

MARS

No. 358

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OBSERVATIONS

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CMO 2009/2010 Mars Report #02

OAA Mars Section

♂..... This is the second report which treats the one-month period from **16 April ($\lambda=247^\circ\text{Ls}$)** to **15 May ($\lambda=265^\circ\text{Ls}$) 2009**: During the period, the central latitude ϕ moved from 26°S to 23°S , the apparent diameter δ went up from $4.4''$ a bit to $4.6''$, and the phase angle ι was from 22° to 26° . The apparent declination D moved from $3^\circ 06'\text{S}$ to $6^\circ 05'\text{N}$. The planet is still quite low in the morning skies.

♂..... 二回目の報告は**16April($\lambda=247^\circ\text{Ls}$)**から**15May($\lambda=265^\circ\text{Ls}$)2009**の一月月のレビューである。この間中央緯度 ϕ は 26°S から 23°S に動いた。視直径 δ は $4.4''$ から $4.6''$ と甚だ鈍い。位相角 ι は 22° から 26° となった。視赤緯 D は $3^\circ 06'\text{S}$ から $6^\circ 05'\text{N}$ と急速に動いているが、火星の高度は相変わらず低い。

♂..... The following observations reached us this time. 今回の観測は次のようである。

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

6 Colour + 6 B + 6 IR Images (25, 26 April; 5, 6, 12, 14 May 2009)

36cm SCT@f24, 30 with DFK21AU04/DMK21AU04

BUDA, Stefan スティーファン・ブダ (SBd) メルボルン Melbourne, Australia

1 RGB Image (20 April 2009) 40cm Dall-Kirkham with a DMK21AF04

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

2 Drawings (1, 14 May 2009) 300×20cm Goto ED refractor*

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

1 Drawing (14 May 2009) 300×20cm Goto ED refractor*

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

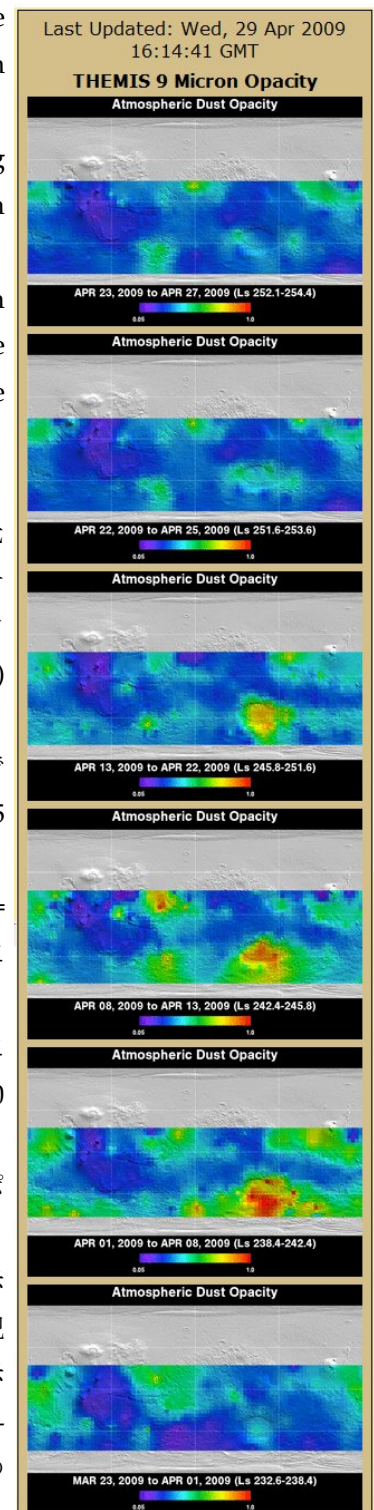
♂..... Since the apparent diameter D moved from south to north around 26 April, Stefan BUDA (SBd)'s report ceased to come after his image made on 20 April ($\lambda=251^\circ\text{Ls}$) at $\omega=181^\circ\text{W}$. The image was taken in the dust cloud season, but clearly and normally shows the area from M Sirenum to M Cimmerium as well as M Chronium. Tomio AKUTSU (Ak) took images on 25 Apr ($\lambda=254^\circ\text{Ls}$) at $\omega=136^\circ\text{W}$ and on 26 Apr ($\lambda=254^\circ\text{Ls}$) at $\omega=129^\circ\text{W}$ where M Cimmerium was darkly shown. On 1 May ($\lambda=258^\circ\text{Ls}$) at $\omega=063^\circ\text{W}$ one of us (Mn) visually observed at Fukui: the planet was found before 4 o'clock local time and he observed at 5 o'clock (20:00 GMT): Already twilight and it was rather hard to check the spc but the dark markings were faintly seen. Chryse looked whitish. On 5 May ($\lambda=260^\circ\text{Ls}$) at $\omega=038^\circ\text{W}$ and on 6 May ($\lambda=261^\circ\text{Ls}$) at $\omega=025^\circ\text{W}$, Ak produced important images where the area around Margaritifer S looked quite darker than the case in 2007. The image of Ak on 12 May ($\lambda=265^\circ\text{Ls}$) at $\omega=326^\circ\text{W}$ is also important since it shows the area of Noachis and the season is the one the great dust storms occurred in 1971 and 2007. Noachis this time looked free from any thick dust. On 14 May ($\lambda=266^\circ\text{Ls}$), Takashi NAKAJIMA (Nj) and Mn watched at $\omega=287^\circ\text{W}$ (19:30 GMT; Mn) and at $\omega=291^\circ\text{W}$ (Nj): Syrtis Mj and M Serpentis were caught but at the time

of Noachis the planet faded away in the twilight sky. Fortunately on the same day Ak at Cebu slightly later observed at $\omega=304^\circ\text{W}$ (20:42 GMT) in which Noachis looked normal. Afterwards the region moved to Europe.

Hellas was quite normal seen from our side. As described in the preceding issue, the MRO-MARCI reported a dust disturbance inside Hellas from around 4 Apr ($\lambda=240^\circ\text{Ls}$) but as far as we see in the Themis maps, the disturbance subsided inside Hellas within one month (see here a Figure from <http://themis.asu.edu/dustmaps/>). On the other hand the prediction of the globalisation of dust issued from the observations of the MCS seems to have been incorrect. The related Site does not show up sometimes, so that no detailed account is known to us at present.

♂.....視赤緯Dが26Aprilを境に北に移ったので、オーストラリアのブダ(SBd)氏の画像は20Apr($\lambda=251^\circ\text{Ls}$) $\omega=181^\circ\text{W}$ 以後報告は無い。この像では、ノアキス大黃雲の季節であるが、場面はマレ・シレヌムからマレ・キムメリウム、それにマレ・クロニウムが正常に出ていて綺麗である。阿久津(Ak)氏が25Apr($\lambda=254^\circ\text{Ls}$) $\omega=136^\circ\text{W}$ 、26Apr($\lambda=254^\circ\text{Ls}$) $\omega=129^\circ\text{W}$ でマレ・キムメリウムを撮った。1May($\lambda=258^\circ\text{Ls}$) $\omega=063^\circ\text{W}$ で筆者達の一人(Mn)が福井で眼視で観測した。前回より三十分ほど早く4時前に導入したが、観測は5時(20:00GMT)である。薄明で南極冠などは見辛いが暗色模様は見える。クリュセが白っぽいようである。5May($\lambda=260^\circ\text{Ls}$) $\omega=038^\circ\text{W}$ 、6May($\lambda=261^\circ\text{Ls}$) $\omega=025^\circ\text{W}$ は重要でマルガリティフェル・シヌスのあたりが2007年に比較して濃化している模様である。12May($\lambda=265^\circ\text{Ls}$) $\omega=326^\circ\text{W}$ も重要で、第二のノアキス黄雲の季節だがノアキスは無事のように見える。14Mayには福井で中島(Nj)氏とMnが眼視で観測した。また三十分早くなり、3時40分には導入、 $\omega=287^\circ\text{W}$ (19:30GMT、Mn)と $\omega=291^\circ\text{W}$ (Nj)の観測となった。シュルティス・マイヨルの南中で、マレ・セルペンティスやヘッレスポントゥスは濃く確認出来たがノアキスまでは行かなかった。幸いこの日Ak氏が $\omega=304^\circ\text{W}$ (20:42GMT)で影像を得、ノアキスに異常がないことを示している。ただ、その後のことは歐羅巴に移るので観測が途絶える心配がある。一方ヘッラスはこちらから確認出来る限りさほどの明るさを示していない。ヘッラスについては、前号で4Apr($\lambda=240^\circ\text{Ls}$)頃からMRO-MARCIの像に内部黄塵が立っている様子を伝えたが、四月終わりのThemisの像によると(右図、<http://themis.asu.edu/dustmaps/>)予想通りヘッラス内部から出ることなく一ヶ月で沈静化したようである。尚、MCSによるグローバル化の予想は外れたと考えられる。関連ページは時々休止するので、その後の状況はわれわれには判らない。

南 政 次・村上 昌己 M MINAMI & M MURAKAMI



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Forthcoming 2009/2010 Mars (3)

Ephemeris for the Observations of the 2009/2010 Mars. II

June and July 2009

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 June 2009 to 31 July 2009: The data are listed for every day at 00:00

GMT (not TDT). ω and φ denote the longitude and latitude of the sub-Earth point respectively. The symbols λ , δ and ι stand for the areocentric longitude of the Sun, the apparent diameter and the phase angle respectively. 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 2009*.

