# July – August 2025

Our astronomical observation forecasts – (generally excluding ephemeris)

Here I offer you observation forecasts that are generally not included in your usual ephemeris.

These forecasts have been developed since 2019.

If you don't want to miss anything, and if you haven't already, I suggest you subscribe to don't hesitate, alerts, it's free: my https://astro.aguarellia.com/index-alertes.htm

Don't miss my videos too, like the latest one: my brand new astronomical watercolor workshop

https://www.youtube.com/c/Aguarevan

While waiting for the next astro alert, I'll see you at the end of August 2025. In the meantime, I wish you the best possible summer, without it being too hot or too stormy.

So it is without moderation that, on board this planet of brutes and if your weather cooperates, I invite you to observe the wonders of the sky!

quarellia

Look up!



The English translation is kindly made by Anilkumar Kodali – AWB India **Astronomers Without Borders** 

#### **Aquarellia Observatory Forecasts**

For all the following observations, I am in close contact with organizations bringing together "citizen scientists".

If you wish to observeuseful, do not hesitate to contact me.

https://astro.aquarellia.com

Astronomie et aquarelle

Astronomy and watercolor

Michel Deconinck

### 1- The Sun

The current solar cycle is number 25, as a reminder the first, historical one, having begun in August 1755. This very first cycle corresponds to the beginning of the regular monitoring of the visual observation of sunspots.



SILSO graphics (http://sidc.be/silso) Royal Observatory of Belgium, 2025 June 28



SILSO graphics (http://sidc.be/silso) Royal Observatory of Belgium 2025 June 1

This last curve shows the evolution of the last 13 years, we find there an attempt at predictions for the coming months (SC and CM models). We observe a clear contradiction with the monthly curve. The model considers here that the maximum has passed, which is however not obvious. Even if the last average in blue indicates a solar activity lower than 100, in recent days we observed it well above this value of 100. A case to follow.

S 3 4 20 A RA S 49 60 11 V 89 130 41 Hd 2025 050 14 SIL 35 2 8 N C 4 35

Since May 28, and despite having moved above the 50° parallel, I have never been prevented from drawing our star.

Equipment: Takahashi 100mm f14.8 telescope – 26mm 68° eyepiece – glass objective filter for visual.

Since May 28, my estimate of the "A number" has been 1 for 7 days, and 2 for 3 days. Interesting!

This June 28, at the time of writing this program, the average Wolf number given by SILSO is 137.

On June 29, just before completing this document, we were able to observe a giant prominence in H alpha.



Quickly sketched using a 35mm mini-Lunt this protuberance has developed at the western limb and is worth a look or camera shot.

### 2- Venus

Below are two sketches of Venusian clouds.



Designed with a 100mm Takahashi refractor, opened to 14.8 for a magnification of 211x. I found the contrasts particularly high.

In these sketches we can clearly see the movement of the terminator of Venus which goes from concave to convex in less than three weeks.

## **3- Comets**

After the disintegration of comet C/2025 F2 (SWAN), there's nothing particularly exciting about our beautiful comets. No comet is showing a magnitude that would allow us to observe more than a small ball of gas.

However, we would like to draw your attention to a comet that could well surprise us, but not for the foreseeable future.

This is the comet <u>C/2025 K1 (ATLAS)</u>. According to the excellent site of Gideon van Buitenen <u>https://astro.vanbuitenen.nl/comets</u> the magnitude in October could reach +5.0 but obviously quite close to the sun.



Comet location expected in early October of this year.

But you all know as well as I do, a comet is like a cat, it has a beautiful tail but it only does what it wants!

The light curve seems quite optimistic, allowing us to hope for a magnitude of +10.0 by the end of August. The Sun and its current activity could give it a slight boost.



The black dots come from photometric measurements, the blue dots, which do not yet exist, will come from visual estimations.

Otherwise, we can only hope for another, more brilliant visitor.

#### **Comet Hunters - Call for Contributions:**

As co-head of the comet section of ALPO (The International Association for Solar System Observations) led by Carl Hergenrother, I am waiting for your observations, images (photos or sketches) of comets that you observe or have observed in the past.



My address: michel.deconinck@alpo-astronomy.org

# **4-Asteroids**

Try your hand at asteroid spotting. This summer of 2025 is the perfect time.

When these stars are at opposition, that is, at their highest on the horizon at midnight, just at the southern meridian, is the most sought-after time.

