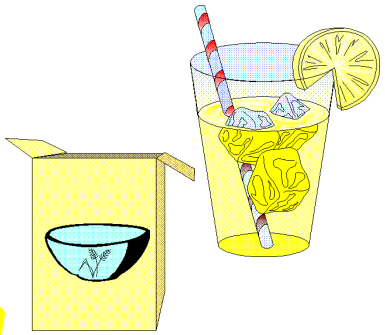
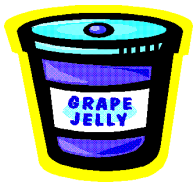
多级校正

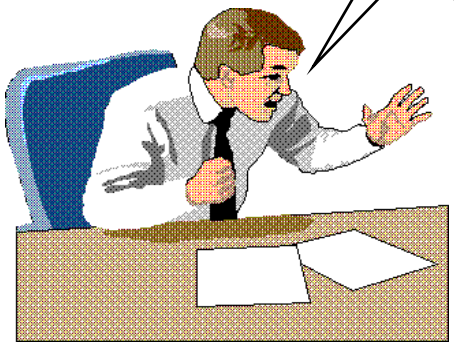
GC ESTD Training

Agilent Technologies

您有一个问题需要解决！

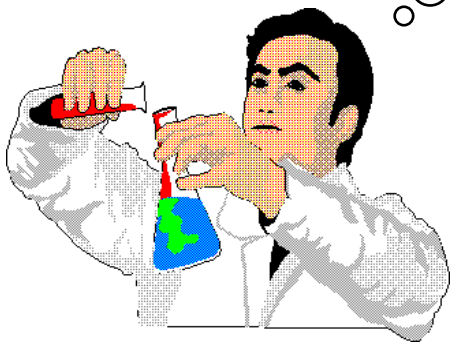




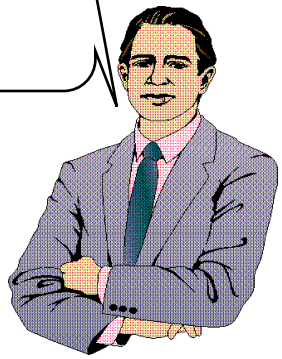


我需要尽快将我们产品中的烷烃做定量分析。

我将需要分离技术。



我来解决！



已知：需要分析的样品中含有C_{11}、C_{14}以及C_{16}，根据以往的经验其浓度范围大约在200ug/mL。

首先根据定量分析的要求找到/准备好待测组分的标样；

- 建立一个分离的方法，摸一下分离条件，确认出峰的时间，即保留时间定性的过程；
- 设计标样，制作80、160、320ug/mL的工作曲线，尽可能让未知样品落在标样的浓度范围内，一般采用倒推的方式设计标准系列，溶剂20.00mL，其中6.4mg/mL即为标准储备液的大体浓度，160uL即为标准的取样量；

$$\frac{320ug/mL \times 20mL}{1mL} = 6400ug/mL = 6.4mg/mL \qquad \frac{6.4mg/mL \times 20mL}{0.8mg/uL} = 160uL$$

- 准备4个22mL 的样品瓶、一支20.00mL的移液管、一只200uL的加样枪、一支200-1000uL可调式加样枪、正庚烷作溶剂、C_{11}、C_{14}、C_{16}标样；
- 配制标准储备液，制备标准系列，一般要求配制5个浓度级别；
- 采集标样的数据，每个浓度级别进3针平行样；
- 数据分析，建立校正表；
- 分析未知样品，出检测报告。

ESTD 工作曲线数据

- 配制标准溶液
  - 准确移取正庚烷20.00mL，称重m0=13.7770g
  - 准确移取C11 200μL，称重m1=13.9110g
  - 准确移取C14 200μL，称重m2=13.9110g
  - 准确移取C16 200μL，称重m3=13.9110g
  - 计算标准储备液中各组分的含量C11=6.50mg/mL，C14=7.46mg/mL，C16=7.34mg/mL
- 配制标准应用液
  - 准确移取0.20、0.50、1.00mL上述标准储备液与20.00mL正庚烷中。

计算各组分的含量，单位ug/mL

Level	C_{11}	C_{14}	C_{16}
1	64.4	73.9	72.7
2	158.7	182.0	179.1
3	309.8	355.3	349.7

- ESTD 工作曲线数据

  - 配制标准溶液
    - 准确移取正庚烷20.00mL，称重m0=13.7770g
    - 准确移取C11 200μL，称重m1=13.9110g
    - 准确移取C14 200μL，称重m2=13.9110g
    - 准确移取C16 200μL，称重m3=13.9110g
    - 计算标准储备液中各组分的含量C11=6.50mg/mL，C14=7.46mg/mL，C16=7.34mg/mL
  - 配制标准应用液
    - 准确移取0.20、0.50、1.00mL上述标准储备液与20.00mL正庚烷中。

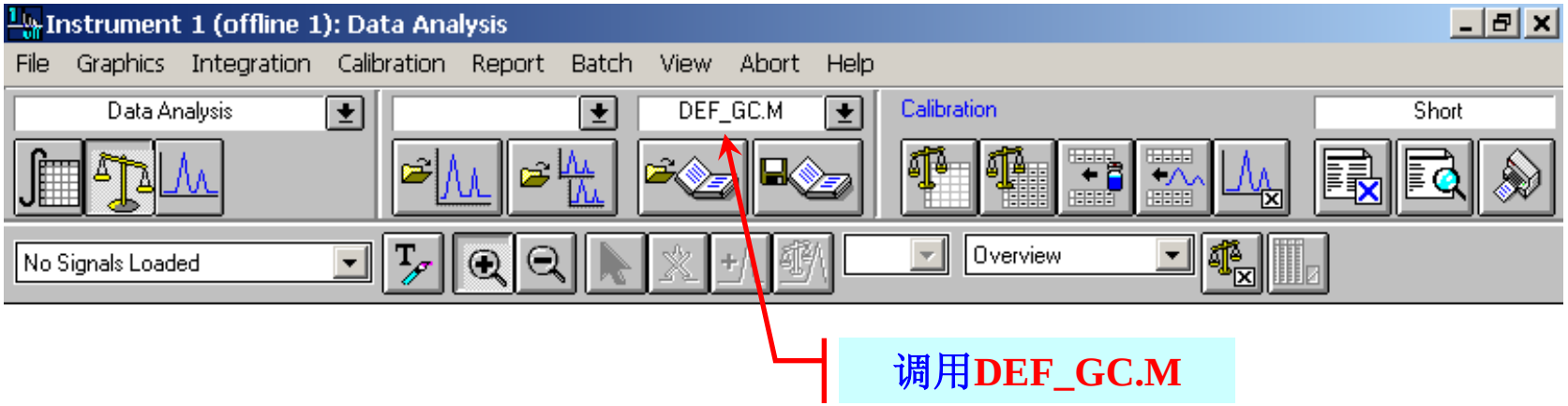
计算各组分的含量，单位μg/mL

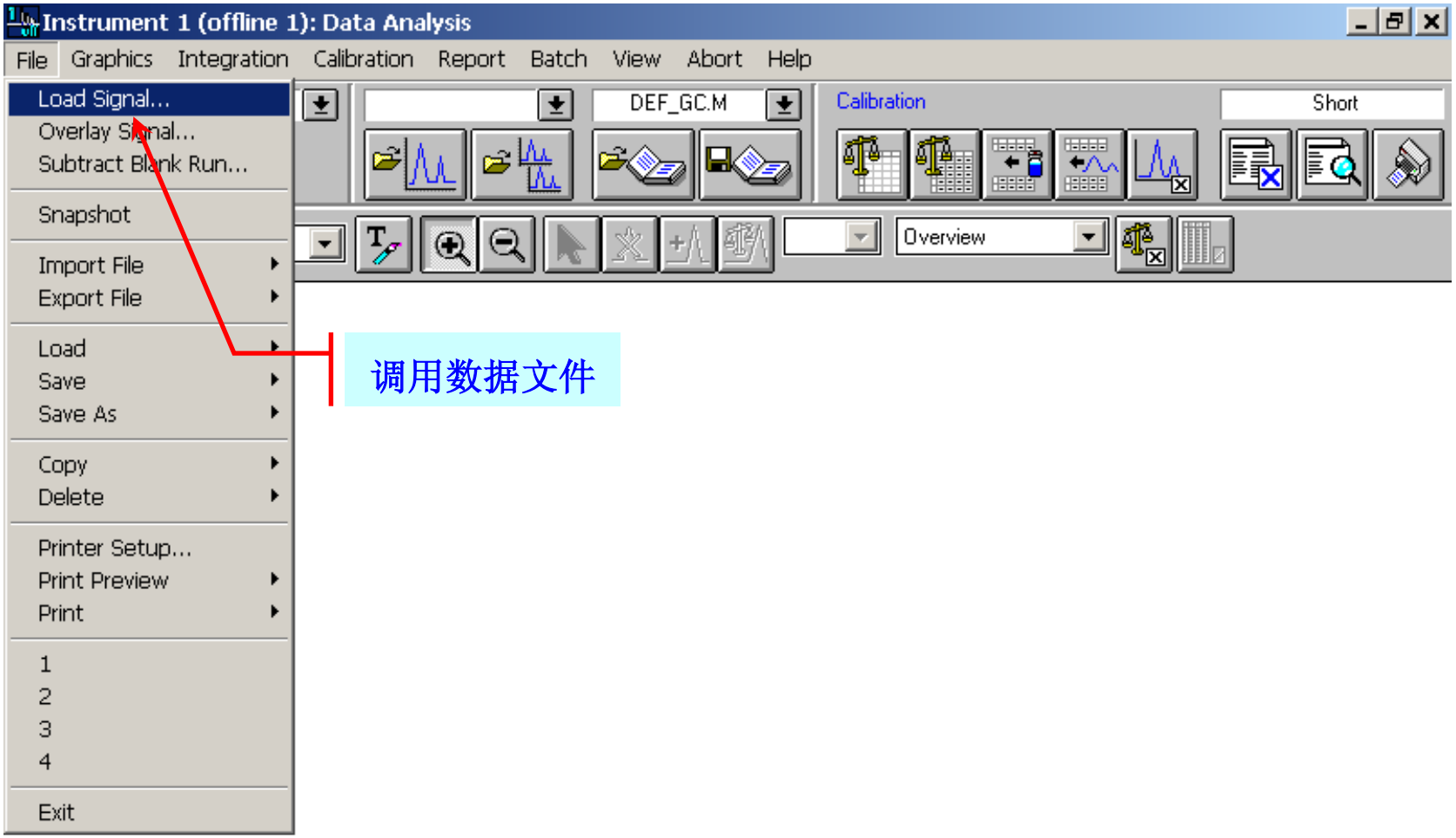
Level	C11	C14	C16
1	64.4	73.9	72.7
2	158.7	182.0	179.1
3	309.8	355.3	349.7

