At the end of the 19th century, Parisian professional astronomers used two observatories: the Paris Observatory which was erected in 1672 at the southern extremity of the old city and the Meudon Observatory which was created in 1876, ten kilometers south-west of the center of Paris, using the buildings of an existing palace.

In 1883 Camille Flammarion installed his own observatory at Juvisy, 20 kilometers south of Paris, also on the top of an existing building, with a 24 cm refractor. He was an amateur astronomer, although he also worked at the Paris Observatory from time to time.

In 1887, he founded the Société Astronomique de France (SAF), an association of professional and amateur astronomers for the promotion of astronomical science. It was installed in the Hôtel des Sociétés Savantes (residence of learned societies), in the heart of the Latin Quarter of Paris. A cupola was erected on the top of the building in 1890, housing a 108 mm refractor, and another one in 1900 with a 190 mm refractor.

At the same time, the Sorbonne University underwent complete reconstruction, which was completed in 1901. It had in fact been previously reconstructed between 1626 and 1653, under the supervision of Richelieu, the prime minister of Louis XIII. After Richelieu’s reconstruction, nothing remained of the Sorbonne from the middle ages. After 1901, the only remaining part of Richelieu’s Sorbonne was the church where he had been buried. Also, the existing sundial, installed in 1876, was reinstalled at the north side of the main quadrangle, facing the church.

The highest part of the new buildings is the Astronomy Tower, which is crowned by two cupolas. The upper cupola was equipped with an equatorial mount supporting a 241 mm refractor for observations and a 219 mm refractor for astrophotography.
The lower cupola contained a meridian circle. Both cupolas are still visible above the roofs of the Latin Quarter, as well as those of the *Hôtel des Sociétés Savantes*, the École Polytechnique and the Institut Henri Poincaré.

However, the Sorbonne observatory stopped its activities as early as 1909, partly because the maintenance of the instruments was too difficult, and partly because of the increasing light pollution in the center of Paris. The main instrument was taken to the Paris Observatory where it was used until 1940. No further astronomical observations were to be performed in the Astronomy Tower until 1980. It was, however, used as an observation point in August 1944, during the fight for the liberation of Paris. Some bullet holes are still visible on the outside of the walls just below the main cupola.

On the other hand, Camille Flammarion’s observatory in Juvisy was quite active, both for observation and astrophotography. After his death in 1925, it was supervised by his widow Gabrielle until her death in 1962. Eugène Antoniadi, the well-known Mars specialist, worked there between 1895 and 1902. Afterwards, Ferdinand Quénisset, who did a lot of observation and astrophotography, worked there until 1951. He also discovered two comets from the Juvisy observatory.

After 1962, the ownership of the building was shared by the SAF and the city of Juvisy. Because of a lack of money, it gradually went into decay, even though some roof repairs were undertaken during the seventies. Only recently, it obtained the status of «monument historique» and both the cupola and the refractor were restored. I am presently in charge of the final arrangements before the reopening of the observatory, and I hope that I can soon report on the first observations. The other parts of the building are still in need of a lot of repair.

The observatory at the *Hôtel des Sociétés Savantes* was also quite active. It was open twice a week for public observations, generally directed by professional members of the SAF. The other activities were astrophotography and observation by amateur members of the association, many of whom later became professionals. In 1935, the 108 mm refractor was replaced by a 153 mm refractor made by Manent, with a motor for the right ascension axis. During the German occupation of Paris, the cupola which contained the 190 mm refractor stopped working. In 1952, it was repaired and the 190 mm refractor was replaced by a 215 mm refractor.

Unfortunately, in 1968, the Academy of Paris, which was the owner of the *Hôtel des Sociétés Savantes*, recovered the building in order to use it in a different way. It is presently the *Maison de la Recherche* of Paris-Sorbonne University. The address is 28 Serpente street. As a result, the SAF had no observatory for a period of ten years. In 1976, a new convention was signed with the Academy of Paris, which placed the Astronomy Tower of the Sorbonne at the disposal of the SAF. This convention has to be renewed every 15 years.

It turned out that some repairs of the cupola were necessary. These were done by the SAF which also installed a new system to rotate the dome and a concrete pillar to support the instrument. The 153 mm refractor which came from the *Hôtel des Sociétés Savantes* was installed on the pillar, and could be used again for observations starting in October 1980. The 215 mm refractor coming from the same place was lent by the SAF for the creation of an observatory open to the public in Triel, 30 kilometers west of Paris, where it is still used.

Currently, the four levels of the Astronomy Tower are occupied by two different activities: observation in the upper cupola and the grinding and polishing of telescope mirrors in the lower areas.
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The SAF’s Instrument Committee consists of approximately 50 members. Most of them are interested in making their own telescopes, which are generally, but not always, Newtonian. They meet on Tuesday evenings and Saturday afternoons in the Astronomy Tower where they can grind, polish, and check the mirror for their instrument. Some stop after one mirror, but others want to make a bigger one afterward, or they stay mainly to help others. The mirrors that are made here are usually between 20 and 40 centimeters in diameter.

