

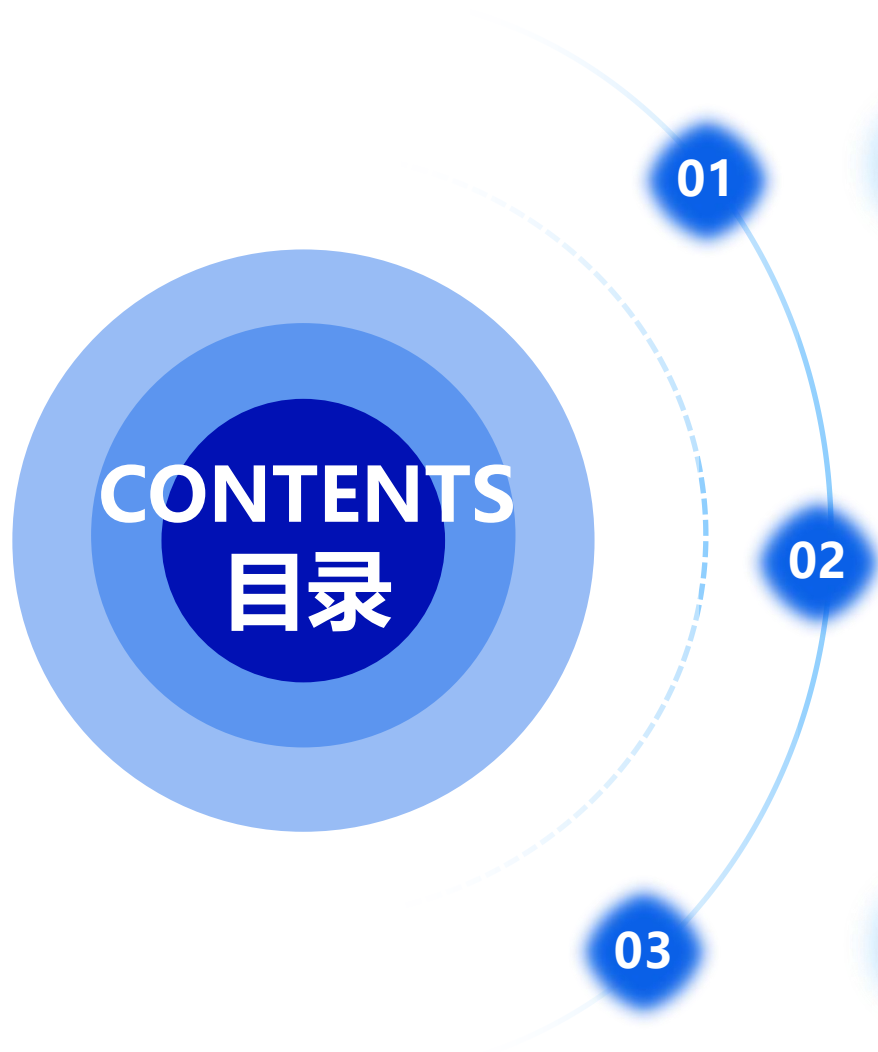
# GeoEast解释-地震工区数据加载

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GeoEast



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**数据类型介绍**

02

**工区之外数据的加载**

03

**工区内部数据的加载**



# 数据加载



GeoEast解释系统数据格式大概分三类：**SEG-Y格式**、**ASCII码格式**以及**LAS格式**的井曲线，所有数据的加载均是在主控中点中数据节点右键菜单Import，分为工区外部数据和工区内部数据两部分。

主控数据树

Geographic Information

- Boundaries **边界**
- Combined Fault Polygons **断层组合线**
- Combined Horizons
- Combined Traverses
- Mappings **成图相关数据**
- Scatters
- Grids
- Contours
- Wavelet
- Specimens
- Wells **井相关数据**
- 2D
- DQZJ **工区测网grid**
- Velocities **速度数据**
- Seismics **地震数据**
- Attribute Volumes **属性数据**
- Horizons **层位数据**
- Faults **断层数据**
- Traverses
- GME
- WorkFlow
- Swaths **任意线轨迹数据**

**Import Boundary**

文件格式  
x1 y1 connection flag  
x2 y2 connection flag  
...

**Import Fault Polygons**

文件格式  
x1 y1 connection flag  
x2 y2 connection flag  
...

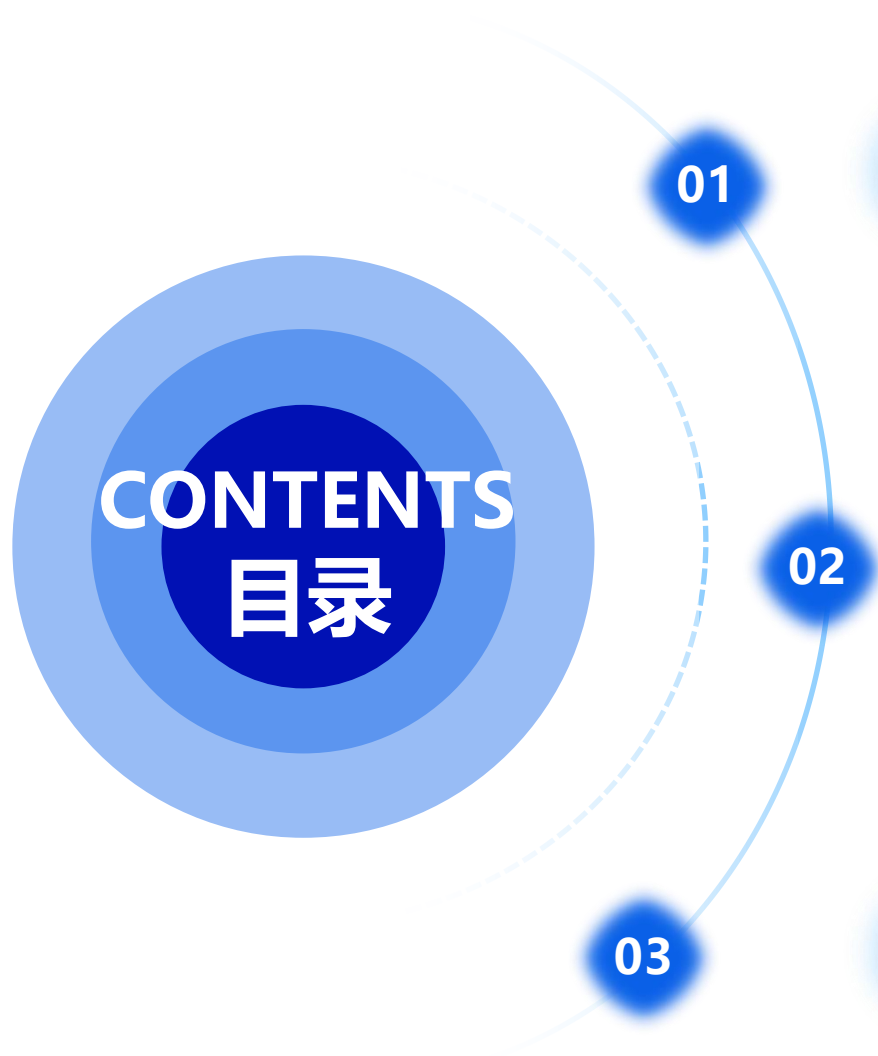
**Import Contour**

文件格式  
x1 y1 value connection flag  
x2 y2 value connection flag  
...

**Import**

- Well Information
- Log Curves
- Path
- Formation Tops
- Lithology
- Oil Gas Water

工区之外数据的加载



01

**数据类型介绍**

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**工区内部数据的加载**



# Fault polygon加载



DatImport-Fault Polygon Data Import ( Project:TLM\_test\_xhx )

File Type: FaultPolygon Format Type: General ASCII File

File Name	Polygon Name
1 /yfs0/xhx/wt1.cal.rude.bou.dat	TEST

**Fault polygon文件格式必选项**  
 x1 y1 connection flag  
 x2 y2 connection flag

Polygon already exists: Warn ZoningNum: 16

CRS of Current Project: ZXF\_BJ54\_ZONE\_19N  
 CRS of Data: ZXF\_BJ54\_ZONE\_19N

Buttons: Help, Next, Cancel

DatImport-Fault Polygon Data Import ( Project:TLM\_test\_xhx )

Mnemonic Line: 1 DataBody Start: 2 End: 1 Connection Flag Type: 111 Use Delimiters(Comma,Space,Tab)

Header Item	Body Item
3	Column Num
4	Column Name
5	Unit
6	Connection Flag
7	Fault Level
8	Fault Point Type
9	Fault Polygon Type
10	Closing Type

Buttons: Open, Save As..., Default, Add row, Remove

	1	2	3	4
1	#x	y	boundaryName	connectionFlag
2	Mnemonic line	5078.8820	wt1.cal.rude...	1
3	568068.2300	4969896.0895	wt1.cal.rude...	1
4	576385.9909	4965093.8258	wt1.cal.rude...	1
5	573604.7735	4960276.6183	wt1.cal.rude...	1

按住Ctrl键，鼠标依次点必选项的列号，高亮后鼠标放到注释行行号1的位置右键

Buttons: Help, Back, Import, Cancel

三种形式的connection flag

566482.7479	4966469.6350	1363.0000	1	1	6
566690.6429	4966349.4935	1519.0000	1	2	7
566794.5904	4966289.4228	1568.0000	1	2	7
566915.8625	4966219.3403	1627.0000	1	3	8
566535.9938	4966161.6711	1342.0000	2	1	6
566709.2396	4966061.5532	1460.0000	2	2	7
566917.1346	4965941.4117	1558.0000	2	2	7
567003.7575	4965891.3528	1606.0000	2	3	8
566564.0200	4966330.2705	1358.0000	3	1	6
566667.9675	4966270.1998	1451.0000	3	2	7
566858.5379	4966160.0700	1550.0000	3	2	7
566945.1608	4966110.0111	1598.0000	3	2	7
566962.4854	4966099.9993	1611.0000	3	3	8
566461.3446	4966112.4127	1316.0000	4	1	6
566634.5904	4966012.2948	1393.0000	4	2	7
566755.8625	4965942.2122	1470.0000	4	2	7
566911.7837	4965852.1061	1541.0000	4	2	7
566998.4067	4965802.0472	1592.0000	4	3	8
566384.1512	4966619.0114	1328.0000	5	1	6

111 123 678

DatImport-Fault Polygon Data Import ( Project:TLM\_test\_xhx )

Mnemonic Line: 1 DataBody Start: 2 End: 1 Connection Flag Type: 111 Use Delimiters(Comma,Space,Tab)

Header Item	Body Item
1	Column Num
2	Column Name
3	Unit
4	Connection Flag

Buttons: Open, Save As..., Default, Add row, Remove

	1	2	3	4
1	#x	y	boundaryName	connectionFlag
2	565287.0126	4965078.8820	wt1.cal.rude...	1
3	568068.2300	4969896.0895	wt1.cal.rude...	1



# Well information加载



DataImport-Well Information Import ( Project:TLM\_test\_xhx )

File Type: WellInfo Format Type: General ASCII File

File Name	Well Name	WellSet
1 /testdata/ly_data/dqzj_traindata/well/well_loc.dat		3D_test <b>可创建井集</b>

Well Set: well\_loc

Well already exists: Warn ZoningNum: 16

CRS of Current Project: ZXF\_BJ54\_ZONE\_19N  
 CRS of Data: **BJ54\_ZONE\_19N** Choose...

Buttons: Help, Next, Cancel

DataImport-Well Information Import ( Project:TLM\_test\_xhx )

Mnemonic Line: 1 DataBody Start: 2 End: 1 Use Delimiters(Comma,Space,Tab)

Header Item	Body Item	Column Num	Column Name	Unit
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1	Well Name	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2	Surface X(East)	m
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3	Surface Y(North)	m
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	4	KB	m
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	5	Completion Depth	m

	1	2	3	4	5
1	#wellName	wellTopX	wellTopY	kb	completionDe...
2	H43	570207.8100	4956936.0000	0.0000	2600.0000
3	H45	570151.3800	4960058.0000	0.0000	2500.0000
4	H47	567291.6900	4966908.5000	0.0000	2600.0000
5	H48	568960.0000	4958170.0000	0.0000	2600.0000

rowNumber: 11

Buttons: Help, Back, Import, Cancel

### 井信息文件格式必选项

井名1 井口X1 井口Y1 KB1 完钻井深1  
 井名2 井口X2 井口Y2 KB2 完钻井深2  
 ...



# Well Curve加载 (文本文件)



Import

Export

Well Path Check...

Log Curve Check...

Tops Check...

Lithology Check...

OGW Check...

Well Set Manager...

Curve Set Manager...

Well Information

Log Curves

Path

Formation Tops

Lithology

Oil Gas Water

TestOil

DrillingCoring

SideWallCoring

General ASCII File

LAS Format File

WIS Format File

DLIS Format File

DataImport-Well Curve Import ( Project:TLM\_test\_xhx )

File Type: WellCurve Format Type: General ASCII File

File Name	Well Name
1 /testdata/ly_data/dqzj_traindata/well/q124.ac	q124

Select Well

Clear currCell

Clear currColumn

Replace name

Add files

Remove

Remove All

Default

Well Set

The Version Num : Auto Increase Version number auto-increment. Linear Interpolation

Null Filter Null Skip && Auto -9999.00,-99999.00,-999.99,-999.25

Next Cancel

DataImport-Well Curve Import ( Project:Zhungaer )

Mnemonic Line: 1 DataBody Start: 2 End: 0 Use Delimiters(Comma,Space,Tab)

Header Item Body Item

Column Num	Column Name	Unit	Constant	Version
1	Measured Depth(MD)	m	重命名	自定义版本号
2	P_AC	ms/m		

根据数据文件自定义格式

1	2
#measuredD...	p_ac
228.7500	456.4430
228.8750	470.8020
229.0000	473.3480

rowNumber: 100

Help Back Import Cancel

Wells

- Data Type
  - Well Information
  - Log Curve
  - Lith
  - OGW
  - Top Version
  - Path
  - Synthetic
- <All>
- 2D
- DQZJ
- zhongguili\_1

New Well...

Link Wells

Interesting Well Set...

Import

Export

Well Path Check...

Log Curve Check...

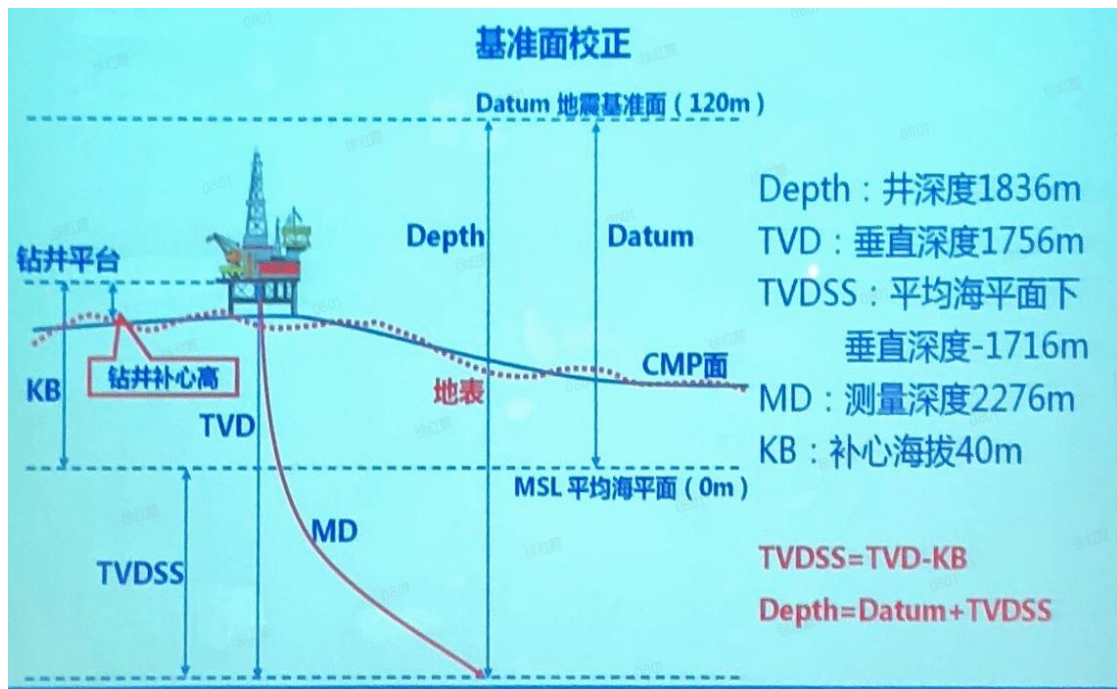
Tops Check...

