

MARS

No. 417

25 December 2013

No. 43

Published by the International Society of the Mars Observers

Localism or Universalism?

By

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0° At the times when Tycho BRAHE (1546~1601) or his sister Sophia BRAHE (1556~1643) lived, it must have been happy for any astronomer to be active confined in such an observatory, called Uraniborg or Stjerneborg on an island like the island of Hven, but such an isolated life is not necessarily comfortable for modern astronomy observers, for example, for those who would like to observe globally the planet Mars. In Tycho's case, if there occurred some disagreements with the sponsor, he could find another sponsor (in Plague) and there he was still an imperial astronomer with the observatory (at Benátky nad Jizerou). It was fortunate in the case of Tycho that Johannes KEPLER (1571~1630) was near him. KEPLER found a way to make Tycho's data to be usable for another important case.

In the case of the research of the surface of the planet Mars, there is a decisive problem that the rotation period of Mars is not so different than the case of the Earth from which we observe. This simply implies that we need a world-wide distribution of the

observatories or a flexible unison of lots of widely spread observatories.

1° For example, the Lick Observatory was the station where E E BARNARD (1857~1923) observed Mars before he moved to another sponsor of Yeakes Observatory in 1895, and even now in Lick there are kept BARNARD's documents of Mars observations e.g. in 1894 which he produced when he stayed in Lick. However, his observations must have looked very isolated, and it is difficult to see how these played any role in encouraging the observational world of Mars at the times (and at present).

On the other hand, the present writer underwent an impressive experience when he stayed at the Lick Observatory in October 2005, coordinated by Bill SHEEHAN. On 18 October 2005, the present writer (*Mn*) (also Masami MURAKAMI (*Mk*) in Japan) received a nice email from Silvia KOWOLLIK (*SKw*) in Germany in which she reported that a dust core was visible at the morning side of the planet. Time was 01:55 GMT (18:55 PDT,

10:55 JST). It must have been at midnight in Germany, while at California, it was still bright, and so we could not catch Mars yet at Lick. However it was certain that Mars with a dust could be caught within a few hours at the west coast. Unfortunately it must have been impossible to watch the dust from Japan, while the present writer asked *Mk* in Yokohama to send out an alert to all of the members around the world by the use of the big CMO address list. In the course of time, we began to receive some observation reports from inside the US. This implied Mars could come to us soon, and hence the present writer (*Mn*) entered the big dome at 22h PDT (05h GMT), and started the first observation from 05:30 GMT by the Grand Refractor. Yes, the dust was very apparent, and looked visually to show a whitish-yellow tinge and roundish. This was just after Silvia (*SKw*) was forced to stop at 05:04 GMT (perhaps, in Germany the planet was low in the western sky). This implied *Mn* at Lick took over her observations in Germany. Inside the dome while watching, it was impossible to read emails, but after the end of the last observation at 08:50 GMT, we were aware that Don PARKER (*DPk*) at FL, Ed GRAFTON (*EGf*), Bill FLANAGAN (*WFl*) both at TX had obtained images at 04:25~04:32 GMT, 06:42 GMT, 06:45 GMT respectively and had emailed to us. The person who first communicated to us in the US was Joel WARREN (*JWn*) at Amarillo, TX, whose first observation was made at 04:20 GMT. Later we were informed it was Sean WALKER (*SWk*) in NY who took the first set of Mars images in the American continent. Anyway this proved to be a long and nice chasing of the Martian

dust cloud, and maybe it provided an unprecedented set of observations.

It should be remembered that at that time it was generally believed that the dust would develop largely at the daytime, though we continued to insist that the dust must be stable during the daytime. Hence this was a very nice opportunity to check the case, and so every twenty minutes ccd observations (every 5°) or every 40 minutes (every 10°) visual observations were expected. On this point Silvia KOWOLLIK (*SKw*) knew the method and did good work. As to a full detailed report, see Note 7 (Miracles occurred on 18 October 2005) in CMO #324 (25 Oct 2006).

We are of the opinion that the occurrence of the dust must be caused at the early morning or at dawn, and hence it is very important to check the aspect of the dust at the morning side. Some observers in England took some images of Mars on 18 Oct maybe at midnight but there were few who chased the aftermath of the entrainment of the dust.

2° At this place we are not concerned with such reproofs, but would like to consider the situation from a wider civilisation point of view.

When the present writer was waiting the rise of Mars on Mt Hamilton after the alert of Silvia, he deeply felt how wide and large was the American continent. To move from the east coast to the west coast, the heavenly body takes three hours. In fact the beginning of the observation at Lick on 18 October was delayed by two and a half hours from the first case of Sean WALKER (*SWk*) at NY. This may imply that if an observer in

NY is united with another in CA, they will gain more pieces of information obtainable as if each of them is endowed with more three hours: That is, they can see the heavenly body for nearly 14 hours if the low sky unstable condition is ignored.

Furthermore, if the European observers are united with the observers on the New World, much more continuous observations may be possible. In this case, the presence of the Atlantic Ocean is negligible. In the case of 18 October 2005, the sixth observation of *SKw* was made at 04:24 GMT, while Don PARKER (*DPk*) at Miami produced a set of images at 04:25 GMT, the fact proving that the Atlantic Ocean played no obstruction. As shown above, even Ludwigsburg, Germany could be relayed smoothly to Mt Hamilton, California of the US, if we employ every 20 minutes or 40 minutes observation method. Since the possible observation of the dust at England was assumed first around at 00:00 GMT or before, the united continual effective observations at Europe and the US would be assured for more than 10 hours.

3° Europe aside, it will not be difficult for the US observers to unite together to observe continuously or chase any celestial body within the USA.

