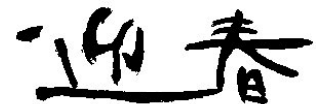


MARS

No. **366**
10 January 2010

OBSERVATIONS

Published by the OAA Mars Section*All the Best for 2010*

CMO Editors

T ASADA, M MINAMI, M MURAKAMI

T NAKAJIMA, A NISHITA

*Forthcoming 2009/2010 Mars (11)***Why and How Do We Observe the Planet Mars? I****Masatsugu MINAMI 南 政 次(Mn)**

We suppose no astronomer forgets a special red star which shined brilliantly and largely in the sky in 2003. A lot of people were aware of the fact and knew it was the planet Mars, the same star that enchanted and puzzled the people from the ancient times. It apparently moved around among the constellations in a complex manner in some seasons. So in the old China it was called “熒惑” whose letters imply uncanny and fascinated at the same time. It was also a strange thing since the great bright red star visited every fifteen or seventeen years. It was thus so intrinsically to give rise to several stories which looked beyond human knowledge.

On the other hand this strange star also continued to give us a lot of hints to our scientific minds. The curtain of the modern mechanical science was raised ever since the advent of Newton's discovery of the second law of motion, while its original idea came from Kepler's laws and they were born because of the strangeness of the motion of the planet Mars. If our star was mere a planet which dully

and usually rotated around the Sun, the history of the laws of motion must have changed.

Mars continued also as a mysterious star even after the telescope was invented, even after it gradually became bigger and bigger. Ever since Huygens revealed Syrtis Mj, the markings on the surface of the planet almost have been known that they could stay stable just like seas and lands and could be an object of the attractive scientific stories. Almost all stories surrounding Mars were turned out to be negative (just before the 1909 revelation), but we may say any true science cannot reach straightforwardly its true goal: Rather the deep science experiences a zigzagged way and rather the great science has a complex history. In other words the theory which passed through several failures or had several branches of the pre-theory might become finally tight and deep. Any theory of Mars has not only born several scientific fictions, but always gave some meaningful hints to the Mars scientists and this kind of developments was not very far from

the situation which governed other sciences.

At present, after a dawn came, we know the spacecrafts including MGS (stuck however in November 2006), MRO and so on brought about a perfect kind of information concerning the fine structures of the markings on Mars and some meteorological variations on the planet, and it proves really that the observations from the ground based stations suffer from the physical limitations. We should say however it is a foolish rash to consider that the period of observations from the terrestrial basis has to be ceased.

First of all, any science should have anything to do with the whole aspect of the matter. Any scientist doesn't want to see only a tree but the forest which contains the tree. From the ancient time mankind used eyes to see the whole word and he wanted to be conscious of his intrinsic place or his proper position. If mankind abandons our field of vision in a global sense our usual perspective will become meaningless. We need Science which fits to our usual life. We don't need any monster science which may destroy our usual world.

Any science application has a marginal limitation, and hence we have to change the method and outlook according as the scientific circumstances change. Even when we want to know the growth situation of crops, the method must be carefully chosen according to our goal. To investigate how the rice crops are reared in a small area of one hectare, it will be most effective to go down there on the ground and check out. However in order to investigate the growth situation in a much larger area throughout the year it is more effective to use a method of remote sensing: A simple way is to take pictures in several colours from a height of several ten thousand metres or more. The result must be much coarser but it will give statistically a more exact prospect. It also has a possibility to make us be aware of a contamination of land and sea. It is also a kind of remote sensing if we can check the pollution of the mountainside from the

estuary of large river.

That is to say, we can not say we have got a whole knowledge of the Martian surface if we thoroughly investigate the Martian debris by complicated vehicles. It is really interesting to check the inside of the polar caps on the cap surfaces, but it is more interesting and important to know the relation between the polar cap and the seasonal change of the upper atmosphere. The investigations by the spacecrafts around the planet should be said to be similar to a remote sensing, but at present the spacecrafts which go round the planet Mars are too near to the surface to give the global aspect of the markings. They provide a globe with patches all over: It is absurd to regard such an MGR (merry-go-round) which gives rise to a rotating Mars as a reproduction of the real Mars. Do you believe the orographics occur in the morning as seen on MGR? Rather the observations from the ground based stations could be said to provide a more real remote sensing. At least without our terrestrial images we may dare to say that even the images of the wide camera of the spacecraft cannot be interpreted. Because of that, the MGR looks to provide few interesting stories during the activity of the terrestrial observations are absent at the non-aparition time.

We of course admit that hitherto several scientific facts have been revealed from the results of the spacecrafts as well as the terrestrial observations: However we are still puzzled with the work of the white clouds and the origin of the dust storms: In addition it is still necessary how the dust storm expands inside the real Martian atmosphere. Our observations of the dust are still valuable since we possess a file of the past observational data to compare. Finally we must declare standing on the following points of view that the presence of the white cloud has suggested from a long time ago that the planet has a water vapour and also the chronological statistics implies that no life is present on Mars. We should say so that there are many waste plans of no use no matter how the space-scientists do. □

CMO 2009/2010 Mars Report #10

OAA Mars Section

*CMO Mars Observations during the Second Half of December 2009*from 16 December ($\lambda=024^\circ\text{Ls}$) to 31 December 2009 ($\lambda=032^\circ\text{Ls}$)

2009年十二月後半(16 Dec~31 Dec 2009)の火星面観測

Since the planet will be soon closest to the Earth, we shall publish the CMO fortnightly for a while. This time we treat the period from 16 December ($\lambda=024^\circ\text{Ls}$) to 31 December ($\lambda=032^\circ\text{Ls}$) 2009. During the period the apparent diameter increased from $\delta=11.2''$ to $12.7''$. The Martian season proceeded, and the activity of the nph much decreased and the npc has begun to thaw. The central latitude remains $\phi=19^\circ\text{N}$, and so the northern hemisphere is largely visible. The phase angle also varied from $\iota=30^\circ$ to 22° : The disk thus looks more roundish. The apparent declination D is however inconvenient for the refractor user: it went up from the later 17°N to 18.6°N . This time we limited the period to a fortnight and so we had not enough to watch the whole globe: In Europe the area of M Acidalius was seen, in the US the area of the evening Solis L while in Japan we mainly watched the area including Elysium (under a poor seeing).

♂..... 今回の報告は最接近も近付いてきたので16 December ($\lambda=024^\circ\text{Ls}$) から31 December ($\lambda=032^\circ\text{Ls}$) 2009迄の十二月後半の期間を対象にする。δも11.2"から12.7"まで大きくなった。季節は北極雲が霧散し北極冠が縮小を始める頃に当たる。中央緯度φは19°Nの儘で安定している。位相角ιも30°から22°と縮まり、円くなってきた。但し視赤緯Dは再び上昇気味で17°N後半から18.6°Nまで高くなってきた。今回は二週間の観測のため、ヨーロッパではマレ・アキダリウム中心、アメリカではソリス・ラクスタ方といったところ、日本ではエリュシウム辺りであった。気候は太平洋側と裏側ではひどく違う。

♂..... We received the observations this time as follows. 今回拝受の報告は次の通りである。

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

4 Sets of RGB + 4 IR Images (20, 24 December 2009)

36cm SCT @f/36, 55 with DMK21AU04

BATES, Donald R ドン・ベーツ (DBt) テキサス Cypress, TX, USA

5 Colour Images (20, 21, 27,~29 December 2009) 25cm spec @f/30 with a ToUcam Pro II

FLANAGAN, William D ビル・フラナガン(WF) テキサス Houston, TX, USA

2 Set of LRGB CCD Images (21 December 2009) 36cm SCT@f/36 with a Lu075M

FONTANILLAS LOPEZ, Nicolás ニコラス・フォンタニヤス(NFt) セビーヤ Sevilla, España

1 Colour Image (27 December 2009) 21cm Dall-Kirkham @f/40 with a SPC900

GARBETT, Peter J ピーター・ガーベット (PGb) 英国 Sharnbrook, Bfd, UK

1 Colour Image (16 December 2009) 36cm SCT @f/45 with a SKYnyx 2-0 M

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

2 Sets of RGB + 2 IR Images (18, 22 December 2009) 36cm SCT @f/31, 34 with a DMK21AF04

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

1 LRGB+ 1 G+ 1 B Images (21 December 2009) 36cm SCT @f/39 with an ST402

HERNANDEZ, Carlos E カーロス・ヘルナンデス (CHr) フロリダMiami, FL, USA

1 Set of Colour Drawings (31 December 2009) 300, 390×23cm Maksutov-Cassegrain

KOHZAKI, Ichiro 神崎 一郎 (Kz) 東久留米 Higashi-Kurume, Tokyo, Japan

26 Drawings (16, 18,~20, 22, 23, 28, 29, 31 December 2009) 240, 340×20cm speculum

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

6 Sets of Colour Images (16, 21, 22, 26, 28, 29 December 2009)

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

LAWRENCE, Pete ピート・ローレンス (PLw) 英国 Selsey, WS, UK

1 Colour Image (28 December 2009) 36cm SCT @f/67 with a SKYnyx2-0M

LEWIS, Martin R マーチン・ルイス (MLw) 英国 St. Albans, Hertfordshire, UK

1 Colour Image (28 December 2009) 22cm speculum @f/46 with a DMK21AF04.AS

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 (25, 26[†] December 2009) 220, 250×15cm refractor/ 210×15cm Cassegrain[†]

MELILLO, Frank J フランク・メリッロ (FMI) ニューヨーク Holtsville, NY, USA

1 Set of RGB + 1 Colour Images (23, 28 December 2009) 25cm SCT with a ToUcam pro II

MINAMI, Masatsugu 南 政次 (Mn) 福井 Fukui*, Fukui, Japan

28 Drawings (24, 27, ~29 December 2009) 340, 400, 600×20cm Goto ED refractor*

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

5 Sets of RGB + 5 IR Images (21, 24, 28 December 2009)

25cm speculum @f/60, 75 with a Lu-075M

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

11 Drawings (19, 22, 26 December 2009) 320×20cm F/8 speculum

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

7 Drawings (24 December 2009) 400×20cm Goto ED refractor*

PARKER, Donald C ドン・パーカー (DPk) フロリダ Miami, FL, USA

2 Sets of RGB + 1 UV Images (16, 30 December 2009)

41cm F/6 speculum @f/22 with a SKYnyx 2-0M

PEACH, Damian A デミアン・ピーチ (DPc) 英国 High Wycombe, Bucks, UK

6 Sets of Colour + 2 R Images (16, 21, 23, 27 December 2009)

36cm SCT @f/40 with a SKYnyx 2-0M

SMET, Kris クリス・スмет (KSm) ベルギー Bornem, Belgium

3 Colour Drawings (25/26, 28 December 2009) 210, 250, 360×30cm Dobsonian

TYLER, David デーヴ・タイラー (DTy) 英国 Flackwell Heath, Bucks, UK

2 Colour Images (28 December 2009) 36cm SCT @f/40 with a SKYnyx 2-0

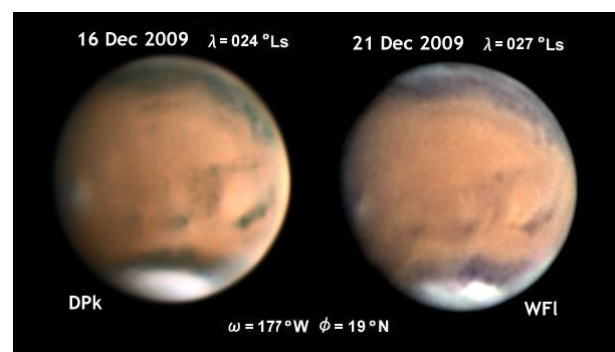
WARREN, Joel ジョエル・ウォーレン (JWn) テキサス Amarillo, TX, USA

5 Sets of RGB Images (16, 17, 20, 21 November 2009)

28cm SCT (⊗3×Barlow) with a DBK21AF04.AS

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

♂⋯⋯A) **Polar Dust at around $\Omega=170^\circ\text{W}$:** The perimeter area of the polar caps is meteorologically severe because of the abrupt difference of temperature and so on, and hence the polar dusts frequently occur there. On 21 Dec ($\lambda=027^\circ\text{Ls}$), Ed GRAFTON (EGf) at $\omega=168^\circ\text{W}$, and Bill FLANAGAN (WFl) at $\omega=172^\circ\text{W}$, 177°W detected a rise of a complex dust at Vastitas Borealis at around $\Omega=170^\circ\text{W}$, and showed that it has an origin deep inside. This kind of dust was previously observed on 22 Jan 2008 ($\lambda=021^\circ\text{Ls}$) at Utopia (see our interpretation in CMO #348). The previous one occurred when $\phi=07^\circ\text{N}$, whilst this time $\phi=19^\circ\text{N}$ so that we could see the dust streak more inside. Outside the npc it vastly spread out beyond Vastitas Borealis, and perhaps to the latitudes of Propontis I. Fortunately on 16 Dec ($\lambda=021^\circ\text{Ls}$), Don PARKER (DPk) produced an excellent image at the same angle with one of WFl's, and so we here compare them. It shows clearly how the area of Vastitas Borealis became dusty. The eastern (preceding) side of the npc is also influenced by the dust or the white cloud which



must have induced the dust. Further east we have an image made by Damian PEACH (*DPc*) at $\omega=063^\circ\text{W}$ where the morning side of the npc looks to be invaded by the dust. The western side of the dust streak keeps the white brightness of the npc: This difference is checked by the image by Don BATES (*DBt*) at $\omega=162^\circ\text{W}$ and Joel WARREN (*JWn*)'s images at $\omega=166^\circ\text{W}\sim 172^\circ\text{W}$. On the same day, in Japan the further western side was observed by Teruaki KUMAMORI (*Km*) at $\omega=276^\circ\text{W}$, and Yukio MORITA (*Mo*) at $\omega=284^\circ\text{W}$: Here Utopia looks slightly fainter but no effect inside the npc. Just we can see a dark line and shadowy area caused by the difference of the residual cap and the new surrounding snow (as stated before, already the north polar night is governed by the midnight Sun). On the preceding day on 20 Dec ($\lambda=026^\circ\text{Ls}$), there is no effective observation, but the MRO seems to show a dust rise at around $\Omega=150^\circ\text{W}$ and *DBt*'s image on 20 Dec ($\lambda=026^\circ\text{Ls}$) at $\omega=145^\circ\text{W}$, and *JWn*' one at $\omega=197^\circ\text{W}$ may suggest it. On the other hand on 22 Dec ($\lambda=027^\circ\text{Ls}$), Peter GORCZYNSKI (*PGc*) took images at $\omega=136^\circ\text{W}$, but no details are apparent except for a faintness at the west end of the npc.

