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Forthcoming Mars in 2011/2012. I

By

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This is a rough translation of the article published in *the Heavens* (OAA Journal) April 2011 issue

The planet Mars was already in conjunction with the Sun on 4 February 2011 GMT, and came already back to the eastern sky, while in any apparition after the perihelion the planet's apparent diameter is quite slow to become large, and this apparition, Mars will be at opposition after aphelion and later occur on 3 March 2012 at 20 h GMT, and closest to the Earth on 5 March 2012 at 17 GMT (see Fig. 1). This apparition is the most aphelic apparition and so we will barely be able to observe large and satisfied images: The apparent diameter δ will become 6" (seconds of arc) on 4 November 2011, and will gain δ=9" on the last day 31 December of 2011: On the day the tilt is ϕ=24°N, the phase angle ι=34° and the Martian season λ is λ=051°Ls: The planet is seen in Leo and so seen well high up from the Northern Hemisphere. As is well known, it is not easy to observe visually when δ is under 10", but we cannot complain since the coming maximal diameter (on 5 March 2012) is no larger than δ=13.9". At least we can (and should) measure the size of the north polar cap (npc) at the end of this year so that we could be able to estimate quite exactly the depth of the npc. Even if δ=7", the visual observation will bring something (λ=037°Ls), and so the usual visual observers should prepare to begin their routine observations on the first day of December 2011.

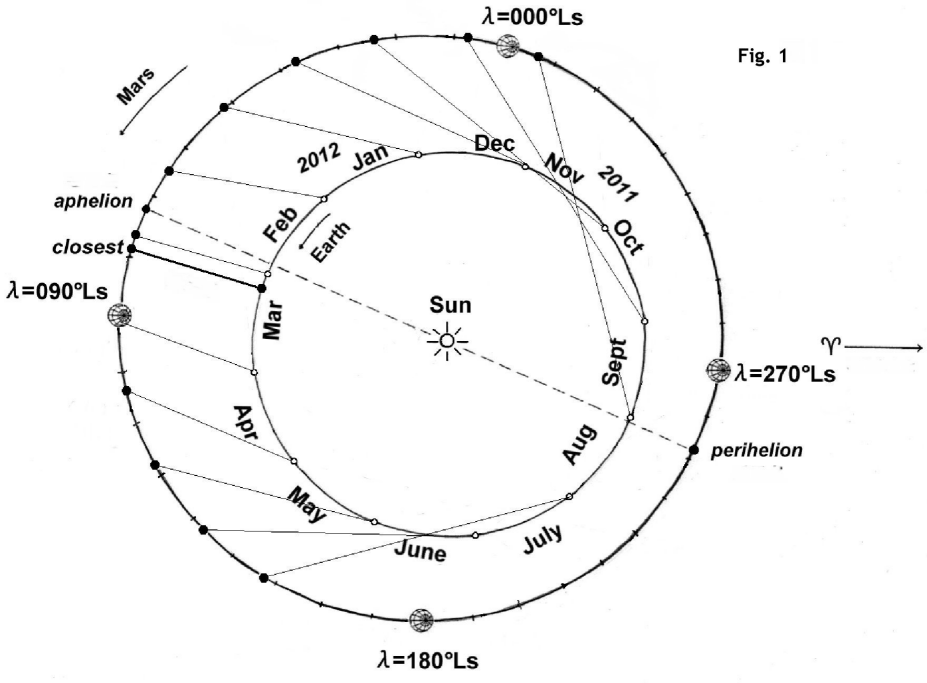


Fig. 1

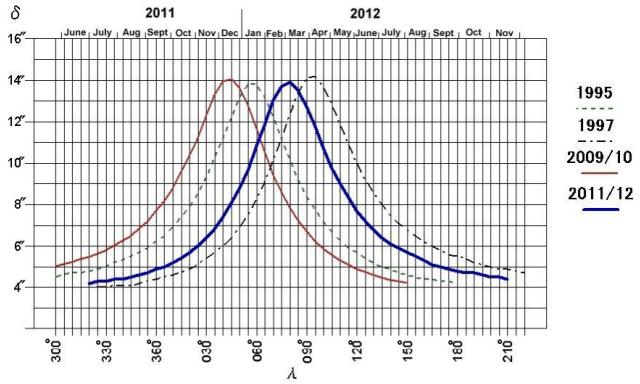
However the CCD observations have changed the recent observational situation, and even if δ=4.5" one can get sometimes excellent images, and hence one can start from mid-August this year.

The northern spring equinox of the planet will visit on 13 September 2011: After midnight it will shine in Gem with ϕ=13°N, and ι=31°, while the apparent diameter is only δ=4.9". However at this time since the apparent declination is high enough to rise up rapidly, and so we may have opportunities to take good CCD images.