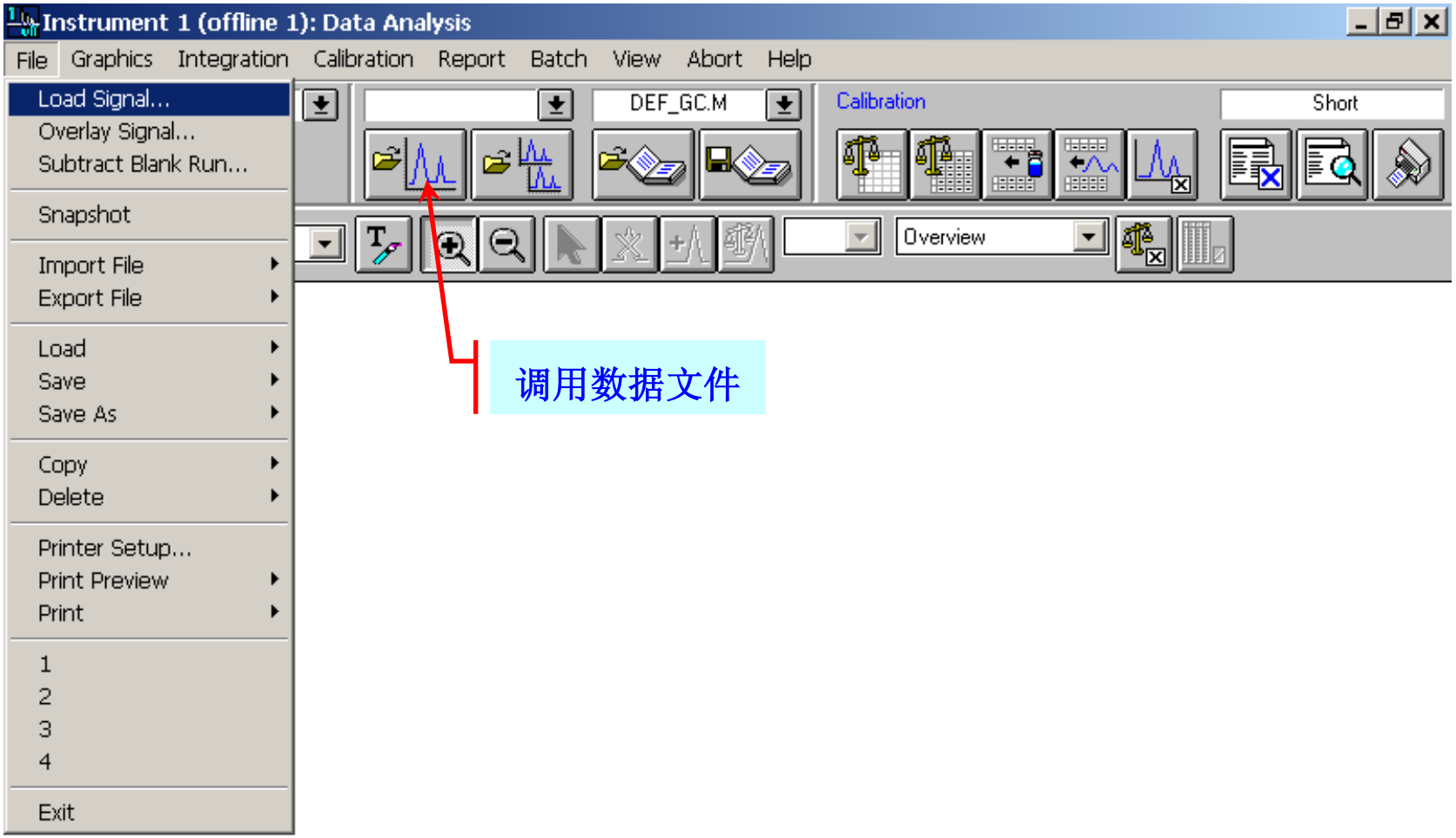
C:\HPCHEM\1\DATA\ESTDGC

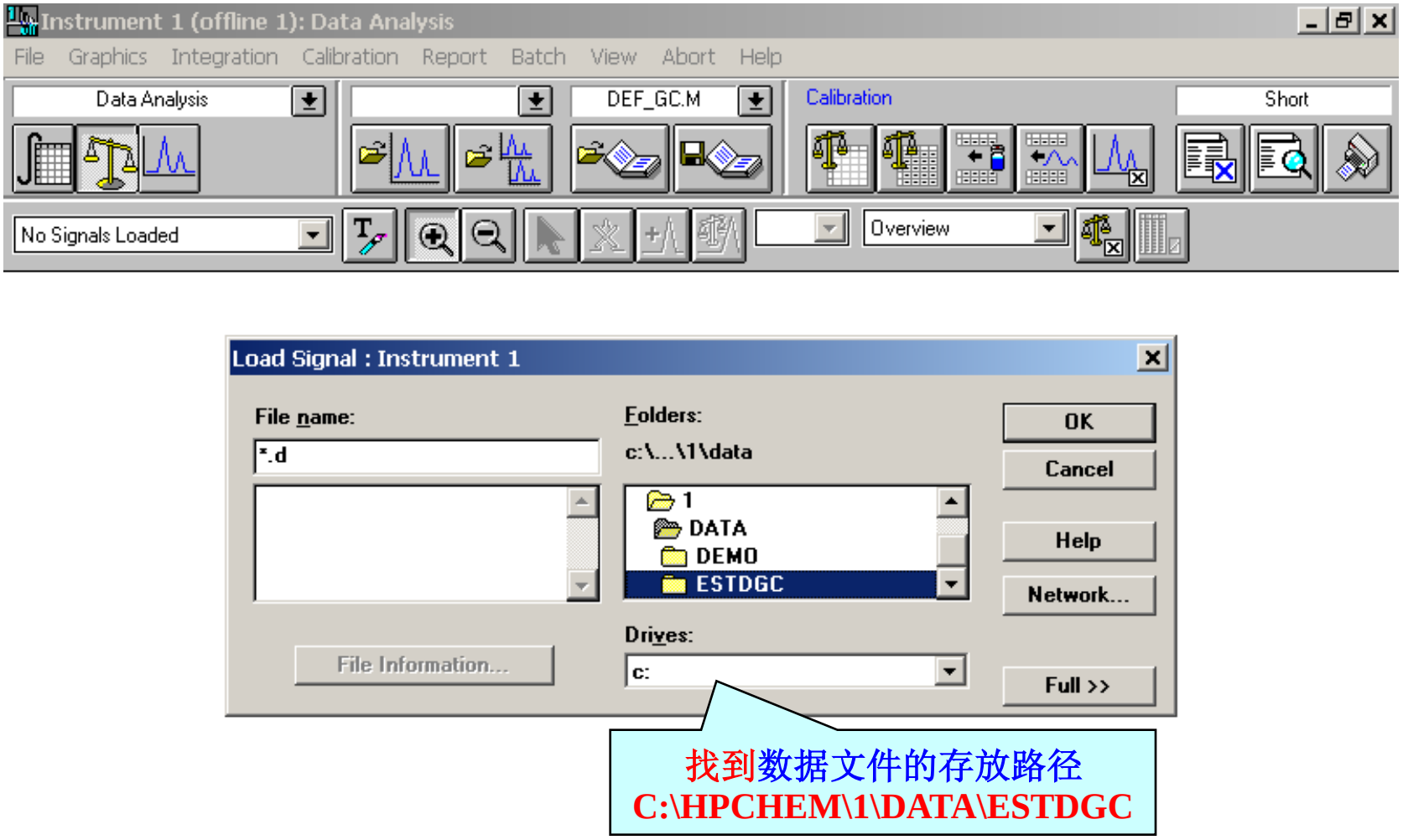
	Level1	Level2	Level3
第一针	001B0101.D	002B0201.D	003B0301.D
第二针	001B0102.D	002B0202.D	003B0302.D
第三针	001B0103.D	002B0203.D	003B0303.D

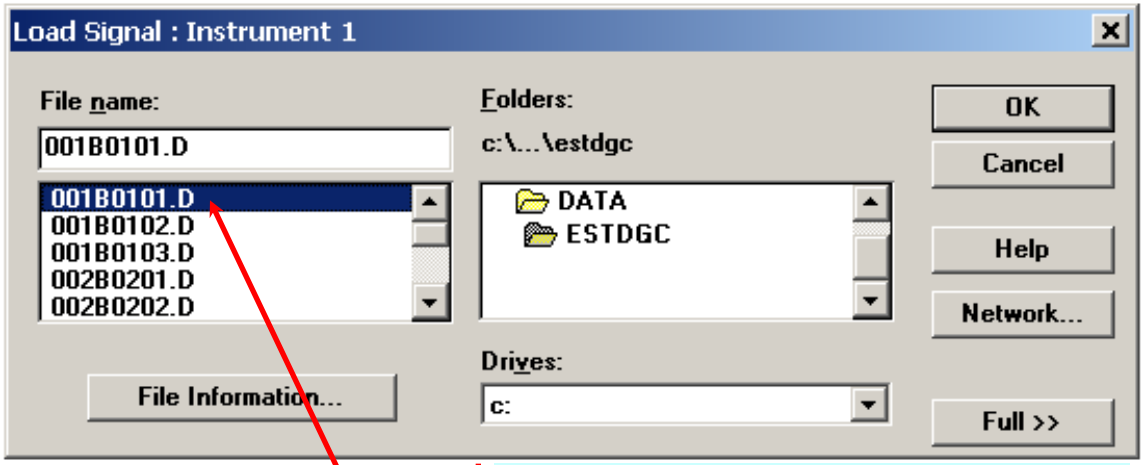
未知样品：sample-1.D；sample-2.D；sample-3.D


Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
DEF_GC.M
Calibration
Short
No Signals Loaded
Overview
调用DEF_GC.M
[F1=Help] [F5=StartRun] [F6=StartSeqRun] [F8=Stop] [F11=NextWindow]


Instrument 1 (offline 1): Data Analysis
File
Graphics
Integration
Calibration
Report
Batch
View
Abort
Help
Load Signal...
Overlay Signal...
Subtract Blank Run...
Snapshot
Import File
Export File
Load
Save
Save As
Copy
Delete
Printer Setup...
Print Preview
Print
1
2
3
4
Exit
DEF_GC.M
Calibration
Short
Overview
调用数据文件
[F1=Help] [F5=StartRun] [F6=StartSeqRun] [F8=Stop] [F11=NextWindow]
Load Signal(s) and Spectra of a Data File


Instrument 1 (offline 1): Data Analysis
File
Graphics
Integration
Calibration
Report
Batch
View
Abort
Help
Load Signal...
Overlay Signal...
Subtract Blank Run...
Snapshot
Import File
Export File
Load
Save
Save As
Copy
Delete
Printer Setup...
Print Preview
Print
1
2
3
4
Exit
DEF_GC.M
Calibration
Short
Overview
调用数据文件
[F1=Help] [F5=StartRun] [F6=StartSeqRun] [F8=Stop] [F11=NextWindow]
Load Signal(s) and Spectra of a Data File

