187.21°W	17.2°N	030.02 Ls	13.61"	14.0°	1.3°	+20°03'	
14	January	2010	178.42°W	17.1°N	037.57°Ls	13.67"	13.2°	1.1°	+20°10'	
15	January	2010	169.62°W	17.0°N	037.98°Ls	13.72"	12.5°	0.9°	+20°18'	
	-	2010	160.85°W	16.8°N	038.43°Ls	13.78"	11.7°	0.7°	+20°25'	
16 17	January January	2010	152.08°W	16.7°N	038.43 Ls 038.88°Ls	13.78	11.7 10.9°	0.7 0.5°	+20°23'	
18	January	2010	132.08 W 143.32°W	16.6°N	038.88 Ls 039.33°Ls	13.87"	10.9°	0.3°	+20°33'	
19	January	2010	134.56°W	16.5°N	039.78°Ls	13.92"	9.4°	0.0°	+20°48'	
20	January	2010	125.81°W	16.3°N	040.23°Ls	13.96"	8.6°	-0.2°	+20°56'	
20	January	2010	123.01 **	10.5 11	040.23 Es	13.70	0.0	0.2	120 30	
21	January	2010	117.06°W	16.2°N	040.68°Ls	13.99"	7.9°	-0.4°	+21°03'	
22	January	2010	108.32°W	16.1°N	041.13°Ls	14.02"	7.1°	-0.7°	+21°12'	
23	January	2010	099.60°W	15.9°N	041.57°Ls	14.04"	6.4°	-0.9°	+21°19'	
24	January	2010	090.88°W	15.8°N	042.02°Ls	14.07"	5.6°	-1.1°	+21°27'	
25	January	2010	082.14°W	15.7°N	042.47°Ls	14.08"	5.0°	-1.4°	+21°34'	
26	January	2010	073.42°W	15.5°N	042.92°Ls	14.09"	4.4°	-1.7°	+21°42'	
27	January	2010	064.71°W	15.4°N	043.36°Ls	14.09"	3.7°	-1.9°	+21°49'	
28	January	2010	055.99°W	15.3°N	043.81°Ls	14.10"	3.1°	-2.2°	+21°56'	
29	January	2010	047.27°W	15.1°N	044.26°Ls	14.09"	3.0°	-2.4°	+22°03'	
30	January	2010	038.55°W	15.0°N	044.70°Ls	14.08"	3.1°	-2.7°	+22°10'	
31	January	2010	029.83°W	14.9°N	045.15°Ls	14.07"	3.2°	-2.9°	+22°17'	
01	Februay	2010	021.11°W	14.7°N	045.59°Ls	14.06"	3.3°	-3.2°	+22°24'	
02	Februay	2010	012.38°W	14.6°N	046.04°Ls	14.03"	3.9°	-3.4°	+22°30'	
03	Februay	2010	003.64°W	14.5°N	046.48°Ls	14.01"	4.6°	-3.7°	+22°36'	

#### 便

Letters the Editor t o

### • · · · · · Subject: Jupiter J091022 Received: Fri 23 Oct 2009 06:41:59 JST

台風の影響で気流が悪いが、上空の風が治まっ たきました。BAの輝きがより無くパッと見ても 気付かず、後ろに近づいた暗部が顕著に黒く見え ています。NEBは複雑で幅が経度により違います。

### O·····Subject: Jupiter: J091025 J091026 Received: Sat 31 Oct 2009 16:43:36 JST

GRSの北側の白斑はメタンバンドでやや明るく なっています。

### O·····Subject: Jupiter: J091027 J091028 Received: Sat 31 Oct 2009 16:55:21 JST

最近、気流が悪い日が続いています。

### O····Subject: Jupiter J091031 Received: Sun 01 Nov 2009 14:08:28 JST

GRSの北側の白斑はその後、見えています。前 方に青色の物質があり、際立っています。メタン バンドでカリスト本体が映らず、不思議?です。

### O····Subject: Juputer J091101 Received: Tue 03 Nov 2009 12:58:43 JST

最近、珍しく晴れが続き、夕方に木星が見えて います。NEBの内部活動は活発で大きなリフト、 白斑があります。NEBsからのフェストーンも以 前より大きくて青みが強くなってきました。NNTZ のRSはメタンブライトです。

### O····Subject: Jupiter J091103 Received: Wed 04 Nov 2009 23:39:00 JST

永続白斑BAの直後のSTBが小さくなり、黒い斑 点に見えます。NEBは益々活発になり、NEBnに は多く暗斑があります。

### O·····Subject: Mars Ak03Nov09 Ak05Nov09 Received: Fri 06 Nov 2009 22:11:03 JST

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091103/Ak03Nov09.jpg こんばんは、火星画像です。風があり,ぶれて います。火星画像はカラー撮像よりもRGB合成の 方が良い結果でるようです。

### O·····Subject: Jupiter J091107 Received: Sun 08 Nov 2009 18:28:42 JST

GRSは少し、赤くなっています。その北側の白 斑はまだ明るく、前方に青いものはそのままです。

#### ○ · · · · · Subject: Jupiter J091108

#### Received: Mon 09 Nov 2009 07:13:49 JST

SEBは淡い状態、白斑BAも淡い状態です。

### O·····Subject: Mars Ak09Nov09 Received: Tue 10 Nov 2009 23:20 JST

こんばんは、今朝の火星画像です。

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091109/Ak09Nov09.jpg \circ \cdots Subject: Mars Ak10Nov09 Received: Wed 11 Nov 2009 12:58 JST

南様、今朝の火星画像です。気流は良くなって きました。

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091110/Ak10Nov09.jpg

#### O · · · · · Subject: Re: Mars Ak10Nov09 Received: Wed 11 Nov 2009 15:33 JST

南様、昨日まで日本人スタッフが部屋にいまし たので思うように行動が出来ない状態でしたが、

今日から自由です。と言いましても本社からの催 促で此方の仕事が多くなり、一人では厳しくなり ました。夕方の木星と朝方の火星の二つは体力的 に厳しい(寒くは無いのは助かります)ので、今後 は16~18GMTにします。朝方まで出来るのは日曜 日です。一人で見ているのがもったいない思いが します。今夜から、木星も再開します。

### O····Subject: Jupiter J091111 Received: Thu 12 Nov 2009 17:41 JST

NEBは活発で、北側は大きく、湾を形成し、複 雑な模様が多い。NTBは斜めの長いストリークが、 見られる。SEBにはSEDが(I=180°ぐらい)ある。

### ○・・・・・Subject: 火星アニメーション Received: Fri 13 Nov 2009 17:57 JST

南様、11月9日の火星画像からアニメーションを 作ってみました。カラー像 B像、RGBチャンネ ル像です。B像は使えるかと思います?

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091109/Ak09Nov09.jpg  $\bigcirc \cdots Subject: Jupiter\ J091114\ J091115$  Received: Mon 16 Nov 2009 00:04:52 JST

GRSの北側の白斑は見えなくなりました。前方 の青いストリークは淡くなり、消えそうです。GRS の後ろのバルジは前に傾き、今後どうなるのか? 変化を見ましょう。永続白斑BAとその後ろの白 斑の合体はまだしていませんが、白斑の前方は南 側に傾き、今週中?には合体しそうです

### O·····Subject: Mars Ak13Nov09.jpg, B091113.gif Received: Mon 16 Nov 2009 00:55:28 JST

南様、火星画像を送ります。B光アニメーショ ンも作りました。

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091113/Ak13Nov09.jpg 11月14日も撮像しましたが、処理が終っていま せん。

### O·····Subject: Mars Ak14Nov09 Received: Mon 16 Nov 2009 23:25:12 JST

火星画像 Ak14Nov09です。

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091114/Ak14Nov09.jpg

#### ○ · · · · · Subject: Mars Ak17Nov09

#### Receied: Wed 18 Nov 2009 18:09:00 JST

風が強く、気流も悪く、像が踊っていました。 http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091117/Ak17Nov09.jpg しし座流星群、1個だけ見ましたが、日本ではど うなのでしょうか?

## O····Subject: Mars Ak18Nov09 Received: Thu 19 Nov 2009 17:56:37 JST

火星画像Ak18Nov09とB光アニメーションです。

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091118/Ak18Nov09.jpg 阿久津 富夫(Tomio AKUTSU セブThe Philippines)

### • · · · · · Subject: Solar flare 23rd Oct Received: Sat 24 Oct 2009 01:46:11 JST

Hi Guys, Some sun was enjoyed today. The wide view in the Coronado shows three AR's in the NH, one of which was very bright and looked quite active. Whilst imaging this most promising AR on higher power in reasonable seeing, I became aware of a rapid brightening. See image timed at 11:20ut. It lasted for about 3 minutes before fading equally rapidly. Cloud spoilt attempts at an animation. The higher power shot of the AR near the limb, is also shown here. Both were taken with my Day

star/Solar Spectrum Hybrid. on a 5 inch AP 130 f8 airspaced triplet refractor. Best wishes

#### O····Subject: AR 1029 26th Oct Received: Thu 29 Oct 2009 01:26:29 JST

Hi guys following on from Pete's fine images of the event, here are a few more images of the AR 1029 from the 26th Oct You can compare the Herschel wedge white light (+green solar continuum filter), with the H $\alpha$  image taken with the same scope and same magnification. I.E. a 5" AP f8 Starfire with 4× Powermate and either the H $\alpha$  Daystar/SS hybrid .65 A filter or the wedge. The wide field shot is from my 60mm DS Coronado. Best wishes

#### O····Subject: Solar action 27th Oct Received: Thu 29 Oct 2009 09:05:31 JST

Hi Guys here are some images from 27th, the spots have fattened up some, with far reaching  $H\alpha$  phenomena.

