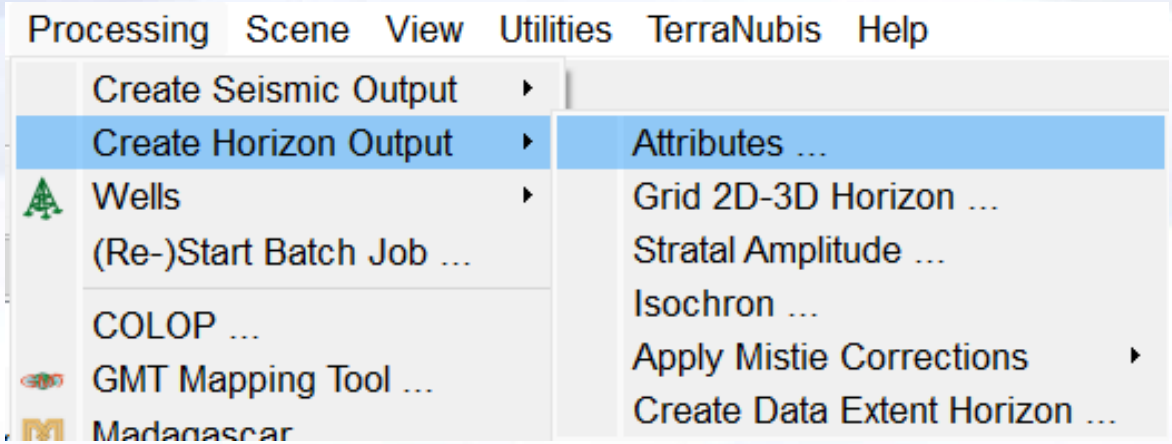
6 处理(Processing)

6.2创建层位输出

6.3(再)启动批处理作业

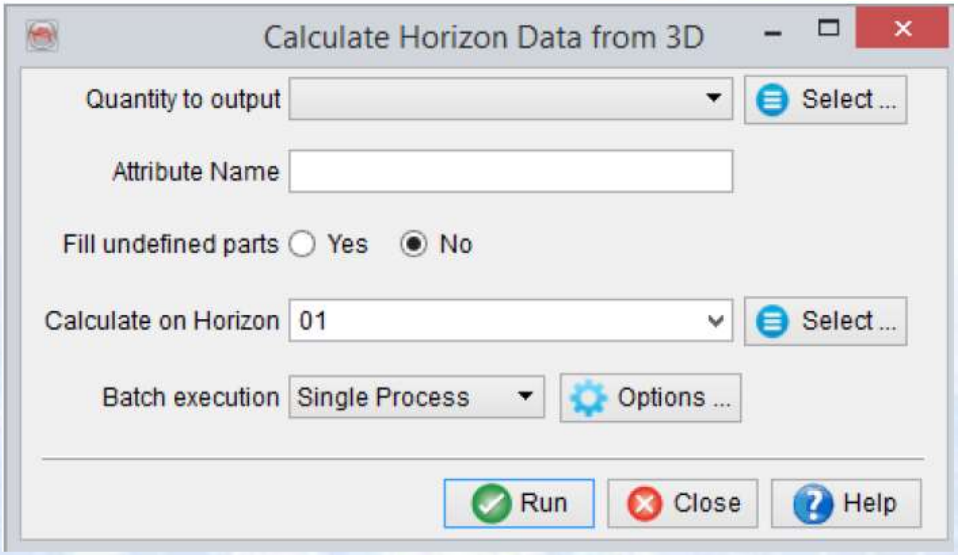
6.2创建层位输出

This menu is used to create 2D/3D-grid based output. The data is stored as horizon data (or attribute) to the selected horizon.