Weather conditions however cannot be expected since in the Northern Hemisphere the season heads for winter when the apparent diameter develops. Even if we prepare well, the sky may turn out to be dismal. Hence we cannot attain the routine observation without patience this apparition.

The apparitions which were akin to this case visited previously in 1995, 1997 and 2010. Figure 2

Fig. 2 Apparent Diameters as Functions of the Seasons λ



shows how the situations of the previous apparent diameters were different from this case. First we should note that the seasons denoted differ little by little if we pick out the same diameter. Conversely speaking, because of these differences we can observe the seasons from λ=040°Ls to λ=095°Ls at the maximal diameters on the occasions of the aphelic apparitions. Secondly we note that we thus take the seasons serious implied by Ls (and use the letter λ to denote the season). This says we cannot miss every apparition if we think the variation of seasons to be important.

This apparition, if we pick out the diameters larger than δ=7", we can observe from 1 December 2011 to 19 June 2012 where the season varies from λ=037°Ls to λ=127°Ls, and hence we can catch the seasonal width of 90 degrees in Ls including the northern summer solstice. Conversely speaking this apparition gives a rare and precious opportunity to observe the season near the summer solstice rather in a good apparent diameter condition. As shown in Fig. 2, this is quite different from the preceding apparition in 2010.

One of the observational objects this apparition is the check of the recession of the npc as in the preceding apparition in 2009/2010. Another is possible observations of the events associated with the thawing of the npc. Since the appearance of the npc from the covering of the np hood occurs at around λ=010°Ls~020°Ls and so it will be hard to check the moment since the apparent diameter is still small. However as the season proceeds to λ=040°Ls, it will be enough to check the occurrence of the dust activity associated with the npc. As reported in Note (1) in CMO #373, there might be seen some dust around the npc: In fact, in 2010, a very clear dust lift was observed inside the npc at around λ=046°Ls.

Furthermore as the npc recesses the summits of Tharsis Montes and Olympus Mons will be seen covered by the evening cloud. Since at the end of this year, the season becomes λ=051°Ls when δ=9" and so already the orographic season in this range. The evening cloud of Olympus Mons will attain a peak at around λ=100°Ls and will be checked as a cotton-ball like floating spot: In 2009/2010 it was difficult to check it because the angular diameter was too small when around λ=100°Ls. Tharsis Montes behave similarly, but there exist differences little by little among them, and especially Arsia Mons behaves quite in a peculiar manner: Its peak will come around λ=150°Ls, and so outside the above period. Alba Mons usually is noticed from the spring equinox to around λ=060°Ls. (Secondary peak at around λ=130°Ls): See for example the observations in 1995 in

http://www.hida.kyoto-u.ac.jp/~cmo/cmomn0/95Note13.htm

We also should be led to the routine observation of the brightness of Hellas: Its southern part will also be very whitish bright at around λ=100°Ls. There is recently a view that this must be a part of the south polar cap (spc) and hence we will have to need to alter the point of view since the time of W H PICKERING that the npc and spc cannot be observed at the same time. In fact at around λ=100°Ls the npc is still clearly visible.

Another set of words about the recession of the npc is needed. At this apparition it is most appropriate to see whether the npc behaves as like W BAUM described or its recession follows a linear line. The Baum plateau implies the following possibility that the thawing of the npc first comes temporarily to stay while it will begin to thaw rapidly from around λ=055°Ls: The fact whether it is linearly or not seems to depend on the conditions of the air mass which governs the np region will readily contribute to the migration of the air mass to the south or stay long near the npr, and the difference may be given rise to the clearance of the dust density previously accumulated or not. Anyway this is an important problem and it is one of the reasons we should start our routine work from earlier.

When comes the time we should start the intense observations, we will again continue the description about the situation in a different way. □

CMO 09/10 Mars Note (12)

List of Images of Alba Mons in 2009/2010 after the Northern Spring Equinox

Alba Mons (called Alba Patera before 2007) is a shield volcano having a dull wide flank which may be about 2000km in diameter, but curiously its height is low under 7km. However its position is near the north polar region and so it is an interesting place in relation with the white cloud activity after the northern spring equinox (related with the thawing of the npc). In 1995 we once observed a burst at around λ=051°Ls as described in http://www.hida.kyoto-u.ac.jp/~cmo/cmomn0/95Note13.htm

In reality it is said its activity peak occurs at around λ=060°Ls (and secondly also at around λ=140°Ls), but in the 2009/2010 apparition as far as we checked no interesting conspicuous activity was observed. However, we here try to give a list of the images where Alba Mons is located near the evening side in order to see how the situation depends on the observation styles or timings.

The following is a list of the code of names of observers employed in the following list of images.