Level 0 of the Astronomy Tower, about 20 metres above Saint-Jacques Street, is the only one which is accessible by elevator. Presently, the elevator is out of commission for a period of 3 years, because of extensive repair work now underway in the university. On level 0, the Foucault test is used to check the parabolic shape of the mirrors. It can detect defects of as little as 10 nanometers. In fact, the device is quite simple so that it was made completely by hand.

Level 1 is used to grind and polish the mirrors, which is also done completely by hand, rubbing two pieces of glass against each other with an abrasive product between them. The lower piece becomes a convex tool and the upper piece becomes the concave mirror. Level 1 is divided into two parts. The first room is used to initially grind the surface of the mirror and give it a spherical shape. The second room is circular, being just under the lower cupola, which no longer contains the meridian circle. In that room, the mirror is given its final parabolic shape and is polished. This is the moment when the Foucault test must be performed, often many times, before the shape is perfect. Subsequently, the surface of the mirror is covered with a thin coating of metal, so that light can be reflected completely. This is done in another room belonging to the SAF.

Level 2 is a large square room just beneath below the upper cupola, with windows on all four sides. From there, we have a superb view of old Paris, including the Panthéon, Notre-Dame cathedral, the Eiffel Tower, and Sacré-Cœur of Montmartre. This level is used to prepare observations and receive visitors. Levels 2 and 3 are only accessible via a narrow wooden staircase, so that the number of visitors is limited to 6.

Level 3 is the circular room covered by the upper cupola, 39 meters above street level. It is possible, but not necessarily recommended, to walk outside around the cupola.

At the present time, this is the only observatory within Paris which is regularly open to the public. Twice a week, on Monday and Friday evenings, the 153 mm refractor is used to observe with the visitors the Moon, the planets and a few deep sky objects such as double stars and the most brilliant nebulae. For such objects, the images are often
sharper than those of larger telescopes. Both the 7 ton bronze cupola and the instrument are moved by hand, except for small corrections with the right ascension motor, which also turns the instrument to compensate for the rotation of the earth.

I organise the visits in such a way that each of the 11 presenters, including myself, receives the public about once a month. If the weather is not good, we can illustrate the inversion of the images by the instrument by observing, for example, signs on far-away buildings, or people walking in the restaurant of Eiffel Tower. Also, each presenter can use the instrument for his own observations and receive friends at the observatory.

For instance, I enjoy observing the Sun by projection on a screen until sunset. At the beginning, the sunspots are quite visible. Then the shape of the Sun becomes oval with a green line at the top and a red line at the bottom. More and more birds, and even planes, are seen crossing the image. Sometimes, the shape of the Sun becomes irregular because of refraction phenomena in the atmosphere. Exceptionally, details of the horizon appear in the image at the end, for instance leafless trees of the Meudon forest at the winter solstice or people walking on the terrace of Arc de Triomphe at the summer solstice.

Acknowledgements: I would like to thank Charles White for helping to improve the English and the presentation of this text. The photographs were taken by my wife Yoko Oger.

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2011/2012 Mars Observations in January 2012

This 6th report treats the Mars observations of the ISMO made in January 2012. During the period the planet attained a stationary at Vir on 25 January and began to return to Leo. The Martian season proceeded from $\lambda=051^\circ$Ls to $\lambda=065^\circ$Ls and the apparent diameter augmented from $\delta=9.0^\prime\prime$ to $\delta=11.7^\prime\prime$. The tilt remained around $\phi=23^\circ$N so that we could observe deeply northern hemisphere. The phase angle rapidly decreased from $\iota=34^\circ$ to $\iota=23^\circ$. The thawing of the npc proceeded and the inside of the P-ring (defined earlier) shows the aspect of the residual cap. There observed a precursory sign of the migration of the water vapour and the evening clouds around Tharsis were now quite active.

We received observations from the following observers. BUDA (SBd) in Australia is very welcome, and at the Philippines the rainy season seemed to have ended so that AKUTSU (Ak) must have become active.

ABEL, Paul G (PAb)  Leicester, the UK

4 Colour Drawings (13, 24 January 2012) 310, 250x20cm speculum

AKUTSU, Tomio (Ak)  Cebu, the Philippines

9 Sets of RGB + 7 Colour + 5 L + 9 IR Images (19, 24, 27, 28, 30 January 2012) 36cm SCT @f/35 with a DMK21AU04, DFK21AU04
BUDA, Stefan (SBd)  Melbourne, Australia  
2 Sets of RGB +1 Colour images (15, 21, 28 January 2012)  
40cm Dall-Kirkham with a DMK21AU04

FLANAGAN, William (WFl) Houston, TX, the USA  
8 Sets of LRGB Images (3, 7, 14, 15, 28, 30 January 2012)  
36cm SCT @f/27 with a Flea3