While the USA has been a large agricultural country, it showed from the outset a tendency of urbanised society: Every state has its own laws, and rather has enjoyed independency. The states engaged in mutual trade, and developed with good reciprocal relations. Remarkable is the fact the first language all over the large country was *English*.

The USA has been free from the inter-

nal war since the end of the Civil War (1861~1865). Therefore we can consider that after the War, the US has continued to greatly prosper. The American Civil War broke out soon after the era where there lived such a German economist as Johann Heinrich von THÜNEN (1783~1850) who was a landowner and treated the problem of the agricultural lands and the urbanisation using an idea of isolated states (*der isolierte Staat*). So this stream may be related with the further urbanisation in the case of the US. Even from the world-wide view point, the urbanisation rapidly progressed in the 19th and 20th Centuries. And as we entered 21st Century, it is said that the population rates of the urban part and the rural part total in the world has become to be parallel.

As easily seen in the figure in http://esa.un.org/unup/Maps/images/l_urban_2011.gif (this figure is due to UN's World Urbanisation Prospects), the distribution of the usual cities in the US continent looks uniformly studded, with two exceptions of the outstandingly big Cities at the east coast and the west coast. The symbol of these particular urban Cities is a gathering of skyscrapers. This is also the symbol of the abandonment of the Localism. Here the agriculture-based societies are no use. No more they look down to the land to be cultivated.

The strength of the distribution also lies in the fact: Even if some part could suffer from a large-scale natural disaster, the other part would surely survive.

We here only pay our attention to the view-point of the continual Mars observation when something happens on the surface to be chased. We should say the US con-

continent has an ideal distribution of observers from the east coast to the west coast. If an organic association could lead, there must have been born a splendid network inside the US continent, maybe from the outset of the 20th Century.

4° We could say the USA or the New World has long been an antithesis of Europe. That is to say, on the side of Europe there must have been several restrictions including the cases where any free urbanisation was restricted. Of course, if we pick out Latin as a universal language, and take account of the wide spread of Catholicism, there would be a possibility or the basis of the universalism in Europe. However truth was that the localism had widely governed. During the medieval period, the city was surrounded by the rampart wall, governed by a self-defence system, and so the city was self-closed and exclusive. It was also possible that the religion also worked against scientific considerations. Perhaps such a city governed by a feudal lord cannot be called city in modern sense. Freedom was not guaranteed.

Speaking of the architectures, any cathedral or duomo seems to have spires which are directed upward. However, for instance, the Duomo di Milano has an overwhelming structure form of the building with a splendid façade, and the spires are not impressive. The Canterbury Cathedral is solemnly impressive and also has towers, but if we look down the Cathedral from the hilly section of the town, it looks duller. The horizontal view from the Royal Hyde Park in London shows us several spires at distances, but they look just peculiar. Just we imagine

that around the churches there may be found some settlements.

We have thus seen that in the case of the modern urbanisation the skyscrapers are symbolised as those to be detached from the localised agricultural-based societies, and governed by the universalism. On the contrary, European system is still localised (looking down) and is far from the universalism (looking upwards).

5° In the western Europe, however, learning a lesson from the furious behaviours of Nazi Germany, there has been aroused a trial of unification of the Western Europe after WWII. After a series of such trials as EEC (European Economic Community) in 1957, EC (European Communities) from 1967 and so on, the EU (European Union) started after the signing in 1992 and the effectuation in 1993 of the Maastricht Treaty. The founding members were Belgium, France, Italy, Luxembourg, the Netherlands, and West Germany. Later the UK, Ireland, Denmark and so on joined. In 2013, a total of 28 countries (28 sovereign member states) joined including those from the Eastern Europe. The languages used are 23 or more.

However, there are still unsolved problems: For example the Economic and Monetary Union (EMU) does not completely work, and there is also a problem of the "Euroscepticism": The treaty establishing a Constitution for Europe was signed in Rome in 2004, while there was pointed out that there smells a sense of the urtranationalism, and the referendum in France as well as in the Netherlands rejected the ratification. Perhaps it is still difficult to expel the traditional

localism of the Old World even in the modern times.

At present, the depth of EU's Cultural policies is unknown to us except for some Civis media relations or more concretely the EU Youth Orchestra and so on. It is unknown whether the European Planetary Science Congress (EPSC) is helped by the EU or not.

6° On the other hand, we should note that the US itself has been gradually declined to admit the Localism. After the Great Economic Depression in 1929 which originated in the US, Franklin D ROOSEVELT (1882~1945) was elected in 1933 as the 32nd President of the US and launched the famous New Deal. This implied that the classical economic liberalism was restricted, and the government conducted the market interventions. This turned round the flagging economy, but at the same time this policy implied that, similar to the Bloc Economies taken by England and France, a regionalism was employed showing a localised tendency of economic enclosure.

Furthermore, due to some American behaviour after participating in WWII in Europe, a feeling of distrust could have been developed in Europe and, depending on the situation, it was believed that the US was capable of not fighting with Nazi Germany but with Europeans. In fact, it was said the US Air Force made sometimes the friendly bombings at the French district.

Otherwise, it is widely known that several big companies or corporations, just like such auto manufacturers as GM and Ford, were said to be secretly on the side of Nazi Germany. Standard Oil and DuPont were as

well notorious. There was a deep relation of these US combines with the IG Farben of Nazi Germany. IG Farben* was a famous Deutsch chemical industry conglomerate having a hundred thousand workers, and this conglomerate met almost all military demands in Das dritte Reich. The patent of the Zyklon B which was used at extermination camps was owned by IG Farben. Any bombardment aircraft needed the tetraethyl lead, but its right to use was owned by Standard Oil. This however sent to the Deutsch Luftwaffe through IG Farben. Furthermore, it was revealed by a Royal Secret Intelligence that huge amount of American oil used to be sent every month to Nazi Germany (maybe through a Francisco FRANCO's Spanish agency).

