


Cosmic Rhythms & Planting Calendar

Working with Rhythms is a major area where BD improves on other streams of organic practices



Introduction

- Conscious incorporation of rhythms into our agricultural activities is one of the major areas where Biodynamic Farming distinguishes and improves over other forms of organic practices

In These Sessions

- Session I
 - Introduction to Cosmic Rhythms
- Session II
 - Connection To Farming Activities
- Session III
 - Planting Calendar

Rhythm

- What is a Rhythm
 - A regular recurrence of an action
 - Examples - heartbeat/breath
- Activities done in tune with rhythms yield maximum benefit
- Earth and the Cosmos have rhythms too
 - We are already aware of and in tune with some rhythms (e.g. Sun's rhythms)
 - Others we are unaware & hence lose out on potential benefits

Benefits of Working With Cosmic Rhythms

- At a minimum they provide a broad framework/ set of principles to plan and do our farm activities.
 - They introduce a discipline into the farming activities
- The real major benefit is that they allow the cosmic energies to revitalize our soil
 - Food produced from such a living soil has not only more nutrition but increased life force and vitality
- Can be looked upon as a free bonus/subsidy available to the organic farmer
- Weeds follow Cosmic Rhythms
 - Weeds specialize in extracting every possible subsidy available in nature

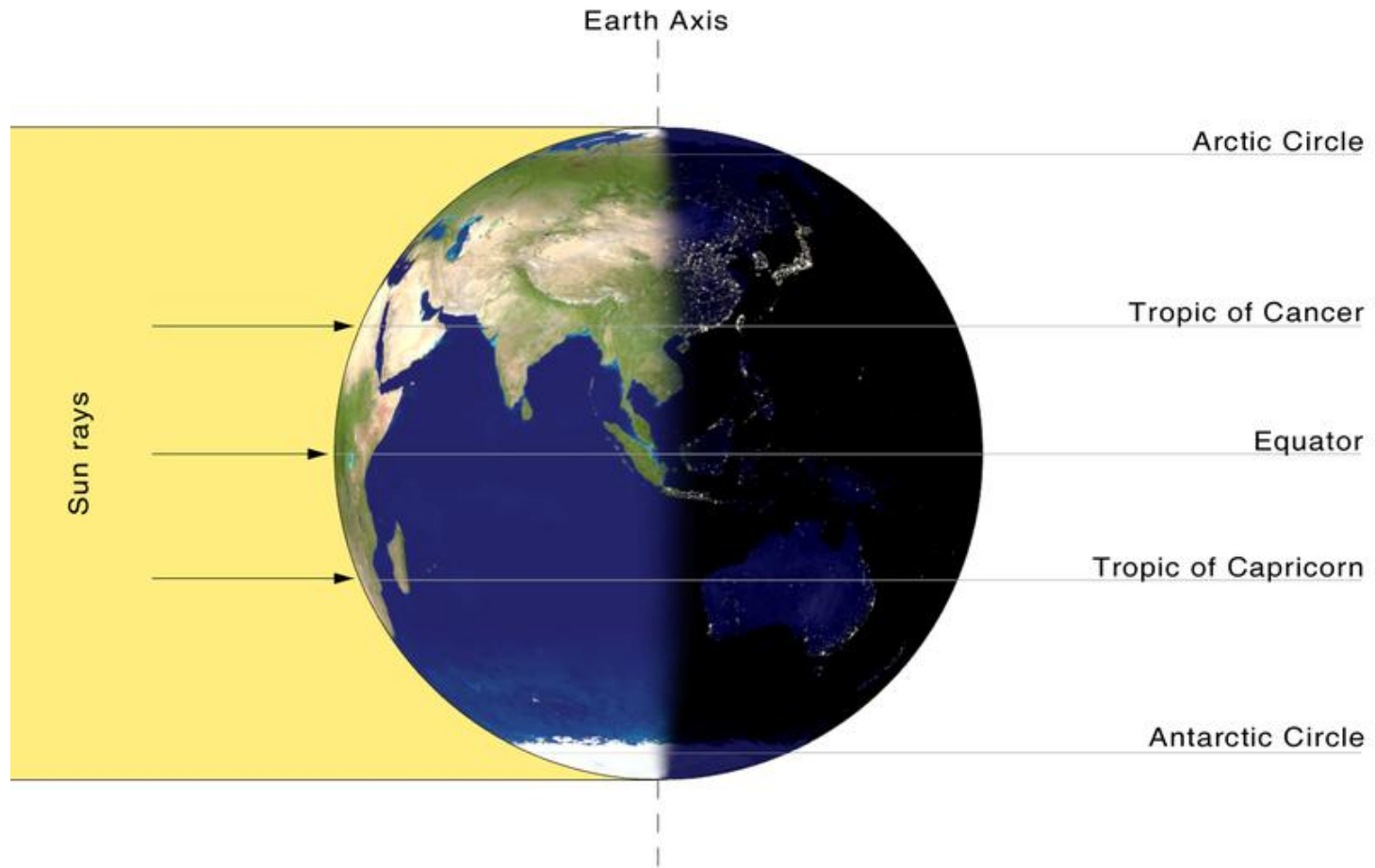
The Different Cosmic Rhythms

- Sun Rhythms
 - Day/Night