GHOMIZADEH, Sadegh (SGh)  Tehran, Iran  
7 Colour + 1G + 18 Images (15, 16, 21, 23, 29 January 2012)  
(28cm SCT with a DMK21AU04.AS)

GORCZYNSKI, Peter (PGc)  Oxford, CT, the USA  
11 Sets of RGB + 4 R + 15 IR Images (1, 3, 4, 7, 11, 15, 16, 22, 28, 30 January 2012)  
36cm SCT @f/28 with a DMK21AF04.AS

KOHZAKI, Ichiro (Kz)  Higashi-Kurume, Tokyo, Japan  
14 Drawings (6, 8, 10, 13, 17, 18, 25, 27 January 2012)  
340, 480×20cm speculum

KONNAÏ, Reiichi (Kn)  Ishikawa, Fukushima, Japan  
6 Drawings (7, 9, 13, 29 January 2012)  
380, 500×30cm SCT

KUMAMORI, Teruaki (Km)  Sakai, Osaka, Japan  
6 LRGB Colour + 6 B Images (9, 17, 26, 27, 30, 31 January 2012)  
28cm SCT @f/70, 80 with a DMK21AF04/DFK21AF04

KOWOLLIK, Silvia (SKw)  Ludwigzburg, GERMANY  
8 Sets of RGB Images (15, 16, 18 January 2012)  
20cm speculum with a DMK31AF03.AS

MAKSYMOWICZ, Stanislas (SMk)  Ecquevilly, France  
1 Set of Drawings (17 January 2012) 250×20cm Cassegrain

MELILLO, Frank J (FMl)  Holtsville, NY, the USA  
5 Colour + 1 B’ Images (1, 7’, 16, 29 January 2012)  
25cm SCT with a ToUcam pro II / Starlight Xpress MX-5’

MINAMI, Masatsugu (Mn)  Fukui City Observatory*, Fukui, Japan  
19 Drawings (8, 16, 17, 31 January 2012)  
400×20cm Goto ED refractor*

MORALES RIVERA, Efrain (EMr)  Aguadilla, Puerto Rico  
4 Sets of LRGB Images (2, 9, 22, 27 January 2012)  
31cm SCT with a Flea3

MORITA, Yukio (Mo)  Hatsuka-ichi, Hiroshima, Japan  
8 Sets of RGB + 8 LRGB Colour + 8 L Images (8, 9, 16, 17, 21, 23, 25, 28 January 2012)  
25cm speculum @f/80 with a Flea3

MURAKAMI, Masami (Mk)  Fujisawa, Kanagawa, Japan  
20 Drawings (2, 7, 13, 14, 17, 25, 27, 30, 31 January 2012)  
320×20cm F/8 speculum

NAKAJIMA, Takashi (Nj)  Fukui City Observatory*, Fukui, Japan  
18 Drawings (8, 16, 17, 31 January 2012)  
400×20cm Goto ED refractor*

PARKER, Donald C (DPk)  Coral Gables, FL, the USA  
6 Sets of RGB + 1 UV Images (2, 8, 11, 18, 24’, 27’ January 2012)  
41cm F/6 speculum @f/47, 36cm SCT @f/48  with a DMK21AU618.AS

PEACH, Damian A (DPc)  Selsey, West Sussex, the UK  
1 Set of RGB +2 Colour + 2R + 1B Images (17, 27 January 2012) (36cm SCT with a SKYnyx 2-0M?)

PHILLIPS, James (JPh)  Charleston, SC, the USA  
1 Colour Image (29 January 2010)  
20cm Refractor (with a SKYnyx cam)

POUPEAU, Jean-Jacques (JPp)  Essonne, France  
4 Sets of RGB Images (13, 15, 17 January 2012)  
35cm Cassegrain with a SKYnyx 2-0

SMET, Kris (KSm)  Bornem, Belgium
3 Colour Drawings (4, 15 January 2012) 420, 220×30cm Dobsonian

**TATUM, Randy (RTm)** Henrico, VA, USA

1 Colour Image (1 January 2012) 25cm speculum with a DFK31AU

**WARELL, Johan (JWr)** Skivarp, SWEDEN

3 Sets of RGB Images (15, 19, 31 January 2012) 22cm speculum @f/31,17 with a ToUcam pro III

**WESLEY, Anthony (AWs)** Murrumbateman, NSW, Australia

1 IR Image (19 January 2012) 41cm speculum with a Grasshopper Express

**WILLEMS, Freddy (FWl)** Waipahu, Hawaii, the USA

8 Sets of RGB + 1 RGB + 9 Colour + 5 IR Images (1, 5, 7, 8, 14, 19, 23 January 2012)
36cm SCT with a DMK21AU04.AS, DBK21AU618.AS

♂・・・・・We Further Received as follows:

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

1 Set of RGB + 1 IR Images (2 November 2011) 36cm SCT @f/28 with a DMKAU618.AS

**WILLEMS, Freddy (FWl)** Waipahu, Hawaii, the USA

2 Sets of RGB Images (7, 12 September 2011) 36cm SCT with a DFK21AU04.AS

♂・・・・・There are several points which are worth of special mention among the observations in January:

First the images of the npc on WILLEMS (FWl) at Hawaii made on 19 Jan (λ=059°Ls) at ω=149°W, 157°W show an inlet outside the P-ring and it can be considered as the precursory of the eastern end of Olympia.


