Wednesday, October 17, 2018

Asterism.

In Astronomy, an asterism is a remarkable figure drawn by particularly brilliant stars.

In general, these stars are not linked by either a significant gravitational interaction or a common gestation, which makes an asterism a rather arbitrary and subjective celestial object.

It is often on the basis of asterisms that civilizations have imagined their constellations, although an asterism could as well form a part of a constellation as being made up of stars belonging to several different constellations.

An asterism can occupy a sufficiently large area of the sky to be well identifiable with the naked eye.

the Summer Triangle, for example, extends over more than 30 degrees.

Among this category, we find the characteristic figures that allow us, over the seasons, to locate the most famous constellations.

Large and Small Pans for the Big Dipper and the Little Dipper, small parallelogram for the Lyre, W Cassiopeia, etc.

There are many small asterisms invisible to the naked eye:

These can be seen using binoculars or a small telescope.

Some asterisms invisible to the naked eye sometimes reveal themselves as open heaps, provided that we can prove the common origin of the stars

involved.

There are few asterisms visible to the naked eye that are also open clusters, but when the case arises they seldom know this second property.

The two most representative examples are the Melotte 111 and Collinder 285 open clusters, which contain Berenice's lock of Hair asterism, and five of the Seven stars of the M45 (Pleïades)

The sky visible from the latitudes of the Chinese empire has been subdivided into several regions, smaller in size than the western constellations.

There are nearly 300 asterisms used by Chinese astronomers of ancient times.

The Summer Triangle, formed by stars Vega, Deneb and Altaïr, is one of the largest asterisms in the northern hemisphere.

Here is a list of the most famous Asterisms:

- The Grand Saucepan (or Grand Chariot)
- In the Ursa major
- The Little Saucepan or the Little Spoon or the Little Trolley In the Ursa minor
 - The Teapot In Sagittarius
 - The Orion Belt In Orion
 - The W of Cassiopeia In Cassiopeia
- The Spring Triangle In the Bouvier In the Virgin In the Lion

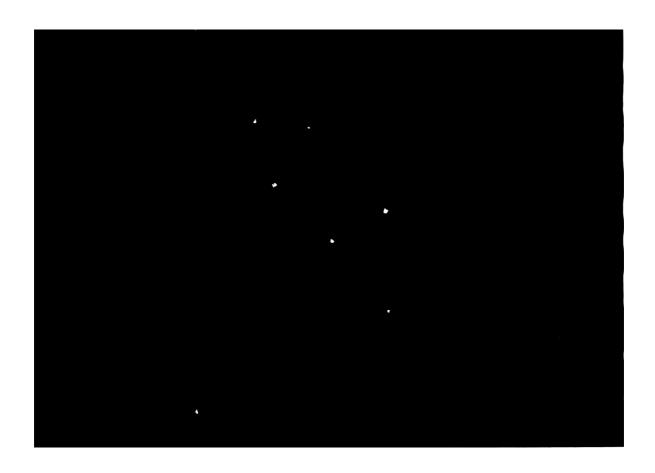
- The Summer Triangle In The Swan In the Eagle
- The Autumn Triangle In Aries In the Whale In Andromeda

The Winter Triangle In Orion In the Little Dog In the Big Dog

• The winter Hexagon

or the Winter Circle or the Winter Polygon In Orion

In the Big Dog
In the Little Dog
In Gemini
In the coach
In Taurus



The North Cross In The Swan.

From a historical point of view, optical astronomy, also called astronomy of visible light, is the oldest form of astronomy.

Originally, optical images were drawn by hand.

The spray paint on the paper is really the best to do that, so, I did astronomical drawing (more painting) for the magazine.



A wink to Pierre Soulages but also a great way to make my representation of the Cosmic Diffuse Background.

The Universe has evolved from a quasi-homogeneous state of gas to arrive at an inhomogeneous distribution of the matter characterized by filaments of matter filled with galaxies which cross by forming clusters surrounded by vacuum.

Cosmology aims to answer three major questions: what is our Universe made

of? how was it created? and what is its evolution?

Although Scientists have asked themselves these questions for a very long time, it was only with general relativity and the powerful instruments of the 20th century that the first credible answers, based on observations and not beliefs, were born. Cosmology is paradoxically a fairly recent science in astronomy compared for example to planetology.

What does the cosmology of the beginning of the 21st century answer to the three fundamental questions that are the composition, the formation and the evolution of the universe? First, the universe would be made up of stars, hot or cold gas but above all dark matter, invisible and always unknown, and an even more mysterious dark energy; a science still young, in full development, which still requires a lot of work and observations to understand the mechanisms of the Universe.

The stars of the constellations have no physical links between them.