 - Seasons
- Moon Rhythms
 - Full Moon/New Moon
 - Nodes/Eclipses
 - Perigee/Apogee
 - Ascending/Descending
 - Moon opposite Saturn
 - Moon in Zodiac Constellations

Sun's Day/Night Rhythm

- Caused by earth's (West to East) rotation on it's axis in 24 hours
 - Part of the earth facing the sun receives sunlight and it is day time in that part
 - The portion that is away from the sun receives no sunlight and it is night time in that part
- Most of us are already in tune with this rhythm
 - We sleep at night and do all agricultural activities during the day
- This is the Earth's daily breath
 - Earth breathes in during the night and breathes out during the day

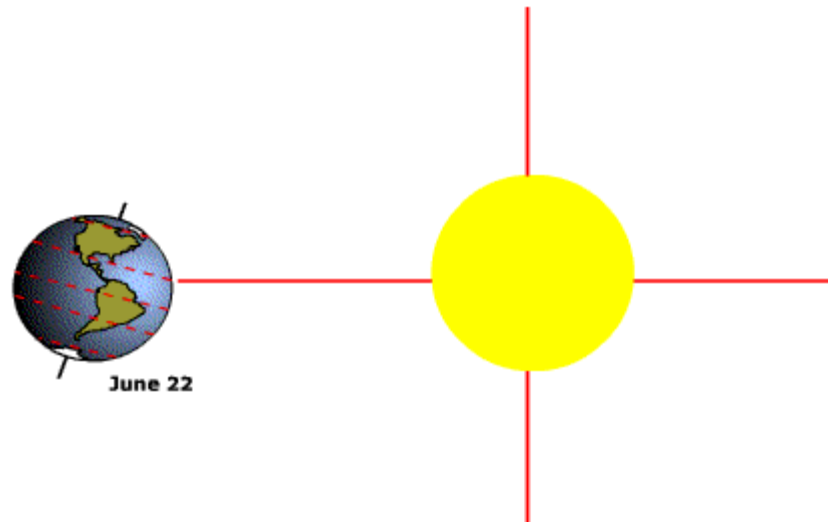
Sun's Day/Night Rhythm



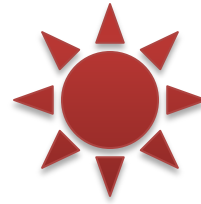
Sun's Seasons

- Caused by Earth going round the Sun
 - Takes 365.25 days to complete one revolution
 - Path is elliptical (but this has only slight effect on the seasons)
 - The earth's axis is not perpendicular to the orbital plane but is at 23.5 degree angle to it and always points to the North Star
- Winter Sun is more southwards and its path is a smaller/lower arc in the sky
 - hence slanted/milder rays; short days and cool climate
- Summer Sun is more northwards and its path is a higher/bigger arc in the sky
 - hence perpendicular/harsher rays; long days and hot climate
- Agricultural activities generally follow this rhythm
- This is the Earth's yearly breath
 - Earth breathes in during winter and out during summer