Lithology Check...

OGW Check...



# 时深关系加载



DataImport--Well Curve Import ( Project: xhx\_test\_1\_1\_2)

Mnemonic Line: 1 DataBody Start: 2 End: 0

Header Item	Body Item	Column Name
1	<input checked="" type="checkbox"/>	Vertical Depth
2	<input checked="" type="checkbox"/>	P_TD

	1	2
1	#TVD	P_TD
2	228.7500	298.7500
3	228.8750	298.8641
4	229.0000	298.9818
5	229.1250	299.1001

rowNumber: 100

Buttons: Help, Back, Import, Cancel



File Edit AI Help

Algorithm

Filter

- PreProcess
  - Remove Abnormal Value
  - Datum Correction**
  - ReSample
- Correction

TLM\_test\_xhx

Well Look for: p\_ta in Log type

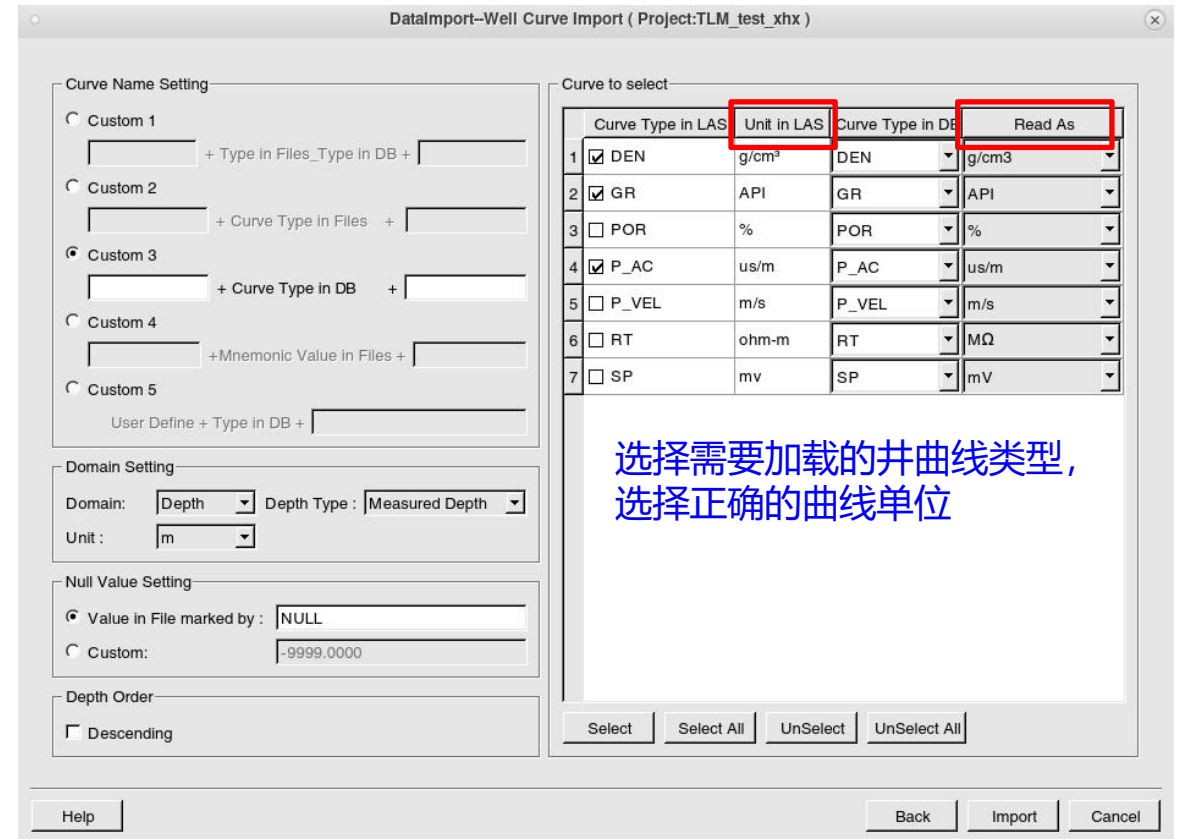
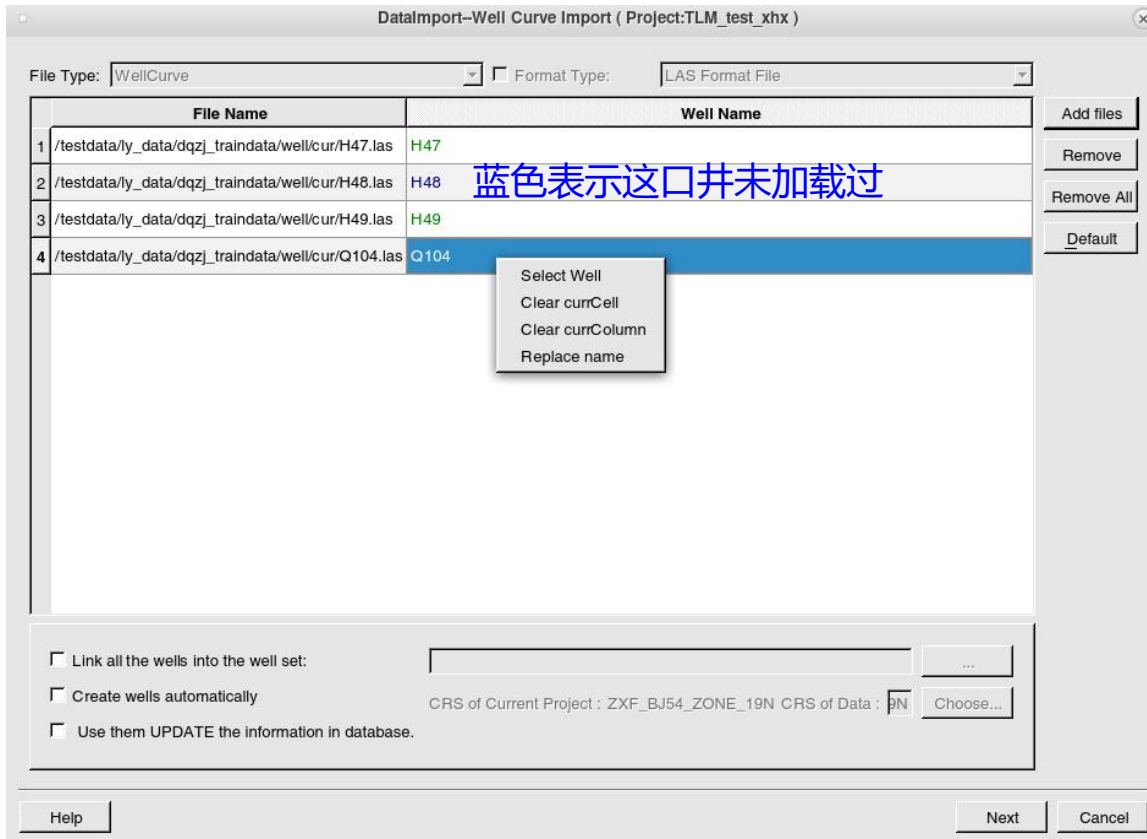
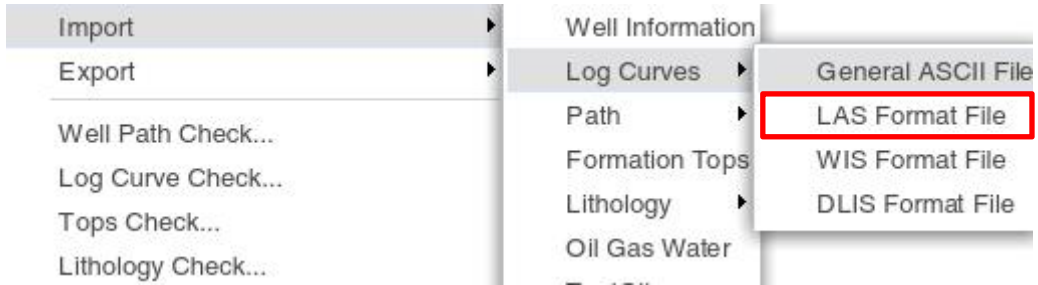
Count: 12

Well Name	Log Name	Log Type	Description
H47	H47syn02DT	P_TD	From:SYN KB:100 Datum:0 Survey:DQZJ
H47	P_TD	P_TD	Original
H47	P_TD	P_TD	Original CopyFrom:AO21
H47	H47syn02DT_tf	P_TD	From:SYN KB:100 Datum:0 Survey:DQZJ
H47	DT	P_TD	From:SYN KB:100 Datum:0 Survey:DQZJ

GeoEast的时深关系从地震基准面起算，如果需要导入其他软件，需要做基准面校正。



# Well Curve加载 (las文件)





# 通过EXCEL表格粘贴曲线

Wells

- Data Type
  - Well Information
  - Log Curve
  - Lith
  - OGW
  - Top Version
  - Path
- <All>
- DQZJ
- HuanQing
- WZH

2D

2D\_test

train2D

3D

3D\_2

5D

4 bao14 Areal exploratory well ver

5 bao15 Areal exploratory well Ver

6 bao16

7 bao18

8 bao5

9 bao6

10 bao7

11 F02-1

12 F03-2\_c

13 F03-4

14 F06-1

15 F06-2

Create Set

Rename

Import

Export

Log Curve Check...

Tops Check...

Lithology Check...

Well Path Check...

Copy...

Synthetic Set Manager...

Well Information...

打开井曲线浏览

WellCurveBrowser

Well List(25)

Curve Information

Samples Property

Depth	Value
12193 1635.875	325.047
12194 1636.000	324.680
12195 1636.125	324.045
12196 1636.250	323.286
12197 1636.375	322.582
12198 1636.500	322.166
12199 1636.625	322.123
12200 1636.750	322.347
12201 1636.875	322.646
12202 1637.000	322.779
12203 1637.125	322.585
12204 1637.250	322.057
12205 1637.375	321.319
12206 1637.500	320.554
12207 1637.625	319.909
12208 1637.750	319.430

Append Row

Insert Row

Remove Selected Row

Remove All Row

选中井名

选中曲线名

12208	1637.750	319.430
12209		

选中Excel表格中的两列多行井曲线数据，ctrl+C复制，而后点击左侧空白栏，ctrl+V粘贴即可，粘贴完成后点击上方保存按钮





# Well Path加载



Wells

- Data Type
  - Well
  - Log
  - Lith
  - OGW
  - Top
  - Path
  - Synt
  - <All>
- New Well...
- Link Wells
- Interesting Well Set...
- Import
  - Well Information
  - Log Curves
  - Path
    - General ASCII File
  - Formation Tops
- Export
- Well Path Check...
- Log Curve Check...

DataImport-WellPath Import ( Project:TLM\_test\_xhx )

File Type: WellPath Format Type: General ASCII File

File Name	Well Name
/testdata/ty_data/dqzj_traindata/well/xj1.path	xj1

Write Mode: Warn Null Filter: [x] Null Value Define: 0,-99999.00,-999.99,-999.25

Method Type: Balance Tangent  Vacuating 抽稀

DataImport-WellPath Import ( Project:TLM\_test\_xhx )

Mnemonic Line: 1 DataBody Start: 2 End: 1  Use Delimiters(Comma,Space,Tab)

Column Num	Column Name	Unit
1	Azimuth	
2	Well Name	Unknown
3	X Offset (East)	m
4	Y Offset (North)	m

Open

1	2	3	4
#measuredD...	verticalDepth	xOffset	yOffset
2	0.0000	0.0000	0.0000
3	0.5000	0.5000	0.0030
4	1.0000	1.0000	0.0060
5	1.5000	1.4999	0.0080

rowNumber: 100

select Format

Filter:

- [\*]default.mft
- [\*]default\_full.mft
- [\*]default\_mda.mft
- [\*]default\_mxy.mft
- [\*]default\_mxyoffset.mft

Wells

- Data Type
  - Well Information
  - Log Curve
  - Lith
  - OGW
  - Top Version
  - Path
  - Synthetic
  - <All>
  - 2D
  - DQZJ
  - zhongguili\_1
- New Well...
- Link Wells
- Interesting Well Set...
- Import
- Export
- Well Path Check...
- Log Curve Check...
- Tops Check...
- Lithology Check...
- OGW Check...
- Well Set Manager...
- Curve Set Manager...
- Tops Set Manager...
- Lithology Set Manager...
- Copy...
- Seg To Curve...
- Batch Delete
- D-T Relation
- Custom Calculation...
- Privilege Manager...
- Comprehensive Information Browser

Wells

- Data Type
  - Well Information
  - Log Curve
  - Lith
  - OGW
  - Top Version
  - Path
  - Synthetic
  - <All>
  - 2D
  - DQZJ
  - zhongguili\_1
- New Well...
- Link Wells
- Interesting Well Set...
- Import
- Export
- Well Path Check...
- Log Curve Check...
- Tops Check...
- Lithology Check...
- OGW Check...