B) The North Polar Cap: The npc was relieved from the nph, and so generally looks roundish, but it is still not uniform. Sometimes there occur such peripheral dust disturbances, and sometimes the cap itself appears quite smaller as seen on the images of *PGc*'s on 18 Dec ($\lambda=025^\circ\text{Ls}$) at $\omega=200^\circ\text{W}$ or of *JWn*'s on 20 Dec ($\lambda=026^\circ\text{Ls}$) at $\omega=197^\circ\text{W}$. Visually one of us (*Mn*) also saw an irregular (outside and inside) perimeter of the npc as on 24 Dec ($\lambda=028^\circ\text{Ls}$) at $\omega=220^\circ\text{W}$, 230°W , 240°W , 250°W etc. Ichiro KOHZAKI (*Kz*), who came back, also checked a deformation of the npc and some shade and light inside the npc on 22 Dec ($\lambda=027^\circ\text{Ls}$) at $\omega=243^\circ\text{W}$, and on 23 Dec ($\lambda=028^\circ\text{Ls}$) at $\omega=229^\circ\text{W}$ and so on. These characteristics are also shown by the ccd images on 24 Dec ($\lambda=028^\circ\text{Ls}$) by *Mo* at $\omega=237^\circ\text{W}$ and by Tomio AKUTSU (*Ak*) at $\omega=243^\circ\text{W}\sim 263^\circ\text{W}$: See also *Km*'s images on 26 Dec ($\lambda=029^\circ\text{Ls}$) at $\omega=223^\circ\text{W}$. On the opposite side, the npc shown by Frank MELILLO (*FMI*) on 23 Dec ($\lambda=028^\circ\text{Ls}$) at $\omega=097^\circ\text{W}$ looks unstable.

C) 16 December: The day 16 Dec ($\lambda=024^\circ\text{Ls}$) was unique in the sense that there have been got a lot of excellent images, including afore-cited image of *DPk*. At $\omega=089^\circ\text{W}$, Peter GARBETT (*PGb*) took the area of Solis L in the evening, and *DPc* at $\omega=113^\circ\text{W}(115^\circ\text{W})$, $122^\circ\text{W}(125^\circ\text{W})$, and adjusted respectively the B images at $\omega=107^\circ\text{W}$, 128°W , but the excellent images of the Tharsis Montes, Olympus Mons and Alba Mons on them are moving, and so we consider each of RBG images should have an appropriate B images. *DPk* on the day took B within three minutes. On the day *JWn* took at $\omega=220^\circ\text{W}$ where Syrtis Mj was appearing and Elysium is a bit light: The description of the shadowy area to the west of the Æthria dark patch looks natural as if seen in a naked eye. In Japan, *Kz* and *Km* observed the area of Syrtis Mj which was located on the evening side.

D) M Acidalium: As tilt ϕ moved down, and the nph retreated, whole of M Acidalium is visible. *DPc* took it near the CM in R on 23 Dec ($\lambda=027^\circ\text{Ls}$) at $\omega=028^\circ\text{W}$, and described mildly its details as well as the aspects of the southern hemisphere. His images on 27 Dec ($\lambda=029^\circ\text{Ls}$) at $\omega=005^\circ\text{W}\sim 011^\circ\text{W}$ are also mild but show well the eastern side of M Acidalium. On the day Nicolás FONTANILLAS (*Nft*) also produced mildly it near the CM at $\omega=019^\circ\text{W}$. On the other hand, *FMI* took an evening M Acidalium on 28 Dec ($\lambda=030^\circ\text{Ls}$) at $\omega=063^\circ\text{W}$ and showed the dark triangle at the NW part clearly. The morning M Acidalium used to be covered by the morning mist (nph) but this time it is independent of the npc: See Martin LEWIS (*MLw*)'s on 28 Dec ($\lambda=030^\circ\text{Ls}$) at $\omega=332^\circ\text{W}$, also Pete LAWRENCE (*PLw*)'s image at $\omega=344^\circ\text{W}$, and Dave TYLER (*DTy*)'s at $\omega=355^\circ\text{W}$ on the day. Finally *DPk* issued a superb image on 30 Dec ($\lambda=031^\circ\text{Ls}$) at $\omega=050^\circ\text{W}$: Detailed but not so strong, and it shows that the area of Auroræ S is detailed but quite mild.

E) Hellas: As stated from this session the visual observer *Kz* came back (he is not a newcomer but one of old members of the OAA Mars Section), and since he starts observing earlier than the ccd members, chased Hellas several times. On 18 Dec ($\lambda=025^\circ\text{Ls}$) saw Hellas bright at $\omega=275^\circ\text{W}$, 285°W . On 19 Dec ($\lambda=026^\circ\text{Ls}$) at $\omega=266^\circ\text{W}$, he thought it

was off-white, but at $\omega=275^\circ\text{W}$ noticed it was whitish. It was also whitish bright on 20 Dec ($\lambda=026^\circ\text{Ls}$) at $\omega=254^\circ\text{W}$, 264°W . Another of us (*Mk*) observed on 19 Dec ($\lambda=026^\circ\text{Ls}$) at $\omega=271^\circ\text{W}$, 280°W , 290°W and saw that it is rather bluish white. *Mn* just wrote that it "may" be whitish on 24 Dec ($\lambda=028^\circ\text{Ls}$) at $\omega=258^\circ\text{W}$. NAKAJIMA (*Nj*) just bright at $\omega=264^\circ\text{W}$. Hellas was trapped on the morning side by the ccd imagers as follows: *Km* on 22 Dec ($\lambda=027^\circ\text{Ls}$) at $\omega=254^\circ\text{W}$, and *Mo* on 24 Dec ($\lambda=028^\circ\text{Ls}$) at $\omega=237^\circ\text{W}$. *Ak* successively took the images on 24 Dec ($\lambda=028^\circ\text{Ls}$) at $\omega=243^\circ\text{W}$, 253°W , 263°W : The last one shows a white Hellas. Evening Hellas was also observed by Stanislas MAKSYMOWICZ (*SMk*) on 25 Dec ($\lambda=028^\circ\text{Ls}$) at $\omega=321^\circ\text{W}$, and Kris SMET (*KSm*) at $\omega=333^\circ\text{W}$ on the same day. **F) The Brightness of the Southern Limb:** We should note that the southern limb sometimes appears very bright. The following images all show it notwithstanding $\phi=19^\circ\text{N}$:-- *DPc*: on 16 Dec ($\lambda=024^\circ\text{Ls}$) at $\omega=107^\circ\text{W}\sim 128^\circ\text{W}$, *PGc* on 18 Dec ($\lambda=025^\circ\text{Ls}$) at $\omega=200^\circ\text{W}$, *DBt* on 20 Dec ($\lambda=026^\circ\text{Ls}$) at $\omega=145^\circ\text{W}$ and 21 Dec ($\lambda=027^\circ\text{Ls}$) at $\omega=162^\circ\text{W}$, *DPc*: on 21 Dec ($\lambda=027^\circ\text{Ls}$) at $\omega=063^\circ\text{W}$ (related with Argyre), *DBt*, *EGf* & *WFl*: on the same day at $\omega=162^\circ\text{W}$, $\omega=168^\circ\text{W}$, $\omega=177^\circ\text{W}$ respectively, *FMI*: on 23 Dec ($\lambda=028^\circ\text{Ls}$) at $\omega=093^\circ\text{W}$ etc. Visually *Nj* and *Mn* on 24 Dec ($\lambda=028^\circ\text{Ls}$) at $\omega=230^\circ\text{W}\sim 240^\circ\text{W}$, *Mn* on 27 Dec ($\lambda=030^\circ\text{Ls}$) at $\omega=174^\circ\text{W}$, 183°W , and on 29 Dec ($\lambda=031^\circ\text{Ls}$) at $\omega=175^\circ\text{W}$, 185°W , 195°W , 204°W , 214°W etc: At $\omega=224^\circ\text{W}$ it was mist-like (other bright spot near the limb was witnessed but not identified). On the ccd images, *Km* on 29 Dec ($\lambda=031^\circ\text{Ls}$) at $\omega=182^\circ\text{W}$, and *DPk* on 30 Dec ($\lambda=031^\circ\text{Ls}$) at $\omega=050^\circ\text{W}$. The later must have been related with Argyre but very wide. **G) Near Tharsis:** The cloud associated with Tharsis Montes as well as Olympus Mons and Alba Mons was clearly caught by *DPc* on 16 Dec ($\lambda=024^\circ\text{Ls}$) at $\omega=119^\circ\text{W}$, 128°W (B). The cloud of Olympus Mons also was brightly on the day by *DPk* at $\omega=177^\circ\text{W}$. On 21 Dec ($\lambda=027^\circ\text{Ls}$) *EGf* at $\omega=180^\circ\text{W}$ and *WFl* at $\omega=172^\circ\text{W}$ and 177°W shot explicitly the orographic cloud at Olympus Mons. *Km* also caught it near the terminator on 29 Dec ($\lambda=031^\circ\text{Ls}$) at $\omega=182^\circ\text{W}$. The cloud over the evening Elysium Mons was also shown on the images by *Km* on 22 Dec ($\lambda=027^\circ\text{Ls}$) at $\omega=254^\circ\text{W}$, and on 24 Dec ($\lambda=028^\circ\text{Ls}$) *Mo* showed it at $\omega=237^\circ\text{W}$, and *Ak* at $\omega=243^\circ\text{W}\sim 263^\circ\text{W}$. Visually *Mn* saw on 27 Dec ($\lambda=030^\circ\text{Ls}$) at $\omega=164^\circ\text{W}$ a series of Tharsis Montes, and on 29 Dec ($\lambda=031^\circ\text{Ls}$) at $\omega=175^\circ\text{W}$ saw Olympus Mons near the terminator, but could not check Elysium Mons. Season of the orographics has begun from the preceding period. **H) Evening Mists:** This time, there are few that describe the evening mist: On 21 Dec ($\lambda=027^\circ\text{Ls}$) at $\omega=063^\circ\text{W}$, *DPc* took a scene where Xanthe is at the evening side, but the mist is weak. On the other hand *FMI* showed a thick Xanthe mist near the terminator on 23 Dec ($\lambda=028^\circ\text{Ls}$) at $\omega=097^\circ\text{W}$, but his B image is not true one. *DPk* showed us an excellent image on 30 Dec ($\lambda=031^\circ\text{Ls}$) at $\omega=050^\circ\text{W}$ where a thick evening mist patch to the north of sinking Meridiani S and it also shows a misty expansion around Chryse-Xanthe implying an equatorial mist band.

