

ECE 333

Quiz 5 solution 11/04/21

1.1 False, it is $-\pi/12$ (one hour after solar noon)

1.2 False, it depends on latitude and not longitude

1.3 False, we may need to check for $\|\phi(h)\|_d \leq \pi/2$

2.1 $h=1$ (one hour before solar noon)
 $\theta(h) = \pi/12$

2.2 $\beta = \tan^{-1} \left(\frac{10}{0.126} \right) \approx 1.5582$.