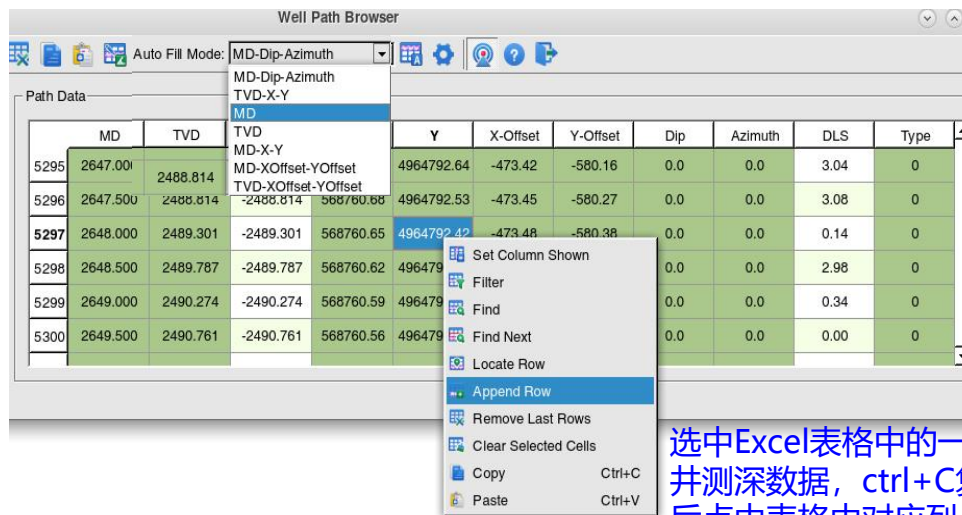


# 通过EXCEL表格粘贴轨迹数据



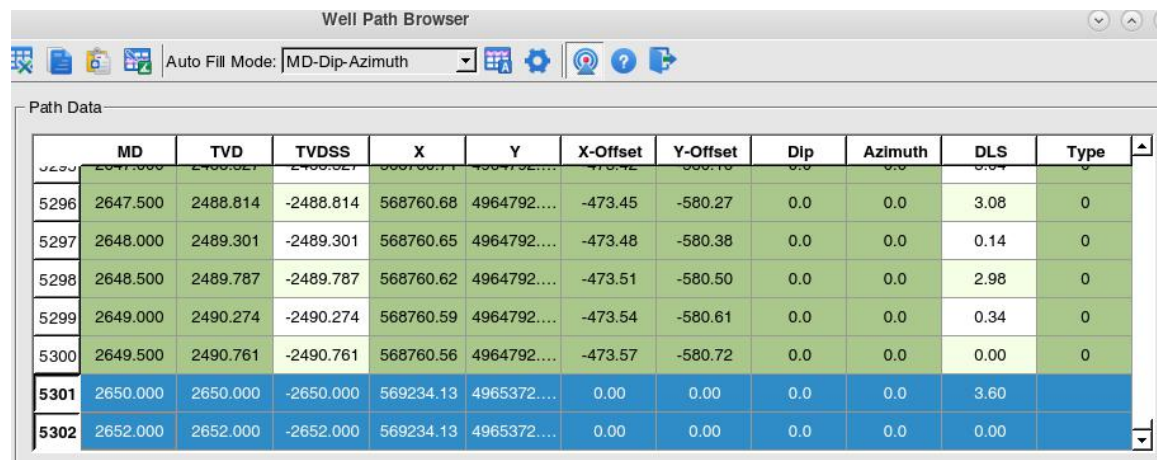
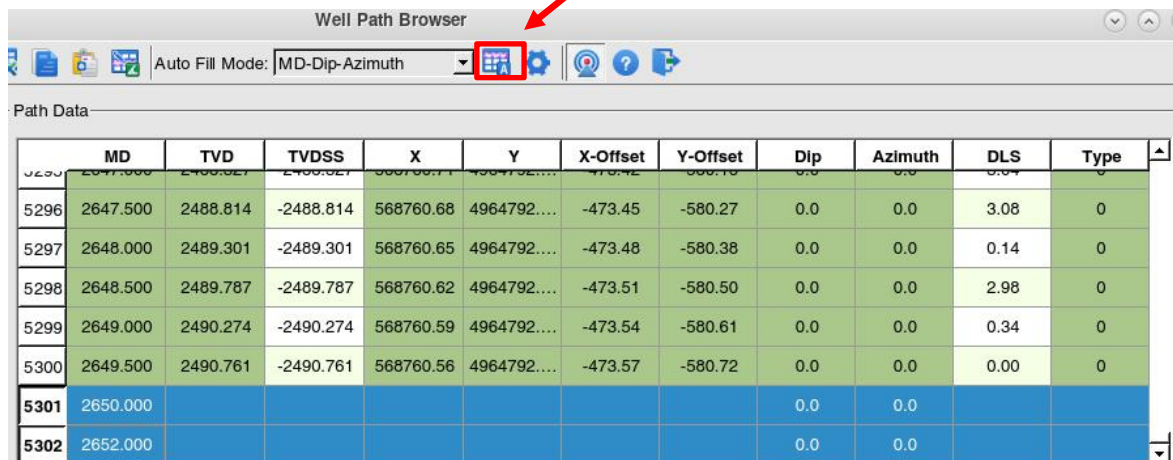
打开井轨迹浏览

井轨迹追加与井曲线追加操作类似



选中Excel表格中的一列多行井测深数据，ctrl+C复制，而后点中表格中对应列，ctrl+V粘贴即可，只能一列一列粘贴

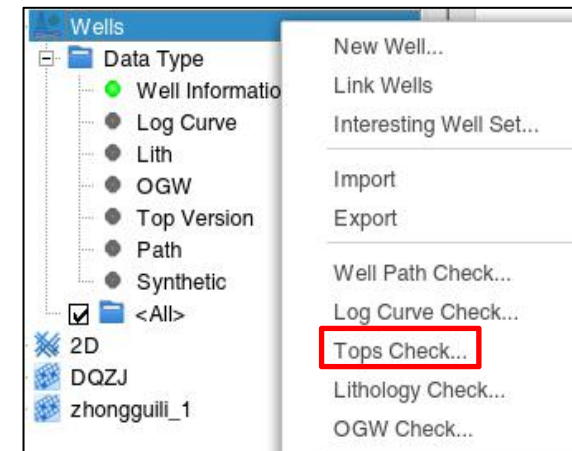
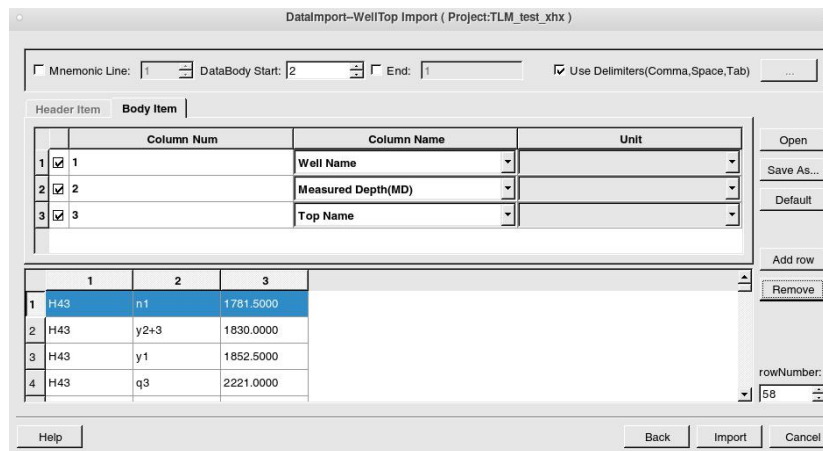
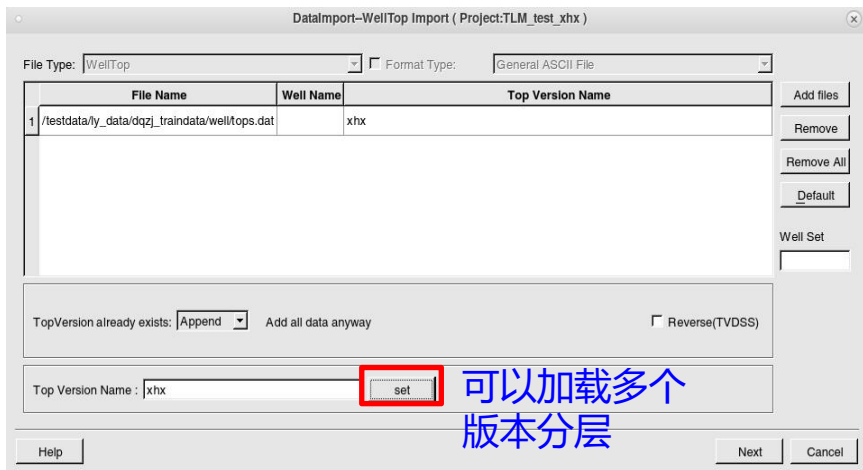
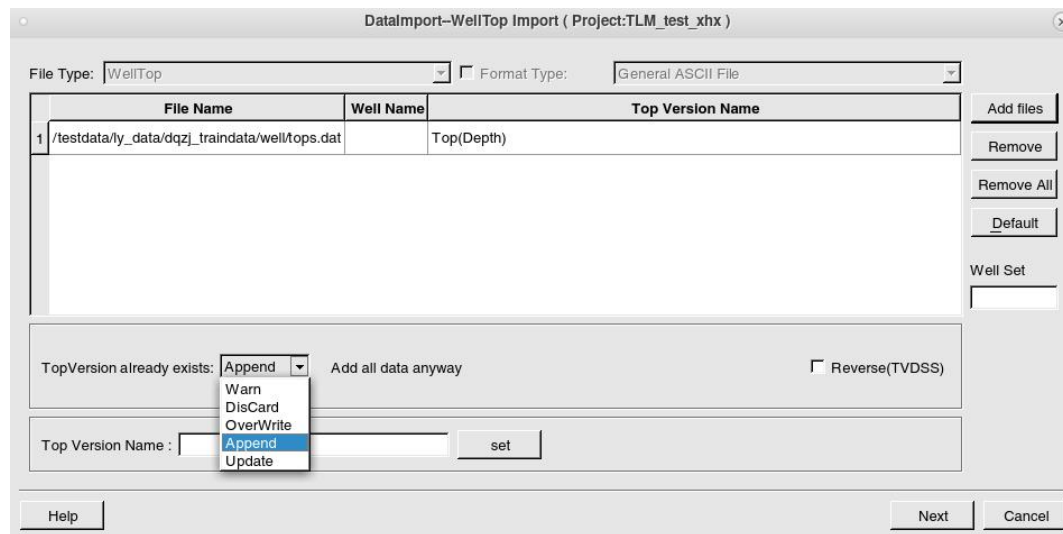
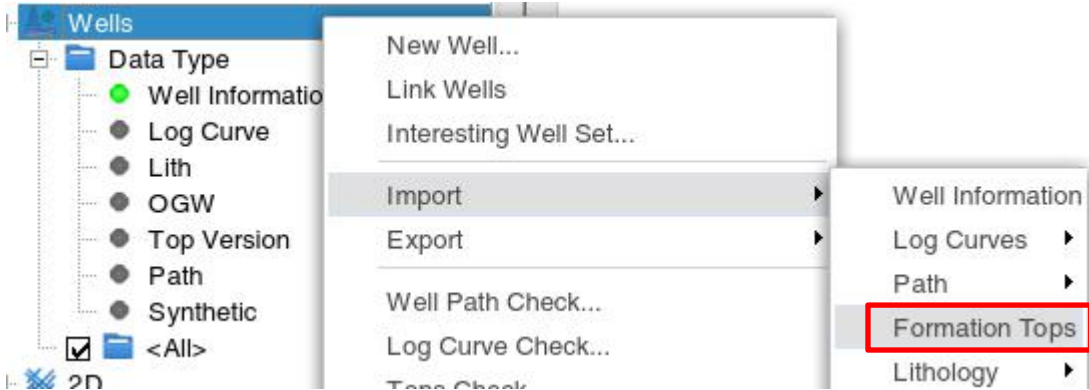
根据选择的格式以及填写的几列数据，自动填充完整表格



最后点击上方保存按钮保存至数据库



# Formation Top加载



注：一个剖面上所有井只能选择同一版本的分层  
合成记录制作也只能选择同一版本的分层

### 井分层文件格式必选项

井名1 top1 测深1  
井名2 top2 测深2  
...



# 通过EXCEL表格粘贴分层数据



Well Top Browser

Top Version Name: Top(Depth) 1:H47

	Well	TopSeg	MD	TVD	TVDSS	X	Y	Time
1	H47	n1	1757.000	1757.000	-1657.000	19092833.186	4979472.989	1481.273
2	H47	y2+3	1824.500			19092833.186	4979472.989	1515.807
3	H47	y1	1873.000			19092833.186	4979472.989	1540.201
4	H47	q3	2216.500			19092833.186	4979472.989	1701.191
5	H47	q2	2427.000			19092833.186	4979472.989	1808.529
6	H47	aa	2500.000			19092833.186	4979472.989	1849.129

Context menu options:

- Set Column Shown
- Append Row
- Insert Row
- Remove Selected Row
- Remove All Row
- Copy (Ctrl+C)
- Paste (Ctrl+V)
- Create Well Set
- Save As Scatter

Well Top Browser

Top Version Name: Top(Depth) 1:H47

	Well	TopSeg	MD	TVD	TVDSS	X	Y	Time
1	H47	n1	1757.000	1757.000	-1657.000	19092833.186	4979472.989	1481.273
2	H47	y2+3	1824.500	1824.500	-1724.500	19092833.186	4979472.989	1515.807
3	H47	y1	1873.000	1873.000	-1773.000	19092833.186	4979472.989	1540.201
4	H47	q3	2216.500	2216.500	-2116.500	19092833.186	4979472.989	1701.191
5	H47	q2	2427.000	2427.000	-2327.000	19092833.186	4979472.989	1808.529
6	H47	aa	2500.000	2500.000	-2400.000	19092833.186	4979472.989	1849.129
7	H47							

Well Top Browser

Top Version Name: Top(Depth) 1:H47

	Well	TopSeg	MD	TVD	TVDSS	X	Y	Time
1	H47	n1	1757.000	1757.000	-1657.000	19092833.186	4979472.989	1481.273
2	H47	y2+3	1824.500	1824.500	-1724.500	19092833.186	4979472.989	1515.807
3	H47	y1	1873.000	1873.000	-1773.000	19092833.186	4979472.989	1540.201
4	H47	q3	2216.500	2216.500	-2116.500	19092833.186	4979472.989	1701.191
5	H47	q2	2427.000	2427.000	-2327.000	19092833.186	4979472.989	1808.529
6	H47	aa	2500.000	2500.000	-2400.000	19092833.186	4979472.989	1849.129
7	H47	bb	2500.000					
8	H47	cc	2510.000					