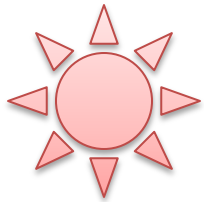
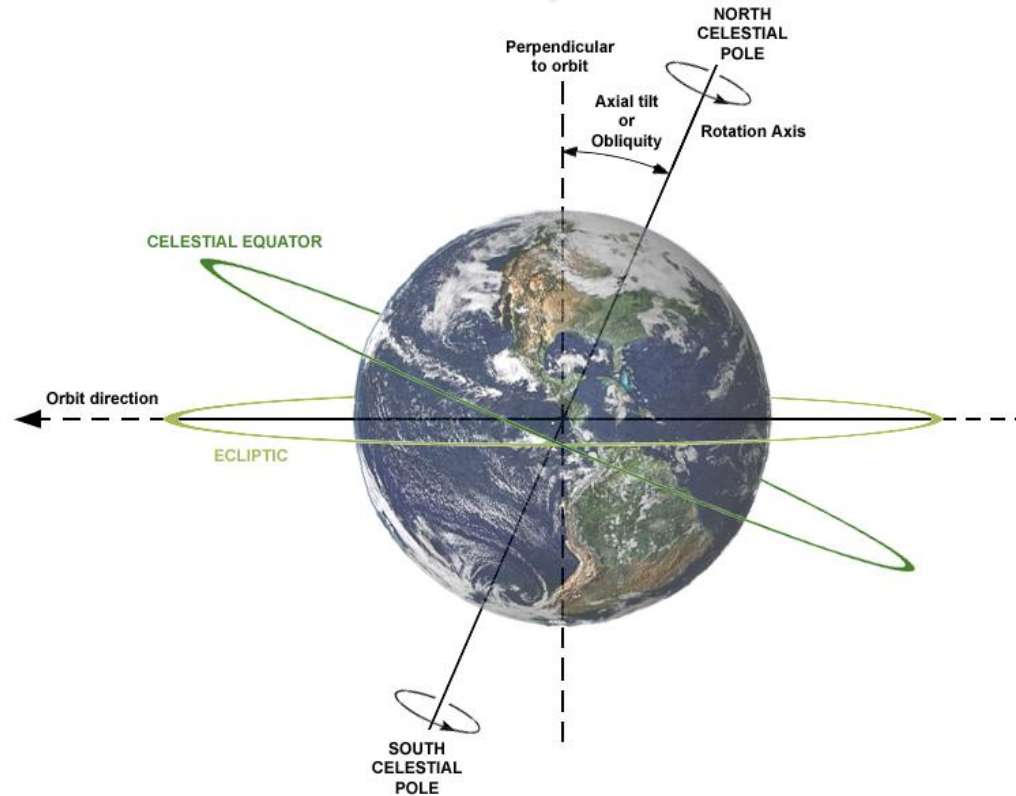
Sun's Seasons



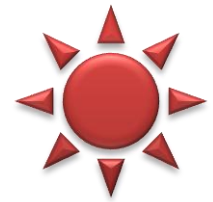
Solstice & Equinox



Equinox
(21st March)



Winter Solstice
(21st Dec)



Summer Solstice
(21st June)



Equinox
(21st Sept)