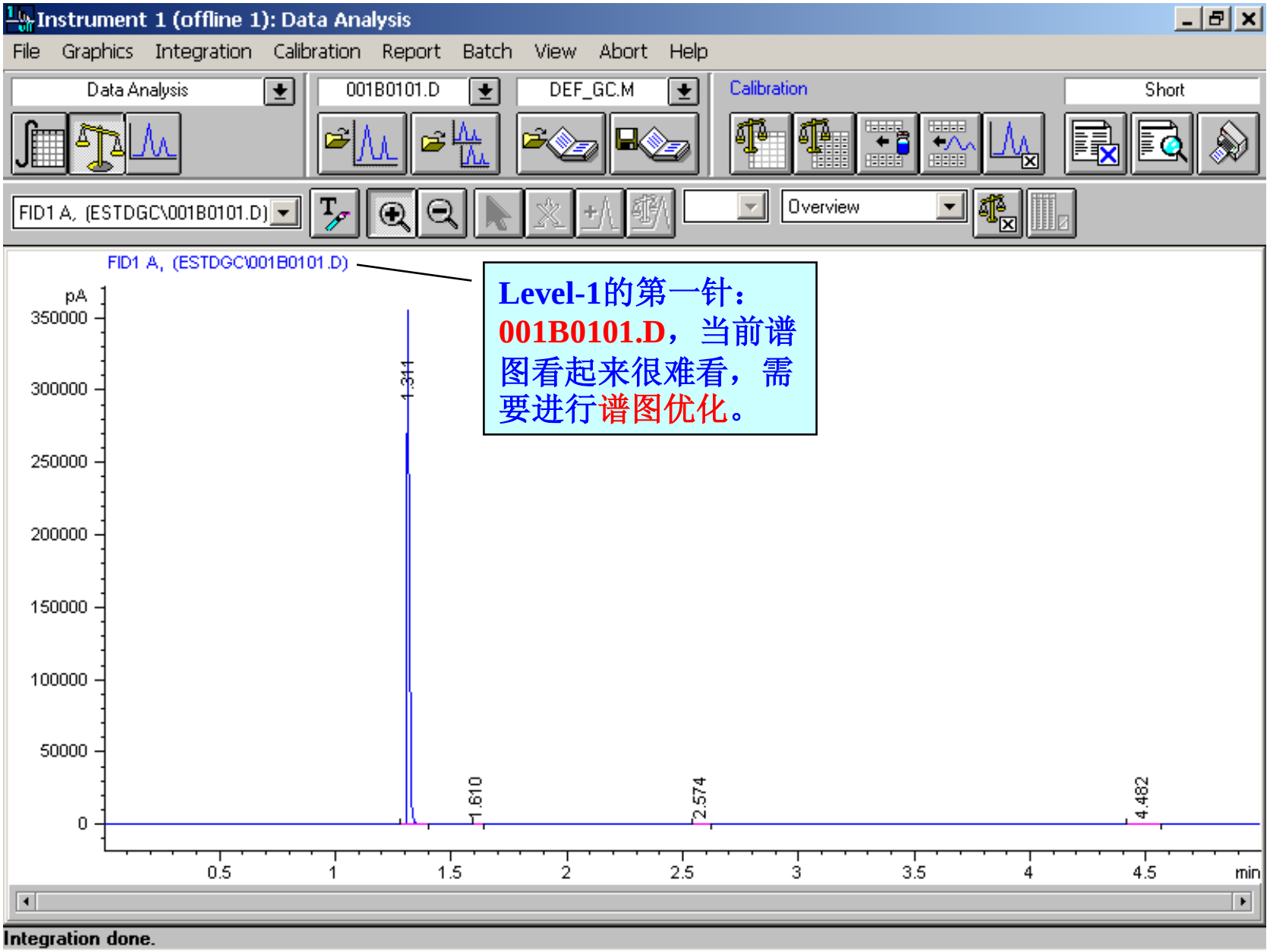

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
DEF_GC.M
Calibration
Short
No Signals Loaded
Overview
Load Signal : Instrument 1
File name:
*.d
Folders:
c:\...\1\data
1
DATA
DEMO
ESTDGC
OK
Cancel
Help
Network...
Drives:
c:
File Information...
Full >>
找到数据文件的存放路径
C:\HPCHEM\1\DATA\ESTDGC
[F1=Help] [F5=StartRun] [F6=StartSeqRun] [F8=Stop] [F11=NextWindow]
busy

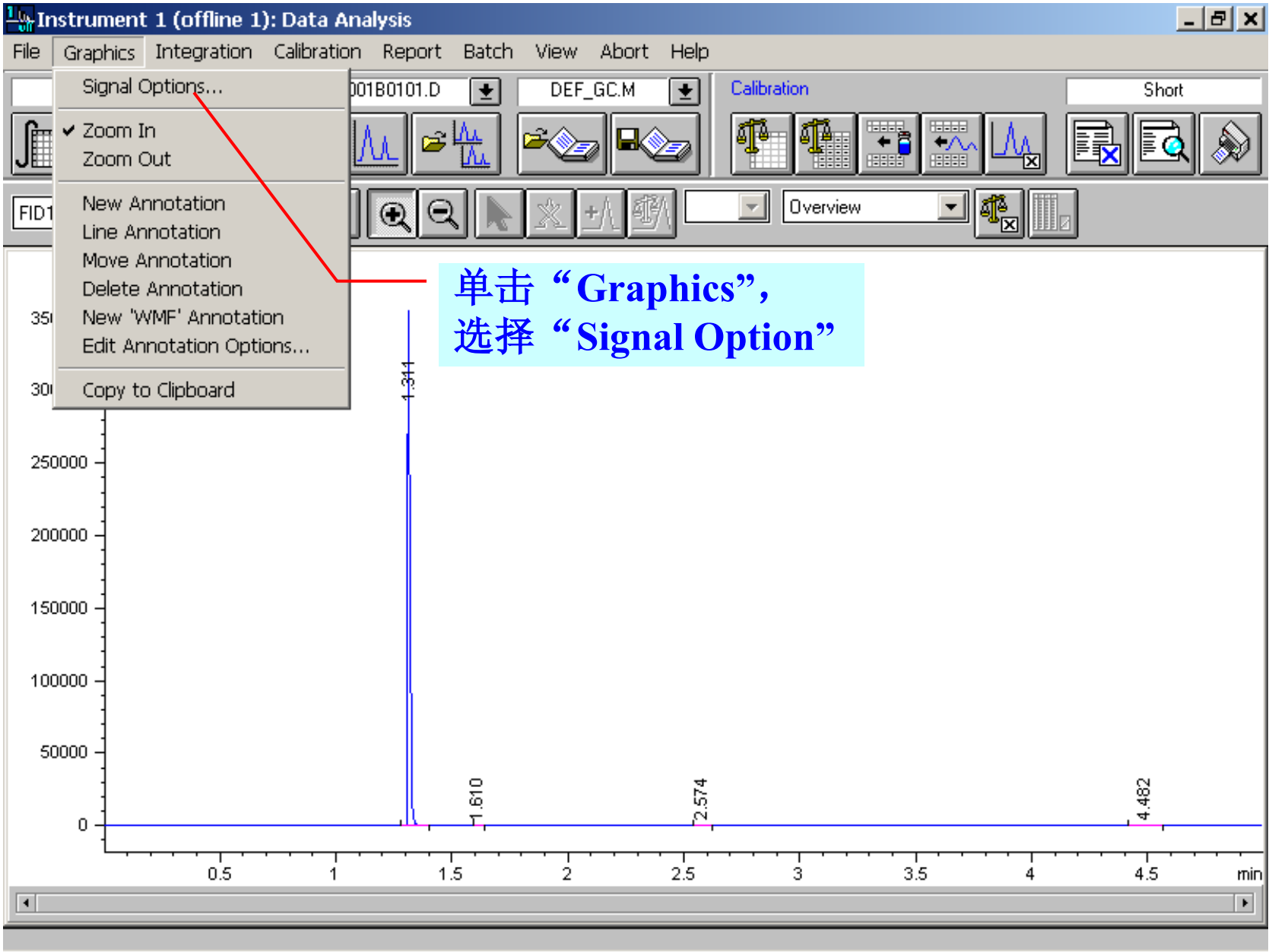


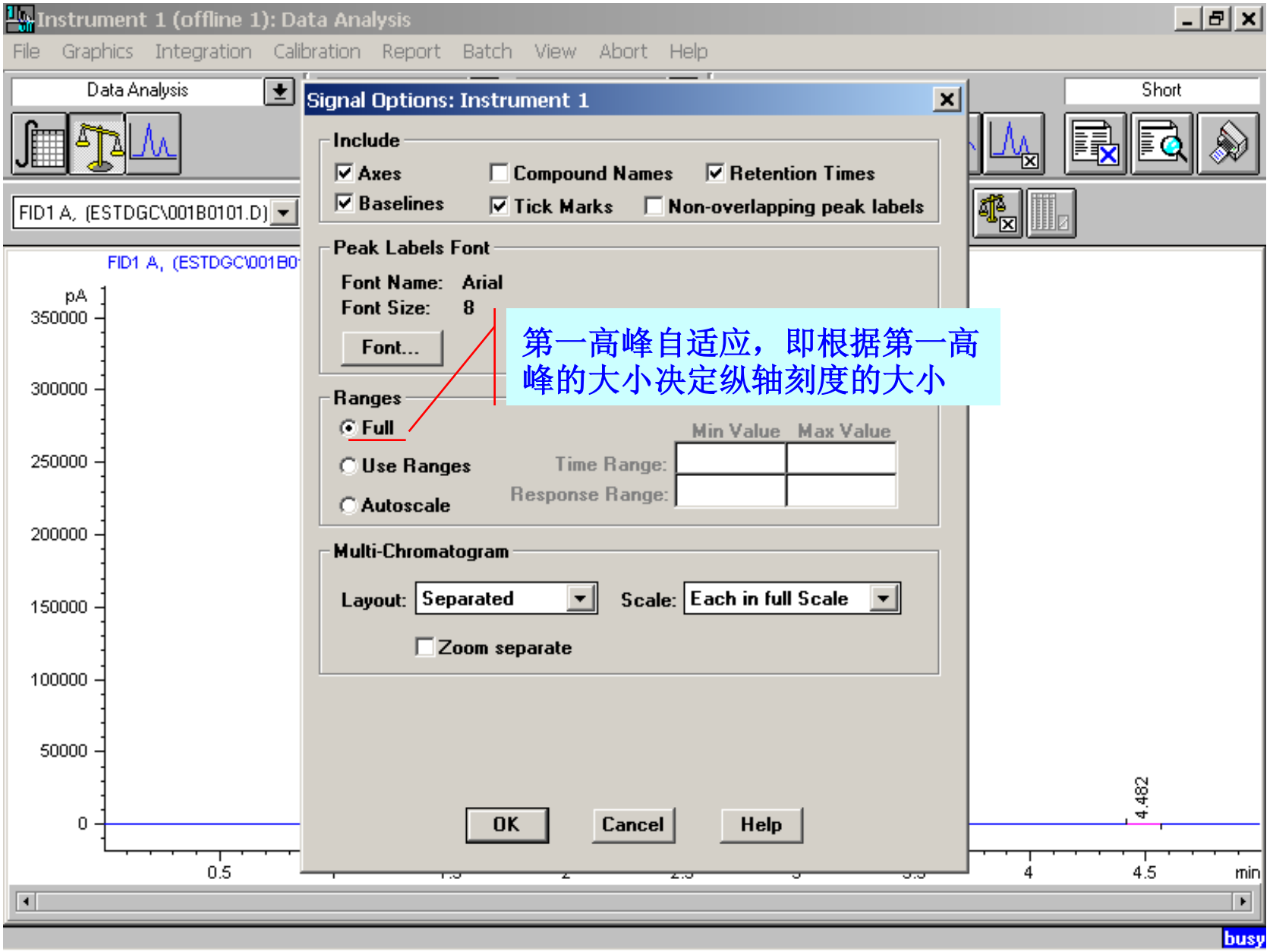
查找，调用“低含量标准”样品的数据文件，当前选中的数据文件是：Level-1 的第一针，单击OK，注意：标准样品数据分析的顺序。

