

# 多井地层对比数据显示与编辑

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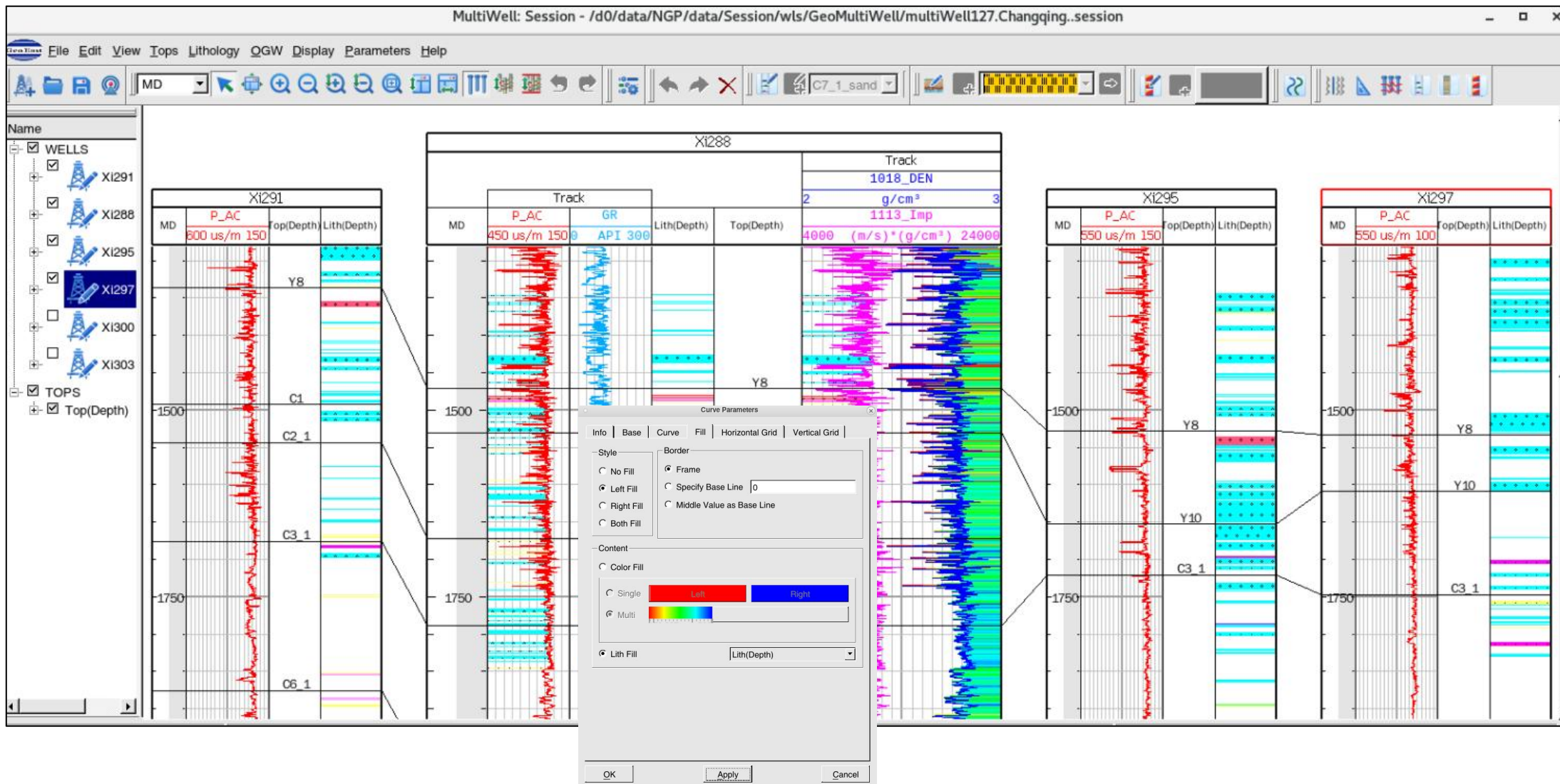
中油油气勘探软件国家工程研究中心

2026年6月2日

GeoF



曲线显示：可以显示多种曲线，数据道顺序调整，曲线叠合显示，曲线属性修改，并进行颜色或岩性的填充显示。



① 在树上分层节点点右键，可删除分层、对所有显示井的分层进行批量改名、分层拉平。

The screenshot displays the GeoMultiWell software interface with four well logs (Xi291, Xi288, Xi295, Xi297) and two dialog boxes. The left sidebar shows a tree view of well sections and layers. A context menu is open over the 'Y6' layer node, with options: Flatten... (highlighted in red), Rename... (highlighted in blue), Delete (highlighted in blue), and Properties... (highlighted in red). A 'Rename' dialog box is open, showing 'Old Name: Y6' and an empty 'New Name' field. A 'Question' dialog box is also open, asking 'Are you sure to delete top name Y6 in all well displayed?' with 'No' and 'Yes' buttons. The 'Yes' button is highlighted in blue, and the text '仅从多井显示中去除' (Remove only from multi-well display) is written in blue next to it.

②按下分层编辑按钮，进入分层编辑状态，可以创建新的分层。

① ③ ② 可直接输入新的top分层名

①: 点击Edit Tops进入编辑状态  
 ②: Top列表选择分层  
 ③: 点击Create Tops  
 ④: 鼠标在Top道某一位置点击插入分层

Well Xi297      Data Lith(Depth)      MD 1428.5697      Amplitude

③按下分层编辑按钮，进入分层编辑状态，可以调整分层深度、删除分层、分层拉平。

The screenshot displays the GeoEast software interface with four well log sections: Xi291, Xi288, Xi295, and Xi297. Each section shows depth (MD) on the y-axis and lithology on the x-axis. A red line indicates a top layer labeled 'Y6' at approximately 1280 MD. A context menu is open over this layer, with 'Modify...' selected. A 'Modify Tops' dialog box is also open, showing 'Name: Y6' and 'Depth: 1280'. The 'Display Contents' panel on the left shows the 'Y6' top layer selected under 'TOPS'. The 'Section Name' panel on the top left shows the selected session 'Xi291-Xi288--Xi297'. The 'Display Contents' panel on the bottom left shows the 'Y6' top layer selected under 'TOPS'. The 'Modify Tops' dialog box has 'Name: Y6' and 'Depth: 1280' fields, with 'OK' and 'Cancel' buttons. The 'Display Contents' panel on the left shows the 'Y6' top layer selected under 'TOPS'. The 'Section Name' panel on the top left shows the selected session 'Xi291-Xi288--Xi297'. The 'Display Contents' panel on the bottom left shows the 'Y6' top layer selected under 'TOPS'. The 'Modify Tops' dialog box has 'Name: Y6' and 'Depth: 1280' fields, with 'OK' and 'Cancel' buttons.

② 分层编辑按钮

撤销拉平

②

Delete  
Flatten  
Modify...  
Save

Modify Tops

Name: Y6

Depth: 1280

OK Cancel

Well Xi291      Data Top(Depth)      MD 1278.7240      Amplitude

④ 编辑结束后，选择File菜单下的Save，勾选Top后点Save可以保存编辑后的分层数据。

The screenshot shows the GeoEast software interface with four well logs (Xi291, Xi288, Xi295, Xi297) displayed. The 'File' menu is open, and 'Save' is selected. The 'Save' dialog box is open, showing the following data list:

