

GeoEast解释特色技术

地震解释子系统(GeoSeismic)-三维工区断层解释

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中油油气勘探软件国家工程研究中心

2026年8月

GeoEast



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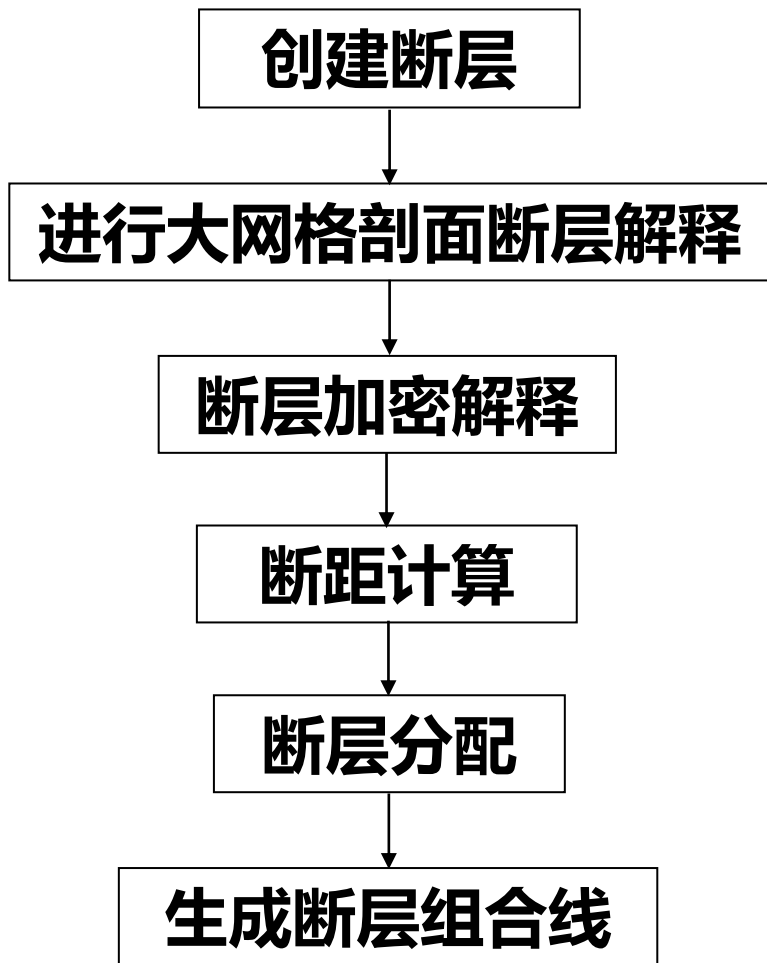
注意事项