Date (00:00GMT)	ω	φ	λ	δ	ι	Π	D
01 June 2009	184.16°W	20.3°S	276.64°Ls	4.69"	28.3°	-37.3°	+10°36'
02 June 2009	174.29°W	20.1°S	277.26°Ls	4.70"	28.4°	-37.4°	+10°52'
03 June 2009	164.43°W	19.9°S	277.88°Ls	4.70"	28.5°	-37.5°	+11°08'
04 June 2009	154.57°W	19.7°S	278.51°Ls	4.72"	28.7°	-37.6°	+11°24'
05 June 2009	144.72°W	19.5°S	279.13°Ls	4.72"	28.8°	-37.7°	+11°40'
06 June 2009	134.86°W	19.2°S	279.75°Ls	4.73"	28.9°	-37.8°	+11°56'
07 June 2009	125.01°W	19.0°S	280.37°Ls	4.74"	29.0°	-37.9°	+12°11'
08 June 2009	115.17°W	18.8°S	280.99°Ls	4.75"	29.2°	-38.0°	+12°26'
09 June 2009	105.32°W	18.6°S	281.61°Ls	4.75"	29.3°	-38.1°	+12°41'
10 June 2009	095.48°W	18.3°S	282.23°Ls	4.76"	29.4°	-38.2°	+12°57'
11 June 2009	085.64°W	18.1°S	282.85°Ls	4.77"	29.5°	-38.2°	+13°12'
12 June 2009	075.81°W	17.8°S	283.47°Ls	4.78"	29.6°	-38.3°	+13°26'
13 June 2009	065.97°W	17.6°S	284.08°Ls	4.78"	29.7°	-38.3°	+13°41'
14 June 2009	056.14°W	17.4°S	284.70°Ls	4.79"	29.8°	-38.4°	+13°55'
15 June 2009	046.32°W	17.1°S	285.32°Ls	4.80"	29.9°	-38.4°	+14°10'
16 June 2009	036.49°W	16.9°S	285.94°Ls	4.81"	30.1°	-38.5°	+14°24'
17 June 2009	026.67°W	16.6°S	286.55°Ls	4.82"	30.2°	-38.5°	+14°38'
18 June 2009	016.86°W	16.4°S	287.17°Ls	4.83"	30.3°	-38.5°	+14°52'
19 June 2009	007.04°W	16.1°S	287.78°Ls	4.83"	30.4°	-38.5°	+15°06'
20 June 2009	357.23°W	15.8°S	288.40°Ls	4.84"	30.6°	-38.5°	+15°19'
21 June 2009	347.42°W	15.6°S	289.01°Ls	4.84"	30.7°	-38.5°	+15°33'
22 June 2009	337.61°W	15.3°S	289.62°Ls	4.84"	30.8°	-38.5°	+15°46'
23 June 2009	327.81°W	15.0°S	290.23°Ls	4.86"	30.9°	-38.5°	+15°59'
24 June 2009	318.01°W	14.8°S	290.84°Ls	4.87"	31.0°	-38.5°	+16°12'
25 June 2009	308.21°W	14.5°S	291.45°Ls	4.89"	31.1°	-38.4°	+16°25'
26 June 2009	298.42°W	14.3°S	292.06°Ls	4.90"	31.2°	-38.4°	+16°38'
27 June 2009	288.62°W	14.0°S	292.67°Ls	4.91"	31.3°	-38.4°	+16°50'
28 June 2009	278.83°W	13.7°S	293.27°Ls	4.92"	31.5°	-38.3°	+17°02'
29 June 2009	269.05°W	13.4°S	293.88°Ls	4.93"	31.6°	-38.3°	+17°14'
30 June 2009	259.26°W	13.2°S	294.48°Ls	4.94"	31.7°	-38.2°	+17°26'
01 July 2009	249.48°W	12.9°S	295.09°Ls	4.95"	31.8°	-38.1°	+17°38'
02 July 2009	239.70°W	12.6°S	295.69°Ls	4.96"	32.0°	-38.1°	+17°50'
03 July 2009	229.93°W	12.3°S	296.30°Ls	4.97"	32.1°	-38.0°	+18°01'
04 July 2009	220.15°W	12.1°S	296.90°Ls	4.98"	32.2°	-37.9°	+18°12'
05 July 2009	210.38°W	11.8°S	297.50°Ls	4.99"	32.3°	-37.8°	+18°23'
06 July 2009	200.61°W	11.5°S	298.10°Ls	5.00"	32.4°	-37.7°	+18°34'
07 July 2009	190.85°W	11.2°S	298.70°Ls	5.01"	32.5°	-37.6°	+18°45'
08 July 2009	181.08°W	10.9°S	299.30°Ls	5.02"	32.6°	-37.5°	+18°55'
09 July 2009	171.31°W	10.6°S	299.90°Ls	5.03"	32.7°	-37.4°	+19°06'
10 July 2009	161.57°W	10.4°S	300.50°Ls	5.04"	32.8°	-37.3°	+19°16'
11 July 2009	151.80°W	10.1°S	301.09°Ls	5.05"	32.9°	-37.1°	+19°26'
12 July 2009	142.05°W	09.8°S	301.69°Ls	5.06"	33.0°	-37.0°	+19°36'
13 July 2009	132.29°W	09.5°S	302.29°Ls	5.07"	33.1°	-36.9°	+19°45'
14 July 2009	122.55°W	09.2°S	302.88°Ls	5.09"	33.3°	-36.7°	+19°55'
15 July 2009	112.80°W	08.9°S	303.48°Ls	5.10"	33.4°	-36.6°	+20°04'
16 July 2009	103.05°W	08.6°S	304.07°Ls	5.11"	33.5°	-36.4°	+20°13'
17 July 2009	093.31°W	08.3°S	304.66°Ls	5.12"	33.6°	-36.3°	+20°21'
18 July 2009	083.56°W	08.0°S	305.25°Ls	5.13"	33.7°	-36.1°	+20°30'

Date (00:00GMT)	ω	φ	λ	δ	ι	Π	D
19 July 2009	073.83°W	07.8°S	305.84°Ls	5.14"	33.8°	-35.9°	+20°38'
20 July 2009	064.09°W	07.5°S	306.43°Ls	5.15"	33.9°	-35.8°	+20°47'
21 July 2009	054.35°W	07.2°S	307.02°Ls	5.16"	34.0°	-35.6°	+20°55'
22 July 2009	044.62°W	06.9°S	307.61°Ls	5.18"	34.1°	-35.4°	+21°02'
23 July 2009	034.88°W	06.6°S	308.19°Ls	5.19"	34.2°	-35.2°	+21°10'
24 July 2009	025.16°W	06.3°S	308.78°Ls	5.20"	34.3°	-35.0°	+21°18'
25 July 2009	015.43°W	06.0°S	309.36°Ls	5.22"	34.4°	-34.8°	+21°25'
26 July 2009	005.70°W	05.7°S	309.95°Ls	5.23"	34.5°	-34.6°	+21°32'
27 July 2009	355.99°W	05.4°S	310.53°Ls	5.25"	34.6°	-34.4°	+21°39'
28 July 2009	346.27°W	05.1°S	311.11°Ls	5.26"	34.7°	-34.2°	+21°45'
29 July 2009	336.55°W	04.8°S	311.69°Ls	5.27"	34.8°	-34.0°	+21°52'
30 July 2009	326.84°W	04.5°S	312.27°Ls	5.29"	34.9°	-33.8°	+21°58'
31 July 2009	317.12°W	04.2°S	312.85°Ls	5.30"	35.0°	-33.5°	+22°04'
01 Aug 2009	307.40°W	04.0°S	313.43°Ls	5.31"	35.1°	-33.3°	+22°10' ---

----- 07/08 CMO Note (13) -----

Sightseeing of the Bonus Craters

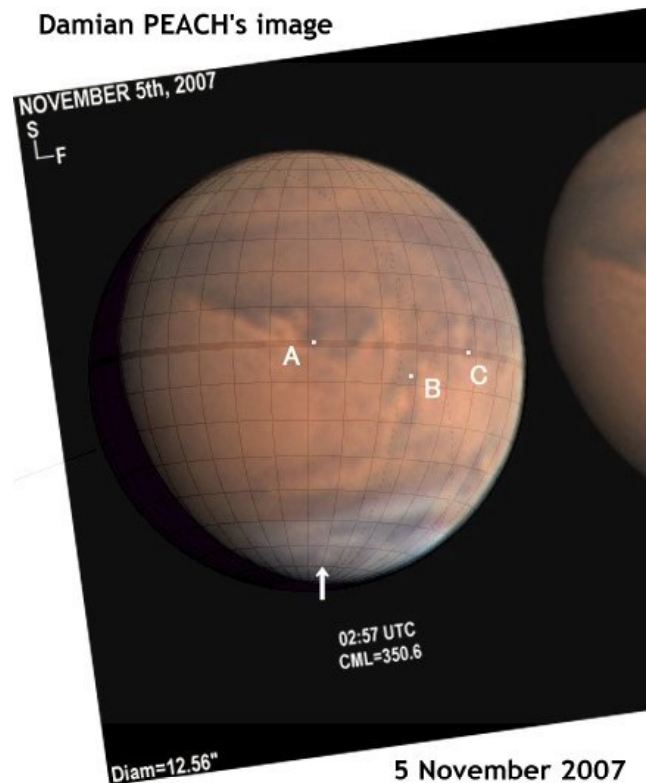
2007年のロモノソフ・クレータ他 クレータの観測

★It has hitherto been known that some famous Montes as Olympus Mons, every of Tharsis Montes, Elysium Mons et al have been observed even visually as white spots or shadowy points. However it has not been so easy to distinguish minute Craters, though nowadays such an interesting crater as the Huygens crater is well known: It has been rather easy to discriminate the Hershel crater inside M Cimmerium, and as well the Newton crater has been known as Caralis Fons, and the Schiaparelli crater could be recognized long as Edom and so on. Otherwise in 2003, Maurice VALIMBERTI (MVL) identified the Terby crater nearby the big crater Hellas. ★In 2007, a new bonus of crater was listed. As announced in CMO #338 (25 November 2007) at pSer2-0771, a small crater with white covering appeared, as pointed out by Christophe PELLIER (CPI), on Damian PEACH (DPC)'s series of images made on 5 November 2007 ($\lambda=342^\circ\text{Ls}$) at $\omega=328^\circ\text{W}$ ~ 027°W . At that time it was said its latitude was to the south of 60°N and so it was considered as the Kunowsky crater ($\Omega=009^\circ\text{W}$, $\Phi=57^\circ\text{N}$), but a later checking revealed that its position was at ($\Omega=008^\circ\text{W}$, $\Phi=65^\circ\text{N}$) so that it was identified as the

Lomonosov crater: This was corrected in 07/08 CMO Note (3) in CMO #349 (25 August 2008) when we discussed about the early stage of the npc in 2007, as follows:

DPC's images on 5 Nov ($\lambda=342^\circ\text{Ls}$) at $\omega=328^\circ\text{W}$, 339°W , 344°W , 351°W , 003°W , 007°W , 014°W , 023°W , 027°W are superb and prove an existence of the Lomonosov crater ($\Omega=008^\circ\text{W}$, $\Phi=65^\circ\text{N}$) inside the npc [in CMO #338 (25 Nov 2007 issue) it was nominated as Kunowsky crater ($\Omega=009^\circ\text{W}$, $\Phi=57^\circ\text{N}$), while the formula we are using shows that its latitude falls at $64^\circ+\alpha^\circ\text{N}$. *MK's* grid investigation also shows that it lies to the north of 60°N . Rather Kunowsky lies near the boundary of the npc]. See p0964 in #349.