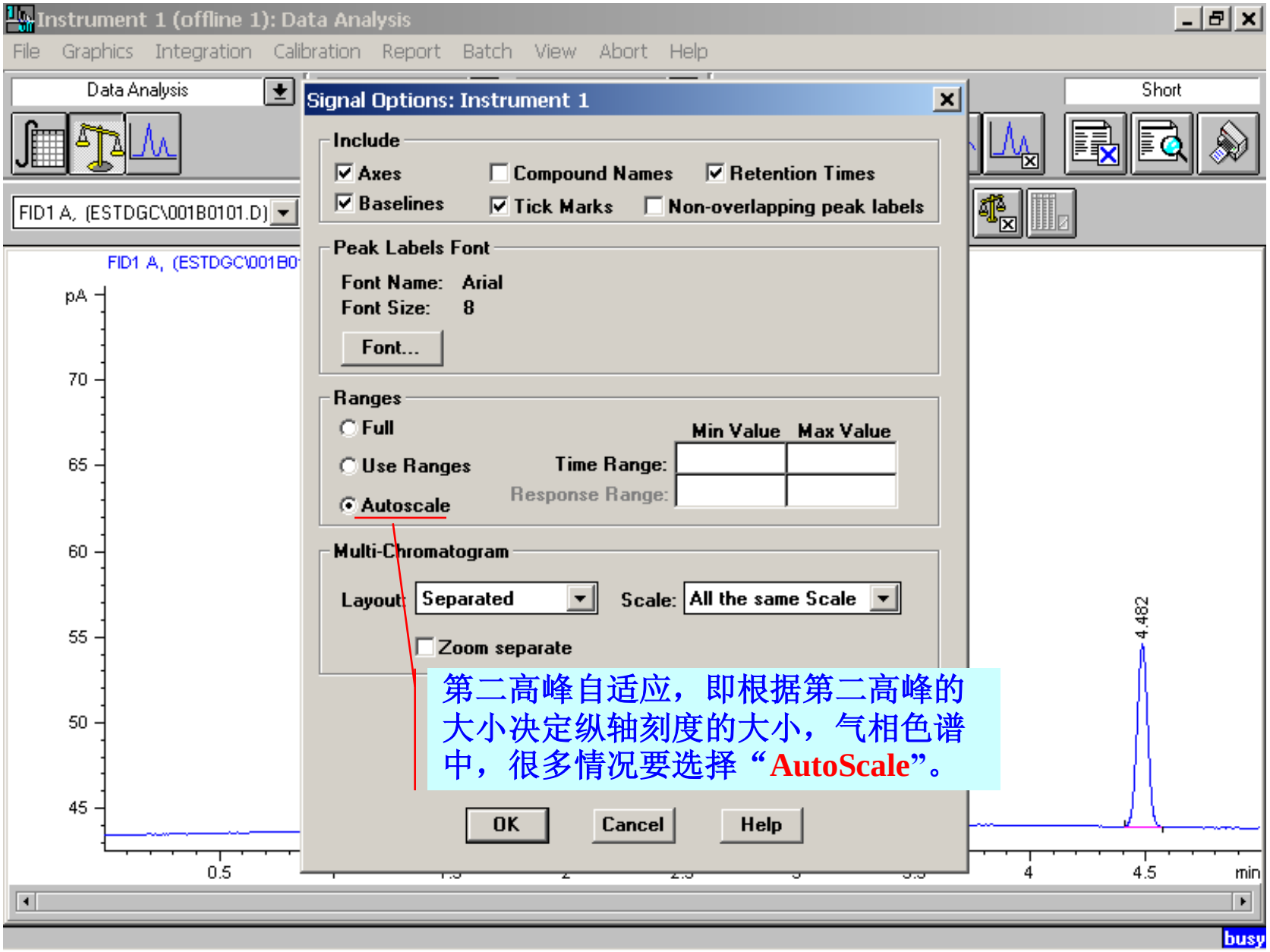
[F1=Help] [F5=StartRun] [F6=StartSeqRun] [F8=Stop] [F11=NextWindow]

busy

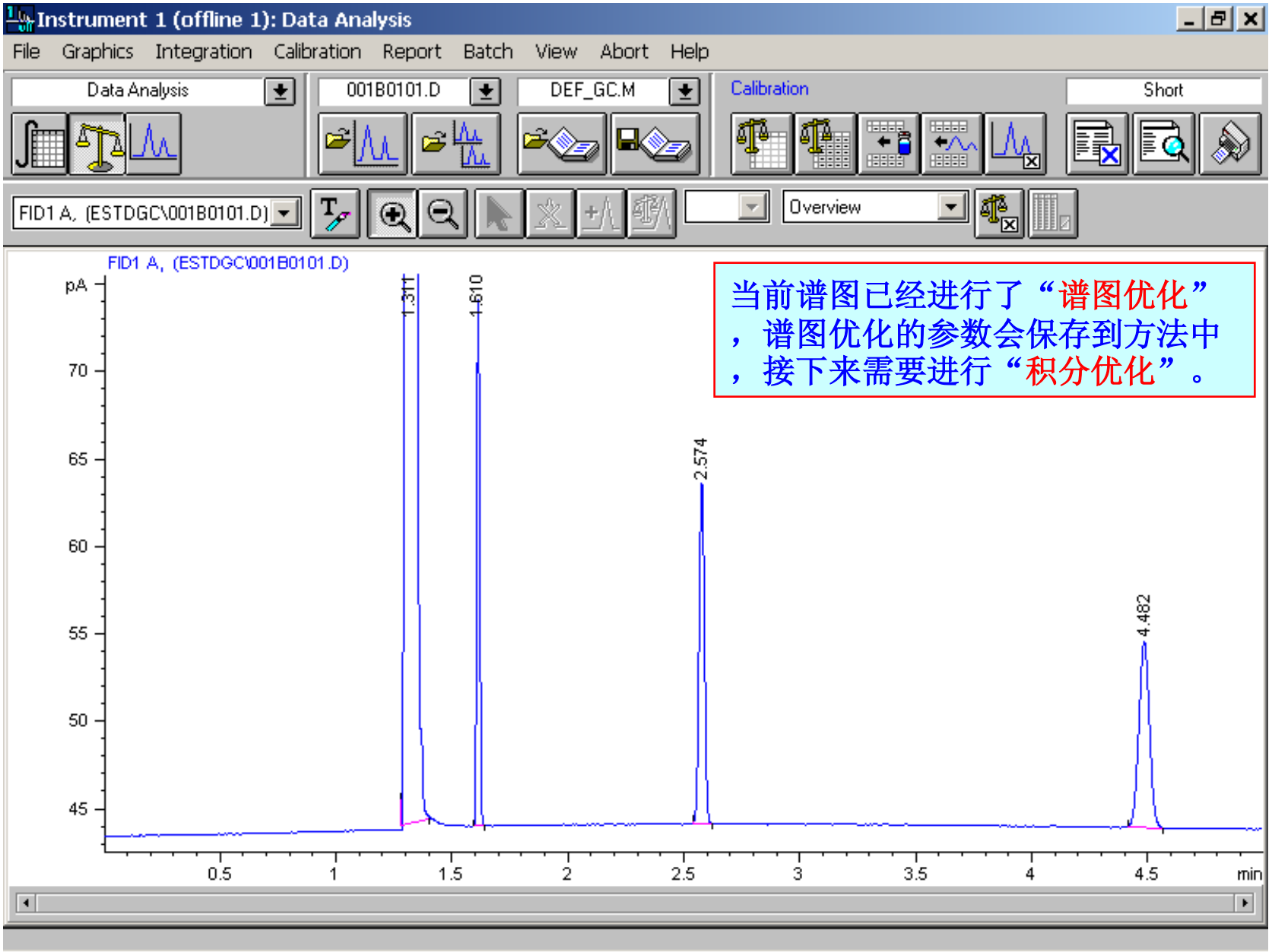

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0101.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\001B0101.D)
Overview
FID1 A, (ESTDGC\001B0101.D)
Level-1的第一针：
001B0101.D，当前谱图看起来很难看，需要进行谱图优化。
pA
350000
300000
250000
200000
150000
100000
50000
0
1.311
1.610
2.574
4.482
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
Integration done.

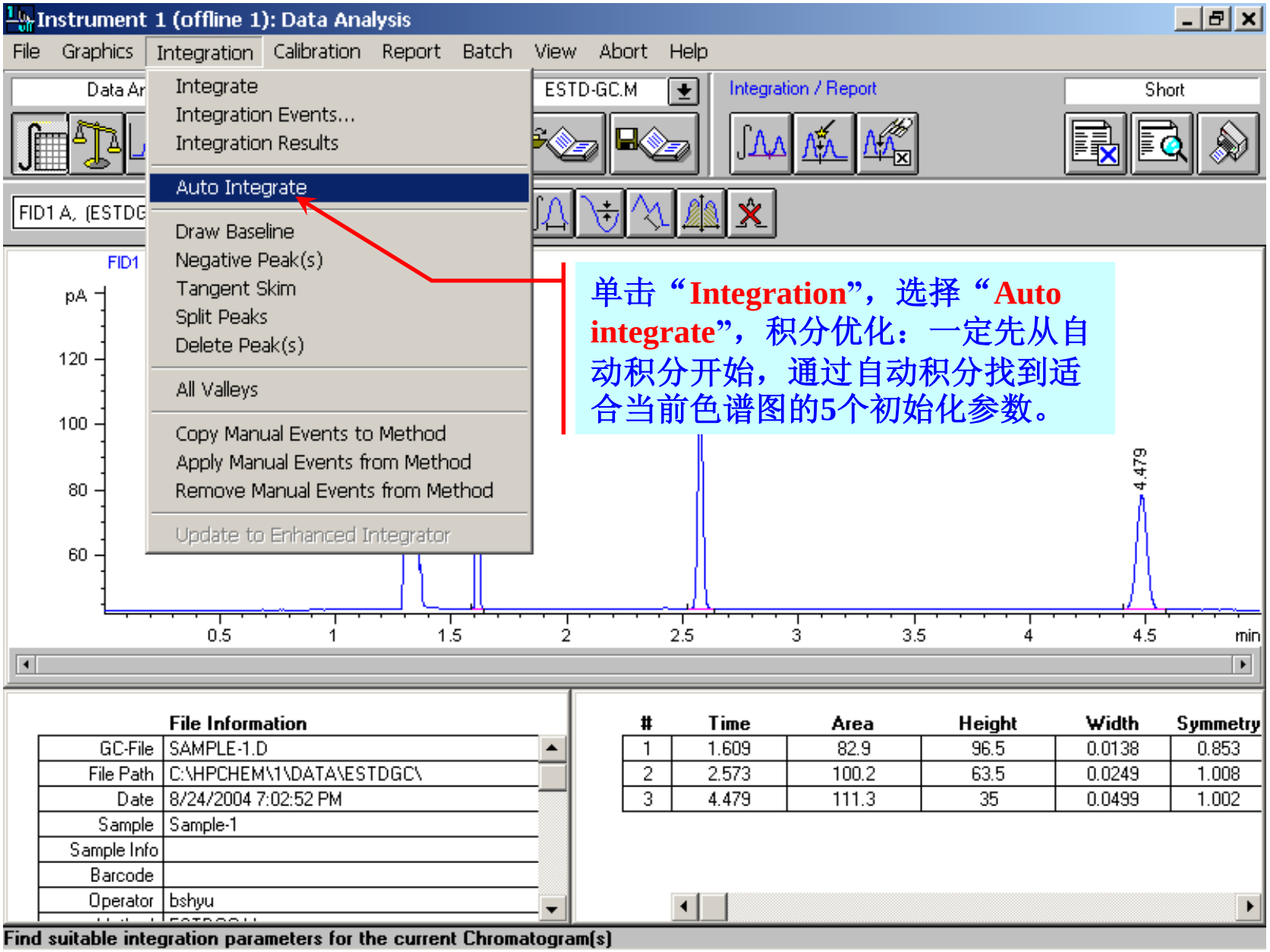

Instrument 1 (offline 1): Data Analysis
File
Graphics
Integration
Calibration
Report
Batch
View
Abort
Help
Signal Options...
Zoom In
Zoom Out
New Annotation
Line Annotation
Move Annotation
Delete Annotation
New 'WMF' Annotation
Edit Annotation Options...
Copy to Clipboard
DEF_GC.M
Calibration
Short
Overview
单击“Graphics”，
选择“Signal Option”
1.311
1.610
2.574
4.482
250000
200000
150000
100000
50000
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min