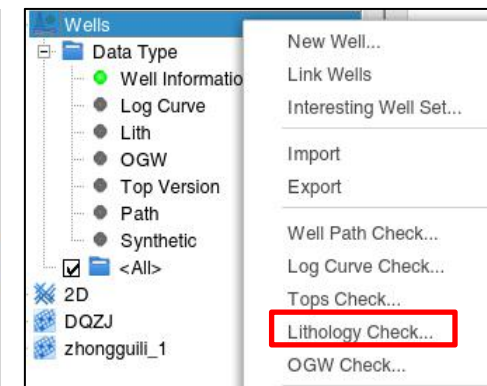
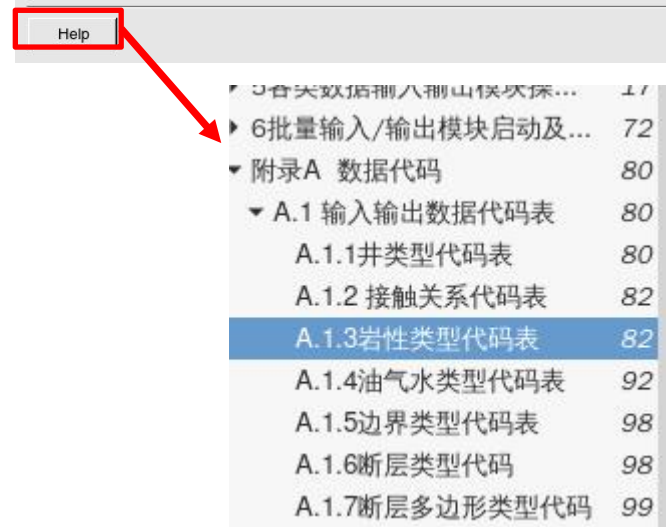
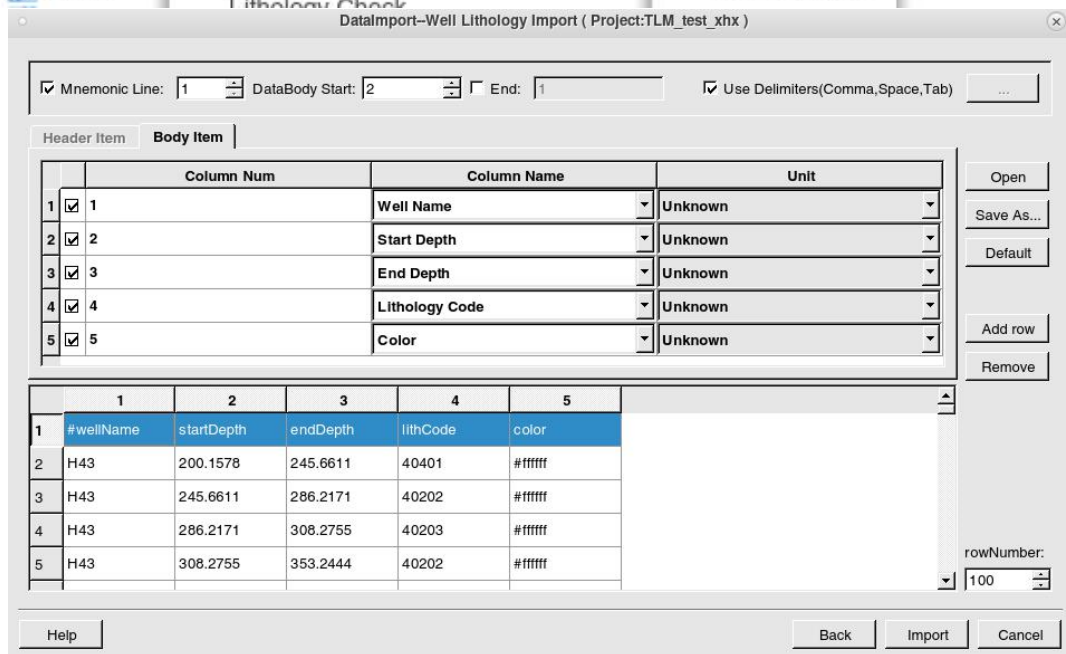
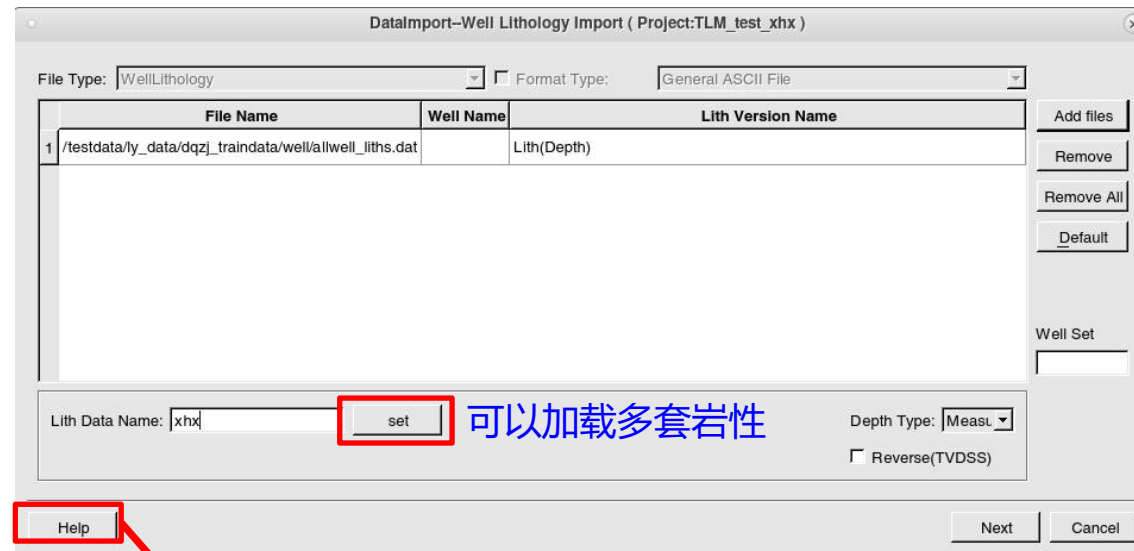
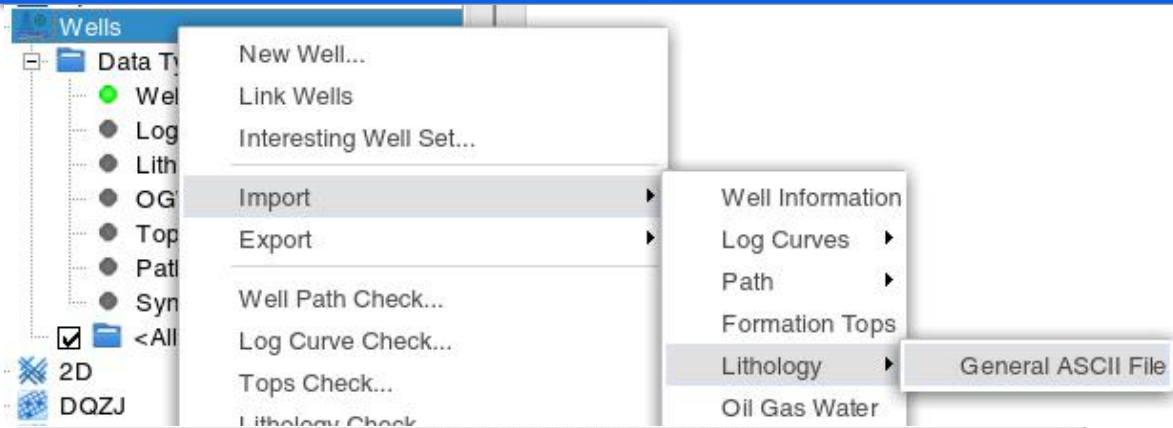
Well Top Browser

Top Version Name: Top(Depth) 1:H47

	Well	TopSeg	MD	TVD	TVDSS	X	Y	Time
1	H47	n1	1757.000	1757.000	-1657.000	19092833.186	4979472.989	1481.273
2	H47	y2+3	1824.500	1824.500	-1724.500	19092833.186	4979472.989	1515.807
3	H47	y1	1873.000	1873.000	-1773.000	19092833.186	4979472.989	1540.201
4	H47	q3	2216.500	2216.500	-2116.500	19092833.186	4979472.989	1701.191
5	H47	q2	2427.000	2427.000	-2327.000	19092833.186	4979472.989	1808.529
6	H47	bb	2500.000	2500.000	-2400.000	19092833.186	4979472.989	1849.129
7	H47	aa	2500.000	2500.000	-2400.000	19092833.186	4979472.989	1849.129
8	H47	cc	2510.000	2510.000	-2410.000	19092833.186	4979472.989	1854.690



# Lithology加载

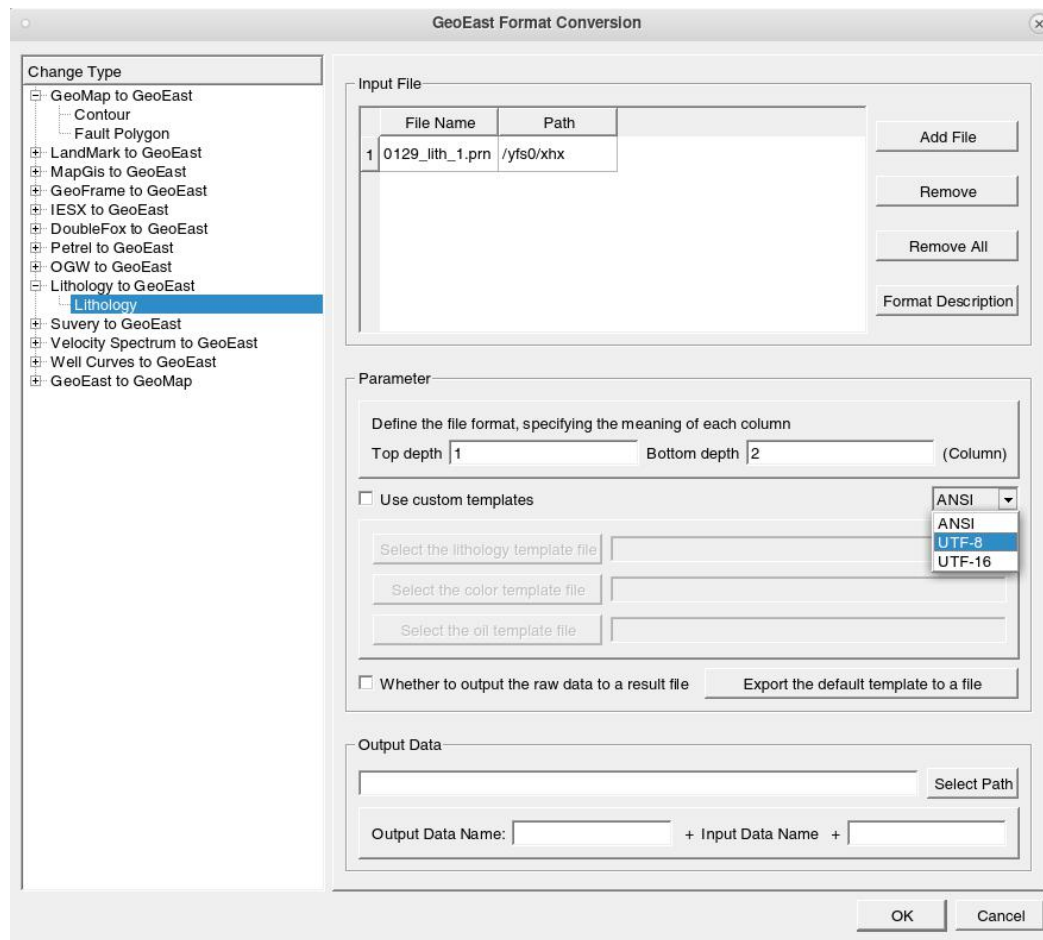


## 井岩性文件格式必选项

井名1 起始深度1 终止深度1 岩性代码1 颜色代码1  
井名2 起始深度2 终止深度2 岩性代码2 颜色代码2  
...



# 岩性代码转换



578	580	灰黄色	粉砂质泥岩
580	582	灰黄色	泥岩
582	584	灰黄色	粉砂质泥岩
584	586	灰黄色	粉砂质泥岩
586	588	灰黄色	粉砂质泥岩
588	590	灰黄色	泥岩
590	592	灰黄色	泥岩



170.5194	180.5232	40403	#00ffff
186.5232	221.0125	40203	#ffaa00
221.0125	228.7815	40403	#00ffff
228.7815	235.5660	40203	#ffaa00
235.5660	280.5308	40403	#00ffff
280.5308	305.7716	40203	#ffaa00
305.7716	379.7319	40403	#00ffff
379.7319	385.7081	40366	#55ff00
385.7081	458.5271	40403	#00ffff
458.5271	479.1684	40305	#ffff00
479.1684	488.6101	40403	#00ffff

6130	6132	褐灰色		泥岩
6132	6134	褐灰色	荧光	泥质粉砂岩
6134	6136	褐灰色	荧光	泥质粉砂岩
6136	6138	褐灰色	荧光	泥质粉砂岩
6138	6140	灰褐色		泥岩

荧光显示也可以以岩性的形式加载，有荧光列时，加载时该列选择为OIL Level



# 油气水加载



Wells

- Data Type
  - Well Infor
  - Log Curve
  - Lith
  - OGW
  - Top Versi
  - Path
  - Synthetic
- <All>
- 2D
- DQZJ

- New Well...
- Link Wells
- Interesting Well Set...
- Import
- Export
- Well Path Check...
- Log Curve Check...
- Tops Check...
- Litholoav Check...

- Well Information
- Log Curves
- Path
- Formation Tops
- Lithology
- Oil Gas Water**

DataImport-WellOGW Import (Project:TLM\_test\_xhx)

File Type: WellOGW Format Type: General ASCII File

File Name	Well Name	OGW Name
1 /testdata/ly_data/dqzj_traindata/well/allwell_liths.dat		OGW(Depth)

Depth Type: Measured Depth  Reverse(TVDSS)

Buttons: Add files, Remove, Remove All, Default, Well Set, Next, Cancel

**Help**

DataImport-WellOGW Import (Project:TLM\_test\_xhx)

Mnemonic Line: 1 DataBody Start: 2 End: 0

Column Num	Column Name	Unit
1	Well Name	Unknown
2	Start Depth	Unknown
3	End Depth	Unknown
4	OGW Type	Unknown

Buttons: Open, Save As..., Default, Add row, Remove, rowNumber: 8

附录A 数据代码

附录A 数据代码	80
A.1 输入输出数据代码表	80
A.1.1井类型代码表	80
A.1.2 接触关系代码表	82
A.1.3岩性类型代码表	82
A.1.4油气水类型代码表	92
A.1.5边界类型代码表	98
A.1.6断层类型代码	98
A.1.7断层多边形类型代码	99
A.1.8地层代码表	99
A.1.9拾取类型代码	101

90005	含油水层
90006	可能(油气)
90007	油气同层
90008	气层

Well Name	Well Type
1 H47	Areal exploratory well

- Create Set
- Rename
- Import
- Export
- Log Curve Check...
- Tops Check...
- Lithology Check...
- Well Path Check...
- OGW Check...**

## 油气水文件格式必选项

井名1 起始深度1 终止深度1 油气水代码1  
井名2 起始深度2 终止深度2 油气水代码2

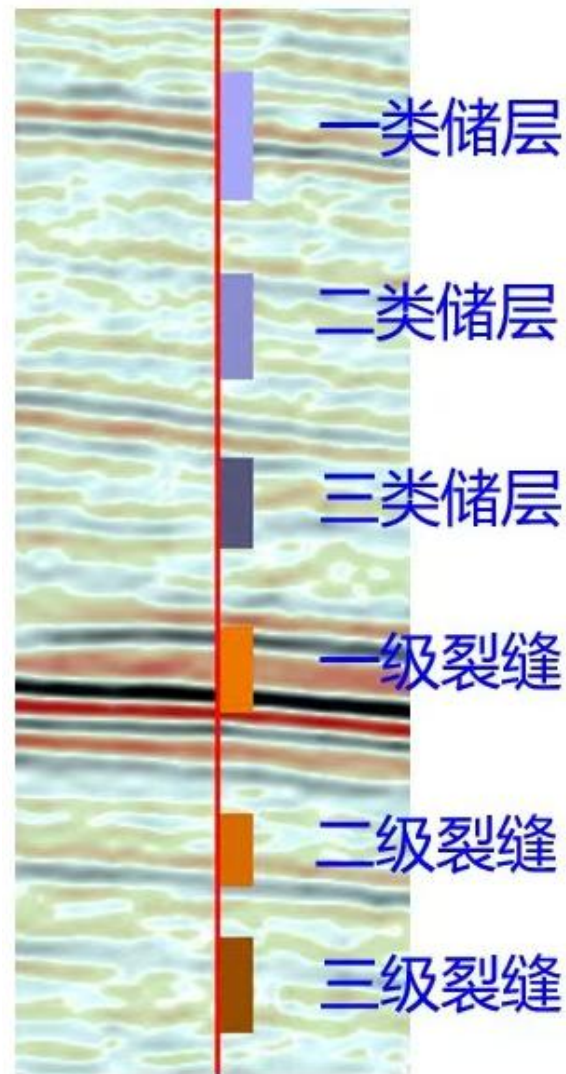
...