Damian PEACH's image



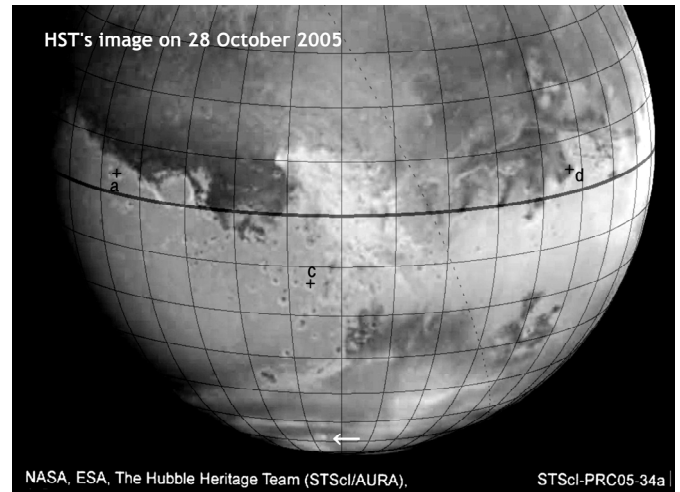
★Here we shall show how we derived the Lomonosov degrees from the *DPC's* image on 5 November at $\omega=351^\circ\text{W}$: We first chose three standard

points A, B, C such that A: ($\Omega=352^\circ\text{W}$, $\Phi=00^\circ\text{S}$), B: (020°W , 09°N), C: (038°W , 00°S) and then we found the NS line. The arrow \uparrow points thus to the Lomonosov. \star At the same time at p0965 by employing the similar coordinate grid, we pointed out that Ed GRAFTON (*EGf*)'s images on 14 Nov 2007 ($\lambda=347^\circ\text{Ls}$) at $\omega=021^\circ\text{W}$ also show the whitish Lomonosov crater. \star Furthermore this time *CPI* informed us (see LtE this issue received on 8 May 2009 at 22:46:40 JST) of the fact that it can also be seen on *CPI*'s images on 1 November 2007 ($\lambda=340^\circ\text{Ls}$) at $\omega=003^\circ\text{W}$, 011°W as well as on Paulo CASQUINHA (*PCq*) made on 4 November ($\lambda=342^\circ\text{Ls}$) at $\omega=001^\circ\text{W}$.

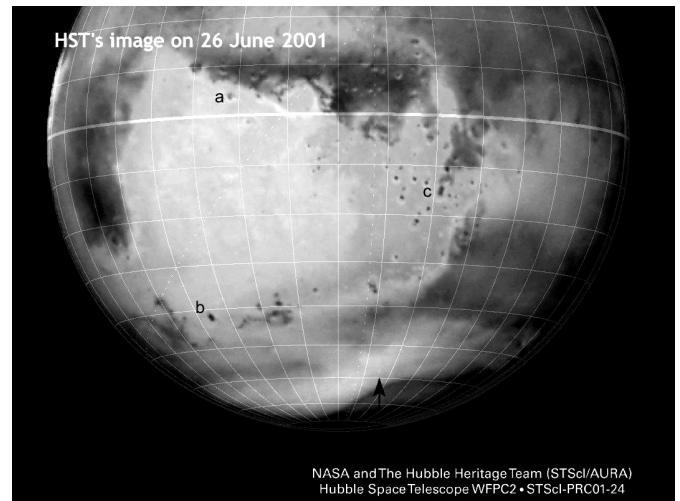
\star As to this white spot, one may consider that it may be a drifting cloud or arbitrary (see eg Jeff BEISH (*JBs*)'s opinion claiming that the crater was bogus in the LtE of this issue), whereas, as *CPI* comments in the same LtE column, since it stayed in a long term from morning to evening, and furthermore it was evident equally in all wavelengths (especially in Red), the white matter must have been a frost patch or a local snow fall caused by a geomorphological reason. Just the condition where a meteorological circumstance must have been necessary related with the nph.

\star At this point we caution that any serious images should be accompanied by the designation $p \leftarrow f$ exactly on the same image plate as always done by Don PARKER (*DPk*) or Yukio MORITA (*Mo*). In this case by the use of the Π value (the Position Angle of the axis rotation, measured eastwards from the north point) we can easily find the NS line (see any of recent CMO Ephemeris).

\star The Lomonosov and the Kunowsky crater are a pair which are located near each other and hence it is possible the both craters behave similarly concerning the frost covering under the similar conditions. In 2007 the deeper Lomonosov crater was witnessed because the tilt ϕ was deeper, but in 2005, as noticed in CMO #338, the Kunowsky frost was shot by the HST on 28 October 2005 ($\lambda=314^\circ\text{Ls}$). Here we show the case by the use of the coordinate grid: Unfortunately we are not informed of the



LCM and others, but choosing the standard three points as a: ($\Omega=330^\circ\text{W}$, $\Phi=04^\circ\text{S}$), c: (010°W , 13°N), d: (064°W , 05°S), and we suspected LCM was $\omega=016^\circ\text{W}$. The spot then indicated the Kunowsky crater. \star Similarly, the HST image on 26 June 2001 ($\lambda=185^\circ\text{Ls}$) also shows the nph under which the



Kunowsky is suggested: Here the three points were chosen such that a: ($\Omega=330^\circ\text{W}$, $\Phi=04^\circ\text{S}$), b: (316°W , 42°N), c: (010°W , 13°N) and derived the spot by specifying LCM was $\omega=352^\circ\text{W}$.

\star Finally we mention that in the 2009/10 apparition also the Lomonosov crater may be observed. In the coming apparitions when the smaller npc is observed under appropriate angular diameter, such a minor crater as Korolev crater ($\Omega=196^\circ\text{W}$, $\Phi=73^\circ\text{N}$) may possibly be revealed on some ccd images.

(MINAMI (*Mn*) & MURAKAMI (*Mk*))

\star これまでオリュムプス・モンズやタルシス三山など山(モンズ)と言われるところは眼視観測でも白斑や暗い斑点として認められてきたが、ヘッラ

スやアルギュレなどは例外として比較的小さなクレータは意識的に明確に観測に掛かることは珍しいことであった。尤も、現在ではホイヘンス・クレータについてはよく知られているし、ハーシェル・クレータもアリンコの眼として昔から観測に掛かっていることは知られている。ニュートン・クレータはカラリス・フォンスとして知られていて2005年などには明確であったし、スキアパレリ・クレータも昔から観測に掛かって居るといえば言えないことはない。他に2003年にはヴァリンバーティ(MVI)氏がテルヴィー・クレータを自身の像の中で指摘した例がある。★2007年には新しい例が加わった。CMO#338(25Nov2007号)のpSer2-0773(英文ではp0771)で報告したように、北極域に白斑のクレータがピーチ(DPc)氏の5Nov2007($\lambda=342^\circ\text{Ls}$) $\omega=328^\circ\text{W}-027^\circ\text{W}$ の連続画像に顕れていることをペリエ(CPI)氏が指摘した。当時は緯度が 60°N 未満とされていたので、クノウスキー・クレータ($\Omega=009^\circ\text{W}$ 、 $\Phi=57^\circ\text{N}$)と考えられたが、更に精査したところ、その位置は($\Omega=008^\circ\text{W}$ 、 $\Phi=65^\circ\text{N}$)の深さにあることが分かり、ロモノソフ・クレータであることが判明、このことは次の様にCMO #349(25Aug2008)での2007年早期の北極冠域の検討の際(07/08 CMO Note(3))に訂正した：

「5Nov($\lambda=342^\circ\text{Ls}$)のDPc氏の $\omega=328^\circ\text{W}$ 、 339°W 、 344°W 、 351°W 、 003°W 、 007°W 、 014°W 、 023°W 、 027°W の良像群には北極冠内に在ると思われるロモノソフ・クレータ($\Omega=008^\circ\text{W}$ 、 $\Phi=65^\circ\text{N}$)が寫し込まれている[#338(25Nov2007號)ではクノウスキー・クレータ($\Omega=009^\circ\text{W}$ 、 $\Phi=57^\circ\text{N}$)としたが、今回、上の公式で調べた結果、 $64^\circ+\alpha^\circ\text{N}$ に落ちた。寧ろ、北極冠の境界がクノウスキーの邊りにある。Mk氏のグリッドでも 60°N 以北]が、……」(p0968、英文ではp0964参照)。

★ここでDPc氏の5Nov $\omega=351^\circ\text{W}$ の画像からどの様にグリッドでロモノソフを割り出したかを示すと、先ず基準として座標点を三個所A、B、Cを選び、それらがそれぞれA: (352°W 、 00°S)、B: (020°W 、 09°N)、C: (038°W 、 00°S)であることから、南北線を見付けている。★尚、同じ箇所でグラフトン(EGf)氏の14Nov2007($\lambda=347^\circ\text{Ls}$) $\omega=021^\circ\text{W}$ にも明白に顕れており、これにもグリッドを当て嵌めているので参照されたい。今回、CPI氏は更にLtE(8May2009_22:46:40JST受領のもの)で、CPI氏自身の1Nov2007($\lambda=340^\circ\text{Ls}$) $\omega=003^\circ\text{W}$ 、 011°W やカスキニア(PCq)氏の4Nov($\lambda=342^\circ\text{Ls}$) $\omega=001^\circ\text{W}$ 等

にも顕れていると指摘している。★この白斑について雲ではないかという意見もあるが(今回のビーシュ(JBs)氏のLtE参照)、CPI氏などは長期間にわたること、各色で出ていることなどから、霜ないし降雪と考えているが、筆者達も同意である。ただ、北極雲のような条件が周りにあることが条件であろう。溶岩域がかなり広がっていて、そこに周りの気象条件によって霜がこびりつくのであろうと思われる。

★JBs氏の間違いは画像の南北線を取り違え、従って経度が違うという主張から発しており、後は言いがかりである。気の毒なのは、DPc氏の画像の傾きが悪いことであり、画像は学術的な意味もあるのだから矢張りパーカー(DPk)氏や森田(Mo)氏の様に $p \leftrightarrow f$ を出しておくべきであろう。そうすればCMO暦表の Π 値(北の方向から東の方向に測った軸回転の位置角の値)から南北線が導き出せる。

★尚、ロモノソフ・クレータとクノウスキー・クレータとは若干の緯度の違いだけの組であり、霜ないし降雪は同じ様な条件で起こると考えられる。2007年にロモノソフまで見られたのは ϕ が北に深かったからであるが、#338で触れたように2005年にはもう少し浅いクノウスキー・クレータがHST像に顕れている。28Oct2005($\lambda=314^\circ\text{Ls}$)のHST画像には明白にクノウスキーが出ている。英文の部で経緯度図と共に示してあるが、基準点はa: (330°W 、 04°S)、c: (010°W 、 13°N)、d: (064°W 、 05°S)を採った。LCMは $\omega=016^\circ\text{W}$ と見ている。

★また、26June2001($\lambda=185^\circ\text{Ls}$)のHST画像にも北極雲が現れて居るが、その下にクノウスキーが出ていると思われる。この図の南北線は次の三点：a: (330°W 、 04°S)、b: (316°W 、 42°N)、c: (010°W 、 13°N)を基準点として採用し、LCMは $\omega=352^\circ\text{W}$ と導出した上で、↑のあたりにクノウスキーが位置する。

★最後に2009/10年接近でもロモノソフなどは引掛かるのではないかとと思われるので注意する。更に今後の接近では、北極冠が小さくなって更に高緯度で、十分な視直径があれば既にHSTなどで出ているコロレフ・クレータ($\Omega=196^\circ\text{W}$ 、 $\Phi=73^\circ\text{N}$)等がccdで分離される可能性がある。

(村上 昌己Mk+南 政 次Mn)

便り

Letters to the Editor

●.....Received: 20 April 2009

拝復、この度はご丁寧なお手紙を頂戴致し恐縮でございました。.....何のお役にも立たないと思いますが、連休中も大体在宅しておりますので、ご都合をお知らせ下さい。メール・アドレスは murayama@...となっておりますのでご利用下さい。右取り敢えずお返事まで。