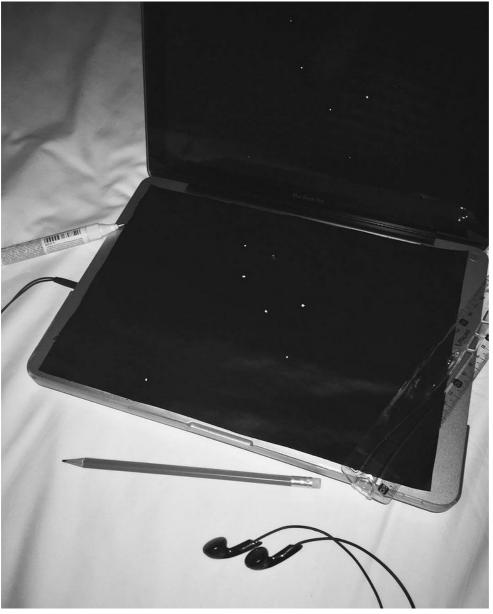
Only their apparent position in the same area of the sky, when viewed from Earth, connects them.

In particular, their distances can be very different.

As the stars have different speeds from each other, the shape of the constellations changes over time.

After only a few tens of thousands of years, the shape of a constellation is no longer recognizable.



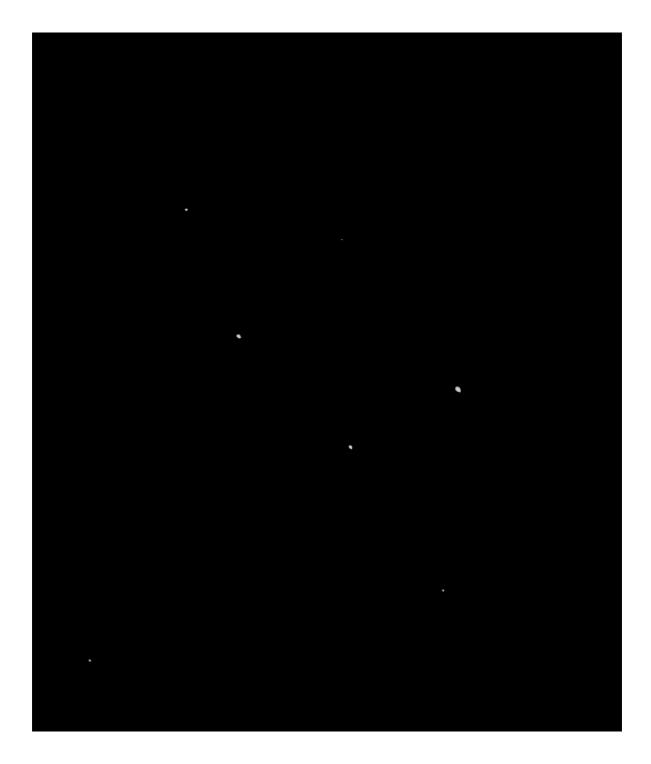


It's necessary to check carrefully all steps and apply.

That consist to look at the sky and draw but , it's not what I've made . I just wanted illustrated the subject.

A simple constellation as a first one.

Even if the photo seems to make measurements and sizes of stars unfair: this is not the case.



The photo to compare.

- The Grand Pegasus Square In Pegasus
- In Andromeda
- The Urn In Aquarius

- The Sickle In The Lion
- The false cross in the veils
- M73 In Aquarius
- The Northern Fly In Aries
- The Kemble Waterfall In the giraffe
- The Hanger Cluster or Collinder 399

or clusters of Brocchi In the Little Fox

mmm .. there is not a pentagram! ahah

Essential supports for astronomical design: The templates.

That allow to precisely position all the drawing elements.

+ Complete the data tables.

The use of a template must respect the original dimensions of the document in order to preserve the scale of the templates.

Template margins are set to allow full reproduction without cropping.

The presence of a ruler in millimeters on the right edge of the template helps to verify that the reproduction scale is 100%.

DESSIN DE VÉNUS Nº

Observateur : Date : Lieu : Dép. :

Instrument :

D: mm F/D:

Heures, début : T.U.

mise en place : T.U.

fin : T.U.

Oculaire, type: focale: mm

Grossissement : Filtre(s) :

Remarques:

CONDITIONS MÉTÉO

Début Évolution

Vent:

Transparence:

Turbulence :

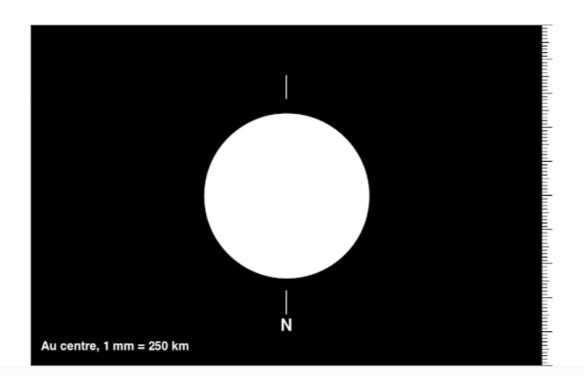
Température : °C

Hygrométrie :

Pression:

Pollution lumineuse : Magnitude visuelle :

Remarques:



Hauteur sur l'horizon :	Diamètre apparent :
Références photos n° :	
Commentaires :	

Template of Venus: exemple.

Templates available: On demand:

- Solar drawing
- Drawing of Venus
- Moon drawing
- Drawing of Mars
- Drawing of Jupiter
- Saturn's drawing
- Stellar drawing (Bright nebulae)

Posted by Veronica IN DREAM at 3:42 PM