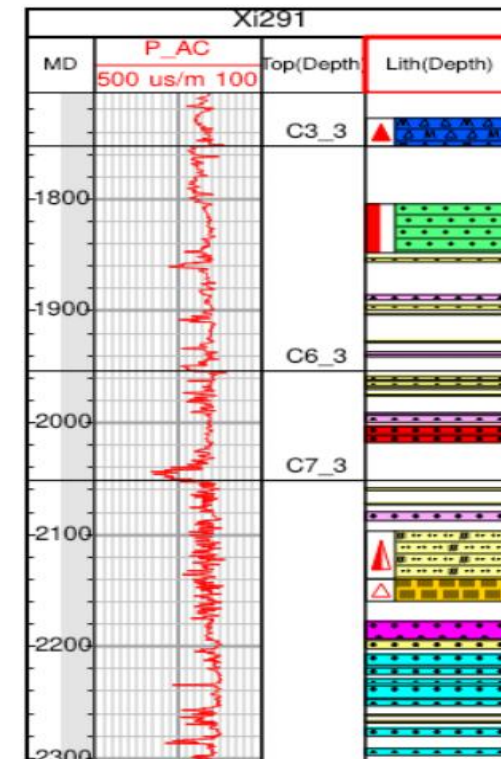
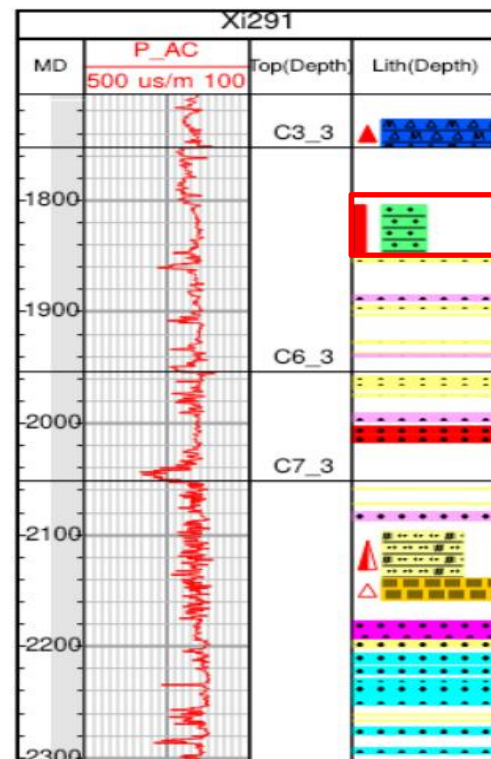
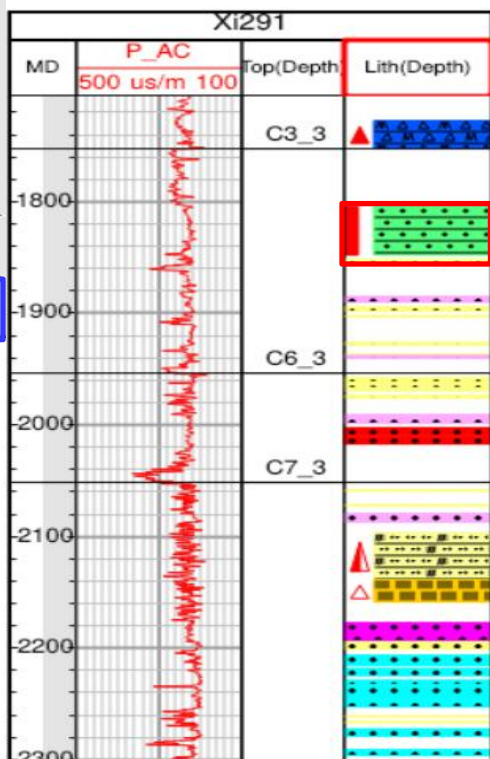
Type	Title	Well Name	Name	Version
<input checked="" type="checkbox"/> Top	Top(Depth)	Xi291	Top(Depth)	修改版本号

A 'Warning' dialog box is also open, asking to overwrite the data which name is Top(Depth). The 'Yes' button is highlighted.

① 岩性粒度显示：岩性可以粒度显示或整体100%粒度显示。

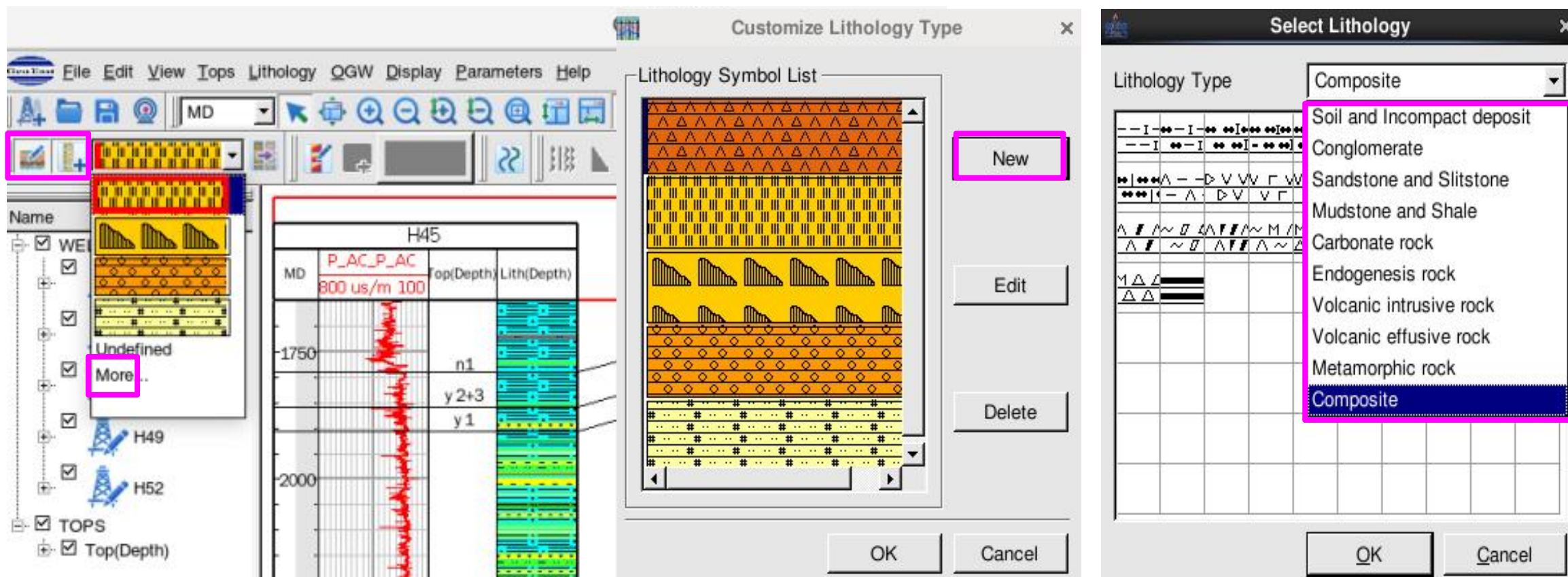
All岩性横向充满显示、Granularity (%) 岩性横向按粒度百分比显示。

- Insert Track
- Insert Ruler
- Insert Curve...
- Insert Tops...
- Insert Lithology...
- Insert OGW...
- Insert Oil Test...
- Insert Drilling Coring...
- Insert Sidewall Coring...
- Remove
- Properties...



②添加新的岩性：在岩性编辑中，可以直接添加新的岩性。

#### 新增岩性



## ②修改岩性：在岩性编辑中，修改岩性类别及岩性范围。

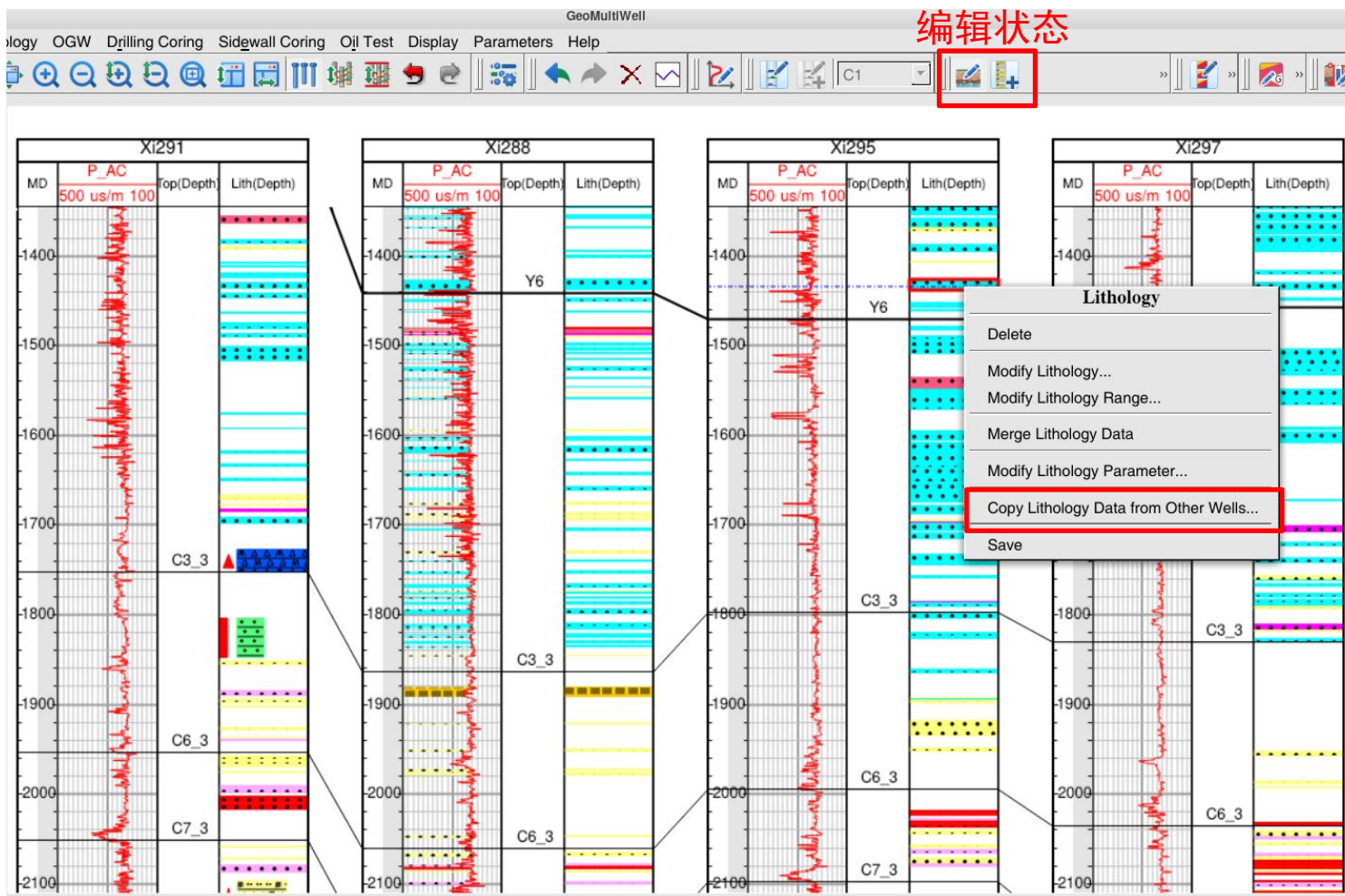
The screenshot displays the GeoEast software interface for editing lithology. The main window shows four well logs (Xi291, Xi288, Xi295, Xi297) with depth on the y-axis (from -1500 to -1650) and lithology on the x-axis. A context menu is open over a cyan-colored lithology interval in well Xi291, with options: Delete, Modify Lithology..., Modify Lithology Range..., Merge Lithology Data, Modify Lithology Parameter..., Copy Lithology Data from Other Wells..., and Save. The 'Modify Lithology Range...' option is highlighted with a blue box.