The wider field shot from the Coronado brings in the limb of the sun. This filter at .5Å brings out the Ha detail in higher contrast than the .65A filter used for the higher magnifi-



cation image, which is a mosaic of 5 tiles.

We were also blessed with a fine Prominence, shown south up. Best wishes

#### O····Subject: Solar images 2nd Nov 09 Received: Tue 03 Nov 2009 19:39:03 JST

Hi guys, Here are a few images of Monday's activity. Best wishes

#### O····Subject: solar images 4 Nov 09 Received: Fri 06 Nov 2009 09:50:11 JST

Hi Guys, Here are two shots from the day. The 10:38 Image showing the chromosphere edge as though it is section, is a strange one. You can see a small AR near to the limb. Emanating from that is a small prominence, that you can see appears to go right down to the photosphere. The Chromosphere is not depicted as very dense in the .65 A filter, as you see though a lot of it to a lower chromsphere level. The prominence reduced in size after the picture show, for the next half hour anyway.

The wider field Coronado image with a .5A filter shows a higher level in the atmosphere, and at a greater density and seems to block views of the chromosphere "edge". Using the Coronado's front etalon only on a separate scope, then shows the chromosphere edge. best wished

#### O····Subject: Animation 4th Nov 09 Received: Sat 07 Nov 2009 00:49:01 JST

Hi Guys here is an animation from 4 single shot frames of the spicule looking prom' associated with the small active region on the west limb. timed from 1031 to 1038 ut. Best wishes

#### O····Subject: Solar image 7-Nov-09 Received: Sun 08 Nov 2009 18:42:24 JST

Hi Guys, There was a nice filament / prom combo this morning, almost a "limb crosser", pity about the break. Single shot image with Coronado maxscope 60DS .5A,

Using a straight blocking filter unit, and LU075CCD.

#### O·····Subject: Solar image 27thNov09 Received: Mon 09 Nov 2009 03:36:58 JST

Excellent work with the Solarscope as always Pete: nice mag too from the Isle of Man 70mm certainly a very efficient filter. I have been working on a medium mag image from my Daystar SS hybrid H $\alpha$  filter plugged into a 130mm f8 Starfire. One thing it showed up was some "laminations" in the "edge on" part of the chromosphere. They are also visible in the images I sent out on the 4th ie the Gif movie and the still shot. They seem almost too sharp to be real and shout out I'm and artifact, but I have not seen multiple irregular artifacts before. Something to keep a look out for in the future. Seeing was poor. Best wishes

### O·····Subject: Solar images 14th /15th Nov 09 Received: Tue 17 Nov 2009 00:13:21 JST

Hi Guys we have two images in Ha and one in white light, showing a new AR's movement 14th to 15th, or more correctly the old AR 1029 coming back onto the disc. The white light Image also shows the tiny sunspot 1031. The prominence imaged on the 14th evolved into quite a large one on the 15th. The sun was only 16 degrees above the horizon for some of these image, here in the UK, I / we, have now entered the "problem imaging the sun" period, which will last about 10 weeks i.e., 5 weeks before and after the winter solstice, when it will then climb above neighbor's trees, rabbits and children.

#### O····Subject: Solar Images 17Nov09 Received: Thu 19 Nov 2009 01:05:25 JST

Hi Guys, That's a beautiful image from your .2A SS set-up Pat. Here are a few images of the happenings a day later. The 09:18 image shows a large prominence against the solar surface, positioned above an even larger Active Region. This two frame image was taken with a 60mm DS solarmaxscope with 3x barlow. The 11:27 Image is a montage of 5 overlapping frames, and shows the same AR as the Coronado, but taken at 160" focal length compared to 47". The scope was a 5 Inch f 8 AP with 4x powermate and .65A Daystart / SS hybrid.

best wishes

#### O····Subject: Solar images 20Nov09 Received: Sat 21 Nov 2009 20:00:13 JST

Hi Guys, There were a couple of nice example features yesterday, showing that filaments really are prominences. The active regions were busy too, with numerous small filaments reminding me of salmon leaping waterfalls. Both images from a 60mm Solarmaxscope DS with straight blocking filter and 3x tv barlow. Best wishes

Dave TYLER (デヴィド・タイラー Bkh 英)

http://www.david-tyler.com

### • · · · · · Subject: 2009-10-22 Mars observations Received: Sat 24 Oct 2009 07:15:50 JST

Hi all, An early start on the morning of the 22nd was well rewarded with some reasonable seeing, although the transparency was rather poor with light mist obscuring the sky.

 $http://www.hida.kyoto-u.ac.jp/\sim cmo/cmons/2009/091022/BKn22Oct09.jpg$ 

25 November 2009 Ser2-1201

Still none the less my first colour image through the C14 was obtained. Syrtis Major and Sinus Sabaeus were on show for some time. The view through the eyepiece was very good and detail could be made out but eventually the mist became fog and no further observations were possible. As I was packing up to go to work the ISS made a pass overhead - a great end to an enjoyable session. Warm regards to all

Bruce KINGSLEY (ブルース・キングスリィMaidenhead英)

### • · · · · · Subject: (no subject) Received: Sat 24 Oct 2009 07:39:37 JST

Dear Masatsugu, I hope you are doing well and have fully recovered from your trip to Paris. Again, it was great to meet you and everyone else who attended the IWCMO!

I finally had to opportunity to image Mars this apparition. Attached is a set of images I took on the morning of October 18th during a trip I made to West Texas.

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091018/WFI18Oct09.jpg The seeing was average to above average but seemed to improve for a few minutes just before sunrise. As a result the image I took around 11:30 UT shows a little more detail than the one I took 20 minutes earlier. Both image sets seem to show the region just east of Melas Lacus (Ophir & Coprates) conspicuously bright. This was even perceptible in the visual observations I made just after I completed taking the images. Best Regards,

### O····Subject: (no subject) Received: Mon 09 Nov 2009 23:57 JST

Dear Masatsugu, I hope you are doing well. We had some good weather here last week and I managed to get out and image Mars just before twilight on most of the mornings. Attached are the images that were taken on 4 November and 5 November. The seeing was pretty good on the 4th. I also have some that I took earlier in the week that I hope to send to you shortly as soon as I process them. Best Regards,

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091104/WFl04Nov09.jpg http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091105/WFl05Nov09.jpg O·····Subject: Mars - 1, 2, and 3 November Images Received: Fri 13 Nov 2009 2:37 JST

Dear Masatsugu & Christophe, I'm finally catching up with processing the images I took last week. Attached are images of Mars on 1 November, 2 November and 3 November. The images show the progression of the southerly extension of the NPH west of Utopia which later seemed to evolve into the small polar dust event that you noted on the 4 November and 5 November images. I was lucky that not only did I have a whole week of clear skies but the correct face of Mars was visible to be able to observe this progression. Best wishes,

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091101/WFl01Nov09.jpg http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091102/WFl02Nov09.jpg http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091103/WFl03Nov09.jpg O·····Subject: Mars 11, 12 and 13 November Received: Mon 16 Nov 2009 12:36:23 JST

Dear Masatsugu, Attached are images I managed to take during the last few days of clear skies that we had here. Valhalla seems very prominent in the images from all

three nights. Looks like rain here tonight but hopefully

we will get some clear skies next week. Best wishes,

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091111/WF111Nov09.jpg http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091112/WF112Nov09.jpg http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091113/WF113Nov09.jpg

Bill FLANAGAN (ビル・フラナガン Houston TX 美)

#### • · · · · · Subject: Jupiter images - 18 october 2009 Received: Sat 24 Oct 2009 20:16:07 JST

Hi all, again and again poor seeing http://astrosurf.com/pellier/J091018-CPE SEBs is more faded in IR than in R. Best regards

O····Subject: Re: IWCMO intervention Received: Sun 25 Oct 2009 21:50:10 JST

Dear Masatsugu, Here is my document in word format. Ask me if there are still some corrections you would require. The absence of figure 4 was a mistake, I have corrected the subsequent numerations of the figures! Best wishes,

#### O····Subject: Re: htm file of your manuscript Received: Mon 26 Oct 2009 01:56:07 JST

Dear Masatsugu: it's all nice, your uploading is more easy to read than my original document (thanks to the shifting of figures from the text). Just a remark, the text of the figures is just very slightly off-screen at left. It does not prevent the text to be read. If you see nothing on your own internet browser, don't change anything it will be fine. Thanks again!