FLANAGAN (WFl)`s images on 15 Jan (λ=057°Ls) at ω=103°W~115°W also show a similar aspect, though the images are somewhat blurred. So we can consider that Olympia comes out around this time: Usually the clear shape of Olympia is said built around λ=064°Ls (cf CMO #183 in 1997), and hence the present observations are highly precious in the sense it detected the very beginning of Olympia-Ierne.


Next, Bill(WFl) captured a beautiful Syrtis Mj near the terminator in a pure greenish tint on 28 Jan (λ=063°Ls) at ω=337°W; it was just like a gemof jade.


On 30 Jan (λ=064°Ls) also he caught at ω=321°W that the evening side of Syrtis Mj is also bluish.


This is of course not the blue cloud, but the phenomenon that the white cloud refracts back the short wavelength lights to the direction of the Earth: See for example the CMO Site:

http://www.hida.kyoto-u.ac.jp/~cmo/cmo/note/9901/01.html

from 25 November 1999: The discussion was restricted to the morning side, but can easily be applied to the evening side. At the morning side, Syrtis Mj on MORALES (EMr)`s on 2 Jan (λ=052°Ls) at ω=231°W and the one on BUDA (SBd)`s on 15 Jan (λ=057°Ls) at ω=225°W look slightly bluish.

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120102/EMr02Jan12.jpg

KONNAÏ (Kn) chased on 13 Jan (λ=057°Ls) at ω=221°W, 231°W, 240°W: At ω=231°W Syrtis Mj was not well clear but at ω=240°W he noted it to be "very faintly bluish". KOHZAKI (Kz) later observed at ω=248°W, 257°W, 267°W; and noted Aeria is light at the morning side, maybe a remnant of white clouds.

At Fukui, NAKAJIMA (Nj) and MINAMI (Mn) on 16 Jan (λ=058°Ls) captured Syrtis Mj from ω=225°W and on 17 Jan (λ=058°Ls) from ω=216°W (it is possible to see Syrtis Mj around from ω=213°W), but could not see the colour because of the poor seeing; just only saw a slightly bluish Syrtis Mj at ω=235°W.

Thirdly we stress that the water vapour was coming much southwards to the equatorial zone, and on the excellent images by PARKER (DPk) on 24 Jan (λ=061°Ls) at ω=357°W, two small cloud are floating on
the sand region of Aeria and Arabia. Perhaps Chryse is also invaded by the water vapour.


The orographic clouds at Tharsis and Olympus Mons are now well in season, and there are lot of observations so that we skip many of them. We just note Olympus Mons on GORZCYSNSKI (PGc)'s images on 7 Jan (λ=054°Ls) at ω=152°W, 167°W look to show a shadow of the caldera (ι=33°). As well EMr's images on 9 Jan (λ=055°Ls) at ω=159°W similarly show the shadow.


As examples where the water vapour were going southwards even in the morning, we shall pick out the case of Freddy (FWl) on 23 Jan (λ=061°Ls) at ω=114°W and the images of SBd on 28 Jan (λ=063°Ls) at ω=090°W where Olympus Mons is white already in the morning, and this shows the southward going of the water vapour.


Since as to Alba there remain discussions, we pick out some: Near the CM, KUMAMORI (Km) and AKUTSU (Ak) captured it on 26 Jan (λ=062°Ls) at ω=106°W, and on 27 Jan (λ=063°Ls) at ω=084°W respectively (on 27 Jan, Km also caught at ω=085°W).


Elysium looks variable according to the cameras and the procedures: FMl's image on 1 Jan (λ=051°Ls) at ω=210°W shows it whitish, while on PGc's images it is not so at ω=218°W: On the latter the P-ring is evident. Freddy(FWL)'s images do not show Elysium which was gone, but the P-ring is obvious and Hellas is dull (ground-like). DPk's image set on 2 Jan (λ=052°Ls) at ω=207°W shows Elysium near the CM and it is evident in B but the cloud is not so in RGB. It is also similar in EMr's image at ω=231°W on the day. PGc's images on 3 Jan (λ=052°Ls) at ω=198°W also show Elysium near the CM to be dull.

http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120102/DPk02Jan12.jpg

From Japan, Km shot on 17 Jan (λ=058°Ls) at ω=205°W, but on B it is quite dull (while Phlegra looks...
faintly broad in LRGB). $K_z$ seems to have checked the area at $\omega=210^\circ W$, $220^\circ W$. $Mo$'s image set on 17 Jan ($\lambda=058^\circ Ls$) at $\omega=199^\circ W$ also show the similar tendency.