Two dialog boxes are shown:

- Modify Lithology**: This dialog allows changing the lithology type (represented by a symbol), background color (currently cyan), and oil bearing level (currently None). The 'Background Color' checkbox is checked. A blue arrow points from the 'Modify Lithology Range...' menu option to this dialog.
- Modify Lithology Range**: This dialog allows setting the depth range for the modification. The 'Start' value is 1509 and the 'End' value is 1516.5. The 'OK' button is highlighted with a blue box.

In the top right corner, a 'Select Lithology' dialog is visible, showing a list of lithology types with their corresponding symbols and colors.

③ 岩性拷贝：利用对话框实现一口井的整体或部分岩性拷贝到多口井中。

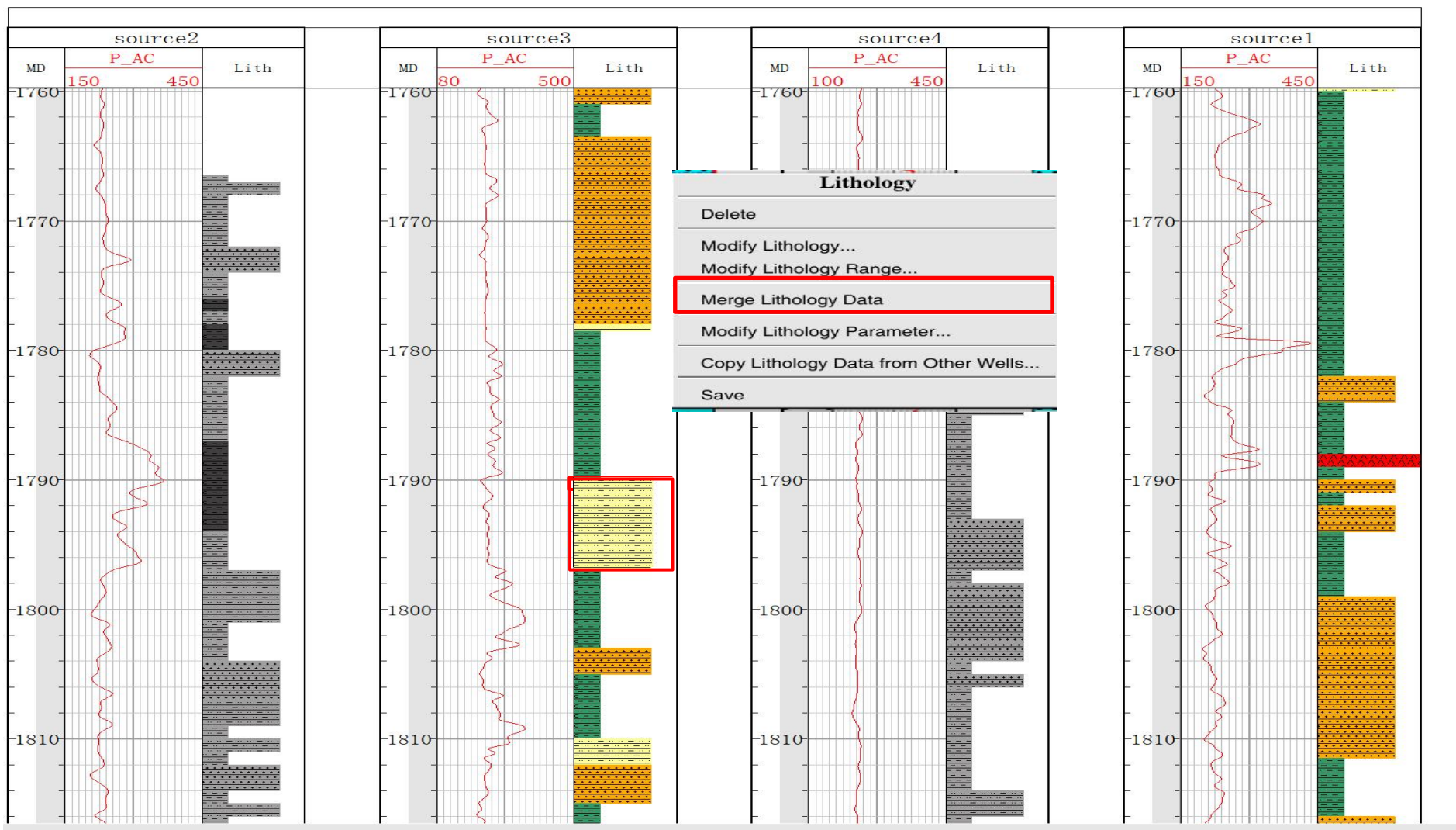


编辑状态

The 'Copy Lithology' dialog box is shown with the following settings:

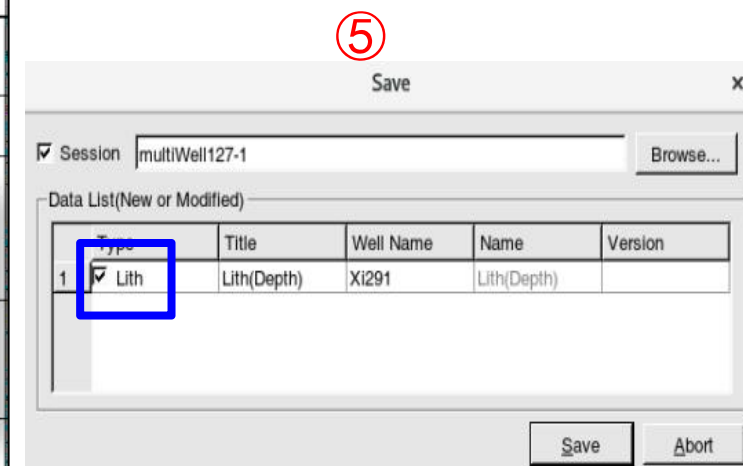
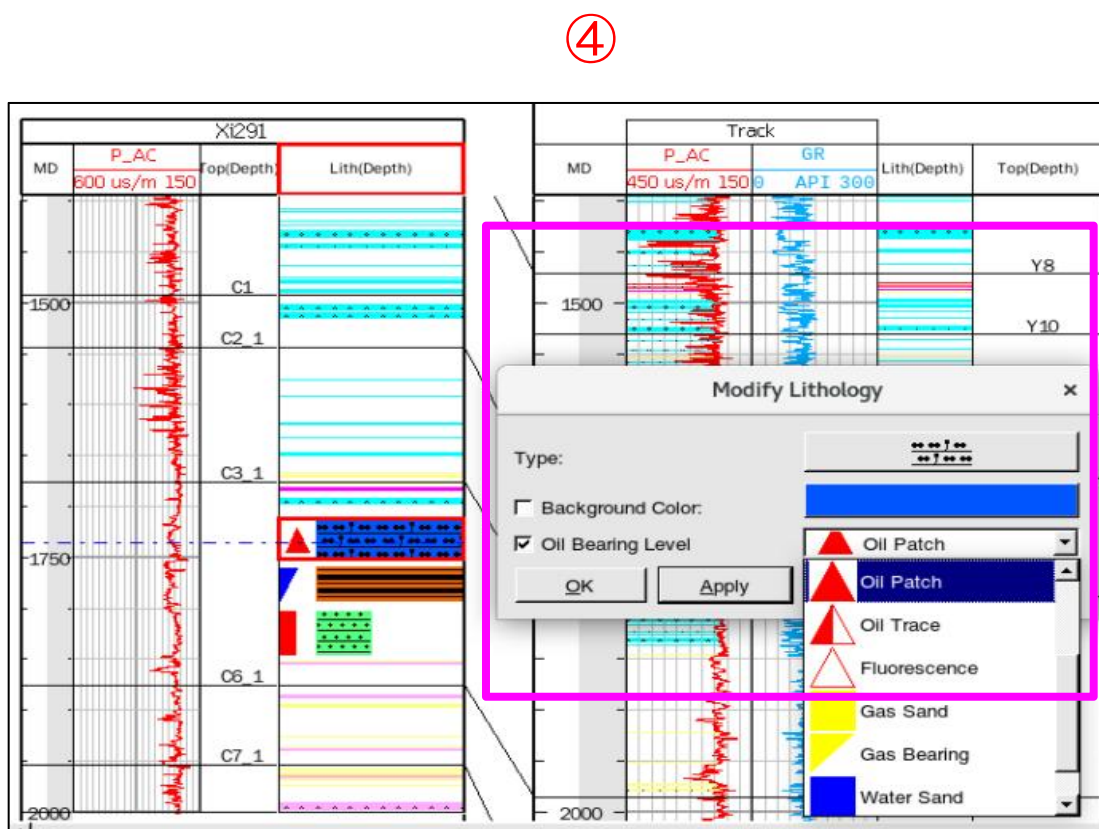
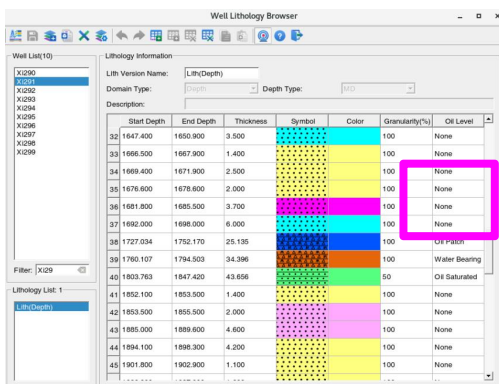
- Source Lithology Parameter:** Wells with Lithology: Xi288
- Specify Source Lithology:** Lithology List: lly-lith, Lith(Depth)
- Specify Range to Copy:**
  - Radio buttons: All, **Part**
  - Source Tops Version: Top(Depth)
  - Start: **Tops** Y6 1442 m
  - End: **Tops** C6\_3 2060 m
- Target Location in Xi295:**
  - Radio buttons: Same to Source Well Location, Depth, **Tops**
  - Target Location: Y6 1471 m
  - Target Tops Version: Top(Depth)

④ 岩性合并 (Merge Lithology Data) : 将多段岩性合并为同一种岩性。



⑤ 添加含油级别：在岩性编辑中，修改岩性时，可以添加含油级别，该含油级别可以在岩性浏览中进行查询。

⑥ 岩性保存：岩性编辑结束后，选择File菜单下的Save勾选Lith后点Save保存编辑后的岩性数据。



油气水编辑中，可添加新油气水、调整油气水边界、删除油气水、修改油气属性，保存编辑结果等。

The screenshot shows the GeoMultiWell software interface. The main window displays three well logs: Q124, Q109, and H45. The OGW (Oil Gas Water) column for well Q124 is highlighted, and a context menu is open over it, showing options: "OGW", "Delete", "Modify OGW...", and "Modify OGW Range...". The "Modify OGW..." option is selected. A dialog box titled "Replace & Set Oil Gas Water Symbol" is open on the right, showing a list of OGW types and a "Modify OGW" button. The dialog box also shows the current OGW parameter file path and options to replace the same OGW type of this well or all wells.

编辑状态

OGW  
Delete  
Modify OGW...  
Modify OGW Range...

Replace & Set Oil Gas Water Symbol

Current Oil Gas Water Parameter File: [mc0:d2\data\Changqing\wells\OGW\WellOGWPara.ogw]

OGW Type List:

- Oil Reservoir
- Poor Reservoir
- Water Bearing Oil Layer
- Oil Water Layer
- Oil Bearing Water Layer
- Suspected Oil Gas Layer
- Oil Gas Layer
- Gas Layer
- Gas Water Layer
- Gas Bearing Water Layer
- Water Layer
- Tight Layer
- Dry Layer
- Poor Gas Layer
- Gas Bearing Dry Layer
- Coal Layer
- I Type Reservoir
- II Type Reservoir
- III Type Reservoir
- Level-1 Fracture
- Level-2 Fracture
- Level-3 Fracture

Frame  
Color: [Black] Width: [1]

Fill  
Color: [Red]

Modify OGW

Replace Same OGW Type of This Well  
 Replace Same OGW Type of All Wells

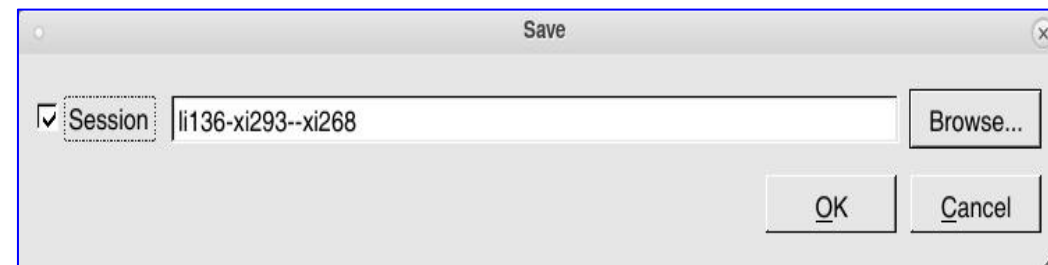
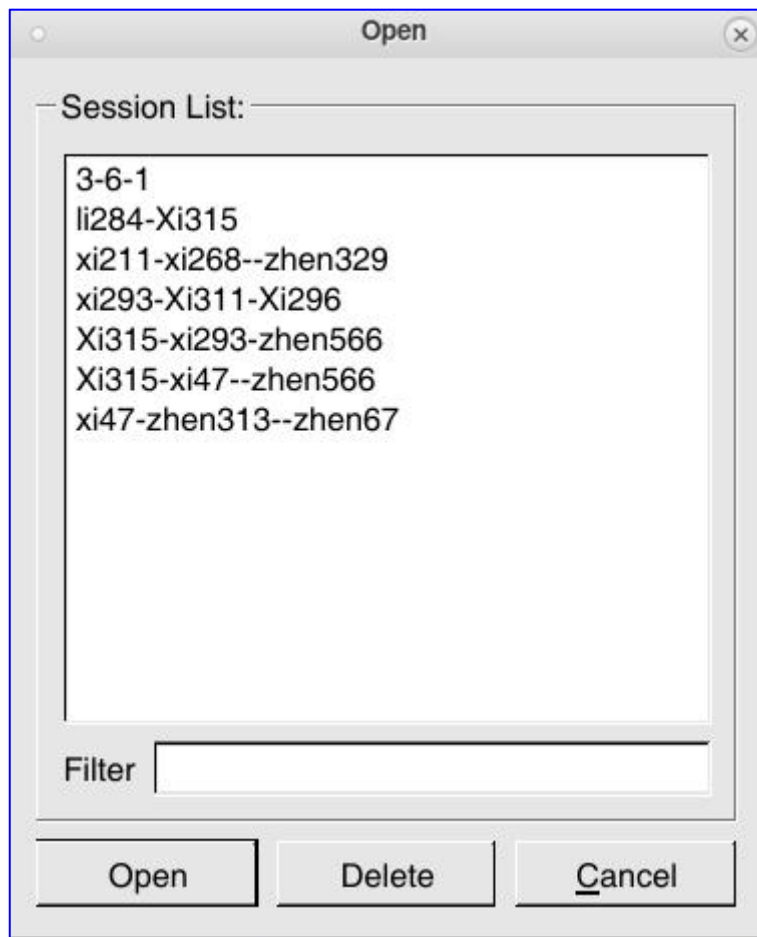
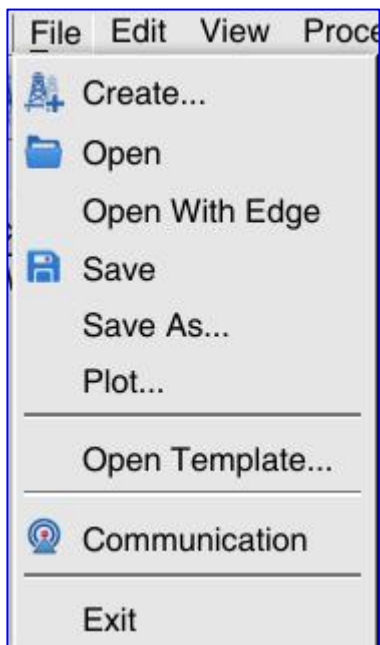
OK Save... Cancel



