

```

root
  fileName expression 'polarization ' + frontPolarization+backPolarization
init
  counter.countAgainst choice 'TIME'
  backPolarization expression 'UP'
  frontPolarization expression 'UP'
Loops
  vary
    _i start 1 stop 2 numPoints 2
    waitPoint expression 0
  subloop
    vary
      frontPolarization value 'UP','UP','DOWN','DOWN' cyclic
      backPolarization value 'UP','DOWN','UP','DOWN' cyclic
      _time value 30,150,150,30 cyclic
      waitPoint value 10 cyclic
      counter.timePreset expression _time

```

Trajectory Comments

Single quotes are text input

Produces 4 files:

polarization_UPUP

polarization_UPDOWN

polarization_DOWNUP

polarization_DOWNDOWN

spaces produce underscores '_'

Produces 2 points from 1 to 2. At each step, this sets waitPoint to 0 and goes to subloop.

Subloop sets permutation of front pol and back pol. Each permutation counts respective time with no time delay as waitPoint is 0. After 4 perms, waits 10s and goes back to main loop. Each data point will have all 4 permutations.

NOTE: waitPoint is not part of filename as it is not listed as variable to add to filename