Just after the War, when the western Allies advanced into Frankfurt am Main, they were surprised to find the big and wide IG Farben Building remained intact, in spite of the fact Frankfurt was seriously bombed in WWII: It is said about 5,500 residents were killed during the raids, and the city centre was almost completely destroyed. Why?

*There is an episode about Carl BOSCH (1874~1940) who was the first head of the IG Farben which was built in 1925. However he belonged to the Jews, and was against to HITLER's policies. He was a Nobel laureate in chemistry in 1931. From 1935 he was "chairman of the board of directors of the IG Farben." After HITLER became chancellor, he looked to fall into "despair and alcoholism." He died in 1940 before HITLER's defeat. BOSCH had been known as an amateur astronomer. He collected meteorites "which were loaned to Yale University, and eventually purchased by the Smithsonian." He had a "well-equipped private observatory". Later "the asteroid 7414 Bosch was named in his honour".

□

2013/2014 Mars Observations in November 2013

♂..... This is the third Report in this apparition and here we shall pick out the Mars Observations of the ISMO members performed in November 2013. The appearance of the planet in the sky became just after midnight, and it could be observed near at the meridian at the time of Sunrise. The planet's location moved to the inside of the constellation of Vir from Leo, and the apparent declination went down to 03°N at the end of the period. The Martian season proceeded from $\lambda=043^\circ\text{Ls}$ to 057°Ls , and it was expected that the effect of the water immigration from the north polar region might be checked. The angular diameter went up from $\delta=4.9''$ to $5.6''$, the phase angle varied from $\iota=31^\circ$ to 35° , and the defect of illumination increased at the evening side. The tilt was $\phi=24^\circ\text{N}$ to 25°N , and hence the area of the north polar cap (npc) provided a good view.

♂..... The observers who contributed this period were as follows:

AKUTSU, Tomio (Ak) Cebu, the Philippines

2 Sets of *RGB* + 2 *IR* Image (17, 30 November 2013) 36cm SCT @f/24 with a DMK21AU618AS

GHOMIZADEH, Sadegh (SGh) Roudehen, Iran

1 *Colour* Image (27 November 2013) (28cm SCT with a DMK21AU04.AS)

GORCZYNSKI, Peter (PGc) Oxford, CT, the USA

3 Sets of *RGB* + 3 *IR* Images (15, 21, 30 November 2013) 36cm SCT with an ASI 120MM

MELILLO, Frank J (FMI) Holtsville, NY, the USA

1 *Colour* Image (30 November 2013) 25cm SCT with a ToUcam Pro II

MORALES RIVERA, Efrain (EMr) Aguadilla, Puerto Rico

1 Set of *LRGB* Images (21 November 2013) 31cm SCT with a Flea3

MORITA, Yukio (Mo) Hatsuka-ichi, Hiroshima, Japan

5 Sets of *RGB* + 5 *LRGB Colour* + 5 *L* Images (4, 5, 7, 21, 22 Nov 2013) 36cm SCT with a Flea3

PARKER, Donald C (DPk) Miami, FL, the USA

2 Set of *RGB* + 1 *IR* Images (8, 18 November 2013) 41cm Spec @f/26 with an ASI 120MM

♂..... Yukio MORITA (*Mo*) obtained images on 4 Nov ($\lambda=045^\circ\text{Ls}$) at $\omega=023^\circ\text{W}$, on 5 Nov at $\omega=013^\circ\text{W}$, on 7 Nov ($\lambda=046^\circ\text{Ls}$) at $\omega=355^\circ\text{W}$, and on 21 Nov ($\lambda=053^\circ\text{Ls}$) at $\omega=213^\circ\text{W}$, on 22 Nov ($\lambda=053^\circ\text{Ls}$) at $\omega=206^\circ\text{W}$. The first three observations show a large M Acidalium. Among the images, the set of images on 7 Nov ($\lambda=046^\circ\text{Ls}$) at $\omega=355^\circ\text{W}$ proves the best: The Oxus canal clearly streams down from the eastern end of Niliacus L, and the eastern border of M Acidalium is well described. S Sabæus is shot dark in a familiar shape, and well separated from Margaritifer S. The southern limb area is duller in R. In B, no marking is shot except for the npc. Other two show the surfaces with a light Elysium. The Ætheria dark patch is clearly seen, and the Utopia area is dark and wide adjacent to the bright npc.

Don PARKER (*DPk*) produced images on 8 Nov ($\lambda=047^\circ\text{Ls}$) at $\omega=204^\circ\text{W}$ and on 18 Nov ($\lambda=051^\circ\text{Ls}$) at $\omega=092^\circ\text{W}$. The former set at $\omega=204^\circ\text{W}$ shows Elysium to be very bright, but invisible in B. The Ætheria dark patch is quite evident. The latter image set at $\omega=092^\circ\text{W}$ shows an evening mist in Chryse (also in B) which is extending to the north of Tithonius L which is clearly shown. Solis L is well dark. At the northern part of Tempe, there is a ground lit band and its western tail may be a bit misted. The southern limb is not particularly light.