6.2.1 Attribute

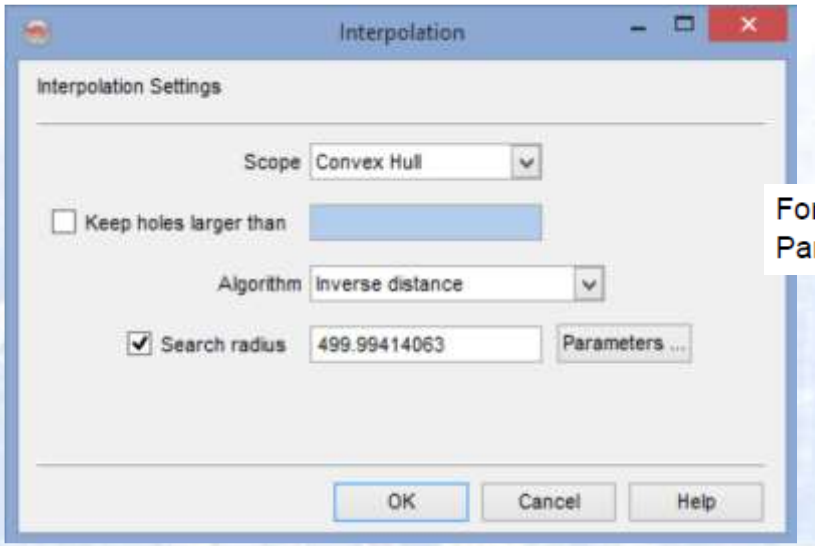
Some attributes consume significant calculation time e.g. curvature, spectral decomposition etc. It also depends on the size of the input seismic volume. Therefore, to create on-the-fly a horizon data in a scene may take significant time. Following *Processing > Create Horizon output > Attribute (2D or 3D)*, the attribute calculation is there processed in the background (batch processing) and thus other tasks can be done at the same time. By using a Horizon output, horizon attributes can be created at desired horizons independently.



Select the quantity to output (2D/3D) from the list of stored data or attributes. The attribute is (by default) saved with its own name, but it can be edited. Select the horizon on which the selected attribute will be calculated.

The parameter file, which is automatically created in the Store Processing Specification field, can have any name (a default name is provided) so that the calculation process can be easily re-started if needed. The batch processing can be achieved using a single or multiple machines. More information on this window is provided in single machine batch processing section. After the batch processing is finished, the result will be available as a horizon data: right-click on a blank horizon's attribute in the tree to select the horizon data (Select Attribute > Horizon Data).

If the option for 'Fill undefined parts' is toggled on, then the '*Settings*' button can be used to enter the interpolation settings:



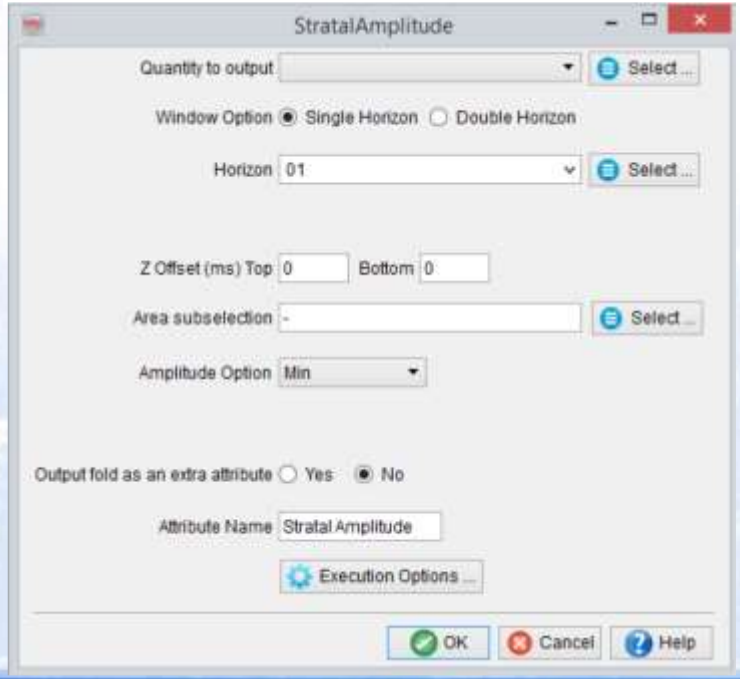
For the '*Execution Options*', please refer to the following topic: Batch Execution Parameters

