

MA in Cultural Astronomy and Astrology

AHAN7024 Heavenly Discourses

Sky Journal

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The sky is an ever changing view, it is always in a state of moment, thus observations in one minute can be different to the next. Here are some ideas about what you can observe and record about the sky. All of these are naked-eye astronomy events and along with your observations, which you can record in many different ways, you can also add your insights and feelings about your connection with this element of the sky. Additionally you can add local folk tales or sky mythology to any of your observations.

All of the following are simply to fuel your own ideas about your sky journal – you can ignore them or modify in whatever way you desire.

Moon observations

Seeing the surface of the moon — when do you see the greatest surface detail of the moon? Do your cultural opinions of the appearance of the moon bias your view? What patterns do you see on the moon? Do you see a 'Man in the Moon' or a Lady in the Moon or the lunar hare? What do others see? How do the lunar phases alter your view?

Size of the Moon — does the size of the moon vary? What common objects in our culture are the same or similar size as the Moon – a coin for example. Does it have any cultural meaning that this common object has the same size?

Brightness of the Moon — what is the lunar phase by which you can still read standard size 12 pt font? For you, what size does the font need to be for different lunar phases? What phase, if any, do you find the moon casting a shadow?

Colours of the Moon — does the moon change its colour from rise, culmination and setting? What are the circumstances of your observation for red, orange, pink, bronze-yellow, blue, black, green or purple moons?

Moon light landscapes — What are the colours of moon light landscapes? Can you capture these images in some way?

Phases — How close to the exact half can you see the exact straight line edge to the Moon, when does it start to curve a little?

Planets

What is the visual difference between a planet and a star? Is it true that stars twinkle and planets do not? What does such an observation suggest about nursery rhymes or other folk law?

Speed against the stars – Watch a planet moving against the stars, see if you can note the faster moving planets from the slow movers. Look for planets rising before the sun, or setting after sunset - record their stepping up into the sky (before sunrise) or the stepping down into the 'underworld' (before sunset).

Spotting Mercury — can you, and if so what does it look like?

Venus — is Venus visible? How long does it take to reach its full brightness, how quickly does it fade? Does Venus shine in the morning daylight or the pre dusk sunshine? If Venus is bright can you observe a shadow cast by Venus, if so what is it like?

What are the colours of the planets and do they change?

What conjunctions can you observe either between two planets or the Moon and a planet and what do these look like? What was the phase of the Moon when it formed conjunction to a planet? Did the moon or the planet pass above or below the other planet?

Stars

What colours can you observe in the different stars? Are your views on the colour of the stars the same as other people? Do the stars change in their 'twinkle' quality?

How many stars do you see in the Pleiades – how does this change in relationship to the phases of the moon? Record your visuals.

The Bee-Hive cluster is a star cluster in Cancer, can you see it? When can you see it?

Stars and Land

Atmosphere extinction: How low in the sky can you see a star? What is this zone between land and sky like?

What pairs of stars for your location can you see co-rising or co-setting at the same time?

Can you spot any stars rising before the sun? These are called either morning rising or heliacal rising - if they are returning to visibility after a time of being lost in the sun's light. What stars are morning rising and what stars are heliacally rising? Do you think such stars are culturally important? If you are in the northern hemisphere and you observe Sirius as a heliacal rising star what does it mean to you to have the brightest star in the sky return to visibility?

Constellations

What constellations can you see? What constellations are the planets moving through for your period of observations? What is the relationship of some of the constellations to the line of your local horizon? Do any constellations 'walk' along the horizon line?

What are the constellations which occupy the zenith for your location, can you photograph/draw them?

If you were looking at the sky for the first time what 'constellations' would you make? Does your cultural background influence how you see the constellations?

Constellation Stories

Some constellations are grouped together by mythology to form stories such as Orion with Scorpio. What sky stories can you observe?

Some constellations contain mini constellations called asterism such as the Pleiades in the constellation Taurus. What others can you see, why do you think they rate the status of asterisms?

Milky Way

Can you see the Milky Way, if so, observe its colour, shape and form. How does it move during the night, can you record this in any way?

It is believed that the Egyptian's saw the Milky Way as the sky goddess Nut, what shapes or images do you see in the Milky Way?

Shooting Stars

Do you see any shooting stars? Where are they in the sky? Is their observation significant to you? What folk tales do you or others assign to shooting stars?

Sky

Sunrise and Sunset

Over the course of some days or weeks what are the colours of the sunrise or sunset skies? When do you first notice red in the sky? Are sunset more red than sunrises? What is the difference in light between sunrise and sunset? What other colours are in common between sunrise and sunset? What colours are unique to sunrise but not to sunset?

How flat or round is the sun at sunrise or sunset? Does the size of the orb of the sun vary? Is it cold or warm when you see flat suns? Do you see the sun distorted, cut in half or doubled up?

Green flash – some days at sunset you can observe a green flash of light just above the sun – can you see this and if so what does it look like?

How long is your twilight? What are the colours of your twilight sky? Purple is considered rare, how much purple can you see? If you see a bright purple sky are there fires nearby? Note the local conditions as you watch the twilight.

How dark is the blue of the sky? At what time of the day is it the darkest blue? What is the dominate colour of the day time sky for you during the course of your observation?

Clouds

Clouds types and patterns – what do you see on different days, what do the patterns remind you of? How fast do they move?

Birds

How do your local birds ‘use’ the sky? Are there more birds at sunset or sunrise? Are these birds not birds? What does such movement add to your concept of the sky?

Rainbow, and Halos

Collect rainbows, **colours**, size and how they relate to the landscape. Look for a moon bow, they do happen but are much harder to see. There are other phenomena called fogbows – arches of white light formed in fog when the rising sun is behind you and/or even dewbows when the sun rises over a glossy field of grass. There are many different visual phenomena around the sun as the weather changes, see what you can observe.

Lunar halos

Look for a lunar halo – how big is it, what does it look like?

Eclipses

If there are going to be any solar or lunar eclipses that you will be able to observe these will allow you to consider images, colours, and your own feelings as you observe the eclipse. With a solar eclipse you could focus on the ground and record the small images of the eclipse captured in shadows underneath trees.

Southern or Northern Lights

This is not available for most people but if you are lucky enough to observe either of these then the options for colour, size, shape, recording in any format and noting your feelings are vast.

Books that you may find useful:

Schaaf, Fred. *Seeing the Sky : 100 Projects, Activities, and Explorations in Astronomy*. New York ; Chichester: Wiley, 1990.

Schaaf, Fred. *The Starry Room : Naked Eye Astronomy in the Intimate Universe*. Mineola, N.Y.: Dover Publications ; Newton Abbot : David & Charles, 2002.