Peter GORCZYNSKI (*PGc*) obtained three sets within November: The first one was made on 15 Nov ($\lambda=050^\circ\text{Ls}$) at $\omega=135^\circ\text{W}$ where the dark fringe of the npc is partly concealed by a misty matter which originates in the npc. It is apparent also in B. It's delicate but there seems for a set of small whitish spots to exist near in the CM at lower latitudes. We should say we need another image at a different time. The second set of images on 21 Nov ($\lambda=052^\circ\text{Ls}$) at $\omega=069^\circ\text{W}$ proves to be good, and Solis L is an isolated roundish dark patch. Tithonius L is quite detailed especially in R for $\delta=5.4''$. The evening mist from Chryse reaches the north of Tithonius L. In R and IR, there seems for a dark segment to exist starting from the npc, but maybe possibly a ghost. This must be checked when a bit larger angular diameter is gained. The last set on 30 Nov ($\lambda=056^\circ\text{Ls}$) at $\omega=351^\circ\text{W}$ is comparable with *Mo's* image on 7 Nov ($\lambda=046^\circ\text{Ls}$) at $\omega=355^\circ\text{W}$. S Meridiani in RGB is just about to appear in a shape of two nails. S Margaritifer is also excellently shot, maybe with Oxia Palus. Its west is light. The description of the non-uniform aspect of Oxus is also good. The light and shade of M Acidalium is definitely given. There looks to exist a dust at the EN end of M Acidalium. Some ghosts at the northern western limb should be eliminated.

Tomio AKUTSU (*Ak*) took two image sets on 17 Nov ($\lambda=051^\circ\text{Ls}$) at $\omega=258^\circ\text{W}$, and on 30 Nov ($\lambda=057^\circ\text{Ls}$) at $\omega=138^\circ\text{W}$. The former set shows Syrtis Mj on the morning side, and Hesperia is clear in the evening. In R, the western part of Utopia is nicely shown. The Ætheria dark patch and Nodus Alcyonius are clearly produced. It looks there is no disturbance. On the latter image set, M Sirenum is seen dark near the southern morning limb. An evening mist comes up to the CM. At the centre, several small whitish dots look to exist. Propontis I seems to be apparent. The npc is definite with a broad dark fringe. This image can be compared with *PGc's* images on 15 Nov ($\lambda=050^\circ\text{Ls}$) at $\omega=135^\circ\text{W}$, and the blowing up of white mist from the npc has been cleared.

Efrain MORALES (*EMr*) gave a set of images on 21 Nov ($\lambda=052^\circ\text{Ls}$) at $\omega=056^\circ\text{W}$: M Acidalium is dark and large in the evening, and the area of Solis L is dusky, but the images generally dull except for the R image where some structures of Nilokeras and the Solis L area are seen.

Sadegh GHOMIZADEH (*SGh*)'s image is taken on 27 Nov ($\lambda=055^\circ\text{Ls}$) at $\omega=263^\circ\text{W}$, but its ingredients are not shown. It is certain that Syrtis Mj is shot, corresponding to *Ak's* images on 17 Nov ($\lambda=051^\circ\text{Ls}$) at $\omega=258^\circ\text{W}$, but no other necessary information is contained here. The data should be accompanied with the data concerning the apparatus.

Finally Frank MELILLO (*FMI*) gives an image on 30 Nov ($\lambda=056^\circ\text{Ls}$) at $\omega=007^\circ\text{W}$. M Acidalium and the npc are quite apparent. The aspect of the area near the following limb might indicate something, but the image is too small to say something. On the day, *PGc*, *FMI* and *Ak*, gave images from different angles.

Masatsugu MINAMI & Masami MURAKAMI

Forthcoming 13/14 Mars (6)

Ephemeris for the Observations of the 2013/14 Mars. III *January & February 2014*

Akinori NISHITA

AS a sequel to the Ephemeris for the physical observations of Mars in CMO/ISMO #415, we here list up the necessary elements of the Ephemeris for period from 1 January 2014 till 28 February 2014: The data are listed for every day at 00:00 GMT (not

TDT). The symbols 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 (denoted D).

The data here are basically based on *The Astronomical Almanac for the Year 2014*.

