

# GeoEast解释-数据的备份及恢复 Link、二三维工区转换

汇报人：徐红霞

中国石油东方物探公司物探技术研究中心  
中油油气勘探软件国家工程研究中心

2026年4月7日

GeoEast



01

**数据备份及恢复**

**数据的link**

02

**数据的copy**

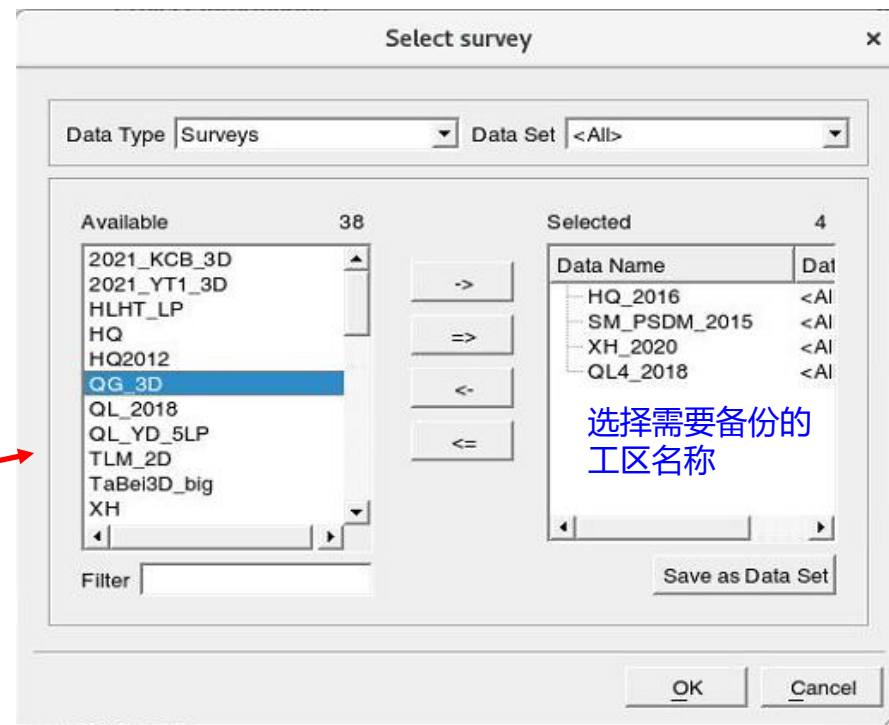
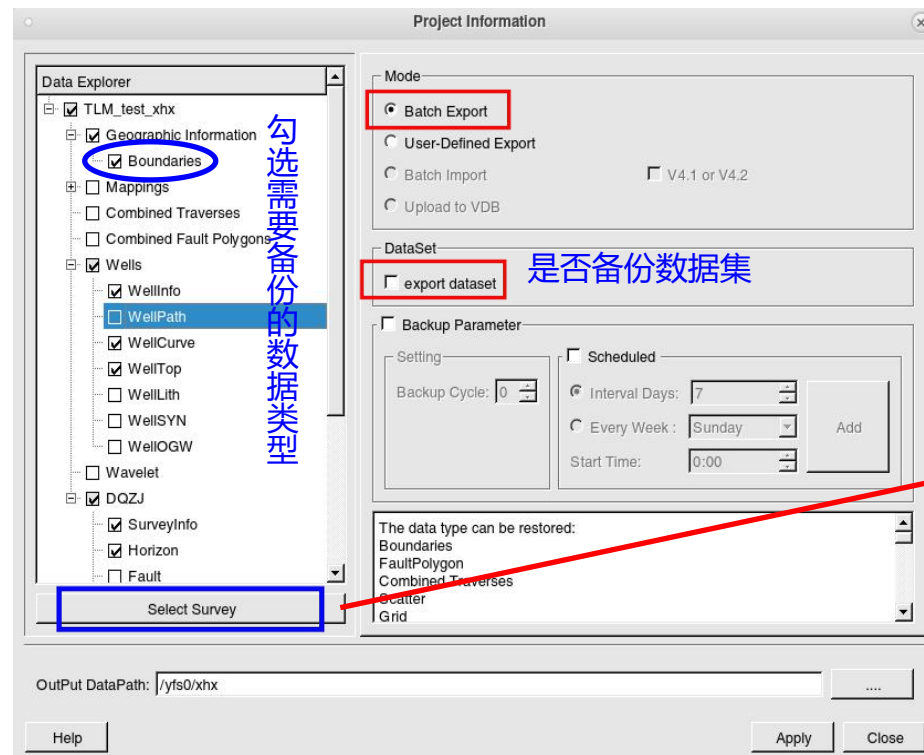
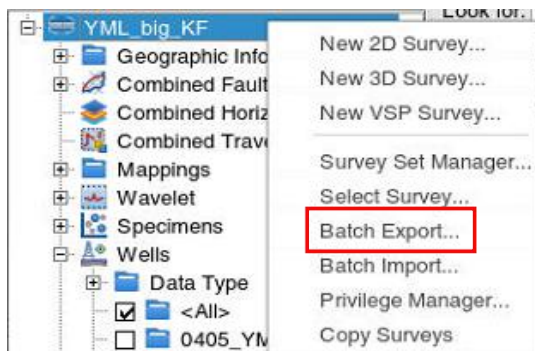
**三维工区转二维工区**