○.....Subject: Re: お返事有難うございます
Received: Tue 21 Apr 2009 15:43:19 JST

南 政次様、ご連絡有難うございました。小生 5月4, 5日共にとくに予定ございません。体調お悪い中を遠路わざわざおいで頂いてもお役に立ちそうありませんが、ご日程決まりましたらまたご連絡ください。とりあえずご返信まで。

○.....Subject: Re: 先日は有難うございました
Received: Fri 8 May 2009 19:52:53 JST

南 政次様、メール有難うございました。先日は遠路わざわざご来訪下さり有難う存じました。いろいろとお話が出来まして晩年の老人大変愉快でございましたが、万事不徹底な私の性格でお役に立つような資料がありましたかどうか気になっております。お気づきのことがありましたらまたご連絡ください。

酔っ払ってもいませんでしたのに俳句の話までしてしまい、常間地さんにも御披露くださったとのこと、汗顔の至りです。私が老いや死のことばかり題材にするので、仲間には評判が悪いのですが、実感が出ているのかも知れません。

お疲れのことと思いますがご自愛くださるようお願いいたします。とりあえずお礼まで。

村山 定男 (Sadao MURAYAMA 東京Tokyo)

(註) Masami MURAKAMI (*Mk*) and the present Editor (*Mn*) visited Sadao MURAYAMA on 4 and 5 May and heard about the early days of the OAA Mars Section. MURAYAMA is now 85 of age: He started the Mars observations in 1939 and hence his Mars watching has lasted 70 years fully at the end of this year. One of his noteworthy achievements was the shots (by TriX Pan) of the emergence of the 1956 Noachis dust storm whose photos will be shown on the occasion of the Meudon meeting as well as his drawings of the day. Also shown will be his long-standing visual observations of the variation around Nodus Laocoontis from 1948 to 1973. (*Ed*)

●.....Subject: animation link to active prominence
Received: Sat 25 Apr 2009 04:31:16 JST

Hi Guys here's an animation of the Active Prominence imaged on the 22nd April. This is a 20 minute time span Gif. taken with a Daystar ATM filter in an 80mm TMB

http://www.david-tyler.com/upload/upload_page.asp?IMU_PAGE_NAME=Solar%20April%202009

○.....Subject: Further solar animation
Received: Sun 26 Apr 2009 08:12:24 JST

Hi Guys, I have just completed another animation of the active prominence from the 22nd April. It is timed a little later than the first one, and is perhaps even more fasci-

nating. This is the link to the page where they are on. Copy and paste it into your www box if it fails to link.

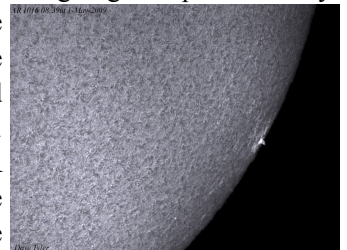
Or even take a look on www.david-tyler.com RECENT IMAGES / Solar April 2009, and more if you have a mind to inc Mars, Saturn. Jupiter is to be found on IMAGES/Jupiter. The moon on Images /Lunar

○.....Subject: sunspots
Received: Thu 30 Apr 2009 17:51:14 JST

Hi Guys I was surprised to bump into these late yesterday PM. I first noticed the very bright patch in the Double stacked Coronado 60. Changing to a "not warmed up" Daystar, the spots showed up very clearly. As the filter warmed the surrounding H α fields came into view.

○.....Subject: The sun 1st May 2009
Received: Sat 02 May 2009 09:11:08 JST

Hi Guys, There was quite a bit going on up there today. AR1016 was going over the top and putting up some bright phenomena. Captured here in a variety of ways. Faculae associated with AR 1016 is shown in white light imaged off a wedge



with ND, solar continuum and Ir block filters. A wide field shot shows a very bright component extending beyond the limb. This was taken with a 0.5 A solar max 60 and 4x powermate. The remaining images and Proms were taken with a Daystar/Solar Spectrum Hybrid filter .65A OG 4.5 inches x108 inches focal length.

○.....Subject: Solar proms 2nd May 2009
Received: Mon 04 May 2009 18:04:13 JST

Hi Guys, The 2nd treated us to one magnificent broccoli shaped prominence and one very nice one. Seeing was very variable but any blue sky is good sky. The large scale are from a 6 inch Vixen ED stopped to 4.5 inches. the, H α filter is a recently rebuilt Daystar /solar spectrum hybrid .65 A. The wider field images showing the filaments too, are out of my trusty Solarmax 60DS with 4x powermate and straight through blocking filter.

○.....Subject: southern solar prom
Received: Tue 05 May 2009 07:15:40 JST

Hi Guys, The southern solar prom I imaged on the 2nd was also there on the 3rd. The clouds clear late PM but seeing was actually better than the for 2nd's image.

○.....Subject: Active region 10-May-2009
Received: Tue 12 May 2009 01:34:48 JST

Hi Guys, There was some nice seeing early on the 10th, enabling some terrific views of the active regions. Here is one image from my 60mm.5A coro' solarmax scope The AR really glows at .5A. The .65A Daystar /Solar spectrum hybrid using 4.5" aperture and 108" efl was used for the montage. Best wishes

○.....Subject: Solar AR 17th May
Received: Tue 19 May 2009 05:29:16 JST

Hi Guys, Not a lot of change in the AR, but its nice to have! So it has to be imaged and fussed over. full details on Images. Good to see your artwork of it Erika.

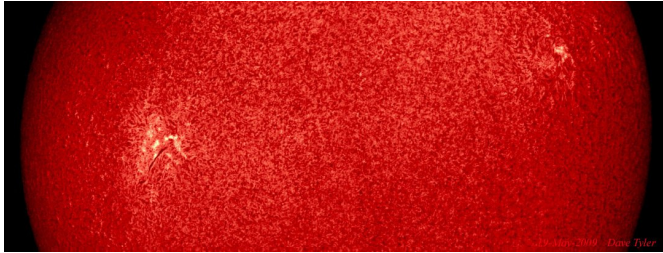
○.....Subject: Solar images 18th May
Received: Wed 20 May 2009 00:32:38 JST

Hi Guys, I hope you are not getting bored with this AR,

as the new one following is equally photogenic. Anyway here's a prom to go with it. There was a nice little micro sunspot group visible in white light. No it was not a high flying flock of geese passing in front of the sun.

○.....**Subject: solar imagefest 19 May**
Received: Thu 21 May 2009 07:17:35 JST

Hi guys, but there is so much to see !
0910 The mono wide field shot barely sharpened to retain the view of the "network cells" i.e. the regular honeycomb appearance most clearly seen as the limb begins to darken.



0910 colourised strip showing both of the current Active Regions. Best wishes

Dave TYLER (テウァイト・タイラー Bkh 英)

●.....**Subject: Saturn images 29 march 2009**
Received: Sat 25 Apr 2009 19:36:06 JST

Hi all, Some images under fair conditions, nothing to note especially.

<http://www.astrosurf.com/pellier/S090329-CPE>

○.....**Subject: Re: Fw: RE: corrected image**
Received: Fri 08 May 2009 22:46:40 JST

Dear Masatsugu, I'm fine - I was about to thank you about your last sending of the 2001 Mars report part II, that I had ended reading this week. Your analysis give much things to think about this unusual global storm.

Now about this story of craters/clouds on the NPR in 2007 - I found Jeff's last measurement of the white spot (7,1°W, 67,2°N) coherent with the situation of the Lomonosov crater, taken into account the slight error margin unavoidable on the border of an amateur image, even as good as Damian's.

I have personally measured Damian's red image of 3H47 UT, and found around (10°W, 66,5°N). I have been as careful as I could to correctly place the frame with WinJupos, but still I have not the same values. But the problem will not be solved with measurements. To find out what the spot is, we must introduce three elements :

1) The spot is absolutely stationary in several days. It's evident on the animation made by Rolf Meier with one image of his and Damian's :

<http://users.xplornet.com/~skywatch/pages/images/nph.gif>

It's no more than 6 days between the two, and the white spot just doesn't move (while clouds from the vanishing NPH are clearly different). By the way, the spot is also imaged on the following images of the CMO gallery :

- mine of nov 1st (under excellent seeing)

- P. Casquinha of nov 4st

At this point we can eliminate seasonal clouds from the NPH (that are westerly fastly moving so they change in a

matter of hours), just remains the hypothesis of the "lee" cloud.

2) Color analysis. Jeff himself speaks about that, but I don't know of the details his thought here. Mine analysis is that the spot is visible on every color, and clearly in red light. So it must be frost and not cloud, as for white details only frost can shine in every color - white clouds do not shine in red light, except the brighter and thickest ones, but this is not the case here. Lee clouds over the Tharsis volcanoes are absolutely not visible in red light, if we can find any comparison.

3) Now about the visibility of craters. Jeff looks to refuse absolutely that we can see them on images. I suppose that he refers to seeing the real relief of the crater, with no enhancing effect. But if the craters is frosted, and if its border is enlightened by a low angle sunlit (this being the case on the NPR in winter), there is no problem to understand why it could be detected, just as the Olympus Mons is eyepiece-visible during a global dust storm : contrast, an effect well known to break the optical resolution rules.

4) But finally, my personal position here is a reverse of the traditional one. I think that white color on the late martian northern winter at the NPR is mostly ground ice, and not clouds. HST and MGS images look clear to me and I have some difficulties to understand how anyone could not see the cap on images such as these :

http://www.astrosurf.com/pellier/MGS_2002_NPR

(winter cap clearly visible under a clear sky, frosted craters shining brightly - even the perennial future summer remnant is detected as early as Ls 340 !)

http://imgsrc.hubblesite.org/hu/db/images/hs-2007-45-f-full_jpg.jpg
Best wishes,

○.....**Subject: Re: Fw: RE: corrected image**
Received: Fri 08 May 2009 23:46:28 JST

Dear Masatsugu, You're welcome to use my comments. It has been a very interesting discussion.