♂.....**A) $\Omega=170^\circ\text{W}$ 辺りでの極性黄塵:** 極冠の縁は温度変化など気象条件が厳しく、極冠などの溶解期には黄塵が立つことがよく知られているが、21Dec($\lambda=027^\circ\text{Ls}$)のエド・グラフトン(*EGf*)氏の $\omega=168^\circ\text{W}$ 、ビル・フラナガン(*WFl*)氏の $\omega=172^\circ\text{W}$ 、 177°W の画像では、 $\Omega=170^\circ\text{W}$ 辺りの北極冠の端っこに黄塵が立ち、可成り内部に入り込んでいるのが分かる。これは22Jan2008($\lambda=021^\circ\text{Ls}$)にウトピアに見られたものと似ている(#348の解説参照)が、今回は $\phi=07^\circ\text{N}$ であったのに対し、今回は $\phi=19^\circ\text{N}$ と相当中まで浸透しているのが見える。また、北極冠の外にもワスチタス・ボレアリスを越えてはみ出てプロポンティスI辺りの緯度まで広く黄雲を運んでいるようである。幸い16Dec($\lambda=021^\circ\text{Ls}$)にドン・パーカー(*DPk*)氏の北極冠の像があるので同じ角度の*WFl*氏の像と比較してみる。ワスチタス・ボレアリスも黄塵にやられているのが分かる。北極冠の東側もやや黄塵ないしは誘発した白雲に覆われているようで、更にこの辺りの東側ではデミアン・ピーチ(*DPc*)氏の $\omega=063^\circ\text{W}$ では朝方が黄塵に侵されているようである。西側は北極冠の明るさを保っている。この違いは、同日のドン・ベーツ(*DBt*)氏の $\omega=162^\circ\text{W}$ やジョエル・ウォーレン(*JWn*)氏の $\omega=166^\circ\text{W}\sim 172^\circ\text{W}$ にも窺える。同日、日本では更に西側

を熊森照明(Km)氏が $\omega=276^\circ\text{W}$ で、また森田行雄(Mo)氏が $\omega=284^\circ\text{W}$ で撮っているが、こちら側はウトピアが稍薄くなっている他はさほどの影響はなく北極冠内は永久極冠との間のコントラストで筋状の暗帯が見えるのみである(前にも述べたが既に北極は白夜に入って太陽光を常時受けている。) なお、前日20Dec($\lambda=026^\circ\text{Ls}$)の観測では効果的なものがないが、MROによると $\Omega=150^\circ\text{W}$ 辺りで矢張り極性黄塵が出ているかも知れず、DBt氏の20Dec($\lambda=026^\circ\text{Ls}$) $\omega=145^\circ\text{W}$ 、JWn氏の $\omega=197^\circ\text{W}$ に少し窺えるかも知れない。一方、22Dec($\lambda=027^\circ\text{Ls}$)にはゴルティンスキィ(PGc)氏が撮っているが、 $\omega=136^\circ\text{W}$ で、北極冠西端にボケがある程度で詳細は分からない。 **B) 北極冠**：北極冠は北極雲から開放されて円く見えているが、一様ではない。先のような変化もあれば、PGc氏の18Dec($\lambda=025^\circ\text{Ls}$) $\omega=200^\circ\text{W}$ やJWn氏の20Dec($\lambda=026^\circ\text{Ls}$) $\omega=197^\circ\text{W}$ の様に小さく見えたりする。また肉眼でも筆者の一人(Mn)は24Dec($\lambda=028^\circ\text{Ls}$)の $\omega=220^\circ\text{W}$ 、 230°W 、 240°W 、 250°W などで外側や内側に不規則性を見ている。神崎一郎(Kz)氏も22Dec($\lambda=027^\circ\text{Ls}$) $\omega=243^\circ\text{W}$ 、23Dec($\lambda=028^\circ\text{Ls}$) $\omega=229^\circ\text{W}$ 等で北極冠の歪みや濃淡を見ているようである。これらは24Dec($\lambda=028^\circ\text{Ls}$)のMo氏の $\omega=237^\circ\text{W}$ や阿久津富夫(Ak)氏の $\omega=243^\circ\text{W}\sim 263^\circ\text{W}$ 、Km氏の26Dec($\lambda=029^\circ\text{Ls}$) $\omega=223^\circ\text{W}$ 等に出ている。別の面ではフランク・メリッロ(FMI)氏の23Dec($\lambda=028^\circ\text{Ls}$) $\omega=097^\circ\text{W}$ の北極冠も不安定である。 **C) 16 Dec**：16Dec($\lambda=024^\circ\text{Ls}$)は特異日で先のDPk氏の像も含めて良像が集まっている。 $\omega=089^\circ\text{W}$ にはピーター・ガーベット(PGb)氏が、夕方のソリス・ラクス周辺を撮り、更にDPc氏が $\omega=113^\circ\text{W}$ (115°W)、 122°W (125°W)で撮像した、それぞれに $\omega=107^\circ\text{W}$ 、 128°W のB光を当てて居るようだが、この時のB光ではタルシス三山以下、アルバ・モンズやオリュムプス・モンズが動いているので、寧ろB像にR光を当てるべきではないかと思われる。DPk氏は三分ほどの違いである。同日のJWn氏は $\omega=220^\circ\text{W}$ でシュルティス・マイヨルが出たところだがエリュシウム地帯が明るく、アエテリア暗斑の西側が暗く、眼視に近い描写である。日本ではKz氏とKm氏が夕方のシュルティス・マイヨル方面を見ている。 **D) マレ・アキダリウム**： ϕ が上がり、北極冠が後退したために、マレ・アキダリウムが見易くなっている。DPc氏の23Dec($\lambda=027^\circ\text{Ls}$) $\omega=028^\circ\text{W}$ はR像だけだが殆ど中央で捉え、南半球の微細構造と共に好く描写されている。但し、強くはない。27Dec($\lambda=029^\circ\text{Ls}$) $\omega=005^\circ\text{W}\sim 011^\circ\text{W}$ も甘い像だが東側がよく分かる。同日のニコラス・フォンタニヤス(NFt)氏の $\omega=019^\circ\text{W}$ でも殆ど中央である。一方FMI氏の28Dec($\lambda=030^\circ\text{Ls}$) $\omega=063^\circ\text{W}$ は夕方のマレ・アキダリウムで、北西部の三角形がよく出ている。朝方のマレ・アキダリウムは以前は北極雲に包まれたものだが、北極冠から独立して見える。28Dec($\lambda=030^\circ\text{Ls}$)のマーチン・ルウィス(MLw)氏の $\omega=332^\circ\text{W}$ 、ピート・ローレンス(PLw)氏の $\omega=344^\circ\text{W}$ 、デーヴ・タイラー(DTy)氏の $\omega=355^\circ\text{W}$ 等がそれに当たる。最後にDPk氏が30Dec($\lambda=031^\circ\text{Ls}$) $\omega=050^\circ\text{W}$ で詳細に富んだマレ・アキダリウムを提出した。但し全体強烈ではない。この像はアウロラエ・シヌスあたりが案外退化していることを伝えている。 **E) ヘッラス**：今回からKz氏が復帰し、ccd組より早く観測に入るので、ヘッラスを可成り追っている、18Dec($\lambda=025^\circ\text{Ls}$) $\omega=275^\circ\text{W}$ 、 285°W で明るく見ている。19Dec($\lambda=026^\circ\text{Ls}$) $\omega=266^\circ\text{W}$ では茶系統かと迷いが見られるが、 $\omega=275^\circ\text{W}$ では白っぽく明るいとしている。20Dec($\lambda=026^\circ\text{Ls}$) $\omega=254^\circ\text{W}$ 、 264°W では白く明るい。我々のもう一人(Mk)の19Dec($\lambda=026^\circ\text{Ls}$) $\omega=271^\circ\text{W}$ 、 280°W 、 290°W で青白くとしている。Mnは24Dec($\lambda=028^\circ\text{Ls}$) $\omega=258^\circ\text{W}$ で多分白くとしている。中島孝(Nj)氏は $\omega=264^\circ\text{W}$ で明るい。ccd組は遅れるのだが、Km氏が22Dec($\lambda=027^\circ\text{Ls}$) $\omega=254^\circ\text{W}$ 、Mo氏が24Dec($\lambda=028^\circ\text{Ls}$) $\omega=237^\circ\text{W}$ の朝方で押さえている。Ak氏は24Dec($\lambda=028^\circ\text{Ls}$) $\omega=243^\circ\text{W}$ 、 253°W 、 263°W と連続して撮像した。後者では白い。ヘッラスはその他25Dec($\lambda=028^\circ\text{Ls}$)にスタニラス・マクシモヴィッツ(SMk)氏が $\omega=321^\circ\text{W}$ で、クリス・スメット(KSm)氏が $\omega=333^\circ\text{W}$ の夕方で見ている。 **F) 南端の明るさ**：南端の明るいときがあることに注意しておく。次の画像には見られるが、何れも $\phi=19^\circ\text{N}$ である：DPc氏の16Dec($\lambda=024^\circ\text{Ls}$) $\omega=107^\circ\text{W}\sim 128^\circ\text{W}$ 、PGc氏の18Dec($\lambda=025^\circ\text{Ls}$) $\omega=200^\circ\text{W}$ 、DBt氏の20Dec($\lambda=026^\circ\text{Ls}$) $\omega=145^\circ\text{W}$ と21Dec($\lambda=027^\circ\text{Ls}$) $\omega=162^\circ\text{W}$ 、DPc氏の21Dec($\lambda=027^\circ\text{Ls}$) $\omega=063^\circ\text{W}$ (これはアルギュレ)、DBt氏、EGf氏、WFl氏の同日の夫々 $\omega=162^\circ\text{W}$ 、 $\omega=168^\circ\text{W}$ 、 $\omega=177^\circ\text{W}$ の画像、FMI氏の23Dec($\lambda=028^\circ\text{Ls}$) $\omega=093^\circ\text{W}$ 等。眼視ではNj氏とMnの24Dec($\lambda=028^\circ\text{Ls}$) $\omega=230^\circ\text{W}\sim 240^\circ\text{W}$ 、27Dec($\lambda=030^\circ\text{Ls}$)の $\omega=174^\circ\text{W}$ 、 183°W 、29Dec($\lambda=031^\circ\text{Ls}$)

$\omega=175^\circ\text{W}$ 、 185°W 、 195°W 、 204°W 、 214°W など、 $\omega=224^\circ\text{W}$ では霧状に見える(実は未だ明るい光斑が東南端に見えるのだが同定できない)。ccdではKm氏が29Dec($\lambda=031^\circ\text{Ls}$) $\omega=182^\circ\text{W}$ 、DPk氏が30Dec($\lambda=031^\circ\text{Ls}$) $\omega=050^\circ\text{W}$ で写している、後者はアルギュレ絡みであろうが範囲は広い。**G) タルスス辺り**：タルスス三山やアルバ・モンス、オリュムプス・モンスについてはDPc氏の16Dec($\lambda=024^\circ\text{Ls}$) $\omega=119^\circ\text{W}$ 、 128°W(B) に余すところ表現されているが、オリュムプス・モンスの雲はDPk氏の同日の $\omega=177^\circ\text{W}$ に出ているし、下がってKm氏は29Dec($\lambda=031^\circ\text{Ls}$) $\omega=182^\circ\text{W}$ に端で捉えている。エリュシウム・モンスの雲もKm氏に依って22Dec($\lambda=027^\circ\text{Ls}$) $\omega=254^\circ\text{W}$ に、また24Dec($\lambda=028^\circ\text{Ls}$)にはMo氏が $\omega=237^\circ\text{W}$ で示し、Ak氏が $\omega=243^\circ\text{W}\sim 263^\circ\text{W}$ で連続して撮っている。肉眼では未だ難しいのであるが、Mnは27Dec($\lambda=030^\circ\text{Ls}$) $\omega=164^\circ\text{W}$ にタルスス三山の連なりを見た他、29Dec($\lambda=031^\circ\text{Ls}$) $\omega=175^\circ\text{W}$ ではオリュムプス・モンスの沈むところを端で捉えた。しかしエリュシウム・モンスは捉えていない。前回から山岳雲のシーズンが始まったことは確かである。**H) 夕霧**：今回はクリュセの夕霧を描写する画像が少ないのであるが、DPc氏に21Dec($\lambda=027^\circ\text{Ls}$) $\omega=063^\circ\text{W}$ にはクリュセの夕霧が然程強くない。一方、FMI氏の23Dec($\lambda=028^\circ\text{Ls}$) $\omega=097^\circ\text{W}$ には夕端のクサンテに強く掛かっているようであるが、彼のBは意味をなさないのでチョットね。DPk氏の30Dec($\lambda=031^\circ\text{Ls}$) $\omega=050^\circ\text{W}$ では夕端のシヌス・メリディアニの北に濃い霧が出ている。クリュセ-クサンテは可成り内部だが、それでもBでは白くなっている。赤道帯霧を思わせる。

♂..... **追加報告** : We Further Received as follows:

PEACH, Damian A デミアン・ピーチ (DPc) 英国 High Wycombe, Bucks, UK

24 Sets of Colour Images (9^\dagger , 10^\dagger , 17^\dagger , $\sim 19^\dagger$, 26 September; 13, 23 October; 11 December 2009)

36cm SCT @f/40 with a SKYnyx 2-0M († Barbados, the West Indies)

DPc's first image that we received this apparition was taken on 9 August ($\lambda=318^\circ\text{Ls}$) and the images we received this time were mainly made of those taken at the Barbados island in September. The ones on 9 Sept ($\lambda=335^\circ\text{Ls}$, $\delta=6.0''$, $\phi=07^\circ\text{N}$) consist of a series of images at $\omega=051^\circ\text{W}$, 056°W , 061°W , 066°W (069°W): Solis L is rather completely shown despite this small angular diameter. The relation with Tithonius L is also definite. Nilokeras is also well described. The npf is declined to the side of M Acidalium. On 10 Sept ($\lambda=336^\circ\text{Ls}$), he took at $\omega=049^\circ\text{W}$, 053°W (055°W), 057°W : the description is more intense than the day before, and the area around Auroræ S is quite detailed, and Ophir is light. The images on 17 Sept ($\lambda=340^\circ\text{Ls}$) at $\omega=340^\circ\text{W}$, 345°W (348°W), 356°W (358°W) show a shadowy streak inside the npf, and perhaps the image at $\omega=358^\circ\text{W}$ suggests the Dawes slit. The streak between Deuteronilus and M Acidalium is light but the B image (only one) suggests nothing. S Sabæus was completely described and the tail of M Serpentis is dark and broad. $\delta=6.2''$. On 18 Sept ($\lambda=340^\circ\text{Ls}$) at $\omega=349^\circ\text{W}$, the npf largely covered M Acidalium. The south of M Serpentis looks very broad. On 19 Sept ($\lambda=341^\circ\text{Ls}$) the series at $\omega=322^\circ\text{W}$, 326°W , 331°W (333°W) show Hellas which looks dusty (though THEMIS data do not show any dust). The morning area around M Acidalium is interesting, but what is more interesting is the B image at $\omega=328^\circ\text{W}$ which however must have been applied in the RGB composites at $\omega=326^\circ\text{W}$ and even at $\omega=333^\circ\text{W}$. The description around M Serpentis became more detailed. A shadowy line that is similar to Valhalla is seen along the north coast of S Sabæus. The images after 26 Sept ($\lambda=344^\circ\text{Ls}$) must have been taken in the UK: On the day he shot at $\omega=200^\circ\text{W}$, 204°W (206°W), 208°W which detailed the area of M Cimmerium, and showed the southern extension of the Ætheria dark patch. On 13 Oct ($\lambda=353^\circ\text{Ls}$) he took at $\omega=029^\circ\text{W}$, (033°W) 036°W : M Acidalium prevails and the area of Argyre is light. The npf is quite large. On 23 Oct ($\lambda=358^\circ\text{Ls}$) he shot at $\omega=286^\circ\text{W}$, 290°W (292°W), 296°W , 305°W where Syrtis Mj was shown, but the last one include Meridiani S. Hellas is off-white, but the only one B shows that it's rather misty. These images show well the relation between M Serpentis and Yaonis Fr. The Huygens crater is obvious on the image at $\omega=292^\circ\text{W}$. It seems that the weather in November was quite dismal (see LtE). On 11 Dec ($\lambda=022^\circ\text{Ls}$) he

took at $\omega=156^\circ\text{W}$, 162°W : The B image at $\omega=159^\circ\text{W}$ show the area around Arsia Mons, and more inside the evening cloud of Olympus Mons. The Phlegra complex is well described, whereas Propontis I looks shabby. $\delta=10.7''$.