03

**二维工区转三维工区**



# 项目级数据备份

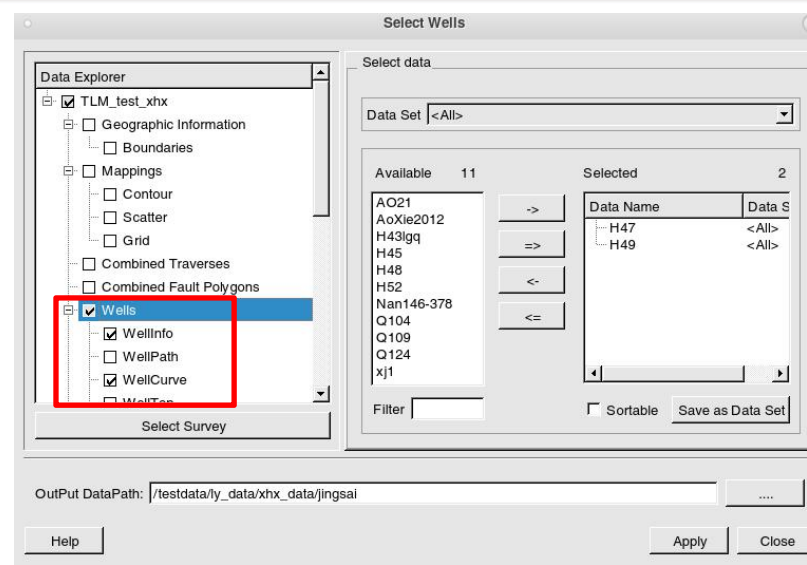
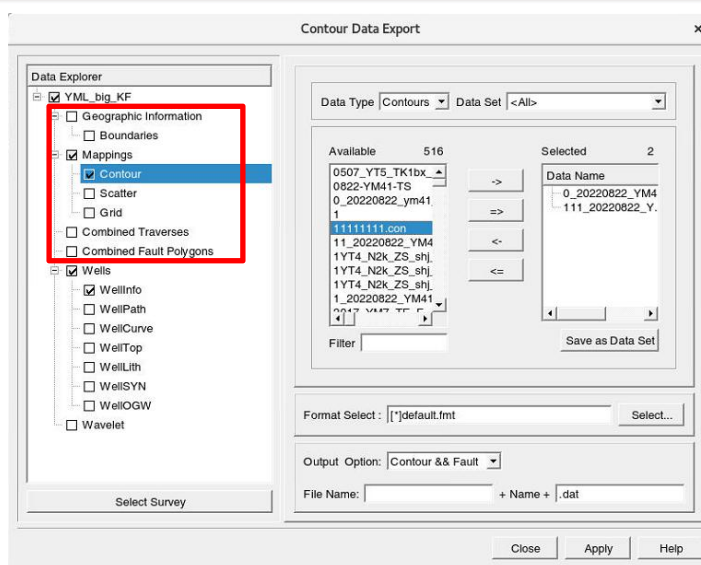
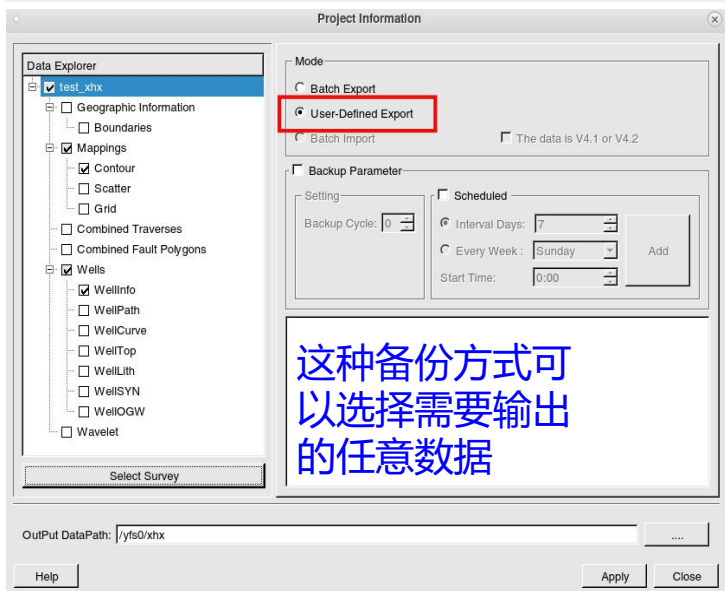


早期版本 (4.1及4.2) 备份时选择Boundary可能闪退，可以尝试备份时不选Boundary。

这种备份方式只能选择数据类型，不能选择具体数据，一旦选择数据类型，其下所有数据按默认格式被一次性输出，备份产生的所有数据均以主控数据树的模式分级管理，备份产生的每一个数据都可以单独加载，也可以批量导入。

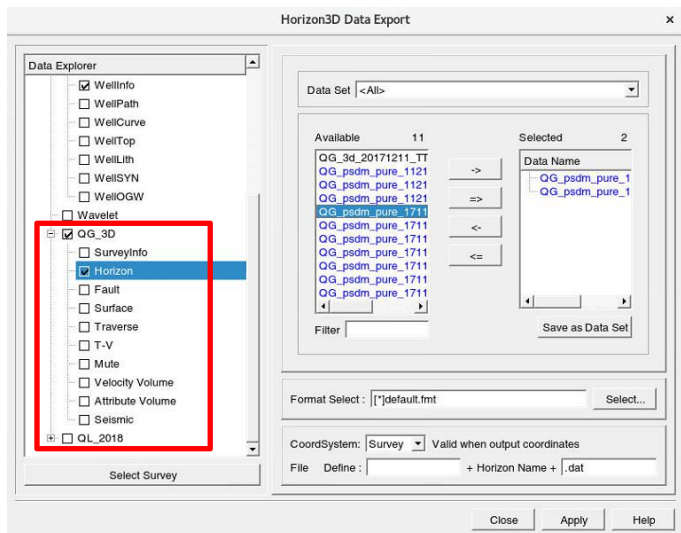


# 任意选择数据备份



左侧点中数据类型contour，右侧选择需要输出的具体数据，每一类输出数据可以单独选择输出文件格式。

左侧点中Wells，右侧选择需要输出的井名，如果左侧点中WellCurve，则右侧可以选择需要输出的井曲线。



左侧点中数据类型Horizon，右侧选择需要输出的具体层位，并能指定数据格式。

备份产生的所有数据均以主控数据树的模式分级管理，每一个数据都可以单独加载，也可以批量导入。注意：GeoEast2024 (V4.3) 及更高版本以此方式备份的数据批量导入时主控选择Batch Import可以一次性恢复所有数据，在GeoEastV4.2及以下版本中备份的数据恢复时只能同一类数据批量加载。



# 定期自动备份



Project Information

Data Explorer

- TLM\_test\_xhx
  - Geographic Information
    - Boundaries
  - Mappings
    - Contour
    - Scatter
    - Grid
  - Combined Traverses
  - Combined Fault Polygons
  - Wells
    - WellInfo
    - WellPath
    - WellCurve
    - WellTop
    - WellLith
    - WellSYN
    - WellOGW
  - Wavelet
  - DQZJ

Select Survey

Mode

- Batch Export
- User-Defined Export
- Batch Import

The data is V4.1 or V4.2

Backup Parameter

Setting

Backup Cycle: 0

Scheduled

- Interval Days: 7
- Every Week: Tuesday

Start Time: 0:00

Add

每周日零点开始备份，备份三次后，第四次备份将覆盖第一次的内容，即21天一个循环。

Warning

Backup schedule has been added, please use the command crontab -l to view!