File → Save 工作区显示的内容直接保存到原文件下。

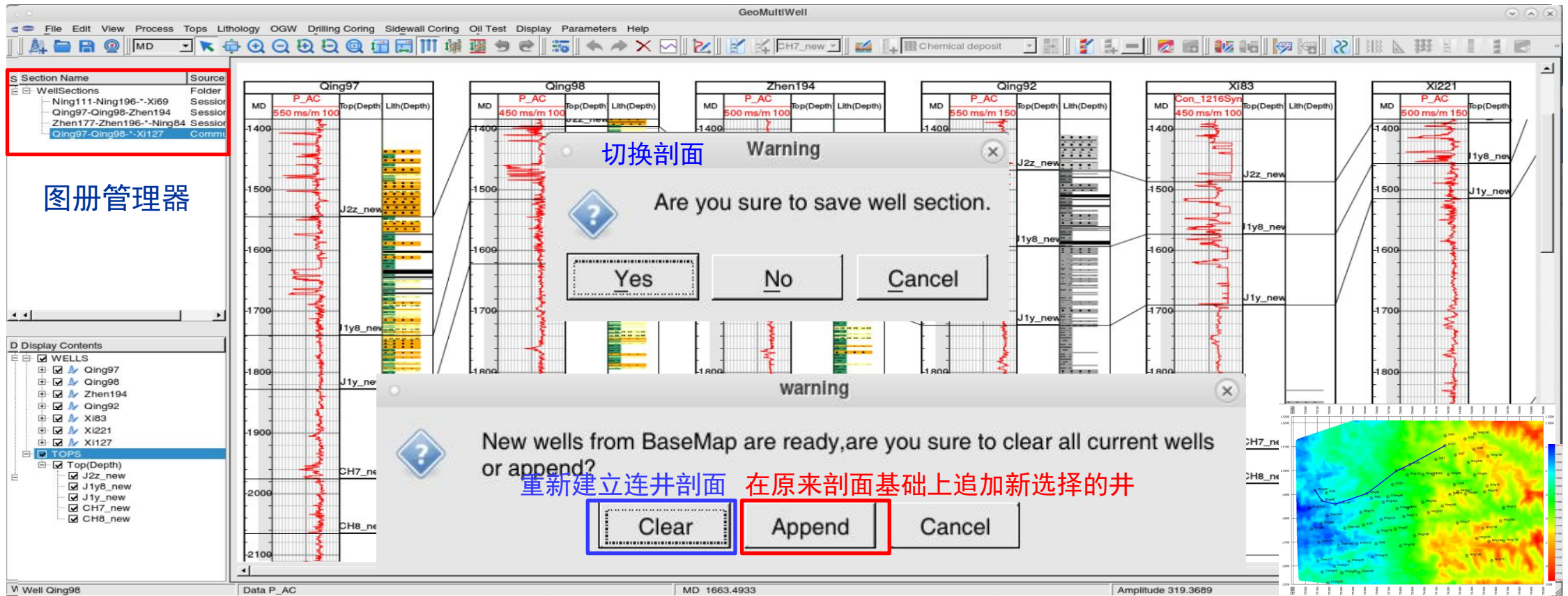
File → Save As 将工作区中的图形保存成另外的状态保留文件。

File → Open 选择打开已保存的状态保留文件或删除场景文件。



对图形显示比较满意时，可保存成场景文件。方便下次调用。

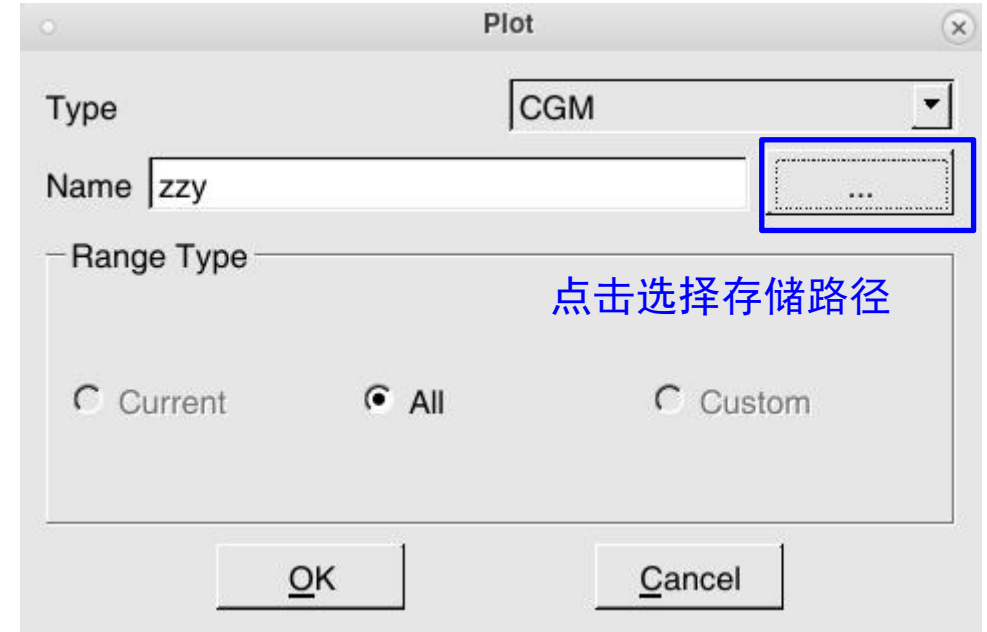
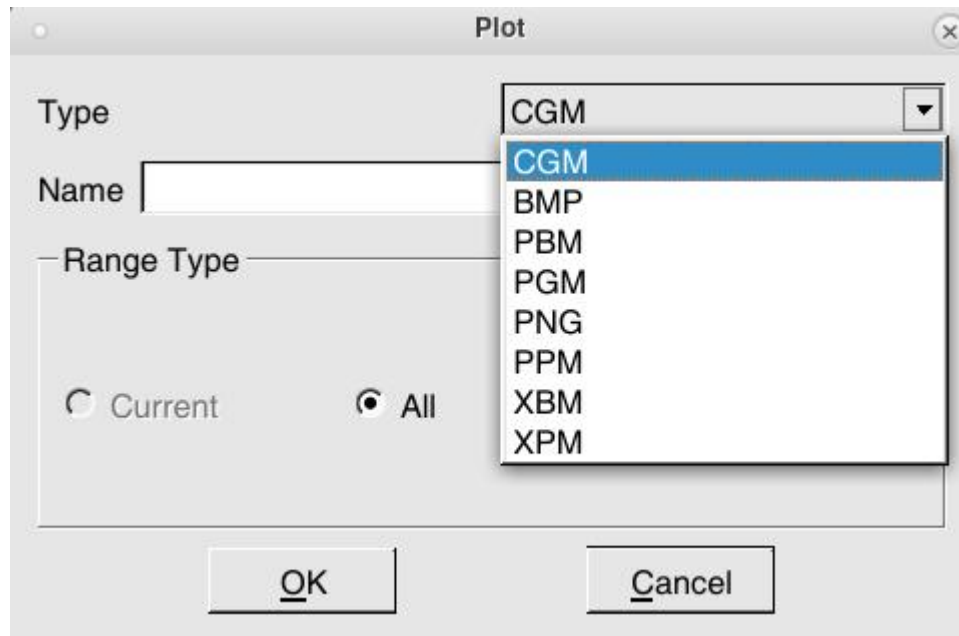
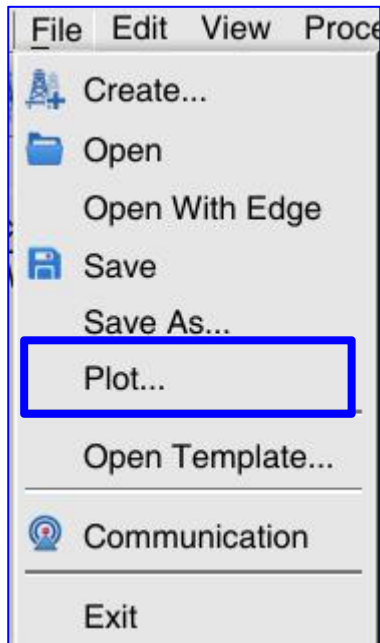
➤ **高效图册管理：**引入图册式管理界面，支持将多个连井剖面整合归档，方便进行批量浏览、对比。