$P$-ring was also checked this time by many imagers. Bill($WF_l$)'s set of images on 3 Jan ($\lambda=052^\circ Ls$) at $\omega=229^\circ W$ shows a faint mist ejected from the outer bright ring outside the dark $P$-ring.


On 7 Jan ($\lambda=054^\circ Ls$) at $\omega=190^\circ W$, $WF_l$'s images show the $P$-ring very clearly at the eastern side of the npc. This must be related with the thawing of the outer-ring and the appearances of islands.


On WESLEY ($AW_s$)'s IR image on 19 Jan ($\lambda=059^\circ Ls$) at $\omega=181^\circ W$, the $P$-ring is evident. It generally looks the inside (the residual cap) of the $P$-ring is less bright; accordingly the npc has been weaker than before. $Hellas$ was observed, in addition to Freddy($FW_l$) on 1 Jan ($\lambda=051^\circ Ls$) (aforementioned), by PHILLIPS ($JPh$) on 29 Jan ($\lambda=063^\circ Ls$) at $\omega=288^\circ W$ ($\phi=23^\circ N$) in which it was dull, while rather light on Frank($FM_l$)'s image on the day.


$MURAKAMI$ ($MK$) also chased $Hellas$ on 7 Jan ($\lambda=054^\circ Ls$) (as mentioned later), but it was dull, while seemed to become lighter near the evening side.

The interesting area of S Meridiani was shot densely: KOWOLLIK ($SKw$) took the area on 16 Jan ($\lambda=058^\circ Ls$) at $\omega=358^\circ W$, $006^\circ W$, $015^\circ W$, $025^\circ W$, and compared with her images on 18 Jan ($\lambda=058^\circ Ls$) at $\omega=348^\circ W$, $359^\circ W$, $007^\circ W$.


POUPEAU ($JPp$) also took the region on 17 Jan ($\lambda=058^\circ Ls$) at $\omega=357^\circ W$, and PEACH ($DPc$) did at $\omega=355^\circ W/357^\circ W$, $003^\circ W$ on the day. Furthermore as abovementioned $DPk$ showed excellent images on 24 Jan ($\lambda=061^\circ Ls$) at $\omega=357^\circ W$.


We shall note that 15 Jan ($\lambda=057^\circ Ls$) was a peculiar day when a lot of images were obtained from many countries: SMET ($KSm$) issued nice drawings at $\omega=346^\circ W$, $027^\circ W$, $028^\circ W$.


WARELL ($JWr$) took at $\omega=008^\circ W$, and $JPp$ at $\omega=026^\circ W$, $SKw$ at $\omega=040^\circ W$ (both show the area of M Acidalium),


Bill($WF_l$) took the images at $\omega=103^\circ W/107^\circ W$, $112^\circ W/115^\circ W$, and $PGc$ at $\omega=103^\circ W$


and $SBd$ at $\omega=225^\circ W$.


Finally GHOMIZADEH ($SGh$) shot at $\omega=290^\circ W$.


The Japanese islands suffered from the typical winter-time weather. The region facing towards the Pacific Ocean had rather bright days but the seeing was very poor and the rear side of the island was bothered by snow almost every day. $Mo$ at Hiroshima captured Syrtis Mj and S Sabaeus on 8 Jan ($\lambda=054^\circ Ls$) at
Dear Dr. Minami, Attached here are my latest drawings of Mars. Freddy’s images are from 7 and 12 September before the spring equinox: The former was at \( \lambda=024°Ls \) at \( \omega=076°W \) when \( \delta=6.0° \): Solis L is visible. Freddy’s colour image on 31 Jan \((\lambda=064°Ls)\) observed from \( \omega=016°W \) to 040°W to catch M Acidalium and a bit of S Meridiani but the seeing remained very poor and stopped observing finally. They left the cars on the way and the dome was snow-bound.

Finally \( Kn \) pointed out that \( Kn’s \) colour image on 31 Jan \((\lambda=064°Ls)\) at \( \omega=045°W \) shows clearly the white Argyre area at the southern limb similar to the one taken by the HST on 25 Feb 1995 (see Lte#395). This \( Kn’s \) image shows also quite a dark segment of M Acidalium along the boundary of the npe, which was also already apparent on \( DP^k \)'s images taken on 18 Jan \((\lambda=059°Ls)\) at \( \omega=051°W \).


We Further Received from \( PGc \) made on 2 Nov\((\lambda=024°Ls)\) at \( \omega=076°W \) when \( \delta=6.0° \): Solis L is visible. Freddy’s images are from 7 and 12 September before the spring equinox: The former was at \( \omega=348°W \) where M Serpentis is shot and the latter was at \( \omega=306°W \) where Syrtis Mj and a slightly light Hellas were visible. The angular diameter on 7 Sept \((\lambda=357°Ls)\) was \( \delta=4.8° \). (M MINAMI & M MURAKAMI)

Letters to the Editor

- ● ● ● ● ● Subject: Drawings of Mars
  Received: Wed 11 Jan 2012 14:00 JST
  Dear Dr. Minami, Attached are the latest drawings of Mars.