OK

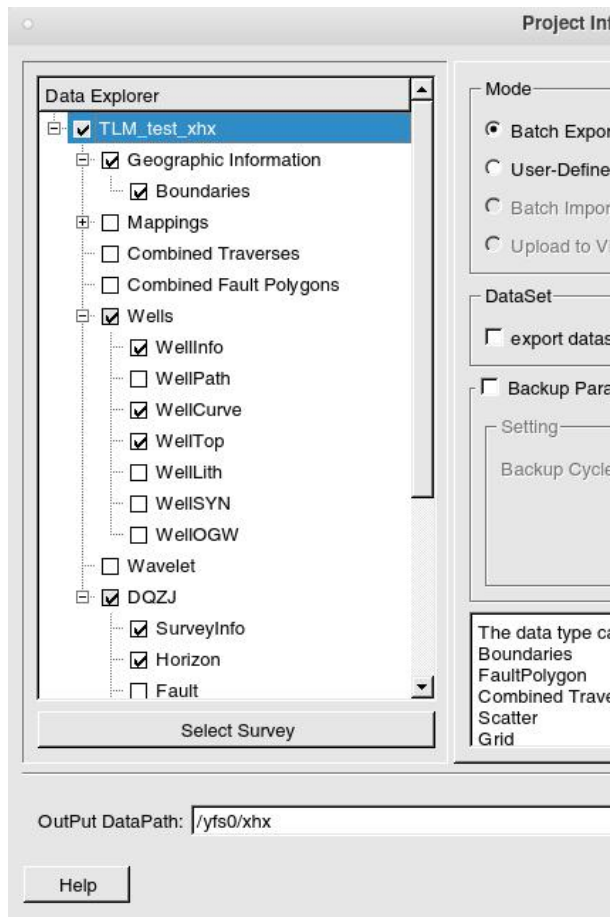
OutPut DataPath: /yfs0/xhx

Help Apply Close

备份任务设置完成后，点击Add按钮添加备份任务



# 数据备份后产生的文件



定期自动备份

```
[ xhx@hw2c79-002 ~]$ cd TLM_test_xhx
[ xhx@hw2c79-002 ~/TLM_test_xhx]$ ls
crs_backup.xml  DQZJ  project_backup.xml  project_describe.xml  Wells
[ xhx@hw2c79-002 ~/TLM_test_xhx]$ cd DQZJ
[ xhx@hw2c79-002 DQZJ]$ ls
DQZJ.dat  DQZJ.xml  Horizon
[ xhx@hw2c79-002 DQZJ]$ cd Horizon
[ xhx@hw2c79-002 Horizon]$ ls
aa_time.dat  Info  Format  wt1.ip_time.dat  wt1_time.dat  wt2qn2_time.dat  wt2_time.dat
```

```
[ xhx@hw2c79-002 DQZJ]$ cd Horizon
[ xhx@hw2c79-002 Horizon]$ ls
aa_time.dat  Format  Info  wt1.ip_time.dat  wt1_time.dat  wt2qn2_time.dat  wt2_time.dat
Batch2
[ xhx@hw2c79-002 Horizon]$ cd Batch2
[ xhx@hw2c79-002 Batch2]$ ls
aa_time.dat  wt1.ip_time.dat  wt1_time.dat  wt2qn2_time.dat
t  wt2_time.dat
```



# 批量数据恢复



**Project Information**

**Data Explorer**

- test\_xhx\_1
  - Wells
    - WellInfo
    - WellPath
    - WellCurve
    - WellTop
    - WellLith
    - WellSYN
    - WellOGW
  - JS3D-demo
    - SurveyInfo
    - Horizon
    - Fault
    - Surface
    - Traverse
    - T-V
    - Velocity Volume
    - Attribute Volume
    - Seismic
    - Wavelet

**Mode**

- Batch Export
- User-Defined Export
- Batch Import**  V4.1 or V4.2
- Upload to VDB

**Project Coordinate system**

- Overwrite

The data type can be restored:

- Boundaries
- FaultPolygon
- Combined Traverses
- Scatter
- Grid
- Contour
- Wavelet
- WellInfo
- WellPath
- WellCurve
- WellLith
- WellTop
- WellOGW
- WellSynthetic
- Survey2DInfo
- Horizon2D

Restore Data Path: /testdata/ly\_data/xhx\_data/Post\_inv\_Demo

Help Apply Close

4.1或4.2版本备份的数据恢复到4.3及以上版本时须勾选此项

4.4版本新增，是否覆盖原始坐标系

勾选需要恢复的数据类型

此处选择到备份产生的项目名称那一级目录即可。

**Coordinate System Restore Manage**

**Attention: Coordinate recovery is dangerous ,be sure to check carefully!**

List of backup coordinate system :

Beijing54	Map to	B
-----------	--------	---

**Benchmark:**Beijing 1954  
**Ellipsoid:**Krassowsky 1940  
**Transformation parameter:** 15921  
**Projection type:**TransverseMercator  
**Projection zone No.**Beijing 1954 / Gauss-Kruger 18N  
**WKT parameters:**  
 PROJCS["Beijing 1954 / Gauss-Kruger 18N (deprecated)",  
 GEOGCS["Beijing 1954",  
 DATUM["Beijing\_1954",  
 SPHEROID["Krassowsky

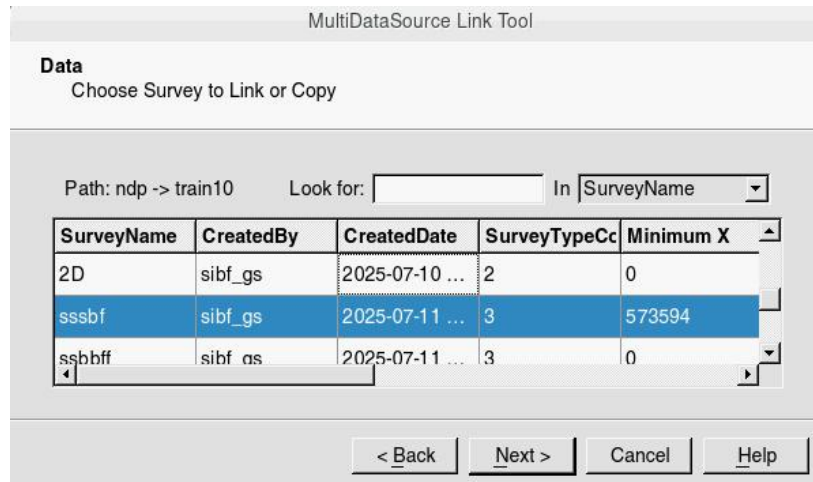
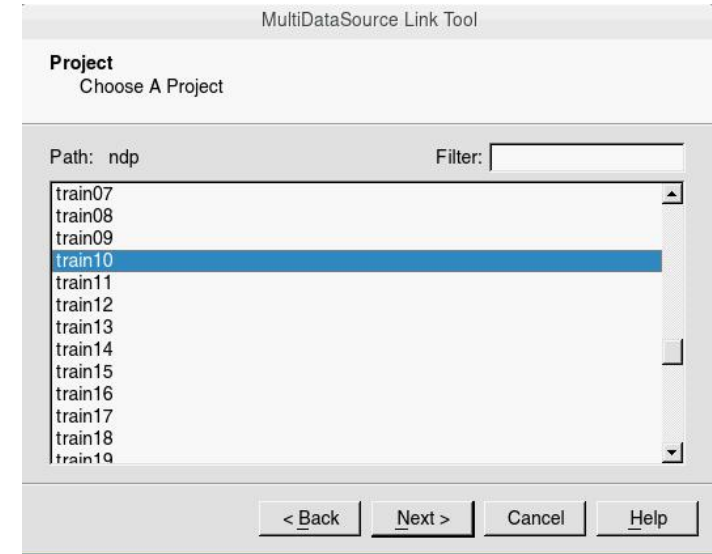
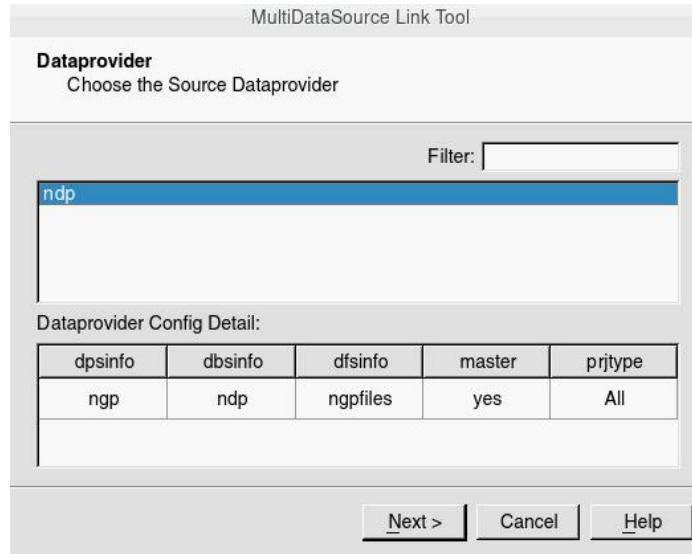
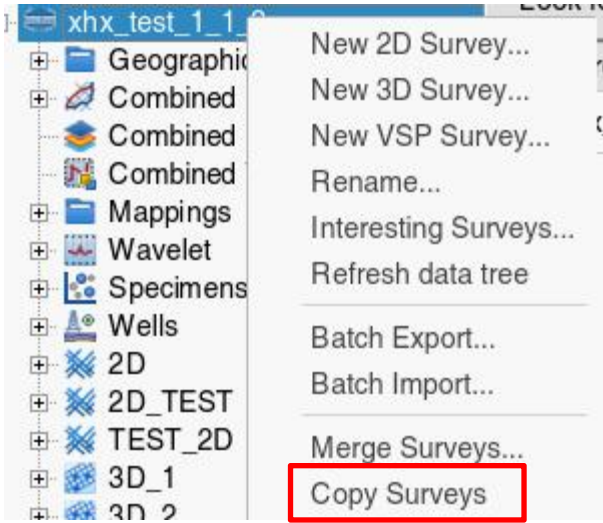
**Benchmark:**Beijing 1954  
**Ellipsoid:**Krassowsky 1940  
**Transformation parameter:** 15921  
**Projection type:**TransverseMercator  
**Projection zone No.**Beijing 1954 / Gauss-Kruger 18N  
**WKT parameters:**  
 PROJCS["Beijing 1954 / Gauss-Kruger 18N (deprecated)",  
 GEOGCS["Beijing 1954",  
 DATUM["Beijing\_1954",  
 SPHEROID["Krassowsky