SWk: Sean WALKER
PGc: Peter GORCZYNSKI
EGf: Ed GRAFTON
Mo: Yukio MORITA
Ak: Tomio AKUTSU
PGb: Peter GARBETT
DPc: Damian PEACH
FMl: Frank J MELILLO
Mk: Masami MURAKAMI
DTy: Dave TYLER
MLw: Martin LEWIS
IBr: Ian BRUCE
JLr: Joahim LORENZ
DPk: Don PARKER
CHr: Carlos HERNANDEZ
PLw: Pete LAWRENCE
EMr: Efrain MORALES
Hg: Yasunobu HIGA
SGh: Sadegh GHOMIZADEH
RGh: Ralf GERSTHEIMER
NBv: Nicolas BIVER
ISp: Ian SHARP
SKd: Simon KIDD
BKn: Bruce KINGSLEY
WFl: Bill FLANAGAN
RTm: Randy TATUM
Mn: Masatsugu MINAMI
Km: Teruaki KUMAMORI

Now the first images by *SWk* show Alba Mons clearly

in white:

SWk: 18Nov(λ=011°Ls)2009 at ω=113°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091118/SWk18Nov09.jpg

On the same day *PGc* also took but it's not whitish.

PGc: 18Nov(λ=011°Ls)2009 at ω=126°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091118/PGc18Nov09.jpg

Further in order:

PGc: 21Nov(λ=013°Ls)2009 at ω=096°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091121/PGc21Nov09.jpg

EGf:23Nov(λ=014°Ls)2009 at ω=085°W (G)
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091123/EGf23Nov09.jpg

Mo: 1Dec(λ=018°Ls)2009 at ω=104°W, 114°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091201/Mo01Dec09.jpg

Ak: 4Dec(λ=019°Ls)2009 at ω=094°W (B)
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091204/Ak04Dec09.jpg

PGb: 16Dec(λ=024°Ls)2009 at ω=089°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091216/PGb16Dec09.jpg

DPc: 16Dec(λ=024°Ls)2009 at ω=107°W~128°W(B)
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091216/DPc16Dec09.jpg

FMl: 23Dec(λ=028°Ls)2009 at ω=093°W, 097°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/091223/FMl23Dec09.jpg

Mo: 6Jan(λ=034°Ls)2010 at ω=104°W, 111°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100106/Mo06Jan10.jpg

Mk: 7Jan(λ=035°Ls)2010 at ω=105°W,114°W
A white belt from Tempe

Mk: 9Jan(λ=036°Ls)2010 at ω=055°W
A light belt westward from Tempe

DTy: 17Jan(λ=039°Ls)2010 at ω=113°W (faint)
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100117/DTy17Jan10.jpg

MLw: 17Jan(λ=039°Ls)2010 at ω=126°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100117/MLw17Jan10.jpg

PGb: 17Jan(λ=039°Ls)2010 at ω=133°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100117/PGb17Jan10.jpg

IBr: 17Jan(λ=039°Ls)2010 at ω=137°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100117/IBr17Jan10.jpg

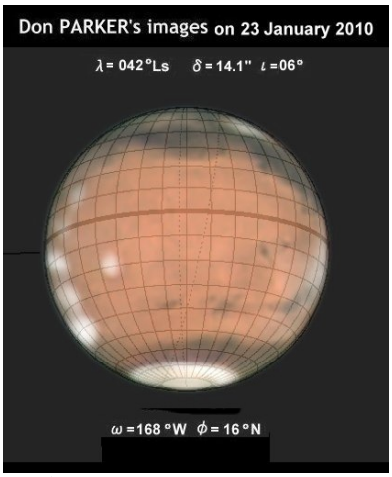
JLr: 23Jan(λ=042°Ls)2010 at ω=109°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100123/JLr23Jan10.jpg

PGc: 23Jan(λ=042°Ls)2010 at ω=155°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100123/PGc23Jan10.jpg

DPk: 23Jan(λ=042°Ls)2010 at ω=168°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100123/DPk23Jan10.jpg

where the white patches at the evening terminator look like to locate at (from the south)

A : 115°W 13°S B : 105°W 02°S
C : 100°W? 10°N D : 100°W 27°N
E : 100°W? 41°N



and Olympus Mons is exactly located at (133°W, 19°N). Alba Mons cloud must be the one at E, but at the terminator side the grid does not well work longitudinally.