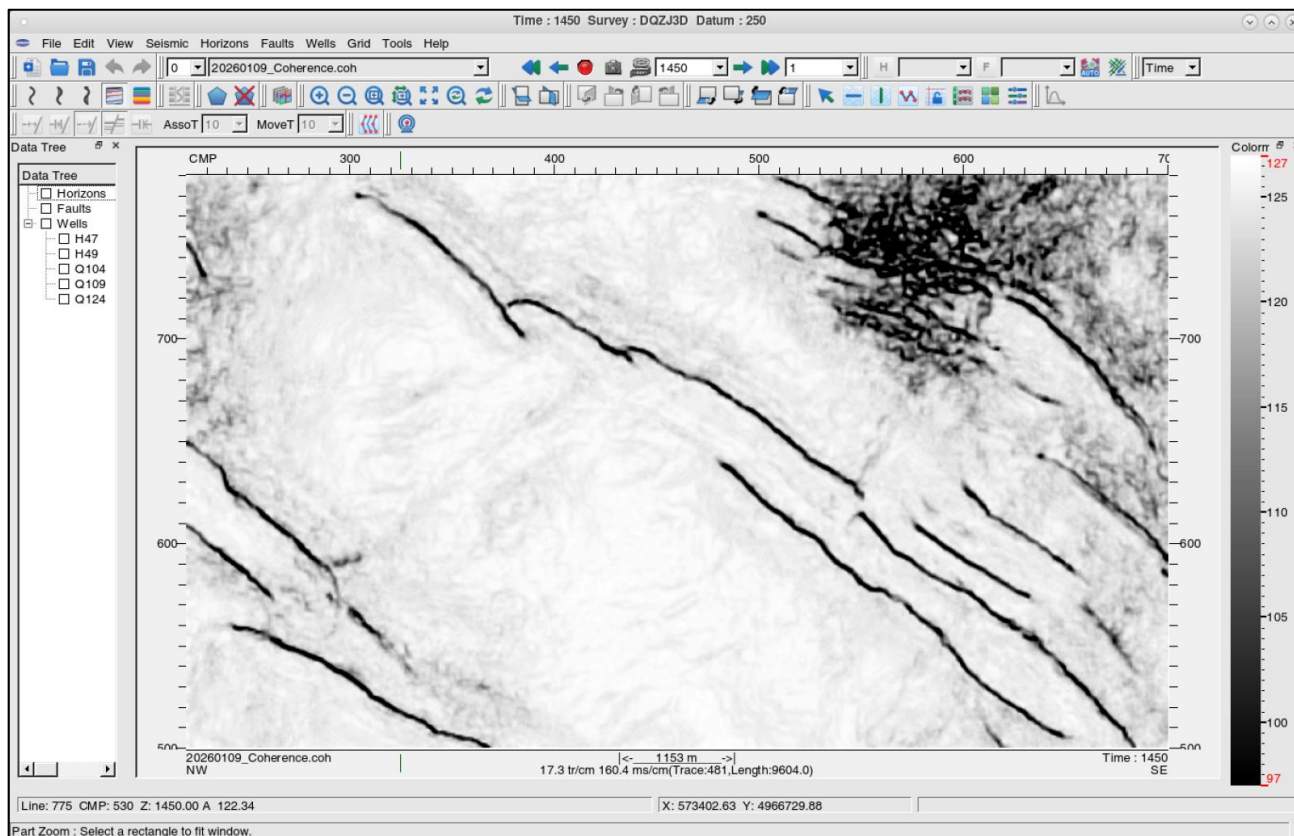
断层解释流程1



在三维工区断层解释之前，最好完成相干、方差和曲率等属性数据体的计算，通过对地震剖面 and 目的层段相干切片的浏览，了解工区断层平面展布特征。

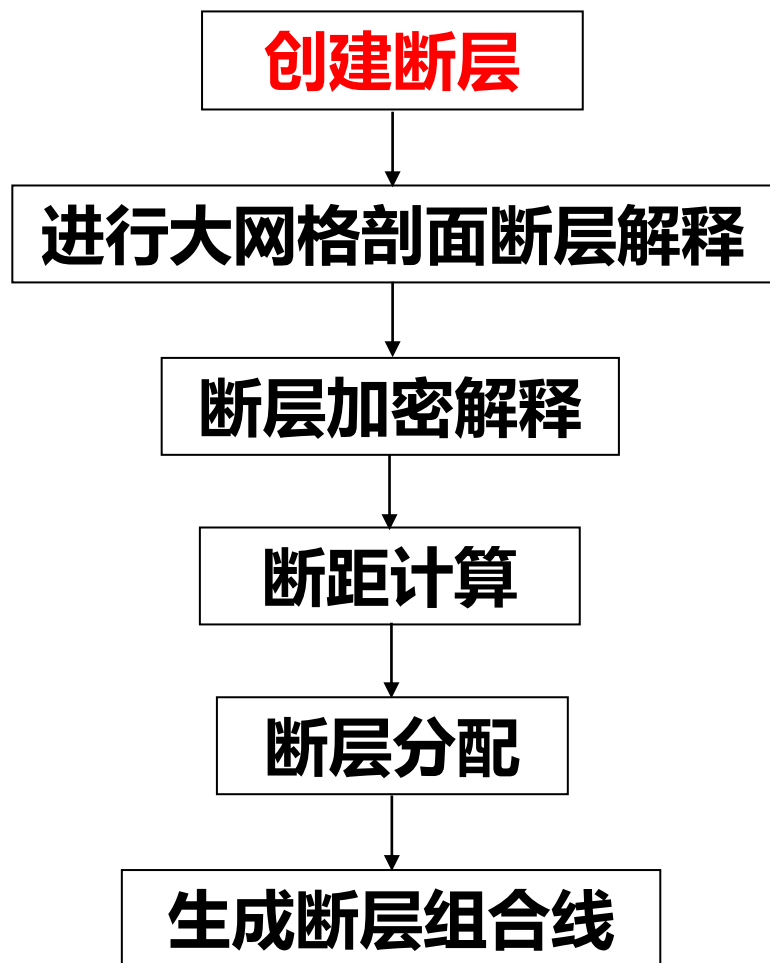


断层解释流程1

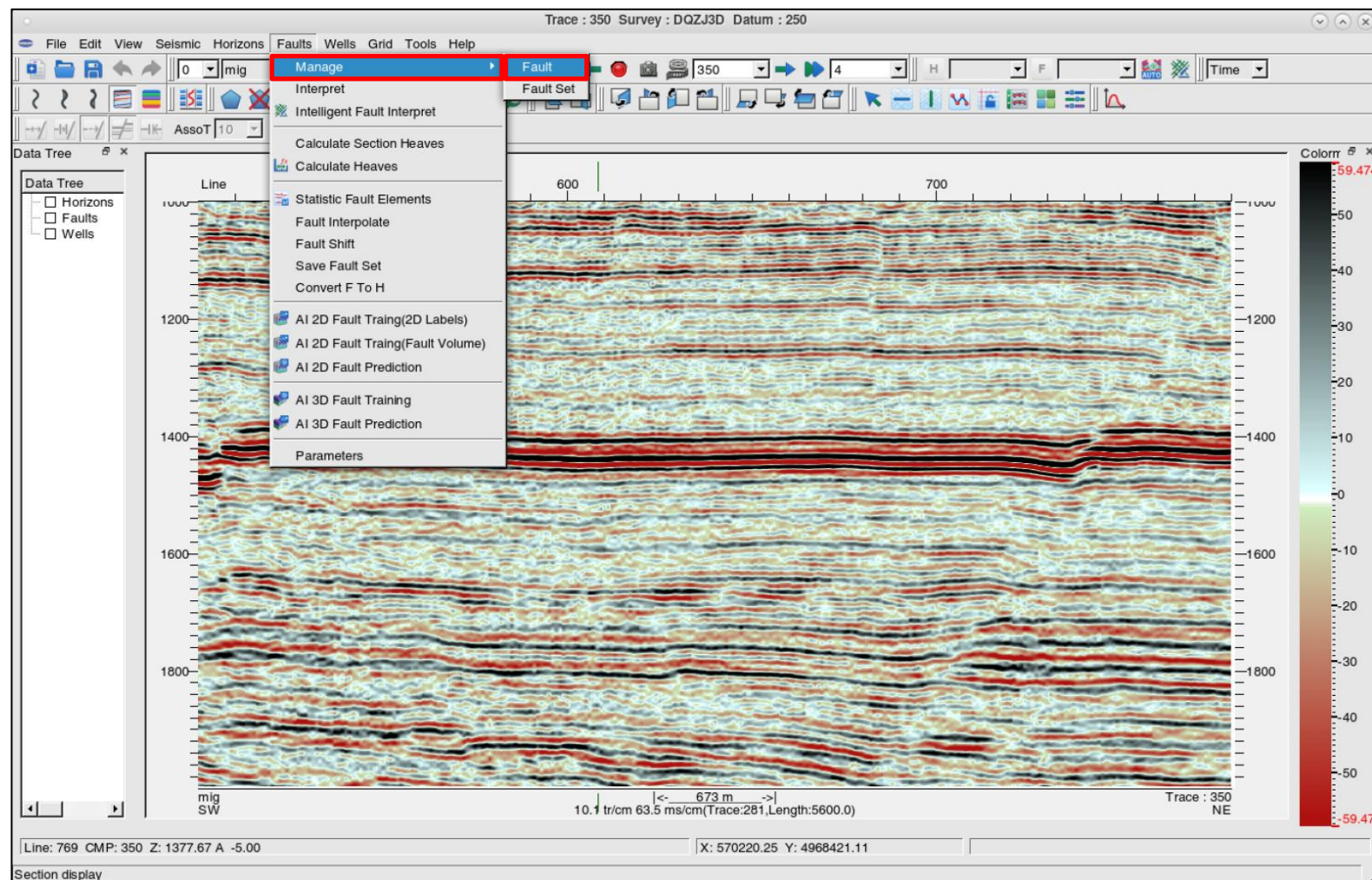




断层解释流程1



断层解释流程1





断层解释流程1



<Fault Management> Survey : DQZJ3D

Domain Type Select: ☒ Time ☐ Depth

Fault Name List:

Data Set List: <All>

Name	Color
F1	Red
F2	Blue
F3	Magenta
F4	Red
F5	Dark Red
F6	Cyan
F7	Green

Find:

Description:

Fault Type: Normal Fault

Line Style:

Line Width: 3

Create Update Duplicate Refresh

Batch Rename H>F Help Cancel

Create Fault

Current Domain Type: Time Set Name: <All>

☒ Batch Mode

Number of Faults: 20

Start Number: 1

Prefix:

Suffix:

Fault Name: NEW_F

Name Such as: NEW_F[1 ~ 20]

Description:

Fault Type: Normal Fault

Fault Color: Yellow

Line Style:

Line Width: 3

OK Apply Cancel

Normal Fault
Reverse Fault
Strike-slip Fault



断层解释流程1



创建断层

进行大网格剖面断层解释

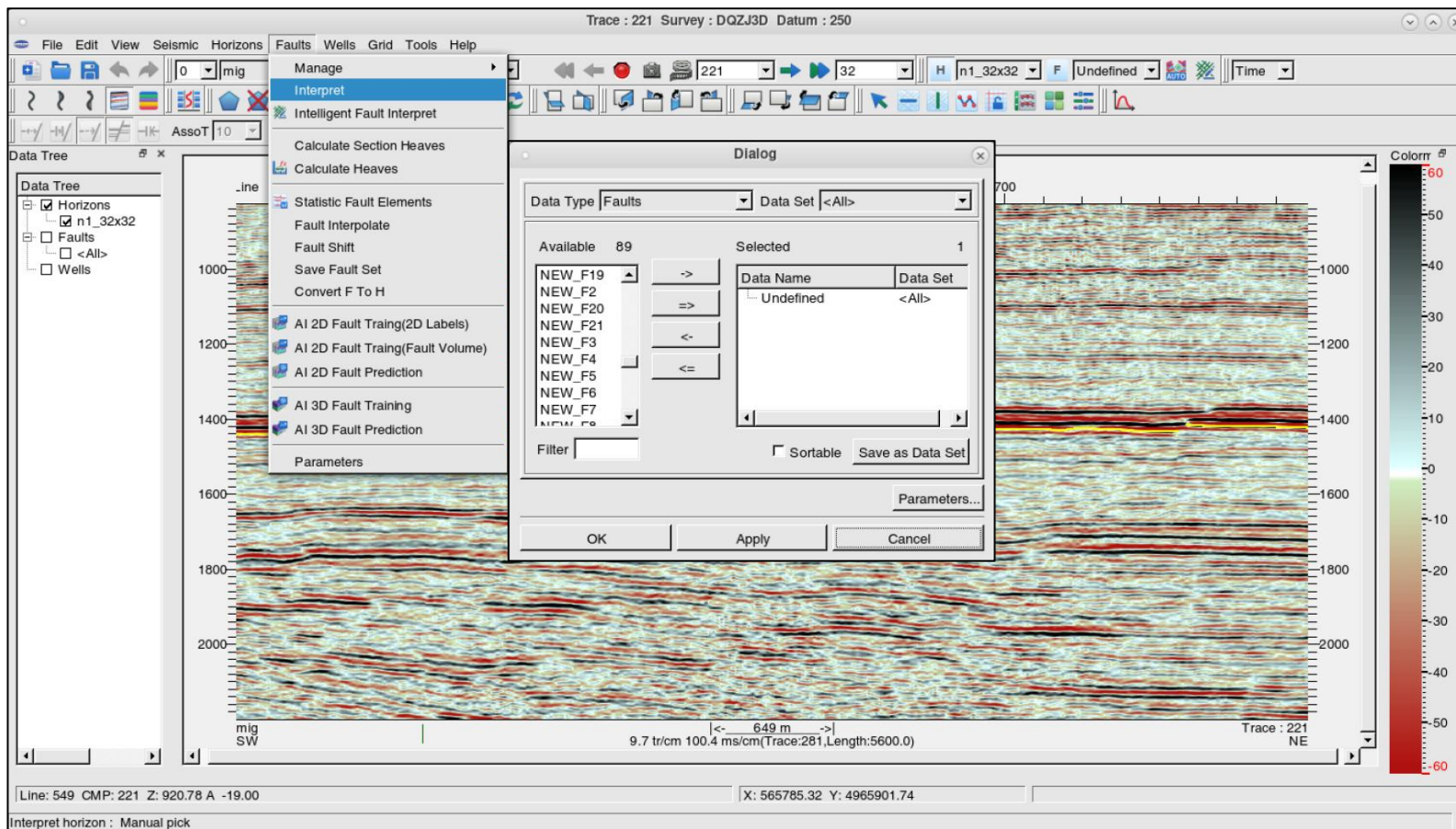
断层加密解释

断距计算

断层分配

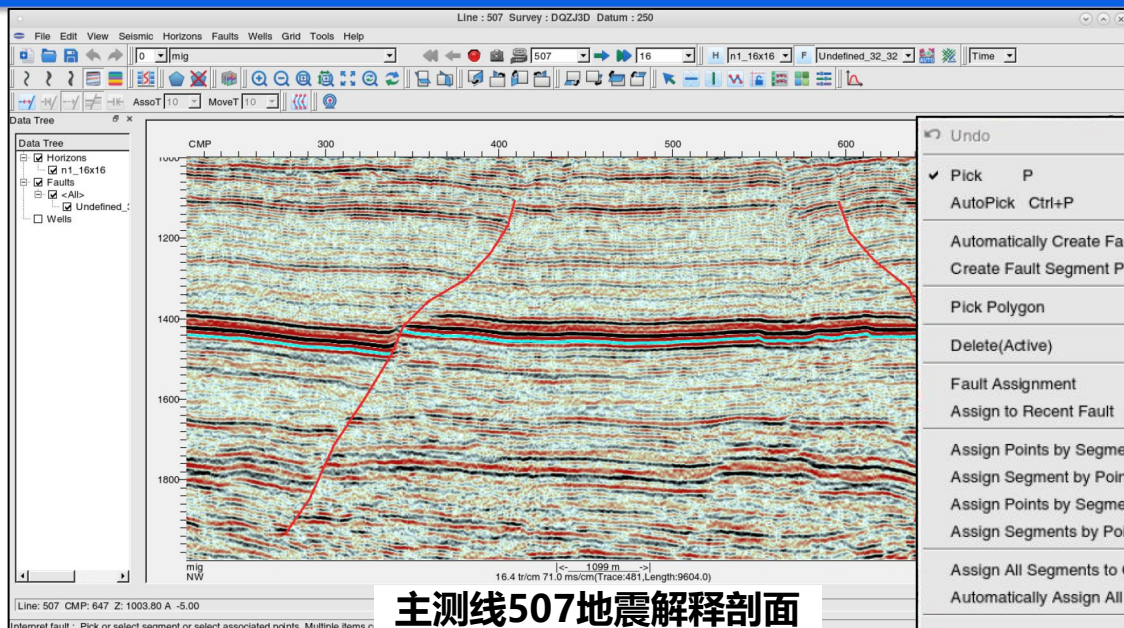
生成断层组合线

断层解释流程1

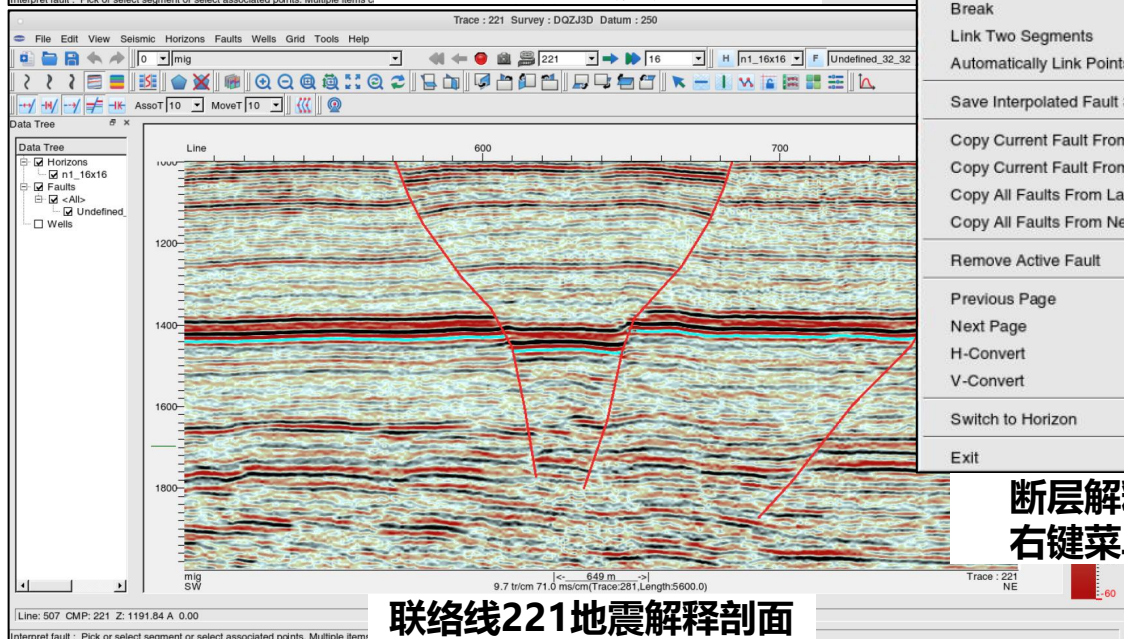




断层解释流程1



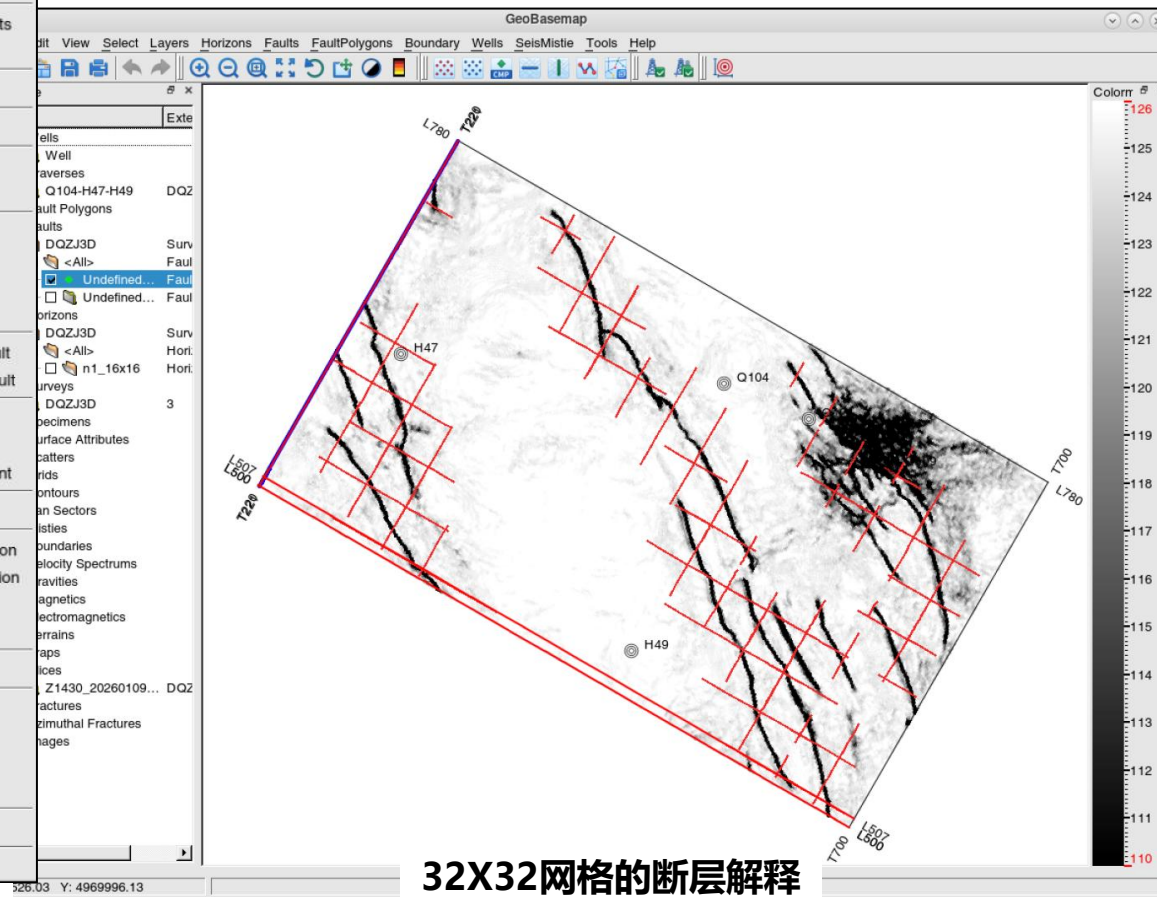
主测线507地震解释剖面



联络线221地震解释剖面

- Undo
- ✓ Pick P
- AutoPick Ctrl+P
- Automatically Create Fault Segments
- Create Fault Segment Parameters
- Pick Polygon
- Delete(Active)
- Fault Assignment
- Assign to Recent Fault
- Assign Points by Segment(Active)
- Assign Segment by Points(Active)
- Assign Points by Segment(All)
- Assign Segments by Points(All)
- Assign All Segments to Current Fault
- Automatically Assign All Current Fault
- Break
- Link Two Segments
- Automatically Link Points to Segment
- Save Interpolated Fault Segments
- Copy Current Fault From Last Section
- Copy Current Fault From Next Section
- Copy All Faults From Last Section
- Copy All Faults From Next Section
- Remove Active Fault
- Previous Page
- Next Page
- H-Convert
- V-Convert
- Switch to Horizon
- Exit