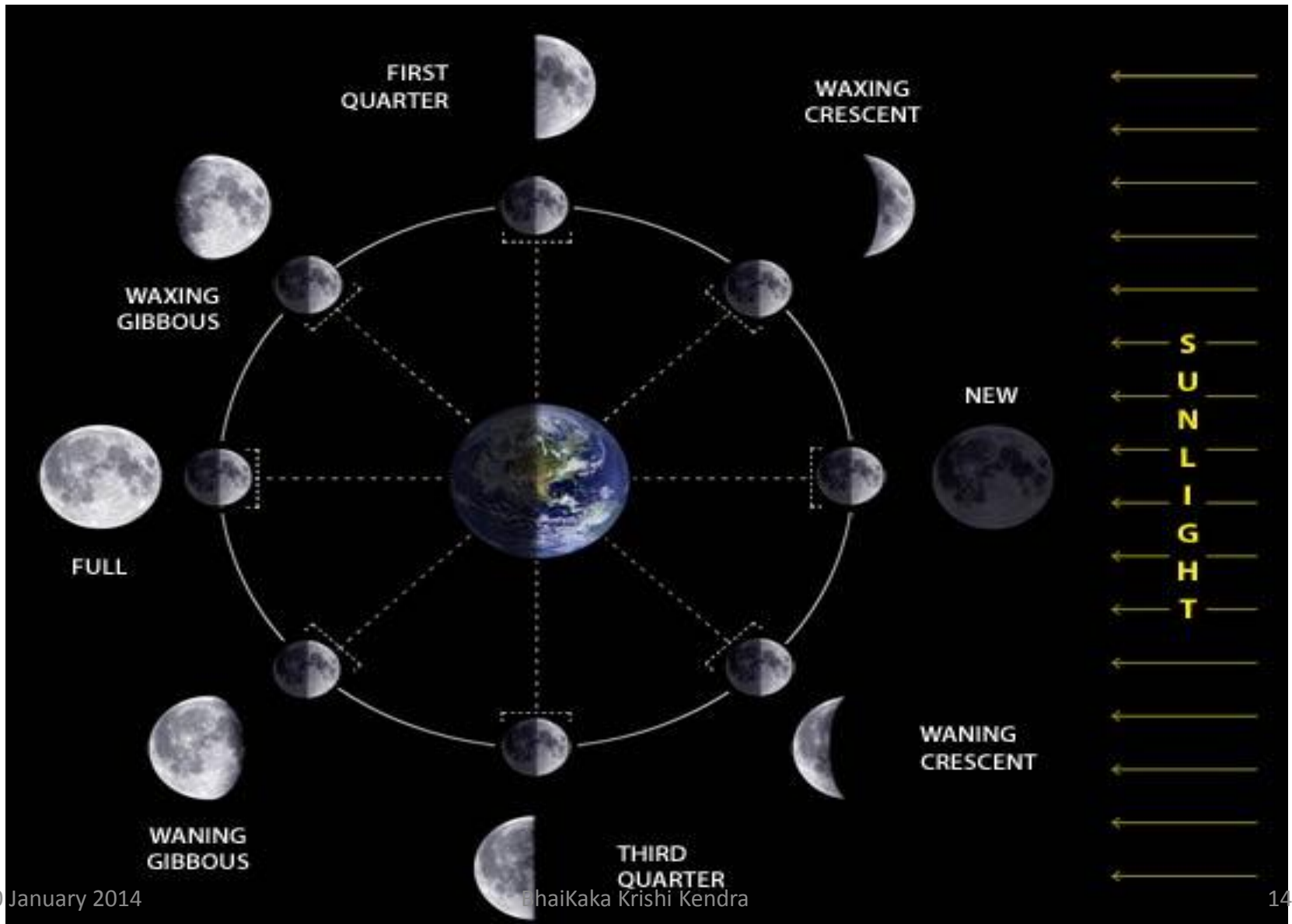
Sun's Seasons - Solstice & Equinox (N. Hemisphere)

- 21st June - Summer Solstice
 - Tropic of Cancer – Longest day; Sun directly overhead.
 - Equator – Sun has a 66.5 degree northerly path above horizon
 - North Pole - 24 Hours sunlight. Sun 23.5 degrees above horizon
- 21st Sept – Equinox
 - Tropic of Cancer –Equal day and night
 - Equator – Sun directly overhead.
 - North Pole - Sun always at the horizon
- 21st December – Winter Solstice
 - Tropic of Cancer – Shortest day; Sun has a 23.5 degree southerly path above horizon
 - Equator – Sun has a 66.5 degree southerly path above horizon
 - North Pole – 24 hours darkness.
- 21st March – Equinox
 - Tropic of Cancer –Equal day and night
 - Equator – Sun directly overhead
 - North Pole - Sun always at the horizon