FMl also took a set of images at exactly the same angle on the day:

FMl: 23Jan(λ=042°Ls)2010 at ω=168°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100123/FMl23Jan10.jpg

PGc:24Jan(λ=042°Ls)2010 at ω=155°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100124/PGc24Jan10.jpg

CHr: 24Jan(λ=042°Ls)2010 at ω=164°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100124/CHr24Jan10.jpg

PLw: 25Jan(λ=043°Ls)2010 at ω=110°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100125/PLw25Jan10.jpg

EMr: 27Jan(λ=043°Ls)2010 at ω=118°W (B)
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100127/EMr27Jan10.jpg

FMl: 27Jan(λ=043°Ls)2010 at ω=132°W~162°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100127/FMl27Jan10.jpg

EMr: 29Jan(λ=044°Ls)2010 at ω=128°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100129/EMr29Jan10.jpg

CHr: 29Jan(λ=044°Ls)2010 at ω=139°W (B)
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100129/CHr29Jan10.jpg

DPk: 31 Jan(λ=045°Ls)2010 at ω=100°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100131/DPk31Jan10.jpg

Ak: 5Feb(λ=048°Ls)2010 at ω=174°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100205/Ak05Feb10.jpg

Ak: 8Feb(λ=049°Ls)2010 at ω=130°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100208/Ak08Feb10.jpg

Hg: 8Feb(λ=049°Ls)2010 at ω=162°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100208/Hg08Feb10.jpg

Ak: 12Feb(λ=051°Ls)2010 at ω=115°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100212/Ak12Feb10.jpg

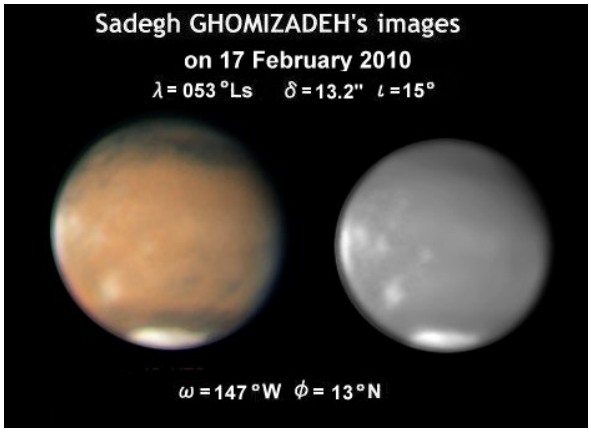
Mo: 13Feb(λ=051°Ls)2010 at ω=106°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100213/Mo13Feb10.jpg

Ak: 14Feb(λ=052°Ls)2010 at ω=081°W, 091°W,100°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100214/Ak14Feb10.jpg

SGh: 14Feb(λ=052°Ls)2010 at ω=199°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100214/SGh14Feb10.jpg

Ak: 15Feb(λ=052°Ls)2010 at ω=104°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100215/Ak15Feb10.jpg

SGh: 17Feb(λ=053°Ls)2010 at ω=147°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100217/SGh17Feb10.jpg



The day on 17 Feb 2011 was fruitful. In England *MLw, DPc,* and *PGb* caught the evening cloud at Albe Mons near the limb, but Tehran, Iran was favourite in the sense it appeared more inside:

MLw: 17Feb(λ=053°Ls)2010 at ω=174°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100217/MLw17Feb10.jpg

DPc: 17Feb(λ=053°Ls)2010 at ω=191°W(195°W)
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100217/DPc17Feb10.jpg

PGb: 17Feb(λ=053°Ls)2010 at ω=193°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100217/PGb17Feb10.jpg

*SGh:*18Feb(λ=053°Ls)2010 at ω=111°W(114°W)
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100218/SGh18Feb10.jpg

RGh: 18Feb(λ=053°Ls)2010 at ω=186°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100218/RGh18Feb10.jpg

NBv: 18Feb(λ=053°Ls)2010 at ω=186°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100218/NBv18Feb10.jpg

PLw: 19Feb(λ=054°Ls)2010 at ω=182°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100219/PLw19Feb10.jpg

ISp: 19Feb(λ=054°Ls)2010 at ω=189°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100219/ISp19Feb10.jpg

RGh: 20Feb(λ=054°Ls)2010 at ω=172°W (B)
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100220/RGh20Feb10.jpg

SKd: 20Feb(λ=054°Ls)2010 at ω=182°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100220/SKd20Feb10.jpg

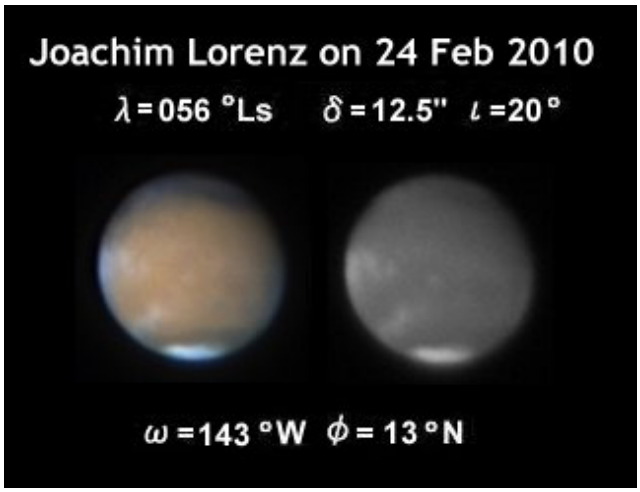
BKn: 20Feb(λ=054°Ls)2010 at ω=182°W (184°W,B)
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100220/BKn20Feb10.jpg