### O····Subject: Jupiter images - 25 october 2009 Received: Thu 29 Oct 2009 07:59:55 JST

Hello - a few images of the side from the GRS to BA. http://astrosurf.com/pellier/J091025-CPE

Best wishes

#### O·····Subject: Jupiter images, 27 october 2009 Received: Fri 30 Oct 2009 06:26:54 JST

Hi all, Wanted to catch the GRS and it was very early. The planet was low but the seeing not bad given the altitude.

http://astrosurf.com/pellier/J091027-CPE

The GRS looks quite colored now! Visually, it was also seen as a dusky orange feature. Best wishes

#### O·····Subject: Jupiter images 29 october 2009 Received: Sun 01 Nov 2009 04:18:30 JST

Hi all, The SEB is now definitely fading, at least preceding the GRS, if we compare from one month ago: http://astrosurf.com/pellier/J091029a-CPE

(RGB + comparative strips)

http://astrosurf.com/pellier/J091029b-CPE

(IR, Violet, UV)

The belt was largely faded in IR since september, but the novelty is that is also fading in short wavelenghts now (see violet images). BTW, the GRS is strongly orange and this was also seen at the eyepiece... Best wishes,

### O·····Subject: Presentation of Jean-Jacque Received: Mon 02 Nov 2009 03:55:36 JST

Dear Masatsugu, dear Richard, There is a friend here in France that I would like to introduce to you.

Jean-Jacques Poupeau is one of our best french observers, very prolific and able to do very good CCD images of the planets (perhaps you have seen his Jupiter's from this summer ?). I have attached some recent shots of his, he has made many more since june. Jean-Jacques is ob-

serving at the south-west of Paris, at one car hour from me, with a homemade 350 mm cassegrain of excellent optical quality (he's impressively skillful for whatever deals with astronomical optics and mechanics!) I have talked to him, telling how interesting and respectful your martian works were, and I invited him to send his images to you also. Jean-Jacques speaks only a few words of english though, but I know that both of you can write a bit in french, if needed. Best wishes,

### O····Subject: Re: Presentation of Jean-Jacques Poupeau Received: Mon 02 Nov 2009 06:47:25 JST

Dear Masatsugu: you're welcome. I'm sure he will read your english, and in any case, I will help him traducing. Have a nice week!

### O·····Subject: Re: IWCMO photos please Received: Sat 07 Nov 2009 04:37:49 JST

Dear Masatsugu, I can send you a few more photos -I'm afraid I also need a few days, I'm about to leave for a long week-end family! On Wednesday I'll be ok. I guess however Bill Sheehan has the best set of photos! Best wishes

### O····Subject: Re: IWCMO photos please Received: Wed 11 Nov 2009 20:01 JST

Dear Masatsugu, Here are more photos from the IWCMO. There is many people I don't have... Best

### O····Subject: Re: PS Received: Sun 15 Nov 2009 22:52:00 JST

Dear Masatsugu, No problem to publish the note of the website. I'm now answering to you and Bill F! Best

### O·····Subject: Re: Mars - 1, 2, and 3 November Images Received: Sun 15 Nov 2009 23:12:43 JST

Dear Bill (FLANAGAN), Many thanks for sending me these important images. They depict very well the evolution of the dust front in the Utopia area! One would make a link between this and the topic about cross-equatorial dust storms, as we have reviewed at the IWCMO. The question is interesting because at the martian season when you took the images, cross-equatorial season is supposed to be over since a while (as the martian seasons look so regular). The season here is Ls 4-5° where the theoretical cross-equ. season ends at Ls 350°, on 7th october this year, almost one month ago. While one might conclude with your images that this year there is a curious prolongation of the critical season, another element must be added since we are now at northern spring - the role played by the north polar cap (NPC) which is absent from the crossequatorial model. During northern spring, a good deal of dust fronts is observed on or at the edge of the cap because of the strong temperature gradient between it and the southern frost-free areas (to make short). This current example might belong more likely to this kind of dust storm, or involving perhaps both explanations, as the southward deflection of the dust is so evident...

Anyway I'm hoping to see your further work! You have exceptional level of resolution and global image quality so your data must be welcomed by anyone writing on Mars;) Good luck and best wishes,

#### ○ · · · · · Subject: New e-mail

#### Received: Sat 21 Nov 2009 08:25:57 JST

Hello everyone, The e-mail address I was using until now has been discontinued, so I've been forced to create a new one which is chrispellier at sfr.fr Please use it from now, and sorry for the inconvenience... you sent me an e-mail since Tuesday, be certain that unfortunately I have not been able to read it and answer Best wishes to all of you.

### O····Subject: [Fwd: IWCMO Talks et al] Received: Sat 21 Nov 2009 22:02:44 JST

To: ALPO Mars<marsobservers@yahoogroups.com>

Hi all, I'm forwarding this message from Masatsugu Minami, director of the OAA Mars Section, about the IWCMO meeting that took place in Meudon, France, in september. The CMO team put online some of the talks given about Mars. Some deal with historical aspects of martian observations, and other will be of direct interest to Mars observers (talk about dust storms and other phenomena). Have a good read.

Christophe PELLIER (クリストフ・ヘ゜リェ nr Paris 法)

### • · · · · · Subject: Mo 22, 20 Oct 09 Received: Sat 24 Oct 2009 23:32:11 JST

やっと22、20日の処理が終わりました。相変わ らずSeeingは良くない状況で、まずまずの像だけ お送りします。

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091020/Mo20Oct09.jpg http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091022/Mo22Oct09.jpg O·····Subject: Mo 27 Oct 09 Received: Wed 28 Oct 2009 23:58:00 JST

昨日も撮ろうと3時過ぎからドームへ向かいま したが、モータードライブの不調で断念。仕事か ら帰って一生懸命に直し、やっと直りました。今 朝は、起きたら5時前で、危うくまた、寝過ごす ところでした。撮像は、3回。ジャストの時間が ベストでした。

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091027/Mo27Oct09.jpg

#### O · · · · · Subject: Mo 30 Oct 09 Received: Tue 03 Nov 2009 02:29:30 JST

やっとの思いで、処理完了です。コントラスト をつけすぎず、薄くなりすぎずが難しく、なかな か前に進めませんでした。このほかに28、29日も 撮っています。11月に入っても撮っていますがこ ちらの方はボヤボヤで全くだめです。

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091030/Mo30Oct09.jpg Lフィルターは早速頼んでおきましたが、在庫 が無く、1~2ヶ月後になるようです。

冬型が少しおさまったら撮像を再開しようと思 っています。

### ○····Subject: Re: 如何でしたか Received: Sun 08 Nov 2009 15:55:50 JST

今朝は2時過ぎから起きて待機していましたが、 雲が多く予定の時間には撮れませんでした。xy4° のWで撮っていますが少々ずれています。雲の切 れ間ではありますが、40°後に撮れました。後は 日が昇るまで曇ってしまいました。

昨日も雲の中での撮像でしたが、4°、14°と撮 っていますので処理してお送りしたいと思ってい ます。とりあえず今朝のものを送ります。

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091107/Mo07Nov09.jpg

#### O····Subject: Mo06Nov 09 Received: Tue 10 Nov 2009 00:24 JST

6日が処理できましたのでお送りします。残り05、10日分とあります。曇りの間に出来るだけ処理して送ろうと思っているのですが…

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091106/Mo06Nov09.jpg  $\bigcirc \cdots Subject: Mo~14~Nov~09$  Received: Mon~16~Nov~2009~23:54:54~JST

17時から撮りましたが、Seeingの悪いこと。17時台は良いものが皆無で何とか18時台から処理できました。枚数が少なく少々荒れ気味です。

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091114/Mo14Nov09.jpg

森田 行雄 (Yukio MORITA 廿日市 Hiroshima)

#### • · · · · · Subject: Image: 10-24-09 11:10 UT Received: Sun 25 Oct2009 1:12 JST

Greetings list, Seeing was far from good, but I managed some decent detail. Chryse is close to the CM. A good view of the NPR can be seen in Red. I've never imaged Mars with this much of a tilt and NPR to be seen, so I'm not sure if any NPC detection can be had in this image. Anyone know when it should start to form? I'm 99% certain the "patchy clouds" you see towards center disc in Blue close the the limb are processing artifacts.

http://marswatch.amaonline.com/10-24-09@1110.jpg

#### O·····Subject: Re: Image: 10-24-09 11:10 UT Received: Sun 25 Oct 2009 6:27 JST

Greetings list, After reprocessing this image and studying it some, I'm wondering if there might be dust in the NPR, north of Cydonia. Can someone tell me if albedo features in that region are obscured in Red?

http://marswatch.amaonline.com/10-24-09@1110.jpg

#### O····Subject: Image: 10-31-09 11:00 UT Received: Sun 01 Nov 2009 3:40 JST

Greetings list, An image from this morning in average seeing. A good view of the NPC can be seen, along with a band of clouds south of the NPC. I'm not sure if the clouds to the south would be part of the NPH or not. No dust activity that I can see.

http://marswatch.amaonline.com/10-31-09@1100.jpg

#### O·····Subject: Image: 11-01-09 11:05 UT Received: Sun 01 Nov 2009 21:29 JST

Greetings list, With the breaking down of the NPH over the last week, a very good view can be had of the NPC. Starting to look rather brilliant in my opinion.