Full Moon/New Moon

- Caused by Moon's revolution around the earth in 27.3 days
 - We see the moon because of light reflected from Sun
 - When Moon is opposite the Sun (with Earth in between), the sun's rays are reflected from full face of the moon and we have full Moon.
 - When Moon is between the Sun and Earth, no light is reflected and we have the No or the New Moon.
 - In all other positions, light gets reflected from a part of the moon and hence we have the waxing (becoming bigger) and the waning (becoming smaller) of the moon.
 - This is a 29.5 day rhythm [Synodic Period]

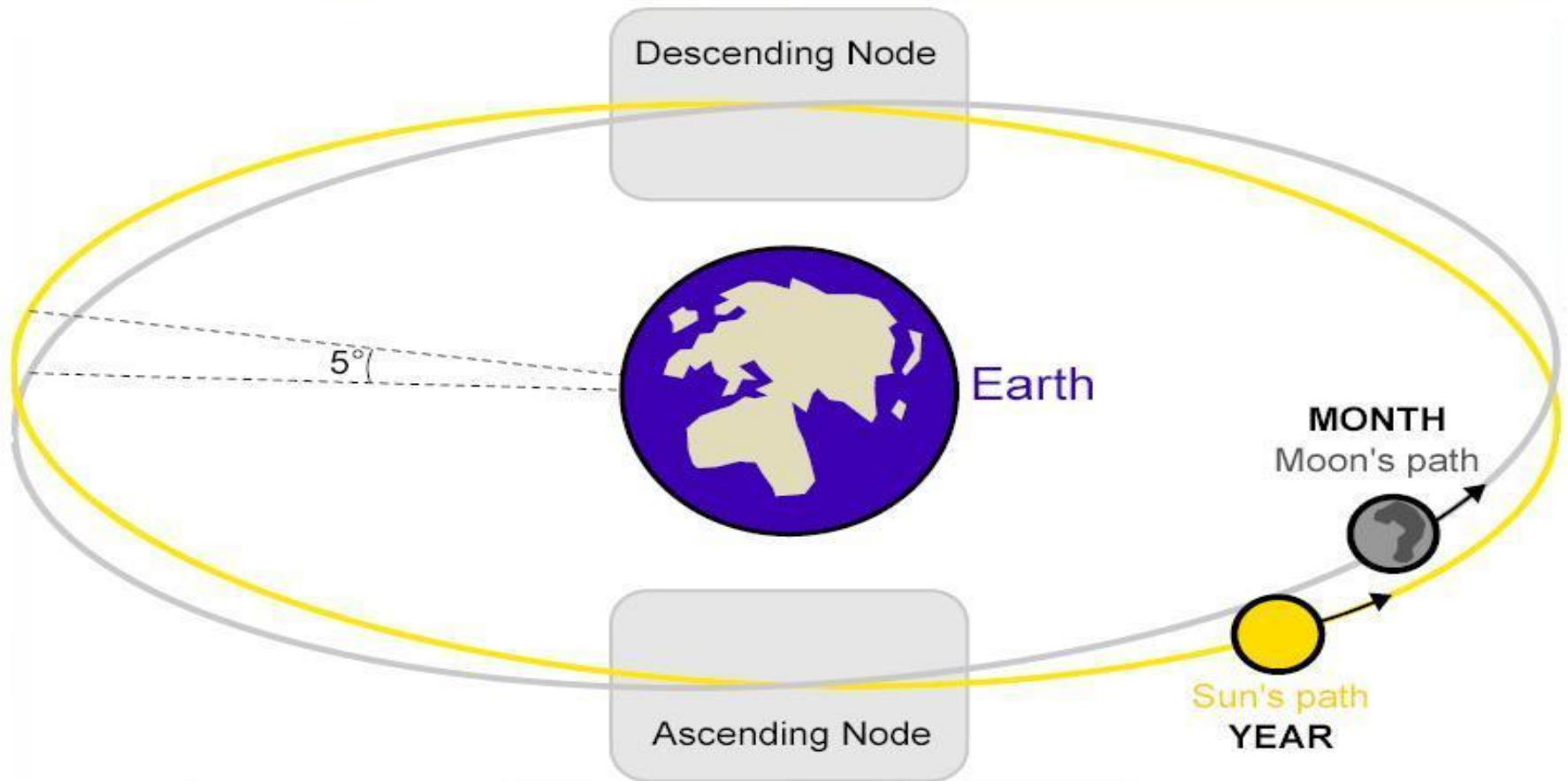
Full Moon/New Moon



Moon Nodes

- Caused by intersection of the Moon's & Earth's orbital planes
