The HELIOCENTRIC Model

To an earthbound observer, where is the Sun on 6/21?

23.5 degrees north of the Equator, and to the “right”.

To an earthbound observer, where is the Sun on 12/21?

23.5 degrees south of the Equator, and to the “left”.

6/21 Summer Solstice

12/21 Winter Solstice

Date ?
The Celestial Sphere and the Geocentric Model

![Diagram of celestial sphere and equator with key dates and movements]

- **12/21 Sun**
- **6/21 Sun**
- **3/21**
- **9/22**

The Annual (Apparent) Path of the Sun

(1 Degree/ Day)
The Daily Path of the Sun and the Geocentric Model

Daily (Apparent) Motion of the Celestial Sphere
(360 Degrees/Day)
(15 Degrees / Hour)
(1 Degree / 4 Minutes)
The Path of the Sun at 41 N
The Path of the Sun at 41 N

6/21
3/21 & 9/22 (Equinox)
12/21
The Path of the Sun at 41 N

- 6/21
- 3/21 & 9/22 (Equinox)
- 12/21