Execution Options (上页图)，参考 Batch Execution Parameters

6.2.2 Stratal Amplitude

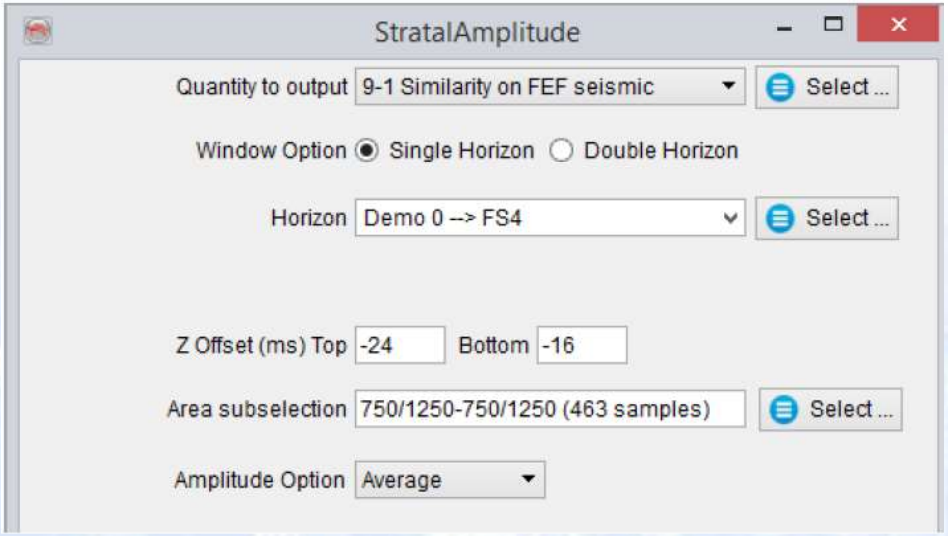
Stratal Amplitude is a processing tool available to compute statistics (min, max, rms, etc.) from an attribute along a horizon or between two horizons. The window can be launched from *Processing* > *Create Horizon output* > *Stratal Amplitude*. The output will be stored as horizon data (grid) saved on the top or base horizon.

This feature operates based on a single-trace calculation only (ie: no step-out). For multi-trace calculations (using step-out), you are advised to use the Volume Statistics attribute.

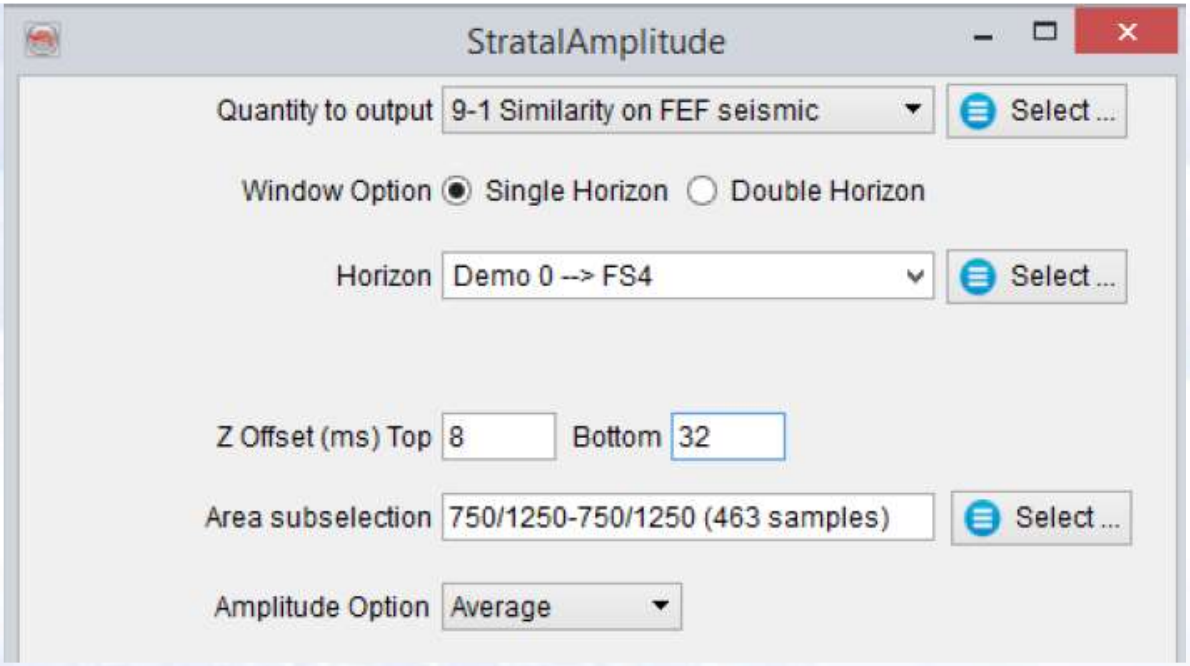


In this window, select the input attribute from which the values will be extracted. The extraction may be guided by a single horizon (*Single Horizon*) or between two horizons (*Double Horizon*).