Restore Cancel

系统会自动比较备份数据与原project之间的坐标系，自动设置，此处只是警告，可以直接点击Restore开始数据恢复。



# 数据的Link





**CONTENTS**  
**目录**

01

**数据备份及恢复**

**数据的link**

02

**数据的copy**

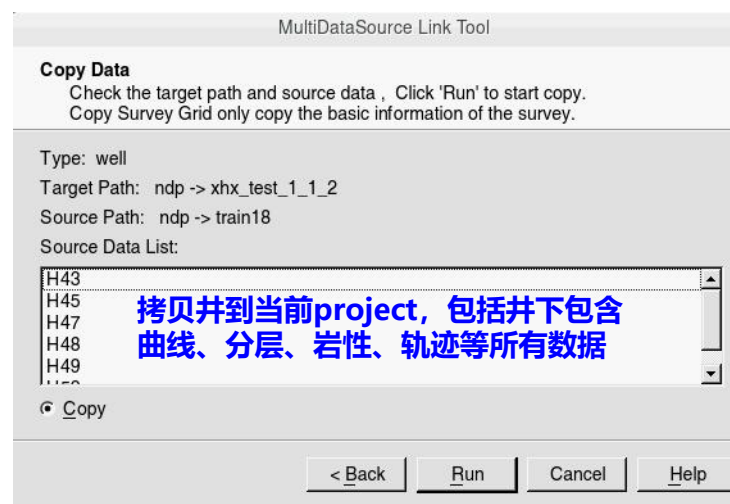
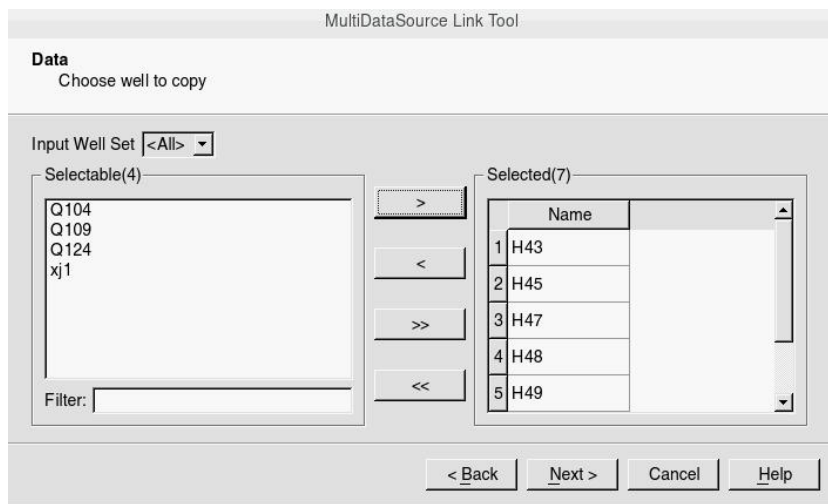
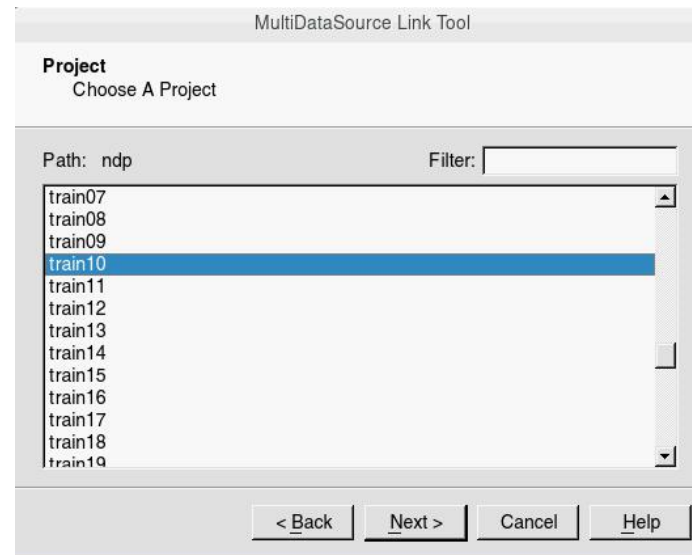
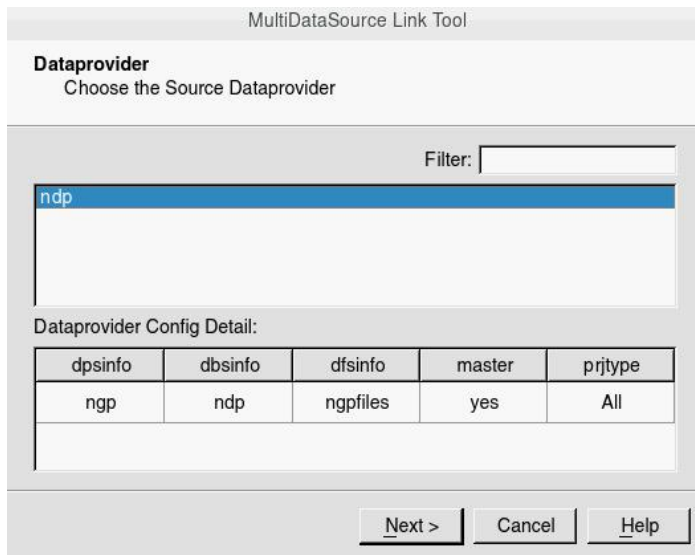
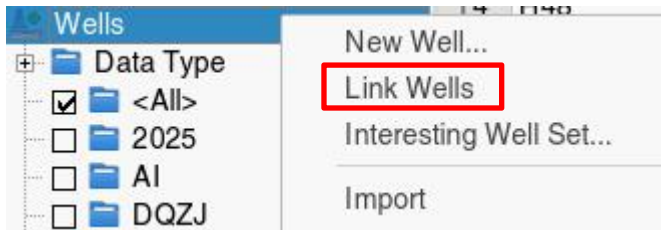
**三维工区转二维工区**

