

Appendix 1: New Control Variables Illustrated

Figure A1.1 shows the “control data” section of a PEST control file wherein values are specified for the UPTTESTMIN, UPTTESTLIM, RUN_SLOW_FAC, RUN_ABANDON_FAC, WIN_MRUN_HOURS, SOFTSTOPHOURS, ZEROSENVAL, JCOWARNTHRESH and JCOZEROTHRESH variables. All of these variables are optional; hence they can be omitted from a PEST_HP control file if desired. As has been discussed, a value cannot be supplied for both of SOFTSTOPHOURS and HARDSTOPHOURS in the same PEST control file. The protocol for supplying a value for HARDSTOPHOURS is identical to that for SOFTSTOPHOURS; simply replace the “softstophours” string with “hardstophours” in the example below.

Use of the OBSREREF, ORR_NOT_FIRST and RRFSAVE variables is also demonstrated in figure A1.1.

```
* control data
restart regularisation
19 19 2 10 3
2 3 single point 1 0 0 obsreref orr_not_first
.1 2 0.3 0.03 3 3 uptestmin=10 uptestlim=50 derforgive run_slow_fac=2.5 run_abandon_fac=5.0 win_mrun_hours=0.5
2 3 0.001 0
0.5 zerosenval=-1.11E29 jcowarnthresh=1.0e20 jcozerethresh=1.0e30
30 0.01 3 3 0.01 3 softstophours=24.0
1 1 1 rrfsave
```

Figure A1.1 Example of the “control data” section of a PEST_HP control file.