



*Tips and tricks session*

# **QUICK WRITING INCON FILE WITH EXCEL'S MACROS**

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# Introduction

- Problem: how to create quickly an INCON file based on well log data using EXCEL?
- Solution: use a MACRO (Visual basic)!
- Why EXCEL? Because it is a powerful tool to handle tables and chart in a intuitive way. No need of compiler. Easy step by step debug. Million of peoples are using EXCEL.



# 4 easy steps

1. Load the MESH file in the EXCEL worksheet containing the well log data;
2. Run the macro;
3. Check results;
4. The INCON file is ready-to-use!

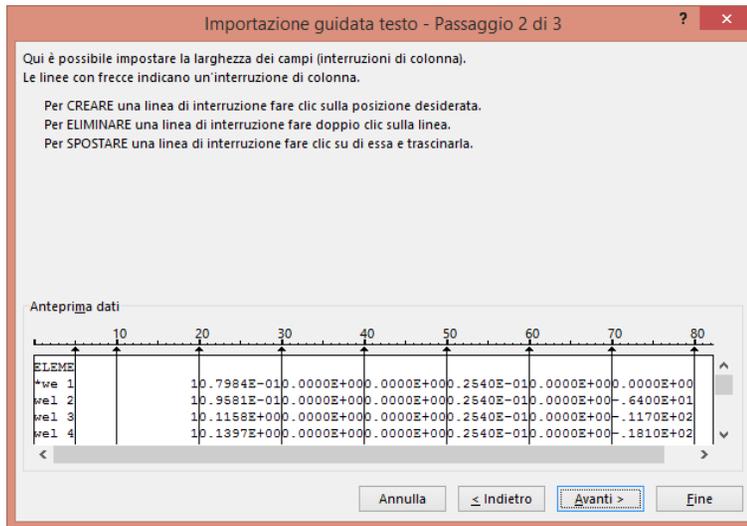


# How it's works

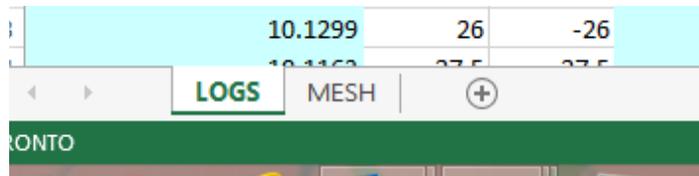
- The macro read the z coordinate from the ELEME fields of the MESH file
- Linear interpolation between 2 log data is done
- A formatted TOUGH2 compliant INCON file is generated. Results checking is straightforward with the classing charting possibilities of EXCEL.

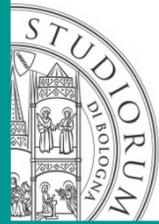


# EXAMPLE

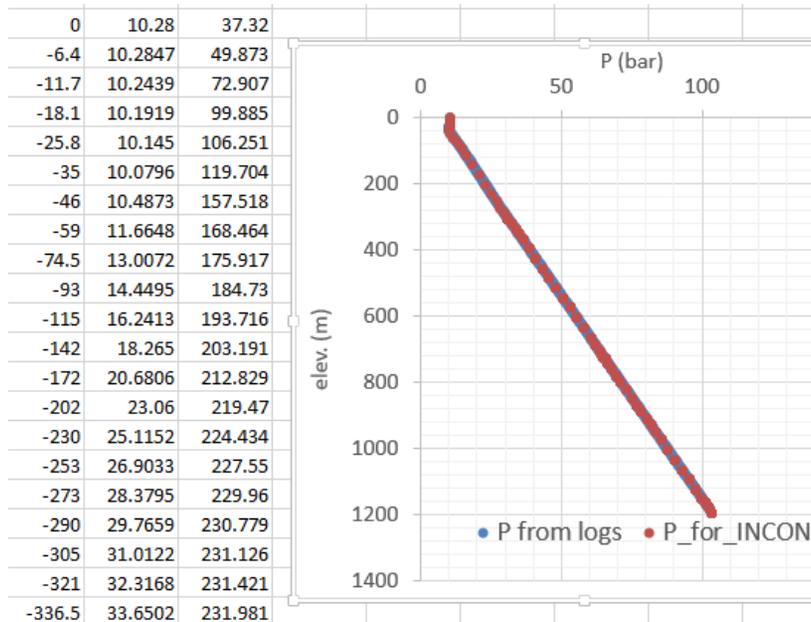


Step 1: Importing delimited text in Excel. Note: import columns 1 and 2 as “text”, to avoid errors during reading!  
Have sheet LOGS and MESH in the same workbook of Excel





# EXAMPLE



Step 2: RUN the create\_incon\_MESH macro. In the MESH worksheets, 3 columns are filled with the interpolated value.  
Step 3: Is time to check.  
Step 4: run the write\_incon\_MESH macro - the file INCON is ready-to-use!

```
INCON.dat ×
INCON-Generated by EXCEL'S Macro - date: 29/09/2015,time: 14:14:23,folder: C:\Users\
*we 1
  1.02800000000000e+06 6.000000000000e-03 6.000000000000e-06 3.732000000000e+01
wel 2
  1.02847000000000e+06 6.000000000000e-03 6.000000000000e-06 4.987300000000e+01
wel 3
  1.02439000000000e+06 6.000000000000e-03 6.000000000000e-06 7.290700000000e+01
wel 4
  1.01919000000000e+06 6.000000000000e-03 6.000000000000e-06 9.988500000000e+01
```



# EXAMPLE

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**Note:**

This sample only interpolate P and T primary variable, while the INCON file contains 4 values. Sg and XNaCl are constant for this example.



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