sampling rate: 2.2 frequency (0.31429 samples per hour) signal period: 7 hours, frequency: 0.14286 cycles per hour

number of samples: 19, 8 periods df: 0.01654, Δf : 0.29774 cycles per hour dt: 3.18182, Δt : 57.27273 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