# 储层和裂缝类型加载

附录A 数据代码	80
A.1 输入输出数据代码表	80
A.1.1 井类型代码表	80
A.1.2 接触关系代码表	82
A.1.3 岩性类型代码表	82
A.1.4 油气水类型代码表	92
A.1.5 边界类型代码表	98
A.1.6 断层类型代码	98
A.1.7 断层多边形类型...	99

90014	左飞层	P
90015	含气干层	G
90016	煤层	C
90017	一类储层	R
90018	二类储层	R
90019	三类储层	R
90020	一类裂缝层	C
90021	二类裂缝层	C
90022	三类裂缝层	C



# 感谢大家对GeoEast软件的 信任和支持!

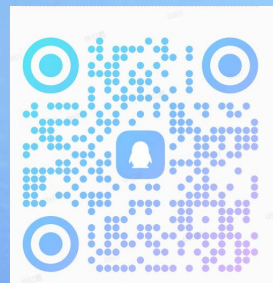
更多详情请关注



GeoEast微信公众号



解释技术支持QQ1群



解释技术支持QQ2群



Bilibili视频教程

技术支持热线电话: 18233420979

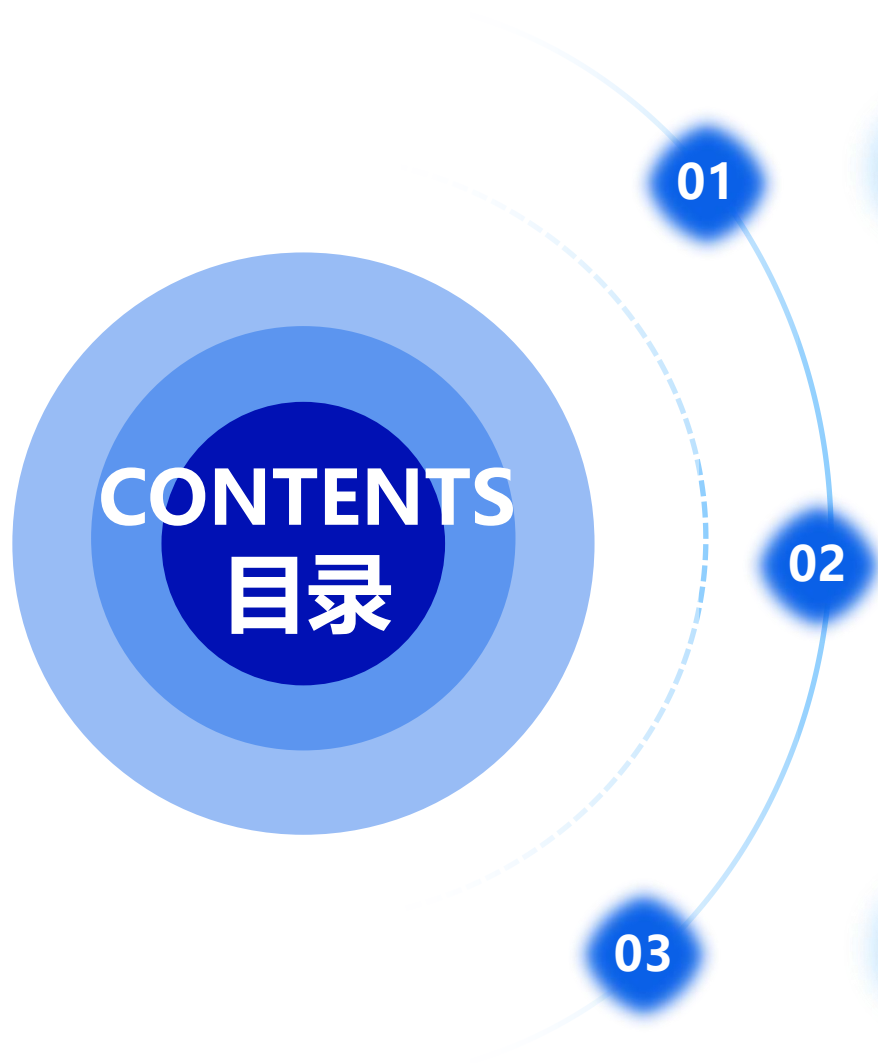
QQ交流群: 196011710、340847471

智能问答助手: <https://community.gs.com.cn/index>

官网网址: <http://www.gs.com.cn>

问题管理系统: <https://wt.gs.com.cn>

销售热线: 0312-3736073



01

**数据类型介绍**

02

**工区之外数据的加载**

03

**工区内部数据的加载**



# 工区内部数据加载



工区内部数据主要包含速度数据、地震数据、属性数据、层位数据、断层数据以及任意线数据等。

Import T-V Pairs... 速度普  
Import Velocity Volume... 速度体

Import Seismic Data 地震数据

Import Volume... 属性体

Import Attributes... 面属性

Import Horizon 层位

Import Fault 断层

Import Traverse



# 三维SEG-Y数据加载



GeoSeisImport ( test\_xhx - test\_liubo )

Select one or more seismic files

Stack Type:  Media Type:

Seismic Files	Swath Name	Volume Name
1 /emc0-id2/data/xhx/1207_xhx.thin.sgy	Null	1207_xhx.thin

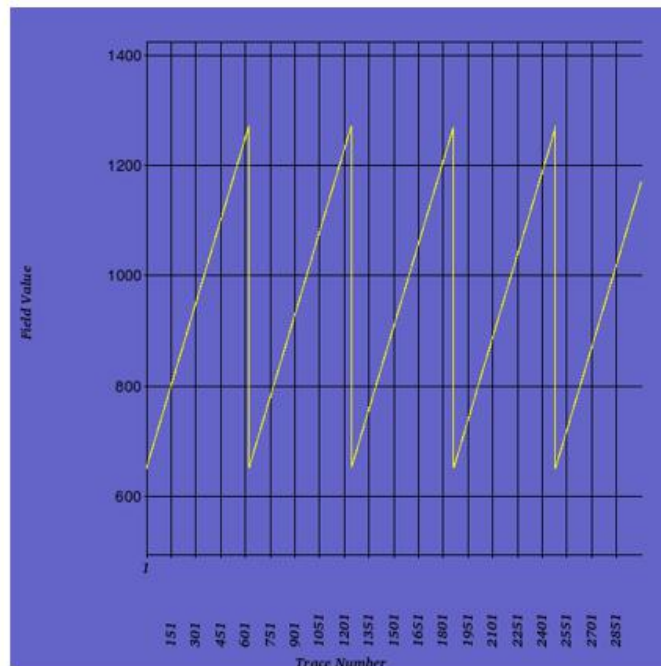
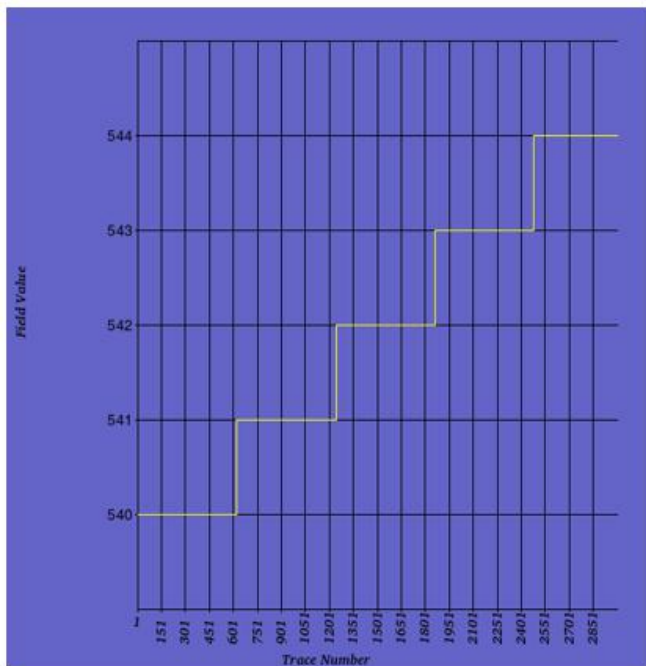
Line Name Match:  Separator:  Sim Coef 60%

Trace Header | Data History | Reel Header | Volume Header | **Trace Header** | Trace Data

	Trace Headers	Start Byte	Format	Trace 1	Trace 2	Trace 3	Trace 4	Trace 5	Trace
5	Energy source point number	17	4-Byte Integer	0	0	0	0	0	0
6	Ensemble number	21	4-Byte Integer	650	651	652	653	654	655
74	Line number	189	4-Byte Integer	540	540	540	540	540	540

Start Trace:  Trace Count:  Increment:

输入数字后回车确认



GeoSeisImport ( TLM\_test\_xhx - DQZJ )

Set trace header information

Mode:

	Header	Source	Function	Header Type	Start Byte	Format
1	Line/CMP Line	From Header		Trace Header	189	4-Byte Integer
2	CMP	From Header		Trace Header	21	4-Byte Integer
3	SP/CMP Stake	From Header		Trace Header	17	4-Byte Integer
4	CMP X	From Header		Trace Header	181	4-Byte Integer
5	CMP Y	From Header		Trace Header	185	4-Byte Integer
6	Trace Type	From Header		Trace Header	29	2-Byte Integer



# 二维SEG-Y数据加载



GeoSeisImport ( train\_1213 - 2D )

Select one or more seismic files

Stack Type: Poststack Media Type: Disk Analyze...

Seismic Files	Line Name	Volume Name
1 /testdata/ly_data/dqzj_traindata/2d/seis/sgy/AA1_mig.sgy	AA1_mig	AA1_mig
2 /testdata/ly_data/dqzj_traindata/2d/seis/sgy/AL1_mig.sgy	AL1_mig	AL1_mig
3 /testdata/ly_data/dqzj_traindata/2d/seis/sgy/AL2_mig.sgy	AL2_mig	AL2_mig
4 /testdata/ly_data/dqzj_traindata/2d/seis/sgy/AL3_mig.sgy	AL3_mig	AL3_mig

Line Name Match: Specified ( > ) Separator: Sim Coef 60% Match Data Name mig

2D Survey Line Parameter Setting

Create 2D line and automatic statistics  
Tolerance (m): 25 Unit for CMP X/Y in Files: m

Update existed 2D line info

< Back Next > Cancel Help

GeoSeisImport ( Zhungaer - FB\_C\_GJX\_2D\_2022 )

Select one or more seismic files

Stack Type: Poststack Media Type: Disk Analyze...

Seismic Files	Line Name	Volume Name
1 /testdata/ly_data/dqzj_traindata/2d/seis/sgy/AA1_mig.sgy	AA1	mig
2 /testdata/ly_data/dqzj_traindata/2d/seis/sgy/AL1_mig.sgy	AL1	mig
3 /testdata/ly_data/dqzj_traindata/2d/seis/sgy/AL2_mig.sgy	AL2	mig
4 /testdata/ly_data/dqzj_traindata/2d/seis/sgy/AL3_mig.sgy	AL3	mig

Line Name Match: Specified ( > ) Separator: Sim Coef 60% Match Data Name mig

2D Survey Line Parameter Setting

Create 2D line and automatic statistics  
Tolerance (m): 25 Unit for CMP X/Y in Files: m

Update existed 2D line info

< Back Next > Cancel Help

File Header | Data History | Reel Header | Volume Header | Trace Header | Trace Data

Trace Headers	Start Byte	Format	Trace -999	Trace -998	Trace -997	Trace -996	Trace -995	Trace -994
6 Ensemble number	21	4-Byte Integer	2	3	4	5	6	7
72 Ensemble/CMP X	181	4-Byte Integer	563242	563267	563292	563317	563342	563367
73 Ensemble/CMP Y	185	4-Byte Integer	4961777	4961780	4961784	4961787	4961790	4961794

Start Trace: 1 Trace Count: 1000 Increment: 1 Trace Header Display

GeoSeisImport ( train\_1213 - 2D )

Set trace header information

Mode: Simple Save to a template... Reset

Header	Source	Function	Header Type	Start Byte	Format
1 Line/CMP Line	From Header		Trace Header	189	4-Byte Integer
2 CMP	From Header		Trace Header	21	4-Byte Integer
3 SP/CMP Stake	From Header		Trace Header	17	4-Byte Integer
4 CMP X	From Header		Trace Header	181	4-Byte Integer
5 CMP Y	From Header		Trace Header	185	4-Byte Integer
6 Trace Type	From Header		Trace Header	29	2-Byte Integer

< Back Next > Cancel Help

点击蓝色框显示最后一道，在绿色框中分别输入第一道和最后一道道号，输入数字后回车确认，Display显示为单斜线即正确。



# SEG-Y数据加载



GeoSelsimport ( train\_1213 - dqz\_3d )

Set volume storage parameters

Volume Control

Data Format: 32-Bit Float Attribute Type: Amplitude

Domain Type: PP Time

Volume Extents

Keyword	Minimum	Maximum
CMP line	500	780
CMP	220	700

Restore to survey extents

Volume Time Range

Limitation Method: Same as Seismic File Filling Value: 0

Minimum Time(ms): 0 Maximum Time(ms): 0

三维

GeoSelsimport ( TLM\_test\_xhx - 2D )

Set volume storage parameters

Volume Control

Data Format: 32-Bit Float Attribute Type: Amplitude

Domain Type: PP Time

Volume Extents

Current Line: AL1\_mig

Keyword	Minimum	Maximum	Increment
CMP	0	0	

Restore to line extents

Volume Time Range

Limitation Method: Same as Seismic File Filling Value: 0

Minimum Time(ms): 0 Maximum Time(ms): 0

二维

GeoSelsimport ( TLM\_test\_xhx - 2D )

Set trace amplitude processing mode

NOTE: Current valid amplitude range can be stored is -2147483648.0 to 2147483647.0.

Volume Amplitude Scaling

Scaling Type: No Scaling

Scaling Method: Maximum Amplitude

Minimum Amplitude: -25000.00 Maximum Amplitude: 25000.00

Volume Amplitude Range Transform

Use the formula  $y=A*x+B$  to transform the amplitude: A = 1 B = 0

Trace Sample Control

Trace Resampling(us): 4000

Time Shift(ms): 0

Null Amplitude: -999999.0

Trace Output Mode

Type: Append Only  Skip the dead traces

Note: ~~mode=delete and append will cause the import procedure to be more slowly.~~

< Back Import Cancel Help



# 二维SEG-Y数据加载名称修改



GeoSeisImport ( AAA\_2025\_songliao\_LP - XJ\_2d )

Select one or more seismic files

Stack Type:  Media Type:

	Seismic Files	Line Name	Volume Name	
1	/yfs0/xhx/tools/ws03297/TLM-WS03-297_BGP_migf.sgy	TLM-WS03-297_BGP_migf	TLM-WS03-297_BGP_migf	<input type="button" value="Add Seismic Files"/> <input type="button" value="Add Lines/Swath"/> <input type="button" value="Remove"/> <input type="button" value="Remove all"/> <input type="button" value="Up"/> <input type="button" value="Down"/>

Line Name Match:  Separator  Sim Coef 60%   Match Data Name

2D Survey Line Parameter Setting

Create 2D line and automatic statistics  
Tolerance (m) :  Unit for CMP X/Y in Files :

Update existed 2D line info



# 二维SEG-Y数据加载名称修改



GeoSeisImport ( AAA\_2025\_songliao\_LP - XJ\_2d )

Select one or more seismic files

Stack Type:  Media Type:  Analyze...

Seismic Files	Line Name	Volume Name
1 /yfs0/xhx/tools/ws03297/TLM-WS03-297_BGP_migf.sgy	TLM-WS03-297_BGP_migf	TLM-WS03-297_BGP_migf

Line Name Match:  Separator  Sim Coef 60%

2D Survey Line Parameter Setting

Create 2D line and automatic statistics  
Tolerance (m) :  Unit for CMP X/Y in Files :

Update existed 2D line info

< Back Next > Cancel Help

Replace

String to Find :

Replace with :

Replacing Range

Selection  Whole Column

Restore to File Name Apply Close

Line Name	Volume Name
TLM-WS03-297_2026_migf	TLM-WS03-297_BGP_migf



# 二维SEG-Y数据加载名称修改



GeoSeisImport ( AAA\_2025\_songliao\_LP - XJ\_2d )

Select one or more seismic files

Stack Type:  Media Type:  Analyze...