http://marswatch.amaonline.com/11-01-09@1105.jpg

#### O·····Subject: Image: 11-02-2009 10:55UT Received: Tue 03 Nov 2009 2:56 JST

Greetings list, An image in decent seeing. A nice view of the NPC can be seen, along with some clouds south of the cap, over Mare Boreum. These only show up in RGB and Blue, which means, I assume, they are water/ice clouds. They are not seen in Red, so we can rule out dust. These clouds in this region have been lingering now for at least 5 days that I know of. But the NPC is prominent and putting on a great show.

http://marswatch.amaonline.com/11-02-09@1055.jpg

#### O·····Subject: Image: 11-07-09 10:45 UT Received: Sun 08 Nov 2009 6:02 JST

Greetings list, Still waiting on good seeing, but making the best of what I can get. Hellas is seen on the morning limb coming into view. There is a yellowish haze over Hellas you can see easily in Red. Perhaps some dust activity. THEMIS indicated some as of yesterday.

http://marswatch.amaonline.com/11-07-09@1045.jpg

#### O····Subject: Mars images Received: Mon 09 Nov 2009 11:31:41 JST

Dear Dr. Minami, My apologies for not sending my Mars images to you. I had to change computers and lost all of my contacts. I will be more than happy and honored to you send you my images of Mars when I take them. With my next imaging session, I will start. Here are all of my 2009 images so far, in case you haven't seen all of them.

http://marswatch.amaonline.com/mars\_2009\_\_2010.htm Hopefully I'll have some nice images to send to you soon. I will be imaging every chance weather allows. Best wishes,

#### O····Subject: Image: Nov 18th, Received: Thu 19 Nov 2009 01:06:37 JST

Greetings list, Seeing still is rather lacking, but I was able to get a decent shot. I'd like to remind people my images are resized 200%, so if you want to see actual scale through my scope, reduce it by 50%. This image is shows about how blank Mars can be. If I had waited an hour or so, the Tharsis volcanoes would have been more towards the evening limb, and I most likely would have been able to pick up some clouds, but no volcanoes or clouds over to be seen in this image. It was 25 degrees this morning and I wasn't waiting. There is some light cloud cover over Mare Boreum. Also, I believe after enlarging and additional processing, I can make out an irregular edge to the NPC. I'm sure that is up for debate though. Normal albedo features seen in the S. Hemisphere.

http://marswatch.amaonline.com/11-18-09@1105.jpg

#### O·····Subject: Image Nov 18th, 1035 UT Received: Thu 19 Nov 2009 04:57:39 JST

Greetings list, One more sequence worth posting from this morning. Shot about 30 minutes before the last one I posted

http://marswatch.amaonline.com/11-18-09@1035.jpg Regards,

Joel WARREN (ジョエル・ウォーレンAmarillo TX 美)

#### • · · · · · Subject: Mars Image - October 20, 2009 Received: Sun 25 Oct 2009 01:29:36 JST

Gentlemen, Attached is a set of images from October 20. Regards,

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091020/PGc20Oct09.jpg

#### O····Subject: Mars Image - November 2, 2009 Received: Thu 05 Nov 2009 22:30:16 JST

Gentlemen, Attached is a set of images from November 2, 2009. Regards,

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091102/PGc02Nov09.jpg

#### O·····Subject: Mars Image - November 9, 2009 Received: Wed 11 Nov 2009 14:07 JST

Gentlemen, Attached is a set of images from November 9, 2009. Regards,

 $http://www.hida.kyoto-u.ac.jp/\sim cmo/cmons/2009/091109/PGc09Nov09.jpg$ 

O · · · · · Subject: Mars Image - November 18

#### Received: Sun 22 Nov 2009 12:39:01 JST

Gentlemen, Attached is my Mars image from November 18. Regards,

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091118/PGc18Nov09.jpg

Peter GORCZYNSKI (ピーター・ゴルチンスキCT 美)

#### • · · · · · Subject: RE: Talk in Paris Received: Sun 25 Oct 2009 20:17:02 JST

Dear Mr. Minami, Thank you for your email and kind comments. I am working on the material that I used in my poster paper to make it suitable for your publication. I will send it as soon as possible. Best Regards

#### O····Subject: Poster Paper Received: Tue 03 Nov 2009 19:52:40 JST

Dear Mr Minami, I have assembled a word file which is a summary of my poster paper on the subject of "Observations of Mars with the Great Melbourne Telescope". Please feel free to edit if you wish and please let me know if you want more information and/or photographs. In the powerpoint presentation at the workshop I did use more photographs and I will send them all if you wish, but it may be a very large file.

Please call me Barry. Best Regards

#### O····Subject: RE: Poster Paper Received: Sat 07 Nov 2009 06:21:20 JST

Dear Masatsugu, I have read the manuscript of my poster paper on your web site and I am happy with it. I am pleased to provide more information if you need it. Best regards

Barry ADCOCK (バェリー・アドコック Melbourne 澳)

#### • · · · · · Subject: RE: Figures in PPt Received: Mon 20 Oct 2009 13:06:24 JST

Dear Masatsugu, Thank you for letting me know about the option of reformatting the Powerpoint slides to Adobe PDF. The original ppt file was 55.7MB, but the PDF version is only 12.8MB. (I know that is still quite large for email, so I hope it does not cause any problems.)

# TEN YEARS AGO (171)

--- #225(25 November 1999)pp2623~2638 ---

CMO Mars Report #18には、16 October(225°Ls)から15 November(244°Ls)迄の観測が取り上げられている。この期間天候が良く、観測は夕方の短い時間だけであったが、暮れるのが早くなったこともあり観測数は減少しなかった。視直径はこの期間の末で $\delta=5.9$ "まで小さくなってしまった。傾きが更に南を向いてきたこともあり、南極冠と周辺の暗色模様が捉えられている。報告は国内からだけとなったが、10月後半には、S SabaeusからSyrtis Mj・Hellasあたりが見えていた。11月中旬には夕方にSolis Lが見える経度まで進んだ。

LtEには、Francis OGER(France), Richard McKIM (UK), André NIKOLAI (Germany), Sam WHITBY (USA), Frank J MELILLO (USA)の国外の各氏より、国内からは、伊舎堂弘(沖

縄)、常間地ひとみ(神奈川)、森田行雄(広島)、岩崎徹(福岡)、比嘉保信(沖縄)氏からのお便りが紹介されている。オジェ氏からは彼が関わった観望会の話が、ソルボンヌ天文台の望遠鏡の写真を添えて語られている。国内からは、しし座流星群の話題が多かった。

TYA(51)は、CMO #079, #080 (10 Nov: 25 Nov 1989) の二冊からの紹介で、20年前のこの期間は十月の「合」直後で観測休止期であった。CMO#079には「1988年火星面観測リスト 第二部」「再見臺北(五)」が掲載された。CMO#080にはドン・パーカー氏の紹介記事が載せられている。

「夜毎餘官 LVIV」は「南山」である。臺北でのクリーニングネーム「南山」ーミナミサンーからはじまり、終南山を説き、王維の「送別」に至る。そして、サン=ドゥニの漢詩仏訳を取り上げ、ドイツ語訳へ話しが及び、マーラーの交響曲の歌詞へと話が転じて、最後は王維に戻って話を

TISEN 0917-7388

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NO. 225

25 November 1999

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IWASAKI, Tohru 岩 萬 盤 (1+) 北九州 KitaKyushu, Fukuoka, Japan 4 Drawings (20, 24 October, 7, 10 November 1999) 400221cm speculum MINAMI, Massakuyu 前 嵌 次 (Mn) 福井 Fukui, Japan 50 Drawings (17, 18, 21, 23, 24, 25, 28 October, 4, ~ 7, 10, 13 November 1999) 400, 48b020cm refractor\*

2623

結ぶ。御存知のようにマーラーは岩崎徹氏の愛聴する音楽家である。 下記のリンクから全文が参照できる。 http://www.hida.kyoto-u.ac.jp/~cmo/cmomn1/Zure5.htm(Japanese) http://www.hida.kyoto-u.ac.jp/~cmo/cmomn2/Cahier04.htm (English)村 上昌己 (Mk) Thank you for your interest in my IWCMO presentation and in the book. I will be glad to send you an announcement when it finally appears, although it will not be until next year.

Please say a kind hello to your wife from my husband and daughter. It was lovely to meet you both in Paris. Sincerely,

### O·····Subject: RE: Manuscript uploaded Received: Thu 29 Oct 2009 01:20:54 JST

Dear Masatsugu, I have just spoken with my editor at the University of Chicago Press, and they would NOT like for any draft text from my book to be publicly available through any website.

Instead, I am attaching the notes I used from my presentation - can you upload this instead? I think it would be fine if you upload these notes (which are linked to the PPT slides by number) alongside a statement that this is based on chapter 2 of my forthcoming book.

It is fine to say that draft copies of this chapter are available by contacting the author. (The editor does not mind if I circulate the draft to colleagues, of course; the only problem is with posting it on a public website.) It is also fine to include a copy of the Table of Contents, as you have done.