	Date (00:00GMT)	ω	ϕ	λ	δ	ι	Π	D
01	January 2014	249.20°W	23.33°N	070.23°Ls	6.86"	36.2°	31.9°	-02°36'
02	January 2014	239.64°W	23.24°N	070.66°Ls	6.91"	36.2°	32.1°	-02°46'
03	January 2014	230.08°W	23.16°N	071.10°Ls	6.96"	36.2°	32.2°	-02°56'
04	January 2014	220.53°W	23.08°N	071.54°Ls	7.02"	36.2°	32.4°	-03°05'
05	January 2014	210.99°W	23.00°N	071.97°Ls	7.07"	36.2°	32.5°	-03°14'
06	January 2014	201.45°W	22.91°N	072.41°Ls	7.13"	36.1°	32.7°	-03°24'
07	January 2014	191.91°W	22.83°N	072.84°Ls	7.18"	36.1°	32.9°	-03°33'
08	January 2014	182.38°W	22.74°N	073.28°Ls	7.24"	36.1°	33.0°	-03°42'
09	January 2014	172.85°W	22.66°N	073.72°Ls	7.29"	36.1°	33.1°	-03°51'
10	January 2014	163.33°W	22.57°N	074.15°Ls	7.35"	36.0°	33.3°	-04°00'
11	January 2014	153.82°W	22.48°N	074.59°Ls	7.40"	36.0°	33.4°	-04°08'
12	January 2014	144.31°W	22.39°N	075.03°Ls	7.46"	36.0°	33.5°	-04°17'
13	January 2014	134.81°W	22.30°N	075.47°Ls	7.53"	36.0°	33.7°	-04°25'
14	January 2014	125.31°W	22.21°N	075.90°Ls	7.59"	35.9°	33.8°	-04°34'
15	January 2014	115.82°W	22.12°N	076.34°Ls	7.65"	35.9°	33.9°	-04°42'
16	January 2014	106.33°W	22.03°N	076.78°Ls	7.71"	35.8°	34.0°	-04°50'
17	January 2014	096.85°W	21.95°N	077.21°Ls	7.78"	35.8°	34.1°	-04°58'
18	January 2014	087.37°W	21.86°N	077.65°Ls	7.84"	35.7°	34.3°	-05°05'
19	January 2014	077.90°W	21.77°N	078.08°Ls	7.90"	35.6°	34.4°	-05°13'
20	January 2014	068.44°W	21.68°N	078.52°Ls	7.97"	35.5°	34.5°	-05°20'
21	January 2014	058.98°W	21.60°N	078.96°Ls	8.04"	35.5°	34.6°	-05°28'
22	January 2014	049.53°W	21.51°N	079.39°Ls	8.11"	35.4°	34.7°	-05°35'
23	January 2014	040.09°W	21.42°N	079.83°Ls	8.18"	35.3°	34.8°	-05°42'
24	January 2014	030.65°W	21.33°N	080.27°Ls	8.25"	35.2°	34.9°	-05°49'
25	January 2014	021.22°W	21.25°N	080.71°Ls	8.33"	35.1°	35.0°	-05°56'
26	January 2014	011.80°W	21.16°N	081.14°Ls	8.40"	34.9°	35.0°	-06°02'
27	January 2014	002.38°W	21.07°N	081.58°Ls	8.47"	34.8°	35.1°	-06°09'
28	January 2014	352.97°W	20.99°N	082.02°Ls	8.55"	34.7°	35.2°	-06°15'
29	January 2014	343.57°W	20.91°N	082.46°Ls	8.63"	34.6°	35.3°	-06°21'
30	January 2014	334.18°W	20.82°N	082.90°Ls	8.70"	34.4°	35.4°	-06°27'
31	January 2014	324.79°W	20.74°N	083.34°Ls	8.78"	34.3°	35.5°	-06°33'
01	February 2014	315.41°W	20.66°N	083.78°Ls	8.86"	34.1°	35.5°	-06°38'
02	February 2014	306.04°W	20.59°N	084.22°Ls	8.95"	34.0°	35.6°	-06°44'
03	February 2014	296.68°W	20.51°N	084.65°Ls	9.03"	33.8°	35.7°	-06°49'
04	February 2014	287.32°W	20.43°N	085.09°Ls	9.11"	33.6°	35.7°	-06°54'
05	February 2014	277.97°W	20.36°N	085.53°Ls	9.20"	33.4°	35.8°	-06°59'
06	February 2014	268.63°W	20.29°N	085.97°Ls	9.29"	33.2°	35.8°	-07°04'
07	February 2014	259.30°W	20.21°N	086.41°Ls	9.37"	33.0°	35.9°	-07°08'
08	February 2014	249.98°W	20.14°N	086.85°Ls	9.46"	32.8°	35.9°	-07°13'
09	February 2014	240.67°W	20.08°N	087.29°Ls	9.55"	32.6°	36.0°	-07°17'
10	February 2014	231.36°W	20.01°N	087.73°Ls	9.64"	32.4°	36.0°	-07°21'
11	February 2014	222.07°W	19.95°N	088.17°Ls	9.73"	32.1°	36.1°	-07°25'
12	February 2014	212.78°W	19.88°N	088.61°Ls	9.82"	31.9°	36.1°	-07°28'
13	February 2014	203.51°W	19.83°N	089.05°Ls	9.92"	31.6°	36.2°	-07°32'
14	February 2014	194.24°W	19.77°N	089.49°Ls	10.02"	31.4°	36.2°	-07°35'
15	February 2014	184.98°W	19.72°N	089.93°Ls	10.11"	31.1°	36.2°	-07°38'

Date (00:00GMT)	ω	ϕ	λ	δ	ι	Π	D
16 February 2014	175.73°W	19.66°N	090.37°Ls	10.21"	30.8°	36.3°	-07°41'
17 February 2014	166.49°W	19.62°N	090.81°Ls	10.31"	30.5°	36.3°	-07°43'
18 February 2014	157.27°W	19.57°N	091.26°Ls	10.41"	30.2°	36.3°	-07°46'
19 February 2014	148.05°W	19.53°N	091.70°Ls	10.51"	29.9°	36.3°	-07°48'
20 February 2014	138.84°W	19.48°N	092.14°Ls	10.61"	29.6°	36.4°	-07°50'
21 February 2014	129.65°W	19.45°N	092.58°Ls	10.72"	29.3°	36.4°	-07°52'
22 February 2014	120.46°W	19.42°N	093.03°Ls	10.83"	28.9°	36.4°	-07°53'
23 February 2014	111.28°W	19.38°N	093.47°Ls	10.93"	28.6°	36.4°	-07°55'
24 February 2014	102.12°W	19.35°N	093.91°Ls	11.04"	28.2°	36.4°	-07°56'
25 February 2014	092.97°W	19.33°N	094.36°Ls	11.15"	27.8°	36.5°	-07°56'
26 February 2014	083.83°W	19.31°N	094.80°Ls	11.26"	27.4°	36.5°	-07°57'
27 February 2014	074.70°W	19.29°N	095.25°Ls	11.36"	27.0°	36.5°	-07°58'
28 February 2014	065.58°W	19.27°N	095.69°Ls	11.47"	26.6°	36.5°	-07°58'
01 March 2014	056.48°W	19.27°N	096.14°Ls	11.58"	26.2°	36.5°	-07°58' ---

Letters to the Editor

●.....*Subject: Mars images on 27, 28, 29 Oct 2013*
Received: 04 November 2013 at 16:13 JST

Dear Masatsugu and Masami, Attached please find my Mars images on 27, 28, 29 October 2013.

