



4 Import

4.3.12 Import Velocity Functions

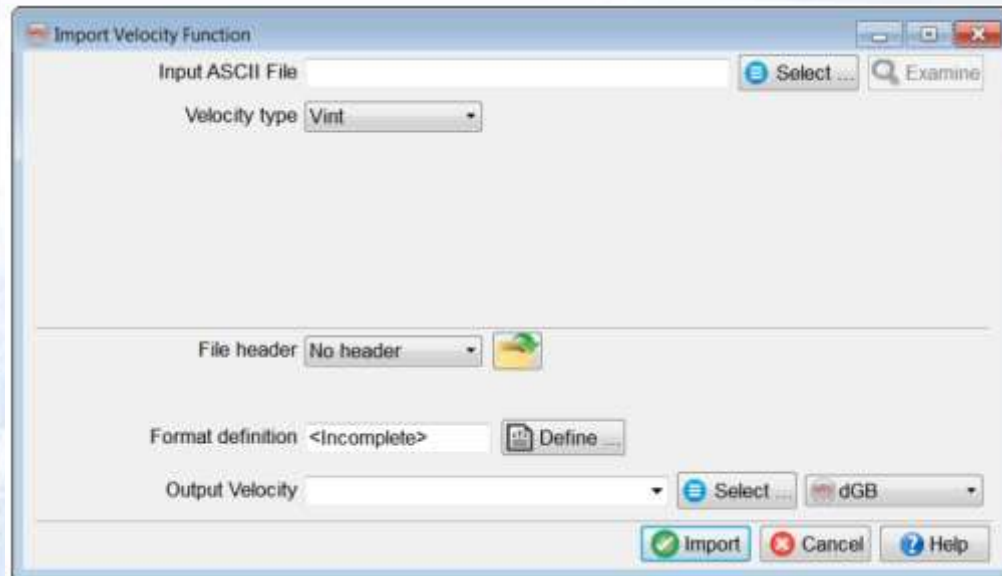
4.3.13 Import Wavelets



4.3.12 Import Velocity Functions

Velocity functions can be imported to OpenText using ASCII files that contain position information (e.g. X/Y or Inl/Crl), Z and Velocity values. You may display the input file by pressing the *Examine* button.

After importing Velocity Function (irregularly sampled data) use Velocity Gridder to create Velocity Field which can be displayed and used for domain conversions.



速度函数ASCII文件格式：
x/y(inl/crl) Z Velocity



Velocity type

The amplitude type of the input data must be specified.

- **Vint** : Interval Velocity, the amplitude of a point accounts for the layer above it.
- **Vrms**: RMS Velocity can only be used in time surveys. They will be treated with a simple Dix for the extraction of the time-depth relationship. If this type is selected, you need to specify if it has statics or not.
- **Vavg**: Average Velocity is the ratio at a given depth between depth and travel-time: $V_{avg} = 2 \cdot Z / TWT = Z / OWT$. As a result a Vavg quantity holds entirely the data from time-depth pairs.
- **Delta**, **epsilon** and **eta** functions will be vertically interpolated with linear interpolation.

速度类型

Vint: 分层速度

Vrms RMS速度仅能用于时间域勘测。简单的Dix提取time-depth关系


Vavg 平均速度，某深度处深度与旅行时的比值

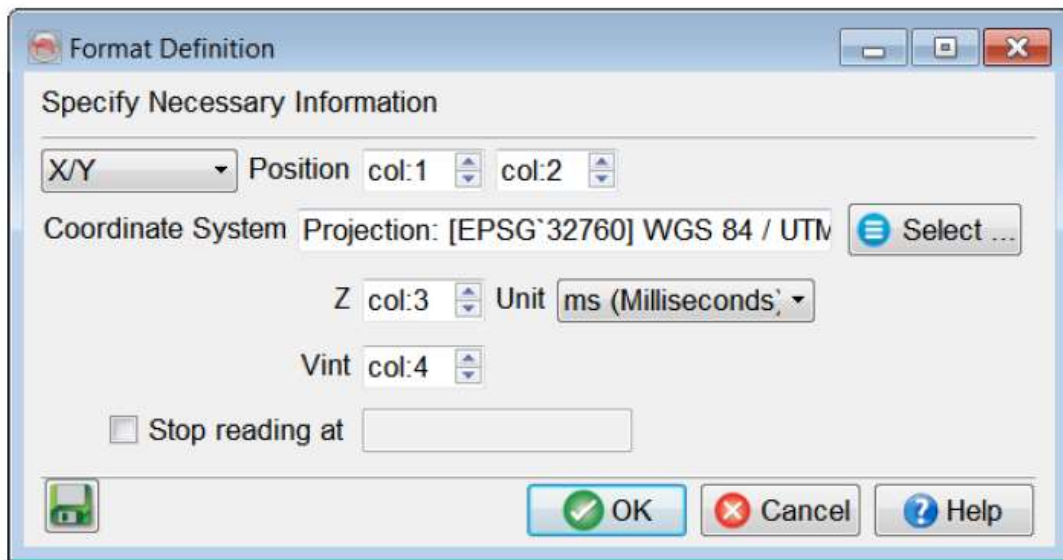
Delta, epsilon, eta函数：使用线性插值，垂向上插值得到速度函数。