I'm sorry to be communicating this when you have already done much of the work to upload the chapter. I did not realize it would be a problem for the editor/publisher. I hope the alternative I have suggested here will work for you. The notes are not in the form of paragraph prose, but I think they will provide the basic ideas for any viewers of the CMO website. Sincerely,

### O·····Subject: RE: RE: Manuscript uploaded Received: Thu 29 Oct 2009 13:34:34 JST

Dear Masatsugu, Thank you for your understanding in this issue - I really appreciate it. Sincerely,

### O····Subject: RE: Upload of the revised manuscript Received: Wed 04 Nov 2009 02:56:31 JST

Dear Masatsugu, Thank you - this looks excellent. I appreciate all your work on this, and I'll let you know as soon as the book is available. Very best,

#### O····Subject: RE: IWCMO Talks et al Received: Sat 21Nov 2009 06:05:26 JST

Dear Masatsugu, Thank you for putting this web site together - it is a very nice record of the symposium. Best wishes,

Maria LANE (マリア・レーン NM 美)

#### • · · · · · Subject: Re: IWCMO Talk Manuscript Received: Tue 27 Oct 2009 04:52:56 JST

Dear Mr Minami, Thank you for your mail. I send you my talk slightly edited. The red numbers are referring to the slides of my PowerPoint presentation. If you need this pictures, you can tell me.

I hope there's not too many mistakes. Maybe you need to corrected the text: it's difficult for me to speak or write english, It's more easy to read it.

It was really a pleasure to meet all this lovers of planet Mars during the Paris meeting. Best regards

O · · · · · Subject: RE: Re: IWCMO Talk Manuscript

#### Received: Thu 29 Oct 2009 18:44:39 JST

Dear Mr Minami, By now I am on hollydays, so I'll send you the file next week. Best regards

### O····Subject: Re: Re: IWCMO Talk Manuscript Received: Tue 03 Nov 2009 23:44:06 JST

Dear Mr Minami, I'm happy you've found interesting my talk about some French astronomers. I'm currently writing a paper (in French) about Gaston Millochau who is totally unknown in his country. He didn't made major discoveries in astronomy but he has witnessed the development of astrophysics in France.

I'm sorry for being not able to speak more about Quénisset: I have never worked specifically on this astronomer.

You're right when you say I used the English word "notoriety" as like the French word "notoriété". I shall used the word "fame" . The sentence should be: "In 1879 he published his book "*Astronomie Populaire*", a best seller who gave him a great fame."

You could found the PowerPoint presentation of my talk containing the pictures at this address:

 $\label{lem:http://rapidshare.com/files/301850574/QUELQUES\_OBSERVATEURS\_DE\_MARS version\_num\_rot\_e-ppt97.ppt.html. \\ Best\ regards$ 

#### O·····Subject: re: Web Page Received: Mon 09 Nov 2009 22:26:52 JST

Dear M Minami, You have done a great job for presenting my talk. I have no comments to add. Thank you very much. Best regards

Stéphane LECOMTE (ステファーヌ・ルコント SAF 法)

### • · · · · · Subject: AR11029, October 26th Received: Tue 27 Oct 2009 19:15:30 JST

Hi all, Here's a shot of AR11029 taken through thin cloud on the 26th October. Lots of intricate changes were observed throughout the region during the imaging session, especially in the 'snake pit' next to the main spot where an intense star-like points caused minor issues with the exposure settings on the camera. Best regards,

#### O·····Subject: Solar images, October 27th 2009 Received: Wed 28 Oct 2009 19:21:36 JST

Hi all, Some great activity still visible on the 27th. AR11029 took centre stage but there was also an impressive "wall of plasma" prominence on view too.

Best regards,

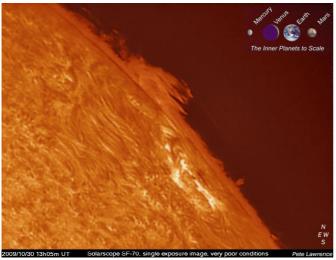
### O · · · · · Subject: Large prom from the 27th and the departure of AR11029 on the 30th Oct Received: Sat 31 Oct 2009 00:37:54 JST

Hi all, Terrible conditions today had me imaging through a thick layer of misty cloud and some trees! As AR11029 rotates towards the limb, it's dragging a cloud of hydrogen with it which is visible as a bright prominence. The other image is of a large prominence visible on the 27th. I've already sent a shot of this out but the one attached was a single exposure (i.e. not a composite), to pick out the surface and prominence at the same time.

Best regards,

#### O·····Subject: Re: Solar image 7-Nov-09 Received: Sun 08 Nov 2009 20:27:11 JST

Fantastic Dave - filaproms aren't easy to image well. The break, as you say, was not well placed for us though was it!? Attached is an image of the same feature using the Solarscope SF-70. Cheers,



O·····Subject: Re: Solar image 27thNov09 Received: Mon 09 Nov 2009 10:28:12 JST

Wow, that's up close and personal Dave! I have seen and captured the same laminations before. As you say, they seem to scream out artifact, almost like a sharpening 'bounce' from the surface and top edge of the chromosphere. I still think there's an element of something real in there though. Cheers,

Pete LAWRENCE (ピート・ローレンス Selsey 英)
http://www.digitalsky.org.uk

#### • · · · · · Subject: Mars-2009-10-27-KUMAMORI Received: Wed 28 Oct 2009 18:58:00 JST

南 政次様、熊森照明です。台風が通り過ぎてようやく晴れました。シーイングはもう一つですが、思っていたよりはデティールが出たように思います。よろしくお願いいたします。

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091027/Km27Oct09.jpg

#### O····Subject: Mars-2009-10-29-KUMAMORI Received: Sat 31 Oct 2009 00:00:18 JST

火星の高度が高い割にシーイングが今ひとつ良くなりません。処理画像ではそこそこのディティールが出るのですが、撮影中のモニター画像ではぼけている時間は長いものです。

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091029/Km29Oct09.jpg O·····Subject: Mars-2009-11-06-KUMAMORI Received: Sun 08 Nov 2009 17:31:09 JST

火星の赤緯がやや低くなって、ベランダからの時間に少し余裕ができたのですが、体の方が朝起きについていけません。ちょっとシーイングが良くなると、そこそこ写るようになりました。

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091106/Km06Nov09.jpg
\( \cdot \cdot \cdot \cdot Subject: Mars-2009-11-08-KUMAMORI \)
Received: Thu 12 Nov 2009 22:38 JST

薄雲を通しての撮影となりました。もう少しシーイングが良ければと思いますが、悪いなりにもなんとか、ディテールが写るようになりました。

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091108/Km08Nov09.jpg

熊森 照明 (Teruaki KUMAMORI 堺 Osaka)

### • · · · · · Subject: Jupiter from Barbados - Lots more images Received: Fri 30 Oct 2009 17:58:15 JST

Hi all, At last I have found enough time to prepare some more Jupiter images taken from Barbados. Work has been so busy recently I have not found the energy to process them as quickly as I hoped. I have posted 3 more nights of images: 5/6th, 6/7th and 7/8th September 2009; a total of 26 more images (there are over 40 images available now). There is one web-page per day; the links to these pages are at the end of this main page:

http://www.astro-sharp.com/jupiter2009barbados.asp Individual page links are:

5th/6th:

http://www.astro-sharp.com/jupiter2009barbados4.asp

http://www.astro-sharp.com/jupiter2009barbados5.asp 7th/8th:

http://www.astro-sharp.com/jupiter2009barbados6.asp

Also, Dave Tyler reprocessed one of my images in a 'softer' style, the question is should I reprocess all of mine to this style? I think I may have gone too 'harsh'. Here is Dave's version:

 $\label{lem:http://www.astro-sharp.com/images/jupiter2009barbados/dave-tyler-processed.jpg\\ Best \ Regards$ 

lan SHARP (イアン・シャープ WS 英)

### • · · · · · Subject: Re: Photos of Paris conference Received: Fri 30 Oct 2009 18:01:02 JST

Dear Masatsugu, I am now sending you many of the pictures from the first evening of the conference; a few of the shots taken in near-darkness are less good, but will I think suit your purposes. With regards

#### O····Subject: Re: Antoniadi talk from Paris Received: Fri 30 Oct 2009 18:25:17 JST

Dear Masatsugu, I attach the text of the Antoniadi talk, which was scripted. Also attached are a selection of non copyright illustrations to give the essential flavour of the talk. The second talk, being 'off the cuff', will need more thought. All the best

### O·····Subject: Re: URL of your page Received: Mon 02 Nov 2009 07:36:38 JST

Dear Masatsugu, This url looks good. The figures look correctly placed. I could send more. Herewith the Lowell 1909 drawing and 1907 photos and also the Antoniadi 1933 drawings coloured by Sadil. However, there is no dust storm map of 1909 because no-one made one: you are, I am sure, thinking of Antoniadi and 1911. I am also attaching a montage including A's series showing the clearance of the 1909 event, taken from the 1909 BAA Mars Memoir. With best regards

#### O····Subject: Re: More photos please Received: Thu 05 Nov 2009 07:24:48 JST

Dear Masatsugu, Yes, I have some more images that may be suitable for you. The pages you sent me links to I just looked at and they seem fine. The 'G' of 'Good morning' in my talk (the first words on the page) is slightly misplaced but everything else looks perfect. I hope to send something at the weekend. With regards.

