

```

1: # Time reserved for antenna motion into positions 1, 2, 3 and 4, seconds.
2: # These should be carefully turned to real antenna motion.
3: # The times should also try to accommodate the gump start delay.
4: # (See the file cp2_scan.txt for the CP2 timing results 23-Aug-2005).
5:
6: set skiplist [ list pos1 14 pos2 24 pos3 28 pos4 42]
7: set timelist [ list pos1 90 pos2 90 pos3 90 pos4 90]
8:
9: for { set p 0 } { $p < $NPos } { incr p } {
10:     set Pname($p) [lindex $skiplist [expr 2*$p] ]
11:     set Pskip($p) [lindex $skiplist [expr 2*$p + 1] ]
12:     set Ptime($p) [lindex $timelist [expr 2*$p + 1] ]
13: }
14:
15: set pos 0
16:
17: [[---code omitted---]]
18:
19: set streamlen [expr $Ptime($pos) - $Pskip($pos) - 2 ]
20:
21: [[---code omitted---]]
22:
23: GumpConfig $streamlen $Sampling_ns $Expname $Activeside $Logfile $PosID
24:
25: [[---code omitted---]]
26:
27: # Gumper loop
28:
29: while { 1 } {
30:
31:     for {set pos 0 } { $pos < $NPos } { incr pos } {
32:
33:         set Position $Pname($pos)
34:         EngineMsg [list "Gumper: waiting for $Scan $Position"] [Utime]
35:
36:         # Wait antenna to move into position
37:
38:         [[---code omitted---]]
39:
40:         # Start gump
41:
42:         [[---code omitted---]]
43:
44:         # Now wait so long that there are 20 seconds left of current
45:         # position
46:
47:         set MainDwell [expr $Ptime($pos) - 20 - $Pskip($pos)]
48:         set streamlen [expr $Ptime($pos) - $Pskip($pos) - 2 ]
49:
50:         if [Gsync $MainDwell] {
51:             set broken 1
52:             break
53:         }
54:
55:         # We now have 20 seconds left of the current position
56:
57:         # Prepare for a "buffer flip"
58:
59:         if { $gmp(buffflip) == 1 } {
60:             set Activeside [expr 1 - $Activeside]
61:         }
62:
63:         # Prepare for next position
64:
65:         set nextpos [expr ($pos + 1) % $NPos]
66:         set PosID "${Scan}$Pname($nextpos)"
67:         GumpConfig $streamlen $Sampling_ns $Expname $Activeside $Logfile $PosID
68:
69:         # Then wait 20 - 2 seconds
70:
71:         [[---code omitted---]]
72:
73:     }
74:
75: }

```