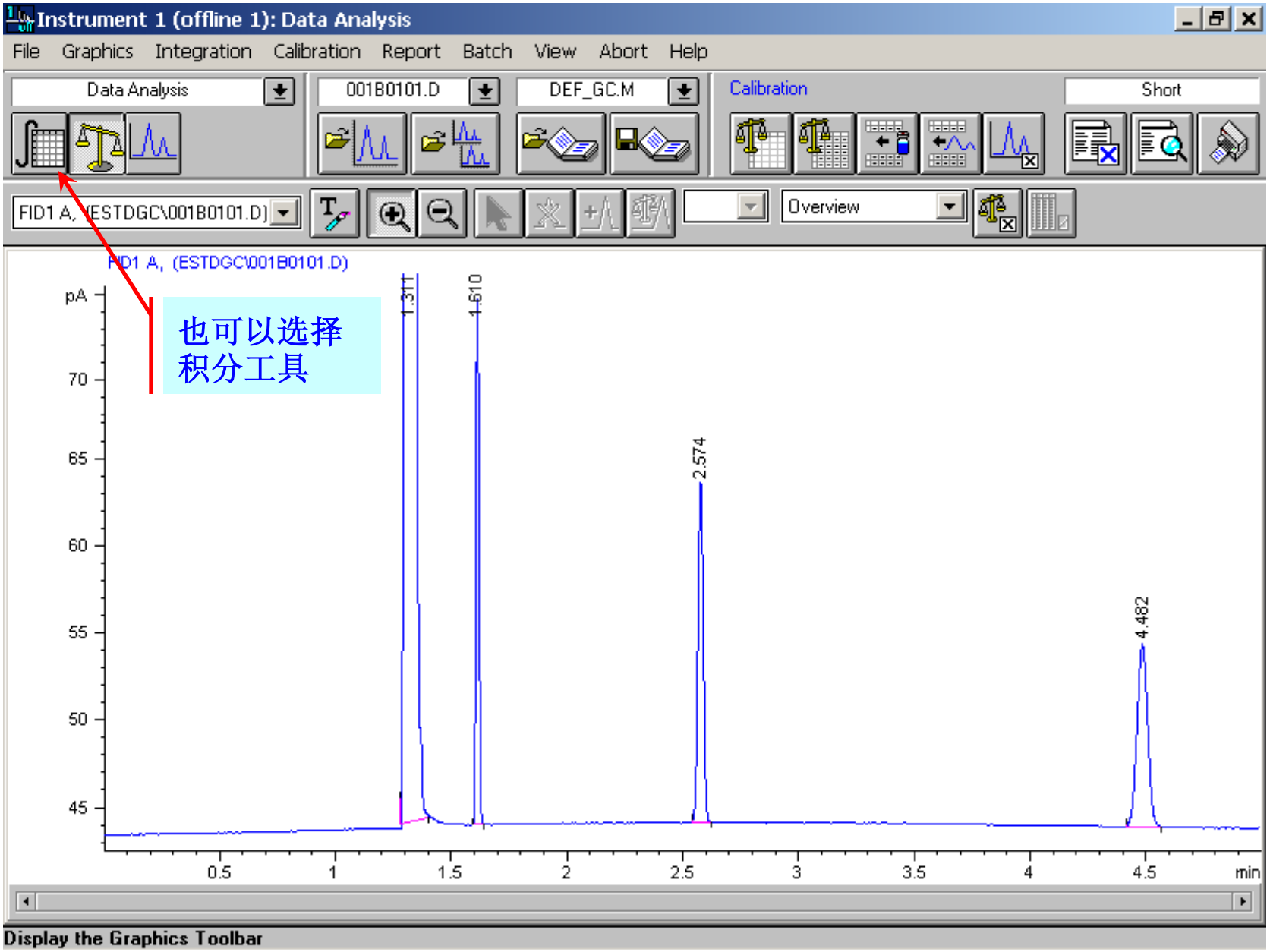

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
Short
FID1 A, (ESTDGC\001B0101.D)
Signal Options: Instrument 1
Include
Axes
Compound Names
Retention Times
Baselines
Tick Marks
Non-overlapping peak labels
Peak Labels Font
Font Name: Arial
Font Size: 8
Font...
第一高峰自适应，即根据第一高峰的大小决定纵轴刻度的大小
Ranges
Full
Use Ranges
Autoscale
Min Value
Max Value
Time Range:
Response Range:
Multi-Chromatogram
Layout: Separated
Scale: Each in full Scale
Zoom separate
OK
Cancel
Help
pA
350000
300000
250000
200000
150000
100000
50000
0
0.5
4
4.5
min
4.482
busy

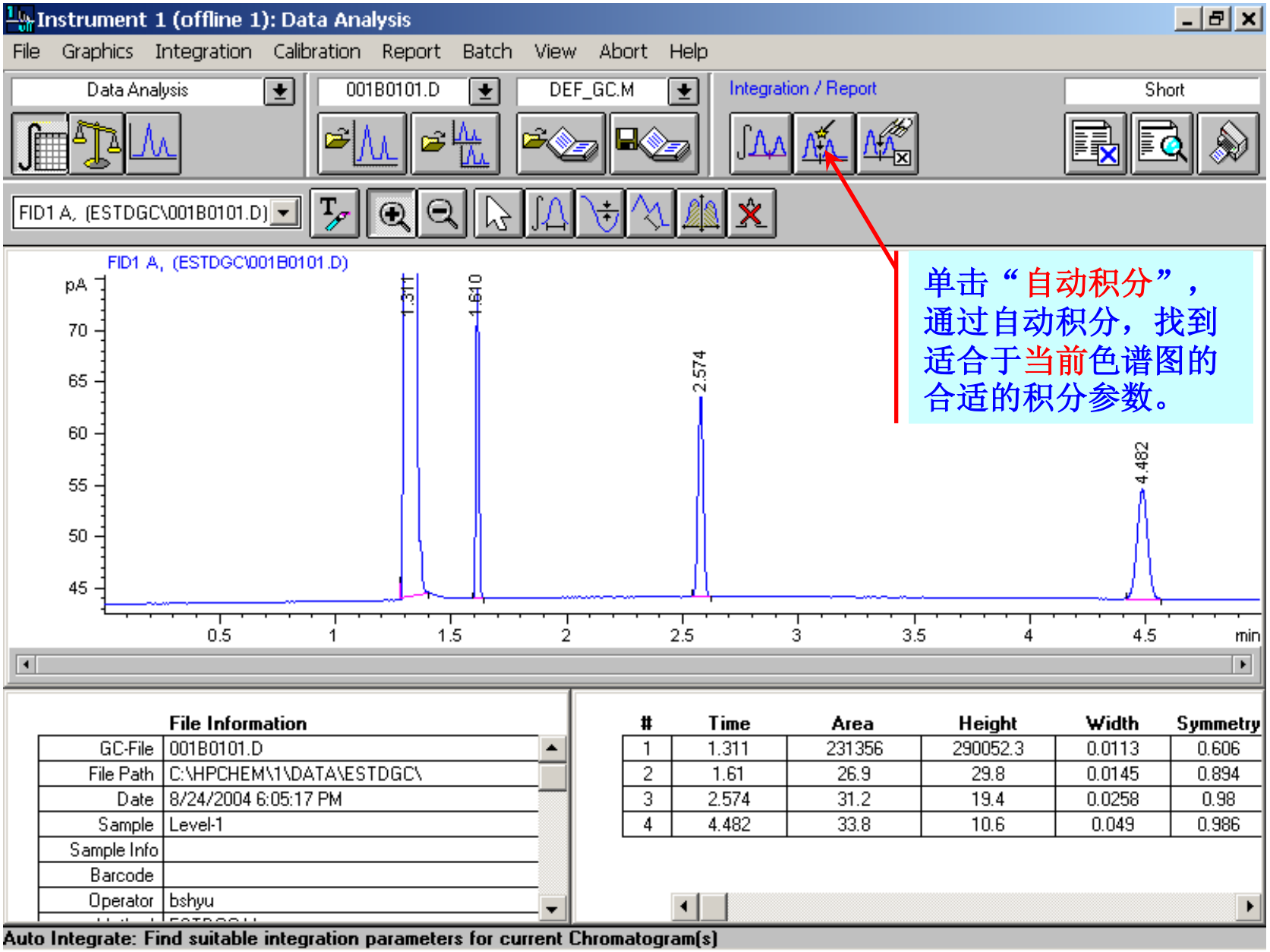


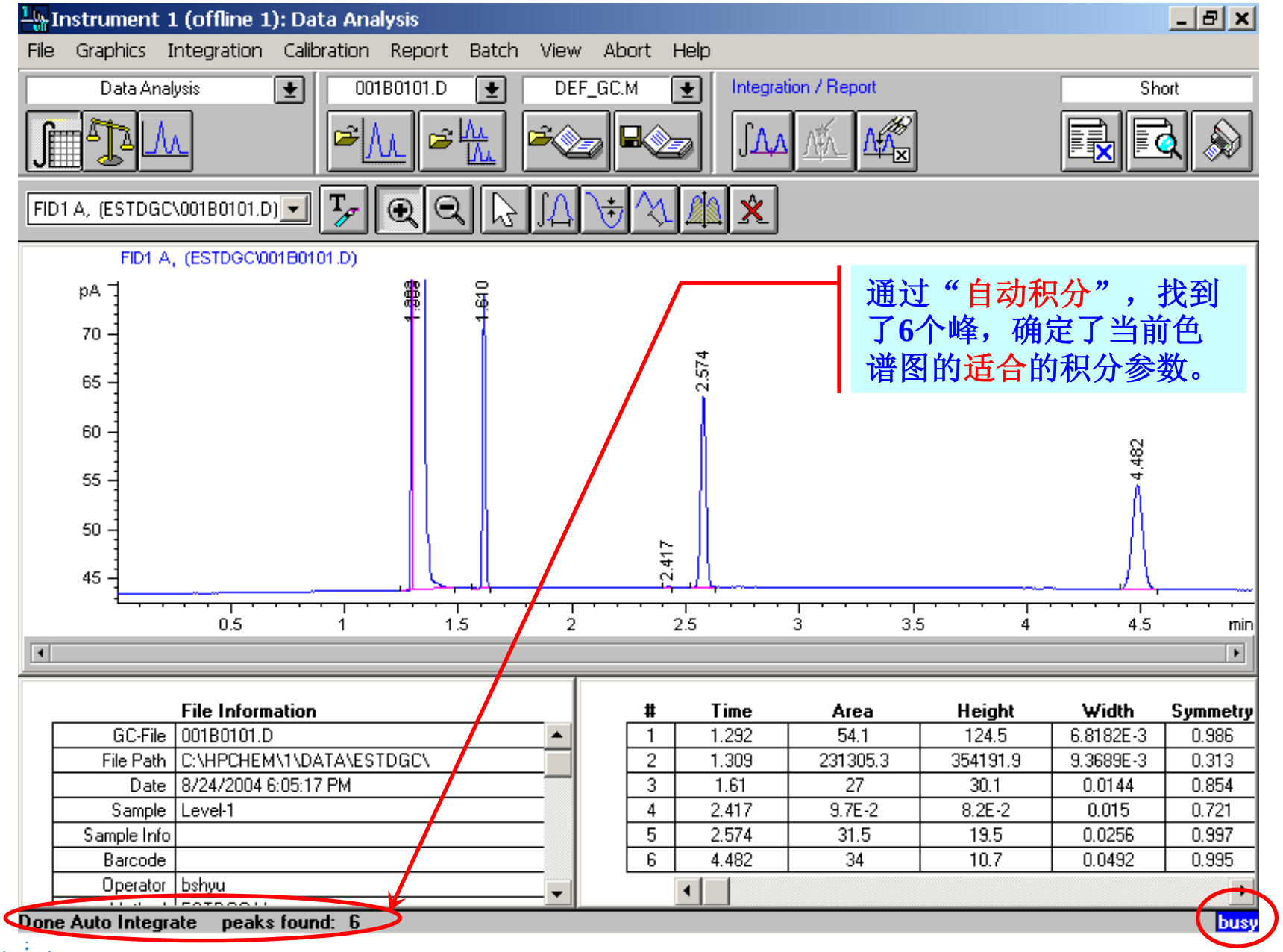
第二高峰自适应，即根据第二高峰的大小决定纵轴刻度的大小，气相色谱中，很多情况要选择“**AutoScale**”。