ピーチ(DPc)氏の画像は既に数枚登録されているが、9Sept($\lambda=335^\circ\text{Ls}$, $\delta=6.0''$, $\phi=07^\circ\text{N}$)の諸像はバルバドスで撮ったもので、この日は $\omega=051^\circ\text{W}$, 056°W , 061°W , 066°W (069°W)の連続像である。この視直径でソリス・ラクスが完全な形に見える。チトニウス・ラクスとの関係も明確である。ニロケラスの描写も好く、北極雲はマレ・アキダリウムの方に傾いている。10Sept($\lambda=336^\circ\text{Ls}$)には $\omega=049^\circ\text{W}$, 053°W (055°W), 057°W で撮られ、前日より強い描写でアウロラエ・シヌスの辺りの描写が詳細、オピルはRで明るい。17Sept($\lambda=340^\circ\text{Ls}$)には $\omega=340^\circ\text{W}$, 345°W (348°W), 356°W (358°W)で撮像。北極雲の中にマレ・アキダリウムの筋が出ていて $\omega=358^\circ\text{W}$ ではドーズのスリットに近い。デウテロニルスとマレ・アキダリウムの間は明るい、Bは一枚のみで、雲との関係は不明。シヌス・メリディアニの描写は完全でお尻のマレ・セルペンティスの太さも出ている。 $\delta=6.2''$ である。18Sept($\lambda=340^\circ\text{Ls}$) $\omega=349^\circ\text{W}$ では北極雲がマレ・アキダリウムを大きく覆う。マレ・セルペンティスの南は太く濃い。19Sept($\lambda=341^\circ\text{Ls}$)もバルバドスで、 $\omega=322^\circ\text{W}$, 326°W , 331°W (333°W)ではヘッラスが出て来てダスティに見えるが、THEMISには出ていない。朝方のマレ・アキダリウムのあたりの北極雲が面白いが、 $\omega=326^\circ\text{W}$ と $\omega=333^\circ\text{W}$ では違ってきている筈なのに、Bは同じ $\omega=328^\circ\text{W}$ を使っているらしい辺りが拙い。マレ・セルペンティスの辺りの描写は更に詳しくなった。ワルハッラ似の蔭がシヌス・サバエウスの北に沿っている。26Sept($\lambda=344^\circ\text{Ls}$)からは英國に戻ってからのものと思われる。 $\omega=200^\circ\text{W}$, 204°W (206°W), 208°W はマレ・キムメリウムの割と詳しい描写で、アエテリアの暗斑の南への延長が出ている。13Oct($\lambda=353^\circ\text{Ls}$) $\omega=029^\circ\text{W}$, (033°W) 036°W はマレ・アキダリウム中心、アルギュレの処が淡くなっている。北極雲は大きい。23Oct($\lambda=358^\circ\text{Ls}$)には $\omega=286^\circ\text{W}$, 290°W (292°W), 296°W , 305°W で、シュルティス・マイヨル中心だが最後にはシヌス・メリディアニまで出ている、ヘッラスが黄色いがBは一枚だけでBには白く出ている。マレ・セルペンティスとヤオニス・フレトゥムの関係はよく分かる。ホイヘンス・クレータが $\omega=292^\circ\text{W}$ に明確。十一月は珍しいほどの天候不良だった由(LtE)。11Dec($\lambda=022^\circ\text{Ls}$)は $\omega=156^\circ\text{W}$, 162°W 。Bの $\omega=159^\circ\text{W}$ には夕縁にアルシア周辺、少し中にオリュムプス・モンスの夕雲が出ている。プレグラ・コンプレックスもよく出ているが、プロポンティスIが見窄らしい。 $\delta=10.7''$ である。

♂.....In the next issue we shall review the observations made during the period from 1 January ($\lambda=032^\circ\text{Ls}$, $\delta=12.7''$) to 15 January 2010 ($\lambda=038^\circ\text{Ls}$, $\delta=13.8''$). The planet will be closest to the Earth on 27 January 2010 ($\lambda=044^\circ\text{Ls}$, $\delta=14.1''$). 南 政 次・村上 昌己 M MINAMI & M MURAKAMI

便 り

Letters to the Editor

●.....*Subject: hi*
Received: Tue 22 Dec 2009 23:06:06 JST

Dear Masatsugu, I sent separately two photos, taken by my son David, of my telescope and me. The telescope, an F5, is, as you know, not exactly a planet observer's scope, but it is easy to set up, with an accurate drive. A Barlow boosts the available powers. In spite of its limitations, I have very much enjoyed my little telescope.

We received about 6 inches of snow last Friday. Colleen and her family experienced 23 inches in New Jersey. Friday I was on the road for the hospital and drove in the snow for about nine hours, on a trip that should have

taken about three hours. We lost track of the number of accidents that we saw, and we guessed at 25. It was an exciting trip. Best wishes,

○.....*Subject: Re: Merry Christmas*
Received: Thu 24 Dec 2009 10:12:13 JST

Dear Masatsugu, Perhaps you will enjoy the attached photo of Tyler and me in Richmond, near the locally famous Strawberry Street Cafe, from which I staggered home many a night back in the '70s.

It looks like most of the snow will be gone by Christmas, so we will have had a white week before Christmas but not a white Christmas. We plan to get together with family members as usual. Uta's mother's cancer is under control at this time, for which we are grateful. My 84 year old father is happily still up and about.

I still have my old F8 scope and may be able to adapt it to the driven equatorial mount. I still have access to the

RAS Observatory, but it is a long drive to make when petrol is expensive and money is tight.

You are wise to decline observing at Flagstaff. I saw that they have had snow there already. I think that if I tried to observe there for very long, I might turn into (become) Nix Olympica.

I will try to send you more drawings soon.

Grandson Max has been joined by our granddaughter, Sailor Rain (an unusual name, but I like it). Best wishes,
Sam WHITBY (サミュエル・ホイットビー Hopewell VA 美)

●.....*Subject: Image of Saturn*
Received: Wed 23 Dec 2009 00:06:58 JST

Dear all, Please find attached a not too clever image of Saturn. I have included a rotated version as to my eye-brain combination this makes the oblate shape of Saturn more apparent and the belts too. ... Best Wishes

Peter GARBETT (ピーター・ガーベット Sharnbrook 英)

●.....*Subject: Mo 01 Dec 09*
Received: Wed 23 Dec 2009 02:13:21 JST

01Decが出来ましたので送ります。もう1回分撮っていますが出来が良くないので2回分のみです。今から21Decを処理します。

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091201/Mo01Dec09.jpg>

○.....*Subject: Mo 21 Dec 09*
Received: Wed 23 Dec 2009 04:38:34 JST

21日をお送りします。当日15時台から撮りましたが、なかなか安定せず17時になって少し落ち着きました。合成f75で撮っています。

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091221/Mo21Dec09.jpg>

○.....*Subject: Mo 24 28 Dec 09*
Received: Fri 01 Jan 2010 22:52:46 JST

明けましておめでとう御座います。今年もよろしくお願ひ致します。...年末にフィルターが届き、撮像を開始しました。Rは今までのものより薄い色でほとんどオレンジ、Gはあまり変わりがないように思えます。Bは今までより濃く、少々時間が掛かりますが、効果は良いようです。IRも今までより鮮明に写ります。

Seeingの良い日がなかなか無いので良像はまだですが、良い結果が得られそうです。このところ、ずっと雪が降っていましたが、そろそろ撮ってみようかと思っています。

24日のものは合成F60で撮ったためし撮りで、良像はこれしかありませんでした。28日はF75にして撮っています。撮り方は今まで通りで何とかなりそうです。

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091224/Mo24Dec09.jpg>
<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091228/Mo28Dec09.jpg>

森田 行雄 (Yukio MORITA 廿日市 Hiroshima)

●.....*Subject: RE: Images/Animation: Dec 21st 09:00 UT*
Received: Wed 23 Dec 2009 09:32:01 JST

The bright spot seems to have particularly large contrast in blue as shown below after processing for contrast.

<http://www.egrafton.com/blue12-21.jpg>

Joel WARREN wrote---Dear list, Any opinions on the brightening at the edge of the NPC appreciated. I'd say my images and Ed's are enough to confirm its actual, and not an artifact. Dust would be my first guess, but it just doesn't quite look like dust to

my eye. Regards, Joel

Ed GRAFTON (エド・グラフトン TX 美)

●.....*Subject: Animation: 23 hour 20th/21st*
Received: Wed 23 Dec 2009 09:50:28 JST

Greetings all, I realized I could make a small animation that shows the bright edge of the the NPC rotating over 23 hours. I also think an argument can be made the NPC is now fragmented somewhat. But the time, info and CM can be found on the gif. Any opinions appreciated. Regards

<http://marswatch.amaonline.com/NPCbrightdemo.gif>

○.....*Subject: Image: 01-01-2010 07:50 UT*
Received: Fri 01 Jan 2010 18:35:42 JST

Greetings list, Happy New Year to all. Decent seeing. Actually had ice building up on my OTA, so imaging was a bit difficult. Its been awhile since I've been able to image around this CM, so it was worth the trouble.

<http://marswatch.amaonline.com/01-01-10@0750.jpg>

○.....*Subject: Reprocessed images*
Received: Sat 02 Jan 2010 05:43:29 JST

Greetings and Happy New Year,

Here is a much improved version of the image I sent you earlier. Regards,

Joel WARREN (ジョエル・ウォレン Amarillo TX 美)

●.....*Subject: Mars-2009-12-22-KUMAMORI*
Received: Wed 23 Dec 2009 14:12:23 JST

南政次様、熊森照明です。寒い風は無くなったのですが、思ったより晴れませんでした。シーイングも昨日より悪くなりました。北極雲が晴れてきたのでしょうか、少し薄暗く写りました。

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091222/Km22Dec09.jpg>

○.....*Subject: Mars-2009-12-26-KUMAMORI*
Received: Sun 27 Dec 2009 12:01:25 JST

なんとか晴れましたが黄雲の経度は無理でした。

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091226/Km26Dec09.jpg>

○.....*Subject: Mars-2009-12-28-KUMAMORI*
Received: Tue 29 Dec 2009 10:48:40 JST

雲が多く、僅かな晴れ間からの撮影でした。黄雲の位置まではまだ届かないみたいです。

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091228/Km28Dec09.jpg>

○.....*Subject: Mars-2009-12-29-KUMAMORI*
Received: Wed 30 Dec 2009 12:51:48 JST

撮影を始めようとすると薄雲がやってきました。予想より少し早く、シーイングもメラメラでした。北極冠の左がやや褐色系になっていますが、微妙で画像処理によるものかもしれません。

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091229/Km29Dec09.jpg>

○.....*Subject: Mars-2010-01-01-KUMAMORI*
Received: Sun 03 Jan 2010 12:08:44 JST

雲が飛び、シーイングも最悪に近く、望遠鏡も揺れ、寒くて厳しい新年の火星を迎えました。

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100101/Km01Jan10.jpg>

○.....*Subject: Mars-2010-01-05-KUMAMORI*
Received: Wed 06 Jan 2010 21:04:18 JST

冬型が続き晴れそうで晴れない空でしたが何とか雲間から撮影できました。北極冠の中央南縁が微かに暗く出ていますが、黄雲の名残でしょうか。

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100105/Km05Jan10.jpg>

熊森 照明 (Teruaki KUMAMORI 堺 Osaka)

●.....**Subject: Mars 21-December-2009**
Received: Thu 24 Dec 2009 01:29:36 JST

Dear Masatsugu, The weather finally cleared and I was able to image Mars. Attached are a set of images taken on 21 December. They show some interesting activity in the North Polar Region with a very bright spot near Utopia, also some bright streaks in Elysium and clouds over Nix Olympica.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmoms/2009/091221/WF121Dec09.jpg>

I also have some images from the night before on 20 December that I'm still working on. The seeing was pretty bad on the 20th just after the frontal passage that cleared our skies. Anyway, I am hoping the weather cooperates in January as we approach opposition!

○.....**Subject: Mars 06-January-2010**
Received: Fri 08 Jan 2010 04:13:54 JST

Dear Masatsugu, The weather here has been pretty cloudy over the last month and a half, but it finally cleared enough to observe Mars on the morning of January 6th. Attached is a set of images taken that morning. The western limb appeared to be particularly bright in blue which seemed to result in a subtle salmon color as compared to the eastern half of the planet.