断层解释
右键菜单



32X32网格的断层解释



断层解释流程1



创建断层

进行大网格剖面断层解释

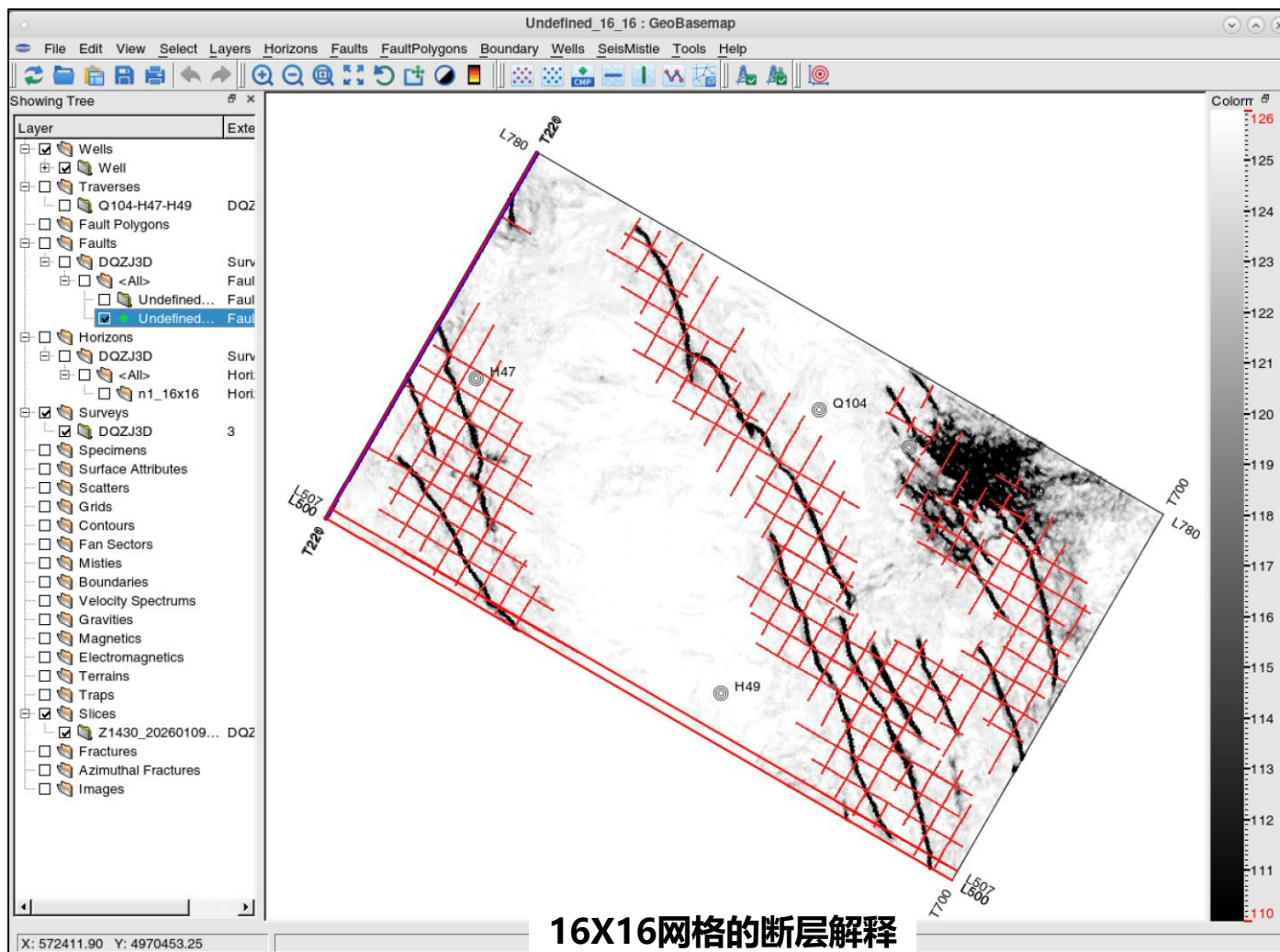
断层加密解释

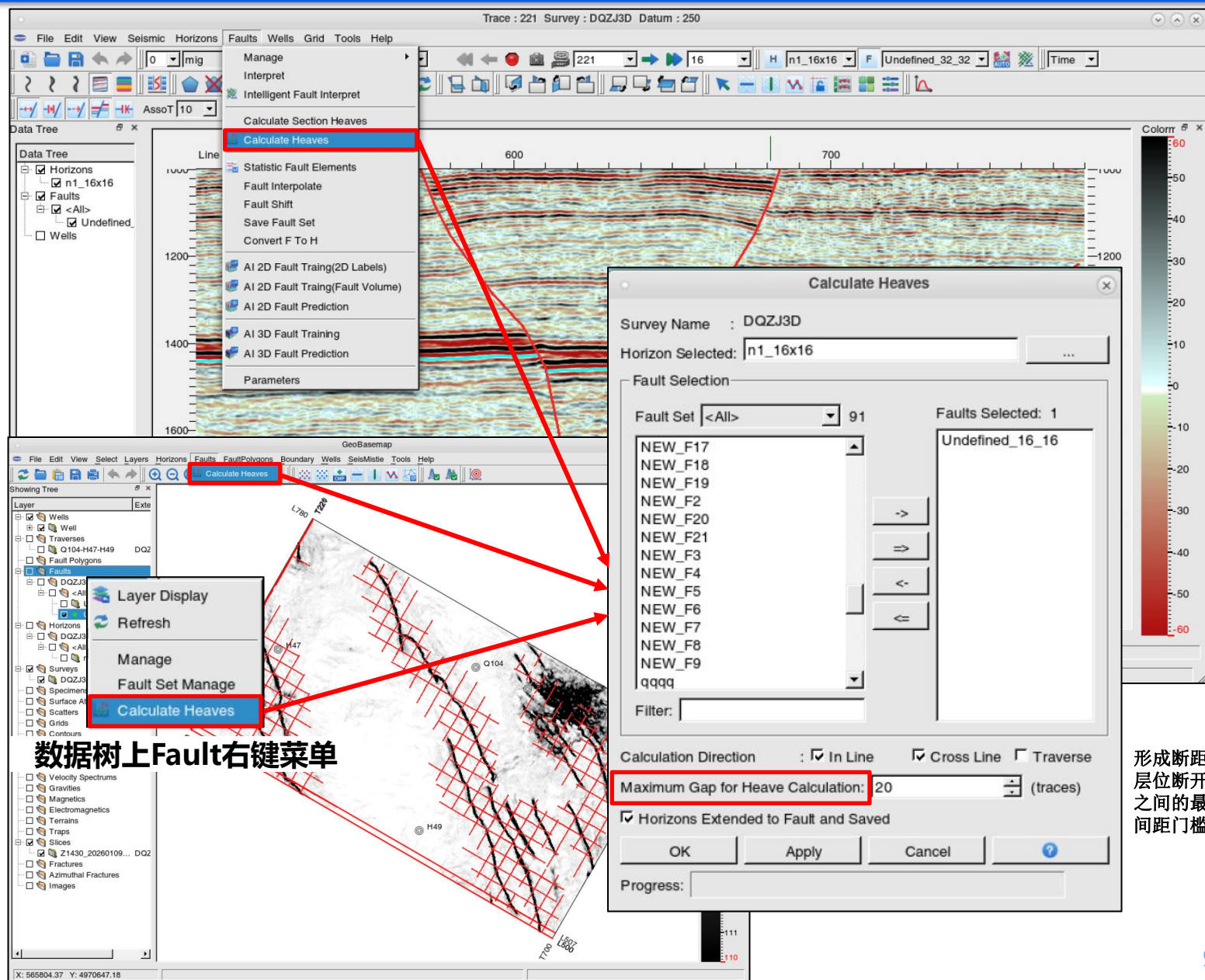
断距计算

断层分配

生成断层组合线

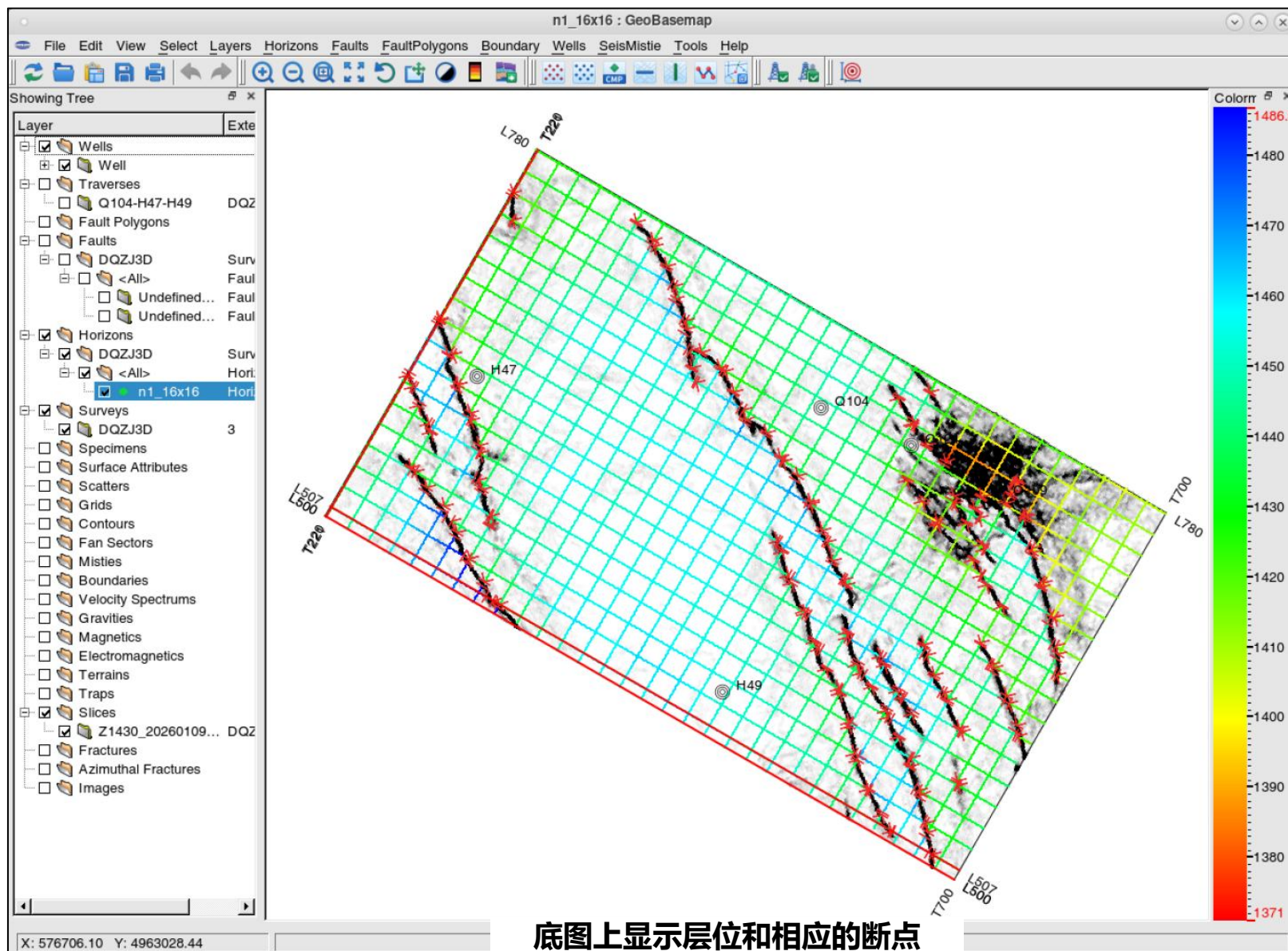
断层解释流程1







断层解释流程1





断层解释流程1



创建断层

进行大网格剖面断层解释

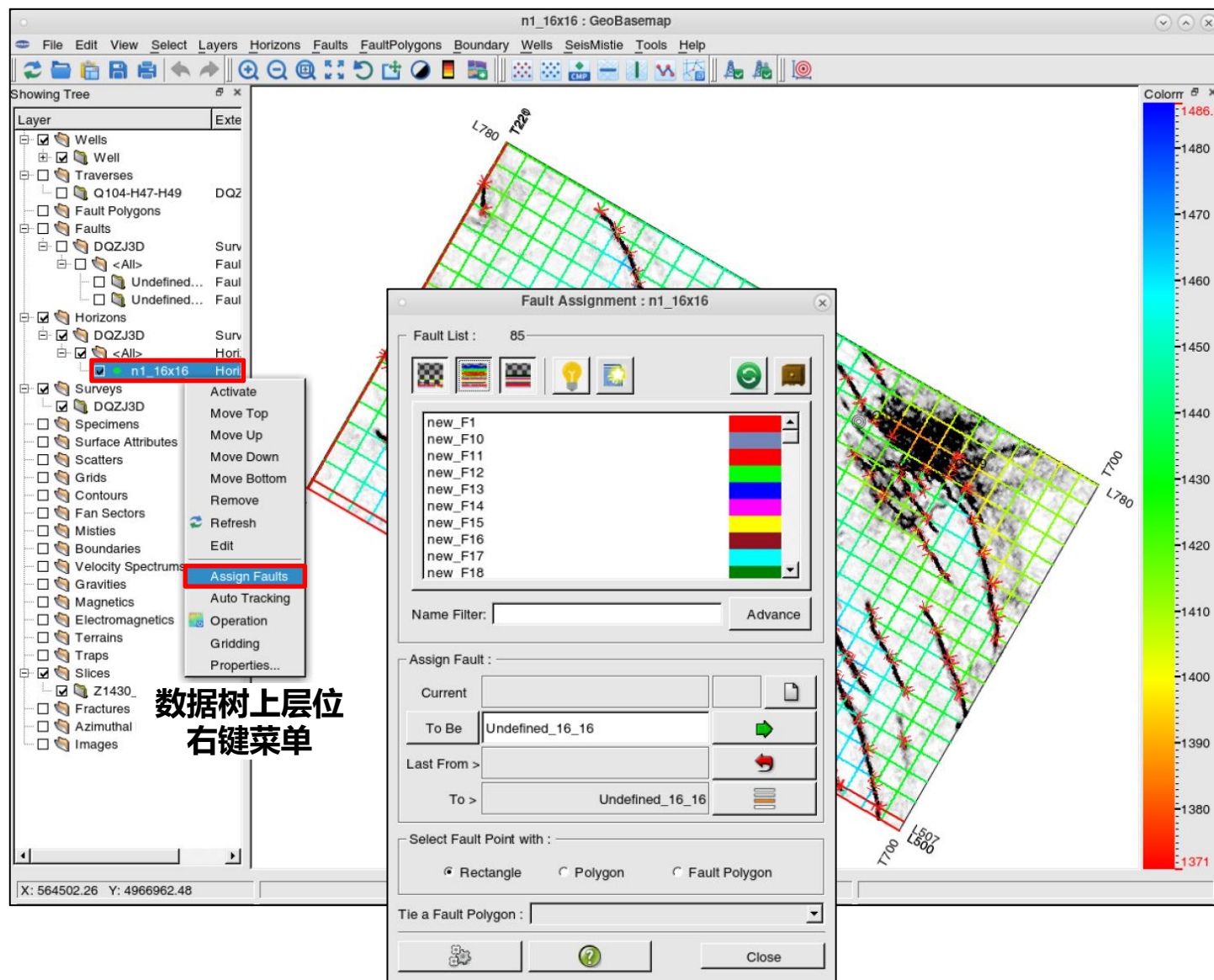