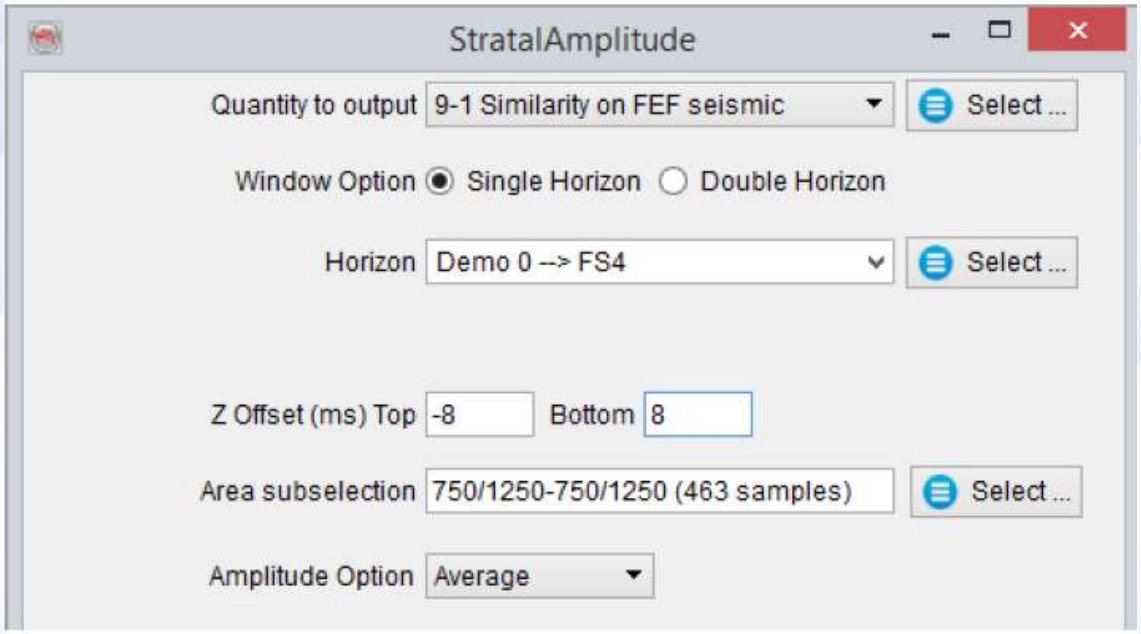
- **Single Horizon** is used to extract amplitude along a horizon within fixed window relative to the point.
- **Double Horizon** is an option of amplitude extraction between two horizons. In this case, the Z-offset parameters (see below) may be defined to increase or decrease the area defined by the horizons.
- **Z-offset** is the offset window specification above (negative values) or below (positive values) a horizon to restrict or extend the calculation interval. For example:



*Settings to extract the average amplitude between 16 and 24 ms **above** ('-' values) the selected horizon.*



*Settings to extract the average amplitude between 8 and 32 ms **below** (for positive values there is no need to prefix with a '+' sign) the selected horizon.*