An arctic cold front is now moving in and it's windy and cloudy outside. Hopefully it will clear enough by Saturday morning to get some more images. I just hope the seeing isn't too bad. With Best Wishes,

<http://www.hida.kyoto-u.ac.jp/~cmo/cmoms/2009/100106/WF106Jan10.jpg>

Bill FLANAGAN (ヒル・フナガシオン Houston TX 美)

●.....**Subject: Mars imagery (Aug, Sep, Oct, Dec 2009.)**
Received: Thu 24 Dec 2009 09:33:22 JST

Hi all, Here is my entire backlog of Mars imagery that has been delayed to all the Jupiter work. Many sets of images are now available here:

<http://www.damianpeach.com/mars09.htm>

Hopefully many more to come over the course of this apparition. Best Wishes

(P.S. No images were obtained in November - it basically rained for the entire month and the rare nights it was clear seeing was terrible! It was the wettest November ever recorded here!)

○.....**Subject: Re: RE: Mars imagery (Aug, Sep, Oct, Dec 2009.)**
Received: Fri 25 Dec 2009 01:23:27 JST

Dear Masatsugu, You're most welcome to host all of my images. Please take them from the links as I send them out. Hopefully there will be some good weather over the coming months - we've had heavy snowfall recently. Seasons greetings to you also!

○.....**Subject: Re:Re: Mars imagery (Aug, Sep, Oct, Dec 2009.)**
Received: Fri 25 Dec 2009 02:36:31 JST

Hi David (ARDITTI), Thanks. My Dec 2007 images are the most detailed views I've ever had of the orographic clouds - you can view them here: Best wishes

<http://www.hida.kyoto-u.ac.jp/~cmo/cmoms/2007/071206/DPc06Dec07.jpg>

○.....**Subject: Uranus (September 19th, 2009.)**
Received: Sun 27 Dec 2009 23:16:05 JST

Hi all, Here are some images of Uranus from close to its opposition date this year. Superb conditions prevailed and it's certainly the best view I've ever had of the Planet.

http://www.damianpeach.com/barbados09/uran_2009_09_19seq.jpg

○.....**Subject: Mars images (Dec 27th, 2009.)**
Received: Mon 28 Dec 2009 07:26:49 JST

Hi all, Here are some images from last night. Seeing was very poor as it so often is these days...

http://www.damianpeach.com/mars09/m2009_12_27rgb.jpg

http://www.damianpeach.com/mars09/m2009_12_27redblu.jpg

○.....**Subject: Re: End of year eclipse**
Received: Fri 01 Jan 2010 05:45:57 JST

Nice shot Jamie. Here is one I took with a Nikon DSLR hand-held to the C14 finderscope through scattered clouds. A happy and healthy 2010 to you all,

○.....**Subject: Mars images (Jan 1st, 2010.)**

Received: Sat 02 Jan 2010 04:24:32 JST

Hi all, Here are some images from earlier today. Seeing was again poor. There seems to be a faint rift across the NPC in the red light images.

http://www.damianpeach.com/mars09/2010_01_01rgb.jpg

http://www.damianpeach.com/mars09/2010_01_01red.jpg

http://www.damianpeach.com/mars09/2010_01_01blue.jpg

○.....**Subject: Mars Images (Jan 4th, 2010.)**

Received: Wed 06 Jan 2010 23:53:49 JST

Hi all, Some images from Jan 4th. Seeing variable from fair to good. The dark summer albedo collar is visible through the NPC. Orographic cloud over the Elysium shield is visible rotating off in the first Blue image. Some weak haze over Libya. Syrtis Major is very pointed in Blue light, quite different from its appearance in the Red images.

http://www.damianpeach.com/mars09/2010_01_04rgb.jpg

http://www.damianpeach.com/mars09/2010_01_04red.jpg

http://www.damianpeach.com/mars09/2010_01_04grnblue.jpg

Best Wishes from very snowy and cold UK!

Damian PEACH (デミアン・ピーチ Bks 英)

●.....**Subject: Re: Mars imagery (Aug, Sep, Oct, Dec 2009.)**
Received: Thu 24 Dec 2009 10:34:57 JST

December 16 is remarkable. On that 11" disk, it looks like you are getting something like quarter arcsecond resolution. I've never seen so much detail in the orographics.

○.....**Subject: Mars 2009 January 04**
Received: Mon 04 Jan 2010 13:03:54 JST

No image yet, just to mention that the view at 02:30 with the temperature at -5°C was superbly sharp and steady, possibly the best I have ever had of Mars. Through the Denkmeier binoviewers at x400 on a C14 it reminded me rather of Antoniadi's 1909 November drawings, Syrtis Major and Sinus Meridiani on display. My filter wheel froze up but I got it going again by 02:45. Seeing then deteriorated rapidly to only 6/10 by 03:00. Light levels were low, possibly due to misting on optics, which had been open all night.

○.....**Subject: Mars 2009 January 04**
Received: Tue 05 Jan 2010 09:46:02 JST

Exceptional seeing, as mentioned.

<http://www.davidarditti.co.uk/astro/images/mars/09/mars2010-01-04-DLA.jpg>

David ARDITTI (デウァイット・アーティチ Edgware ME 英)

●.....**Subject: Mars: December 23, 2009**
Received: Thu 24 Dec 2009 10:05 JST

Hi - I am sending you my latest images of Mars December 23, 2009 to be posted. Thanks,

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091223/FMI23Dec09.jpg>

○ **Subject: Mars: December 28, 2009**
Received: Tue 29 Dec 2009 14:07 JST

Hi - I have attached my latest image of Mars December 28th at 6:23 UT to be posted.

Happy New year 2010!!!

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091228/FMI28Dec09.jpg>

Frank MELILLO (フランク・メリッホ Holtsville NY美)

● **Subject: AR11036 images**
Received: Thu 24 Dec 2009 21:30:43 JST

Here are some recent shots of AR11036...

Merry Christmas everybody!

○ **Subject: Mars, Dec 28th 2009 (CM 344.3)**
Received: Mon 28 Dec 2009 22:28:29 JST

Hi all, After seeing Damian's fantastic results, I felt the need to escape the Christmas bubble and take a look at Mars for myself. After a very clear start to the night, the transparency started to degrade as Mars approached culmination. Seeing was generally pretty average but there were good bits to be had with patience. As Mars approached its highest point in the sky, the transparency and seeing became too bad to work with.

Here's one of several images taken during the session. The Chryse region appeared noticeably bright close to the limb. Best regards,

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091228/PLw28Dec09.jpg>

○ **Subject: AR11039 on New Year's Day, 2010**
Received: Sat 02 Jan 2010 06:34:51 JST

Hi all, (Apologies if this has already been sent to you - my email client glitched during the first send). The Sun doesn't get terribly high in the sky during the day at the moment but the sight of sunlight pouring through the living room windows was too much to ignore. Here's a shot of AR11039 taken on New Year's Day. Some nice, albeit rather small, proms visible around the limb too.

Best regards and Happy New Year to you all,

○ **Subject: Mars, Jan 2nd 2010**
Received: Sun 03 Jan 2010 01:15:34 JST

Hi all, A bit chilly last night and I noticed that my C-14's primary was covered in condensate during the session. It's drying out at the moment but will probably be offline for tonight's show!

Here's a capture of Mars taken during the early hours of the 2nd January 2010. Seeing was fair to begin with but starting to deteriorate towards the end of the session. The fogged primary also had an effect on the brightness of the image and hence affected the maximum frame rate I could operate at. Best regards,

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100102/PLw02Jan10.jpg>

○ **Subject: Mars, Jan 4th, CM288.3**
Received: Tue 05 Jan 2010 07:40:17 JST

Hi all, Seeing was pretty variable for me last night, with a few good bits but carried on the back of a lot of poor stuff. The seeing was definitely better earlier on though. This is the earliest capture made at around half past one.

http://www.digitalsky.org.uk/mars/2010-01-04_01-26-57_RGB.jpg

○ **Subject: Re: Mars, Jan 2nd 2010**
Received: Wed 06 Jan 2010 01:13:48 JST

Hi all, Odd seeing last night with small bursts of good stuff being quite abruptly interrupted by some violent translational shifts. I only took a couple of capture sets assuming the results would be poor. However, Registax appears to have liked the quality of the movies and the results have turned out better than expected. A number of lunar captures taken post Mars also seem to have come out with a fair degree of fine detail under these conditions. Here's the Mars shot...

http://www.digitalsky.org.uk/mars/2010-01-05_01-21-52_IR-G-B.jpg

Best regards,

Pete LAWRENCE (ピート・ローレンス Selsey 英)

● **Subject: Greetings and news**
Received: Fri 25 Dec 2009 00:31:06 JST

Dear Masatsugu, Hope you are well—wishing you best of the season, and also for the new year.

I am very impressed with the web page covering the IWC MO meeting in Paris; again I express my deep appreciation to Nicolas, Christophe and our other French hosts who made the event so enjoyable. It was marvelous to have access to the splendid interiors of the Paris Observatory, Meudon, and Juvisy. All of the talks were stimulating—and I am pleased to see that Professor Dollfus's papers have been added to the web page. It was one of the few regrets about the meeting that he was forced to cancel his attendance owing to health.

I am hoping soon to finish an outline of my talk—with the illustrations I showed. My delay has in part been around the fact that the talk was also a prospectus of a planned book (to be co-authored with Richard McKim and Randall Rosenfeld) and I did not want it to appear until it had been accepted by a publisher. We seem to be getting close now so perhaps so I will be able to oblige you with the PowerPoint and so eliminate the “In preparation” beside my name.

The other news is that I have, regrettably, had to cancel my plans to visit Lowell Observatory at the end of January. A clinical unit to which I consult has sustained the loss of two physicians, one to retirement, the other unexpectedly resigned, so I have been asked to come on board to provide extra service. My hope had been to observe the orographics at Olympus Mons around opposition with the 24" Clark; but I don't see any particular importance in my attempting to do so, having just seen images by Don Parker and Damian Peach which show the effect marvelously, even at this early date. Still it would have been lovely to have put eye to eyepiece and watched Mars with that grand old instrument. Perhaps you and Greg Mort can still hold forth without me?

I wish you and your wife the best health—energy—and happiness in the New Year, and great joy of Mars's winter opposition. Ever,

 (註) Bill is misunderstanding: It is ridiculous for us to go to the US to see the cotton-ball-like orographics of Olym-

pus Mons; they can be observable at this time of the Martian year from all parts of the world. The important thing which can be observable from the US at the 2010 opposition is the “opposition effect” of the Olympus Mons. That is, the shield of Olympus Mons (summit and the flanks) very shines whole day when the planet was near at opposition. This is the phenomenon first revealed by Giovanni V SCHIAPARELLI on 10 November in 1879 and the name of Nix Olympica was thus born. This is no more visible than when the phase angle is very small, and hence it is not always observable at any position of the world. The opposition effect itself can almost be seen whole day (that is, also in the morning), so that this occasion it is especially interesting to observe it because, as it moved to the afternoon side, the orography gradually joins the brightness. As to the brightness of the opposition effect, Christophe PELLIER (CPI) once wrote based on his experience in 2005 that *la caldera du célèbre volcan martien Olympus Mons devient littéralement brillante sur les images; elle est également relativement facile à détecter en observation visuelle* and he thought that it is because of “*le givre au sommet d'Olympus Mons.*” It is an attractive idea, but we believe it is mainly caused by the reflection of the Sun light due to the special lava of Mons including the flanks. Nevertheless CPI's idea is still alive because the summit may have some frozen water or glacier-like matter on the summit so that it may have an opportunity to send *une surbrillance* or a glaring flare at noon to us, and hence we have repeatedly stressed that the US observers should observe at around $\omega=133^\circ\text{W}$ at Martian noon during the phase angle is smaller, although the usual duller opposition effect does occur not only at noon but also in the morning and also afternoon. The cotton-ball-like evening clouds will be much fully enjoyed by everyone from around $\lambda=100^\circ\text{Ls}$. (Mn)

○ **Subject: Re: I understand**
Received: Sun 27 Dec 2009 04:37:22 JST

Dear Masatsugu, Apologies, and again I thank you for your patience. I did misstate the program at Flagstaff -- my own interest was in seeing the cotton-ball cloud with the Lowell refractor, and (if possible) making the distinction between this and the opposition effect, but I also appreciate that there will probably be CCD images from the US -- as from Don Parker and Bill Flanagan and Ed Grafton -- that will satisfy us about the question and so render unnecessary the trip to Flagstaff (which would be arduous, as we would have to arrange ground transport from Phoenix, and the weather is always uncertain this time of year). It seemed quite possible to travel to Flagstaff and not have any clear nights in which to observe. Also the Lowell Observatory is having its MIT camp during January so there will be many students present and all in all it seemed best to arrange a visit for another, more opportune, occasion. Also I need not emphasize the fact that these trips are costly and one has limited funds -- as well as time.

I have not had a chance to look over the notes and sketches I made in the Paris Observatory library regarding the dust storm at Mare Cimmerium of 1894. I shall

try to do so to satisfy you as to this. It is only a sketch of a sketch however and taken under less than optimal conditions so I will plead this in advance.

I shall not live down, I fear, the Lowell Route in *S&T*, and so am not eager -- by undue haste -- to make others.

With best wishes,

○ **Subject: Trouvelot 1894**
Received: Tue 29 Dec 2009 01:01:47 JST

Dear Masatsugu, Here are copies of the pages I showed you—they are my freehand sketches based on Trouvelot drawings in his observing books (which we were not permitted to xerox) and show several images which capture progress of the 1894 dust storm.

I suspect you will wish that I had more information to supply you about them, but these sketches were made quickly and I had a great deal of other work to do so I was lucky to have gotten even this much. Hope they are useful. Best wishes,

○ **Subject: Re:RE: Re: Trouvelot 1894**
Received: Thu 31 Dec 2009 22:29:33 JST

Dear Masatsugu, I share your wish to someday have a true copy. That, however, will depend on the authorities.

