

signal period: 7 hours, frequency: 0.14286 cycles per hour
sampling rate: 40 X frequency (5.71429 samples per hour)
number of samples: 81, 2 periods
df: 0.07055, Δf : 5.64374 cycles per hour
dt: 0.17500, Δt : 14.00000 hours
 $df = 1/\Delta t$, $\Delta f = (n - 1)df = 1/dt$
offset: 0 m, amplitude: 2 m, initial phase: 0.0 °, noise: 0.0