Seismic Files	Line Name	Volume Name	
1 /yfs0/xhx/tools/ws03297/TLM-WS03-297_BGP_migf.sgy	TLM-WS03-297_BGP_migf	TLM-WS03-297_BGP_migf	<input type="button" value="Add Seismic Files"/> <input type="button" value="Add Lines/Volumes"/> <input type="button" value="Remove"/> <input type="button" value="Remove all"/> <input type="button" value="LTP"/> <input type="button" value="LTPM"/>

Line Name Match:  Separator:  Sim Coef 60%

2D Survey Line Parameter Setting

Create 2D line and automatic statistics  
Tolerance (m) :  Unit for CMP X/Y in Files :

Update existed 2D line info

< Back Next > Cancel Help

Extract Line Name From FileName

String:

Separator  Start Position  End Position

Replacing Range

Selection  Whole Column

Extract Line Name From FileName

String:

Separator  Start Position  End Position

Replacing Range

Selection  Whole Column

Extract Line Name From FileName

String:

Separator  Start Position  End Position

Replacing Range

Selection  Whole Column

Line Name	Volume Name
BGP	TLM-WS03-297_BGP_migf

Line Name	Volume Name
TLM-WS03-297	TLM-WS03-297_BGP_migf



# SEG-Y数据加载特殊处理

SEG-Y数据需要进行道头计算式，可以通过公式计算得到新的道头字，比如当前SEG-Y数据体的线道号比当前测网小500，可以用公式计算线道号，将线号加500使SEG-Y数据与当前工区匹配。**(注：如果线道号相差的不是整数，或有方位旋转，不能用此方法)**

GeoSeisImport ( TLM\_test\_xhx - DQZJ )

Set trace header information

Mode: Simple

Header	Source	Function	Header Type	Start Byte	Format
1 Line/CMP Line	From Header		Trace Header	189	4-Byte Integer
2 CMP	From Header		Trace Header	21	4-Byte Integer
3 SP/CMP Stake	From Header		Trace Header	17	4-Byte Integer
4 CMP X	From Header		Trace Header	181	4-Byte Integer
5 CMP Y	From Header		Trace Header	185	4-Byte Integer
6 Trace Type	From Header		Trace Header	29	2-Byte Integer

Expression Definition

Variables:

- CMP(TraceHeader,StartByte=21,Format=4-Byte Integer)
- Line(TraceHeader,StartByte=189,Format=4-Byte Integer)
- X(TraceHeader,StartByte=73,Format=4-Byte Integer)
- Y(TraceHeader,StartByte=77,Format=4-Byte Integer)

Operators:

- +
- 
- \*
- /
- %
- ^

Digital:

- 0
- 1
- 2
- 3
- 4
- 5

Functions:

- ABS
- ACOS
- ASIN
- ATAN
- ATAN2
- CEIL

Expression:

Line+500

Variable Definition

Variable Name: Line

Source: Trace Header

Position Type: Start Byte

Start Position: 189

Format: 4-Byte Integer

Description:

OK Apply Cancel

此处的道头字  
要保持一致

如果二维SEG-Y数据的X坐标不含带号，而需要设置增加带号时，可以通过这里计算设置，例如需要加14带带号。

Expression Definition

Variables:

- CMP(TraceHeader,StartByte=21,Format=4-Byte Integer)
- Line(TraceHeader,StartByte=189,Format=4-Byte Integer)
- X(TraceHeader,StartByte=73,Format=4-Byte Integer)
- Y(TraceHeader,StartByte=77,Format=4-Byte Integer)

Operators:

- +
- 
- \*
- /
- %
- ^

Digital:

- 0
- 1
- 2
- 3
- 4
- 5

Functions:

- ABS
- ACOS
- ASIN
- ATAN

Expression:

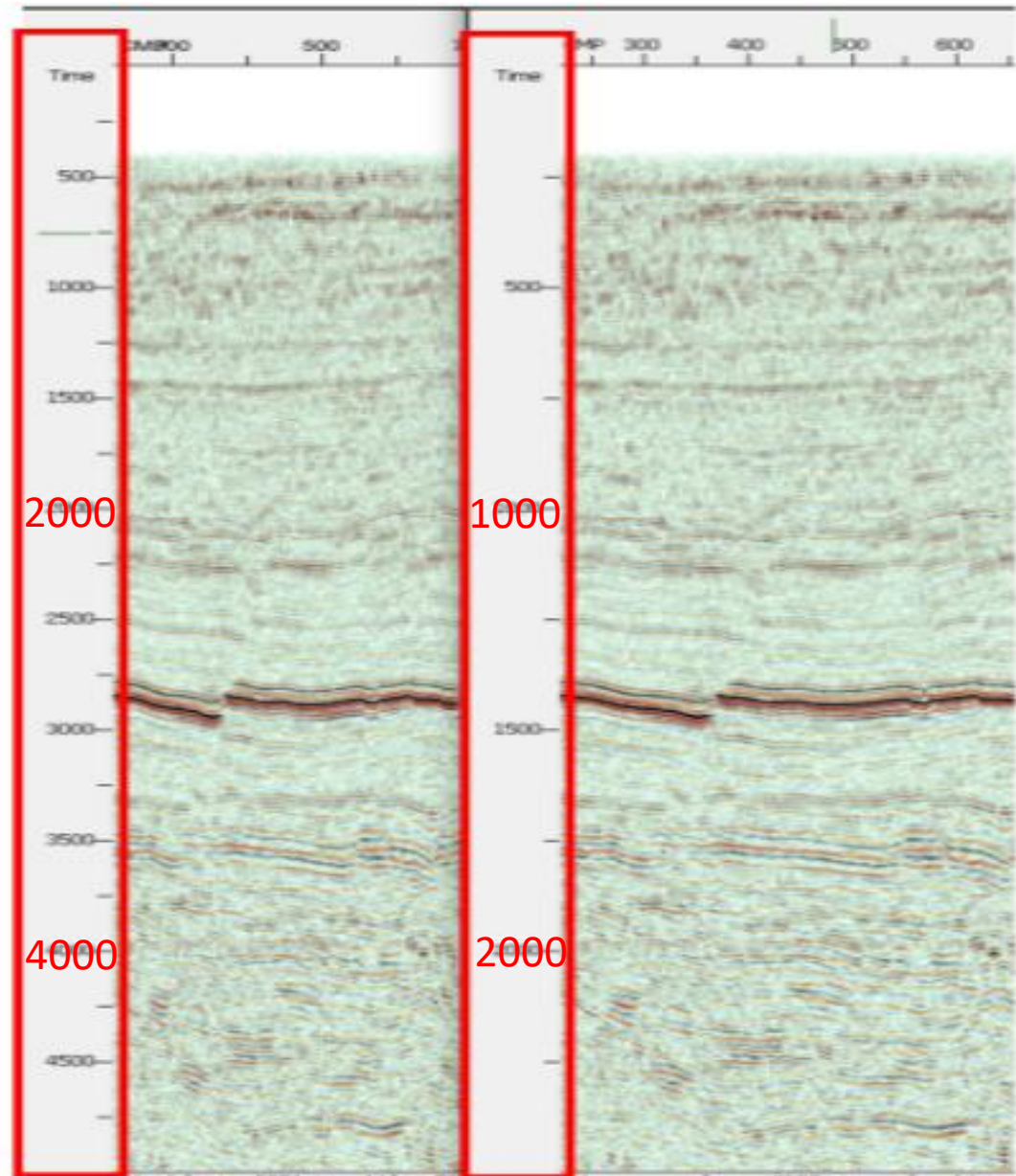
X+14000000



# SEG-Y数据加载特殊处理



如果需要加载的数据**纵向范围有拉伸或压缩**（比如国外深度域地震数据深度单位为英尺，而国内单位为米，国外的资料加载到国内的工区时就需要对原始数据压缩纵向比例），想要通过加载进行纵向拉伸或压缩，需要在加载时**修改卷头**信息采样率，下面举例说明，下图两剖面中左侧为正常剖面，右侧为压缩剖面，从纵向时间轴看出，左侧剖面的时间轴正好是右侧时间值的两倍，形态完全一致，只是纵向时间不对应。





# SEG-Y数据加载特殊处理



GeoSelsimport ( Zhungaer - FB\_SX101\_3D\_2022 )

Set volume header information

Mode: **Simple** Reset

Header	Source	Function	Header Type	Start Byte	Format
1 Format Type	From Header		Volume Head	25	2-Byte Integer
2 Sample Interval	From Header		Volume Head	17	2-Byte Integer
3 Trace Sample Number	From Header		Volume Head	21	2-Byte Integer
4 Global Minimum Time	From Header		Trace Head	109	2-Byte Integer

< Back Next > Cancel Help

GeoSelsimport ( Zhungaer - FB\_SX101\_3D\_2022 )

Set trace header information

Mode: **Simple** Save to a template... Reset

Header	Source	Function	Header Type	Sart Byte	Format
1 Line/CMP Line	From Header		Trace Head	189	4-Byte Integer
2 CMP	From Header		Trace Head	21	4-Byte Integer
3 SP/CMP Stake	From Header		Trace Head	17	4-Byte Integer
4 CMP X	From Header		Trace Head	181	4-Byte Integer
5 CMP Y	From Header		Trace Head	185	4-Byte Integer
6 Trace Type	From Header		Trace Head	29	2-Byte Integer

< Back Next > Cancel Help

Variable Definition

Variable Name: **sample** 随意给一个名称

Source: Volume Header

Position Type: Start Byte

Start Position: 17

Format: 2-Byte Integer

Description :

OK Apply Cancel

Expression Definition

Variables

- CMP(TraceHeader,StartByte=21,Format=4-Byte Integer)
- Line(TraceHeader,StartByte=189,Format=4-Byte Integer)
- X(TraceHeader,StartByte=73,Format=4-Byte Integer)
- Y(TraceHeader,StartByte=77,Format=4-Byte Integer)
- sample(VolumeHeader,StartByte=17,Format=2-Byte Integer)**

Operators

- + - \* / ..

Digital

- 0 1 2 3

Functions

- ABS ACOS ASIN ATAN

Expression:

**sample\*2** 纵向拉长两倍

Clear Validate OK Cancel

Expression Definition

Variables

- CMP(TraceHeader,StartByte=21,Format=4-Byte Integer)
- Line(TraceHeader,StartByte=189,Format=4-Byte Integer)
- X(TraceHeader,StartByte=73,Format=4-Byte Integer)
- Y(TraceHeader,StartByte=77,Format=4-Byte Integer)

Operators

- + - \* / ..

Digital

- 0 1 2 3

Functions

- ABS ACOS ASIN ATAN

Expression:

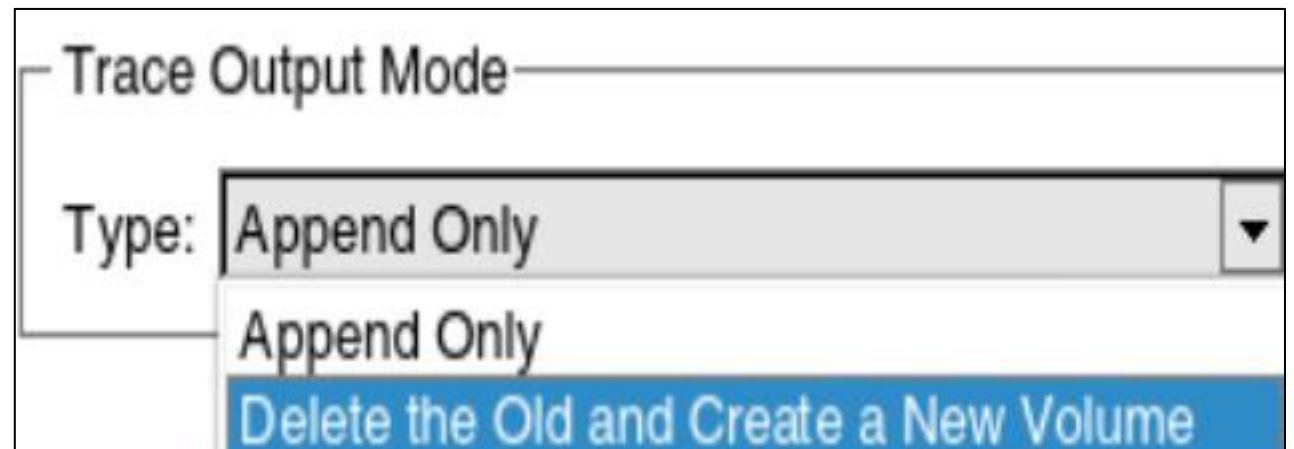
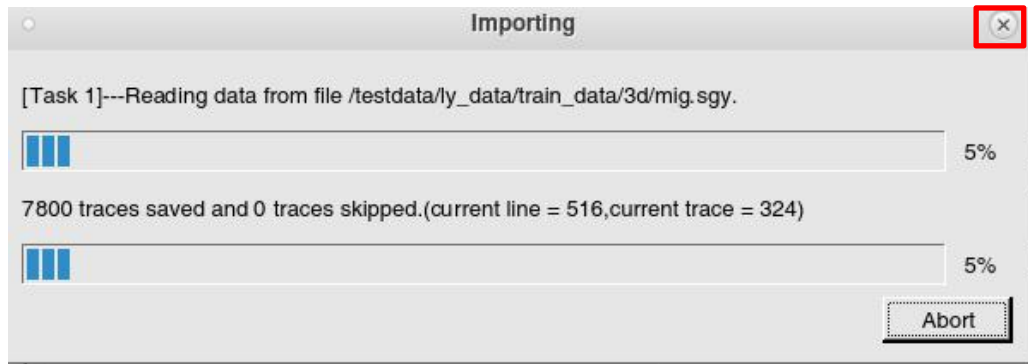
Clear Validate OK Cancel



# SEG-Y数据加载特殊情况处理



一般来说，地震数据加载时，道头字设置正确并且与工区匹配，不会出现加载闪退的情况，但如果用户在第一次加载某地震数据时，由于某些原因，数据未加载完成，**用户自行将进程强行中断**，或者突然断网，此时则会导致系统中产生了一个错误数据，用户再次加载时，如果不更改所加载数据体的名称，保留原名重新加载，则会出现闪退，遇到这种情况，用户可在数据加载的最后一步中选择删除旧数据并产生新数据，而不能选择默认的追加模式，即可解决该问题。

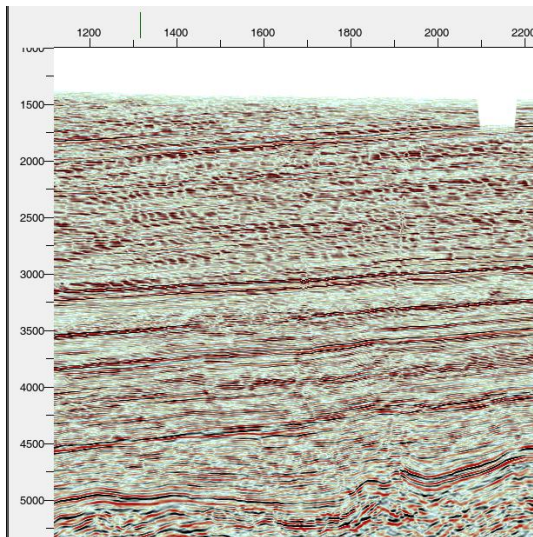
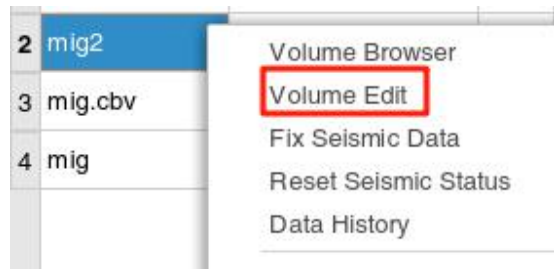