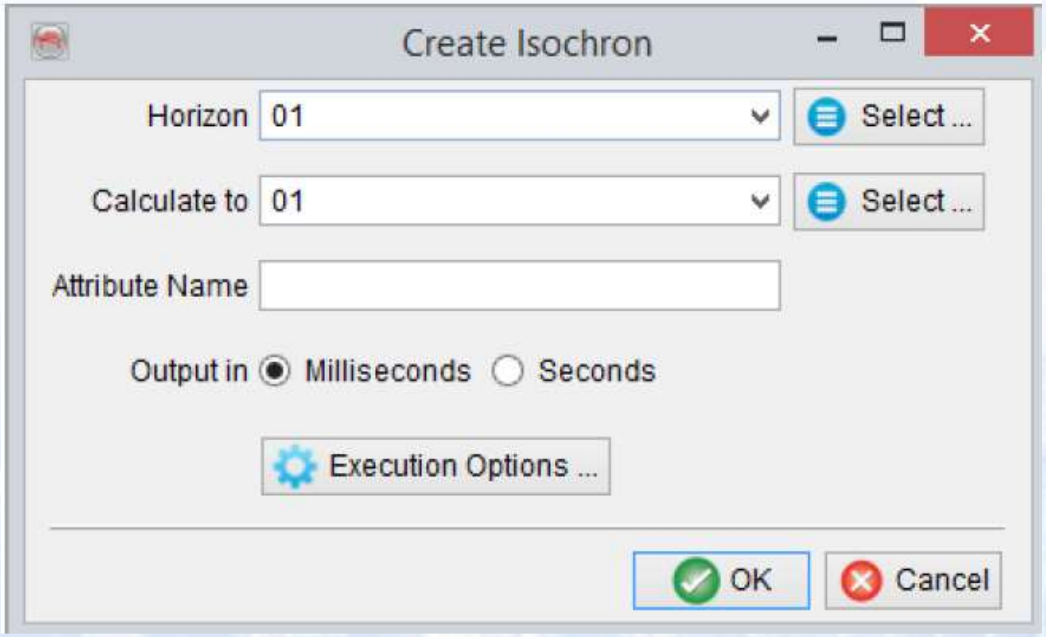


*Settings to extract the average amplitude 8ms equally **around** the selected horizon.*

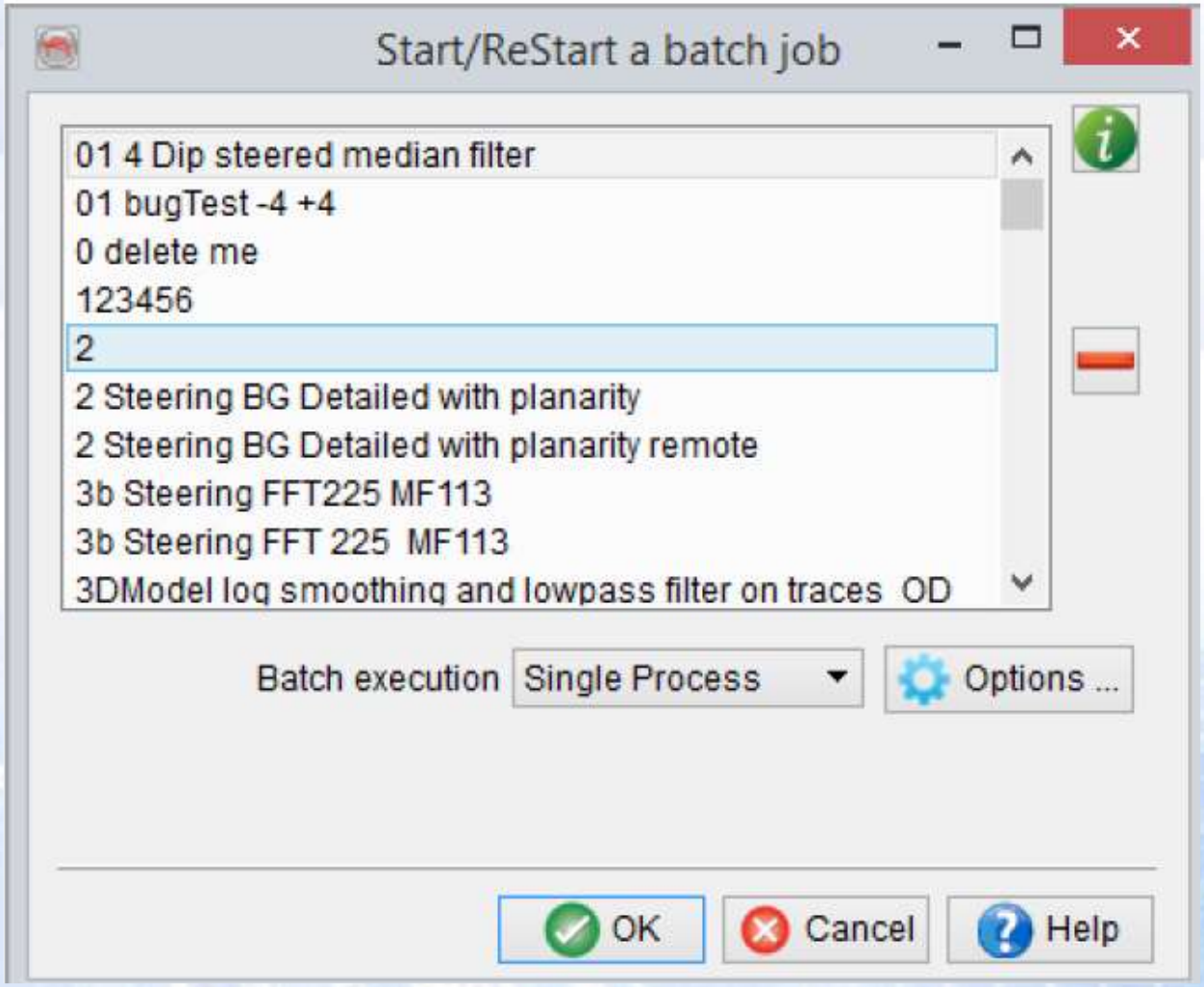
- **Area subselection** is used to specify the area within which the attribute is output.
- **Amplitude options** are the available statistics for amplitude extraction. Five amplitude statistics are available: Min, Max, Average or RMS and Sum.
- **Output fold as an extra attribute** optionally outputs data fold, i.e the number of point used for the processing, as separate horizon data.