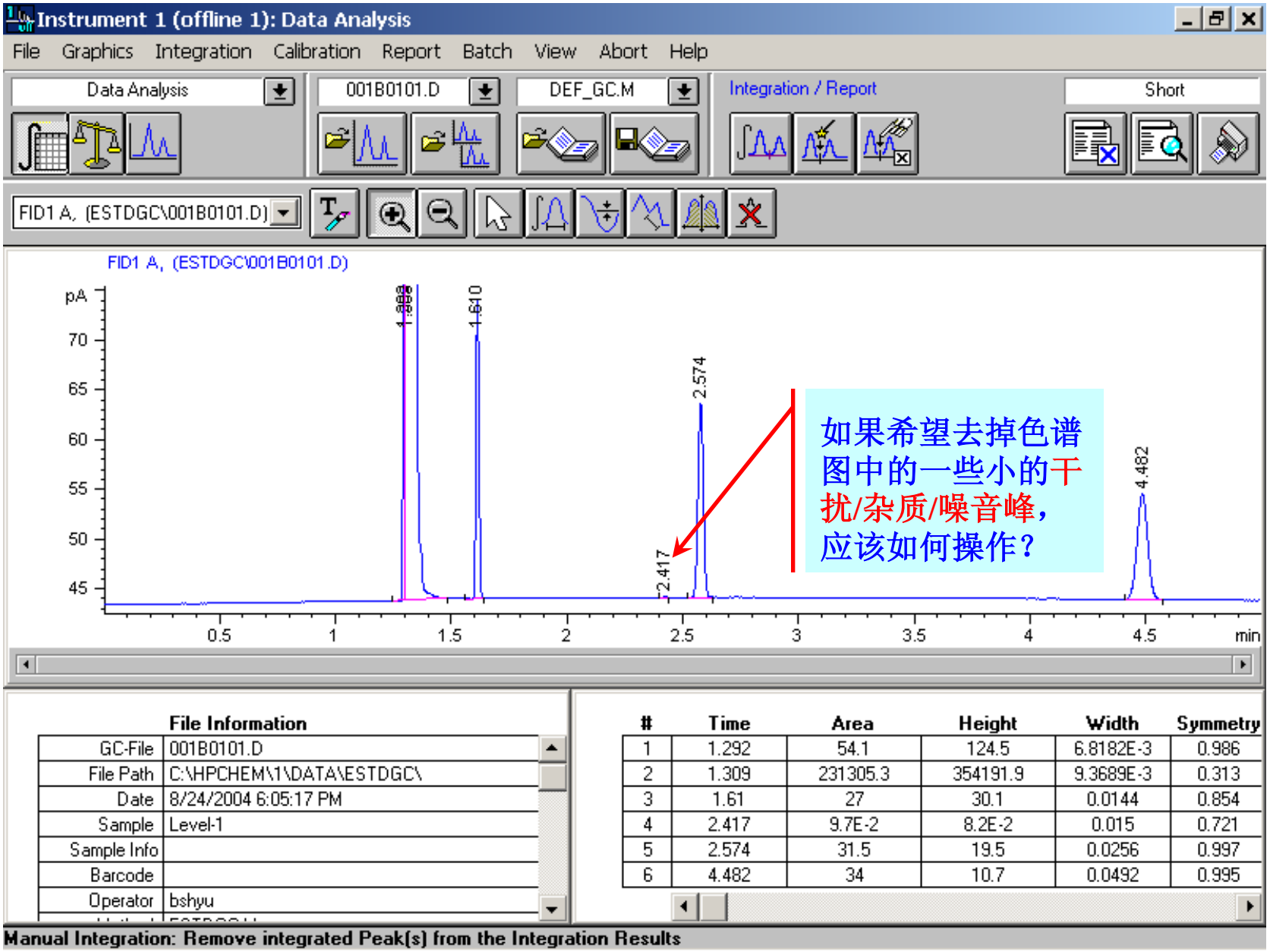

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0101.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\001B0101.D)
Overview
FID1 A, (ESTDGC\001B0101.D)
pA
70
65
60
55
50
45
1.311
1.610
2.574
4.482
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
当前谱图已经进行了“谱图优化”，谱图优化的参数会保存到方法中，接下来需要进行“积分优化”。

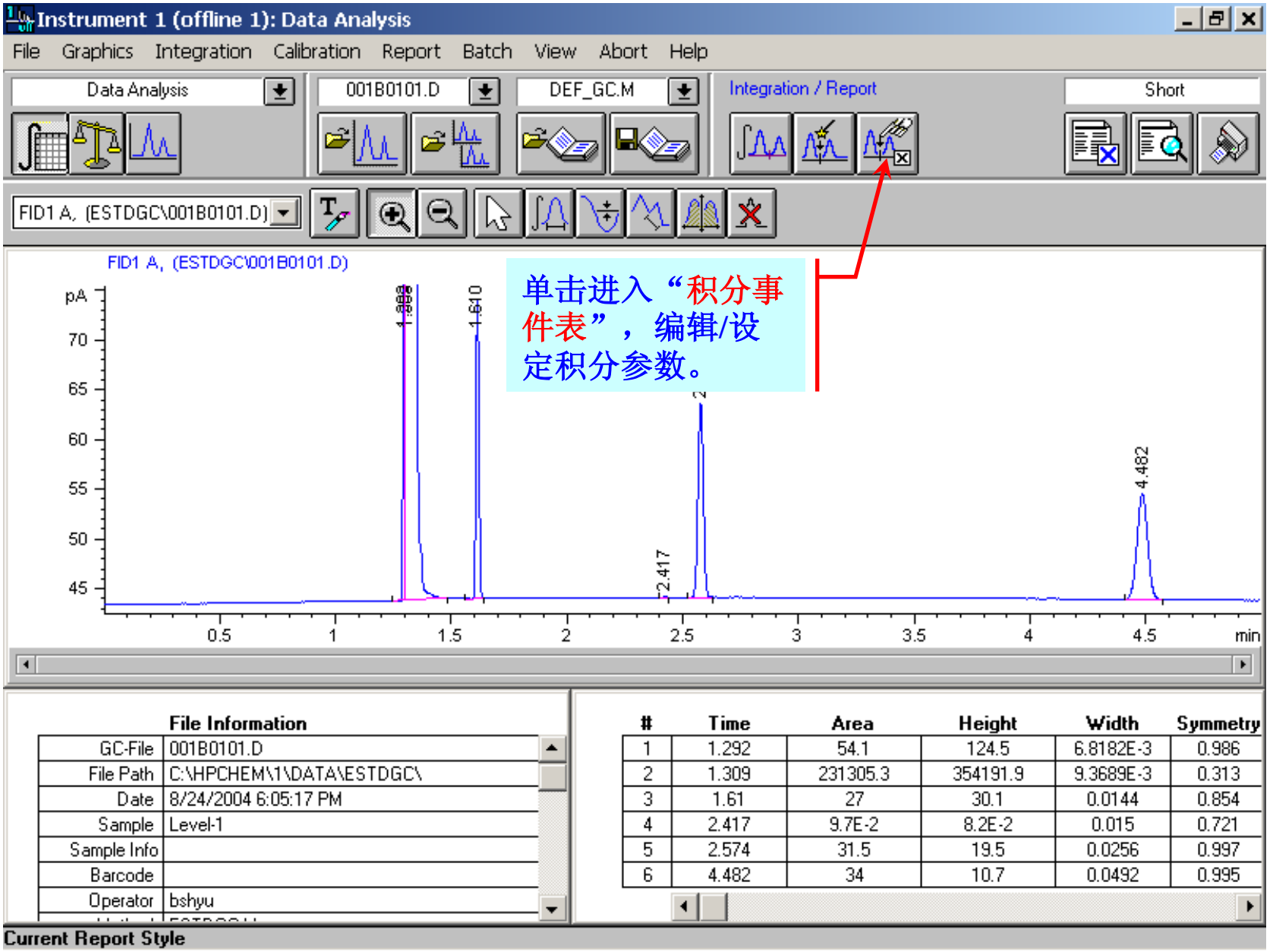

Instrument 1 (offline 1): Data Analysis
File
Graphics
Integration
Calibration
Report
Batch
View
Abort
Help
Integrate
Integration Events...
Integration Results
Auto Integrate
Draw Baseline
Negative Peak(s)
Tangent Skim
Split Peaks
Delete Peak(s)
All Valleys
Copy Manual Events to Method
Apply Manual Events from Method
Remove Manual Events from Method
Update to Enhanced Integrator
ESTD-GC.M
Integration / Report
Short
FID1 A, (ESTDG
FID1
pA
120
100
80
60
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
4.479
单击“Integration”，选择“Auto integrate”，积分优化：一定先从自动积分开始，通过自动积分找到适合当前色谱图的5个初始化参数。
File Information
GC-File SAMPLE-1.D
File Path C:\HPCHEM\1\DATA\ESTDGC\
Date 8/24/2004 7:02:52 PM
Sample Sample-1
Sample Info
Barcode
Operator bshyu
Time Area Height Width Symmetry
1 1.609 82.9 96.5 0.0138 0.853
2 2.573 100.2 63.5 0.0249 1.008
3 4.479 111.3 35 0.0499 1.002
Find suitable integration parameters for the current Chromatogram(s)

