

ASTRONOMICAL LEAGUE

ORBITAL ASPECTS OF VENUS



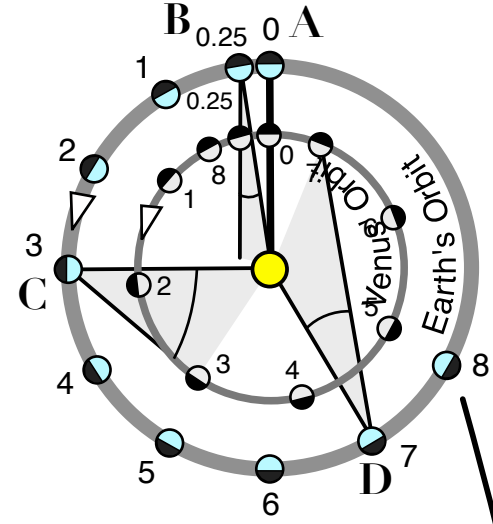
Sidereal orbital period: Time it takes to completely circle the sun.
 Earth: 365.25 days; Venus: 224.7 days
 Synodic orbital period: Time between successive inferior conjunctions
 Venus: 584 days = 19.5 months

Orbital position
Phase and relative size

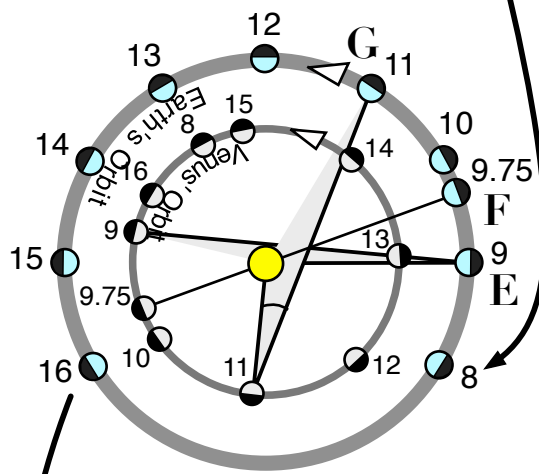
Position above the horizon

- A** **Inferior Conjunction (IC)**, Venus lies between Earth and the sun and can't be seen.
- B** 1 week after IC, thin crescent rises low in east just before sunrise.
- C** 3 months after IC, near half phase and **greatest western elongation** climbs high in east before sunrise.
- D** 7 months after IC, small gibbous shines low in east before sunrise.
- E** 9 months after IC, small gibbous, very low in the east before sunrise.
- F** 9.75 months after IC, lies behind the sun and can't be seen, **superior conjunction**.
- G** 12 months after IC, small gibbous shines low in the west after sunset.
- H** 17 months after IC, near half phase, reaches **greatest eastern elongation** high in the west after sunset.
- I** 18 months after IC, brilliant crescent sets in the west after sunset.
- J** **19.5 months after IC, Venus reaches inferior conjunction again.** It lies in front of the sun and can't be seen.
- K** 1.5 months after the second IC, brilliant crescent shining low in the east before sunrise. Similar to **B**.

Part I: 0-8 months after inferior conjunction



Part II: 8-16 months



Part III: 16-24 months