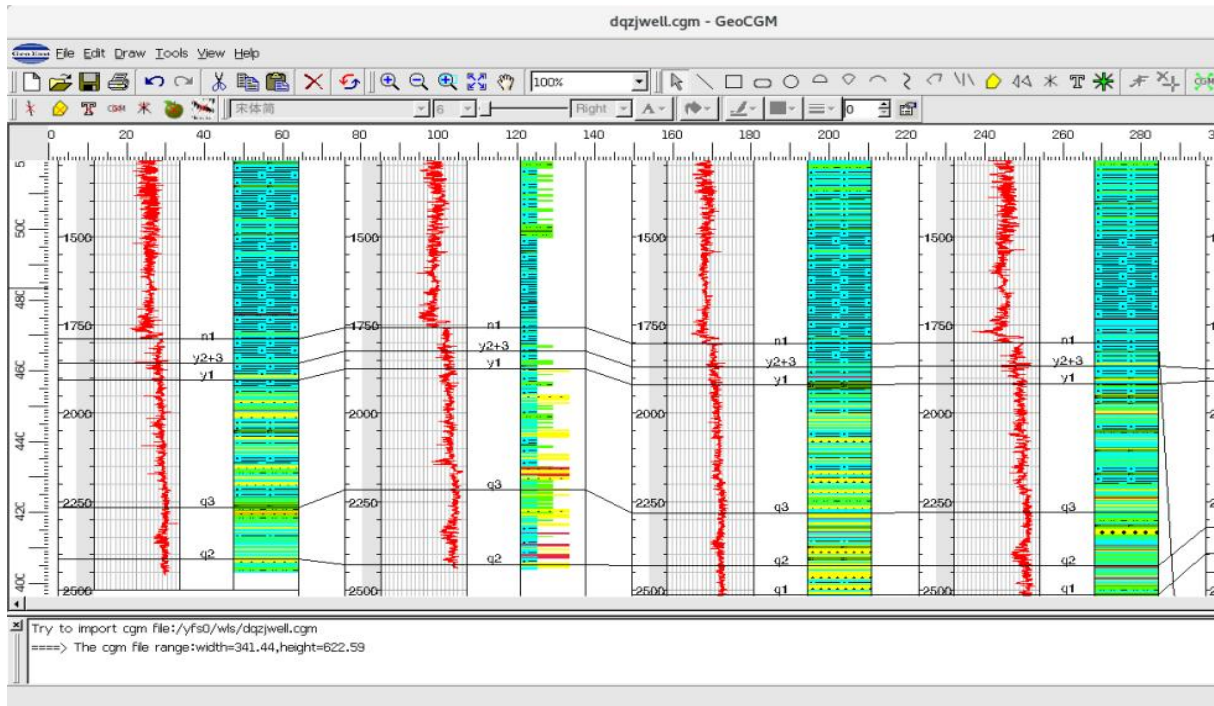
底图实时显示



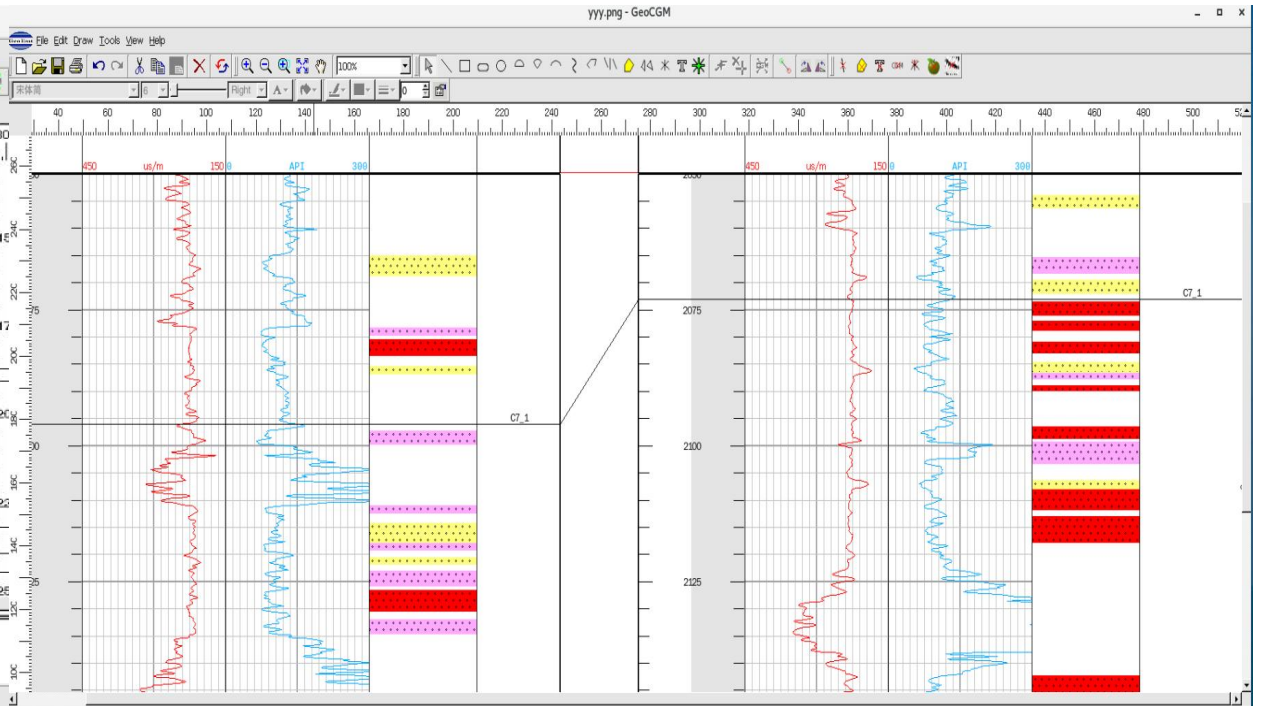
保存的图形文件格式，有CGM、BMP、PBM、PGM、PNG、PPM、XBM、XPM格式。



输出的CGM文件或图形文件都可以在CGM图形编辑与绘图子系统中调用。



CGM文件



图形文件



GeoRock

File Edit AI Help

Algorithm Filter

- PreProcess
  - Remove Abnormal Value
  - Datum Correction
  - ReSample
  - Correction
    - Condition
      - GR Borehole
      - AC Borehole
      - DEN Borehole
    - Acoustic...
    - TVD Deviated Well Correct...
    - TVD Curve Correction
    - TVD Hole Correction
    - SP Baseline Drift Correction
  - Filter
    - Smoothing
    - Wavenumber Filter
    - Frequency Filter
  - Blocking
    - Automatic Curve Splicing
    - Normal Synthetic
    - Multi Well Standardization
    - Depth-Time Conversion
    - DT Extend
  - DataClean
    - Range Detection
    - Smooth Detection
    - Caliper Enlarge Detection
    - Curve Fill
  - Interpretation
    - User Define Calculation
  - Curve Conversion
    - Velocity To Por
    - Velocity To Den
    - Velocity To AC
    - Rt To AC
    - Rt To Conduction
    - AC To Imp
  - VSH Calculation
    - Based on GR
    - Based on CNL
    - Based on SP

Wavenumber Filter

Input and Output | Parameter

Input

Select Well... Select Data Type... Remove Clear Refresh

QC	Well Name	P_AC	Version
<input checked="" type="checkbox"/>	Xi116	P_AC	1
<input checked="" type="checkbox"/>	Xi117	P_AC	3
<input checked="" type="checkbox"/>	Xi119	P_AC	1