DPc: 20Feb(λ=054°Ls)2010 at ω=201°W, 206°W(B)
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100220/DPc20Feb10.jpg

PGb: 20Feb(λ=054°Ls)2010 at ω=185°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100220/PGb20Feb10.jpg

NBv: 23Feb(λ=056°Ls)2010 at ω=137°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100223/NBv23Feb10.jpg

JLr: 24Feb(λ=056°Ls)2010 at ω=143°W(B)
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100224/JLr24Feb10.jpg



DPc: 26Feb(λ=057°Ls)2010 at ω=101°W (105°W)
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100226/DPc26Feb10.jpg

EMr: 28Feb(λ=058°Ls)2010 at ω=179°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100228/EMr28Feb10.jpg

PGc: 1Mar(λ=058°Ls)2010 at ω=167°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100301/PGc01Mar10.jpg

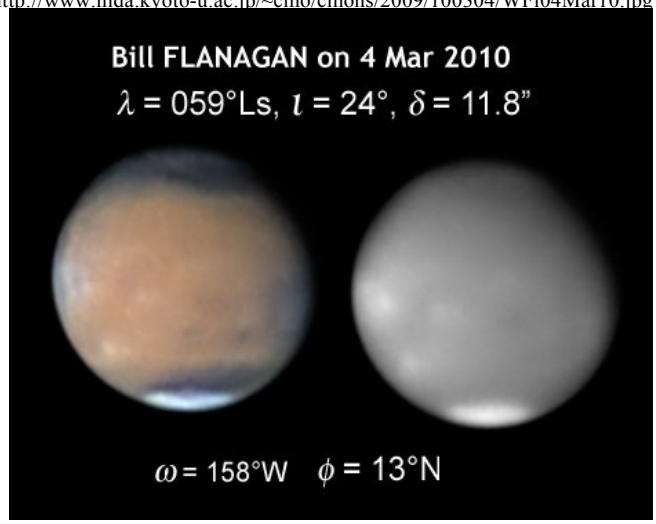
PGb: 1Mar(λ=058°Ls)2010 at ω=099°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100301/PGb01Mar10.jpg

MLw: 1Mar(λ=058°Ls)2010 at ω=111°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100301/MLw01Mar10.jpg

PGc: 2Mar(λ=058°Ls)2010 at ω=173°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009//100302/PGc02Mar10.jpg

EMr: 3Mar(λ=059°Ls)2010 at ω=121°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100303/EMr03Mar10.jpg

WFl: 4Mar(λ=059°Ls)2010 at ω=158°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100304/WFl04Mar10.jpg



PGc: 6Mar(λ=060°Ls)2010 at ω=135°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100306/PGc06Mar10.jpg

RTm: 7Mar(λ=061°Ls)2010 at ω=103°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100307/RTm07Mar10.jpg

FMl: 9Mar(λ=062°Ls)2010 at ω=127°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100309/FMl09Mar10.jpg

FMl: 10Mar(λ=062°Ls)2010 at ω=114°W, 122°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100310/FMl10Mar10.jpg

Ak: 13Mar(λ=063°Ls)2010 at ω=184°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100313/Ak13Mar10.jpg

Mn: 13Mar(λ=063°Ls)2010 at ω=171°W
bright at the limb δ=10.9"

Ak: 14Mar(λ=064°Ls)2010 at ω=174°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100314/Ak14Mar10.jpg

Km: 16Mar(λ=065°Ls)2010 at ω=143°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100316/Km16Mar10.jpg

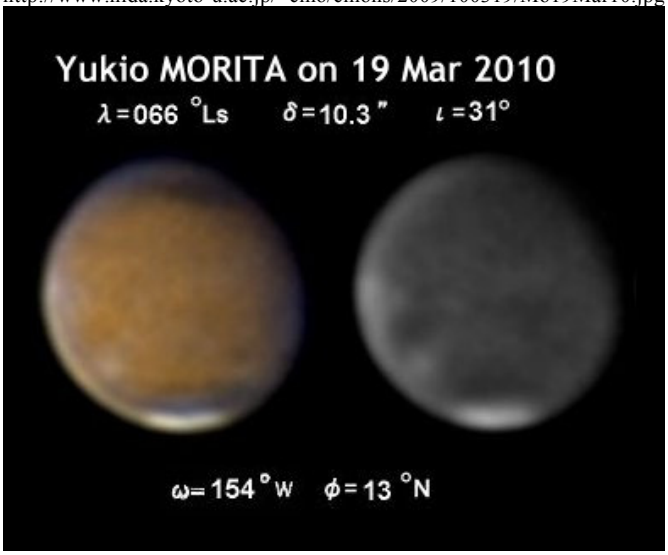
Ak: 17Mar(λ=065°Ls)2010 at ω=147°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100317/Ak17Mar10.jpg