 - Moon's orbital plane is at 5 degrees to Earth's orbital plane
 - Approx. every 13.5 days their paths cross
 - When the node occurs on a new Moon we experience the solar eclipse
 - When the node occurs on a full Moon we experience the lunar eclipse
 - Nodes can be considered mini eclipses in terms of their effect
 - This is a 27.2 day rhythm

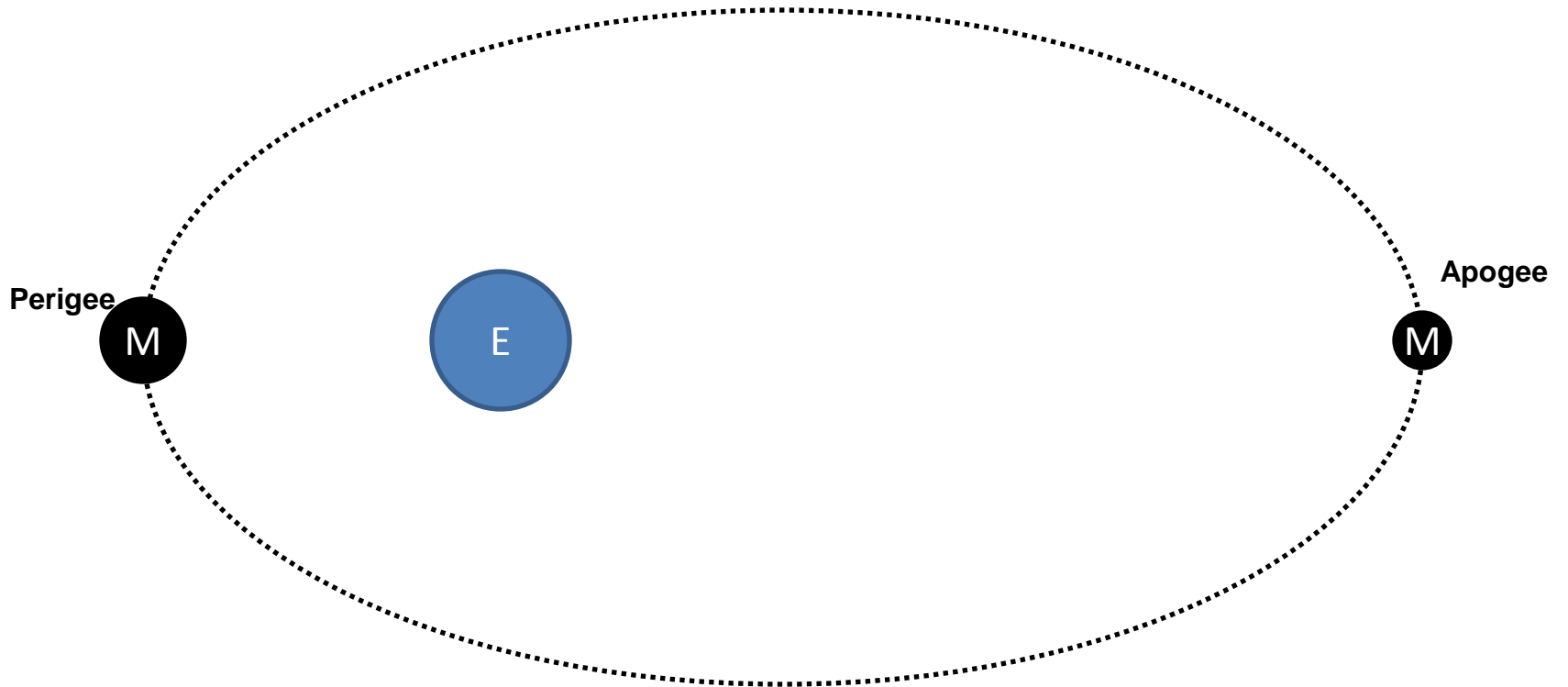
Moon Nodes



Perigee/Apogee

- This happens because the Moon's orbit is elliptical
 - Perigee is the Moon's closest point to the Earth
 - Apogee is the Moon's farthest point from the Earth
 - The Moon's distance varies by as much as 50000 kms. between these points
 - This is a 27.5 day rhythm