# SEG-Y数据加载特殊情况处理



一般来说，地震数据加载后，剖面显示的数据纵向时间/深度刻度从上到下为从小到大，但有时处理员的疏忽会导致置错道头，从而导致地震数据上方显示的刻度大，下方显示的刻度小，此时可以通过手工修改道头的方式重置正确的道头。

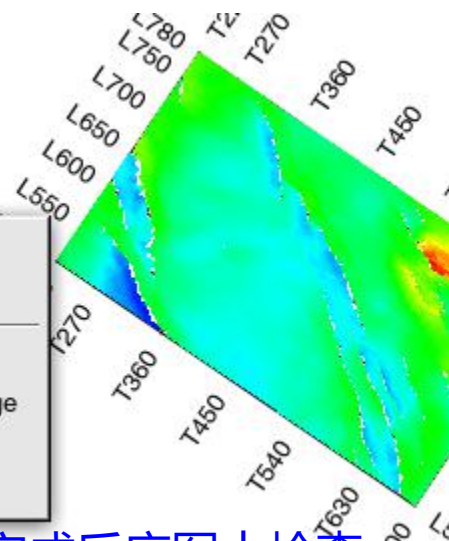
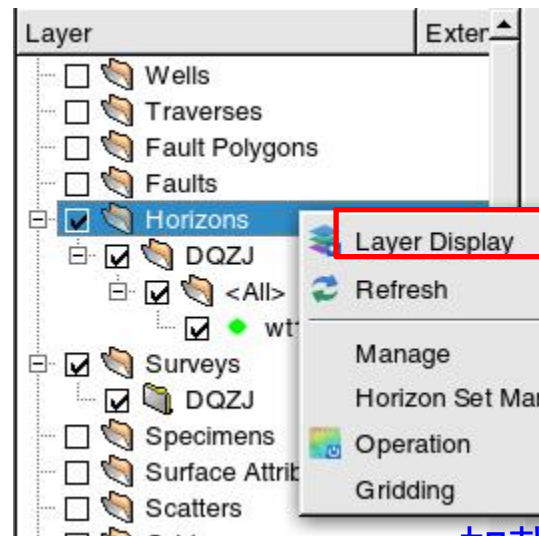
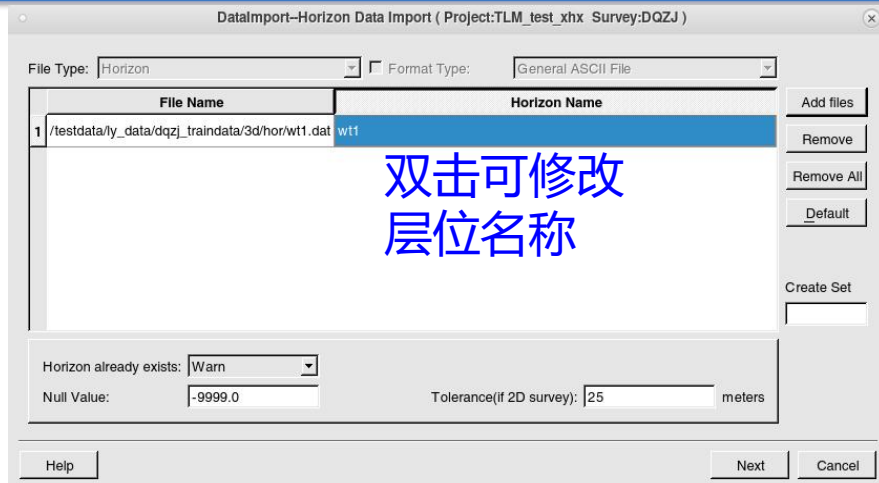
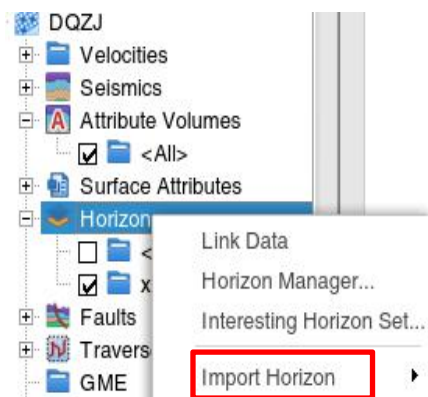


Property	Value
1. Sample interval	1.0000
2. Min time of first samples in volume	0.0000
3. Max time of first samples in volume	0.0000
4. Min time of last samples in volume	2500.0000
5. Max time of last samples in volume	2500.0000
6. Sample format	5:32 Bit float
7. Data form	1:Post-stack
8. Data attribute type	1:Seismic record
9. Domain	1:Time
10. Null sample value	-912300.00
11. Number of traces in volume	135161
12. Data dictionary version	2
13. Maximum samples	2501
14. Maximum fold	0
15. Min time of first valid samples in volume	0.0000
16. Max time of first valid samples in volume	0.0000
17. Min time of last valid samples in volume	2500.0000
18. Max time of last valid samples in volume	2500.0000
19. Original min amplitude in volume	-120.00
20. Original max amplitude in volume	120.00
21. Min amplitude in data volume	-120.00
22. Max amplitude in data volume	120.00
23. Min CMP line	500
24. Max CMP line	780

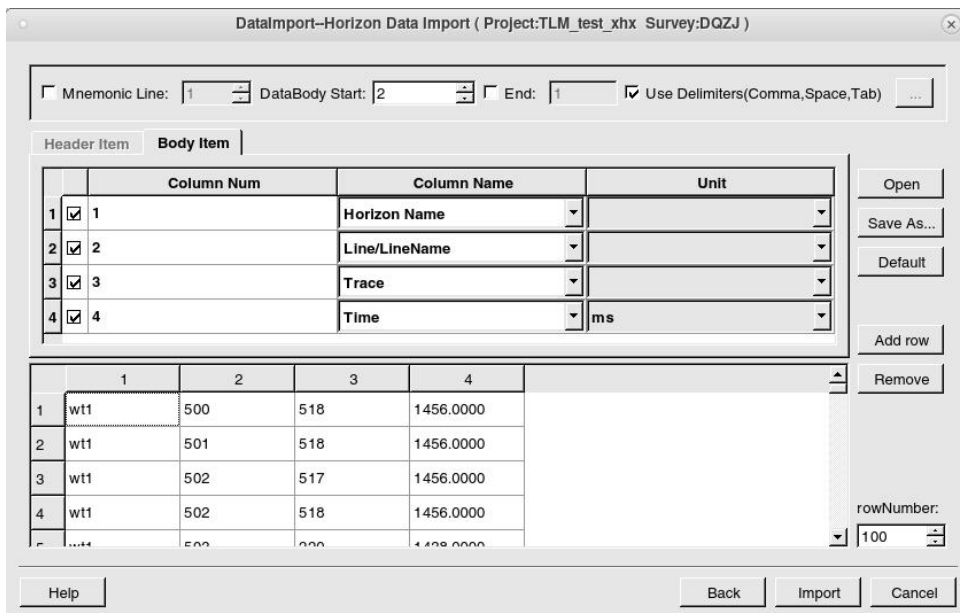
如果置错道头，表现为第2、3行数值大，第4、5行数值小，编辑表格将2、3和4、5的数值颠倒即可。



# 层位数据加载



加载完成后底图中检查数据是否正确



**层位文件格式必选项1**  
层位名1 line1 trace1 time/depth1  
层位名2 line2 trace2 time/depth2  
...

**层位文件格式必选项2**  
层位名1 X1 Y1 time/depth1  
层位名2 X2 Y2 time/depth2  
...



# 断层数据加载



## 断层文件格式必选项1

断层名1 line1 trace1 time/depth1 connectionflag1  
 断层名2 line2 trace2 time/depth2 connectionflag2  
 ...

## 断层文件格式必选项2

断层名1 X1 Y1 time/depth1 connectionflag1  
 断层名2 X2 Y2 time/depth2 connectionflag2  
 ...

Header Item	Body Item
3	Trace
4	X
5	Y
6	Time
7	Connection Flag
8	Fault Type
9	Line Color

	1	2	3	4	5	6	7	8	9
1	segmentTag...	111							
2	#faultName	x	y	surveyName	line/lineName	trace	time	faultType	connectionFlag
3	F1	570374.6813	4966807.6444	3D	703	397	1346.0000	0	1
4	F1	570080.1633	4966977.8448	3D	703	380	1500.0000	0	1
5	F1	569924.2421	4967067.9510	3D	703	371	1609.0000	0	1
6	F1	569699.0225	4967198.1042	3D	703	358	1721.0000	0	1
7	F1	569543.1012	4967288.2104	3D	703	349	1856.0000	0	1

## 格式自动调整

Header Item	Body Item
1	1
2	5
3	6
4	7
5	9



# 工区外数据输出



AAA\_2025\_songliao\_LP

- Geographic Information
- Combined Fault Polygons
- <All>
- Combined Horizons
- Combined Traverses
- Mappings

Export Fault Polygons

Project Information

Data Explorer

- AAA\_2025\_songliao\_LP
  - Combined Fault Polygons

Data Type: Fault Polygons | Data Set: <All>

Available	Selected
000_SL_LP_2024_SB_T07_16.ip.c 111 2D_3D_LINE9 wt1_2D_3D_F_polygon_merge wt1_F_polygon	

Format Select: [\*]default.fmt **Select...**

OutPut Option

Coordinate System: Data

FileName: faultpolygon.dat

OutPut DataPath: /yfs0/xhx

Help | Apply | Close

Export Format Define

Format Define

Available:3 | Selected:8

Survey Name  
Tie Fault Name  
Z

ItemName	StrCol	ValueTyp
1 Fault Polygon...	1	T20
2 X	2	F18.4
3 Y	3	F18.4
4 Connection ...	4	I5
5 Fault Level	5	I5
6 Fault Point ...	6	I5
7 Fault Polygon...	7	I5
8 Closing Type	8	I5

Filter:

Save | Save as

Apply | Close | OK

**【\*】表示系统默认格式**



# 工区内部数据输出



DQZJ\_3D\_2025

- Velocities
- Seismics
  - <All>
  - Attribute Volum
  - Surface Attribut
  - Horizons
  - Faults

Link Data  
Interesting Seismic Set...  
Import Seismic Data  
**Export Seismic Data**

### 3D Survey Data Definition

Data Explorer

- AAA\_2025\_songliao\_LP
  - DQZJ\_3D\_2025
    - Seismic

Extents

	Minimum	Maximum	Increment
Line:	500	780	1
CMP:	220	700	1

Restore to survey extents

OutPut DataPath: /yfs0/xhx

Help Apply Close

### 3D Seismic Data Export

Data Explorer

- AAA\_2025\_songliao\_LP
  - DQZJ\_3D\_2025
    - Seismic

Data Select | Volume Header | Trace Header | Parameter

Data Type: PostStack Seismics  
Data Set: <All>

Available: PostStack Seismics  
Selected: 1

Data Name	Data Set
mig_2025	

Filter:

Traverse: xhx select...

File Name:  + SeismicName+ .sgy

OutPut DataPath: /yfs0/xhx

Help Apply Close

### 3D Seismic Data Export

Data Explorer

- AAA\_2025\_songliao\_LP
  - DQZJ\_3D\_2025
    - Seismic

Data Select | Volume Header | Trace Header | Parameter

Mode: Simple

GeoEast Heade	Start Byte	Format
1 Uniform Trace	1	4-Byte Integer
2 Trace Type	29	2-Byte Integer
3 Global ...	109	2-Byte Integer
4 Minimum Time	111	2-Byte Integer
5 Maximum Time	113	2-Byte Integer
6 Trace Sampl...	115	2-Byte Integer
7 Sample Interval	117	2-Byte Integer
8 Line/CMP Line	189	4-Byte Integer
9 CMP	21	4-Byte Integer

UserDefine TraceHeader

OutPut DataPath: /yfs0/xhx

Help Apply Close

Data Select | Volume Header | Trace Header | Parameter

Seismic File Time Range

Limitation Method: Manual Control

Minimum Time(ms): Same as Volume Manual Control

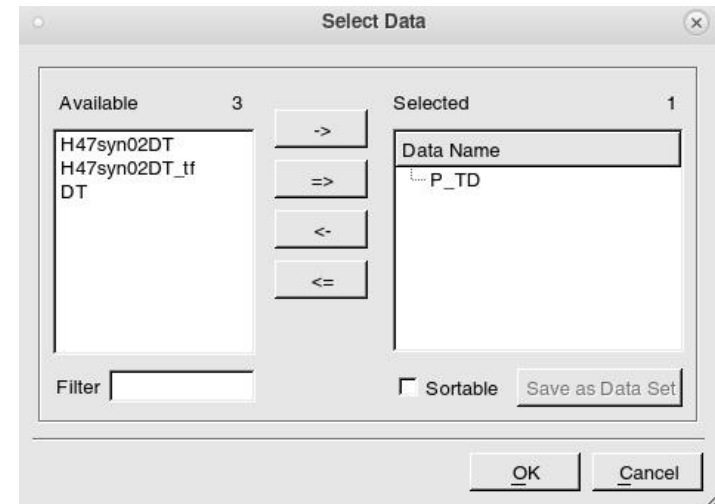
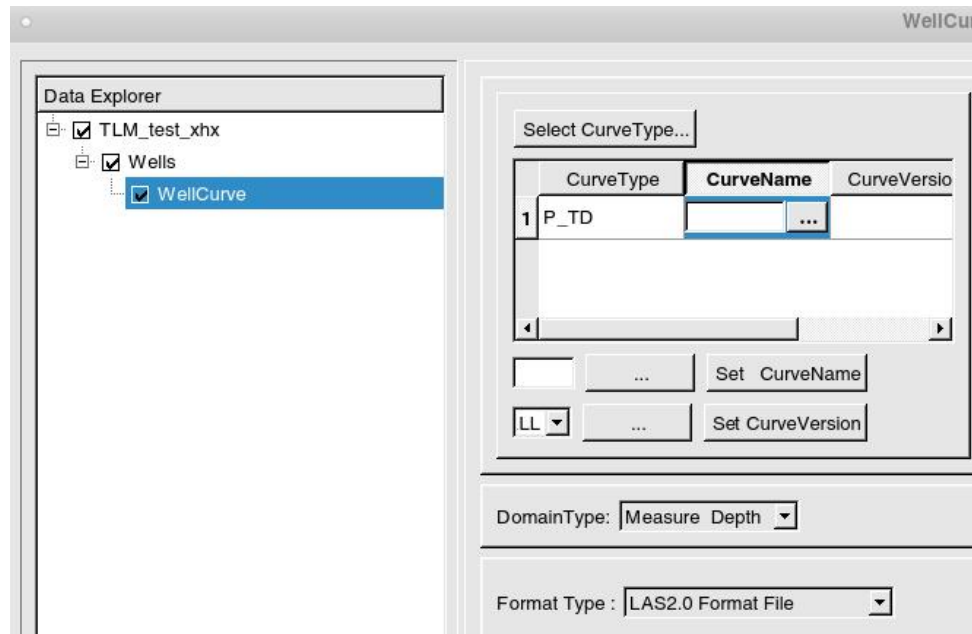
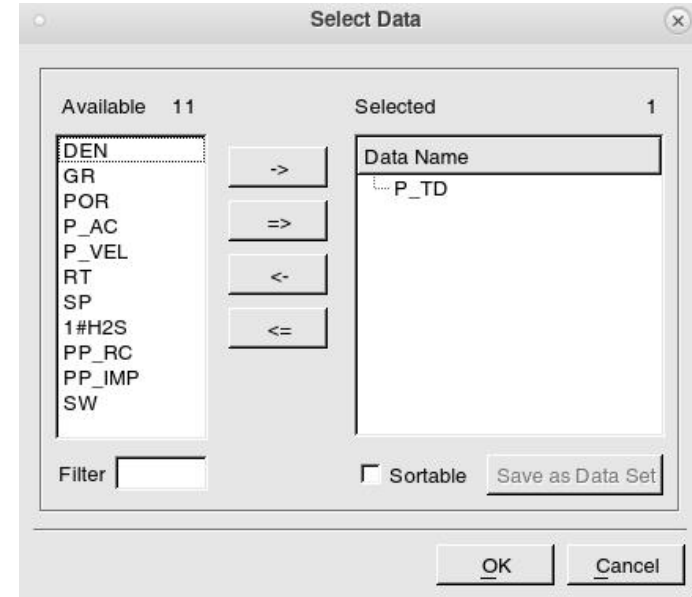
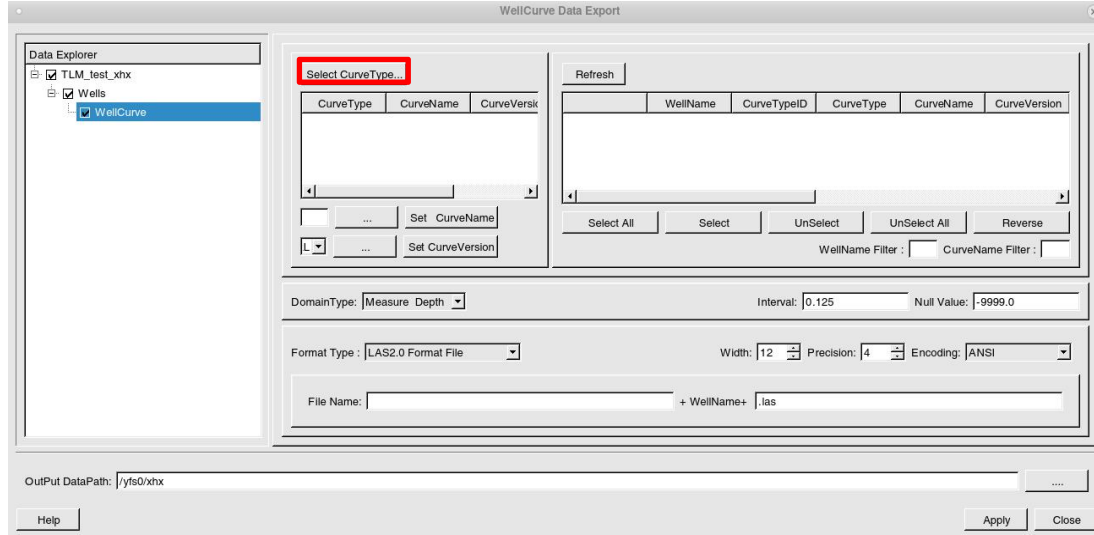
Maximum Time(ms): 2000