Mo: 17Mar(λ=065°Ls)2010 at ω=174°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100317/Mo17Mar10.jpg

Mo: 18Mar(λ=066°Ls)2010 at ω=178°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100318/Mo18Mar10.jpg

Km: 19Mar(λ=066°Ls)2010 at ω=114°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100319/Km19Mar10.jpg

Mo: 19Mar(λ=066°Ls)2010 at ω=154°W~174°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100319/Mo19Mar10.jpg



Ak: 20Mar(λ=066°Ls)2010 at ω=121°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100320/Ak20Mar10.jpg

Mo: 21Mar(λ=067°Ls)2010 at ω=124°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100321/Mo21Mar10.jpg

DPc: 2Apr(λ=072°Ls)2010 at ω=113°W (B)
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100402/DPc02Apr10.jpg

DPk: 8Apr(λ=075°Ls)2010 at ω=165°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100408/DPk08Apr10.jpg

Mo: 25 Apr(λ=082°Ls)2010 at ω=146°W, 154°W
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2009/100425/Mo25Apr10.jpg

On 25 April the apparent diameter was already δ=7.6" though Alba Mons is evident on *Mo*'s images, but the second peak was very far and so we here stop listing up the further images of this year.

(Masatsugu MINAMI & Masami MURAKAMI)

□

Letters to the Editor

●・・・・・***Subject: (27 Marh 2011)***
Received: 4 April 2011

Dear Masatsugu, It was with both pleasure and relief that I read in latest MARS Bulletin that you did not suffer in recent earthquake and tsunami.

One can only imagine the effect this disaster has had on your country and people. Each news bulletin spoke of further deaths and damage, not forgetting the nuclear radiation problem too.

It is good to know that you are alright and we sincerely hope that things will get back to normal as soon as possible.

With all Best Wishes,

Alan W HEATH (Long Eaton, Nott, The UK)

●・・・・・***Subject: Re: On #383***
Received: Thu 07 April 2011 08:47:20 JST

Dear Masatsugu, Yes, I am fine with whatever you decided.

As for the backlog, I will surface with something -- as soon as I have a chance -- and as soon as the bursitis of my right shoulder (due to too much typing in an ergonomically unsound environment -- my office!) improves. Best,

Bill SHEEHAN (Willmar, MN, The USA)

●・・・・・***Subject: Craters on Pluto maybe!***
Received: Sun 10 Apr 2011 06:25:45 JST

Minami-San, I read again the folly of John Mellish's vociferous descriptions of what he saw on Mars in 1915 and laugh at such an absurd waste of time and effort by Bill Sheehan to write such stuff.

I will leave the pseudo science to him and concentrate on the facts and or ordinary science.

You may very well be right about those dark spots in Tharsis that often appear, especially after dust storms, in the locations of high volcanoes. Been there and done than several times at the telescope.

BTW, I knew Tom Cave for many years and he always told us that when we arrived in Paris during WWII he looked for Antoniadi, but found that he had died months before that time. Never did he confess to any of us that he actually met him. Tom Cave often carried on with his "war stories" but I always thought him an honest man. On several occasions Tom expressed to me that John Mellish must have dreamed up those water filled craters on Mars.

Such a waste of space and lack of intellect in your newsletter; the great Moon/Mars hoax e-mails would have been more beneficial.

Hope all is well with our astronomy friends in Japan after the recent catastrophes.

Jeff BEISH (Lake Placid, FL, The USA)

●・・・・・***Subject: Re: RE: Re: thank you***
Received: Mon 11 Apr 011 06:53:31 JST

Friends, Yes, I am getting the CMOs regularly.

I have a new color Imaging Source camera. The old Toucams do not have drivers for Windows 7. I have not been able to properly test it due to the poor weather in VA. I fixed up an old 12" LX200 and have it in my backyard in a Rubbermaid shed. The roof comes off in just minutes. The homemade 10" *f*/12 is still in the canopy carport observatory.

I am looking forward to contributing images during the next Mars apparition. Take care.

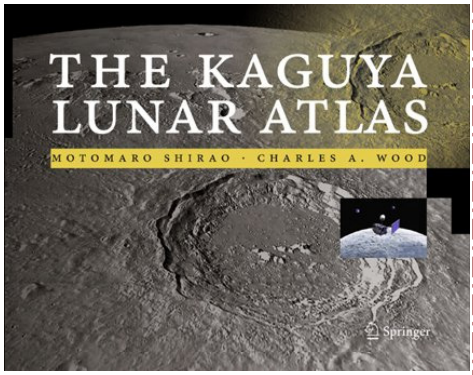
Randy TATUM (Henrico, VA, The USA)

☆ ☆ ☆

★ BOOK REVIEW

●·····***Subject: Kaguya Lunar Atlas***

Received: Sun 27 Mar 2011 02:24:51 JST



Dear Chuck and Masatsugu,

I just received a copy of the *Kaguya Lunar Atlas*, by Motomaro Shirao and Charles A. Wood (nice job, Chuck!) and it gave me hours of delight. I'd seen some of the images from Kaguya on the Internet when they were first released, and was blown away by them; now that I have this book in my hands, I'm blown away again.