03

**二维工区转三维工区**



# 数据的Link



拷贝井到当前project, 包括井下包含曲线、分层、岩性、轨迹等所有数据

因为不涉及磁盘读写, 所以速度是秒级

与加载的井数据同等使用, 可编辑修改保存等。



# 数据的Link



**MultiDataSource Link Tool - Step 1: Dataprovider**

Choose the Source Dataprovider

Filter: [ ]

ndp

Dataprovider Config Detail:

dpsinfo	dbsinfo	dfsinfo	master	prjtype
ngp	ndp	ngpfiles	yes	All

**MultiDataSource Link Tool - Step 2: Project**

Choose A Project

Path: ndp Filter: [ ]

train07  
train08  
train09  
train10  
train11  
train12  
train13  
train14  
train15  
train16  
train17  
train18  
train19

**MultiDataSource Link Tool - Step 3: Data**

Choose Survey to Link or Copy

Path: ndp -> train10 Look for: [ ] In [SurveyName]

SurveyName	CreatedBy	CreatedDate	SurveyTypeCc	Minimum X
2D	sibf_gs	2025-07-10 ...	2	0
ssbfb	sibf_gs	2025-07-11 ...	3	573594
ssbbfb	sibf_gs	2025-07-11 ...	3	0

**MultiDataSource Link Tool - Step 4: Swath**

Choose 'Survey Main Directory' or a swath.  
'Survey Main Directory' means the seismic data under survey.

Path: ndp -> train08 -> 3D-TLM Filter: [ ]

Survey Main Directory

**MultiDataSource Link Tool - Step 5: Data**

Choose Seismic to Link or Copy

Path: ndp -> train08 -> 3D-TLM -> Survey Main Directory Look for: [ ] In [SeismicName]

SeismicName	CreatedBy	Owner	Created Date	Modified By	Modified
mig.resampl...	mateng1_gs	mateng1_gs	2025-07-10 ...	mateng1_gs	2025-07-
mig	mateng1_gs	mateng1_gs	2025-07-07 ...	mateng1_gs	2025-07-0
XHX.AiFaultl...	mateng1_gs	mateng1_gs	2025-07-10 ...	mateng1_gs	2025-07-1
xhx_25_Mos...	mateng1_gs	mateng1_gs	2025-07-10 ...	mateng1_gs	2025-07-1
xhx_25_Mos	mateng1_gs	mateng1_gs	2025-07-10	mateng1_gs	2025-07-

**MultiDataSource Link Tool - Step 6: Link**

Check the target path and source data , Click 'Run' to start link.

Type: seismic  
Target Path: ndp -> xhx\_test\_1\_1\_2 -> DQZJ\_new\_1  
Source Path: ndp -> train08 -> 3D-TLM  
Source Data List:  
mig  
mig.resample.mateng1\_gs