  Extremely changeable weather around here has been breaking the forecasters’ hearts lately, all kinds of weather in a single night, frequent aftershocks to boot!...some seismologists suggest they can be the foreshocks for a possible massive another earthquake in the near future. Just hope the weather will look up soon, because the exciting aphelion Tharsis ~ Amazonis ~ Elysium hemisphere (though may be photogenically boring side) is turning observable from our longitude.

  Good Seeing with Excellent Scopes!

- ○ ● ● ● ● Subject: A moonlit night
  Received: Fri 13 Jan 2012 03:39 JST
  Dear Dr. Minami, The moon is bright enough for me to read the thermometer on the wall of my small dome which says eight degrees below zero! Mars in the X500 field of my Baader Planetarium 60° binoviewer is swelling up to 1.5 times, pulsating and drifting, suggesting different layers of current in the atmosphere above. No Syrtis Major, no Elysium nor even NPC, I think I’d better go to bed!

  Good Seeing with Excellent Scopes!

- ○ ● ● ● ● Subject: Drawings of Mars
  Received: Tue 17 Jan 2012 23:57 JST
  Dear Dr. Minami, Attached here are my latest drawings of Mars. As the apparent diameter of the planet exceeded 10° I have changed the size of the drawing from 3cm up to 4cm across. It’s almost midnight and the sky’s clear now, Mars is already low in the eastern sky. But I am wondering if I should go observing or not; I’ve been slightly feverish since...
this morning, may be just a cold, not flu. Please take care not to catch a cold too.


Good Seeing with Excellent Scopes!

○ ----- Subject: Mars - January 27th, 08:31ut
Received: Wed 01 Feb 2012 05:19 JST

Hi Mr Minami, Here is my most recent session from the 27th of January, Clear Skies.


Efrain MORALES (PUERTO RICO)

○ ----- Subject: Mo 09 Jan_12
Received: Fri 13 Jan 2012 06:27 JST

Masatsugu MINAMI sama, We had a lot of clouds on 9 Jan, but a bit good seeing. I wished I could make the image to be more in good colour.


Best wishes

Yukio MORITA (Hatsuka-ichi, Hiroshima, JAPAN)

○ ----- Subject: Mars image - Jan. 11, 2012
Received: Fri 13 Jan 2012 21:37 JST

Gentlemen, Attached is an image from Jan. 11. Seeing was above average.


○ ----- Subject: Additional Mars from Jan. 11
Received: Sun 15 Jan 2012 10:53 JST

Gentlemen, This set of images was captured about an hour earlier than the image I previously submitted. Seeing was not as good, but you really can tell that from the processed images which turned out pretty good.


○ ----- Subject: Mars image - Jan. 15
Received: Mon 16 Jan 2012 03:07 JST

Gentlemen, Attached is a set of images from this morning. Seeing was less than average, the temperature was -12°C with some wind.


○ ----- Subject: Mars image - Jan. 16
Received: Sat 21 Jan 2012 14:29 JST

Gentlemen, Attached is a set of Mars images from January 16. Seeing conditions were about average. Regards,


○ ----- Subject: Mars image - Jan. 22, 2012
Received: Fri 27 Jan 2012 13:41 JST

Gentlemen, Attached is a set of images from January 22. Seeing was poor.


○ ----- Subject: Mars Images - Jan. 28
Received: Sun 29 Jan 2012 10:29 JST

Gentlemen, This is the first and probably the best set of a two hour period. Seeing was below average. At times during this session Mars appeared to be just a featureless blob. I have not had a chance to process the other images from this session yet, but I don't expect much. Regards


○ ----- Subject: Mars image - Jan. 30
Received: Wed 01 Feb 2012 14:35 JST

Gentlemen, Attached is a set of image that was captured under better than average seeing. Regards,


Peter GORCZYNSKI (Oxford, CT)
Subject: Mars 2012/01/13
Received: Fri 13 Jan 2012 17:40 JST

Hello, Here is Mars on 2012/01/13. The seeing was average while the transparency was poor. T = +3.6°C

Subject: Mars 2012/01/14
Received: Sat 14 Jan 2012 21:15 JST

Hello, Here is Mars on 2012/01/14. The seeing was average. The transparency was fair. T = -1.5°C.

Subject: Mars 2012/01/15
Received: Sun 15 Jan 2012 18:00 JST

Hello, Here is Mars on 2012/01/15. The seeing was average. The transparency was average. T = -1.7°C.

Subject: Mars 2012/01/16
Received: Wed 18 Jan 2012 01:19 JST

Hi, On 16 January seeing was poor & average atmosphere. PLS see it.

Subject: mars 15 Jan
Received: Mon 16 Jan 2012 21:40 JST

Dear Masatsugu, Thank you for your mail. But sorry to say still I am confused so that by fixing the Date and time (GMT) here in my country there is 3.30 Hour different time with GMT. I will send new image to you by new set up, I hope I could get your comment accordingly, is that ok?