<http://www.kwasan.kyoto-u.ac.jp/~cmo/cmons/2013/131027/Mo27Oct13.jpg>
<http://www.kwasan.kyoto-u.ac.jp/~cmo/cmons/2013/131028/Mo28Oct13.jpg>
<http://www.kwasan.kyoto-u.ac.jp/~cmo/cmons/2013/131029/Mo29Oct13.jpg>

I also send an old image taken on 27 Apr 1999 at $\omega=336^\circ\text{W}$, as you requested. With best wishes.

○.....*Subject: Mars images 30, 31 October 2013*
Received: 10 November 2013 at 23:00 JST

Attached here also the images taken on 30 and 31 October.

<http://www.kwasan.kyoto-u.ac.jp/~cmo/cmons/2013/131030/Mo30Oct13.jpg>
<http://www.kwasan.kyoto-u.ac.jp/~cmo/cmons/2013/131031/Mo31Oct13.jpg>

I also collected here the images on 25~29 April 1999 for your use. They were focused on the Fuji negative colour of ASA 100. I used then a PL 7.5mm ocular.

○.....*Subject: Mars images 4, 5, 7 November 2013*
Received: 19 November 2013 at 01:53 JST

Here are Mars images on 4, 5, and 7 November.

<http://www.kwasan.kyoto-u.ac.jp/~cmo/cmons/2013/131104/Mo04Nov13.jpg>
<http://www.kwasan.kyoto-u.ac.jp/~cmo/cmons/2013/131105/Mo05Nov13.jpg>
<http://www.kwasan.kyoto-u.ac.jp/~cmo/cmons/2013/131107/Mo07Nov13.jpg>

Now the weather turned to be dismal under the winter-type pressure-configurations. Seeing is un-

stable if we had a lull. Thank you.

Yukio MORITA (Hiroshima, JAPAN)

●.....*Subject: Images of Mars on 27 Oct 2013*
Received: 05 November 2013 at 14:48 JST

Hi, Please see attachment for your fine database. All of the required data is annotated on the picture. Sincerely,

<http://www.kwasan.kyoto-u.ac.jp/~cmo/cmons/2013/131027/JMI27Oct13.jpg>

Jim MELKA (MO, the USA)

●.....*Subject: Mars image - Nov. 15, 2013*
Received: 18 November 2013 at 10:11 JST

Gentlemen, This was an interesting imaging session. The sky was covered in a nearly homogenous layer of thin clouds. For each color capture, I had to constantly re-adjust gain on the fly. I tried to maintain the gain for a 60% to 70% histogram, making sure never to come close to saturation. Turns out that the seeing was pretty good, but not great.

Olympus Mons is clearly visible now! Regards,

<http://www.kwasan.kyoto-u.ac.jp/~cmo/cmons/2013/131115/PGc15Nov13.jpg>

○.....*Subject: Mars image - November 21, 2013*
Received: 28 November 2013 at 13:38 JST

Gentlemen, Attached is an image from November 21. Seeing was about average. Transparency was variable through thin passing clouds. Regards,

<http://www.kwasan.kyoto-u.ac.jp/~cmo/cmons/2013/131121/PGc21Nov13.jpg>

Peter GORCZYNSKI (CT, the USA)

●.....*Subject: Mars 8 November*
Received: 18 November 2013 at 11:19 JST

Hi All, I have attached belated RGB and NIR Mars images from 8 November. Best,

<http://www.kwasan.kyoto-u.ac.jp/~cmo/cmoms/2013/131108/DPk08Nov13.jpg>

○.....*Subject: Mars 18 November*
Received: 21 November 2013 at 07:11 JST

Hi All, I have attached RGB Mars images from 18 November. Numerous clouds over W. Chryse, Ophir-Candor and Tharsis. Best,

<http://www.kwasan.kyoto-u.ac.jp/~cmo/cmoms/2013/131118/DPk18Nov13.jpg>

Donald C PARKER (Coral Gables, FL)

●.....*Subject: Mars Ak17Nov13 & Comet ISON*
Received: 19 November 2013 at 01:48 JST

The Typhoon passing, the sky turned better. Here a set of Mars images Ak17Nov13. As well a photo of Comet ISON (C/2012 S1):

<http://www.kwasan.kyoto-u.ac.jp/~cmo/cmoms/2013/131117/Ak17Nov13.jpg>

Tomio AKUTSU (Cebu, the PHILIPPINES)

●.....*Subject: Mars - November 21st*
Received: 24 November 2013 at 12:54 JST

Hi Mr. Minami, Here is my latest session from November 21st under average conditions.

<http://www.kwasan.kyoto-u.ac.jp/~cmo/cmoms/2013/131121/EMr21Nov13.jpg>

Efrain MORALES (Peruto Rico)

●.....*Subject: mars 27 november*
Received: 28 November 2013 at 11:01 JST

Hi, After strong rain with bad condition in the cool morning I took one image from Mars .

Regards

<http://www.kwasan.kyoto-u.ac.jp/~cmo/cmoms/2013/131127/SGh27Nov13.jpg>

Sadegh GHOMIZADEH (Roudehen, IRAN)

●.....*Subject: A Happy (Martian) Christmas*
Received: 16 December 2013 at 04:57 JST

Dear Mars friends: I send you my best wishes for the Festive Season and for 2014. Attached is a selection of my best drawings of the planet at each opposition from 1995 till 2010. I look forward to receiving any observations you may make of the Red Planet in 2014. There will be a note about the opposition in the 2014 February number of the BAA Journal, and this will be posted at the BAA Mars Section website in due course. Yours Ever

Richard McKIM (Director, the BAA Mars Section)

(Note) We shall cite the plate of his drawings on another occasion.

☆☆☆

TEN YEARS AGO (224)

----- **CMO #284 (10 December 2003),**
CMO#285 (25 December 2003)

-----<http://www.kwasan.kyoto-u.ac.jp/~cmo/cmomn2/cmo284/index.htm>
<http://www.kwasan.kyoto-u.ac.jp/~cmo/cmomn2/cmo285/index.htm>

WE here as before summarise the two issues of CMO #284 and CMO #285 both were assumed to be published in December 2003.

