**PEST++ Notes**

For the purpose of these notes “model” refers to the software that the PEST software is interfacing with. In this case this is PSDDF.

**Chap 2.2 PEST++ File inputs**

1. Template file, one for each model input file in which parameters or decision variable reside
2. Instruction File, One for each model output file in which parameters or decision variables reside
3. Control File – Supplies Pest++ with the name of all template and instruction files, the names of corresponding model and output files, the values of control variables, initial parameter values, measurement values, weights, etc.

**Chap 2.3 Template Files**

“A model may read many input files; however, a template is needed only for those input files which contain parameters”

Template files can’t read binary files. To interact with a binary file the user needs to write a batch script that runs the model and then converts the output binary file to a text file.

Parameter delimiters cannot be characters [a-z], [A-Z], and [0-9] are invalid.

Parameter widths need to be set. It’s likely that PSDDF uses spaces to delimit the input file and if so the parameter width shouldn’t be limited using PEST++.

When the parameters name is longer than 23 character PEST++ may output padded numbers. Padding is controlled by the fill\_tpl\_zeros option.

Tpl\_force\_decimal forces numbers to be in decimal formal and is off by default.

**Suggestion:** Template files should have the extension .*tpl*

**Chap 2.4- Instruction Files**

Instructions for reading data output

Th instruction file contains the instructions that a PEST++ simulation needs to read the output file. For example in the case of Spec Gravity example, the instruction file provides the necessary information for PEST to read the final surface elevation from the .psp file.

* The instruction file (.ins) needs to include pif and the delimeter