Here are some of the oppositions for the month of August, in July there are also some but their magnitude will always be greater than 10.0:

- (63) Ausonia magnitude 9.3 on August 2
- (2) Pallas magnitude 9.4 on August 7
- (89) Julia magnitude 8.5 on August 10
- (6) Hebe magnitude 7.6 on August 25

My selfie-like memory of Vesta's last opposition



### **5- Meteors**

The Perseid meteor shower offers us the most popular shooting stars, mainly because it is active during school holidays and it is warm in the Northern Hemisphere.

Unfortunately, in 2025, a near-full moon will significantly reduce the number of meteors observed. But if your sky is clear and transparent, you can see many bright meteors with the moon behind you. Ideally, you might even want to provide an obstacle; any wall will do the trick by blocking the moon.

#### Details :

- Radiant: 03:17
- + 58.1°
- ZHR: 100
- Speed 59km/sec)
- Parent object 109P/Swift-Tuttle

#### Next maxima:

- the night of August 12 to 13, 2025. That night, the moon will be 84% full.

> Memory of the Perseids was in 2021



### 6- The Moon

My association ALPO(\*) offers you the opportunity, every two months, to take on some interesting challenges, called "Focus- On".



Let's share our images, even old ones, drawings or photos!

It is now necessary to respect the name of the files, for example:

Copernicus 2023-08-31-2134-DTe.jpg

Meaning

Copernicus, 2023 August 31, 21:34 UT by David Teske

Please send articles, drawings, images, photos, etc. to Alberto Anunziato (Argentina) and David Teske (USA) by August 20, 2025, so that your observations may be included in the September 2025 issue of "The Lunar Observer."

Ideally, the email to be sent should contain the following information:

- Name and location of observer
- Name of the object.
- Date and time of observation in Universal Time (use the name of the months in English or the format "mm-dd-yyyy-hhmm" or "yyyy-mmdd-hhmm")
- Filter (if used)
- Size and type of telescope used. Magnification (for sketches)
- Camera used (for photos and electronic images)
- Image orientation: (North/South East/West)
- Seeing: 0 to 10 (0-worst 10-best)
- Transparency: 1 to 6
- Please feel free to add comments.

It is not necessary to reduce the file size, but the first 4 pieces of information, in bold here, are necessary.

Files should be submitted by email to

- David Teske david.teske@alpo-astronomy.org
- Alberto Anunziato albertoanunziato@yahoo.com.ar
- Wayne Bailey wayne.bailey@alpo-astronomy.org

(\*) ALPO http://alpo-astronomy.org/index.htm

Here are the next great challenges as a preview or *Focus-On's*:

- To be sent before August 20: MARE HUMORUM
- To be sent before October 20: The plateau of the ARISTARCUS crater
- To be sent before December 20: from SCHICKARD to PHOCYLIDES
- To be sent before February 20: RIMA HYGINU

Here is my challenge for Mare Humorum:





This pastel is presented on page 38 of my little atlas of lunar seas (see 3 pages further)

Below we can see the Sea of Humors, it was visible to the naked eye, yet it is one of the smallest lunar seas.

On June 19, 2025, at around 2:40 UTC, it was golden hour.

- Watercolor made in the workshop -.

The color comes mainly from the smoke from the Canadian fires.

\* Mare Humorum





Still on June 19, 2025, pastel taken with an eyepiece between 1:30 and 2:30 UTC. We can clearly see the Sea of Humors\* with the pretty Gassendi crater (arrow) as a reference point, above and to the left of the sea.



### Small Atlas of the Lunar Seas

I have had my first book published about our marvelous natural satellite. It is the small atlas of the lunar seas.

It is on sale here:https://merslunaires.com/



### 7-Variable stars

There are two beautiful novae visible to the naked eye but only from the Southern Hemisphere.



- 1. Discovered on June 12 in the constellation Lupus magnitude 5.5
- 2. Discovered on June 25 in the constellation Vela magnitude 4.8

The star T CrB in the Corona Borealis still hasn't erupted. With my 253 observations since 2016, this wait is becoming truly unbearable! For those who follow it, a new sequence has been created by the AAVSO.



### 8- Contacts

Email: Michel Deconinck:<u>contact@aquarellia.com</u> Or for comets: <u>michel.deconinck@alpo-astronomy.org</u>

#### Website:

https://astro.aquarellia.com

And for fun, don't hesitate to watch our last two videos:



It's here: Astronomy and travel: https://www.youtube.com/c/Aquarevan

And,... if you like it, a little thumbs up (if possible upwards), and subscribe to our channel YouTube, it's nice and it's free.

I wish you all a good summer, a sky without too many traces of artificial satellites or flashes of wind turbines.

See you at the end of August 2025.

Until then, leave!