Format definition


定义速度函数的格式

Predefined and saved file formats are available by pressing the  icon. Otherwise the format must be manually specified. The *Define* button gives access to the *Format definition* window. If Coordinate Reference System (CRS) is defined for the survey, CRS conversion will be available in the import window.



The image shows a 'Format Definition' dialog box with the following fields and controls:

- Specify Necessary Information**
- X/Y** (dropdown menu)
- Position** (text field)
- col:1** (spin box)
- col:2** (spin box)
- Coordinate System** (text field)
- Projection: [EPSG:32760] WGS 84 / UTM** (text field)
- Select ...** (button)
- Z** (text field)
- col:3** (spin box)
- Unit** (dropdown menu, currently set to 'ms (Milliseconds)')
- Vint** (text field)
- col:4** (spin box)
- ☐ **Stop reading at** (text field)
-  (button to save format)
- OK** (button)
- Cancel** (button)
- Help** (button)

It is recommended to save the format definition for a later use by clicking on the  icon. In the pop-up window, write the name of the format and store it at an appropriate level (*All surveys*, *This survey only*, or *My user ID only*) depending on the usage.



4.3.13 Import Wavelets

导入子波函数

Wavelets can be imported into OpendText as ASCII files. The input file should be column sorted with one time/depth sample position per record. The input file can be displayed by pressing the *Examine* button.


Wavelets can be used for synthetic-to-seismic tie, or convolution via the convolve attribute. Wavelets are also used to store all kinds of frequency-derived operators, like seismic spectral blueing and seismic coloured inversion operators.



子波，用于合成地震记录、内卷属性还用于存储各种频率导出的算子，如地震谱blueing和地震着色反演算子

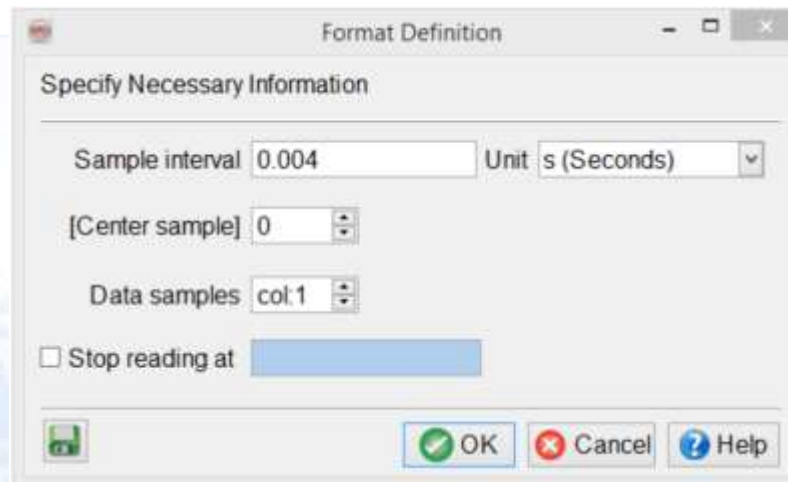


Format definition

Pre-defined and saved file formats are available by pressing the  icon. Otherwise, the format must be manually specified. The *Define* button gives access to the *Format definition* window:

- *Center sample*: a number of lines between the first sample and the center sample (if provided incorrectly, a warning message suggests an auto-predicted number).
- *Data samples*: a column containing amplitude values.
- *Stop reading at*: optional keyword to stop reading a file.

When file header is present, both sampling interval and center sample can be dynamically extracted from it by providing keywords for each, or indexed using columns positions.



Format Definition


Specify Necessary Information

Sample interval: 0.004 Unit: s (Seconds)

[Center sample]: 0

Data samples: col. 1

☐ Stop reading at

 OK Cancel Help



Save format


Enter a name for the format

Strata

Name for format

Store for: All Surveys

OK Cancel

It is recommended to save the format definition for a later use by clicking on the  icon. In pop-up window, write the name of the format and store it. The format can be stored at different levels (All surveys, Current survey, Current OpendText user level) depending on the usage. Press OK when done.