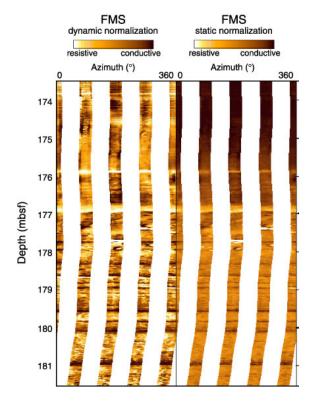
# Importing and displaying processed FMS images in Techlog

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#### Introduction

This page outlines the steps in importing and plotting of processed Formation MicroScanner (FMS) images into Techlog. The data in the processed DLIS file is corrected for tool motion and depth matched to other data set, so you just need to be able to display them and you don't need the full image processing wizard workflow.

## Import FMS data

- 1. Under Home menu (upper right), click on the Import button. The Import Buffer panel will appear next to the Project Browser.
  - a. Select 'Dataset' in the Import buffer panel,
  - b. In the Properties window, select "Launch a script after loading the file in the import buffer", and select the script 'Techlog/wbilmport'. (see
    - illustration below). This will ensure that if you load image data that have been properly saved, it will group all the right arrays into datasets than can be processed in the image processing workflow

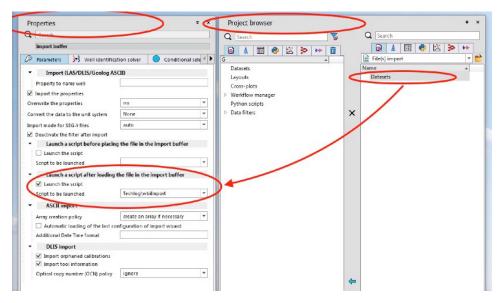


Figure 1: Project import buffer and properties panels

- 2. Using Windows File Explorer, navigate to the location of the file that you want to import. Simply click and drag a file to be imported into the Import Buffer panel. Techlog will try to automatically parse the data and select the appropriate import type.
- 3. Once the data is parsed in the Import Buffer, you can either:
  - i. Click on the well name
    - ii. Click on a particular dataset for that well.
- 4. To import, click on the blue arrow pointing left.
- 5. When the progress bar for the import process disappears, click on the bin icon to purge any file in the import buffer.
- 6. To close the Import Buffer, click on the X icon.

### Concatenate the FMS variables into arrays

This part of the workflow creates 8 arrays (FCA1, FCA2...FCD4) which correspond to the two rows o buttons on each pad. The output files will be saved in the same data set as the source files.

1. In the Geology menu, click on Python explorer and select "Concatenate FMS variables into arrays".

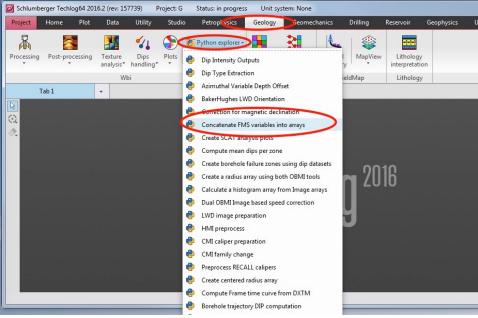


Figure 2: List of Python scripts in Techlog Geology module.

- 2. This will open a window to run the python script for that job:
  - a. Click on the "Pythonscript" yellow menu on the top right to get the right commands displayed (#1 in Fig. 3)
  - b. Select the well from the dropdown list (#2 in Fig. 3)
  - c. Select the dataset that you are working on (#3 in Fig. 3)
  - d. Launch the script (#4 in Fig. 3)

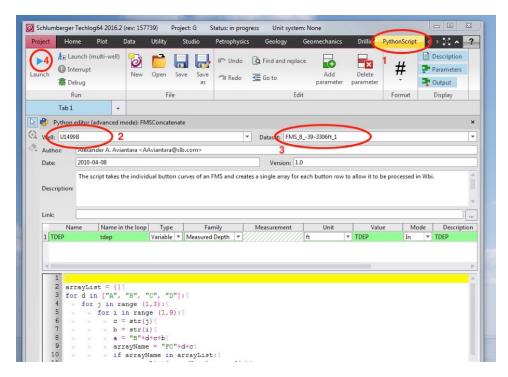


Figure 3: Pythonscript window for creating arrays from variables.