#### O····Subject: Re: More photos please Received: Wed 18 Nov 2009 05:14:56 JST

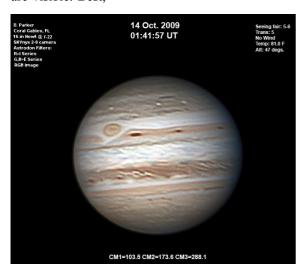
Dear Masatsugu: Here are some more. You will either wish to include #209 or 210, but not both. If you flip

between them you will find that you yourself disappear and reappear! With regards

Richard McKIM (リチャート・マッキム Peterborough 英)

#### • · · · · · Subject: Jupiter 14 October Received: Sat 31 Oct 2009 03:46:35 JST

Hi All, I have attached some belated Jupiter images from 14 October -- RGB, CH4, and UV. The GRS hollow white spot and the SEB "teardrop" and blue streak are visible. Best,



#### O·····Subject: RE: Jupiter 14 October Received: Mon 02 Nov 2009 06:36:19 JST

Dear Masatsugu, Thank you for your kind note. Hopefully I will be able to start imaging Mars this week. I certainly miss it! I had hesitated to image it early for fear of waking my wife. She failed to continue to respond to her therapy, so she is now on a more aggressive chemotherapy. Surprisingly she has had fewer side effects and seems to be responding well. We will know more in a few weeks.

I am sorry to have missed the IWCMO but am glad that it went very well. Looking forward to seeing your pictures

71 trips around the Sun -- Wow! Where did the time go? !! Hope all is well with you, Your friend, Don

#### O····Subject: Jupiter 2 November Received: Tue 10 Nov 2009 08:01 JST

Hi All, I have attached RGB, CH4, and UV Jupiter images from 2 November taken under very poor seeing. Best,

**Don PARKER** (ドン・パーカー Miami FL 美)

#### • · · · · · Subject: Re: Your images please Received: Mon 02 Nov 2009 16:49:13 JST

Dear Masatsugu, Thank you for the interest which you carry in my images of Mars. Excuse me for my bad English and I have to use a translator by Web. Here is the totality of my images of Mars obtained in 2009.

 $http://www.hida.kyoto-u.ac.jp/\sim cmo/cmons/2009/index\_JPp.html\\ Best~Regards$ 

O····Subject: Re: Your images please Received: Mon 02 Nov 2009 23:09:49 JST

Dear Masatsugu, Here is the place of my observing

station: PECQUEUSE (Village), Essonne (department) FRANCE (about 30 km south of PARIS). Best Regards  $\bigcirc \cdots Subject$ : Mars 2009/11/05 Received: Thu 05 Nov 2009 20:49:02 JST

Hello, Here is Mars on 2009/11/05. The transparency was quickly variable. The seeing was poor and the wind was annoying. Regards

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091105/JPp05Nov09.jpg  $\bigcirc \cdots Subject: Re: Mars 2009/11/05$  Received: Fri 06 Nov 2009 05:03:57 JST

Dear Masatsugu, This time it was not possible to obtain G and B images good enough (for me they are really not exploitable) because the weather conditions were terrible. These images have been taken during lulls. Low and mid altitude clouds were crossing over our country and the B movies have been shortened by clouds. Moreover, the wind was a problem. Despite this, the red images are acceptables, but the RGB are finally bad. I hope to do better on next time! Best wishes,

O····Subject: Mars 2009/11/06 Received: Sat 07 Nov 2009 00:22:11 JST

Hello, Here is Mars on 2009/11/06 05H50 UT. Regards http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091106/JPp06Nov09.jpg

O····Subject: Mars 2009/11/10 Received: Tue Nov 2009 17:32 JST

Hello, Here is Mars on 2009/11/10 03H26 UT.Regards http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091110/JPp10Nov09.jpg

O·····Subject: Mars 2009/11/20 Received: Sat 21 Nov 2009 01:30:06 JST

Hello, Here is Mars on 2009/11/20. Regards

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091120/JPp20Nov09.jpg

### Jean-Jacques POUPEAU

(ジャン=ジャック・プーポー Essonne 法)

#### • · · · · · Subject: Mars 2009 November 02 Received: Tue 03 Nov 2009 04:36:26 JST

These are my first images of the 8" dia. planet this apparition. Seeing was fair but there was some interference from cloud. Features look normal to me, but those better versed in comparative areography might be able to comment further.

There was quite a bright star in the field of a highpower eyepiece at the same time, which made an attractive view. I make this (from the excellent free software Stellarum) HP 42673, mag. 6.9, in Preasepe.

http://www.davidarditti.co.uk/astro/images/mars/09/mars2009-11-02-DLA.jpg

#### O·····Subject: Mars 2009 November 04 Received: Thu 05 Nov 2009 08:50:39 JST

Seeing was again fair. On this occasion I managed to capture a much lower longitude (by starting earlier). Alt 53°. Olympus is on the terminator. The empty plain of Amazonis is centre with the "lakes" Propontis and Hecates to the N., Cerebus, Styx and Erebus to f.

http://www.davidarditti.co.uk/astro/images/mars/09/mars2009-11-04-DLA.jpg I have now got another cold (2nd since Paris meeting).

**David ARDITTI** (デヴィット・アーディチ Edgware ME 英)

• · · · · · Subject: Re: IWCMO Lecture Received: Tue 03 Nov 2009 19:15:23 JST Dear Dr Minami, Thank you for your message. Due to a loaded agenda, I am not sure to be able to provide you with the requested contribution. I will do my best, but it could take one or two months before I find availability to work on this contribution. Best regards.

#### Éric CHASSEFIÈRE

(エリック・シャスフィエール Paris VI 法)

#### • · · · · · Subject: IWCMO Talk manuscript Received: Wed 04 Nov 2009 09:16:11 JST

Dear Dr. Minami, Thank you very much for your message regarding my IWCMO paper. I have not yet had the time to bring the apparatus up to an acceptable level. It would also be desirable to have more cognizance taken of work on the role of visual scientific culture in the 19th century, professional, amateur, and popular.

A print astronomical journal asked for the paper shortly after I delivered it, but I have not yet decided in what form I will release it. As they asked first, I must in all fairness give them priority. Yours sincerely,

#### Randall ROSENFELD

(ラント゛ール・ローセ゛ンフェルト Toronto 加)

### • · · · · · Subject: Re: Dark patch at the dusty M Cimmerium Received: Sun 08 Nov 2009 04:57:16 JST

Dear Masatsugu, Thank you for your message, it is always a great pleasure to hear from you.

I promise to tackle the requests you place before me, as soon as I can--forgive me that just now I am very harassed by professional duties. But I should be able to meet all your requirements. Best,

### O····Subject: Re: Dark patch at the dusty M Cimmerium Received: Mon 09 Nov 2009 23:59:56 JST

Dear Masatsugu, I am sending, a couple at a time, images from Paris Observatory, Meudon, and Juvisy. Some are of people there as you requested. I have a few others perhaps to go through and will start working on them later today. Some of the interior of the Paris Observatory and the reception seem to be missing but I shall try to locate them for you.

Then, perhaps in the next few days, I shall take on the other projects you place before me; I am eager to help.

#### O····Subject: Last images Received: Tue 10 Nov 2009 00:36 JST

Dear Masatusgu, I didn't take as many at the reception as I'd supposed—or somehow they don't seem to turn up. I will keep looking but meanwhile here is one of the Transit of Venus painting at the Observatoire; also an image of the statue of the Great Cassini. •••

### O····Subject: More images soon to come Received: Tue 10 Nov 2009 01:38 JST

Dear Masatsugu, I located the reception and some images of the interior of the Paris Observatory; they were missing because I had taken them on the same set with the last of the Somme. I will download these and send some of the better ones later today or tomorrow. Best,

#### O····Subject: Martian at Notre Dame Received: Tue 10 Nov 2009 07:35 JST

Hi, Masatsugu, For general interest, I see the Martians landed on the Tower of Notre Dame. More images tomorrow—let me know if you're getting them safely.

By the weekend I will start putting your other requests behind me. Thanks for all you do, cher Maitre Martien



#### O·····Subject: Mars at Lowell Observatory Received: Fri 13 Nov 2009 3:25 JST

Dear Masatsugu, Greg Mort and I are planning our observing campaign in January. Remind me again of the dates you suggested as the best to make the Olympus Mons observations. We shall send them to you for publication in the CMO. Best,

### O·····Subject: Re:Re: Mars at Lowell Observatory Received: Sat 14 Nov 2009 6:19 JST

Dear Masatsugu, Yes, I think after 25 January should work very well. I just communicated with Greg yesterday and at that time we had not made any definitive plans as to when to observe.

It would be wonderful if you could come—we could then finally have some good time together, without so many other people around. I believe you would be extremely gratified to see the Lowell Observatory after so long--

The only thing I cannot guarantee, of course, is the weather; it must be very changeable and often unfavorable at that season. Flagstaff does sometimes get snow, and with the peaks sticking up into the air, storms can form quickly. (Remember that after 1894 Douglass tried to observe through the winter and his results were so poor that Lowell explored the Sahara and finally decided to move to Mexico for the next opposition!)