Likewise a happy new year, and I will look forward to your always interesting essays on all things Martian.

Someday -- perhaps in the New Year -- I will hope to reread them systematically and distill their essential points. Best,

○ **Subject: For web page**
Received: Tue 05 Jan 2010 02:15:39 JST

Dear Masatsugu, Here is a text that is based on what I presented in Paris, which you can post on your web page (with the proviso that copyright William Sheehan is indicated so that it won't be copied by others without permission as I may have need of it in a different setting).

As soon as you tell me whether it satisfies you—and of any revisions that you may suggest—I shall send some (probably not all) of the illustrations I presented with my talk. All best,

○ **Subject: A more suitable text for you**
Received: Tue 05 Jan 2010 02:38:35 JST

Dear Masatsugu, Instead of putting that entire—and rather heavy—text on the Web Page, I suggest the following. It is more pertinent to the needs of the average reader.

Bill SHEEHAN (ウイリアム・シーハン MN 美)

● **Subject: mars sketches 25/12/09 & 26/12/09**
Received: Sat 26 Dec 2009 21:26:12 JST

Hi, here are my 2 sketches from 25 & 26 december. Greetings,

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091225/KSm25Dec09.jpg>

○ **Subject: mars sketch 28/12/09**
Received: Tue 29 Dec 2009 20:37:35 JST

Hi, here is my sketch from 28 december. Greetings,

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091228/KSm28Dec09.jpg>

○ **Subject: mars sketch 01/01/10**
Received: Sat 02 Jan 2010 21:36:50 JST

Hi, here is my sketch from 1st January.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100101/KSm01Jan10.jpg>

○ **Subject: mars sketch 03/01/10**

Received: Tue 05 Jan 2010 03:09:59 JST

Hi, here is my sketch from 3 January. Greetings,

<http://www.hida.kyoto-u.ac.jp/~cmo/cmoms/2009/100103/KSm03Jan10.jpg>

Kris SMET (クリス・スモト Belgium 比利时)

●.....**Subject: Mars obs 25th from SMK**
Received: Sat 26 Dec 2009 05:39 JST

Dear sirs, Richard, Minami San, Hope you spent an happy christmas full of hopes and excellent wishes.

The sky here was opened yesterday and tried to catch something on Mars. Here is the results given here for the planet 2 hours after rising the horizon. Some notes are incorporated with the drawings. Have good receipt and best wishes.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmoms/2009/091225/SMk25Dec09.jpg>

○.....**Subject: Mars obs on 26th from SMK**
Received: Mon 28 Dec 2009 7:26 JST

Dear sirs, Here is the mars obs of last 26th. Just for confirming the notes of the 25th obs already sent to your attention. Have good receipt of the present mail. Here now the sky is hazzy strong, windy and under bad seeing: not an opportunity to have a look on. Kind regards

<http://www.hida.kyoto-u.ac.jp/~cmo/cmoms/2009/091226/SMk26Dec09.jpg>

○.....**Subject: Re: Hello**
Received: Mon 28 Dec 2009 21:41:38 JST

Masatsugu San, By anyway, it is a great pleasure to read you after seeing you in Meudon. . . .

I think we should less highlighted the event on the moment except if this is for general long term events for data apraisal. I bought in the mean time a 6" refractor of excellent value for actual strehl ratio, not an apo, for reporting slight hazing (so very low contrast). Haze for me is on the equal importance than the dust haze. They are coupled in fact and don't find actual data for. This is my evaluation of the moment, north area of mars being on a survey, strange, unusual, for me.

Hope you spend for next year an happy new incoming year in family, in first, with the mars team and for the whole world! I am joining you, my dear.

Stanislas MAKSYMOWICZ

(スタニスラス・マクシモヴィッチ Ecquevilly 法)

●.....**Subject: 火星の報告について**
Received: Sun 27 Dec 2009 00:37:32 JST

南先生、ご無沙汰しております。『火星通信』をいただいております神崎です。いつも楽しみに読んでおります。さて、遅ればせながら、私も12月中旬よりスケッチを取り始めました。(次の日の勤務のことを考えますと、明け方はなかなか難しいため、夜半に火星が昇ってくるこの時期に開始となってしまいました。)海に近かった千葉に比べて、内陸にあります東久留米市は明らかにシーイングが悪く、苦勞しておりますが、12月25日迄に20枚程スケッチをとりました。以前、報告をしていました時代は、確か月に二度、前半と後半に分けて報告をしていたと思いますが、現在は月に一度、前月の16日から当月の15日までのものを報告するというスタイルとなっているのでしょうか。ご教示をお願いします。現在、『火星通信』

を少し以前のものまで読み返しているところですが。今後とも、よろしくご指導をお願いします。

○.....**Subject: Re: RE: 火星の報告について**
Received: Sun 27 Dec 2009 23:00:44 JST

お返事ありがとうございます。12月11日、13日にもスケッチを一枚ずつとったのですが、強風のため、視野の中を火星が踊ってしまっていて、ぼんやりした模様がなんとなく見えるだけという状態でした。従いまして、報告は、12月16日分からということにしたいと思います。12月16日から昨日26日までで23枚のスケッチがあります。今年中にjpgにスキャンして、報告したいと思います。例えば、昨日の分を添付しますが、こんな感じでしょうか? ご指示を頂きたく存じます。

なるべく×340を使うようにしているのですが、シーイングが悪いため、×240しか使えないこともたびたびあります。現在、2.5mmのアイピースを注文中ですが、それが届けば×480を使えるようになります。40分ごとにスケッチ・毎日最低3枚を目標にしているのですが、実際にやってみますと、何をポイントにして、どのように追えばよいのかの軸足が定まらず、難しさを感じています。よろしくご指導をお願いします。 . . .

今晚は、こちらは時々雨がばらついており、火星は観ることができません。明日以降天気は回復するようですので、引き続き、スケッチに取り組みようと思います。それでは、宜しく申し上げます。

○.....**Subject: Re: RE: 火星の報告について**
Received: Mon 28 Dec 2009 23:59:50 JST

「神崎」は、「KOHZAKI」でお願いします。(以前は、パスポートの表記も、長音でもHが使えなかったため、「KOZAKI」となっており、何となく、そのまま使い続けていましたが、おっしゃるとおり、これではコザキになってしまいますね)

今晚は東京地方は晴天のため、なんだか望遠鏡を覗いてみましたが、気流の状態が最悪で、まともな円盤像にさえならない状況です。もう少し待機してみますが、スケッチはとれないかもしれません。昨日お送りしたデータは、村上さんにも送付しておきます。また、年内に、12月16日以降のものもスキャンしますので、追って送付します。よろしく申し上げます。

<http://www.hida.kyoto-u.ac.jp/~cmo/cmoms/2009/091226/Kz26Dec09.jpg>

○.....**Subject: 12月28日及び29日分の報告**
Received: Wed 30 Dec 2009 01:05:01 JST

本日分と昨日分のスケッチを送付します。いずれも、雲の切れ目が生じた時間帯のもので、前後の時間帯は完全に曇って了っています。本日29日も、これ以降晴れそうにありません。シーイングがそんなに悪くもなかったもので、とても残念です。

<http://www.hida.kyoto-u.ac.jp/~cmo/cmoms/2009/091228/Kz28Dec09.jpg>

<http://www.hida.kyoto-u.ac.jp/~cmo/cmoms/2009/091229/Kz29Dec09.jpg>

○.....**Subject: 火星報告 1**
Received: Thu 31 Dec 2009 12:27:49 JST

南先生、村上様、12月30日は風もなく快晴だったのですが、気流の状態が大変悪く、火星が高く昇ってもピントが合わせられず、極冠さえ見えなような状態でした。したがって、スケッチは一枚もとれませんでした。29日は既にスケッチ一枚

報告しておりますが、その後、正規の時間ではないのですが、晴れ間がわずかに出ましたので、スケッチ一枚とることができました。追加して報告致しましたが、その後再び厚い雲が出てしまいました。序でに12月16日の分を送信いたします。

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091216/Kz16Dec09.jpg>

○.....**Subject: 火星報告3**
Received: Thu 31 Dec 2009 12:31:31 JST

南先生、村上様、12月18日、19日、20日分です。12月17日分がとんでいますが、同日スケッチは2枚とりましたが、気流の状態が非常に悪く、雑ばくなスケッチですので、送信は控えさせていただきます。

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091218/Kz18Dec09.jpg>
<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091219/Kz19Dec09.jpg>
<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091220/Kz20Dec09.jpg>

○.....**Subject: 火星報告7**
Received: Thu 31 Dec 2009 12:36:51 JST

南先生、村上様、12月22日、23日分です。以上で、未報告分は終了です。

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091222/Kz22Dec09.jpg>
<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091223/Kz23Dec09.jpg>

現在のところ、東京は風もなく暖かく晴れておりまして、いい感じなのですが、天気予報によりますと、関東も今晚から1月1日にかけて強風が吹き荒れるらしく、夜どうなるか不安です。

どうぞよいお年をお迎えください。

○.....**Subject: 火星報告**
Received: Sat 02 Jan 2010 00:19:20 JST

南先生、村上様、あけましておめでとうございます。12月31日分のスケッチを送付します。昨晩は、かろうじてピントが合わせられる気流の状態でした。今晚も望遠鏡を覗いてはいますが、ピントを合わせられるかどうかさえ微妙な状態です。

本年もよろしくご指導お願いします。

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091231/Kz31Dec09.jpg>

○.....**Subject: 火星報告**
Received: Sun 03 Jan 2010 23:39:07 JST

南先生、村上様、1月1日及び2日のスケッチを送付します。1日は悪気流のため、1枚しかとれませんでした。昨日は、やや気流が落ち着いていたので、4枚とってみました。本日は、今のところ、ピントも合わせられないほどの気流状態ですので、期待できません。

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100101/Kz01Jan10.jpg>
<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100102/Kz02Jan10.jpg>

○.....**Subject: 火星報告 (1月5日分)**
Received: Wed 06 Jan 2010 23:29:46 JST

南先生、村上様、1月5日にとりましたスケッチ4枚を送付します。よろしくお願いします。

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100105/Kz05Jan10.jpg>

○.....**Subject: 火星報告 (1月6日分)**
Received: Fri 08 Jan 2010 01:07:39 JST

南先生、村上様、1月6日にとりましたスケッチ4枚を送付します。よろしくお願いします。

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100106/Kz06Jan10.jpg>

神崎 一郎 (Ichiro KOHZAKI 東久留米Tokyo)

●.....**Subject: Re: Invitation of an article**
Received: Sun 27 Dec 2009 01:34:37 JST

Dear Masatsugu, please first, forgive me for my late answer: I have a very good excuse for that but I don't

want you to think I did not appreciate your demand: I did BUT, for the last two monthes I was working like hell and... I put an end to my next novel about Mars in New York. But it was handwritten... I have now to enter the thing in a computer... about 1 million signs!!! And my publisher is waiting! I hope you understand why I could not give a positive answer so far for an article. If you are still interested, we could see how to cope with that in the near future!?

I hope your health is better, and wish you to spend a great time for the last days of 2009, the year when I happily met you in Paris. And I hope I'll see you in 2010!

The best to you

Jean CAVÉ (シヤン・カーウエ nr Paris 法)

●.....**Subject: Mars Observers Café on-line again**
Received: Sun 27 Dec 2009 05:49:48 JST

I have moved the Mars Observers Café away from Google and onto the ALPO web site at:

<http://www.alpo-astronomy.org/jbeish/index.html>

For some unknown reason Google decided to change their formats to not support Java, much of HTML and other scripts, so the Café would not run properly.? Now on the ALPO site as long as ALPO is alive and well Mars Observers Café will be safe there.

Jeff BEISH (シエフ・ヒージュ Lake Placid FL美)

●.....**Subject: Mars Image 12/27/2009**
Received: Mon 28 Dec 2009 09:20 JST

Greeting to all from Texas: No white Christmas in our part of the world. Mostly clear skies, but seeing is very poor, making observations of the growing planet Mars challenging. Increasing diameter is helping, but details remain elusive in both the eyepiece and the imager. Best views for me have come from a 4mm Televue Radian with no filters. May the peace of the season be with you!

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091227/DBt27Dec09.jpg>

○.....**Subject: Bates Mars 01022010**
Received: Sat 02 Jan 2010 16:26 JST

A very Happy New Year!

Mars viewing was very nice tonight under clear, cold skies. Larger diameter is allowing more magnification for better detail.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100102/DBt02Jan10.jpg>

○.....**Subject: Bates image of Mars 01052010**
Received: Wed 06 Jan 2010 10:11 JST

Cold weather and clear skies with average seeing continue to dominate the Texas sky. All the best to Mars observers all over the world!

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100105/DBt05Jan10.jpg>

Don BATES (トーン・ベーツCypress TX 美)

●.....**Subject: Mars 12/27/2009**
Received: Mon 28 Dec 2009 20:04:19 JST

It's may first "Mars" I send to you to the CMO project. Telescope: Takahashi "Mewlon 210" D:210mm, F:2415mm, Eye Projection: ortho Kasai 12mm, F/40, No filter, Webcam: SPC Philips 900, AVI 90s, 15fps, Registax/Photoshop, Sevilla: 37°24' N, 06°59' W.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091227/Nft27Dec09.jpg>

○.....**Subject: Mars on 2 Jan 2010 00:25 GMT**
Received: Sun 03 Jan 2010 06:49:19 JST

Dear friends: A new photo of Mars with poor seeing.
<http://www.hida.kyoto-u.ac.jp/~cmo/cmoms/2009/100102/NFt02Jan10.jpg>

Nicolás FONTANILLS LOPES

(ニコラス・フォンタニラス=ロペス Sevilla 西 班牙)

●.....**Subject: Re: 2005 gallery images**
Received: Mon 28 Dec 2009 20:34:16 JST

Dear Masatsugu, The problem is that the domain name "astrosurf.org" has recently expired. If you change the .org to .com, the link is restored - or you can of course the link to your site if you wish to :) Best wishes

○.....**Subject: Mars images - 2 january 2010**
Received: Sun 03 Jan 2010 04:14:07 JST

Happy new year everyone! Here are finally some Mars images after many monthes, despite a 3-hours cloud pasage that ruined the culmination of the planet.