I am recently coming back to astronomy a bit more than last year; I'm currently preparing an article for *l'Astronomie* about the role of the northern polar climate on dust activity on Mars. Maybe this will be the theme of my intervention in september at Meudon? Please note that on my answer, I have incorrectly referred to "lee clouds" while I should have talked about "aster clouds" (orographic). Best wishes

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

●.....**Subject: Re: 如何ですか**
Received: Sun 26 Apr 2009 12:31:05 JST

南様、今朝、金星と火星が、見えていましたので撮像しました。木星は雲で駄目でした。後で送ります。体調はその後、如何ですか？

○.....**Subject: Mars Ak25Apr09**
Received: Mon 27 Apr 2009 00:54:02 JST

こんばんは。火星画像を添付します。気流が悪く、条件ではこんなものです。DFK(カラー)、DMK(モノクロ)の使い分けでやってみました。この条件ではRGB合成よりもカラーショットの方が結果的に良いのもでした。

○.....*Subject: Mars Ak26Apr09*
Received: Mon 27 Apr 2009 17:58:00 JST

こんばんは。今朝、珍しく、低空まですっきり晴れ、この大きさと高度から見て良い画像となりました。眼視では南極冠がはっきり確認できる以外は駄目でした。

○.....*Subject: Jupiter J090426*
Received: Tue 28 Apr 2009 13:49:45 JST

気流が良く、BAが良く分かります。BAの輝きが無いようです。NTBの緯度には暗斑のちぎれた模様が繋がっています。

○.....*Subject: Jupiter J090504*
Received: Tue 05 May 2009 15:46:42 JST

今朝の木星。RS周辺が見えています。NEBの大きなリフト、NTBの黒い模様が目立っています。

○.....*Subject: Jupiter J090505*
Received: Wed 06 May 2009 19:56:04 JST

今朝の木星です。まずまず気流です。

○.....*Subject: Jupiter J090506*
Received: Thu 07 May 2009 19:29:04 JST

今朝の木星画像です。イオが左周辺にあり、赤っぽい。

○.....*Subject: Jupiter J090507*
Received: Fri 08 May 2009 17:48:36 JST

今朝の木星です。気流は良かったが、透明度が悪く、薄雲がり、どんより状態。NEBの大きなリフトは前後に広がっている。北半球は昨年同様、赤っぽく暗い。

○.....*Subject: Re: Jupiter J090507*
Received: Fri 08 May 2009 18:43:29 JST

南様、低空の火星は雲に隠れる時が多く、チャンスは少ないのですが、少し撮れましたので処理が終わりましたら送ります。

村上さんから村山先生訪問の時の画像を送られて来ました。お元気そうですね。

○.....*Subject: Jupiter J090508*
Received: Sun 10 May 2009 10:58:18 JST

透明度が悪かったが、気流は良く、BA周辺の仔細が分かる。

○.....*Subject: Mars on 05, 06 May 2009*
Received: Sun 10 May 2009 21:39:07 JST

今晚は。5月5、6日の火星画像です。まだまだδが小さく、厳しい条件ですが、tryしています。

○.....*Subject: Re: Steering Layer*
Received: Wed 13 May 2009 18:15:18 JST

こんばんは。今朝、木星を撮像後、火星が見えていたので撮りました。低空で透明度が悪く、合成Fを下げましたが、ノートパソコン画面の中で火星が踊った状態では仔細は無理です。

○.....*Subject: Mars Ak14May09*
Received: Fri 15 May 2009 10:59:00 JST

南様、今朝の火星画像です。珍しく低空までスカッと晴れ、透明度は最高、しかし風があり、筒が揺れ、画像も揺れています。火星高度は20度まで上がってきました。ではまた

○.....*Subject: Mars Ak21May09*
Received: Fri 22 May 2009 18:13:38 JST

南様、やっと、一週間ぶりに晴れ、朝、惑星が見えました。木星は高度が上がり気流はかなり良かったのですが、火星はまだ高度が低く、厳しい条件でした。

阿久津 富夫(Tomio AKUTSU セブThe Philippines)

●.....*Subject: Re: non title*
Received: Mon 27 Apr 2009 03:19:59 JST

Dear Masatsugu, Things may not be as grim as they sound. Greg Mort, an astronomical artist who is also a Board Member of the Lowell Observatory, will be there, and has written Nicolas asking if he might present. I think that Rem and Laurie are planning to attend. There will also be about ten or so of us from the ASP who will be participating as part of a tour. So that is starting to fill the ranks....

So that is at least another ten or twelve of us.

I think that we ought to apply some pressure to Richard McKim to bring over more members of the B.A.A. We should also canvas the ranks of European amateurs, since the distance and cost of travel will be minimal. . . .

Unfortunately, with the economy such as it is, people are feeling suddenly pinched and unwilling to plop down money for travel. But I think that with those we mentioned, we should have about thirty, and perhaps if we do more work on the European Union members we will have enough to meet Nicolas's numbers. What is the French participation looking like now?

Meanwhile, I shall keep soliciting for participants as much as possible. I am optimistic we shall make it to 40.

On a related matter--it may be a remote possibility but I must mention it just in case. Greg Mort, the artist, and I have been corresponding vigorously about the history of Mars observations lately, and as he is on the Board at Lowell (and they have a meeting in June), we are moving on a proposal to co-opt the 24-inch Clark for some weeks around opposition between Christmas and mid-January or so next year. Any chance you could come over? It would be great to show you the Lowell Observatory and this would be our best chance. There would be only the three of us I think. Best,

○.....*Subject: Re: non title*
Received: Mon 11 May 2009 09:12:30 JST

Dear Masatsugu, It grieves me to hear that you have had to have another stent put in to your coronary arteries, and that the atrial arrhythmia continues to be such a bother for you. It is very discouraging to have such worrisome symptoms and also to be forced to have remissions from one's work. But it sounds as if the procedure went well, and that Japanese medicine is progressive and effective. Just this past weekend I was at a psychiatry research meeting which included two young Japanese who are doing a fellowship at the State University of New York, and are disciples of Dr. Kishi, who collaborated with me on the article on Fox Possession that we published in Psychiatry Online (all are based in Tokyo; Dr. Kishi had hoped to attend this meeting himself, but he was prevented from traveling because of the worry about swine flu). They gave me some ideas about the state of psychiatry in Japan. The thing that impressed me was the very large number of patients they endeavor to see; usually sixty in a day. I would break down with that kind of case load. Perhaps, however, the Japanese are more respectful and deferential to authority and so are

more likely to accept the doctor's recommendations without discussion or debate. There must be some cultural differences. One of these doctors also spoke about the increase in suicide among the Japanese attributable to the economic recession. This seems mostly to be the case with middle-aged men who have lost work or are in financial difficulties. Even so, the rate of depression in Japan is much lower than in the United States--again, this may be a cultural thing, and related to the lesser economic disparities in Japanese society compared to the US as well as other things.

I am pleased to hear of your successful travel with Murakami to see Murayama, whose name is of course very well known. I should very much like to hear more of what you may have found out. Also I shall be pleased to hear more about the early days of the OAA Mars Section. I remember your telling me of the great influence that W. H. Pickering had on Japanese observers in those days, and of our discussions --inconclusive in my mind-- as to whether there is a uniquely Japanese way of depicting Mars that distinguishes it from the European or Anglo-American practice. The great influence of Japanese art on impressionists like Monet is of course well

known. It appears that increasingly my own comments at the meeting in September will be concerned with the problems of representing Mars at the eyepiece--and various artists who have had their hand at drawing the planet, including notably Brett, Green, and Antoniadi. Also Scriven Bolton who influenced Chesley Bonestell and about whom I have been fortunate to find some information. I am still trying to determine what, if any, influence the Impressionists may have had on Antoniadi--his art does undergo a change from his early years with Flammarion and the later work at Meudon. Both Rodin and Renoir had studios in Meudon. Of course, Antoniadi lived in a very tony part of Paris. We should try to visit his house at 74, Rue Jouffroy (the street I suppose that is known as Rue Jouffroy d'Abbans; I note, by the way from googling on the internet that it the address now appears to be the location of "Le Music Group," and there is even an e-mail address given: nicolas.blanc_at_le music group.com. Perhaps I shall write to him.) As Richard McKim has pointed out, he was greatly involved in the book on St. Sophia in the years between his departure from Juvisy and the commencement of his work with the Grand Lunette--he made watercolors which are repro-

TEN YEARS AGO (165)

--CMO#217(10 May)Ú(25 May 1999) pp2495~2518 ---

CMO#217には、五月の「第七回惑星観測者懇談会」の報告と謝辞が冒頭に掲載されている。

<http://www.hida.kyoto-u.ac.jp/~cmo/cmomn0/99Note06.htm> (English)

<http://www.hida.kyoto-u.ac.jp/~cmo/cmomn0/99Note06j.htm> (Japanese)

次いで、CMO Mars Report 1998/99 #10に、四月後半の観測報告が纏められている。この期間に衝となり、最接近直前まで来た。火星は「おとめ座」にあつて、視直径 δ は16.2秒角まで大きくなり、季節入も132°Lsまで進んだ。中央緯度 ϕ は20°Nとなった。報告者は22名を数えていた。

日本からの観測では、マレ・アキダリウムからエリシウムあたりまで観測出来て、タウマシアに朝方見られた白雲、バルティアの濃い朝霧 Morning cloud Patch at Baltiaなどが注目された。バルティアの濃い朝霧は、後に発表されたHSTがサイクロン Cyclone として捉えた画像と一致している。アメリカUSAの観測は、シュルティス・マイヨルからタルシス Syrtis Mj~Tharsisあたりまで、ヨーロッパ Europe の観測は、マレ・キムメリウム M Cimmerium~マレ・アキダリウム M Acidalium 領域まで、南半球のオーストラリアからも報告があつた。

CMO#218のCMO Mars Report 1998/99 #11は、五月前半の観測報告で、1Mayに最接近 closest となり、視直径 δ は16.2秒角に達した。報告者は26名と少し増加した。追加報告も2件あつた。日本からの観測では、シュルティス・マイヨルの朝方からオリュムプス・モンスの夕方迄の経度が観測された。ウトピアの濃い朝霧、

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MARS

No. **217**
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報告と謝辞 Acknowledgements

★今期火星最接近の折り、五月の2、3、4日に遠くは沖縄から比嘉保福(Hg)氏、伊倉堂弘(Iw)氏、栃木からは阿久津直夫(Ak)氏、北九州からは岩崎徹(Iw)氏、それに藤沢の村上昌己(Mc)氏に福井市自然史博物館天文台へご参集いただき、CMOの「第七回惑星観測者懇談会」を開催することが出来ました。Mn氏の珍しい特別講義は別にして、最新の火星画像の問題点などの情報や生スケッチなど、福井側は良く勉強させて頂く機会になりました。参加されたかたに改めてお礼を申し上げます。生憎の天候で、連続観測とは参りませんでした。そのぶん会話や情報交換は果てるともなく飛び飛び、却って有難儀であつたかも知れません。西田昭徳(Ns)氏には30cm、25cmミード鏡まで準備して頂き、ご苦労をおかけしたうえ、入館料まで支払う仕儀になりましたが、SC望遠鏡を回んでの談義も楽しいものでした。Hg氏本館判の25cmミードが一台あり、これでMn氏や筆者もスケッチすることが出来、Id氏、Iw氏、Mk氏には20cm屈折でスケッチして頂きました。先ずは簡単な報告とお礼まで。

☆ We are happy to report that we successfully had the 7th Workshop of CMO Observers on 2, 3 and 4 May at the Fukui City Observatory on the occasion when the planet was closest to the Earth (to be further reported in a coming issue). The Meeting was attended by HIGA and ISHADOH who took a flight from Okinawa, by AKUTSU and MURAKAMI who ran by car for 14 hours and by IWASAKI from Kita-Kyushu. We prepared four telescopes for eight persons including a 30cm Meade and two 25cm Meade SCTs, but unfortunately the sky was poor the period. Instead we had pleasant talks and conversations every day on Mars. We thus learnt much about the Mars observation technique and the various kinds of CCD images, and so we are very thankful to all participants.