### Pad concatenation and orientation

1. Under the Geology menu > Processing, select Pad image creation (Fig. 4)

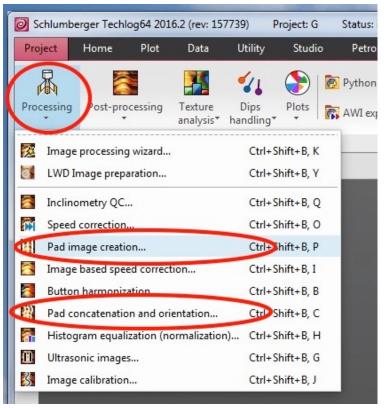


Figure 4: List of imagery-related processing steps.

2. A new window will appear (Fig. 5). Here you have to select change tool and change to FMS\_8 (The tool is actually FMS4, but the option does not exist at this step). The required variables should be automatically selected, but you may opt to manually select them to be sure that you are using the correct variables. Click "Create" to close this window and initiate the workflow in the main Techlog window.

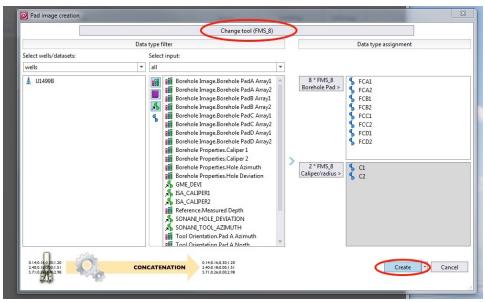


Figure 5: Pad image creation window.

3. In the new panel that appears in the main Techlog window (Fig. 6), there is a sign saying "Please drop your datasets here" - just drag your repeat pass dataset (i,e. FMS\_8\_664-1007m\_1 in the example below).

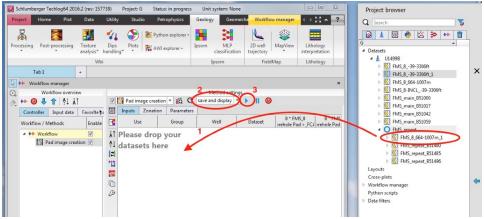


Figure 6: Workflow manager window showing the Pad image creation method.

4. Under the Geology menu > Processing, select Pad concatenation and orientation (Fig. 4). A new window will open, and this time, there is an option to select FMS\_4 - select this, and click "Create". Note: If the well contains datasets with similar variable names, it is a good practice to re-select the variables, or better yet, group the datasets before starting the entire workflow.

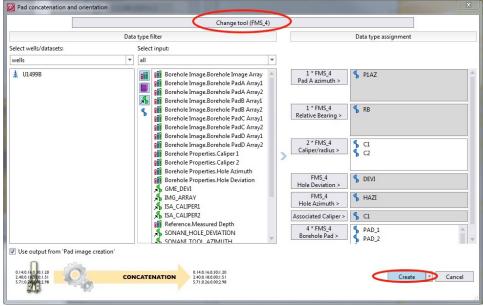


Figure 7: Pad concatenation and orientation window.

5. Back in the Workflow manager (Fig. 6), drag-and-drop the dataset into the main panel. Make sure that "save and display" is selected, and click on the blue arrow/play button. This should complete the processing and display the FMS image in a Logview window. This window may be cluttered with the various steps of the processing, so you can also open a new logview window from the 'Plot' menu, and drop your newly created FMS image in it (Fig. 8).

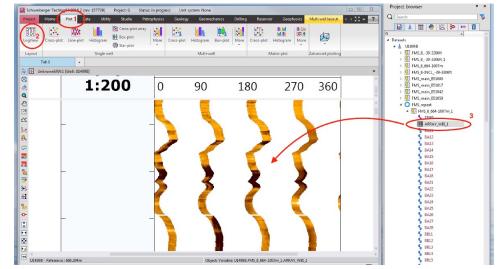


Figure 8: FMS image plot in a Logview window.

# Credits

This page is derived from the document by Gilles Guerin (BRG-LDEO) written in 2017.

# **Archived Versions**

• ImportingFMSimagesinTechlog.pdf - Feb. 24, 2020