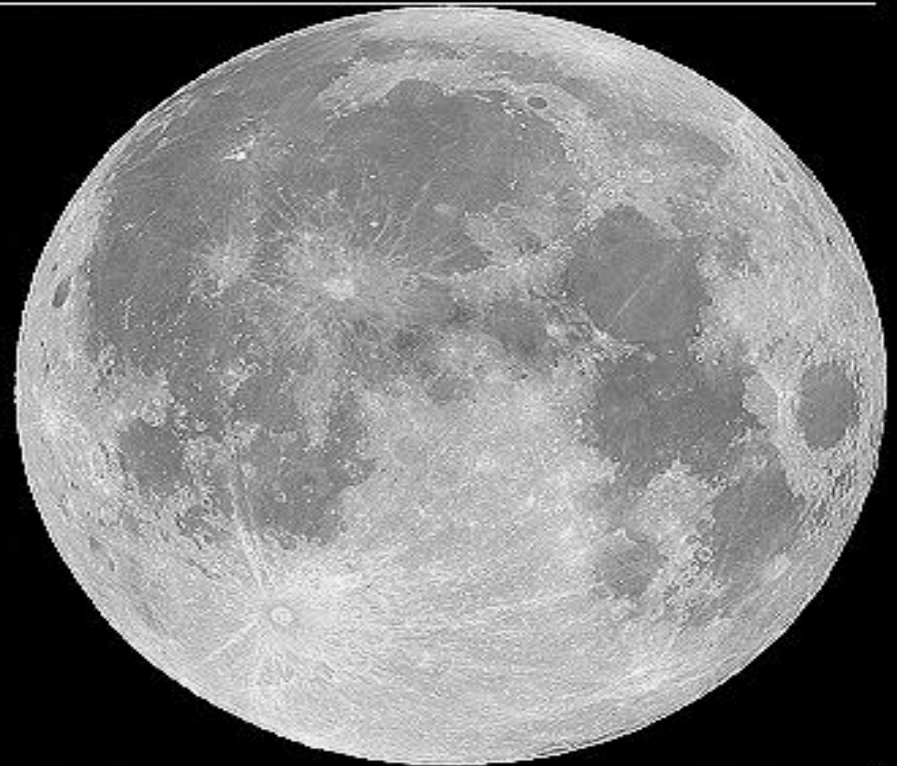
Perigee/Apogee



Perigee/Apogee

Apogee

Perigee



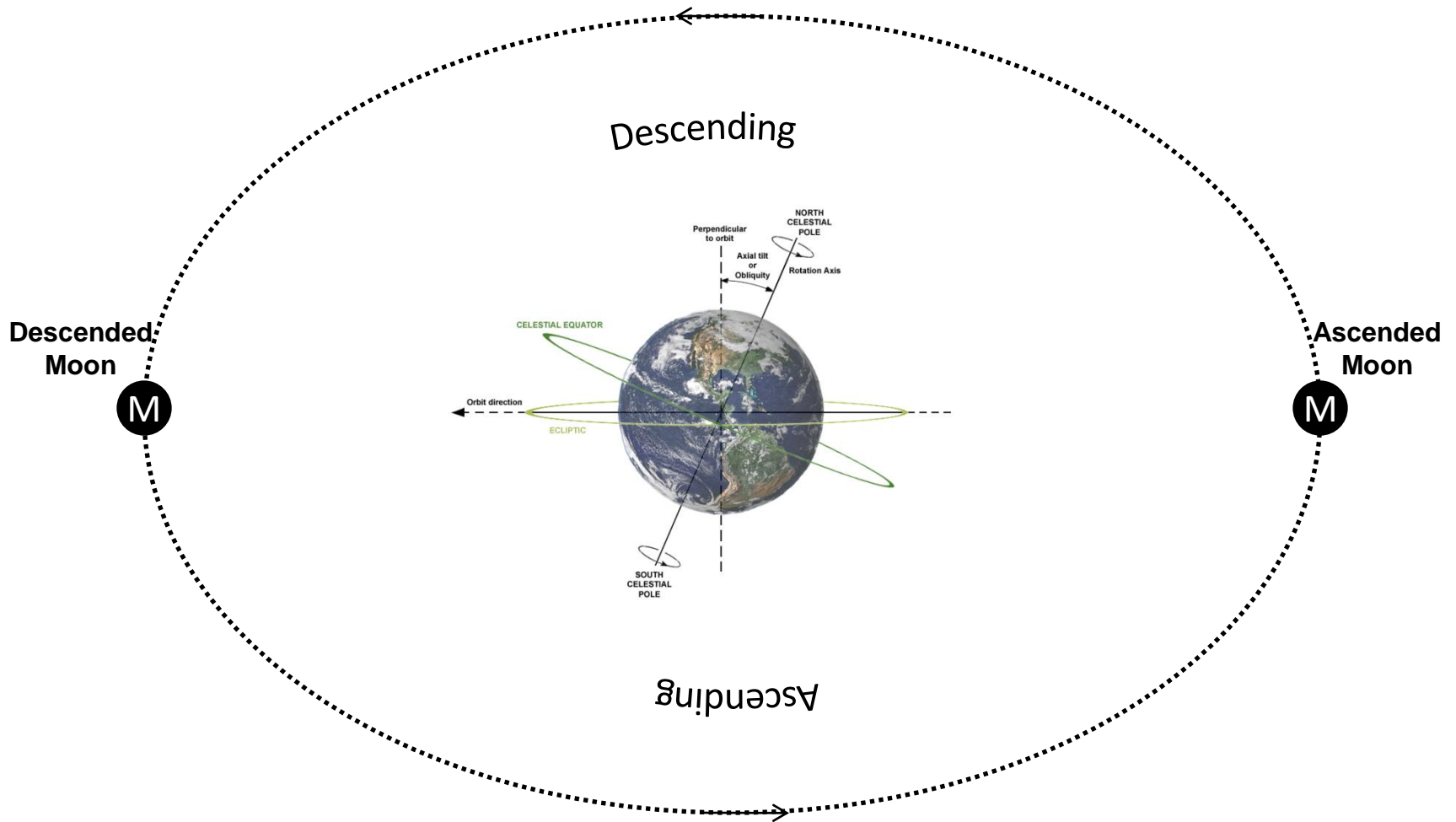
2006-02-13
405,978 km
29.87 arc-mins
Altitude @ 69.17°

2006-09-08
357,210 km
33.89 arc-mins
Altitude @ 45.36°

Ascending/Descending Moon

- Caused by Earth's axis not being perpendicular to the planetary orbital plane but being at 23.5 degrees to it
 - Very similar to the sun's seasons
 - Ascending moon – moon's summer
 - Descending moon – moon's winter
 - Descended moon rises at the southern most point and its path across the sky is very low
 - Ascended moon rises at the northern most point and its path across the sky is higher
 - This is a 27.3 day cycle
 - Most important rhythm for agriculture
 - This is the Earth's monthly breath
 - Asc – Earth breathes out; Desc – Earth breathes in

Ascending/Descending Moon



Moon Opposite Saturn

- Occurs when Moon is exactly opposite Saturn
 - Occurs once in 27.3 days
 - Very important rhythm for agriculture

Moon Opposite Saturn



Moon in Zodiac Constellations

- The Moon passes in front of the zodiac constellations during it's orbit around Earth
 - So does the sun and all the planets
- Each zodiac constellation radiates certain favourable conditions which the Moon focuses on to the Earth as it resides in each constellation

Moon In Zodiac Constellations