CMO Fukui 中島 孝 Takashi NAKAJIMA (Nj)

CMO Mars Report # 10 (1998/99) OAA Fortnight Report

1999年四月後半(16 Apr~30 Apr)の火星面観測
Martian Surfaces in the Second Half of April 1999
from 16 April 1999 (125° Ls) to 30 April 1999 (132° Ls)

南 政 次 Masatsugu MINAMI

♂.....訂正: お氣附きと思いますが、前発表で四月前半とすべきところが迂闊にも「後半」となっていました。訂正をお願いします(Internet-CMOでは訂正されています)。
♂.....愈々、24Aprに衝を迎えた。天候は未だ安定せず観測は低調であったが、Ak氏を初めスパットが掛かり、大きな視直径に見合った成果が得られている。ご老體にも耐わらずケウ(To)氏がスケッチを行っている。Id氏に依れば若い清川哲雄(Ws)氏も40cm鏡で活動を開始するようである。24Aprの黄経観には現在までの報告では沖縄とフロリダ、ノッティンガム、それに福井で観測されて

2 4 9 5

duced in the book on St. Sophia, from which it may be possible to glean something of his artistic practices. But I have never seen this book.

There will be a number of artists present at Meudon: Greg Mort, Marcus Hoitakanen, possibly Randall Rosenfeld, and I hope Tony Misch and Laurie Hatch.

Maria Lane is unable to attend, but I have been asked to review her book on Mars, so perhaps can present some idea of her work. . . . With best wishes,

○ *Subject: Antoniadi and chess*
Received: Mon 11 May 2009 09:28:39 JST

Dear Masatsugu, I have while browsing the internet looking for material relevant to our meeting in the fall noticed an article on Antoniadi's rather formidable powers as a chess master. Thought you might like to see it. <http://www.chesshistory.com/winter/extra/antoniadi.html>

Best wishes,

Bill SHEEHAN (ウィリアム・シーハン MN 美)

● *Subject: Re: Your postal address*
Received: Thu 30 Apr 2009 13:13:10 JST

Dear Masatsugu, I received the 2001 Dust Cloud article and companion circulars. Thank you very much for them. The development of the dust storm is chronicled very

well in the article. I'm glad my observations were of some use. I was in a fortunate place for that opposition (Kwajalein). The seeing isn't as good where I am now.

Thanks again,

Kent DeGROFF (ケント・デグロフ AZ 美)

● *Subject: Ceres 2009 April 02*
Received: Thu 30 Apr 2009 23:34:26 JST

The forthcoming S@N programme prompted me to process this image of Ceres I took near opposition.

I don't think the non-circular shape shown is real. It would be the result of seeing combined with the relatively small number of frames stacked (330 frames at 2.8 fps.) I should have taken comparison images of nearby stars on the same night, but it clouded over. I did feel however that I was imaging a body which was clearly not a starlike point. Through the eyepiece it gave the impression of a dull, brownish, fuzzy, minute disk shaded off at the edges, a bit like some small planetary nebulae appear, but a different colour. Again, it looked like a dull disk in the way Neptune does at high magnification, but not the blue colour, but brownish.

○ *Subject: Saturn 2009 March 26*
Received: Sun 03 May 2009 09:32:43 JST

シュルティス・マイヨルの夜明けの色彩、北極冠周囲の詳細、オリュムプス・モンスなど山岳部の振る舞いと衝効果、エリュシウムからケルベルスを越えるB光での霧などが捉えられた。ヨーロッパ Europe では、 $\omega=037^{\circ}\text{W}$ から $\omega=315^{\circ}\text{W}$ の範囲の観測。アメリカ USA では、 $\omega=100^{\circ}\text{W}$ から $\omega=033^{\circ}\text{W}$ の範囲。ブラジル Brasil、オーストラリア Australia、ハワイ Hawaii からの報告もあった。

また、CMO#218には、Coming 1998/99 Mars (10)として、"Ephemeris for Observations of Mars in 1998/99. IV" A NISHITA「1998/1999年の火星観測暦表(その4)」が掲載された。

<http://www.hida.kyoto-u.ac.jp/~cmo/cmo/coming/9910/10.html> (English)

<http://www.hida.kyoto-u.ac.jp/~cmo/cmo/coming/9910/10j.html> (Japanese)

LtEは、外国からは、André NIKOLAI (Germany), Mike MATTEI (USA), Sam WHITBY (USA), Tomas CAVE (USA), Frank J MELILLO (USA), Damian PEACH (UK), 頼武揚 (Taiwan), Barry ADCOCK (Australia), Jean DIJON (France), Francis OGER (France), Richard W SCHMUDE, Jr (USA), Nicolas BIVER (Hawaii), Randy TATUM (USA), Alan W HEATH (UK) 氏。国内からは、阿久津富夫 (栃木)、森田行雄 (広島)、比嘉保信 (沖縄)、藪保男 (滋賀)、日岐敏明 (長野)、伊舎堂弘 (沖縄)、岩崎徹 (福岡)、大場與志男 (山形)、小山田博之 (神奈川)、松本直弥 (長崎) の各氏から寄せられている。

ADCOCK氏からはAstronomical Society of Victoria の会員からのCCD画像が送られてきた。現在も活躍している Stefan BUDA, Maurice VALIMBERTI両氏が含まれている。

TYA(45)は、廿年前のCMO#072(25May1989)からで、CMO#218に掲載された。1989年五月中旬までの観測報告があり、報告者は三名だった。火星は夕空に遅くまで残っていたものの、この期間に視直径が4秒角台まで小さくなって、この期の観測を皆さん終了としている。この号から「LtEスペシャル」として、編集部寄せられた「便り」が集中して掲載された。

<http://www.hida.kyoto-u.ac.jp/~cmo/cmo/218/tya045.html> (Japanese) 村上昌己(Mk)

I'm rather behind with the processing after a lot of work on IYA events. Seeing was poor on this occasion. The brick-red barge on the N edge of the SEB is on the CM here. We believe this moves at +11 degrees a day WRT System I. Same image:

<http://uk.geocities.com/dlarditti@btinternet.com/sat2009-03-26-DLA.jpg>

David ARDITTI (テウイット・アーティチ Edgware ME 英)

●.....**Subject: Re: Invitation to the IWCMO**
Received: Sun 03 May 2009 00:00:53 JST

Dear Masami, I would like to accept your invitation to IWCMO at Meudon. I am traveling with with another amateur astronomer, so there will be two of us. I look forward to meeting you and other observers! Thank you.

Randy TATUM (ランティ・テータム Richmond VA美)

●.....**Subject: Saturn 2009/4/29**
Received: Sun 03 May 2009 02:39:11 JST

Good evening, recording of last Wednesday. No spots or storm to report. This time no RGB recording a combined Red and Ir recording. Maybe there is a color image, but then I have the color "borrow" from a previous recording. Larger version on my site:

<http://www.astrofotografie.nl/Saturn.htm>

Best regards Met vriendelijke groet

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

●.....**Subject: Recent solar activity**
Received: Mon 04 May 2009 20:05:13 JST

Hi all, Here are some shots taken through my set up of some of the recent solar activity. The recent small active region AR11016 proved rather lovely as it passed over the western limb. Best regards,

○.....**Subject: A busy weekend**
Received: Mon 11 May 2009 05:34:03 JST

Hi all, The weather didn't turn out as was originally forecast and today's captures of the two active regions were a little later than anticipated. Yesterday was better though. Here are some photos covering the weekend's activity... Best regards,

○.....**Subject: Re: AR 11-May-2009**
Received: Wed 13 May 2009 06:27:57 JST

Hi Dave, Some excellent images there - really getting up close and personal. The fine mottling just to the right of the bright region in the first image is interesting - I've seen that sort of pattern before in previous ARs. We must have been imaging at similar times on Sunday - I've attached a couple of Solarscope SF-70 shots and a CaK PST pair (f/20 and f/50). Best regards,

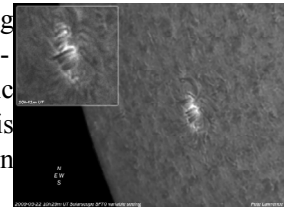
○.....**Subject: AR shots May 16th / Prominence May 18th**
Received: Tue 19 May 2009 04:50:59 JST

Hi all, Here are two shots of the main active region (AR11017) from the 16th and one of today's main prominence which was rather nice albeit a bit faint.

○.....**Subject May 21/22 Solar activity**
Received: Sat 23 May 2009 01:33:11 JST

Hi all, Here are a couple of shots of the old AR11016 region with it's impressive filament from May 21st. I took a short animation sequence of this region as well which spans 8.5 minutes at 30s intervals. The captures

were short and image processing left to a minimum so there's degradation in the quality. The manic blob to the left of the image is dust! The animation can be seen here



http://www.digitalsky.org.uk/solar/2009/2009-05-21_anim-crop.gif
The May 22nd shots show the new AR that's just popped into view. Best regards,

Pete LAWRENCE (ピート・ローレンス Selsey 英)

●.....**Subject: Saturn 2009.04.23**
Received: Tue 05 May 2009 06:25:23 JST

Dears, Under rather bad conditions, without anything interesting to note:

<http://astrosurf.com/delcroix/images/planches/se.php?y=2009&m=4&d=23>

One image with a wider field of view, from left to right Rhea, Dione, Tethys, Saturn, Iapetus and Titan (overexposed):

<http://astrosurf.com/delcroix/images/s20090423-sat-MDe.jpg>

○.....**Subject: Saturn, spots and satellites 2009.05.02**
Received: Wed 13 May 2009 05:55:52 JST

Dears, Under acceptable conditions, Saturn with 2 spots - one of which is the long lived SEBz spot observed for years:

<http://astrosurf.com/delcroix/images/planches/se.php?y=2009&m=5&d=2>

Here is a some composite images, with from left to right Dione, Tethys, Saturn, Enceladus just above the rings, Rhea, the weak Hyperion and Titan: R+IR Saturn version, small format:

http://astrosurf.com/delcroix/images/saturne_20090502_sat_2450_4108_ondx2_1_3_1-5_10_15_1_lev3_small.jpg

R+IR Saturn version, large format:

http://astrosurf.com/delcroix/images/saturne_20090502_sat_2450_4108_ondx2_1_3_1-5_10_15_1_lev3_extralarge.jpg

LRGB Saturn version, small format:

http://astrosurf.com/delcroix/images/saturne_20090502_sat_2450_4108_ondx2_1_3_1-5_10_15_1_lev3_small_lr.jpg

LRGB Saturn version, large format:

http://astrosurf.com/delcroix/images/saturne_20090502_sat_2450_4108_ondx2_1_3_1-5_10_15_1_lev3_extralarge_lr.jpg

○.....**Subject: Saturn 2009.05.16**
Received: Tue 19 May 2009 20:19:21 JST

Dears, Saturn under bad conditions, no details are visible:

<http://astrosurf.com/delcroix/images/planches/se.php?y=2009&m=5&d=16>

○.....**Subject: Saturn 2009.05.18**
Received: Fri 22 May 2009 06:04:23 JST

Dears, Under average conditions, a single "control" image in red+infrared without any details visible:

<http://astrosurf.com/delcroix/images/planches/se.php?y=2009&m=5&d=18>

○.....**Subject: Saturn & satellites 2009.05.15**
Received: Sat 23 May 2009 07:13:37 JST

Dears, I had acceptable seeing from time to time that night, allowing me to build this R+IR composite image of Saturn's family:

http://astrosurf.com/delcroix/images/s20090515_sat2_rir_2650_4449_ondx2_1_3_1-5_10_15_1_lev.jpg

from left to right Tethys, Saturn, Mimas then farther - by decreasing brightness Titan, Rhea and Dione. All images with different filters (the first red/infrared image is the best detailed) - i first suspected some spots but finally think these are not real:

<http://astrosurf.com/delcroix/images/planches/se.php?y=2009&m=5&d=15>

Clear skies,

Marc DELCROIX (マルク・テ・ルククロア Tournefeuille 法)

●.....**Subject: Re: southern solar prom -**
Received: Tue 05 May 2009 07:43:36 JST

Excellent Dave! I caught this prominence later in the day and recorded 90 minutes of its choreography:

http://www.avertedimagination.com/img_pages/sundulations.html
(the smooth full resolution file is linked below the compressed image on this page) hope you enjoy it!