6.2.3 Isopach

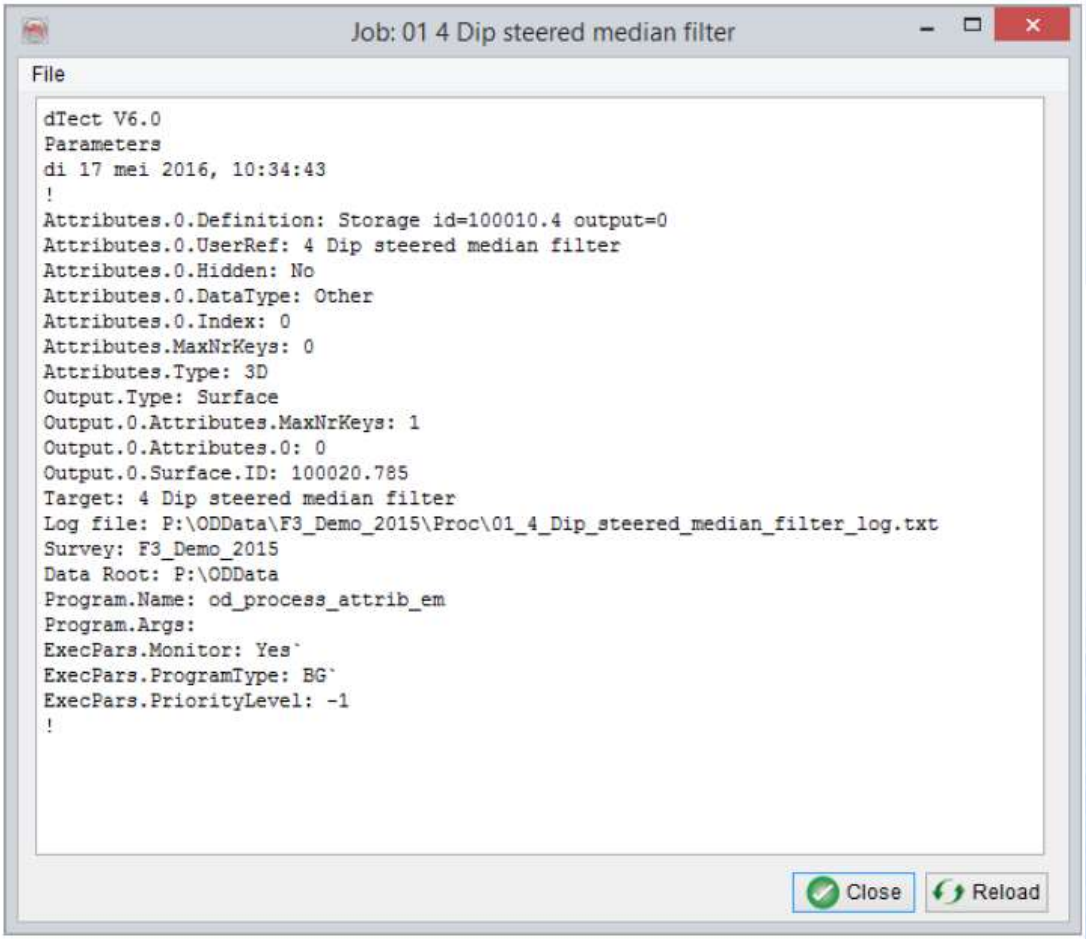
In OpendTect isopach maps can be quickly calculated. The *Create isopach* window is launched either from the *Processing* > *Create Horizon Output* > *Isopach* or from the right click menu of any horizon loaded in the tree: *Workflows* > *Create Isopach*. In this window, select two horizons between which the isopach has to be computed. The isopach map will be saved as a horizon data of the first selected horizon in the window or the horizon .