断层加密解释

断距计算

断层分配

生成断层组合线

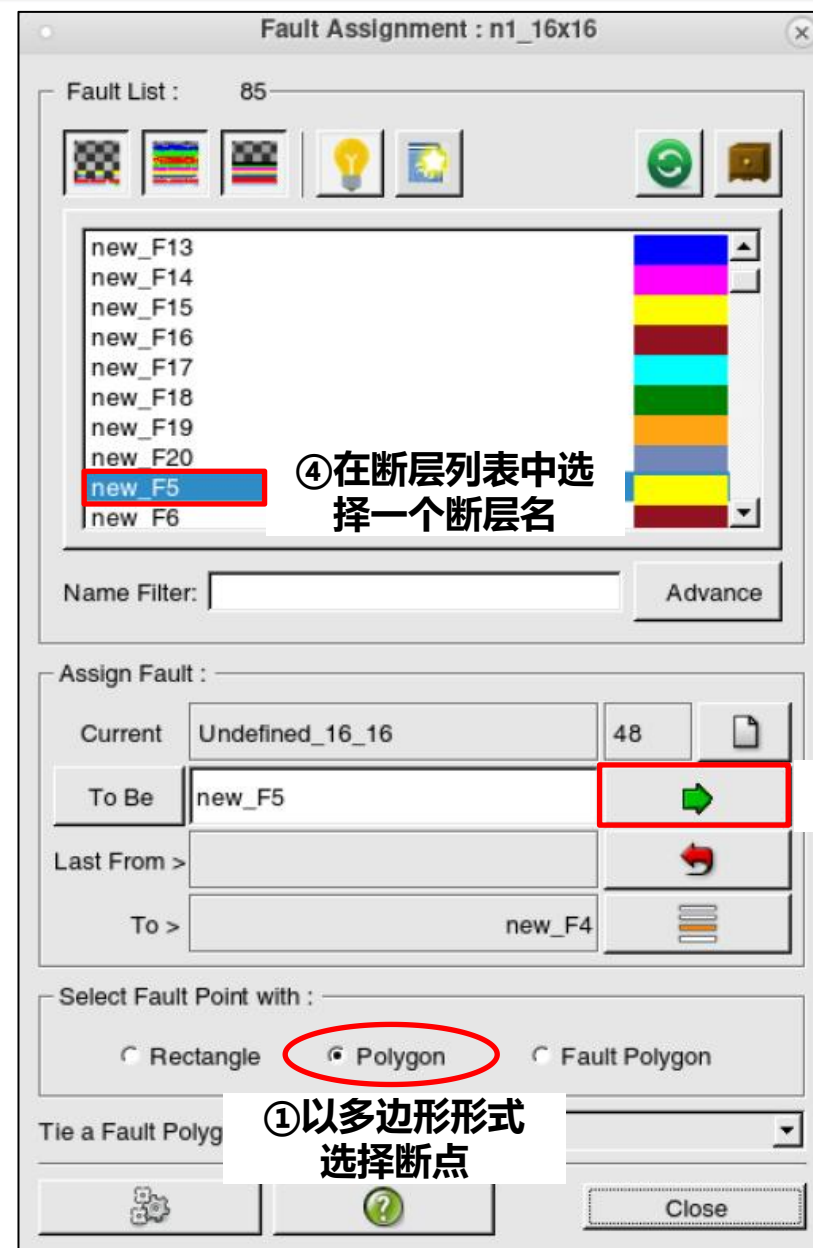
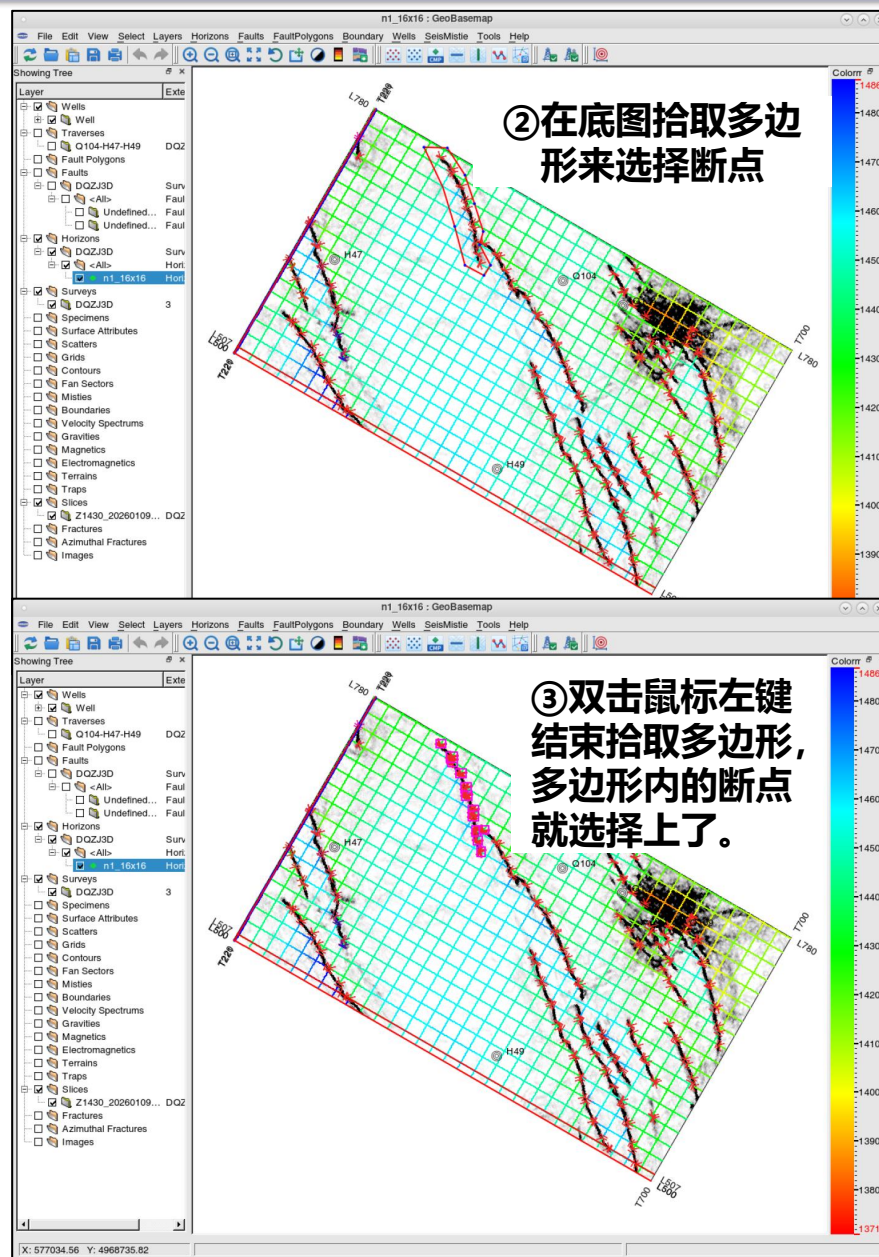
断层解释流程1



数据树上层位
右键菜单

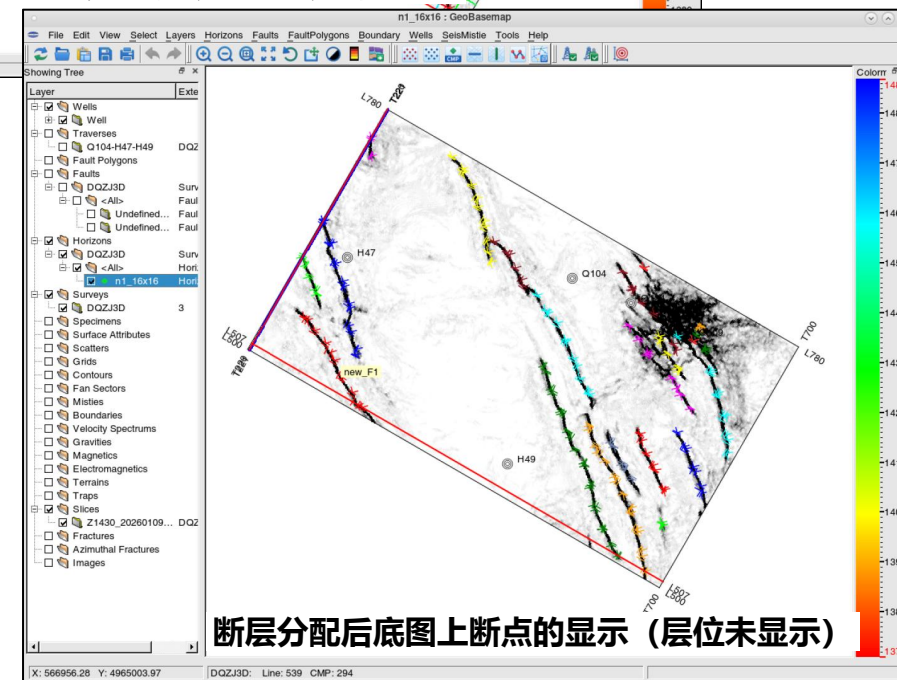
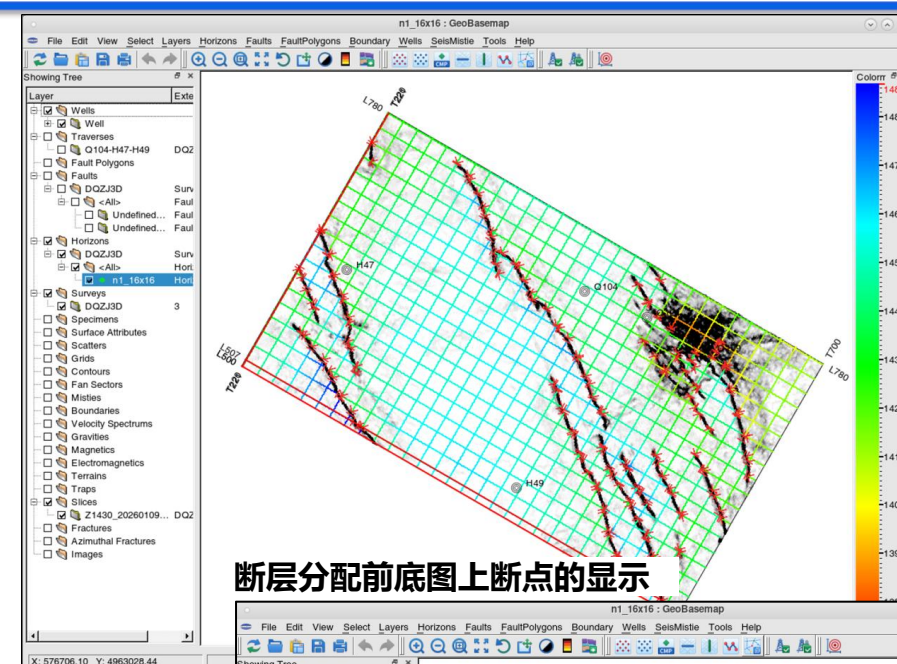
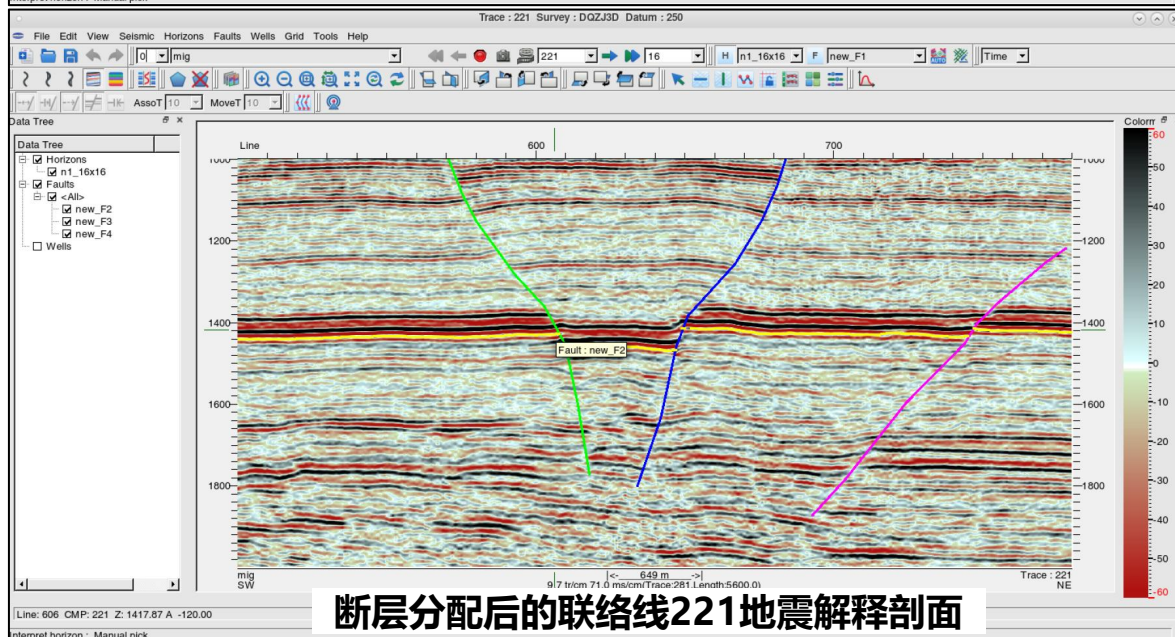
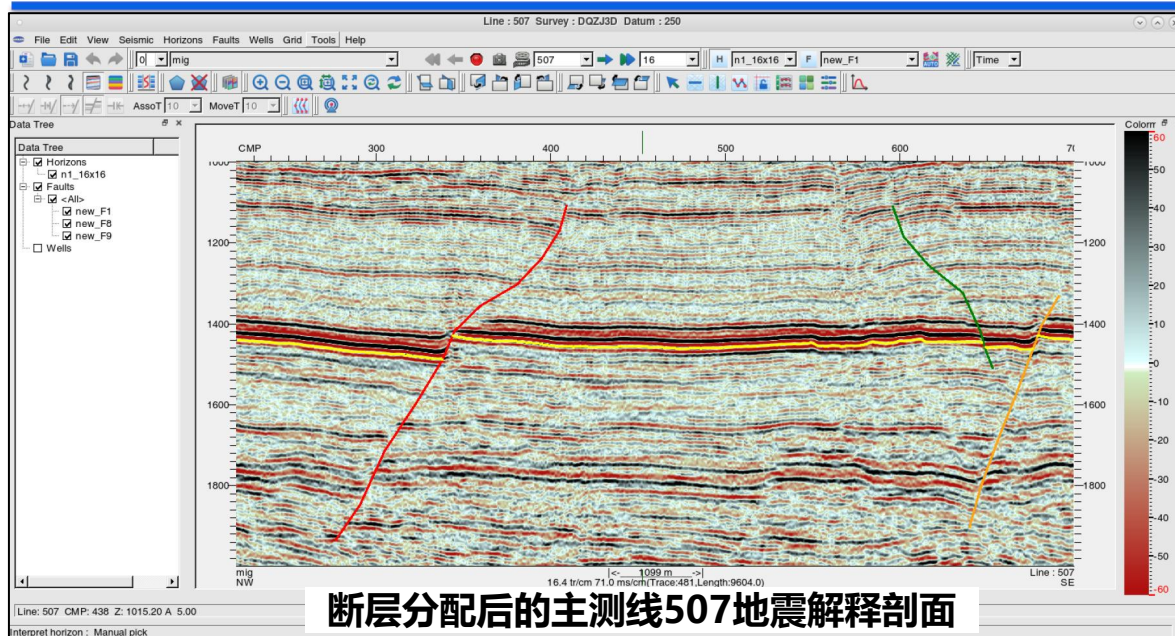