What a spectacular achievement—all done by means of a high-definition TV camera on an infinitesimally low budget (at least compared to the manned lunar missions of the 60s and 70s). And yet they managed to obtain images at least as good as those obtained by the Apollo astronauts circling the Moon!***

This book started me thinking back quite a few years. When I was a kid growing up with the excitement of the Space Program, I used to sit for hours in a wooden box in the backyard which I fancied was my spacecraft; sometimes my "missions" were Earth-orbital, though occasionally I would imagine I was en route to the Moon or even Mars. These missions were all very brave. The bravest was one where I actually suspended this "capsule" from the swingset in the back yard and made a daring night flight of 62 minutes duration. Eked out with a bit of imagination, the sensation was really quite convincing of actually being in space. If only I'd had a PC with a small screen in there—and could roll through images like those from Kaguya—the simulation would have been perfect. That's as close as most of us will ever get to being in space—and thinking about this makes me appreciate that the compellingly real virtual world we can now enter through CCD images, PCs, and the like pretty much undermines the rationale of sending actual men into space just as PCs have rendered obsolete pocket calculators and slide rules.

On a related note: I just finished reading Victor Pelevin's *Omon Ra* (which I picked up in anticipation of the fiftieth anniversary of Gagarin's spaceflight). Pelevin writes of his own (or his character's) similar realization having spent a good deal of time in the cabin of a wooden airplane at a playground: "there was nothing to prevent me from getting into this or any other cabin [and seeing the world as the fliers he saw on TV did], "because flight is no more than a set of sensations, the most important of which I'd already learned to fake, sitting in the attic of the winged hut with the red stars, staring at the enlistment office wall that was where the sky should be, and making quiet droning noises with my mouth... That means, I thought, I can look out from inside myself like looking out of a plane, it doesn't really matter at all where you look out from, what matters is what you see."

The last sentence is the operative one, and inevitably recalled one of the purplest of purple passages of "*Mars and Its Canals*":

"To observe Mars is to embark upon [an enterprise of exploration]; not in body but in mind. Though parted by a gulf more impassable than any sea, the telescope lets us traverse what otherwise has been barred and lands us at least above the shores we went forth to seek. Real the journey is, though incorporeal in kind. Since the seeing strange sights is the essence of all far wanderings, it is as truly travel so the eye arrive as if the body kept it company...."

With Kaguya, we have seen strange sights, and so achieved the essence of all far wanderings.

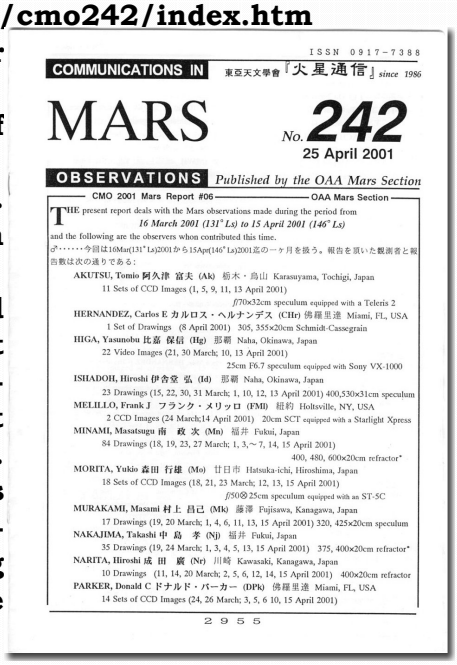
Hats off to Japan's great achievement: Kaguya. Best, **Bill SHEEHAN**

P.S. Of all the images in the book, I liked especially the ones showing the Diamond Ring effect with the Earth eclipsing the Sun, with the aureole—just like that seen around Venus before second contact during its transit—produced by refraction of sunlight by our own mantle of air.