6.3(再)启动批处理作业

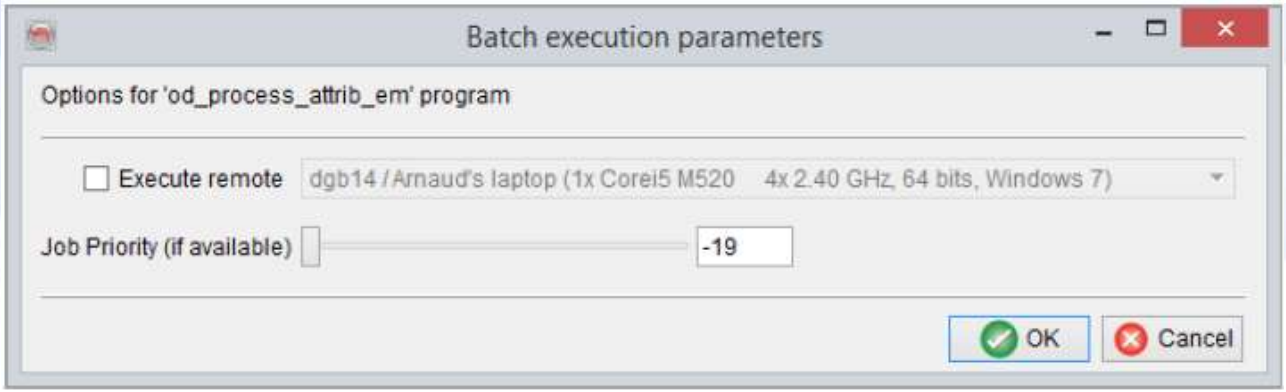

Start/ReStart a batch job
01 4 Dip steered median filter
01 bugTest -4 +4
0 delete me
123456
2
2 Steering BG Detailed with planarity
2 Steering BG Detailed with planarity remote
3b Steering FFT225 MF113
3b Steering FFT 225 MF113
3DModel log smoothing and lowpass filter on traces OD
Batch execution
Single Process
Options ...
OK
Cancel
Help

Batch jobs in OpendTect are stored under a job name in a file containing the inputs, parameters, log file and other relevant information. This information can be read by clicking on the '*Information*' icon,  :

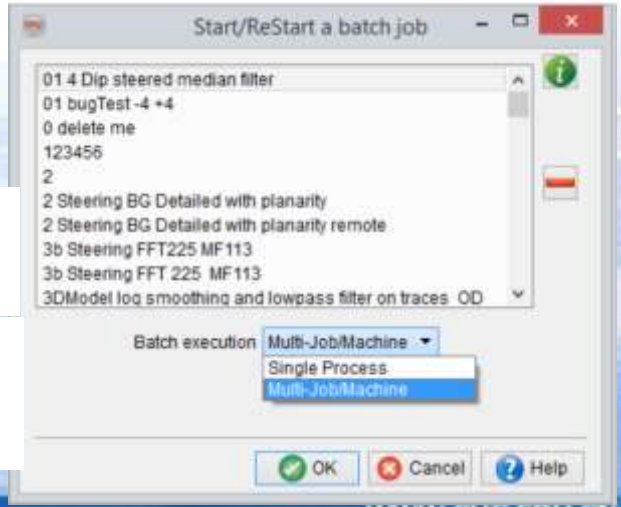


Jobs may also be removed using the icon.

Batch Execution: The batch job may be executed as a Single Process or as a Multi-Job/Machine Process. When opting for '*Single Process*', the user may use his local machine or choose to send the whole job to a remote machine for processing:



'Execute remote' toggled on to send the job to a remote machine. The job priority can be changed (-19-lowest to +19 highest).



Multi-Job/Machine option. Selecting this options brings up the Multi-Machine Processing window.

If a job is selected that was created in OpendTect prior to the 5.0 upgrade, a warning will pop-up, stating "Pre 5.0 Job". These jobs can not be (re-) processed. Attempting to do so will bring up the Error message: "Can not run selected job".