断层解释流程1





断层解释流程1





断层解释流程1



断层组合线自动追踪

创建断层

进行大网格剖面断层解释

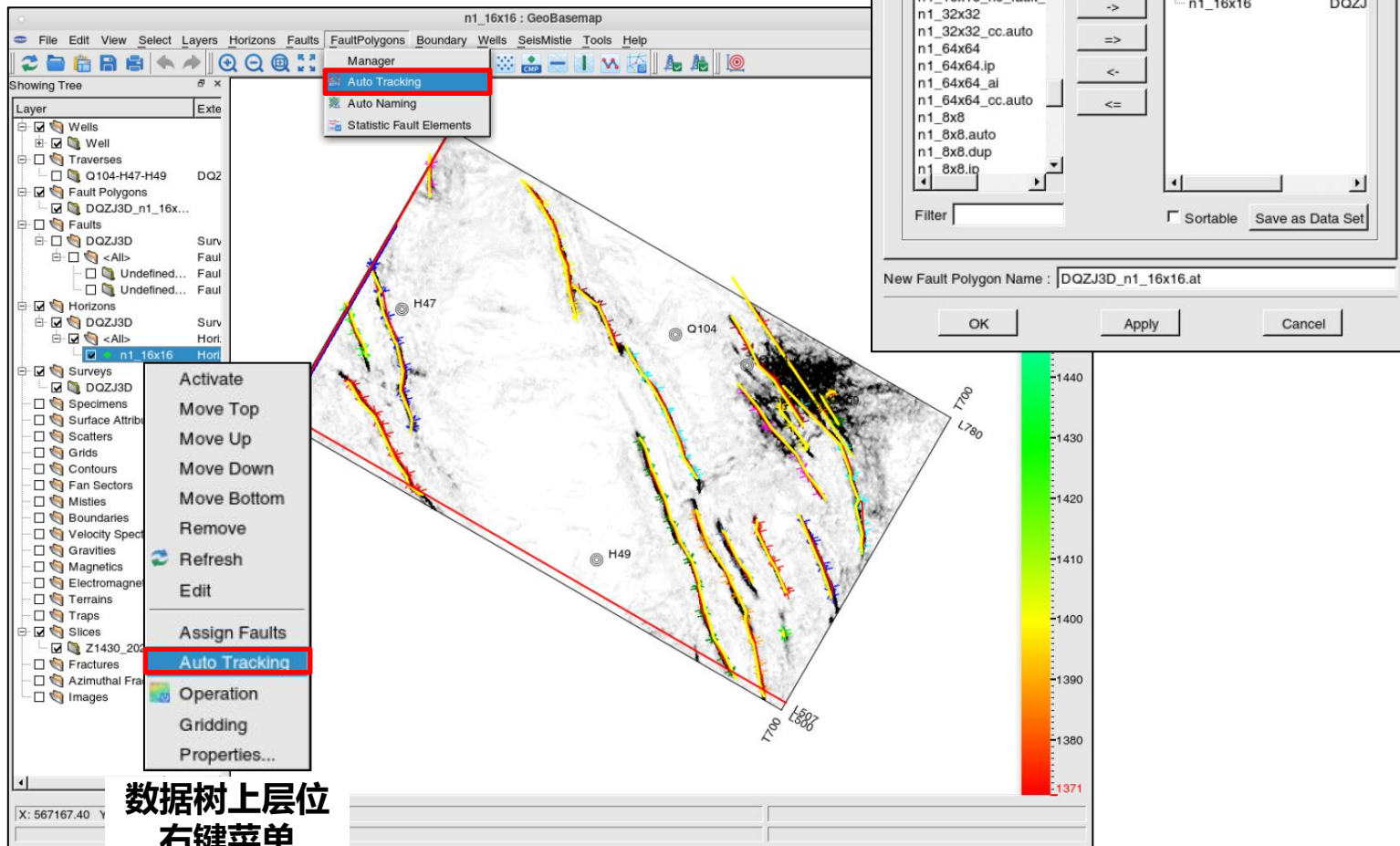
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断距计算

