



Constants:

- LOG_PERIOD = time between periodic logs
- PERIOD = time for cycle
- HALF_PERIOD = PERIOD / 2
- STRENGTH = coefficient for PRC
- REFRACT = refractory period length (PCO does not react to pulses) **No used**

#Note: all times in seconds

Main Variables:

- toWrite = buffer of all the lines of data to write to the output file
- value = a time-based proxy / equivalent of the phase value
- offset = amount to alter value by during a given cycle (affected by phase shifts and initial conditions)
- Reset every cycle
- head = **No used**
- start = the start time for a specific cycle -> used to set value
- log_timer = time when the PCO will log its data
- current_time = time of current loop iteration

#Note: a direct "phase value" is never recorded / has variable -> the "phase value" is converted from variable value when recording data

Data Format:

File Format = .csv

Each line contains the following:

Timestamp, Phase, Offset, Ping?

- Timestamp = time when event recorded
- Phase = phase of PCO -> calculated when logged
- Offset = value of offset variable when recorded
- Ping? = Did the PCO just send message (eg phase = 360)