Alan FRIEDMAN (アラン・フリードマン Buffalo NY 美)

●.....**Subject: A Late Season Saturn in Good Seeing**
Received: Wed 06 May 2009 12:01:54 JST

.....I noticed the seeing was quite steady so once finished with the Moon, I put the 12" Newt back on my EQ6 mount. I was pleased to see Saturn quite steady on the screen, with the Cassini Division visible in the raw video during moments of stable conditions. I only captured 2 runs, as I knew the seeing wasn't going to get any better at that time, but it was enough to capture my sharpest image of Saturn this apparition - a great surprise for being so late in the season. 47deg altitude, 15fps R,G, 7.5fps B. DMK21AU04, 12" Newt. Link:

<http://www.mikesalway.com.au/2009/05/06/a-late-season-saturn-in-good-seeing>

○.....**Subject: Jupiter, Oval BA, Io and Shadow Animation in Good Seeing**
Received: Thu 07 May 2009 19:00:35 JST

Hi all, This morning, 7th May local time, I had reasonably good seeing for about an hour - long enough to capture 7 runs of Jupiter with the Galilean Moon Io and its shadow transiting across the Jovian disc. The red channel was pretty good in almost all images, but unfortunately the blue channel was pretty ordinary, bringing down most of the images from what they could've been. Still, I can't complain as the last few days have seen some better than average conditions, allowing me to finally start getting some runs on the board with this Jupiter season. The best two images from the session are shown here, as well as a 7-frame animation of the red channel showing Jupiter rotating and Io and its shadow in transit. Oval BA is definitely fainter than last year, but still has an orange ring with a lighter/white centre. As Anthony Wesley pointed out in his beautiful image, there's another white storm which appears to have an orange ring around it just to the right of Oval BA, and in-between the two there's a dark spot. It will be interesting to see what happens to this trio over the next few weeks. 7-frame animation here: Jupiter, Io and Shadow Animation? More info here: <http://www.mikesalway.com.au/2009/05/07/jupiter-with-io-and-shadow-transit-animation-in-good-seeing>

○.....**Subject: Saturn with Rhea's Shadow Transit**
Received: Fri 08 May 2009 16:10:31 JST

Hi all, On Wednesday night I captured Saturn in above average seeing - the second time that week! When I'd finished processing the images, I noticed a faint Moon near the edge of Saturn, and a dark feature just under the ring plane. When blinking between the two images, I saw that the feature had moved, so I check Starry Night Pro planetarium software and found that the small Moon was

Rhea and the dark spot on Saturn's disc was Rhea's shadow. You can see the animation of the two frames below, as well as the 2 colour images. The difference in brightness between the two red channel images is due to the capture settings. In the first image, I had gamma at 110 and in the second, 120. The blue channel was so faint, I bumped up the gamma to capture all 3 channels at 15fps rather than dropping blue back to 7.5fps. More here: <http://www.mikesalway.com.au/2009/05/08/saturn-with-rhea-shadow-transit>

○.....**Subject: Jupiter + Ganymede - my best this year!**
Received: Tue 12 May 2009 14:03:28 JST

Seeing was great this morning, 12th May local time, the best I've had all year. Ganymede was approaching Jupiter, soon to begin transit.? Here's one of the 11 images I captured from this morning - the first one to be fully processed and one of the best from the session. The others are still at various stages of processing - more to come in the next day or so - plus an animation of course!

There is an NEB outbreak setting on the bottom left, as well as a large rift on the NEB rotating into view on the right. Ganymede has a number of albedo markings too, including a bright spot on the southern tip. After the shocking run of seeing I've had this year so far, finally the good seeing is starting to come. I can't tell you what a joy it was to process this image after the rubbish I've been processing for months! More details to come when the final images and animation are ready.

<http://www.mikesalway.com.au/2009/05/12/jupiter-and-ganymede-my-best-this-year>
<http://www.mikesalway.com.au/2009/05/13/jupiter-ganymede-animation-12th-may-2009>

○.....**Subject: Jupiter, GRS and Europa - May 12th**
Received: Fri 15 May 2009 04:27:43 JST

Hi all, This image of Jupiter, featuring the GRS at mid-transit and Europa on the left which had just finished transit, was captured on Wednesday morning, 13th May local time in average seeing. Jupiter was still at a reasonably low 49° altitude when this shot was taken (first of the session), but unfortunately the seeing only got worse with altitude and by 5am I'd packed up. The GRS is still quite pale compared to previous years, but the dark centre and dark ring can still be seen. The seeing has turned bad here as the wind has picked up, so looks like no imaging for a few days. Link:

<http://www.mikesalway.com.au/2009/05/15/jupiter-grs-and-europa-13th-may>
Thanks for looking

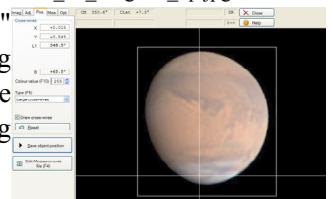
Mike SALWAY (マイク・ソルウェイ NSW 澳)

●.....**Subject: Sightseeing Bogus Crater on Mars**
Received: Wed 06 May 2009 21:56:00 JST

Refer to: CMO338, pp. Ser2-0771 (25 November 2007), PELLIER (CPI) claims the white spot near the NPC on Damian Peach's image:

http://www.damianpeach.com/mars07/m2007_11_05rgb02_dp.jpg

is "Kunowsky crater" (56.8°N, 9.7°W). Using WinJUPOS 8.1.6 to measure the spot we find the following latitude and longitude to be: 65.5°N, 348.5°W; there-



fore, the spot is 8.7° further north and 21.2° further east than the "frosty crater." The so-called "Kunowsky crater" is most likely a normal discrete cloud. See attached image:

○ **Subject: RE: RE: Sightseeing Bogus Crater**
Received: Thu 07 May 2009 22:09:05 JST

Well, I still disagree and if you look at the image attached it should be clear. Take note that in the left image the central meridian is 350.6 degrees and the white spot is only a few degrees to the evening side of Mars, whereas Lomonosov Crater would have to be several degrees to the morning side. The right image places the white spot (CLOUD) at 345.7W, 66.8N. That cannot possibly be Lomonosov Crater (9.2W, 64.9N) either. It is simply a cloud. Yes, I adjusted the position angle of the axis to correspond with the computed axis and the location of that CLOUD is still 348 degrees Areographic longitude!

I know some observers have their heart set on seeing craters on Mars with telescopes but it is simply not possible. If one uses simple high school physics and mathematics this should be clear. I have used WinJUPOS for years to accurately measure features on Mars and these measurements always correspond as close as possible with spacecraft charts. Both Lomonosov (9.2W, 64.9N) and Kunowsky (56.8°N, 9.7°W) craters are more than 20 degrees to the morning side of Mars of that bright puffy spot! 20 degrees should be quite obvious even at just a glance at the image.

○ **Subject: corrected image**
Received: Fri 08 May 2009 07:14:46 JST

I used the wrong image that I corrected some months back and forgot about it. Getting old is not foe the weak and frail mind. I adjusted the axis by 10 degrees and then again measured this "frosty crater" to find that it still is not located where either Kunowsky crater (9.7W, 56.8N) or Lomonosov crater (9.2W, 64.9N) is. The center of the bright spot is 7.1W, 67.2N. Still 2.1 to 2.6 degrees and -10.4 to -2.3 degrees off. Yes, it should be quite obvious the difference I have stated. What is on that images is cloud; maybe on the lee side of wither crater, but a cloud never the less. See corrected image. Yes, even us old guys make little mistakes (射損なう).

○ **Subject: RE: corrected image**
Received: Fri 08 May 2009 20:24:23 JST

Yes, I was quite aware of the image axis tilt when I first measured it and made triangular points to correct the tilt. In fact, as any responsible scientist would do I wrote a program that allows me to correct images for such errors in orientation and use it often in such work. But, I forgot that I had done so and lost that corrected image -- as any responsible "old man" often does!

I really don't care what anyone thinks about this white spot; is a cloud. The other images I have seen plus some HST images suggest that discrete clouds often form over these isolated craters and winds from the polar region causes the clouds to be lee of the crater itself; as indicated in my measurements. Since I can find no other "frosty craters" in images from that same time period or in other

years that suggests a "frosty crater" I must conclude, not assume, but conclude that these are low, discrete clouds similar to orographic and/or topographic clouds that are seen in Edom and other large crater like areas. Also, if one does a color separation study of his image it is quite obvious that the spot is not a surface phenomenon, but an atmospheric aerosol. However, in the past when we used slide rules for our work we could dismiss decimal points in our measurements, but using modern computers and available accurate charts of Mars we can take advantage of technology to correct this philosophy of dropping decimal points -- something some of us hold so dear to our old hearts. It is a cloud; plain and simple!

Jeff BEISH (シ^ェフ[・]ヒ^ーシ^ュ Lake Placid FL美)

● **Subject: Saturn 090505**
Received: Thu 07 May 2009 06:54:21 JST

Hi here is a Saturn image from last night, nothing to report.

http://astrosurf.com/pcasquinha/sat_090505.jpg

Regards

○ **Subject: Sun 2009/05/17**
Received: Tue 19 May 2009 01:29:28 JST

Full Disk with two active regions. PST @ f/20 + Skynyx 2.0M, 12 images mosaic. BW

http://astrosurf.com/pcasquinha/sol_090517.jpg

And colorized

http://astrosurf.com/pcasquinha/sol_090517_c.jpg

Regards

Paulo CASQUINHA (ハ[°]ウロ[・]カスキニヤ Portugal 葡)

● **Subject: Saturns rings are dimming**
Received: Thu 07 May 2009 11:43:18 JST

Over the course of the next few months Saturns rings will grow dimmer and dimmer as seen from Earth as they move edge-on to the sun. Even though the rings are not edge-on to us they will become harder to see and image. Recent images have shown this effect already starting to happen, eg this image from a couple of days ago:

<http://www.acquerra.com.au/astro/gallery/saturn/20090505-093649/large.jpg>

Check out these links to the JPL Solar System Simulator that shows the appearance of Saturn and its rings for us over the next few months, notice that the rings fade out to black even though they are still partially open to us.