断层分配

生成断层组合线

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02

注意事项



断层解释流程2



创建断层

目的层相干切片断层解释

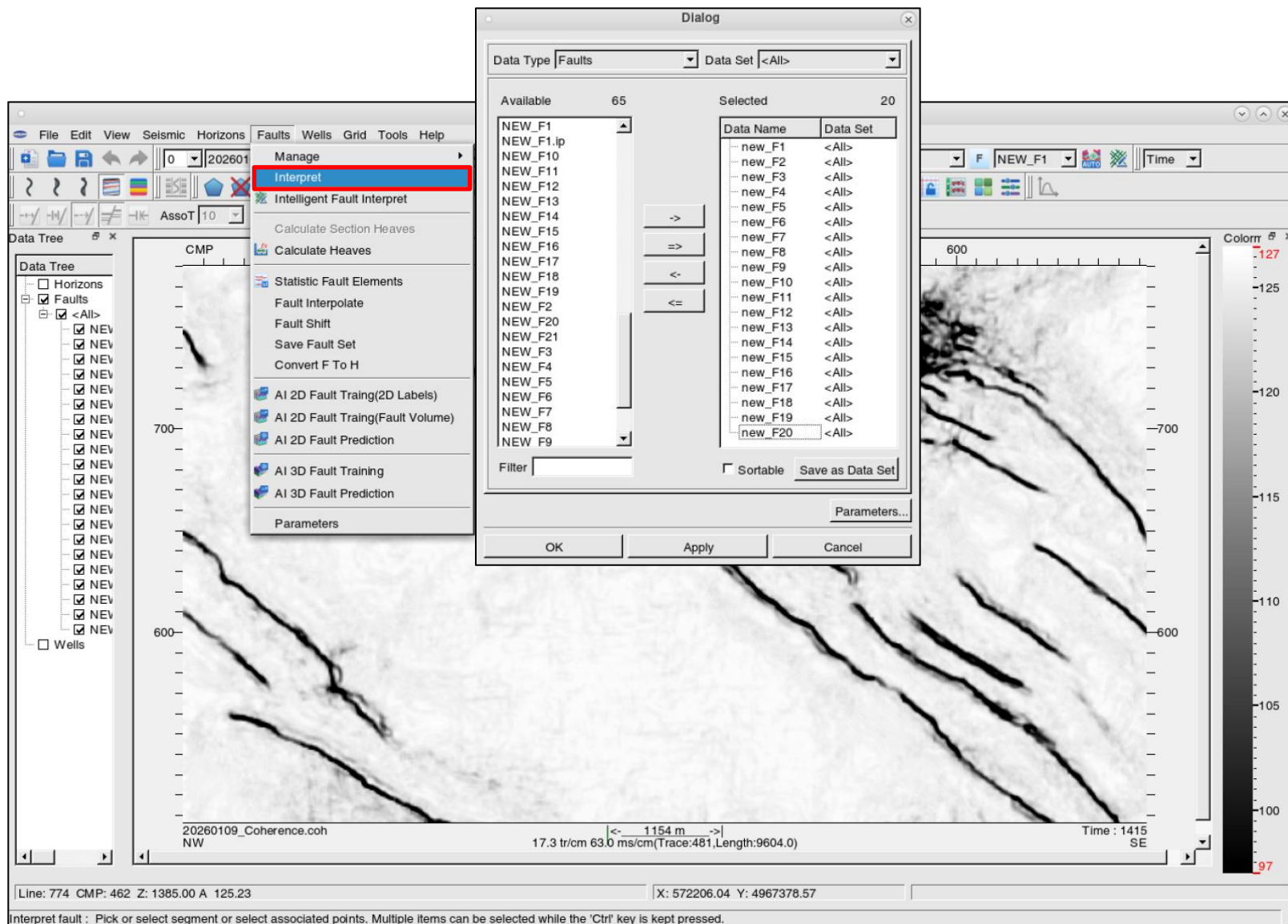
进行大网格剖面断层解释

断层加密解释

断距计算

生成断层组合线

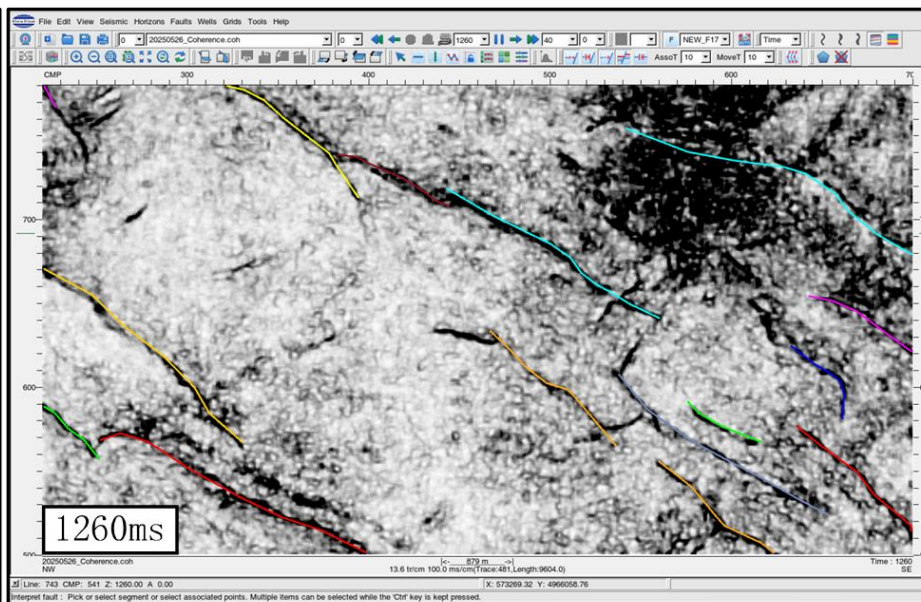
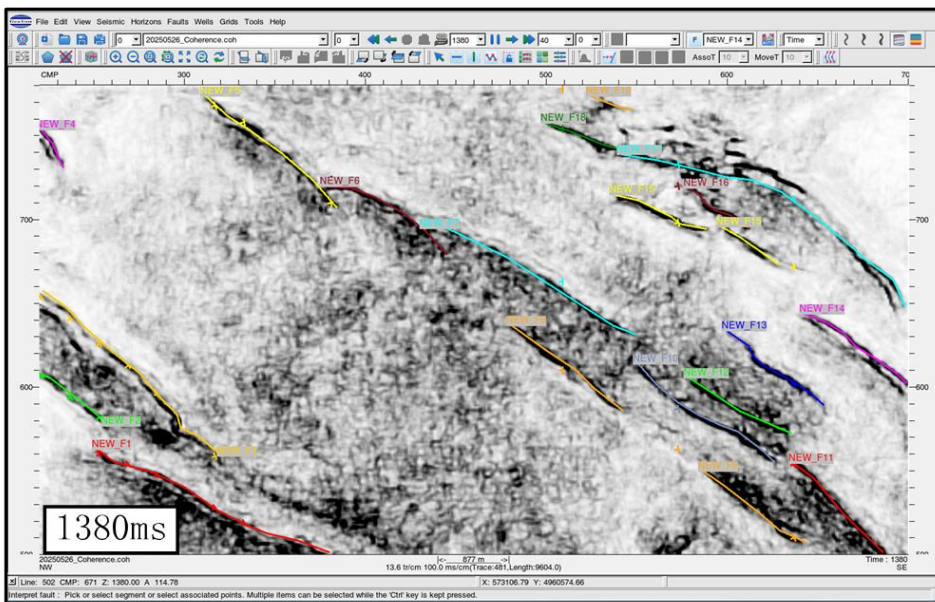
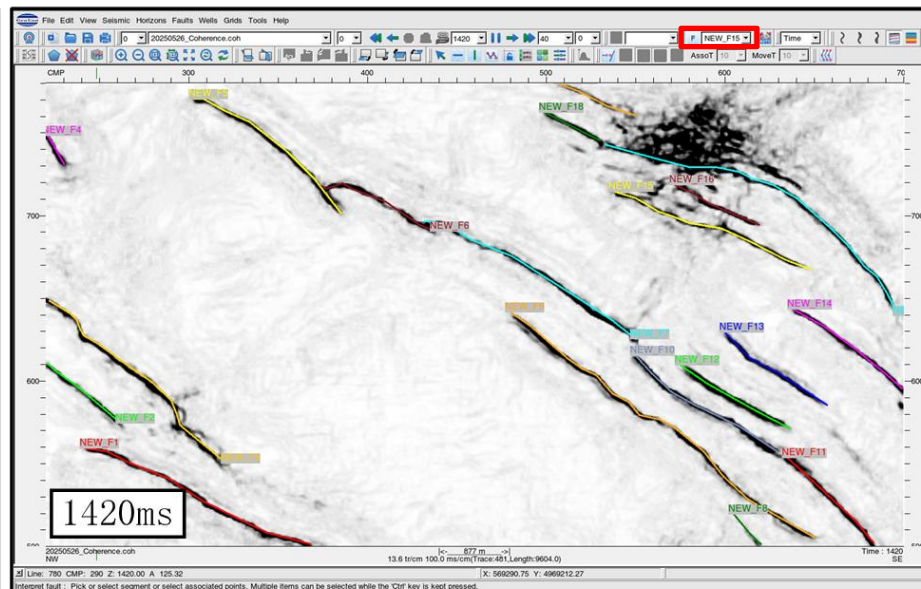
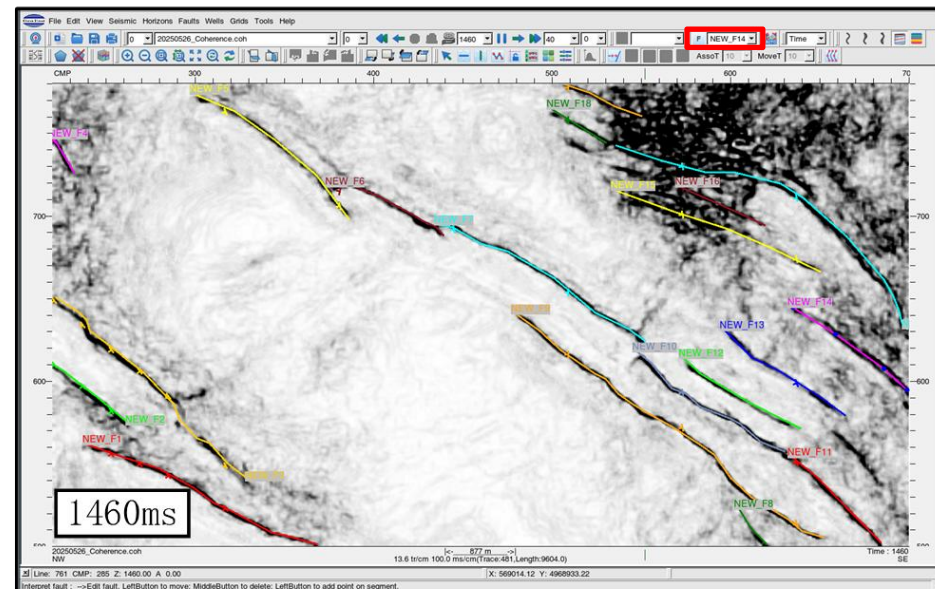
断层解释流程2



相干时间切片的显示



断层解释流程2



Undo

☒ Pick P
AutoPick Ctrl+P

Pick Polygon

Delete(Active)

Fault Assignment
Assign to Recent Fault

Assign Points by Segment(Active)
Assign Segment by Points(Active)
Assign Points by Segment(All)
Assign Segments by Points(All)

Assign All Segments to Current Fault
Automatically Assign All Current Fault

Break
Link Two Segments
Automatically Link Points to Segment

Save Interpolated Fault Segments

Copy Current Fault From Last Section
Copy Current Fault From Next Section
Copy All Faults From Last Section
Copy All Faults From Next Section