I can't give you accurate prognostications unfortunately but will forward this to Greg and to Antoinette and see if they can give you some sort of statistics. I assume though that as always in astronomy, one must make plans to travel in such seasons at one's own risk. At least at the observatory I can guarantee that there will be a telescope (in contrast to J\*\*\*\*) and no pigeon droppings all over the floor (as at M\*\*\*\*\*). Best,

#### O····Subject: CMO Web Page Received: Sun 15 Nov 2009 06:25:22 JST

Dear Masatsugu, Well done on the CMO web page —IWCMO. The illustrations bring back many memories, and you were right to insist on them. Best wishes,

#### O·····Subject: Lowell observatory Received: Mon 16 Nov 2009 01:11:30 JST

Dear Greg, Masatusgu, and Kevin (who I'm including in this discussion since I think he needs to be aware of what's afoot) For Kevin's info: Greg Mort, whom you know well, Masatsugu Minami, Japan's premiere Mars observer, and myself have been discussing a visit to Lowell to use the 24-inch around Opposition date at the end of January 2010 to study the meteorology of the Tharsis volcanoes, especially Olympus Mons. All of this is dependent of course on the availability of the telescope which I am assuming may be well subscribed around that date.

I think we have all the parametrics we need now to determine what we need to do in late January—sounds as if January 25 is the earliest date for us to get started; probably we would observe for about a week.

Brian Skiff, with his usual thoroughness, has given us the weather statistics—they look reasonably promising, assuming we do not have six winter storms in January as they did in 2006 (just after I was last at Lowell; perhaps I brought bad luck). If we can resolve the question of the telescope availability, I'm ready personally to lock in my travel plans—acquire airplane tickets, etc. What do you recommend, Greg and Kevin, for accomodation at Lowell? Also—we will be doing some work in the archives; Antoinette is already aware of that.

It will be great to be back at Lowell again—still (and always will be) my favorite observatory. Best,

Bill SHEEHAN (ウィリアム・シーハン MN 美)

#### • · · · · · Subject: mars sketch 08/11/09 Received: Sun 08 Nov 2009 19:45:10 JST

Hi, this is my sketch from 8 november.

Date: 08/11/09, Time: 06h00 UT, observer: Kris Smet location: Bornem, Belgium, instrument: 12" f/5 dobson magnification: 300x, seeing: poor-average, filters: blue, orange & green

 $http://www.hida.kyoto-u.ac.jp/\sim\!cmo/cmons/2009/091108/KSm08Nov09.jpg$ 

Kris SMET (クリス・スメト Belgium 比利時)

#### • · · · · · Subject: Re: Solar image 7-Nov-09 Received: Sun 08 Nov 2009 23:30:11 JST

great images guys! By the time the sun made it to the US it was a little harder to make the connection between the filament and the prominence. Here are links to two images I made on Saturday (when I should have been raking the leaves): full solar disk:

http://www.avertedimagination.com/img\_pages/sun\_20091107.html and the filaprom, looking like a Yeti stalking the edge of the disk:

http://www.avertedimagination.com/img\_pages/yeti\_prom.html best wishes,

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

#### • · · · · · Subject: Mars Sketch 09 November 2009 Received: Tue 10 Nov 2009 08:56 JST

Sirs: Please find for your consideration the attached sketch and observation of the Red Planet. I was fortunate to have above average seeing--Mars is still very small in the eyepiece--and some clear weather after a month of clouds. Notes are with the sketch. Best regards,

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091109/MRs09Nov09.jpg

#### O·····Subject: Mars Sketch 21 November 2009 Received: Sun 22 Nov 2009 03:24:19 JST

Sirs: Please find attached my latest Mars observation and sketch for your consideration. Seeing was average to below average but I did see some interesting atmospheric features. Notes are with the sketch and included below. 20cm SCT f/10 @400x, 250x, & 340x, Filters: W21, 23A, 56, 80A, & IL, S: 4-5/10, T: 2/6 w/ high clouds, Dia: 9.2", Alt: 69°, Ls: 013°, De: 18.4°, CM:111° ~ 121° *Notes:* North Polar Cap (NPC) prominent bordered by dark Mare Boreum. Broad morning limb haze (MLH). Southern albedo features obscured by blue clouds. Tharsis on central meridian (CM) but no detail seen. Thank you,

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091121/MRs21Nov09.jpg

....Subject: Re: Mars Sketch 21 November 2009
Received: Sun 22 Nov 2009 21:54:24 JST

Very sorry--I must be in too big a hurry! Hope you find attachment this time. Best regards,

Michael ROSOLINA (マイク・ロソーナWV 美)

#### • · · · · · Subject: Greg Mort's IWCMO Talk Received: Thu 12 Nov 2009 10:43 JST

Dear Masatsuga - Sorry for the long delay with my information. I needed to get it all in a proper fashion with some good illustrations. Thanks so much for your communication and patience. It was a grand time for all Mars Observers. Best

#### O·····Subject: Re: Greg Mort's IWCMO Talk Received: Fri 13 Nov 2009 21:24 JST

Dear Masatsugu - The web page looks GREAT! As do each of the images. I don't think the raw image adds all that much anyway. Very nice job with placement of pictures and fonts-colors so on. Thanks for putting it all together, Well Done.....Best Wishes,

Greg MORT (グレク・モート MD 美)

### • · · · · · Subject: Re: Mars at Lowell Observatory Received: Sat 14 Nov 2009 08:34 JST

Antoin has asked me to provide some information about likely weather in Flagstaff in late-January /early-February, evidently the time of your visit.

About all I can say is it is likely to be chilly (about 7C days, about -7C nights). The state of the sky can range from fabulous to overcast. Seeing, probably of most concern, can also range from essentially perfect to 60" (yes, a whole arcminute). Typical however is between 1" and 2". Last winter I regular viewed Saturn as part of helping with the evening public program, and on more than half the nights Titan was a nicely resolved disc (~0".8) in the Clark refractor. If there is a lot of snow, getting the dome shutters open is a serious problem if it has not melted off.

I maintain a nighttime cloudiness record for Flagstaff. The nightly data (since 1995) and annual summaries (for 30 years) are available at the Lowell Web site starting at: http://www.lowell.edu/Research/cloudiness\_data/clouds.html

The summaries for the last ten years show the following

numbers of "usable" nights broadly speaking for January:

2000 132001 13

2002 15

2003 182004 15

2005 6 (eight winter storms)

2006 21

2007 18

2008 11

2009 19

...this is basically the sum of nights not completely cloudy.

There's no way of predicting the weather far in advance. The NWS does issue seasonal climate predictions that are run out 15 months:

http://www.cpc.ncep.noaa.gov/products/predictions/30day/

http://www.cpc.ncep.noaa.gov/products/predictions/long\_range/two\_class.php The current set suggests a somewhat wetter than average winter due to the moderate El Nino event now underway. These forecasts are issued on the third Thursday each

month, so the next batch will come out late next week.

The pattern of winter storms often gets into a ~6-week cycle due to what's called the Madden-Julian oscillation.

So there'll be a series of troughs for a week or tens days then no significant weather for several weeks, then another round of storms. Where we'll be in that cycle (if it develops) is hard to say. But if we're snowed-in around the middle of December, then it's a fair bet that the end of January will be snowy, too.

The NWS also puts out 8- and 12-day forecasts that are quite reliable:

http://www.cpc.ncep.noaa.gov/products/predictions/610day http://www.cpc.ncep.noaa.gov/products/predictions/814day ...so at least you can have a rough idea of the general trend in the weather two weeks ahead. These will show a shift in the storm pattern well before it shows up in the local public forecasts.

On the timescale of 2 days, the NWS forecasts are given here:

http://www.wrh.noaa.gov/fgz/prod\_list.php?wfo=fgz

...where the 'forecast discussions' give the most information. The well-known 'Clear Sky Chart' for Flagstaff is here:

http://www.cleardarksky.com/c/FlagstaffAZkey.html?1

...which can be used to look at the seeing forecast as well (the seeing forecast is based on turbulence models used for aviation, which are quite reliable at forecasting \_bad\_ seeing).

>> At least at the

>> observatory I can guarantee that there will be a telescope...

I presume you have arranged use of the Clark with Kevin Schindler. The telescope is about as busy as it ever has been for the public viewing, at least in the early hours of the evening starting from 5pm until about 9-10pm.

Hope that helps.

Brian SKIFF (ブライアン・スキフ Lowell 美)

### • · · · · · Subject: Mutual event animations website Received: Sat 14 Nov 2009 21:42 JST

Dears, I've put online a website dedicated to "occultations, eclipses and transits" here :

http://astrosurf.com/planetessaf/occultations The aim of this website is not to do the same as well established associations dedicated to these events (like EAON, European Asteroidal Occultation Network; IOTA, International Occultation Timing Association; IMCCE ...), i only refer to their resources.

The only "original" section is the image gallery, which shows mostly 2009 mutual events animations, done with our "planetary imager" approach. I created this gallery upon John Rogers suggestion, who wished not to see the nice work of yours lost in the net as the years pass by ...