<http://space.jpl.nasa.gov/cgi-bin/wspace?body=699&vbody=399&month=5&day=6&year=2009&hour=00&minute=00&rfov=60&fovml=-1&bfv=30&porbs=1&showsc=1>
<http://space.jpl.nasa.gov/cgi-bin/wspace?body=699&vbody=399&month=5&day=6&year=2009&hour=00&minute=00&rfov=60&fovml=-1&bfv=30&porbs=1&showsc=1>
<http://space.jpl.nasa.gov/cgi-bin/wspace?body=699&vbody=399&month=5&day=6&year=2009&hour=00&minute=00&rfov=60&fovml=-1&bfv=30&porbs=1&showsc=1>

Saturn will likely be too close to the sun for easy viewing by August. cheers,

○ **Subject: Saturn last night, May 8**
Received: Sat 09 May 2009 18:24:42 JST

Seeing was pretty good last night around 8pm on Saturn. This image is a combination of data from 2 separate runs at 7.56pm and 8.02pm. What pleases me most about this image is that I seem to have solved the internal reflection problem that has plagued all my Saturn images this year, no more hard edge in this image. The solution was to pull my camera apart and remove the glass cover plate in front of the ccd, I'm guessing that it's a bad idea

to have 2 glass surfaces (the cover plate and the ccd) close together. Almost guarantees internal reflections. A nice bonus is that its now a lot easier to get to the ccd for cleaning! Note how dark the rings are getting, they're on the way to zero visibility in another couple of months: <http://www.acquerra.com.au/astro/gallery/saturn/20090508-095737/large.jpg>

regards,

Anthony WESLEY

(アンソニー・ウェズリー Murrumbateman, NSW 澳)

●.....**Subject: Re: Saturns rings are dimming**
Received: Fri 08 May 2009 08:48:43 JST

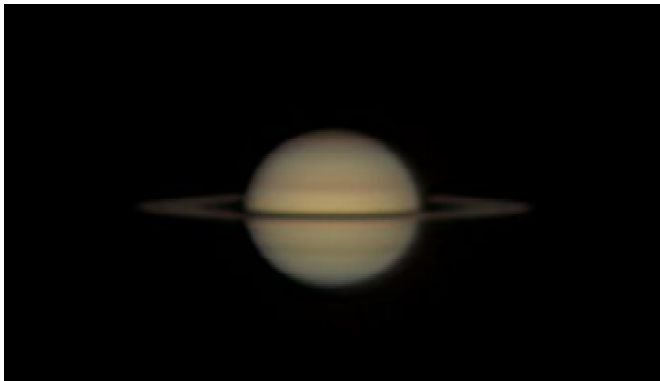
Hi Anthony,

> Over the course of the next few months Saturns rings will grow dimmer
> and dimmer as seen from Earth

yes, I can confirm the dimming of the rings with my own images from this night... 8" Newtonian, eyepiece projection, RGB Filter (Astronomik) and 665 nm Filter (Schott), DMK21AF04.AS. Seeing was 5/10, Transparency 2/5, some thin clouds went through... Cheers

○.....**Subject: Saturn 2009/5/7**
Received: Fri 08 May 2009 09:04:16 JST

Hi Guys, this night weather was not really good, some thin clouds always gone through... No spots, no storms to report, but the rings start dimming as Anthony Wesley reported in his last posting... 8" Newton, eyepiece



projection, DMK 21AF04.AS, each channel 20% of 1800 Images. Here two Images, first RGB with Astronomik Filters (↑), then an image, where I used the 665 nm Filter (Schott) as red channel... Cheers

Silvia KOWOLLIK

(シルビア・コウリク Ludwigsburg 德)

●.....**Subject: 2009 May 15, solar h-alpha**
Received: Sat 16 May 2009 03:16:09 JST

2009 May 15, 1515UT - 1625UT. Solar AR 1017
PCW Memorial Observatory, Zanesville, Ohio USA, Erika Rix
DS 60mm Maxscope, LXD75, 21-7mm Zhumell, Sketch created scopeside with black Strathmore Artagrain paper, white Conté crayon and pencil, white Prang watercolor pencil, Derwent charcoal pencil, black oil pencil. Temp: 21.8°C - 25.6°C, Humidity 42%, Seeing: Wilson 4, Transparency: 4/6, Light cirrus, winds calm, Alt: 50.3, Az: 110.2

Glancing at a lower magnification with the zoom eyepiece, three main areas of prom immediately came to view at approximately 40°, 130°, and 215° position angles. Then adjusting the outer Etalon, the plage of the AR most westwardly popped out, followed by the eastwardly portion of it. I'm a bit unsure if there were actually 2 active regions I was viewing but I've only seen a designation for AR1017. It appeared to be two separate

active regions from today's views.

Increasing magnification with excellent seeing conditions and the light cirrus not bothering me, I concentrated on the prominences first and it was then that I spotted another at approximately 280° PA. It twice as tall as the spike in the group near 120° and spanned across 30° of limb. It was very soft looking but I could still make out strands of structure vertically within it - beautiful and certainly the treat of the day.

Going back to the active regions, in both areas, I could make out what I believed to be magnetic lines. You can almost see the subtle renderings of them in my sketch if you look hard enough. I did find myself rendering the contrast a little more severe than true to the view, but the details of this region were as true as I could make them through sketch by making fine adjustments to the FOV as well as the Etalons of my double stacked Maxscope.

○.....**Subject: 2009 05 18 Sun**
Received: Tue 19 May 2009 03:46:59 JST

2009 May 18, 1548UT - 1700UT, Solar h-alpha featuring AR1017
Temp: 17.2°C-20.6°C, Humidity 22%, Seeing: Wilson 3.5, Transparency: 3/6
Clear, slightly hazy, winds 9mph NNW

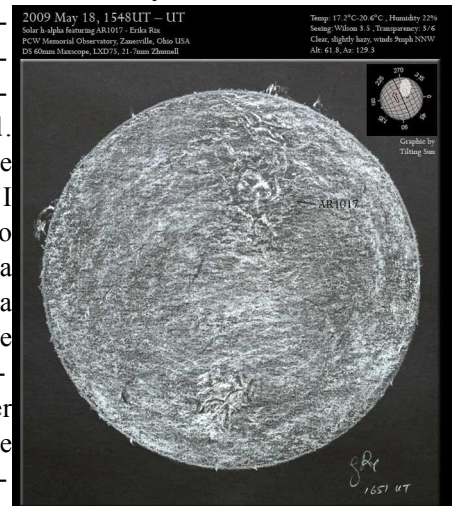
Seeing today wasn't as steady as I would have liked, but at a magnification of approximately 30x, steadiness improved. Still, there were moments when I bumped it up to around 57x for a closer look with a crisp view. The temperature increased by over 3°C during the course of the observation and the heat radiating from inside the observatory certainly doesn't help even with the top rolled back only a few feet.

Two areas of limb showed decent sized prominences and in the moments of better seeing conditions, the limb was alive with tiny fingers protruding out. The three areas of active regions on the disk were brought out better by narrowing the bandwidth and moving them off center for each area to observe them separately. Also, I was able to tease out more definition within these areas by increasing and decreasing magnification.

The region in the east had a long slender filament running through it and then branching off as it made its way to the west. South of that region, there was another short, more pronounced filament that popped into view toward the end of my observation. I didn't notice any sunspots themselves and didn't observe in white light to confirm the lack of them. Kind regards,

○.....**Subject: Re: 2009 05 19 Sun**
Received: Wed 20 May 2009 02:24:50 JST

2009 May 19, 1428UT - 1600UT. Solar h-alpha, AR1017



Temp: 14.2°C-19.8°C, Humidity 44%, Seeing: Wilson 3-3.5, Transparency: 2/6, Light cirrus 90% coverage, slightly hazy, winds 4.6mph SSW

AR1017 is making its way to the western limb, still clearly visible at first glance with the crooked u-shape and then by looking closer, the dark contrasts lining the inside of the "u". The prominence activity was pretty showy today and the spotless region to the east needed to be in just the right spot of my field of view to be observed. The plage was wishbone shaped with what appeared to be a slender, black filament reaching out from it to the east.

The larger of the eastern proms looked detached at first, but as transparency improved, the haze cleared up around the solar disk and I was able to follow the entire loop where it met the limb on both sides and even a few places in between. Best regards,

○.....**Subject: 2009 05 20 Sun**
Received: Thu 21 May 2009 01:30:43 JST

2009 May 20, 1410UT - 1515UT Solar h-alpha, AR1017

Temp: 17.3°C-21.1°C, Humidity 50%

Seeing: Wilson 4, Transparency: 3/6

Clear with slight breeze and a little haze

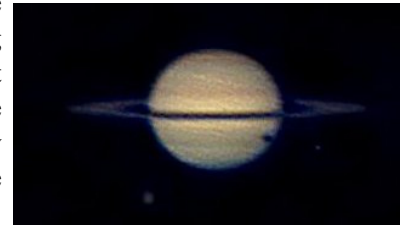
Active region 1017 is now spending its last moments on the western limb and will be leaving us soon. The plage was fairly unremarkable and faint except for a very bright portion on the leading edge of the faint filament running north to south along side of it. The region approximately 40° in from the eastern limb has a slender, but well-defined filament that, upon closer closer inspection, branches off toward the north with a black, almost round smudge at the crook of the branch. There were contrasty areas of faint plage making streaks and mottles around the filament. There were a few broader filaments scattered about, although soft in appearance. And the prominences were very small and scattered; however, there was on area of prominences toward the south that

made a beautiful display. Best regards,

Erika RIX (エリカ・リックス Zanesville OH 美)

●.....**Subject: Titan's shadow on Saturn**
Received: Fri 22 May 2009 13:17:24 JST

Gentlemen: I had the opportunity last week to take a quick image of the Titan shadow crossing on Saturn. The planet was getting low in the sky when the shadow transit started, so the atmospheric conditions were far from ideal. Also, I had trouble getting my new camera set-up, and had to revert to my old trusty Philips ToUcam Pro. Titan is seen in the lower left; the small moon at the right is Rhea.



Don BATES (ド・ン・ベーツ Houston TX 美)

●.....**Subject: Saturn 2009/5/22**
Received: Sat 23 May 2009 10:55:44 JST



Fair seeing that degraded quickly. This is first light with a C-14 I have in possession for a few months. Collimation is a touch off as I was racing the conditions, but not too bad.

Sean WALKER

(ショーン・ウォーカー S&T 美)

☆☆☆

シー・エム・オー・フクイ

中島 孝 Nj

★前号は4月28日に印刷・丁合し、国内は19時までに三国から発送しました。宗像(As氏)には30日に配達されたようです。海外便は福井南郵便局からSALにて発送しています。不ー

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

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

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☆ 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)