In CMO #284, "2003 Great Mars CMO Report (19)" treated the CMO observations made in the period of the latter half of November 2003. The Martian season proceeded from $\lambda=299^\circ\text{Ls}$ to 308°Ls , the season corresponded to the entrained season of the 1973 great dust storm. The angular diameter decreased from $\delta=12.8''$ to $11.2''$. The tilt was $\varphi=25^\circ\text{S}$ to 26°S with a seeing of the smallest spc. The phase angle was big at $\iota=41^\circ$ to 42° with a large defect illumination at the morning side.

The observations were sent from 22 observers with 135 observations: Eight Japanese observers joined with 95 observations, five American observers with 20 observations, seven European observers with 14 observations and two Oceanic observers with 6 observations.

In Report, several subparagraphs were given with subtitles: "Morning mist near Solis L" includes five ccd B images made by AKUTSU and MORITA around $\omega=070^\circ\text{W}$ on 18 Nov to 23 Nov. "Whitish bright spots observed by SIEGEL" described about the phenomena observed by Elisabeth (*ESg*) on 19 Nov ($\lambda=301^\circ\text{Ls}$) at $\omega=183^\circ\text{W}$ and another on 28 Nov ($\lambda=306^\circ\text{Ls}$) at $\omega=075^\circ\text{W}$ by the use of Wr47. Click her LtE for her narrative description. The former one was at Elysium. It was cautioned so "we should so plan to give the high frequent observations about the morning clouds and mists after opposition." In the "NPH" corner, for example, "PARKER (*DPk*)'s images on 22 Nov ($\lambda=303^\circ\text{Ls}$) at $\omega=250^\circ\text{W}\sim 261^\circ\text{W}$ show that the *nph* extended to half of the *Ætheria* dark patch". "The mist which flows over to Chryse from the *nph* is well shown on the images by *Mo* on 24 Nov ($\lambda=305^\circ\text{Ls}$) at $\omega=013^\circ\text{W}$, 019°W ." "spc": "images made by *DPk* around 18 Nov ($\lambda=301^\circ\text{Ls}$) seem to show some diffusions outside the perimeter of the remnant spc," and it is noted that "the Viking image of the spc at $\lambda=297^\circ\text{Ls}$ still showed a diffused something from the residual spc towards $\Omega=000^\circ\text{W}$." Several markings on the southern hemisphere showed a wine-colour which was seen when the airborne dust decreased. Here it was pointed that "*DPk*'s images on 22 Nov ($\lambda=302^\circ\text{Ls}$) at $\omega=250^\circ\text{W}$, 253°W , 256°W " prove that "typical colouring of M Chronium and Tiphys Fr." And then, the subparagraphs "Details of Ausonia-Hellas shown by Don PARKER", "WARELL's Observations of the Evening Hellas" and "FRASSATI's Observation of Protrusion on 17 November" follow. See the details in

<http://www.kwasan.kyoto-u.ac.jp/~cmo/cmomn2/284OAA/index.htm>

In the LtE corner of CMO #284, emails received during the period from 25 November until 9 December 2003 are cited. From abroad, a total of 13 members sent to us: Ed GRAFTON (TX, the USA), Joseph LAUFER (Germany), Frank MELILLO (NY, the USA), Don PARKER (FL, the USA), Christophe PELLIER (France), Agustin SANCHEZ LAVEGA (Spain), Bill SHEEHAN (MN, the USA), Elisabeth SIEGEL (Denmark), Maurice VALIMBERTI (Australia), †Erwin Van der VELDEN (Australia), Johan WARELL (LPL, AZ, the USA), Ferruccio ZANOTTI (Italy). Domestically we received from the following 6 members: T AKUTSU (Tochigi), T ASADA (Fukuoka), T IWASAKI (KitaKyushu), T KUMAMORI (Osaka), Y MORITA (Hiroshima), K OSA (Ishikawa).

The corner of TYA (100) in this issue was written by MINAMI (*Mn*) in Japanese concerning CMO #140 (25 Dec 1993), now twenty years ago. It will be rewritten in English in the next issue. The 13th 1992/93 CMO Note (13) treated the MORITA phenomenon at Elysium which was observed on 12 February ($\lambda=039^\circ\text{Ls}$) and here several other observations and succeeding observations in France were picked out. It was stressed that much attention should be paid to the disturbances in the northern hemisphere, especially around the *npc*. Really the MGS observed a dust disturbance near the *npc* at $\lambda=039^\circ\text{Ls}$. The column of the CMO Fukui announced that the OAA general convention would be held at Fukui next August in 1994.

Next, in CMO #285, described were the observations in the first half of December 2003 as "2003 Great Mars CMO Report (20)". The season proceeded from $\lambda=308^\circ\text{Ls}$

to 317°Ls, and the angular diameter decreased from $\delta=11.1''$ to 9.7". The tilt was around $\varphi=26^\circ\text{S}$, and was maximal on 15 December with 26.42°S, showing largely the southern hemisphere. The phase angle ι was maximal around 42°.

Observers were 20 members with 89 observations. From Japan 6 members sent 52 observations. From the US, we received 10 observations made by 4 observers, from Europe we did 24 observations made by 9 observers, and one Oceanic observer sent us 3 observations. On 13 Dec ($\lambda=315^\circ\text{Ls}$), Don PARKER (*DPk*) discovered a dust cloud which covered Chryse to Eos, and half of Aurorae S extending to the northern part of Argyre. CMO sent out an alert, and the observations in Europe a bit increased. At the end of the period, the area came into sight from Japan also.