Subject: mars 16 Jan.
Received: Wed 18 Jan 2012 01:19 JST

Hi, Poor seeing & unstable atmosphere I took one image of Mars. PLS see it.

Subject: mars 22 Jan
Received: Tue 24 Jan 2012 04:17 JST

Hi, Under poor seeing & average atmosphere I took one image of Mars. PLS see it.

Subject: mars 23 Jan
Received: Wed 25 Jan 2012 07:40 JST

Hi, On 23 January I took one image of Mars; always condition was bad when I observe. PLS see them.

Subject: mars 29 Jan
Received: Tue 31 Jan 2012 08:02 JST

Hi; Conditions were about average when this was taken this MIDNIGHT. there was a lot of unstable but I PICK OUT fair frames: Regards

Sadegh GHOMIZADEH (Tehran, IRAN)

Subject: Sixty years of Mars observations
Received: Sat 21 Jan 2012 09:35 JST

Dear Don,

I am really astonished, how much one can see on the small Martian disc.
I am really astonished, how much one can see on the small Martian disc.
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Kris SMET (Bornem, BELGIUM)

Subject: Sixty years of Mars observations
Received: Sat 21 Jan 2012 09:35 JST

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Kris SMET (Bornem, BELGIUM)

Best wishes,

bill sheehan (willmar, mn)
Dear Masatsugu and Masami; These are the Mars drawings from 13 January.


Best wishes,
Ichiro KOHZAKI (Tokyo, JAPAN)

Dear all, Attaching an image from January 19.

Hi everyone, The seeing was better than what I’m used to in the mornings and also had some cloud trouble but one of the RGB sets was good enough for processing.


It’s been a long time since I’ve seen blue haze over Syrtis Major.

Hi everyone, The seeing this morning was mediocre at best.


There appears to be some detail visible on the edge of the NPC that I don’t know what to make of. It does not seem to match what my planetarium programs are showing in that spot. Regards,

Stefan BUDA (Melbourne, AUSTRALIA)

Hi - I have attached my latest image of Mars January 16, 2012 to be posted. It seems to show some irregularities along the edge of the NPC especially in red light. Thanks,


Hi - I have attached my latest image of Mars January 29, 2012 to be posted. Thanks,

Frank J MELILLO (Holtsville, NY)

Dear all, Attaching my latest Mars image from January 15, with a distinct cap, limb haze and a bright Chryse and Argyre. A wonderful view in the scope at ×480!


Dear all, Attaching an image from January 19.


Best regards,
Johan WARELL (Skivarp, SWEDEN)

Dear Masatsugu, Attached are two set of images of Mars from the mornings of 14-January and 15-January. Clouds are showing over Tharsis and Arcadia. There is also an interesting V shaped feature in the North Polar region near 180°W and 70°N that appears to have some extension to it.


Best Regards,

Dear Masatsugu, Attached is a set of images of Mars from this morning, 28-January. Seeing was average but deteriorated quickly as Mars approached the meridian so I was only able to get one good set. The color composite shows a bluish tint near the terminator over Syrtis Major. Best Regards,


Dear Masatsugu, Thanks for your comments on the 28 January images! Also, thanks for the reference to your very interesting article from 1999 about the phenomenon of the bluish appearance of Syrtis Major when it is near the terminator.


I have attached a set of images from the morning of 30 January. I spent some time refining the wavelet enhancement I have been using on Mars and I seemed to be getting slightly better results than before. I used the new enhancement on the 30 January image. I also reprocessed the 28 January image and I am sending you the new revision of that image set. Compared to the 28 January image, Syrtis Major has rotated an additional 16 degrees from the terminator in the 30 January image. Syrtis Major is still showing the bluish tint that was noticeable in the earlier image. Best Regards,

Bill FLANAGAN (Houston, TX)
Mars observation. Have good receipt:

Stanislas MAKSYMOWICZ (Ecquevilly, FRANCE)

● ● ● ● ● Subject: Mars, Jan 19
Received: Fri 20 Jan 2012 16:16 JST
Hi all, here is a Mars image from this morning, under not-great (but not-awful) seeing. This is an IR image only.

regards,
Anthony WESLEY (NSW, AUSTRALIA)

● ● ● ● ● Subject: Mars Ak19Jan12
Received: Sat 21 Jan 2012 18:30 JST
MINAMI-sama, It seems the rainy season ended in Cebu:

● ● ● ● ● Subject: Mars Ak24Jan12
Received: Wed 25 Jan 2012 06:39 JST
MINAMI-sama. These are the Mars images from 24 January. I even feel cool with a T-shirt on the rooftop.

● ● ● ● ● Subject: Mars Ak27Jan12
Received: Sun 29 Jan 2012 00:27 JST
MINAMI-sama: These are two sets of Mars images from 27 January. Best

● ● ● ● ● Subject: Mars Ak28Jan12
Received: Sun 29 Jan 2012 23:27 JST
MINAMI-sama: These are from 28 January GMT. KUMA-MORI is of the opinion that the reason why the morning limb is doubled must not be because of the optical system, but due to a defect of the camera I use.