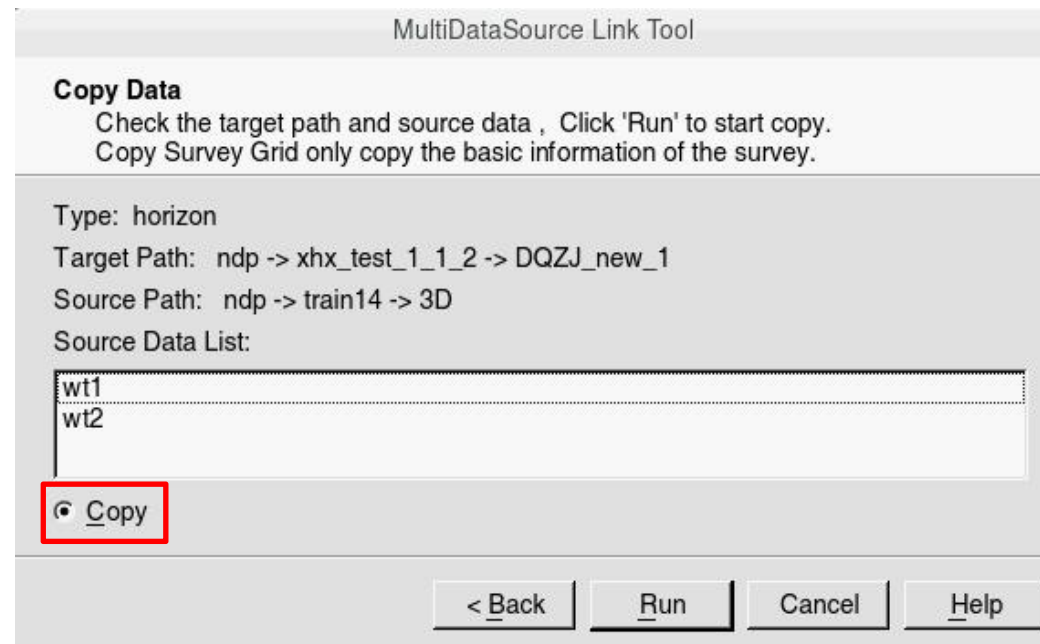
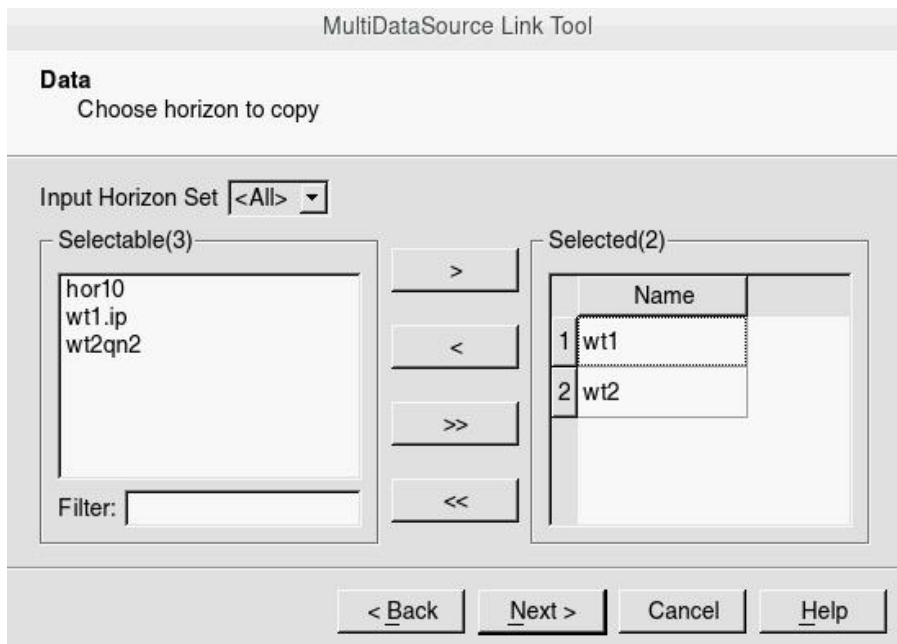
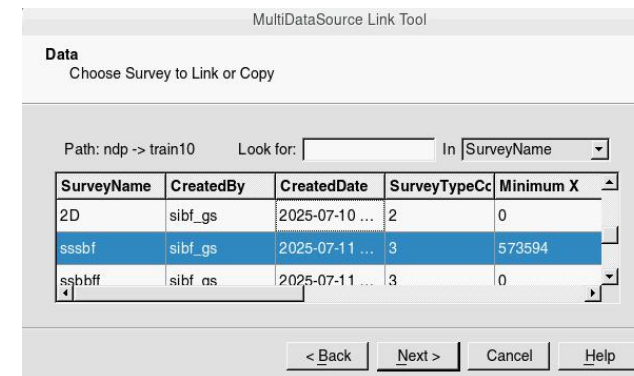
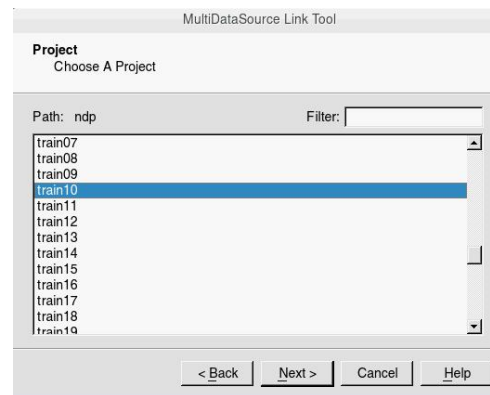
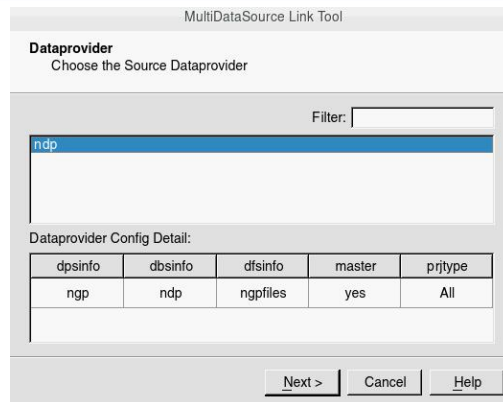
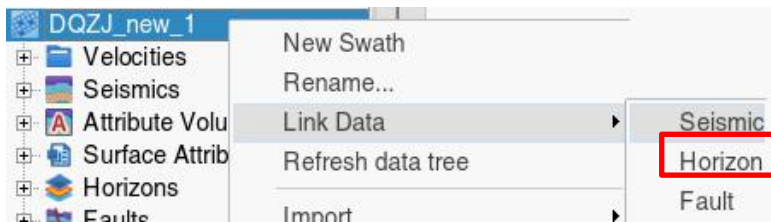
**Final Data Table:**

	Seismic Name	Created Date	Slice	CMP Volume	Data Source	Domain	Attribute Type	Data Form	Data Size(M)	Sample Interval	Sample Format
1	test		No	No	Link	Time	Seismic	Post-stack	1078.28	4	32 Bit float

Link的地震数据**要求测网一致**，在本地数据树显示为Link状态，无创建数据时间，相当于借用源头数据本地显示，不重复占用磁盘空间，数据体在本地能够正常显示，后续提取的各种属性数据均保留在本地，对源头数据无影响，如果该数据被删除，仅相当于与源头的链接断开，对源头数据无影响，但如果源头数据被删除，会导致本地Link的数据无法打开剖面，或提示不在感兴趣工区范围。



# 数据的Link



与加载的层位数据同等使用，可编辑修改保存等。



# 数据的Link



MultiDataSource Link Tool

DQZJ\_new\_1

- Velocities
- Seismics
- Attribute Volu
- Surface Attrib
- Horizons
- Faults

New Swath  
Rename...  
Link Data  
Refresh data tree  
Import

Seismic  
Horizon  
Fault

MultiDataSource Link Tool

**Dataprovider**  
Choose the Source Dataprovider

Filter: [ ]

ndp

Dataprovider Config Detail:

dpsinfo	dbsinfo	dfsinfo	master	priptype
ngp	ndp	ngpfiles	yes	All

Next > Cancel Help

MultiDataSource Link Tool

**Project**  
Choose A Project

Path: ndp Filter: [ ]

train07  
train08  
train09  
train10  
train11  
train12  
train13  
train14  
train15  
train16  
train17  
train18  
train19

< Back Next > Cancel Help

MultiDataSource Link Tool

**Data**  
Choose Survey to Link or Copy

Path: ndp -> train10 Look for: [ ] In [SurveyName]

SurveyName	CreatedBy	CreatedDate	SurveyTypeCc	Minimum X
2D	sibf_gs	2025-07-10 ...	2	0
sssbf	sibf_gs	2025-07-11 ...	3	573594
ssbbff	sibf_gs	2025-07-11 ...	3	0

< Back Next > Cancel Help

MultiDataSource Link Tool

**Data**  
Choose fault to copy

Input Fault Set <All>

Selectable(6)

F6  
F7  
F8  
F9  
Fault  
Undefined

Selected(6)

	Name
1	F1
2	F10
3	F2
4	F3
5	F4
6	F5

Filter: [ ]

< Back Next > Cancel Help

MultiDataSource Link Tool

**Copy Data**  
Check the target path and source data , Click 'Run' to start copy.  
Copy Survey Grid only copy the basic information of the survey.

