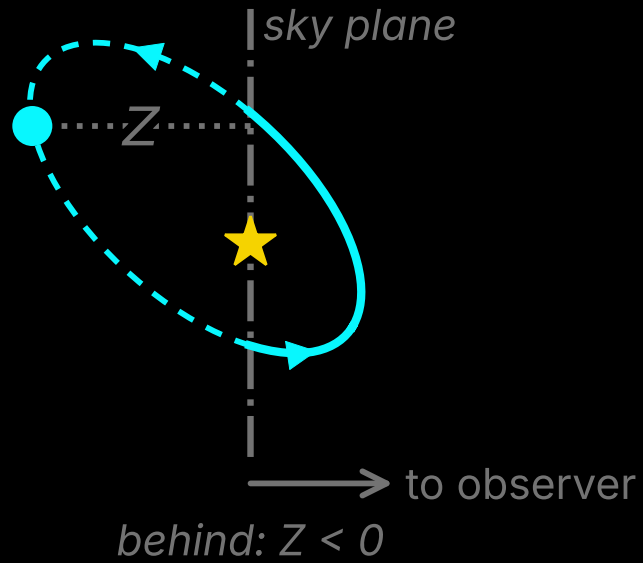


Why is the planet half lit where it crosses the sky plane?

behind the sky plane

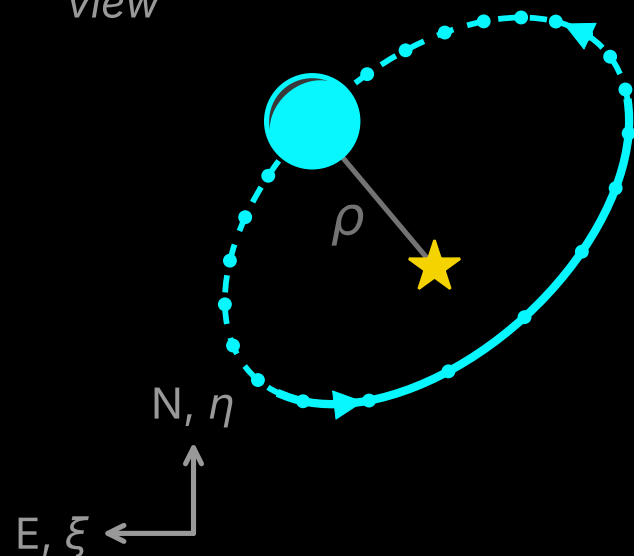
side view
from the east



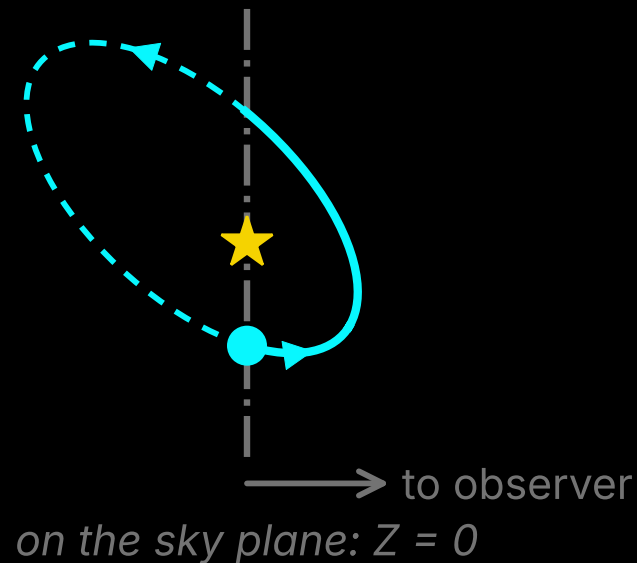
$\alpha = 35$ deg

Φ (Lambert phase) = 0.84

observer's
view

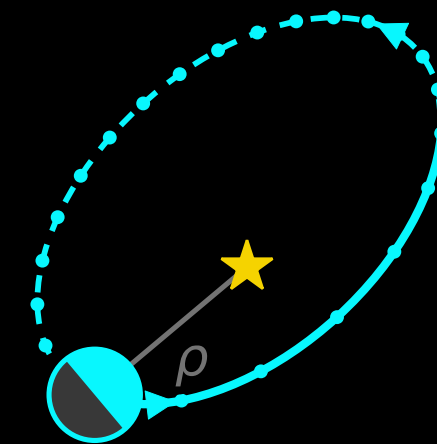


on the sky plane (ascending node)



$\alpha = 90$ deg

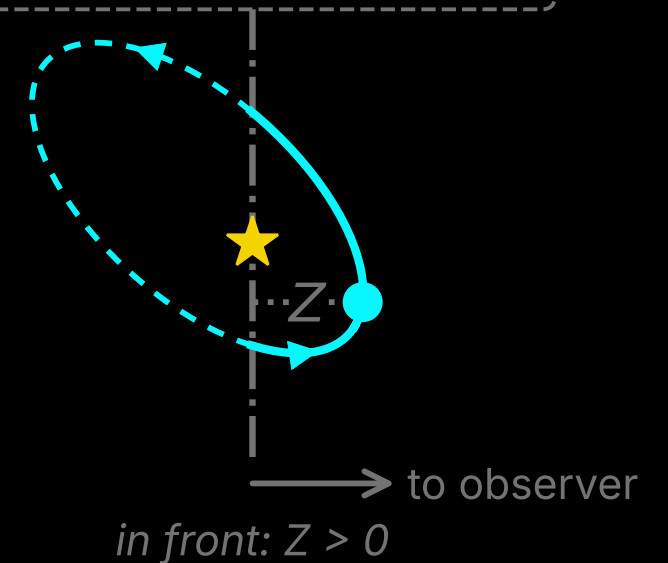
$\Phi = 0.32$



dots:
24 equal time steps per period

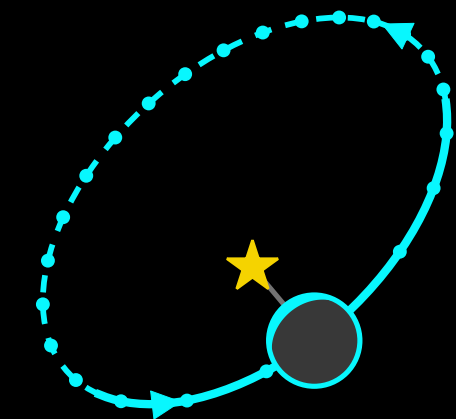
in front of the sky plane

proposed observer profile (pending)
orbit to scale



$\alpha = 145$ deg

$\Phi = 0.02$



planet disk enlarged;
colored = lit, gray = unlit