To see these animations, go to

http://astrosurf.com/planetessaf/occultations, image gallery section, 2009 mutual events. My personal favorite animations are the one from Emmanuel Carrere, Gilles Meier, Christopher Go or Brian Combs. Especially the first 3 ones showing clearly the shadow of the eclipsing satellite on the eclipsed satellite ...

Enjoy these images, and special thanks to everyone who authorized me to use their nice images. Clear skies,

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

#### • · · · · · Subject: Mars 11-13-09 Received: Sun 15 Nov 2009 04:08:33 JST

Image from Houston Texas on 11-13-09 at 11:48 UT. Seeing 7/10

http://www.egrafton.com/11-13-09.jpg

Ed GRAFTON (エト・・ク・ラフトン TX 美)

### • · · · · · Subject: mars obs from SMK 15th Received: Sun 15 Nov 2009 18:18 JST

Hi good morning, Here is the last obs for Mars this morning 15th. Bad conditions but a little report anyway. Comments are enclosed in the report. Kind regards

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091115/SMk15Nov09.jpg

#### Stanislas MAKSYMOWICZ

(スタニスラス・マクシモウ゛ィッチ Ecquevilly 法)

#### • · · · · · Subject: Mars Image DBA111609A Received: Wed 18 Nov 2009 00:50 JST

Attached is my image for Nov. 16, 2009 11:00ut (Red) http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091116/DAd16Nov09.jpg

**David ANDERSON**(デヴィッド・アンダーソンSC美)

#### • · · · · · Subject: Mars #2, Nov 17 Received: Wed 18 Nov 2009 15:37 JST

Here's something interesting - a Mars image from a little earlier, still in good seeing and showing a small bright spot near lower left, close to the terminator. This image was taken using 742nm IR, so I don't know if this

25 November 2009 Ser2-1211

is likely to be cloud or dust, any ideas? cheers,

http://www.acquerra.com.au/astro/gallery/mars/20091117-173726/large.jpg

#### O····Subject: Re: On Mars Images Received: Thu 19 Nov 2009 02:41:03 JST

No problem. The telescope information: 14.5" f/5 newtonian, Televue 5x powermate + extension tubes for approx 7x, Point Grey Research Dragonfly2 mono camera, Filters: Astrodon I-Series RGB, Astronomik 742nm, Astronomik 804nm. All of my images will be taken using this same equipment. regards,

#### **Anthony WESLEY**

(アンソニィ・ウェス゛リー Murrumbateman, NSW 澳)

#### • · · · · · Subject: Re: IWCMO Talks et al Received: Thur 19 Nov 2009 01:53 JST

Cher Nicolas, Audouin Dollfus vient de m'adresser un CD contenant sa présentation escamotée du colloque IWCMO. Je l'ai déposée sur le serveur FTP anonyme de l'Obs. dans le répertoire "/outgoing/crussaire" pour nos amis de CMO.

Cependant, je me suis rendu compte qu'il y avait un nombre de coquilles grossières (One Centurt → One Century; etc.) sans doute imputables à l'état de fatigue de l'auteur comme tu sais. J'hésite beaucoup à modifier ce document avant sa mise en accès public. Grave dilemne! Que ferais-tu à ma place: faire les corrections qui s'imposent ou bien laisser en l'état? Amitiés,

**Daniel CRUSSAIRE** (タ゛ニエル・クリュセールMeudon法)

#### • · · · · · Subject: Mars 11/18 Received: Thu 19 Nov 2009 5:51 JST

Good seeing this morning; note the cloud in Arcadia;

the yellowish color is intriguing; could it be a small dust storm? Clear skies,

 $http://www.hida.kyoto-u.ac.jp/\sim cmo/cmons/2009/091118/SWk18Nov09.jpg$ 

Sean WALKER (ショーン・ウォーカー S&T 美)

#### • · · · · · Subject: Mars 19.11.2009 Received: Thu 19 Nov 2009 22:19:24 JST

Dear Masatsugu, no better weather conditions in sight, but this morning there was an short opportunity for imaging Mars through thin clouds. Because of a strong wind and poor seeing, i couldn't record many details. I send you 2 images: One at a focal length of 8,6m, the other at about 18m. With best wishes

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091119/RGh19Nov09.jpg

Ralf GERSTHEIMER (ラルフ・ケールシュトハイマー

Habichtswald 德)

#### • · · · · · Subject: Dr. Dollfus' talk for IWCMO Received: Fri 20 Nov 2009 22:36:25 JST

Dear Masatsugu, You will find attached here the talk (powerpoint converted into pdf) that Audouin Dollfus had prepared for the IWCMO meeting and he kindly (cf e-mail from Daniel Crussaire) transmitted to us to make it available for the participants,... So I think you can now put it on the CMO IWCMO web page.

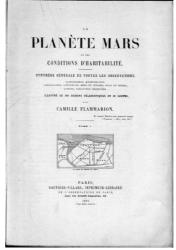
Sorry for this very late answer to a mail you sent me several weeks ago, but we had been in touch with A. Dollfus before. Regards,

Nicolas BIVER (ニュラ・ビヴェールMeudon 法)



◆巴里・模様Ⅲ◆今度の巴里旅行は久し振りに愉 しいことであった。市井でBonjourで始まって Bonne soréeで終わる日常会話を耳にしているのは 心地よいし、ステファーヌ・ルコント(この人は よく知らない)がクリストフにÀ demain(また明日) と行って別れて行くのをみるなども私には愉しか った。◆ガッカリすることもあった。既に匂わせ ているが、Juvisyでのあのフラマリオン天文臺の 廃墟がその一つである。外からの形は遺っている から廃屋と言ってもいい。◆Camille Flammarionカ ミーユ・フラマリオンは若いときから本を澤山書 き、1879年にはAstronome Populaireを實弟の本屋 から13萬冊も賣って一躍有名になり、1882年ファ ンからJuvisyのお城を貰い受け、ここに24cmの屈 折のドームを作り天文臺とするのである。石版に 依れば、1883年に設立されたとある。◆1887年に はSAFを創立する。◆1892年には有名なLa Planète MarsがGauthier-Villarsから出版され、またQuénisset 達が雇い入れられる。Antoniadiはその翌年である。

Juvisyは巴里から汽車で30kmのところらしいが(私



た。ドームまでは辿り着けるが途中はまるで手が着けられないくらいに荒れ果てていて、その有様は想像以上で吐き気がした程である。あのフラマリオンはどう扱われてきたのか。二番目の夫人が亡くなったのが1962年というから五十年でこんなにも廃屋になるものか。◆私は物には執着がない。誰それの被った帽子だとか、誰それの古書などに

關心がない。だからフラマリオンの望遠鏡に特別 興味があるわけではないが、アントニアディがそっと入ってゆく姿が想像出來ても好いではない か。然し、これでは不可であった。◆リックに行ったとき、私は特別バーナードの使った望遠鏡と いうことで關心があったわけではない。然し、バーナードや直立するキャンベルの床が圓く切った 木材の寄せ木で出來ているのを写真で見たりする と非常に懐かしく思うことがある。同じ床である。 然し、フラマリオンの写真はそれを既に許さない。 ◆ただ、フラマリオン友の會というのが出來てい

てるい大てかトとでもがばに心寒動よなる、アたるれ助いうながう物らいデ跫様なけぶがのがではしつィ音にいし先。はのかではではいかのがな。なの◆こなのはのはではしつっくのがないがのがないがのはいかのがないがのはいかのがないがのはいかのがないがのだだがではだいの像か政れうだだ



け荒廃すると何處まで復元出來るかである。フラ

マリオンが何氣なく置いた本が机の上に見られる のであろうか。

◆サン=ジェルマン・デ・プレ教會の近くに、ドラクロア(1798-1863)の美術館がある。1863年まで住んだところで、一時は解體して駐車場にするという話があったそうであるが、反對運動が起こり、美術館となり、今では國立ドラクロア美術館(Musée National Eugène Delacroix)となって綺麗になっている。寝室もアトリエも判っているのだが、然し今では單なる繪畫展示場で、ドラクロアの臭いはしない。僅かに庭であろうか。多分紀録が失われているのであろう。◆フラマリオン天文臺も何れは觀光客が訪れてもおかしくはないが、何處まで復元出來るかが氣になるところである。

◆尚、附け加えると私は少し繙いただけである

が、フラマリオン の本は今でも有効 であると思ってい る。Quénissetのスケ ッチにフラマリオ

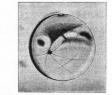


Fig. 130. — Mars le 20 septembre 1894, à 11\*20° soir (Dessin de M. Quénisset

ンは別のことを言っていて面白くないが、上半面(南半球)に何も描いていないスキアパレルリの1879年のスケッチなど、興味があるのだが、イタリア人に當たってみたところこれも何の反應もなかったのは殘念であった。私は1879年の黄雲と關係があると思っているのである。 (Mn)

#### シー・エム・オー・フクイ =

- 中 島 孝 *Nj* -

★前号は10月29日に三人で印刷・丁合し、国内は翌日発送しました。藤沢(Mk氏)には31日、 横浜(Ts氏)には11月1日、宗像(As氏)には2日に配達された由です。不一

☆ Kasap Tsushin CMO (http://www.hida.kyoto-u.ac.jp/~cmo/cmo/oaa\_mars.html)
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