Remove Active Fault

Previous Page
Next Page
H-Convert
V-Convert

Exit



断层解释流程2



创建断层

目的层相干切片断层解释

进行大网格剖面断层解释

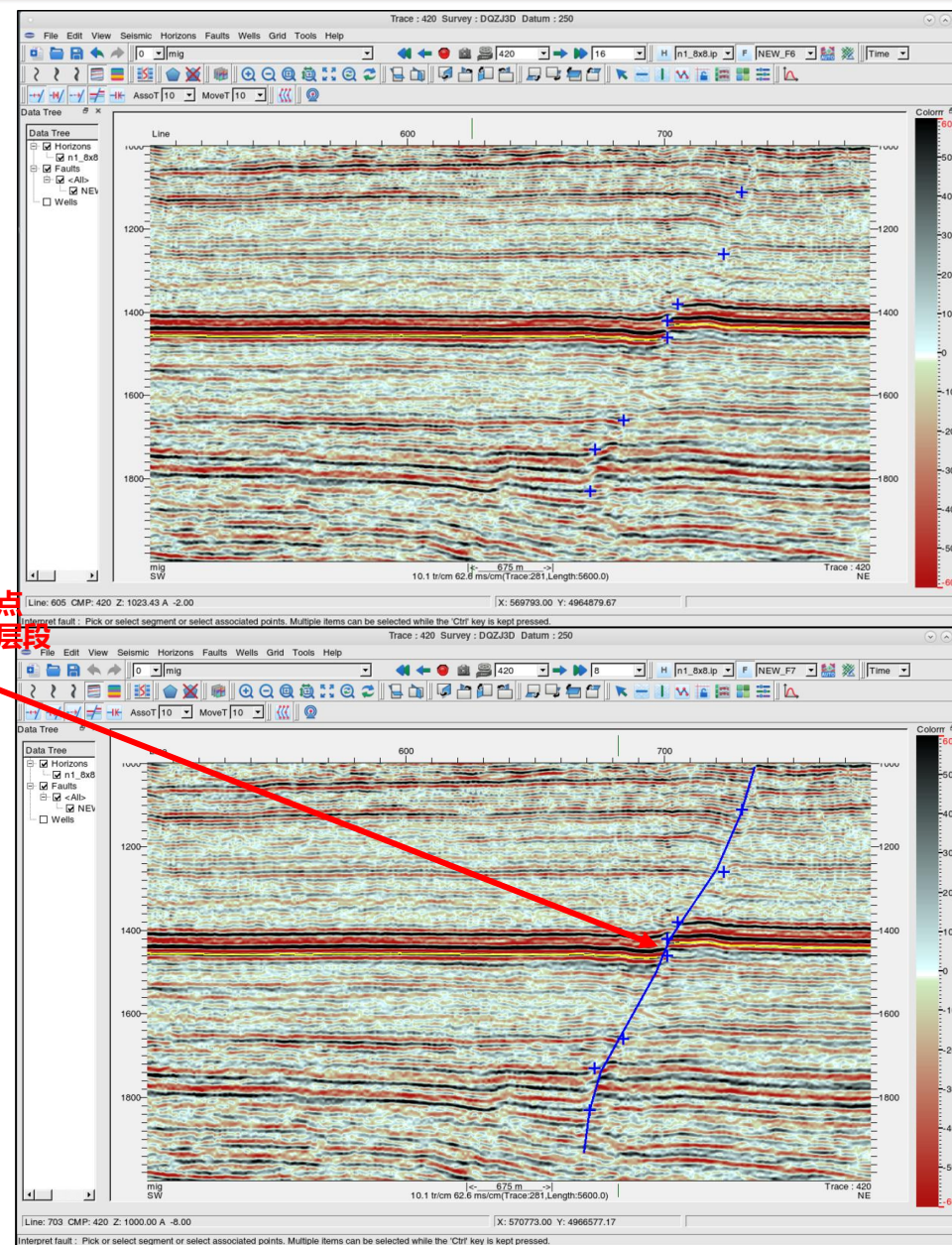
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断距计算

生成断层组合线



断层解释右键菜单





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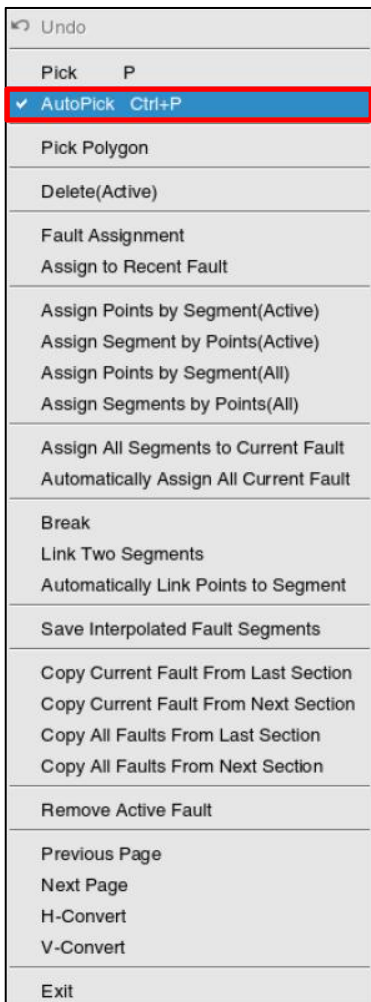


注意事项

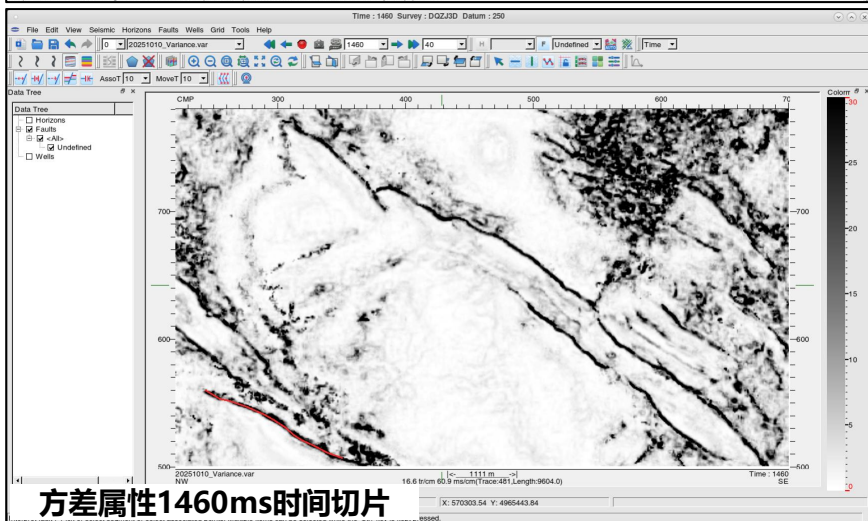
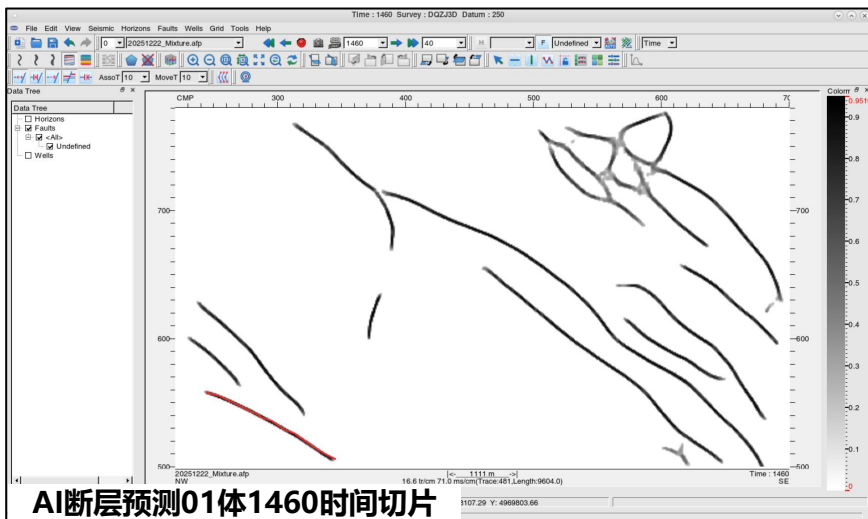


利用《自动拾取断层段》功能时，对属性数据的要求是：其数值大反映断层，如方差属性、AI断层预测的01体数据等，而相干属性的数值小反映断层，则不能使用该功能。

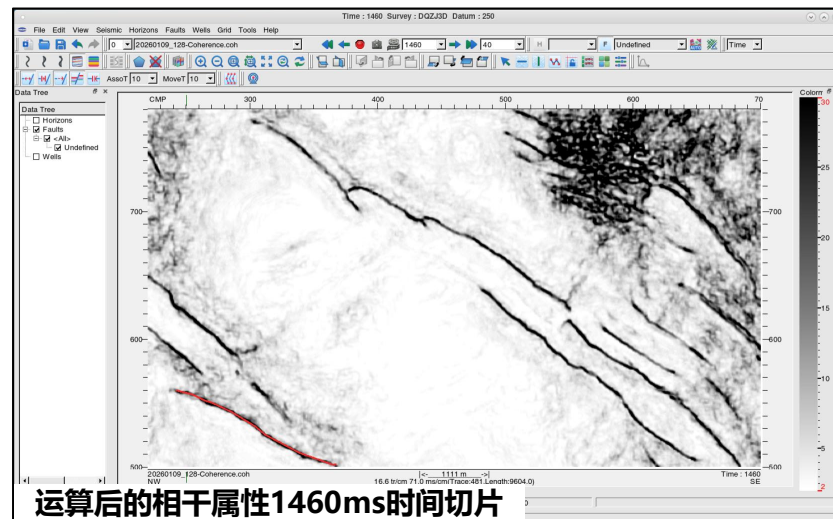
自动拾取断层段
(两点之间自动拾取)
双击鼠标左键结束



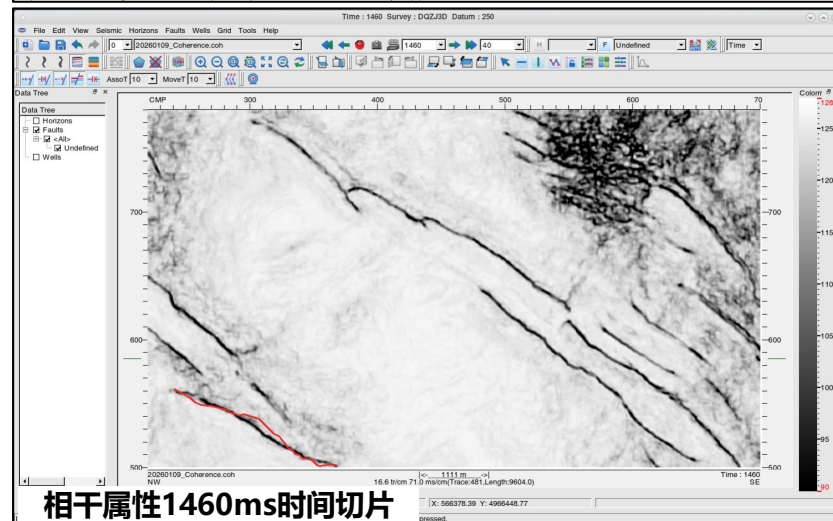
断层解释右键菜单



方差属性1460ms时间切片



运算后的相干属性1460ms时间切片



相干属性1460ms时间切片

感谢大家对GeoEast软件的 信任和支持！

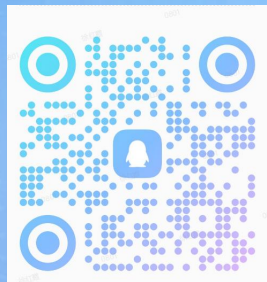
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解释技术支持QQ2群



Bilibili视频教程

技术支持热线电话：18233420979

服务邮箱：geoeast@cnpc.com.cn

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