Type: fault  
Target Path: ndp -> xhx\_test\_1\_1\_2 -> DQZJ\_new\_1  
Source Path: ndp -> train18 -> ZXH  
Source Data List:

F1  
F10  
F2  
F3  
F4  
F5

Copy

< Back Run Cancel Help

与加载的断层数据同等使用，可编辑修改保存等。



CONTENTS  
目录

01

数据备份及恢复

数据的link

02

数据的copy

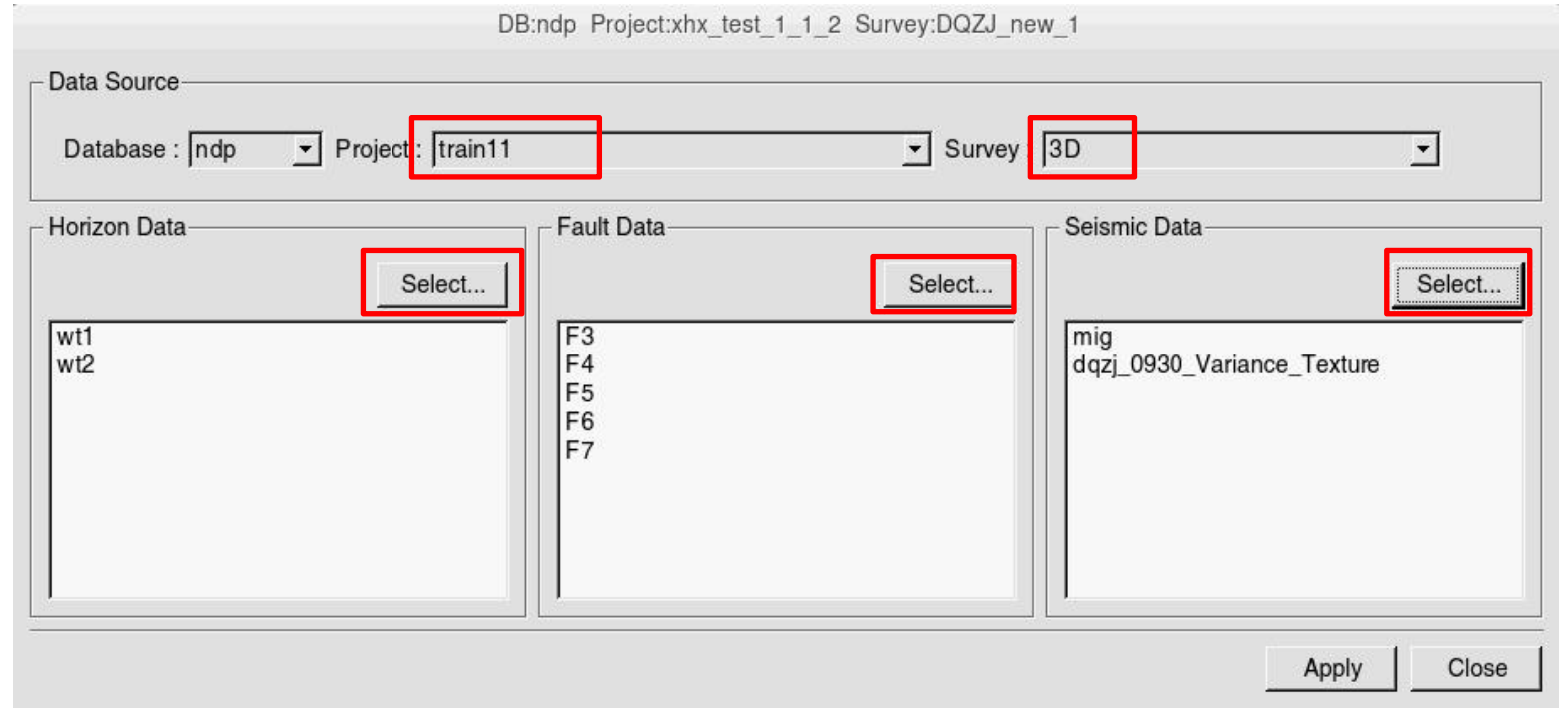
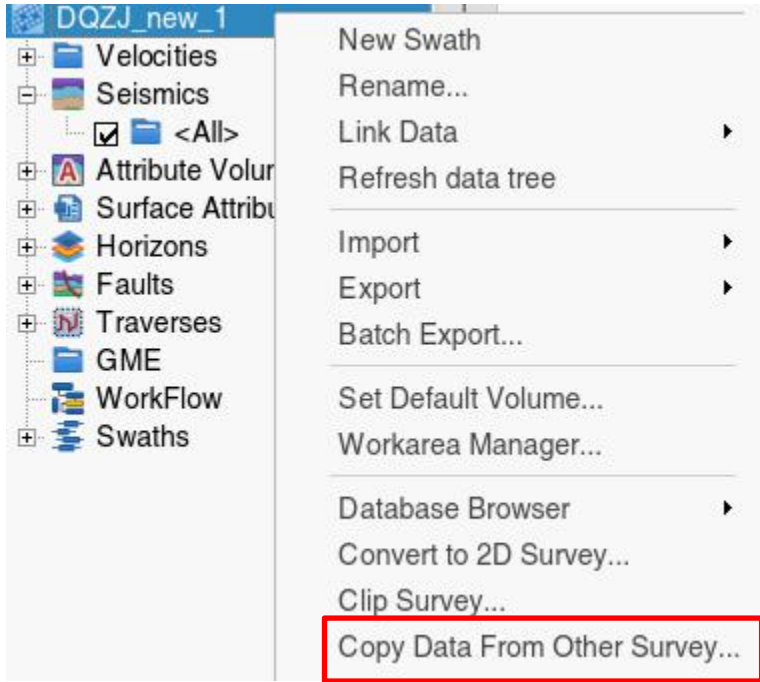
三维工区转二维工区

03

二维工区转三维工区



# 数据的Copy



**相当于数据完全复制一份到本地，占用本地磁盘空间，可编辑修改保存等。**

(GeoEast2023V4.2版本中的link层位与断层不可用，可用copy功能替代)



**CONTENTS**  
**目录**

01

**数据备份及恢复**

**数据的link**

02

**数据的copy**

**三维工区转二维工区**

03

**二维工区转三维工区**



# 三维转二维工区



Menu items:  
New Swath  
Rename...  
Link Data  
Refresh data tree  
Import  
Export  
Batch Export...  
Set Default Volume...  
Workarea Manager...  
Database Browser  
**Convert to 2D Survey...**

2D Survey Name : 2D ... New Line Name : DQZJ\_new\_1 + L/T/A + ...

Create 2D Line

New Line Name	Seismic Name
与可以选择已有二维工区, 也可输入新建二维工区	

Buttons: Seismics, Horizons, Faults, select all, Delete

OK Apply Cancel

3D Survey Info

Survey Name: DQZJ\_new\_1  
InLine : ( 500~780 )  
CrossLine : ( 220~700 )

Path Type	InLines
500	CrossLines
501	Traverses
502	
503	
504	
505	
506	
507	
508	
509	
510	
511	
512	
513	
514	
515	
516	
517	

Filter

OK Apply Cancel

2D Survey Name : 2D ... New Line Name : \_new\_1 + L/T/A + ...