TEN YEARS AGO (188)

-----CMO #242 (25 April 2001) pp2955~2974 -----

http://www.hida.kyoto-u.ac.jp/~cmo/cmomn0/cmo242/index.htm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COMMUNICATIONS IN 東亞天文學會『火星通信』since 1986
MARS No. 242
25 April 2001
OBSERVATIONS Published by the OAA Mars Section
CMO 2001 Mars Report #06 — OAA Mars Section
THE present report deals with the Mars observations made during the period from 16 March 2001 (131° Ls) to 15 April 2001 (146° Ls)
and the following are the observers whon contributed this time.
AKUTSU, Tomio 阿久津 富夫 (Ak) 栃木・鳥山 Karasuyama, Tochigi, Japan
11 Sets of CCD Images (1, 5, 9, 11, 13 April 2001)
f/70x32cm speculum equipped with a Teleris 2
HERNANDEZ, Carlos E カルロス・ヘルナンデス (CHr) 佛羅里達 Miami, FL, USA
1 Set of Drawings (8 April 2001) 305, 355×20cm Schmidt-Cassegrain
HIGA, Yasunobu 比嘉 保信 (Hg) 那覇 Naha, Okinawa, Japan
22 Video Images (21, 30 March; 10, 13 April 2001)
25cm F6.7 speculum equipped with Sony VX-1000
ISHADOH, Hiroshi 伊舎堂 弘 (Id) 那覇 Naha, Okinawa, Japan
23 Drawings (15, 22, 30, 31 March; 1, 10, 12, 13 April 2001) 400,530×31cm speculum
MELILLO, Frank J フランク・メリッロ (FMl) 紐約 Holtsville, NY, USA
2 CCD Images (24 March;14 April 2001) 20cm SCT equipped with a Starlight Xpress
MINAMI, Masatsugu 南 政次 (Mn) 福井 Fukui, Japan
84 Drawings (18, 19, 23, 27 March; 1, 3,~7, 14, 15 April 2001)
400, 480, 600×20cm refractor*
MORITA, Yukio 森田 行雄 (Mo) 廿日市 Hatsuka-ichi, Hiroshima, Japan
18 Sets of CCD Images (18, 21, 23 March; 12, 13, 15 April 2001)
f/50@25cm speculum equipped with an ST-5C
MURAKAMI, Masami 村上 昌己 (Mk) 藤澤 Fujisawa, Kanagawa, Japan
17 Drawings (19, 20 March; 1, 4, 6, 11, 13, 15 April 2001) 320, 425×20cm speculum
NAKAJIMA, Takashi 中 島 孝 (Nj) 福井 Fukui, Japan
35 Drawings (19, 24 March; 1, 3, 4, 5, 13, 15 April 2001) 375, 400×20cm refractor*
NARITA, Hiroshi 成 田 廣 (Ne) 川崎 Kawasaki, Kanagawa, Japan
10 Drawings (11, 14, 20 March; 2, 5, 6, 12, 14, 15 April 2001) 400×20cm refractor
PARKER, Donald C ドナルド・パーカー (DPk) 佛羅里達 Miami, FL, USA
14 Sets of CCD Images (24, 26 March; 3, 5, 6 10, 15 April 2001)
2955

Report #06 in 2001 treated the period from 16 Mar (λ=131°Ls) to 15 Apr (λ=146°Ls) where the angular diameter increased from δ=8.8" to δ=12.0". The number of the observers increased to 16 and a total of 270 observations were obtained. H TSUNEMACHI (*Ts*) and W.-L. TAN (*WTn*) joined. Y MORITA (*Mo*) however suffered from an earthquake and could not observe until mid-April.

From Japan it was observed that the sph is active and not uniform inside. Don PARKER (*DPk*) took some bright area adjacent to Ausonia. In April because of Hellespontus the spc is separated from Hellas. Hellas was not weak in whiteness: In R it shows a detail of the inside. The white cloud activity of Tharsis Montes and Olympus Mons was observed. Evening Libya cloud and Chryse-Xanthe mist were also interesting and the mist along the equatorial band was also checked though weak. The morning Tempe was cloudy, and the npc was caught.

FORTHCOMING 2001 MARS (10) described "The sub-Earth point=sub-Solar point". As to the *S&T* news and *DPk*'s LtE see respectively
http://www.hida.kyoto-u.ac.jp/~cmo/cmo/coming2001/0110/10.html
http://www.hida.kyoto-u.ac.jp/~cmo/cmomn0/DPk241.htm

As a new member of the CMO Editors, *Ts* joined from this month (as announced in #241), and she wrote an essay which is concerned with the Chinese constellations.

LtE includes those from *Mo*, ISHADOH, T MATSUMOTO, HIGA, NARITA, AKUTSU and T IWASAKI domestically and from abroad we received from OGER, BIVER, *DPk*, CAVE, HERNANDEZ, BEISH, W.-Leong TAN, MELILLO, PEACH, WHITBY and others.

TYA (68) treated CMO#104 (25 April 1991) where the season was around λ=040°Ls and angular diameter was δ=6". ***(Mk & Mn)***

C_M_O Fu_Ku_I — **T NAKAJIMA (*Nj*)**

★We wish to thank sincerely Tatsujiro MATSUMOTO (447) and Takeshi (Ken) SATO (448) for their generous donations to the CMO/ISMO.

International Society of the Mars Observers (ISMO)

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CMO #384/ ISMO #10 (25 April 2011)

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