Grid filled with empty traces(poststack is valid)

From Data

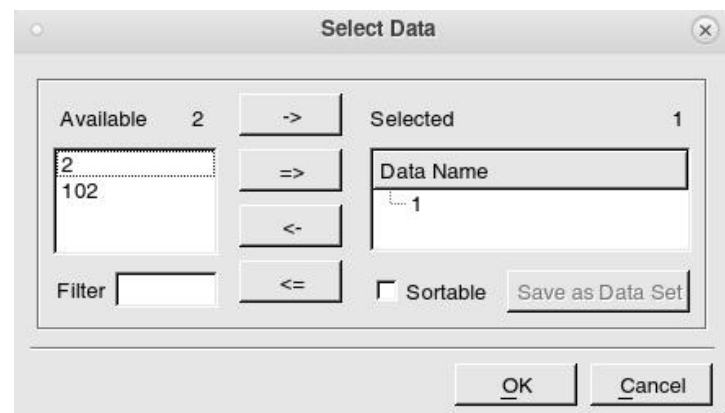
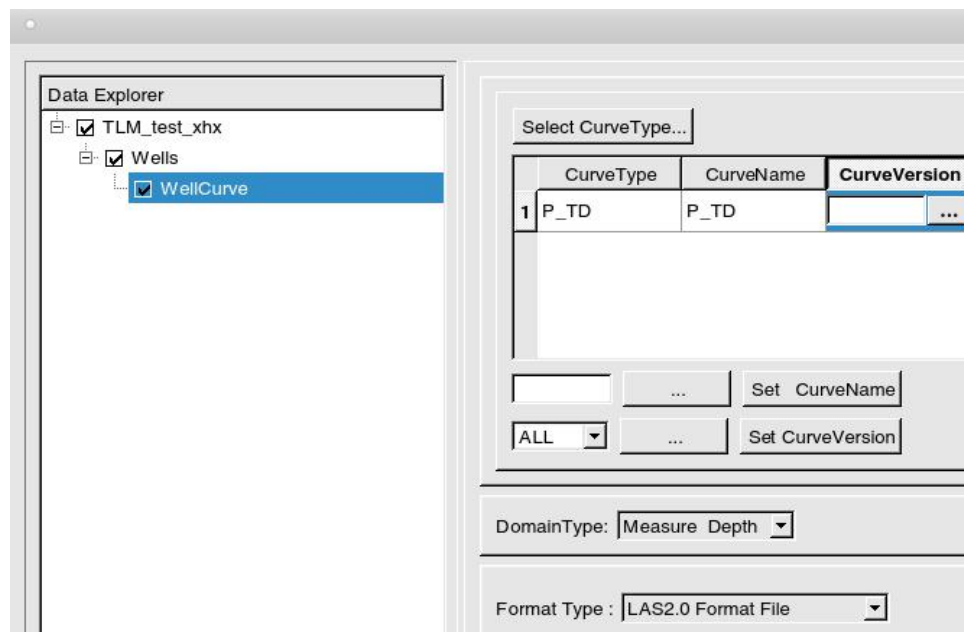
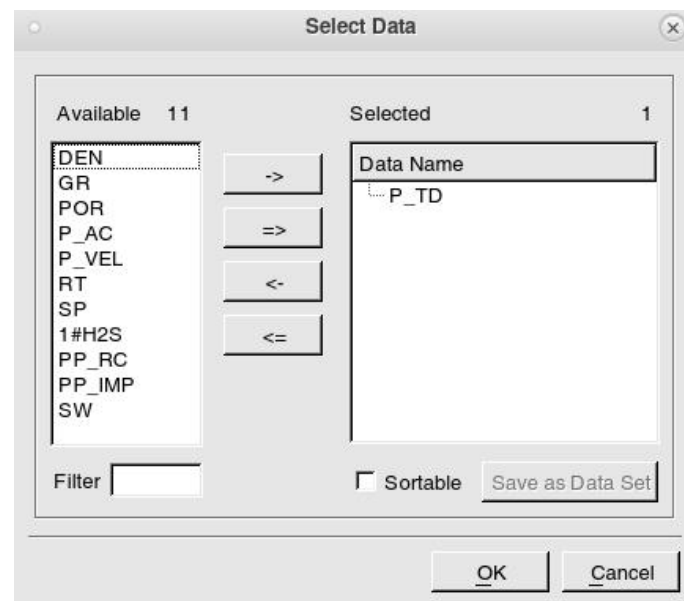
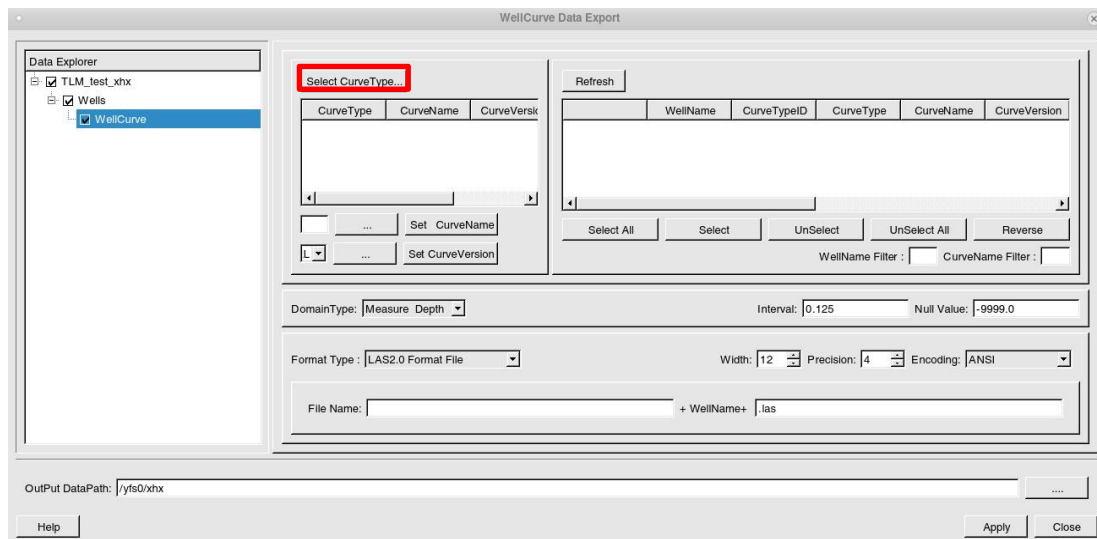


# 测井曲线数据输出





# 测井曲线数据输出





# 测井曲线数据输出



WellCurve Data Export

Data Explorer

- [-] TLM\_test\_xhx
  - [-] Wells
    - [-] WellCurve

Select CurveType...

	CurveType	CurveName	CurveVersion	
1	P_TD	P_TD	1	...

P\_TD ... Set CurveName

ALL ... Set CurveVersion

ALL  
LAST

DomainType: Vertical Depth ... 选择测深  
Measure Depth 或垂深  
Vertical Depth

Format Type: LAS2.0 Format File  
General ASCII File Format  
LAS2.0 Format File

Refresh Total Curve Num : 3 ,selected Num :0

	WellName	CurveType	CurveName	CurveVersion	DomainType	DepthType	
<input type="checkbox"/>	H47	P_TD	P_TD	1	Depth	Vertical	
<input type="checkbox"/>	H49	P_TD	P_TD	1	Depth	Vertical	
<input type="checkbox"/>	Q104	P_TD	P_TD	1	Depth	Vertical	

Select All Select UnSelect UnSelect All Reverse

WellName Filter : CurveName Filter :

Interval: 0.125 Null Value: -9999.0

Width: 12 Precision: 4 Encoding: ANSI

File Name: + WellName+ .las

OutPut DataPath: /yfs0/xhx

Help Apply Close

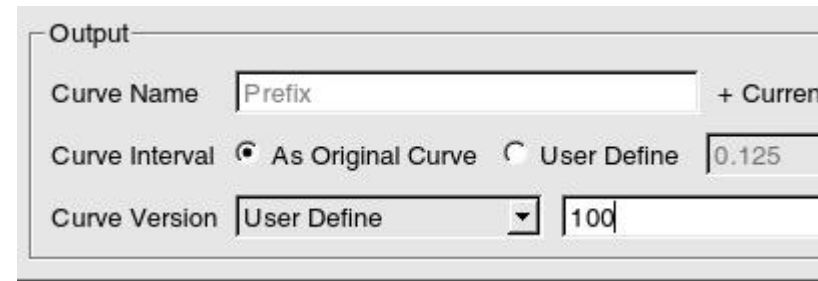
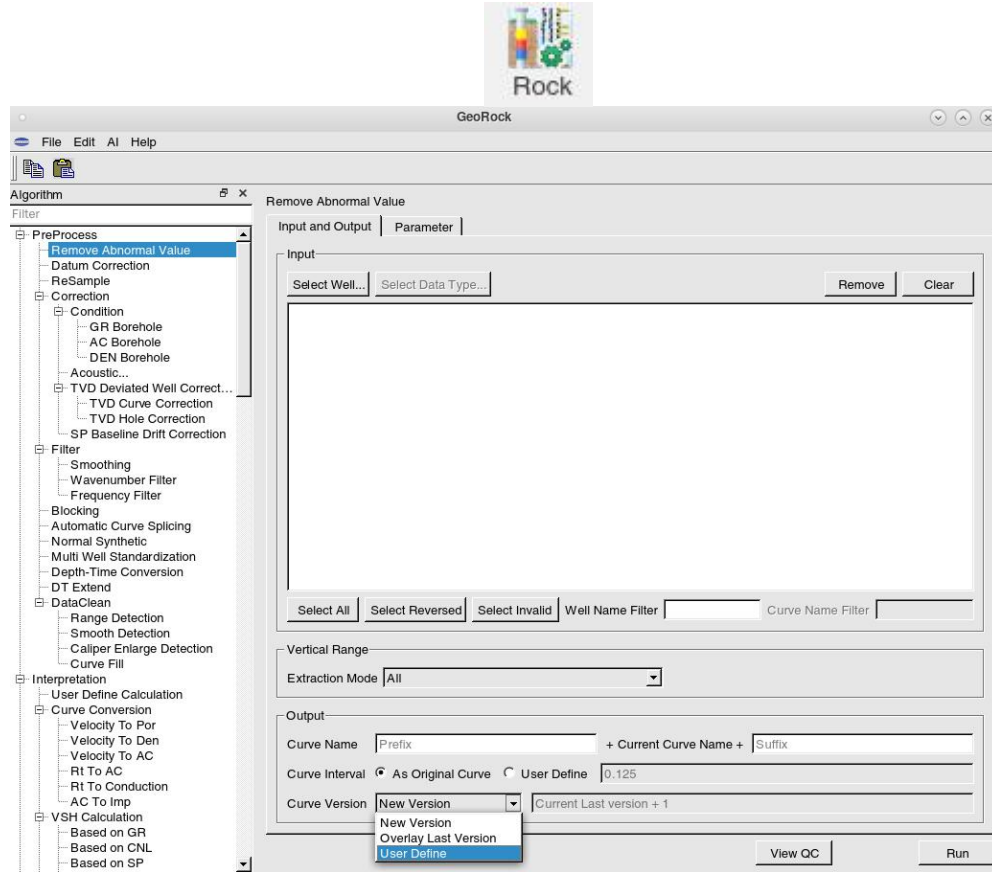
选择所有井  
最大版本号  
的曲线输出



选择测深  
或垂深



# 如何得到统一版本的测井曲线





# 小结



GeoEast解释系统数据格式大概分三类：SEG-Y格式、ASCII码格式以及LAS格式的井曲线，所有数据的加载均是在主控中点中数据节点右键菜单Import，分为工区外部数据和工区内部数据两部分。

- 1、SEG-Y数据体包括地震数据、属性数据、反演数据、速度体数据等，加载方式都相同，需要注意的是，加载的最后一步中数据体的归类，默认为Amplitude，代表原始地震数据，如果是属性数据或速度体数据，可选择相应的数据类型；
- 2、所有的以列模式排列的文本文件都可以按照ASCII码格式加载，包括后缀为dat、txt、prn的各类数据；
- 3、Las格式的井曲线无论每个文件里包含几条井曲线，均可一次性批量加载，ASCII码格式的测井曲线如果要批量加载，需要保证各文件中的曲线一致，格式一致。

# 感谢大家对GeoEast软件的 信任和支持!

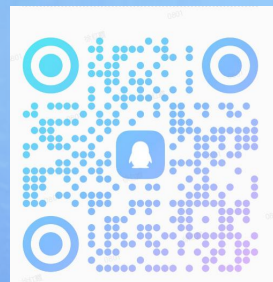
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智能问答助手: <https://community.gs.com.cn/index>

官网网址: <http://www.gs.com.cn>

问题管理系统: <https://wt.gs.com.cn>

销售热线: 0312-3736073