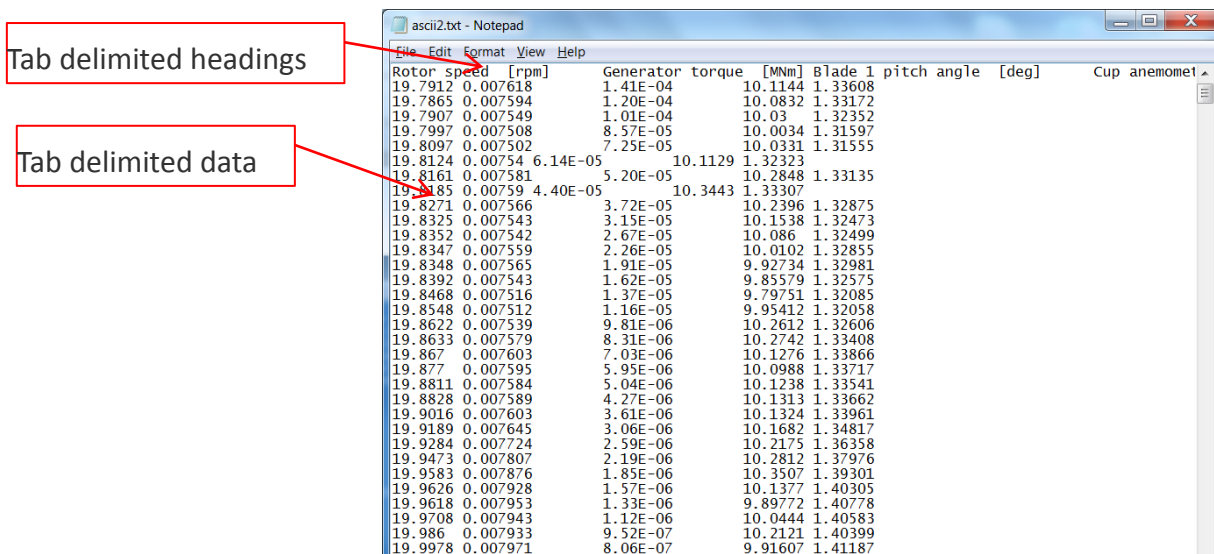


# Generating a channel from a Bladed time history

## 1 GENERATE INPUT FILE

Create a tab delimited file containing columns of all of the measured signals you would like to add to Bladed.

You can copy and paste from excel directly into a ".txt" document. The first row needs to contain the headers and the measured data follows on in row 2.

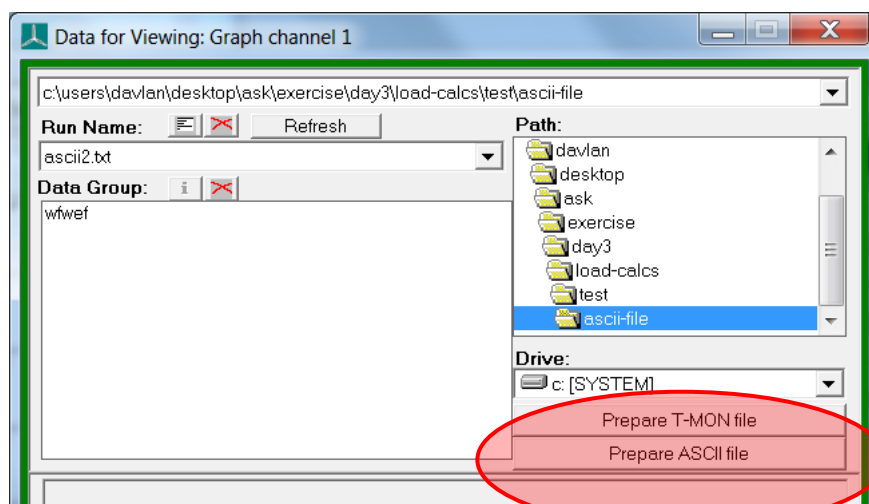


Ensure that all of the data has the same time step. A column of the time is not actually required – only the measured signals that need to be added to Bladed and the associated time step.

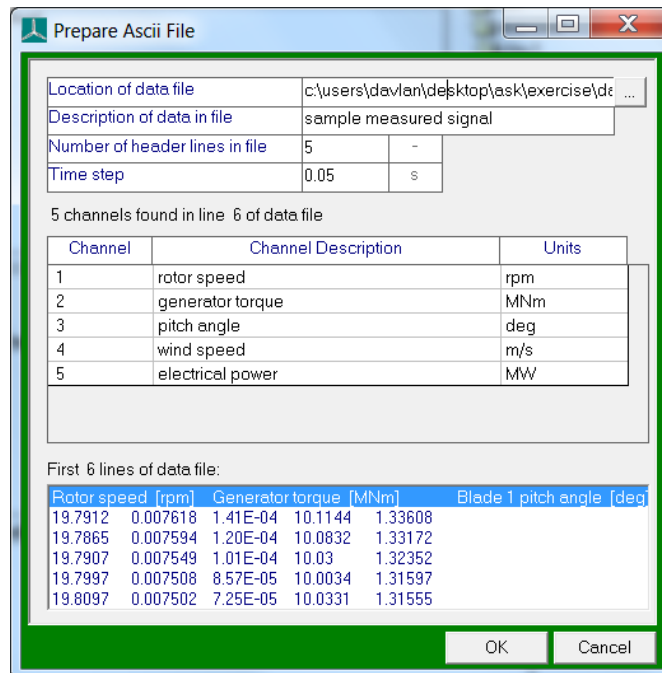
## 2 MANUAL PREPARATION OF ASCII FILE

To create a channel in Bladed from the data columns in your ASCII input file:

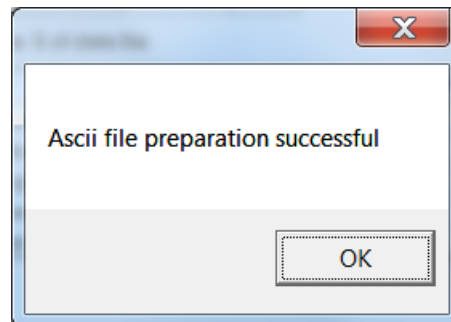
1. Select data viewer > channel 1 > prepare ASCII file



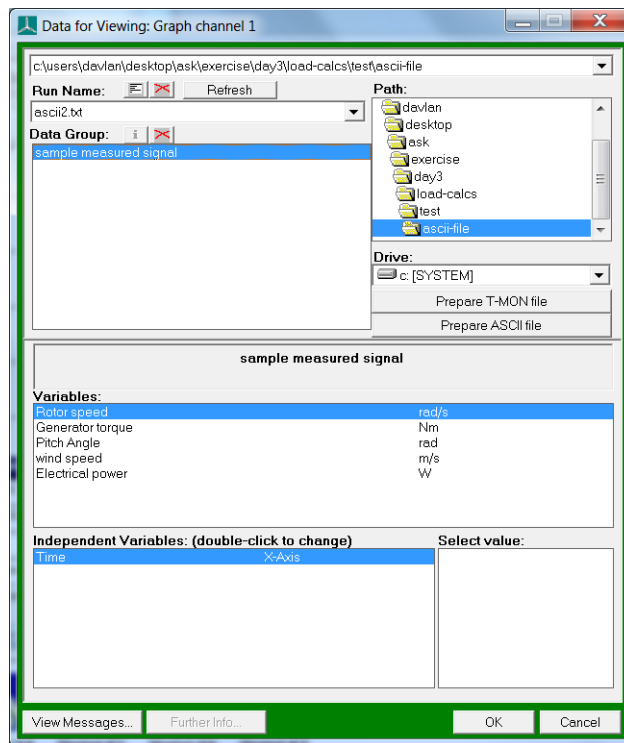
2. Navigate to the input ".txt" file



3. Define the channel name
4. Define the number of heading in the file
5. Define the time step for the variables
6. Define the channel description and units
7. Select "OK"
8. Wait for message...



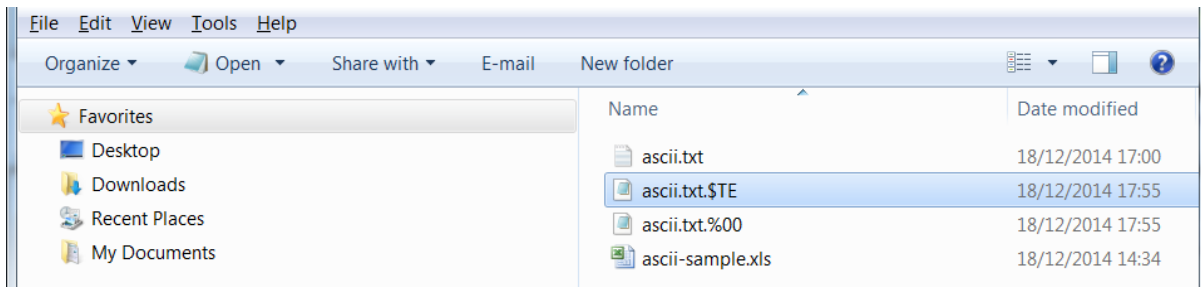
9. Plot measured signals are normal...
  - a. File is generated in the same folder as txt input file.



10. Repeat for remaining input files

### 3 AUTOMATED PREPARATION OF ASCII FILE

Once the process is complete you will notice that two files are generated in the folder alongside the original ASCII input file.



The "\*. \$TE" file is blank but the "\*. %00" file contains the headers for the input ".txt" file. The format of the "\*. %00" file is quite easy to understand and after a repeating the process manually a few times you could easily replicate the header files rather than using the Bladed interface. The "\*. %00" is what Bladed uses to interpret the ASCII input file you provide.

Below is the input file from a sample:

```
ascii.txt.%00 - Notepad
File Edit Format View Help
FILE      ascii.txt
ACCESS   S
FORM     F
RECL     0
FORMAT   n/a
HEADREC  5
CONTENT  'ASCII_DATAFILE'
CONFIG   'USER'
NDIMENS  2|
DIMENS   5      1996
GENLAB   'sample-ascii-file'
VARIAB   'rotor speed' 'generator torque' 'pitch angle' 'wind speed' 'power'
VARUNIT  A/T FL A L/T P
VARSCALE .1047197 1000000 .0174532 1 1000000
AXISLAB  'Time'
AXIUNIT  T
AXIMETH  2
MIN      0
STEP    .05
NVAR     0
```

It is a good idea to repeat the manual process a few times so that you can understand all of the necessary inputs in the "\*.%00" file and then create your own script to make these header files for a series of input ".txt" files. You should then be able to automate the whole process making hundreds of measured time histories available for processing in Bladed very quickly.