The 20th Report also picked out several items in paragraphs: "The minimal spc" described *DPk*'s R light observations of the spc on 5 Dec ($\lambda=311^\circ\text{Ls}$) at $\omega=111^\circ\text{W}$, 117°W, where a tiny spc was clearly shot: It must have been the residual spc. The paragraph "IR Images before Sunset" was concerned with Tomio AKUTSU (*Ak*)'s IR observations in the daytime "on 8 Dec ($\lambda=312^\circ\text{Ls}$) an IR image at before 3 o'clock PM (more exactly at 14:30 JST ($\omega=178^\circ\text{W}$) and several before Sunset." On 13 Dec, *Ak* started further earlier from 13:55 JST. It was also visually observed around from 16h JST. Then came a detailed description about "*DPk*'s Detection of a Significant Dust Storm on 13 December ($\lambda=315^\circ\text{Ls}$)" Here involved were the observations of *Ak*, and Teruaki KUMAMORI (*Km*) in Japan. The report describes that "*DPk*'s email arrived at 16:31 JST. Since MURAKAMI (*Mk*) of cmo@ was not at home, the present writer (*Mn*) sent out CMO Notice #07 informing *DPk*'s dust event by the use of the CMO mailing list (maybe bigger than *DPk*'s) at 18:38 JST. At around 20hrs JST, *Mk* returned home and he readily uploaded *DPk*'s images on the CMO-Gallery and put an alert on the CMO Façade Window (Director's Notes). For the time, the observations should have been done at the US, but the dust was seen already on the afternoon side there: We were anxious about the observations made in Europe." On the following 14 December, *DPk* also made another image at $\omega=044^\circ\text{W}$ (00:19 GMT), and Brian COLLVILLE (*BCl*) in Canada at $\omega=047^\circ\text{W}$ (00:30 GMT):

"The dust looked largely expanded or stayed at higher altitude, and showed several new dust cores at Eos, Capri Cornu, and also at the west of Argyre." "On the day *Ak* succeeded in catching the west end of the dust at $\omega=111^\circ\text{W}$ (4:56 GMT=13:56 JST) in IR, and KUMAMORI (*Km*) also caught it at $\omega=118^\circ\text{W}$ (5:23GMT=14:23JST) by the use of R-640. The western end of the dust was near the centre of Solis L, and the southward end reached the west of Aonius S making a bright core. *Ak* was eventually able to compose an RGB image at $\omega=145^\circ\text{W}$ (7:15 GMT = 16:15 JST), where the core was light also in B. *Ak* also visually checked it at around 15:30 JST (around $\omega=130^\circ\text{W}$). *Km* also made a colour image at $\omega=152^\circ\text{W}$ (7:45 GMT) where the dust was still evident. *Km* chased until $\omega=167^\circ\text{W}$: still a trace was seen."

"On the evening, *Ak* readily processed, and sent the images to us at 20:06 JST: So we emailed out his result to the world-wide CMO members at 20:52 JST (=11:52 GMT).

DPk's correspondence saying *Congratulations to Tomio!* reached us at 4hrs GMT on 15 Dec." On 14 Dec, Ch PELLIER (CPl) in France produced an image at $\omega=313^\circ\text{W}$ (18:42 GMT). The dust was still observed on 15 Dec, and there was reported a set of images from Ed GRAFTON (EGf). In Japan, at $\omega=151^\circ\text{W}$ (17:20 JST=8:20 GMT) MURAKAMI (Mk) caught the dust which "was clearly seen covering the area of Solis L to the south while the dark markings around Dædalia were visible. He chased thus at $\omega=161^\circ\text{W}$, 171°W , 181°W as the dust was gradually pushed to the rear side." The dust was also imaged by *DPk* on 16 Dec. was already arisen on 12 Dec ($\lambda=314^\circ\text{Ls}$) at the WS part of Chryse, and the report displayed five consecutive swaths which show the presence of the dust. Details are read from the following site where our general view is given about the propagation of the dust.

<http://www.kwasan.kyoto-u.ac.jp/~cmo/cmomn2/285OAA/index.htm>

In LtE which contains the emails we received during the period from 10 December to 24 December 2003. From abroad, we heard from 15 members: Jeff BEISH (FL, the USA), Nicolas BIVER (France), Brian COLVILLE (Canada), Ed GRAFTON, Silvia KOWOLLIK (Germany), Josef LAUFER, Richard McKIM (the UK), Eric NG (吳偉堅, Hon Kong), Don PARKER, Damian PEACH (the UK), Christophe PELLIER, Bill SHEEHAN, Johan WARELL, Sam WHITBY (VA, the USA), and Tom WILLIAMSON (NM, the USA). Domestically we heard from 7 members: T AKUTSU, A HIRAOKA (Tokyo), T IWASAKI, T KUMAMORI, Y MAKINO (Toyama), I MIYAZAKI (Okinawa) and Y MORITA. As Seasons Greetings, we received messages with thanks sent from K C PAU (鮑國全, Hong Kong), Félix MASSÓ MILLEIRO (SPAIN), Barry ADCOCK (Australia), Christophe PELLIER, Mario FRASSATI (Italy), Don PARKER, Brian COLVILLE, Eric ROEL (Mexco), Ferruccio ZANOTTI, Jeff BEISH, and Maurice VALIMBERTI.

In this issue, TYA (100) was rewritten in English by Mn about CMO#140 (25 Dec 1993). <http://www.kwasan.kyoto-u.ac.jp/~cmo/cmomn2/285tya100e.htm>

Masami MURAKAMI (Mk) and Masatsugu MINAMI (Mn)

International Society of the Mars Observers (ISMO)

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CMO #417/ ISMO #43 (25 December 2013)

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