勾选

Select All Select Reversed Select Invalid Well Name Filter Curve Name Filter

Vertical Range

Extraction Mode All

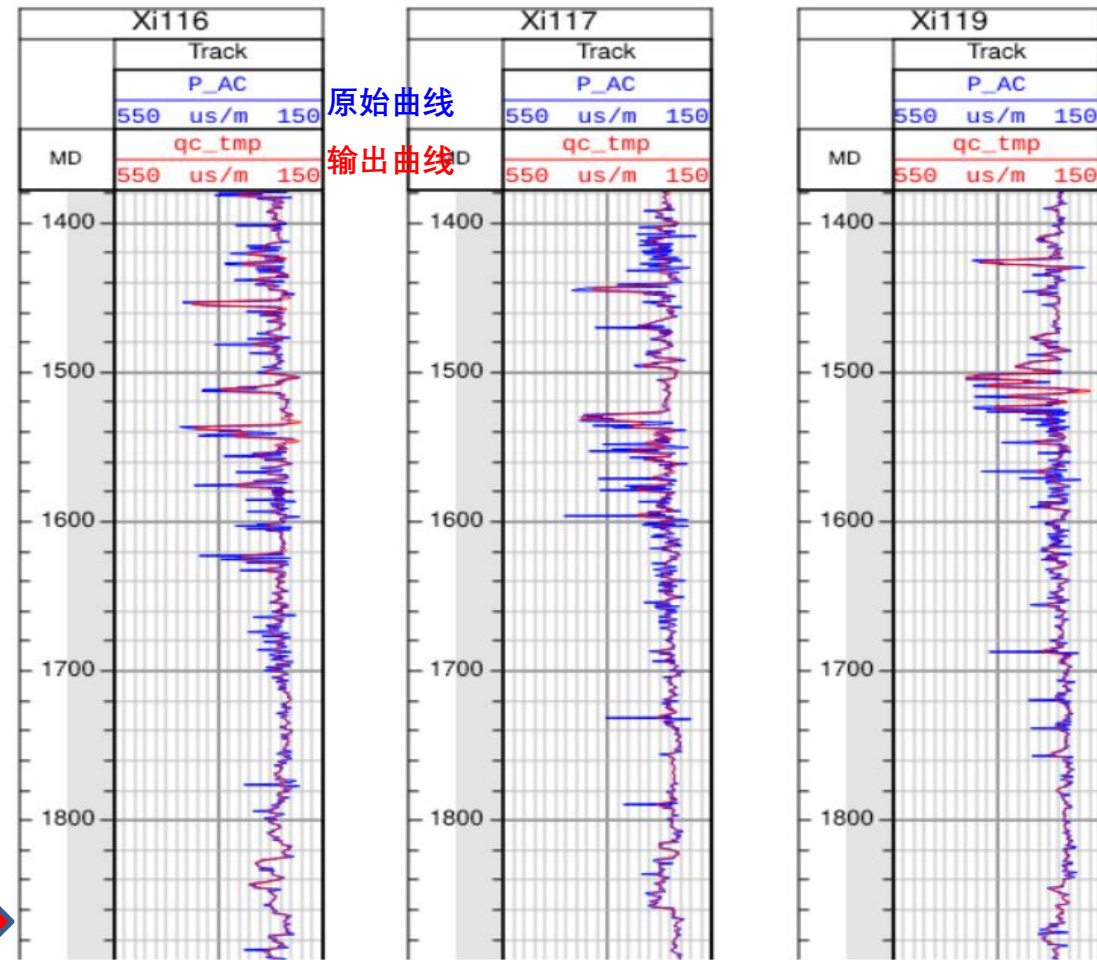
Output

Curve Name Prefix + Current Curve Name + Suffix

Curve Interval  As Original Curve  User Define 0.125

Curve Version New Version Current Last version + 1

View QC Run



Progress Log

Selected Curve:

Parameter:

---

Well Calculation Information :

Number	Well Name	Original Curve	New Curve	Result	Preview/Cause
1	zhen312	standardbgpGR_GR_filter05_1	teststandardbgpGR_GR_filter05_1	Successfu	<a href="#">Preview</a>
2	zhen50	standard_bgpGR_GR_filter05_1	teststandard_bgpGR_GR_filter05_1	Successfu	<a href="#">Preview</a>
3	Zhen569	standardGR_filter05_1	teststandardGR_filter05_1	Successfu	<a href="#">Preview</a>
4	Xi311	standardGR_filter05_1	teststandardGR_filter05_1	Successfu	<a href="#">Preview</a>
5	xi267	standardbgpGR_GR_filter05_1	teststandardbgpGR_GR_filter05_1	Successfu	<a href="#">Preview</a>
6	Xi146	standardGR_filter05_1	teststandardGR_filter05_1	Successfu	<a href="#">Preview</a>
7	xi211	standard_bgpGR_GR_filter05_1	teststandard_bgpGR_GR_filter05_1	Successfu	<a href="#">Preview</a>
8	xi293	standard_bgpGR_GR_filter05_1	teststandard_bgpGR_GR_filter05_1	Successfu	<a href="#">Preview</a>

100%

Pause Close

GeoMultiWell

File Edit View Process Tops Lithology OGW Drilling Coring Sidew

MD

Section Name	Source
WellSections Folder	
zhen312	Communication

zhen312

Track		
	API	300
GR_GR		
1	API	300
qc_tmp		
	API	300
1	API	300

MD

500

750

1000

1250

Display Contents

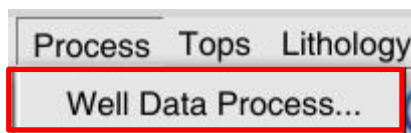
- WELLS
- zhen312
- TOPS

Well zhen312 Data qc\_tmp MD 979.3208

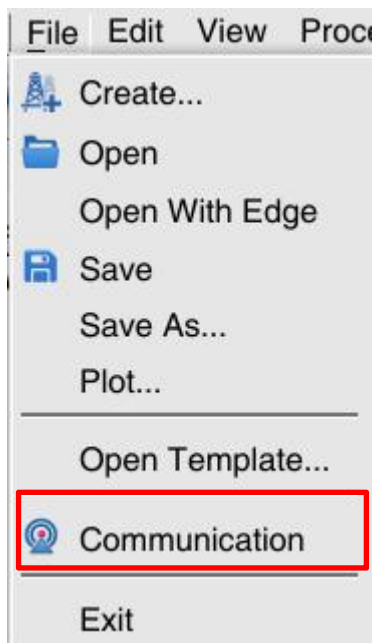
多井对比子系统数据发送到岩石物理进行批量处理

岩石物理子系统启动并显示井数据

多井对比子系统Process菜单



①



+

②

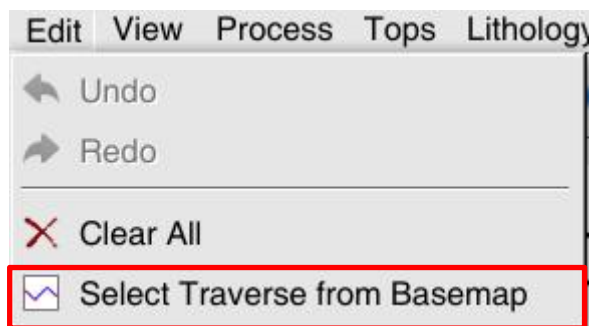


The screenshot shows the GeoRock software interface. On the left, a tree view under 'Algorithm' shows 'Smoothing' selected. On the right, the 'Smoothing' dialog box is open, showing the 'Input and Output' tab. The 'Input' section contains a table with the following data:

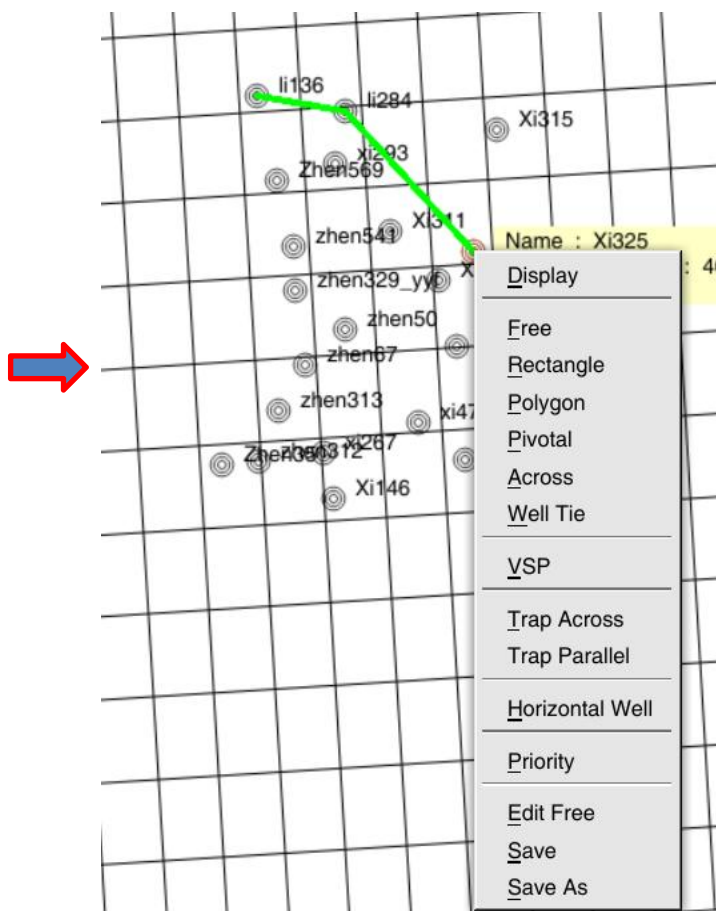
QC	Well Name	P_AC	Version
<input type="checkbox"/>	li136	2022_ljy_P_AC	1
<input type="checkbox"/>	li284	2022_ljy_P_AC	1
<input type="checkbox"/>	Xi325	P_AC	2

Below the table are buttons for 'Select All', 'Select Reversed', and 'Select Invalid'. The 'Output' section shows 'Curve Name' as 'Prefix + Current Curve Name + Suffix', 'Curve Interval' as 'As Original Curve' with a value of 0.125 (m), and 'Curve Version' as 'New Version'.