● ● ● ● ● Subject: Mars Ak30Jan12
Received: Tue 31 Jan 2012 03:16 JST
MINAMI-sama: These are two sets of Mars images from 30 January. There seems to exist a rift inside the nfc.
http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120130/Ak30Jan12.jpg

 Tomio AKUTSU (Cebu, the PHILIPPINES)

● ● ● ● ● Subject: Mars images (January 17th, 2012.)
Received: Wed 25 Jan 2012 04:36 JST
Hi all, Here are some images from Jan 17th in fair conditions. Sinus Meridians and Mare Acidalia are prominent on the disk.

Some bright haze over Argyre, and patchy cloud over Arabia/Moab. Bright limb cloud extending into Chryse.
Best Wishes

○ ○ ○ Subject: Mars images (January 27th, 2012.)
Received: Wed 01 Feb 2012 05:55 JST
Hi all, Poor seeing on this morning but I was determined to

The following images are the Martian discs with the grids and the phases (at 00:00 GMT) from 2 Mar 2011, just near the opposition, to 18 Sept 2012. The noon line (n-line) is shown as a dotted line: The intersection with the other line (m-line) is the sub-Solar point.
Discs with Grids I, where the discs from 4 Sept 2011 to 2 Mar 2012 are treated, are in CMO#389 p.Ser−0189.

**Ephemeris for the Observations of the 2011/12 Mars. VIII**

**March 2012**

Masami MURAKAMI

As a sequel to the preceding list of the Ephemeris for the physical observations of Mars, we here list up the necessary elements of the Ephemeris for period from 26 February 2012 to 5 April 2012: The data are listed for every day at 00:00 GMT (not TDT). The symbols $\omega$ and $\phi$ denote the Longitude and Latitude of the sub-Earth point respectively. The symbols $\lambda$, $\delta$ and $i$ stand for the Areocentric Longitude of the Sun, the Apparent Diameter and the Phase Angle respectively. We also add the column of the Position Angle $\Pi$ of the axis rotation, measured eastwards from the north point: This is useful to determine the north pole direction from the $p\leftarrow$. 
The Apparent Declination of the planet is also given at the final column (denoted as \(D\)). The data here are basically based on *The Astronomical Almanac for the Year 2012*.

<table>
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<th>Date (00:00GMT)</th>
<th>(\omega)</th>
<th>(\phi)</th>
<th>(\lambda)</th>
<th>(\delta)</th>
<th>(t)</th>
<th>(\Pi)</th>
<th>(D)</th>
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<td>077.69°Ls</td>
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<td>12.6°</td>
<td>+12°53'</td>
</tr>
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</table>
and covered the region from M Cimmerium to Solis L. In Japan the weather was dismal but MINAMI (Mn) caught the chance from the time before sunset when it was bright. KUMAMORI (Km)'s 60cm also yielded several markings. From Japan it was observed from the areas of S Sabaeus, Hellas, Syrtis Mj, M Cimmerium. From Europe we received only one observation from D PEACH (DPc).

Notable is that we further received precious 43 images from DeGROFF (KGr) from the Marshall islands: They included the images of before and after the great dust event in May~July 2001.

The third 2001 Mars CMO Note was about "Dust Streaks at the Area of Solis L on 6 July 2001 (Day 13)". On 6 July 2001, 13 days after the occurrence of the global dust storm there was seen two dust streaks near Solis L and it was chased up until October. The season was different but they were similar to the ones observed in 1973.

http://www.hida.kyoto-u.ac.jp/~cmo/cmomn0/01Note03/index.htm

The Forthcoming 2001 Mars (15) column was written by NISHITA (Ns) and includes "Ephemeris for the 2001 Mars. VII":

http://www.hida.kyoto-u.ac.jp/~cmo/como/coming2001/0115/15.html

The LtE corner shows those from MELILLO (NY), Dave MOORE (AZ), Jim BELL (NY), DPk (FL), COLVILLE (Canada), SHERROD (AR), GRAFTON (TX), SHEEHAN (MN), KGr (Marshall Islands) and also domestically from AKUTSU, ISHADOH, Takeshi (Ken) SATO, HORIKAWA. Mk's emails were also cited as correspondences from Fujisawa.

As a second obituary column Ken SATO wrote about the late Mr Toshi-hiko OSAWA.

TSUNEMACHI's 16th essay was about a shellfish work called "Yakoh-Gai" in Japanese whose scientific name is Lunnatia marmorata, and so it is suggestive of the Moon light.

TYA#078 dealt with CMO#114 (25 Feb 1992): The opening note (Note (4)) was about "The SPC at the Final Stage in 1990." The planet Mars 20 years ago was at Cap and not yet the season of Mars. (Mk & Mn)