Create 2D Line

New Line Name	Seismic Name
1 DQZJ_new_1L505	mig;
2 DQZJ_new_1L514	mig;

Buttons: Seismics, Horizons, Faults, select all, Delete

OK Apply Cancel

可用于模型正演



01

**数据备份及恢复**

**数据的link**

02

**数据的copy**

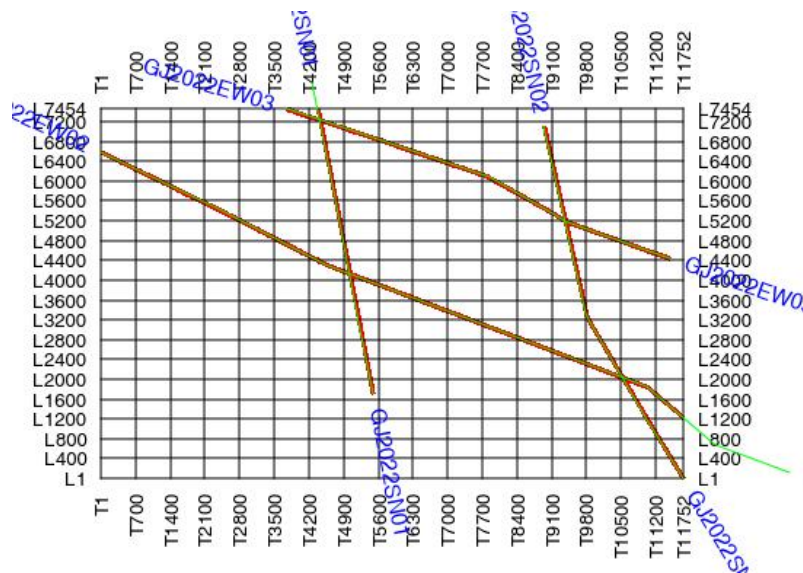
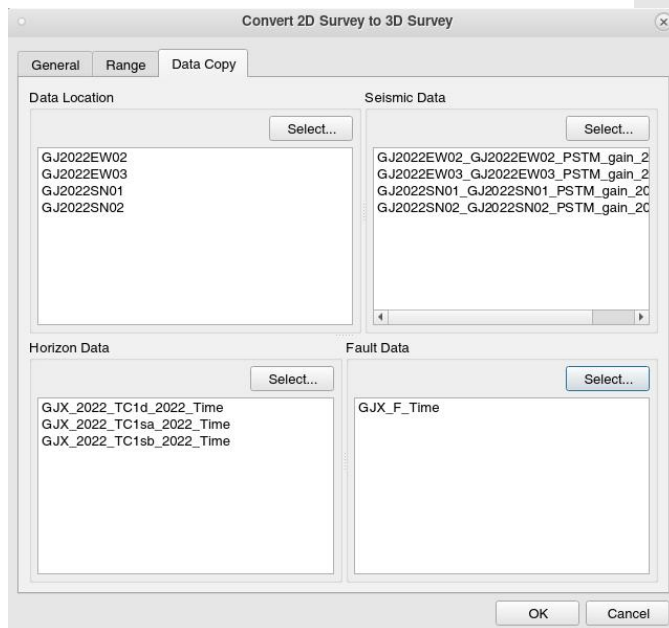
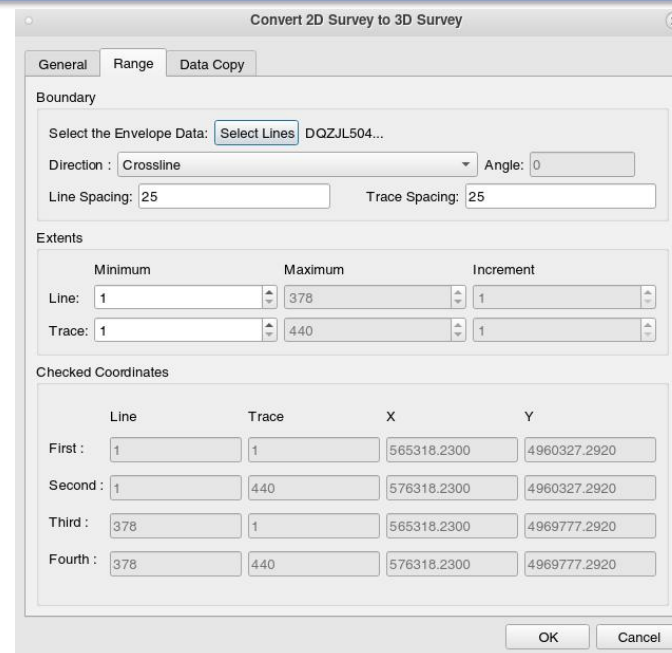
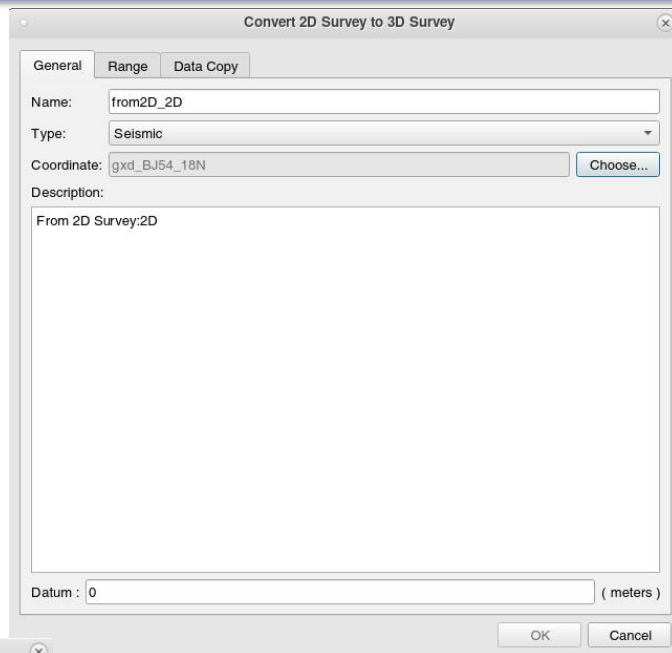
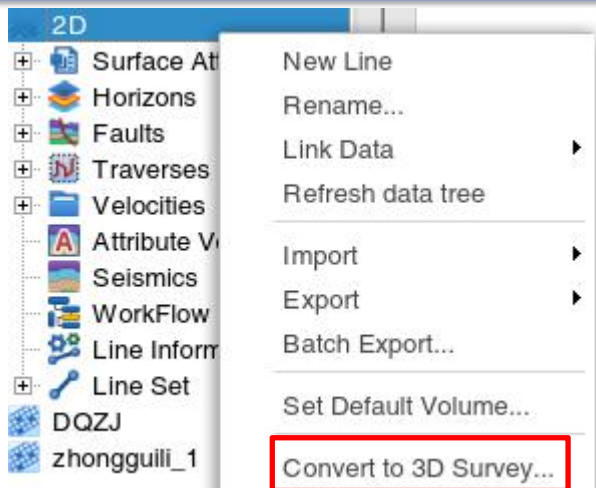
**三维工区转二维工区**

03

**二维工区转三维工区**



# 二维转三维工区



产生的新三维工区中仅仅在原二维测线所处位置的三维任意线上有地震数据，其余位置为空。

# 感谢大家对GeoEast软件的 信任和支持!

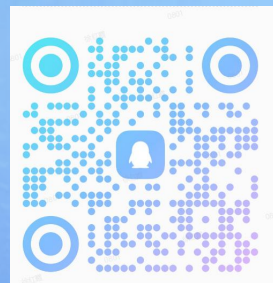
更多详情请关注



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

服务邮箱: [geoeast@cnpc.com.cn](mailto:geoeast@cnpc.com.cn)

问题管理系统: <https://wt.gs.com.cn>

QQ交流群: 196011710、340847471

官网网址: <http://www.gs.com.cn>

销售热线: 0312-3736073