<http://www.astrosurf.com/pellier/M100102-CPE>

It seems that we can see the so-called "Syrtis blue cloud". I have added a crop of the NPC imaged by the HST at a similar season many years ago (1995 aphelic apparition). The dark line inside the cap visible at these longitudes is the future dark collar of the NPC summer remnant (albedo ground collar). Best wishes

<http://www.hida.kyoto-u.ac.jp/~cmo/cmoms/2009/100102/CPI02Jan10.jpg>

PS I have been rebuilding my mailing list after some huge computer problems during hollidays. If ever I have forgotten someone, please tell.

○.....**Subject: Saturn images, 2 january 2010**
Received: Sun 03 Jan 2010 20:51:13 JST

Hi all, A set from yesterday night

<http://www.astrosurf.com/pellier/S100102-CPE>

I find the banding of the planet curiously weak... A possible white spot recorded in the southern hemisphere.

○.....**Subject: Re: Mars images - 2 january 2010**
Received: Mon 04 Jan 2010 03:23:41 JST

Dear Richard, I'm sorry for the e-mail ; did you sent a notice about this change ? It's possible I have received nothing because I did also change my own e-mail (yeah, these things are so complicated :-)))

It was a great result to have demonstrated this much earlier... also the differences of deposits from year to year! Still on this topic, I wonder if the fact that some dark area inside the two caps do appear earlier than other has something to do with physical properties like thermal inertia. The life-save effect of the springtime SPC must belong to the same phenomena... Best wishes

○.....**Subject: Re: Mars 2010/01/05 (J J POUPEAU)**
Received: Fri 08 Jan 2010 19:01:19 JST

Hi all, Note the big atmospheric clearance on the northern hemisphere north of Syrtis Major, as seen on the B images (of JPP). Also well visible on images by Peter Edward on the same night in RGB... Best wishes

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

●.....**Subject: Mars 28thDec2009**
Received: Tue 29 Dec 2009 10:26:30 JST

Hi Guys here are a couple of Mars images from the 28 Dec. Seeing was fair. Best wishes
<http://www.hida.kyoto-u.ac.jp/~cmo/cmoms/2009/091228/DTy28Dec09.jpg>

○.....**Subject: Mars 1st Jan 2010**
Received: Sat 02 Jan 2010 03:49:21 JST

Hi Guys, Happy new year to you all.

Here is a brace of Mars images from this morning. Seeing was quite nice in this carbon tubed C11. When setting up around 23:00 a visual look as opposed to laptop look, surprised me just how bright Hellas was. It looked like a south polar cap; cloud prevented imaging at that time, fortunately it cleared later. Best wishes

<http://www.hida.kyoto-u.ac.jp/~cmo/cmoms/2009/100101/DTy01Jan10.jpg>

○.....**Subject: AR11039**
Received: Sun 03 Jan 2010 08:56:06 JST

Hi Guys Another opportune window today, revealed the current active region to my Daystar /SS filter. Seeing was not too bad at 15deg alt . It has climbed a half a degree since the Solstice, Next month it will be 6 or 7 degrees higher and clear of trees, hoo,,,ray. Best wishes

○.....**Subject: Mars 3 4th Jan 2010**
Received: Tue 05 Jan 2010 10:33:32 JST

Hi Guys, I see lots of fine images around from this evenings sessions, from around UK, Europe and Jim's in the states. I started rather early on the evening of the third Jan, with Mars a little lower, but I seem to have captured an interesting cloud that is not rotating with the planet. No its not the same blue image for the 4 rgbs !!

I see it on Martin's excellent Dobs image, where it is shown a little nearer the limb. Using a full opacity red luminance tends to suppress them. best wishes

<http://www.hida.kyoto-u.ac.jp/~cmo/cmoms/2009/100103/DTy03Jan10.jpg>

Dave TYLER (デヴィッド・タイラー Bks 英)

●.....**Subject: Mars Ak24Dec09**
Received: Tue 29 Dec 2009 11:00:59 JST

南様、火星画像Ak24Dec09です。25日の夕方、無事、鳥山へ着きました。寒く感じますが日本は格別です。今朝、CMOがこちらにも着きました。ありがとうございます。

24日のセブでの画像を送ります。日本ではカメラと望遠鏡が不調で使えず、画像は撮れません。

1月7日にはセブへ戻ります。

寒い季節ですので、どうぞお体には留意してください。では良いお年をお迎え下さい。

<http://www.hida.kyoto-u.ac.jp/~cmo/cmoms/2009/091224/Ak24Dec09.jpg>

阿久津 富夫(Tomio AKUTSU セブ The Philippines)

●.....**Subject: 明けましておめでとうございます**
Received: Fri 01 Jan 2010 01:28 JST

村上昌己様、明けましておめでとうございます。ご返事を頂き、且つ火星日に関してのご意見ありがとうございます。火星日につきましては、ご意見を参考に少し考えてみます。また、今年は下記の3点に注目して行くつもりです。

①1月末に火星が衝になる。②Phoenixの復活なるか?③MARS500が5月頃に開始予定。

火星課の観測も小接近とはいえ北極圏を観測できる機会ということで期待して見ていきます。今年もよろしくお願ひ申し上げます。

安濃 由紀

(Yoshiki ANNOU 日本火星協会 Yokohama)

●.....*Subject: Donald Parker has sent you an ecard*
Received: Fri 01 Jan 2010 12:06:06 JST

Donald Parker has sent you an ecard. To view your ecard, choose from the options below. Click on the following link:

<http://www.americangreetings.com/ecards/view.pd?i=505737616&m=6819&rr=y&source=ag999>

Dear Masatsugu, Happy Birthday and have a great 2010! ... and I hope that you get excellent seeing for viewing that red ball up in the sky! Best regards,

○.....*Subject: Mars 30 December*
Received: Sat 02 Jan 2010 10:05:09 JST

Hi All, I have attached some RGB Mars images from 30 December. Numerous clouds. NPC's center remains dark in red light. Best and happy New Year,

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091230/DPk30Dec09.jpg>

Don PARKER (トドン・パークー Miami FL 美)

●.....*Subject: 常盤優さんからグリーティングカードが届いています*
Received: Sat 02 Jan 2010 00:06:02 JST

常盤 優さん から南 政次様 へ、グリーティングカードのお届けです！

https://greeting.rakuten.co.jp/viewcard/?db=00&card_id=22622270&key=9846324990706571cf5aca2679d3e9de&send=0

Happy Birthday: 蠟燭の溢るるケーキ二日かな
常間地 ひとみ (常盤 優)

(Hitomi TSUNEMACHI横濱Yokohama)

●.....*Subject: Re: Mars 28thDec2009*
Received: Sat 02 Jan 2010 5:03 JST

Hi Dave, Here is my much inferior offering from the same night. Scope was being buffeted by strong breeze which can't have helped at all.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091228/MLw28Dec09.jpg>

Happy New Year to one and all,

○.....*Subject: Re: Mars 2009 January 04*
Received: Tue 05 Jan 2010 09:24:03 JST

Hi, I got some periods of good seeing in a general background of reasonable seeing, just before the witching hour. As a result, significantly better than my effort of the 28th. Looking promising tonight too? Cheers,

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100103/MLw03Jan10.jpg>

Martin LEWIS (マーチン・ルイス St Albans Hts 英)

●.....*Subject: Mars 2 January*
Received: Sat 02 Jan 2010 22:12:44 JST

Dear Mr. Minami and Mr. Murakami: This is my first contribution of 2009-2010 to the CMO. Best wishes.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100102/JSc02Jan10.jpg>

Jesús SÁNCHEZ (ハスス・サンチェス Córdoba 西)

●.....*Subject: Re: Mars, Jan 2nd 2010*
Received: Sun 03 Jan 2010 05:19:41 JST

Hi fellows, Finally my first image from Mars this season, weather wasn't cooperating or busy time schedule the next day. Just like Dave said a bright Hellas to be seen. All the best for this new year for you and your love ones

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100102/JAd02Jan10.jpg>

Jan ADELAAR (ヤン・アテラール Arnhem 荷蘭)

●.....*Subject: Mars 2nd January 2010*
Received: Sun 03 Jan 2010 06:44 JST

Hi all, here is my first Mars of the new year. Some reasonable seeing between scudding clouds.

Happy new year to everyone and let's hope for some clear steady skies!! regards

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100102/PEd02Jan10.jpg>

○.....*Subject: Mars 4/5th January*
Received: Thu 07 Jan 2010 20:07 JST

A delay in posting these due to a 26 hour power cut brrrr in deep snow and -6°C. Now power restored I can reconnect with the world. A high white cloud is visible lower left on disc in both images, more prominent in green/blue. best regards

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100104/PEd04Jan10.jpg>

Peter EDWARDS (ピーター・エトワース WS 英)

●.....*Subject: Re: Mars images - 2 january 2010*
Received: Sun 03 Jan 2010 21:17:54 JST

Dear Christophe, First of all please remember my email address is no longer with AOL but now, since Dec 30 at richardmckim_at_btinternet.com

The AOL one is officially dead as from tomorrow.....

I liked your images very much and they hint at a bright spot in the NPC towards Acidalium. Following that another image sent to me suggests an indent in the cap there, a seasonal feature. In 1993-95 and 97 amateur and HST images showed the annular dark rift in the NPC. In my 1995 Mars report I demonstrated that this feature is the collar of the summer remnant, and suggested that its fluctuating visibility over the years is due to differences in the thickness of the polar seasonal deposits over the years. All the best for 2010

○.....*Subject: Re: SAHEKI's drawings*
Received: Tue 05 Jan 2010 20:03:27 JST

Dear Masatsugu, Happy 2010 to you and so many thanks for passing on the scans of the drawings. I am delighted to have them, and please thank Mr Masao Saheki on my behalf. It is kind of him to have gone to so much trouble. If he reads English perhaps he would like a pdf of the 2001 BAA Mars report part 2 in which I discussed the 1954 and 2001 flashes and reproduced his father's drawings. (Do please let me know!)

If there is any chance of getting copies of the 1950 Mars drawings that will also interest me greatly, for Saheki wrote to the Section in 1950 about his earlier 'bright spot': these details were reported in the Journal of that time.

Our BAA set of the 1952 drawings is now completed, and 1954 restored. From inspecting the various copies of the drawings, published and unpublished, it is clear that Tsuneo Saheki made excellent accurate multiple copies of his drawings. It is also apparent that he must have spent many weeks in making the pencil copies for the BAA, and we have a set of 85 'originals' as I once mentioned.

You will see from the December 2009 BAAJ that we published the details of the Trouvelot dust storm of 1877, though we have not yet been able to copy the originals as the notebook is now being rebound by the archivists. I am now writing two other things: first, a piece about Prgaue's new Kepler museum, which I visited a few weeks ago, and second, a piece about the discoveries I

made in the notebooks of Flaugergues, in Paris. If you have not seen the Journal I can send a pdf of the text and Figures. Again my thanks and all good wishes

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

●.....**Subject: Re: Saturn images, 2 january 2010**
Received: Mon 04 Jan 2010 00:45:38 JST

Hi Christophe and all, and happy new year to all of you. This is a very nice set of images! The white SEBz spot is real to my opinion (and maybe the first image of a spot this apparition), and could be at the same place where we observed one during the last apparition, even if its longitude is just a bit high.

It will be interesting to see if the storms in Storm Alley and the SEBz spot(s) will still be active now that the southern hemisphere is in autumn, as these are the two areas where we have been constantly detecting spots these last years. Looking forward to the next images from all of you then!

Marc DELCROIX (マルク・テレルクコアTounefeuille法)

●.....**Subject: mars 2 jan 2010**
Received: Mon 04 Jan 2010 11:51:42 JST

Hi Minami, Pardon for delay, here in Tehran every day cloudy rain snow &..&, today I took this image under the layer cloud & very poor seeing, this image capture from 2 january at 23.11 UTC time, Ciao

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100102/SGh02Jan10.jpg>

○.....**Subject: mars 6 jan**
Received: Thu 07 Jan 2010 23:29:57 JST

Hi Minami, here is Mars on 6 January at 22.38 UTC Time PLS see you it. Ciao

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100106/SGh06Jan10.jpg>

○.....**Subject: mars 7 january 2010**
Received: Fri 08 Jan 2010 22:48:33 JST

Hi Minami, Seeing & atmosphere was average. information: telescope Celestron 11" Schmidt Cassegrain Focal length 2800 mm, focal ratio 10, camera DMK21 AU04.AS mono+2.5xBarlow, 60fps total 3000 frames stacks Filter: astronomik RGB, processing software: regitax & PS. Cheers

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100107/SGh07Jan10.jpg>

Sadegh GHOMIZADEH

(サデク・ゴミザデ Tehran 伊朗)

●.....**Subject: Mars Image - December 22, 2009**
Received: Mon 04 Jan 2010 09:41:51 JST

Gentlemen, Attached is my Mars image from December 22. Regards,

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091222/PGc22Dec09.jpg>

Peter GORCZYNSKI (ピーター・ゴルチンスキCT 美)

●.....**Subject: Re: Mars 2009 January 04**
Received: Mon 04 Jan 2010 18:00:05 JST

Hi David, Wonderful wasn't it! I also had my best ever eyepiece views of Mars (through my C11) on the 2nd, and then even better last night (this morning). Rock steady at high powers with Syrtis Major dead center. I imaged on both occasions and will send them out soon.