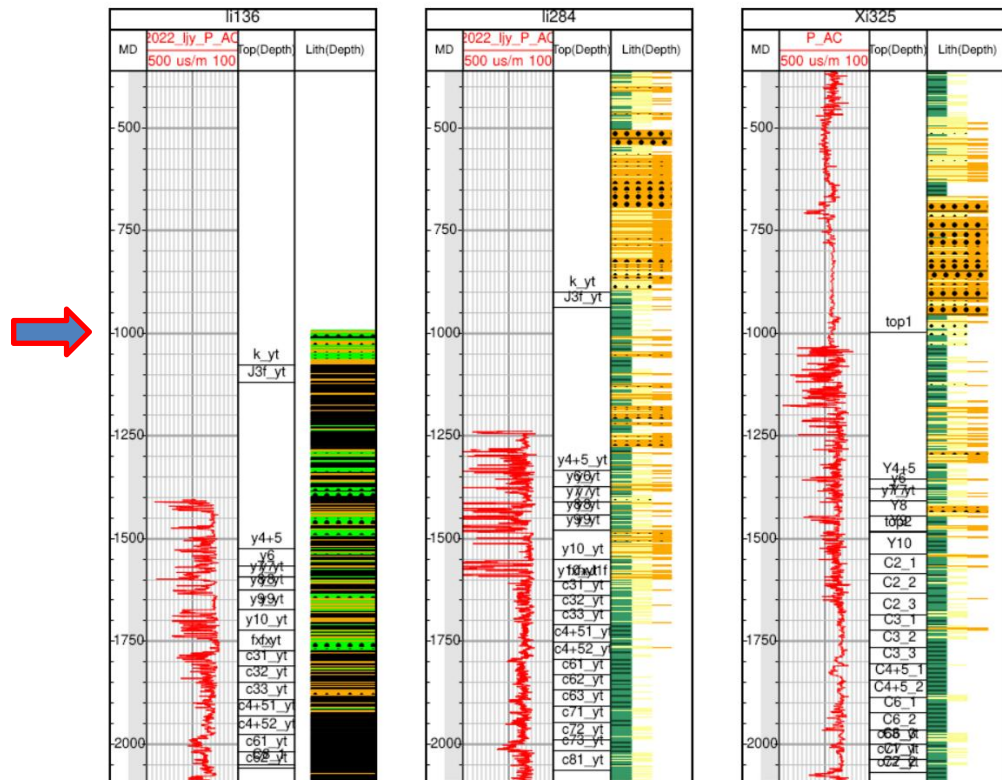
Edit菜单下select按钮



底图选择任意线

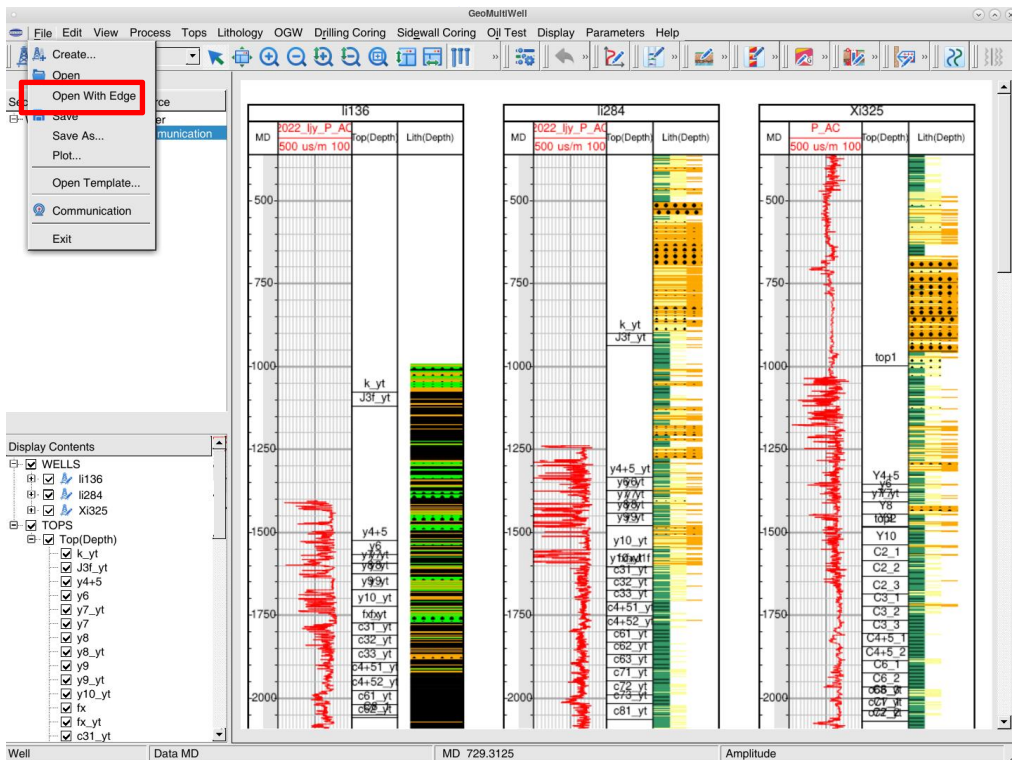


多井子系统显示所选任意线上的井

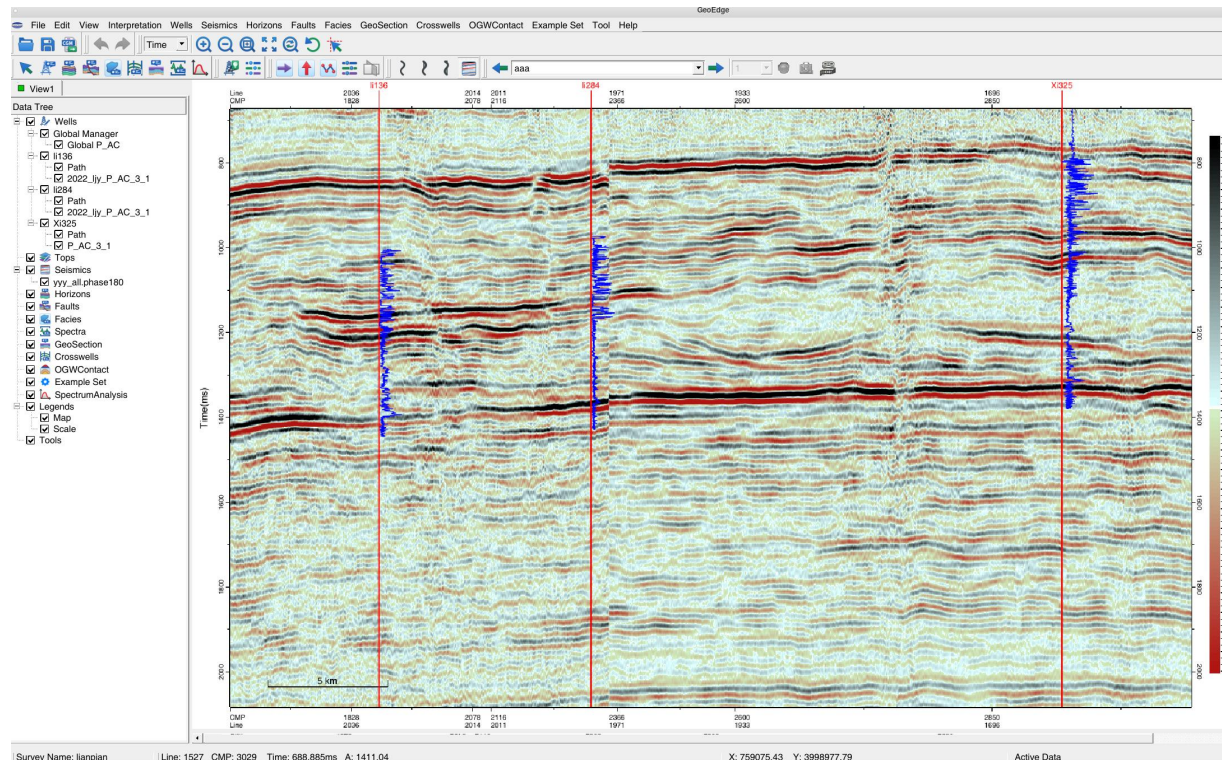




## File菜单下Open With Edge



## 启动井震子系统并显示多井内容



# 感谢大家对GeoEast软件的 信任和支持!

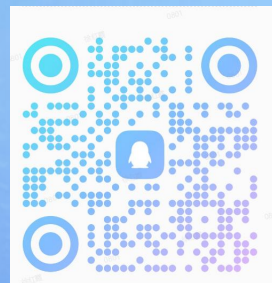
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GeoEast微信公众号



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