○.....**Subject: Mars Jan 4th 2010, v good seeing**

Received: Mon 04 Jan 2010 20:38:57 JST

Hi all, As mentioned in another email, the seeing was excellent from here (Ham, near Selsey on the South Coast of England) this morning with superb eyepiece views. Here's my C11 image, Syrtis Major center stage:

<http://www.astro-sharp.com/images/mars2010/mars-2010-01-04-00-54-rgb-ids.jpg>

Best Regards

Ian SHARP (イアン・シャープ WS 英)

●.....**Subject: 第1報:**
Received: Mon 04 Nov 2010 18:58:11 JST

南政次様、明けましておめでとうございます。今年もよろしく願っています。

さて、過日マッキム氏からご依頼のありました件、遅くなり申し訳ありません。父のノートから観測記録をスキャナーで読み取りましたのでご送付申し上げます。データが多いので、1952年分をひとつに、1953~54分を三つに分割しました。それでもかなりの容量になりますが取りあえず(四報)送らせていただきます。

父の観測記録がB A Aに記録されることは、父はもちろんのことにわれわれ家族にとっても非常に喜ばしいことと思います。マッキム氏には感謝している事を、ぜひよろしくお伝えください。

寒い折くれぐれもお身体をお大事にお過ごしください。

佐伯 雅夫 (Masao SAHEKI 伊丹Hyogo)

●.....**Subject: Mars Observation (January 3, 2010)**
Received: Tue 05 Jan 2010 04:42 JST

I would like to wish you, Dr. Minami, CMO staff and all other members a happy and prosperous new year. I look forward to observations and images from all members. I made an observation of Mars on January 3, 2010 (06:00 U.T.) under average seeing conditions with brief moments of steadier seeing. I was unable to view the planet in blue light as clouds prevented me from doing so shortly after my IR/Magenta filter observation. (See *Notes* in: *Ed*)

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100103/CHr03Jan10.jpg>

○.....**Subject: Mars Observation (Dec 31, 2009)**
Received: Thu 07 Jan 2010 06:25 JST

I made an observation of Mars on December 31, 2009 under average to good seeing conditions. I was able to note a good amount of detail over the Martian disk as noted.

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

Magnification: 295x and 388x

Filters (Wratten): 30 and 80A

Notes; 05:30 U.T. (Wratten 30): The North Polar Cap (NPC) appears brilliant (10/10) surrounded by a dark collar composed of Ortygia (3/10) and Mare Boreum (3/10). Mare Acidalium was prominent on the central meridian (CM) and appeared dark to dusky (3-4/10). Achillis Pons appeared to be obscured by a bright (7/10) haze (cloud). Niliacus Lacus appeared dark (3/10) on the CM. Nilokeras (4/10) and Lunæ Lacus (4/10) appeared as an extension from Niliacus Lacus from its following border. Sinus Sabæus and Sinus Meridiani appeared as a dark to dusky (3-4/10) "knob" over the south-preceding limb. Mare Erythræum appeared dark to dusky (3-4/10) on the CM with Vulcani Pelagus (4/10) and Margaritifer Sinus (3/10) over its eastern (preceding) border and Auroræ Sinus (3/10) over its western (following) border. Pyrrhæ Regio appeared shaded to bright (6-7/10) over the southern half of Mare Erythræum. Solis Lacus appeared dark to dusky (3-4/10) over the south-following limb. Chryse/Xanthe appeared bright (7/10) with dusky to dull (4-5/10) condensations noted within it. Evening Limb Haze, Southern Limb Haze and Morning Limb Haze appeared bright to very bright (7-8/10).

05:40 UT. (Wratten 80A): The North Polar Cap appeared brilliant (10/10). Bright (7/10) haze (clouds) were noted over Chryse/Xanthe and Tempe. Evening Limb Haze, Southern Limb Haze, and Morning Limb Haze appeared bright to very bright (7-8/10).

<http://www.hida.kyoto-u.ac.jp/~cmo/cmoms/2009/091231/CHR31Dec09.jpg>

My best regards to you, Dr. Minami and the CMO staff.
May you all have a Happy New Year! Regards,

Carlos HERNANDEZ (カルロス・ヘルナンデス FL 美)

●.....*Subject: Re: Mars, Jan 4th, CM288.3*
Received: Tue 05 Jan 2010 07:58:13 JST

Hi, Nice! Here is an image at about the same time. Taken with my 25cm Newton and DMK21 camera. Seeing fair. Kind regards

<http://www.hida.kyoto-u.ac.jp/~cmo/cmoms/2009/100104/DDr04Jan10.jpg>

○.....*Subject: Re: Our Gallery*
Received: Wed 06 Jan 2010 01:34:48 JST

Hello, Image was taken on the morning of Jan 4th at 00h59 UT from Ghent, Belgium using a 10 inch Orion Optics UK Newtonian at $f/30$ using a DMK21 camera.

Please go ahead, Best wishes

Dominique DIERICK (ドミニクイ Belgium 比利时)

●.....*Subject: Re: Mars 2009 January 04*
Received: Tue 05 Jan 2010 10:33:02 JST

Nice to see so many excellent photographic images of Mars coming in now that opposition nears. For what it's worth, here's a change from the 'usual' -- a visual study from this evening. Don't worry -- I won't be posting up visual obs to you chaps very often! Best wishes,

<http://www.hida.kyoto-u.ac.jp/~cmo/cmoms/2009/100104/PGr04Jan10.jpg>

Peter GREGO (ピーター・グレゴ Cornwall 英)

●.....*Subject: RE: Mars 3 4th Jan 2010*
Received: Tue 05 Jan 2010 17:36:48 JST

Hi everyone, Thanks for your great images! Thanks Dave T for the interesting sequence showing the cloud feature. I too was imaging and I think my image shows

something of the cloud too. On the seeing front, it got a little better at Welwyn towards 0100, and showed signs of being really quite good, but it was always on the back of a quite rapid lumpy motion. I had to close just after this so cannot say if it got really good here. All the best

<http://www.hida.kyoto-u.ac.jp/~cmo/cmoms/2009/100104/SKd04Jan10.jpg>

Simon KIDD (サイモン・キッド Herts 英)

●.....*Subject: Mars 2010/01/04*
Received: Wed 06 Jan 2010 17:41:40 JST

Hello, Here is Mars on 2010/01/04 23H44 TU.

The transparency was fair. T = -7°C. Regards

<http://www.hida.kyoto-u.ac.jp/~cmo/cmoms/2009/100104/JpP04Jan10.jpg>

○.....*Subject: Mars 2010/01/05*
Received: Wed 06 Jan 2010 19:26:29 JST

Hello, Here is Mars on 2010/01/05 (2 sets):- at 01H32 TU & at 05H35 TU. The transparency was fair. T = -7°C. Regards

<http://www.hida.kyoto-u.ac.jp/~cmo/cmoms/2009/100105/JpP05Jan10.jpg>

<http://www.hida.kyoto-u.ac.jp/~cmo/cmoms/2009/100105/JpP05Jan10n.jpg>

Jean-Jacques POUPEAU

(ジャン＝ジャック・プーポ - Essonne 法)

From Greeting Cards:

Wishing you a happy Christmas and new year

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

謹賀新年

昨年はいろいろとお世話にあづかりました。

本年もどうぞよろしく

村山 定男 (Sadao MURAYAMA 東京Tokyo)

☆☆☆

Forthcoming 2009/2010 Mars (12)

Ephemeris for the Observations of the 2009/10 Mars. VI

February 2010

Masami MURAKAMI 村上 昌己(Mk)

AS a sequel to the preceding Ephemeris, we here list the necessary elements of the Ephemeris for the physical observation of Mars from 1 February to 28 February 2010: The data are listed for every day at 00:00GMT (not TDT). ω and ϕ denote the longitude and latitude of the sub-Earth point respectively. The symbols λ , δ and ι stand for the areocentric longitude of the Sun,

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

Date (00:00GMT)	ω	ϕ	λ	δ	ι	Π	D
01 February 2010	021.11°W	14.7°N	045.59°Ls	14.06"	3.3°	-3.2°	+22°24'
02 February 2010	012.39°W	14.6°N	046.04°Ls	14.03"	3.9°	-3.4°	+22°30'
03 February 2010	003.66°W	14.5°N	046.48°Ls	14.01"	4.6°	-3.7°	+22°36'
04 February 2010	354.93°W	14.4°N	046.93°Ls	13.98"	5.2°	-3.9°	+22°42'
05 February 2010	346.19°W	14.2°N	047.37°Ls	13.95"	5.8°	-4.2°	+22°48'
06 February 2010	337.45°W	14.1°N	047.81°Ls	13.90"	6.6°	-4.4°	+22°53'

Date (00:00GMT)	ω	ϕ	λ	δ	ι	Π	D
07 February 2010	328.70°W	14.0°N	048.26°Ls	13.86"	7.3°	-4.7°	+22°58'
08 February 2010	319.95°W	13.9°N	048.70°Ls	13.81"	8.1°	-4.9°	+23°03'
09 February 2010	311.19°W	13.8°N	049.14°Ls	13.76"	8.8°	-5.1°	+23°08'
10 February 2010	302.41°W	13.7°N	049.58°Ls	13.70"	9.6°	-5.4°	+23°13'
11 February 2010	293.63°W	13.6°N	050.03°Ls	13.64"	10.3°	-5.6°	+23°17'
12 February 2010	284.86°W	13.5°N	050.47°Ls	13.57"	11.1°	-5.8°	+23°21'
13 February 2010	276.06°W	13.4°N	050.91°Ls	13.51"	11.8°	-6.0°	+23°25'
14 February 2010	267.26°W	13.3°N	051.35°Ls	13.44"	12.5°	-6.2°	+23°28'
15 February 2010	258.44°W	13.2°N	051.80°Ls	13.36"	13.3°	-6.4°	+23°31'
16 February 2010	249.62°W	13.1°N	052.24°Ls	13.29"	14.0°	-6.6°	+23°34'
17 February 2010	240.78°W	13.0°N	052.68°Ls	13.21"	14.7°	-6.8°	+23°37'
18 February 2010	231.92°W	12.9°N	053.12°Ls	13.13"	15.4°	-7.0°	+23°39'
19 February 2010	223.08°W	12.9°N	053.56°Ls	13.04"	16.1°	-7.1°	+23°42'
20 February 2010	214.19°W	12.8°N	054.00°Ls	12.96"	16.8°	-7.3°	+23°43'
21 February 2010	205.32°W	12.7°N	054.44°Ls	12.87"	17.5°	-7.5°	+23°45'
22 February 2010	196.42°W	12.7°N	054.88°Ls	12.78"	18.1°	-7.6°	+23°47'
23 February 2010	187.52°W	12.7°N	055.32°Ls	12.69"	18.8°	-7.7°	+23°48'
24 February 2010	178.59°W	12.6°N	055.76°Ls	12.59"	19.4°	-7.9°	+23°49'
25 February 2010	169.66°W	12.6°N	056.20°Ls	12.50"	20.0°	-8.0°	+23°49'
26 February 2010	160.71°W	12.5°N	056.64°Ls	12.40"	20.6°	-8.1°	+23°50'
27 February 2010	151.75°W	12.5°N	057.08°Ls	12.31"	21.2°	-8.2°	+23°50'
28 February 2010	142.79°W	12.5°N	057.52°Ls	12.21"	21.7°	-8.3°	+23°50'
01 March 2010	133.81°W	12.5°N	057.96°Ls	12.11"	22.3°	-8.4°	+23°50'
02 March 2010	124.81°W	12.5°N	058.40°Ls	12.01"	22.8°	-8.5°	+23°49'
03 March 2010	115.79°W	12.5°N	058.84°Ls	11.92"	23.4°	-8.5°	+23°49'

シー・エム・オー・フクイ

中島 孝 Nj

★新春をお迎えのことおめでとうございます。前号報告以降、熊森 照明様(428)、神崎 一郎様(429)、常間地 ひとみ様(430)よりカンパを頂戴しました。有難うございました。不一

★前号は12月25日に印刷・丁合し、国内は翌日発送しました。藤沢(Mk氏)、横浜(Tsさん)、宗像(As氏)共に年内の28日に配達された由です。不一

☆ Kasei-Tsushin CMO (http://www.hida.kyoto-u.ac.jp/~cmo/cmo/oaa_mars.html)

『火星通信』 #366 (10 January 2010) 編集：淺田 正(As)、南 政次(Mn)、村上 昌己(Mk)
中島 孝(Nj)、西田 昭徳(Ns)

Edited by: Tadashi ASADA, Masatsugu MINAMI, Masami MURAKAMI,
Takashi NAKAJIMA and Akinori NISHITA

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

☆ Any e-mail to CMO is acknowledged if addressed to

cmo@mars.dti.ne.jp (Masami MURAKAMI at Fujisawa)

vzv03210@nifty.com (Masatsugu MINAMI at Mikuni-Sakai)

☆ Usual mails to CMO are acknowledged if addressed to

Dr Masatsugu MINAMI, 3-6-74 Midori-ga-Oka, Mikuni, Sakai City, Fukui, 913-0048 JAPAN

☎913-0048 福井縣坂井市三國町緑ヶ丘3丁目6-74 南 政次 (☎/FAX 0776-82-6222)