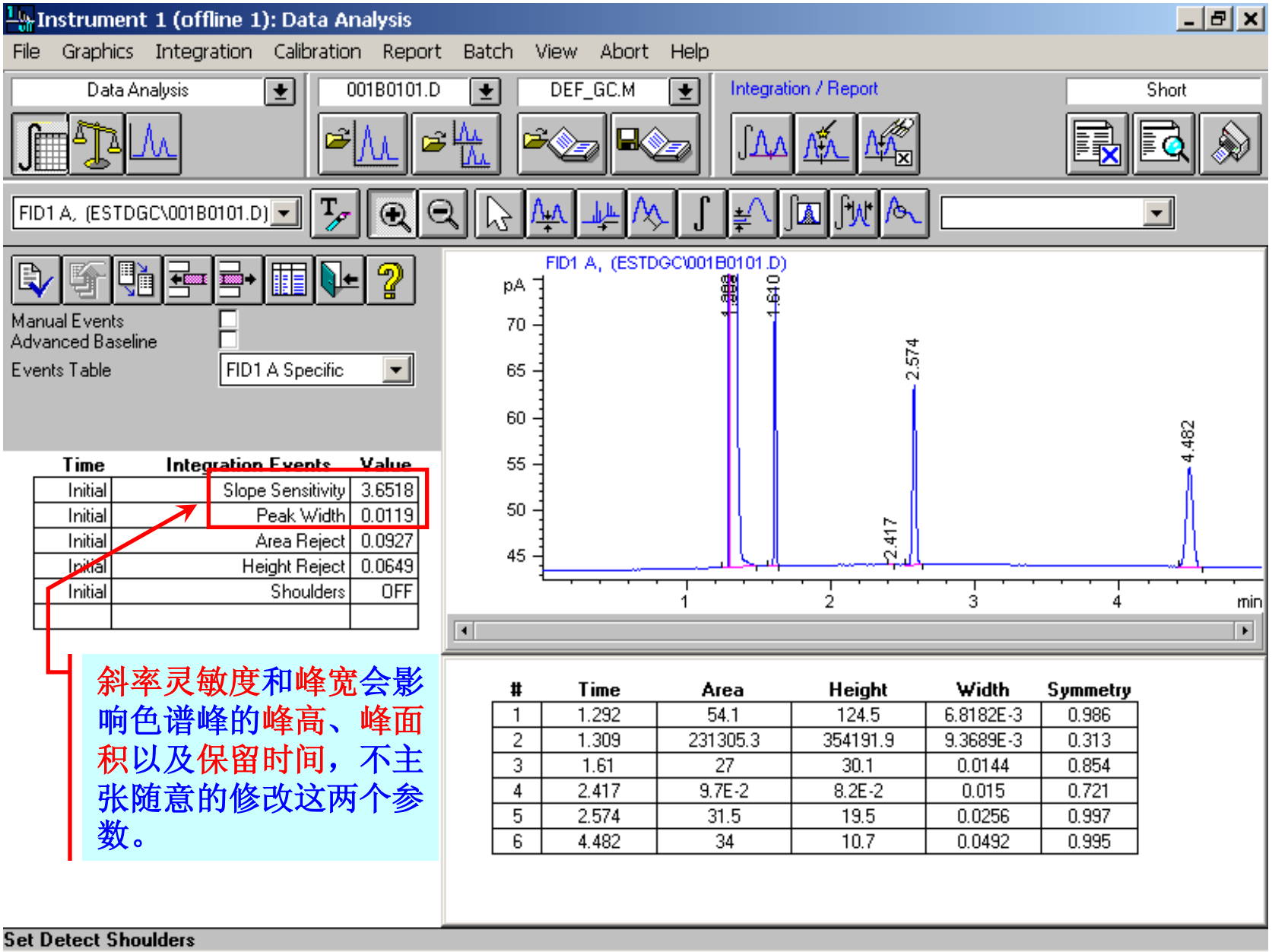

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0101.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\001B0101.D)
Overview
FID1 A, (ESTDGC\001B0101.D)
也可以选择
积分工具
pA
70
65
60
55
50
45
1.311
1.610
2.574
4.482
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
Display the Graphics Toolbar

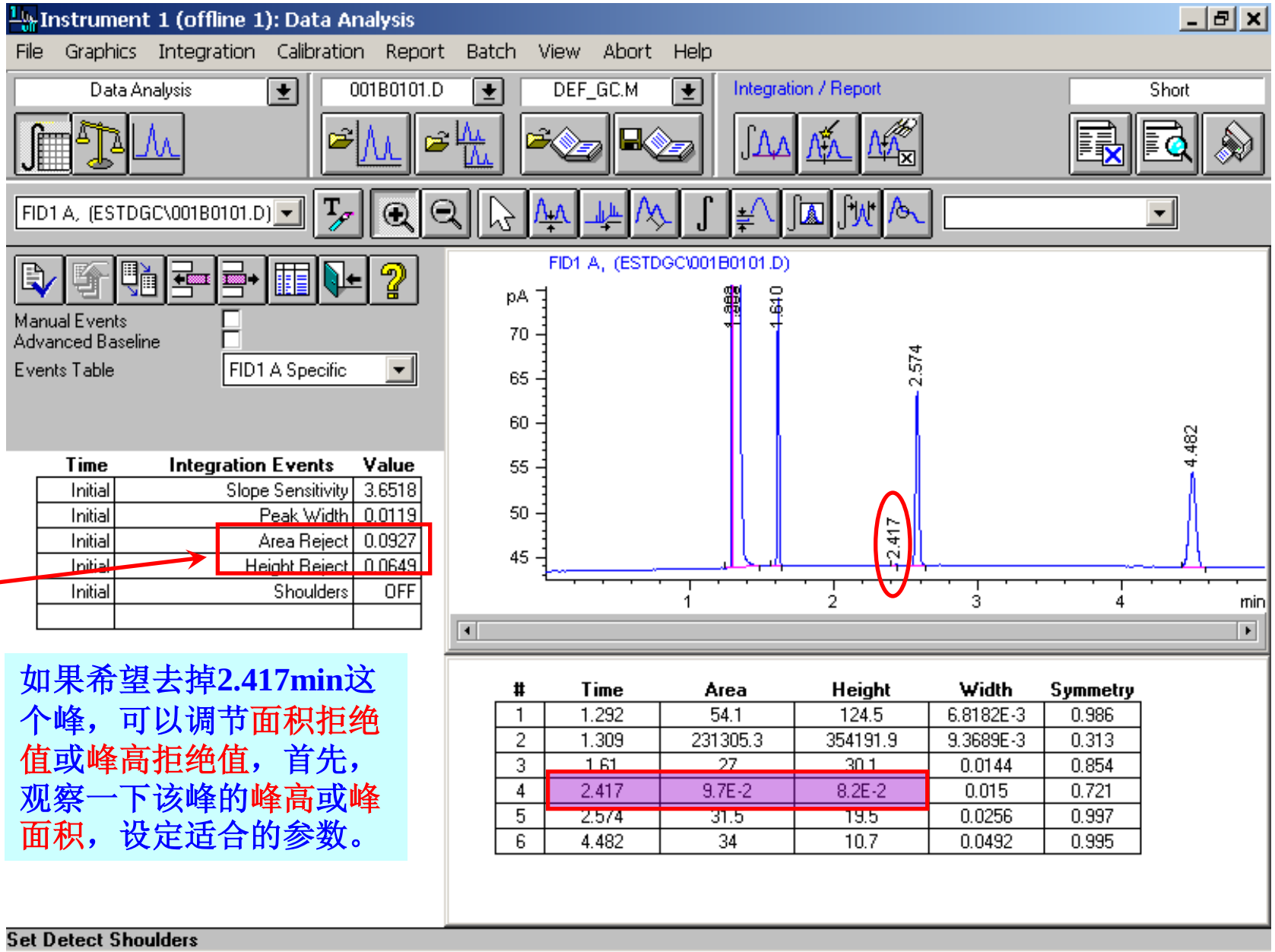

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0101.D
DEF_GC.M
Integration / Report
Short
FID1 A, (ESTDGC\001B0101.D)
FID1 A, (ESTDGC\001B0101.D)
pA
70
65
60
55
50
45
1.311
1.610
2.574
4.482
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
单击“自动积分”，通过自动积分，找到适合于当前色谱图的合适的积分参数。
File Information
GC-File 001B0101.D
File Path C:\HPCHEM\1\DATA\ESTDGC\
Date 8/24/2004 6:05:17 PM
Sample Level-1
Sample Info
Barcode
Operator bshyu
Time Area Height Width Symmetry
1 1.311 231356 290052.3 0.0113 0.606
2 1.61 26.9 29.8 0.0145 0.894
3 2.574 31.2 19.4 0.0258 0.98
4 4.482 33.8 10.6 0.049 0.986
Auto Integrate: Find suitable integration parameters for current Chromatogram(s)


Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0101.D
DEF_GC.M
Integration / Report
Short
FID1 A, (ESTDGC\001B0101.D)
FID1 A, (ESTDGC\001B0101.D)
pA
70
65
60
55
50
45
1.610
2.574
2.417
4.482
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
通过“自动积分”，找到了6个峰，确定了当前色谱图的适合的积分参数。
File Information
GC-File 001B0101.D
File Path C:\HPCHEM\1\DATA\ESTDGC\
Date 8/24/2004 6:05:17 PM
Sample Level-1
Sample Info
Barcode
Operator bshyu
Time Area Height Width Symmetry
1 1.292 54.1 124.5 6.8182E-3 0.986
2 1.309 231305.3 354191.9 9.3689E-3 0.313
3 1.61 27 30.1 0.0144 0.854
4 2.417 9.7E-2 8.2E-2 0.015 0.721
5 2.574 31.5 19.5 0.0256 0.997
6 4.482 34 10.7 0.0492 0.995
Done Auto Integrate peaks found: 6
busy

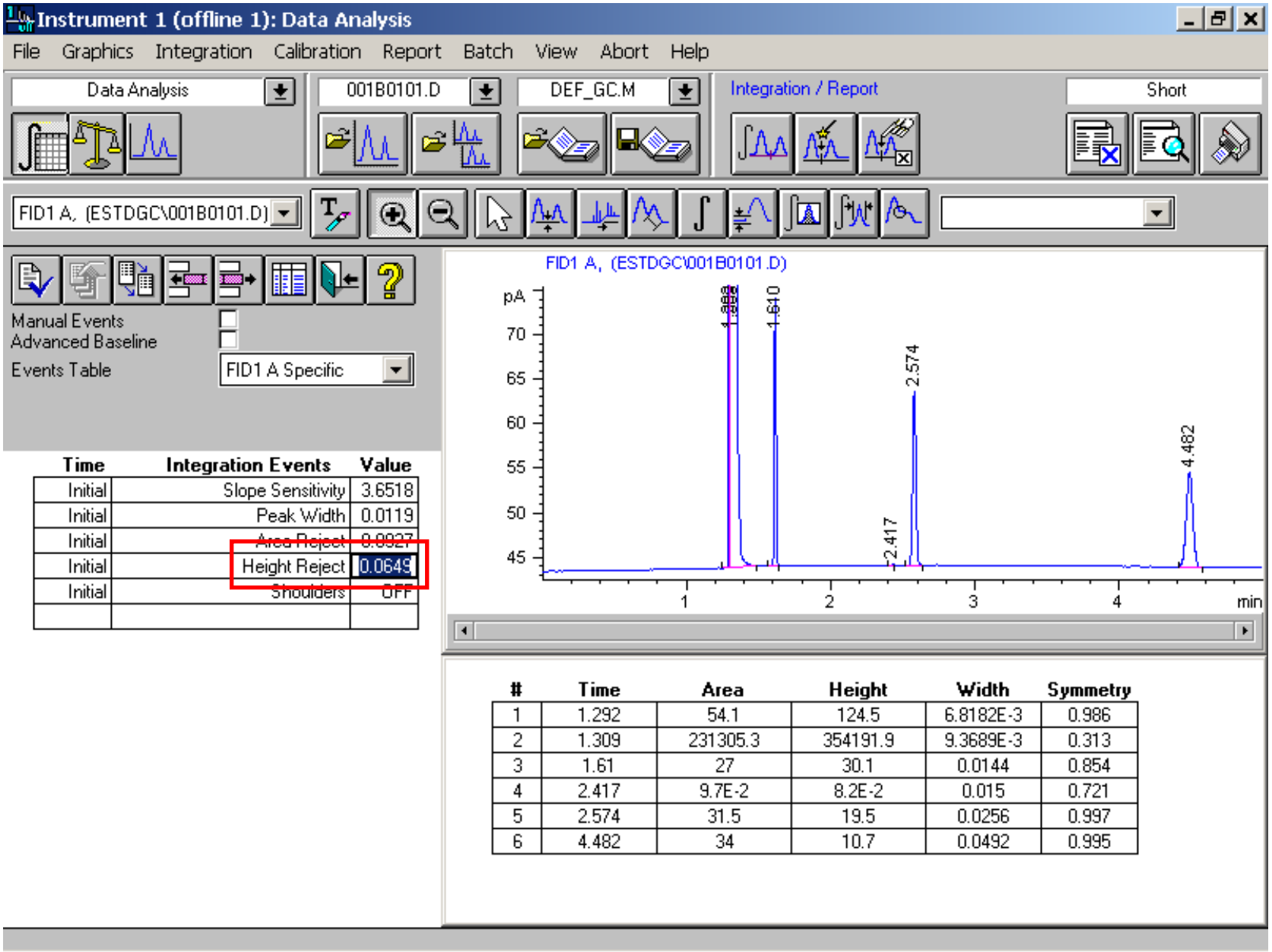

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0101.D
DEF_GC.M
Integration / Report
Short
FID1 A, (ESTDGC\001B0101.D)
FID1 A, (ESTDGC\001B0101.D)
pA
70
65
60
55
50
45
1.610
2.574
2.417
4.482
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
如果希望去掉色谱图中的一些小的干扰/杂质/噪音峰，应该如何操作？
File Information
GC-File 001B0101.D
File Path C:\HPCHEM\1\DATA\ESTDGC\
Date 8/24/2004 6:05:17 PM
Sample Level-1
Sample Info
Barcode
Operator bshyu
Time Area Height Width Symmetry
1 1.292 54.1 124.5 6.8182E-3 0.986
2 1.309 231305.3 354191.9 9.3689E-3 0.313
3 1.61 27 30.1 0.0144 0.854
4 2.417 9.7E-2 8.2E-2 0.015 0.721
5 2.574 31.5 19.5 0.0256 0.997
6 4.482 34 10.7 0.0492 0.995
Manual Integration: Remove integrated Peak(s) from the Integration Results


Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0101.D
DEF_GC.M
Integration / Report
Short
FID1 A, (ESTDGC\001B0101.D)
FID1 A, (ESTDGC\001B0101.D)
pA
70
65
60
55
50
45
1.610
2.417
4.482
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
单击进入“积分事件表”，编辑/设定积分参数。
File Information
GC-File 001B0101.D
File Path C:\HPCHEM\1\DATA\ESTDGC\
Date 8/24/2004 6:05:17 PM
Sample Level-1
Sample Info
Barcode
Operator bshyu
Time Area Height Width Symmetry
1 1.292 54.1 124.5 6.8182E-3 0.986
2 1.309 231305.3 354191.9 9.3689E-3 0.313
3 1.61 27 30.1 0.0144 0.854
4 2.417 9.7E-2 8.2E-2 0.015 0.721
5 2.574 31.5 19.5 0.0256 0.997
6 4.482 34 10.7 0.0492 0.995
Current Report Style


Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0101.D
DEF_GC.M
Integration / Report
Short
FID1 A, (ESTDGC\001B0101.D)
Manual Events
Advanced Baseline
Events Table
FID1 A Specific
FID1 A, (ESTDGC\001B0101.D)
pA
70
65
60
55
50
45
1.610
2.574
2.417
4.482
1
2
3
4
min
Time Integration Events Value
Initial Slope Sensitivity 3.6518
Initial Peak Width 0.0119
Initial Area Reject 0.0927
Initial Height Reject 0.0649
Initial Shoulders OFF
斜率灵敏度和峰宽会影响色谱峰的峰高、峰面积以及保留时间，不主张随意的修改这两个参数。
Time Area Height Width Symmetry
1 1.292 54.1 124.5 6.8182E-3 0.986
2 1.309 231305.3 354191.9 9.3689E-3 0.313
3 1.61 27 30.1 0.0144 0.854
4 2.417 9.7E-2 8.2E-2 0.015 0.721
5 2.574 31.5 19.5 0.0256 0.997
6 4.482 34 10.7 0.0492 0.995
Set Detect Shoulders

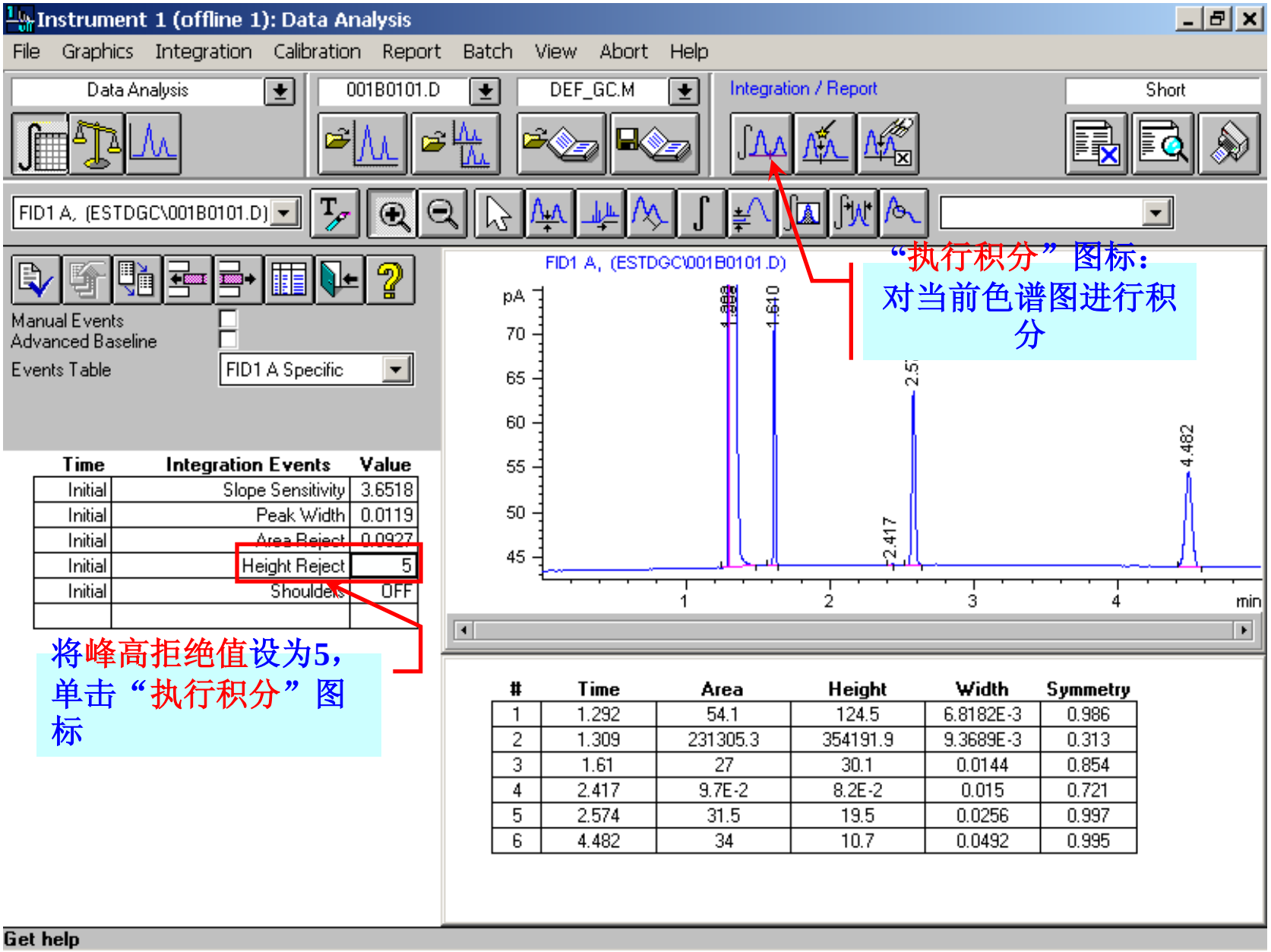


如果希望去掉2.417min这个峰，可以调节面积拒绝值或峰高拒绝值，首先，观察一下该峰的峰高或峰面积，设定适合的参数。



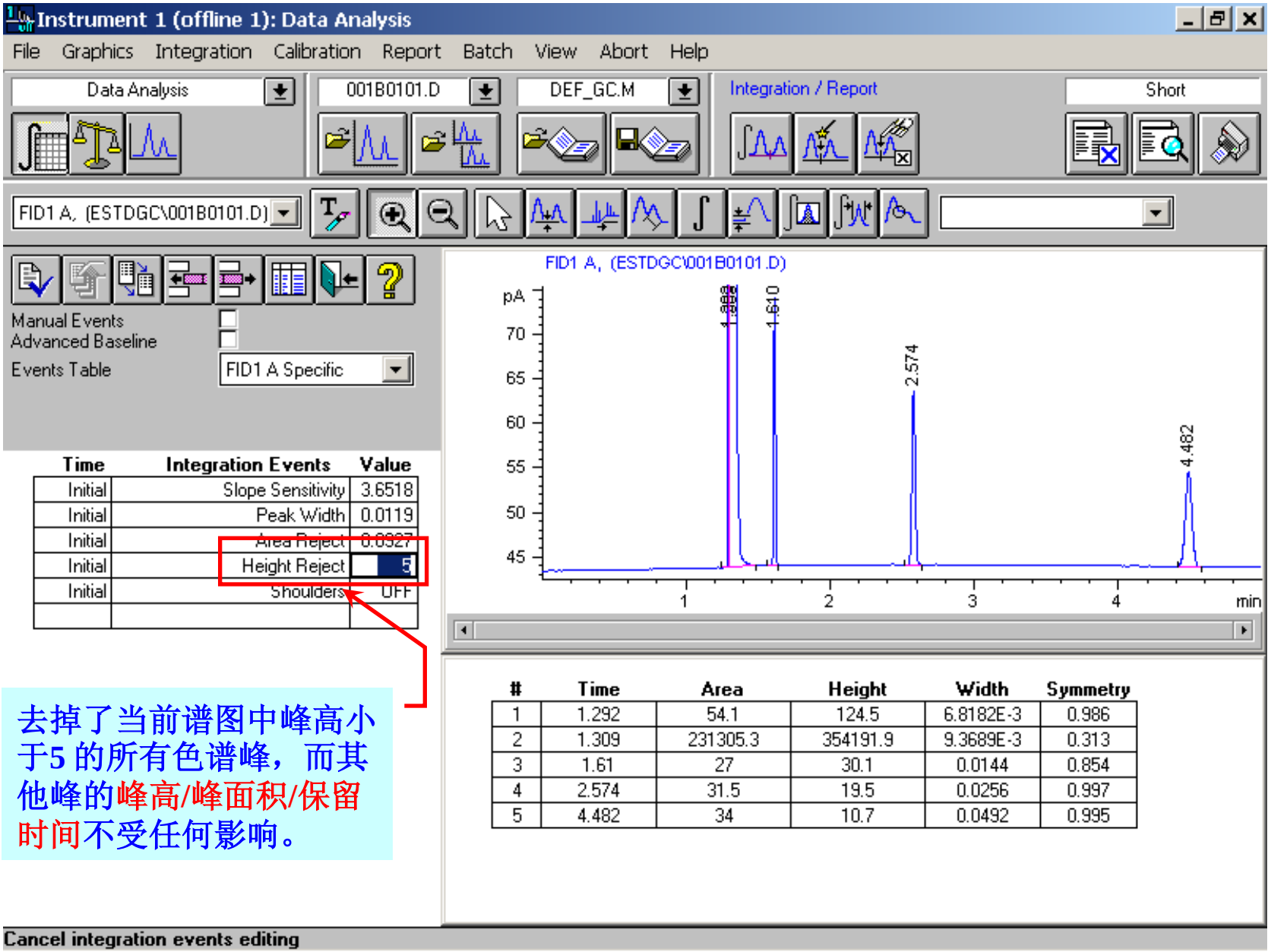
Time	Integration Events	Value
Initial	Slope Sensitivity	3.6518
Initial	Peak Width	0.0119
Initial	Area Reject	0.0927
Initial	Height Reject	0.0645
Initial	Shoulders	OFF

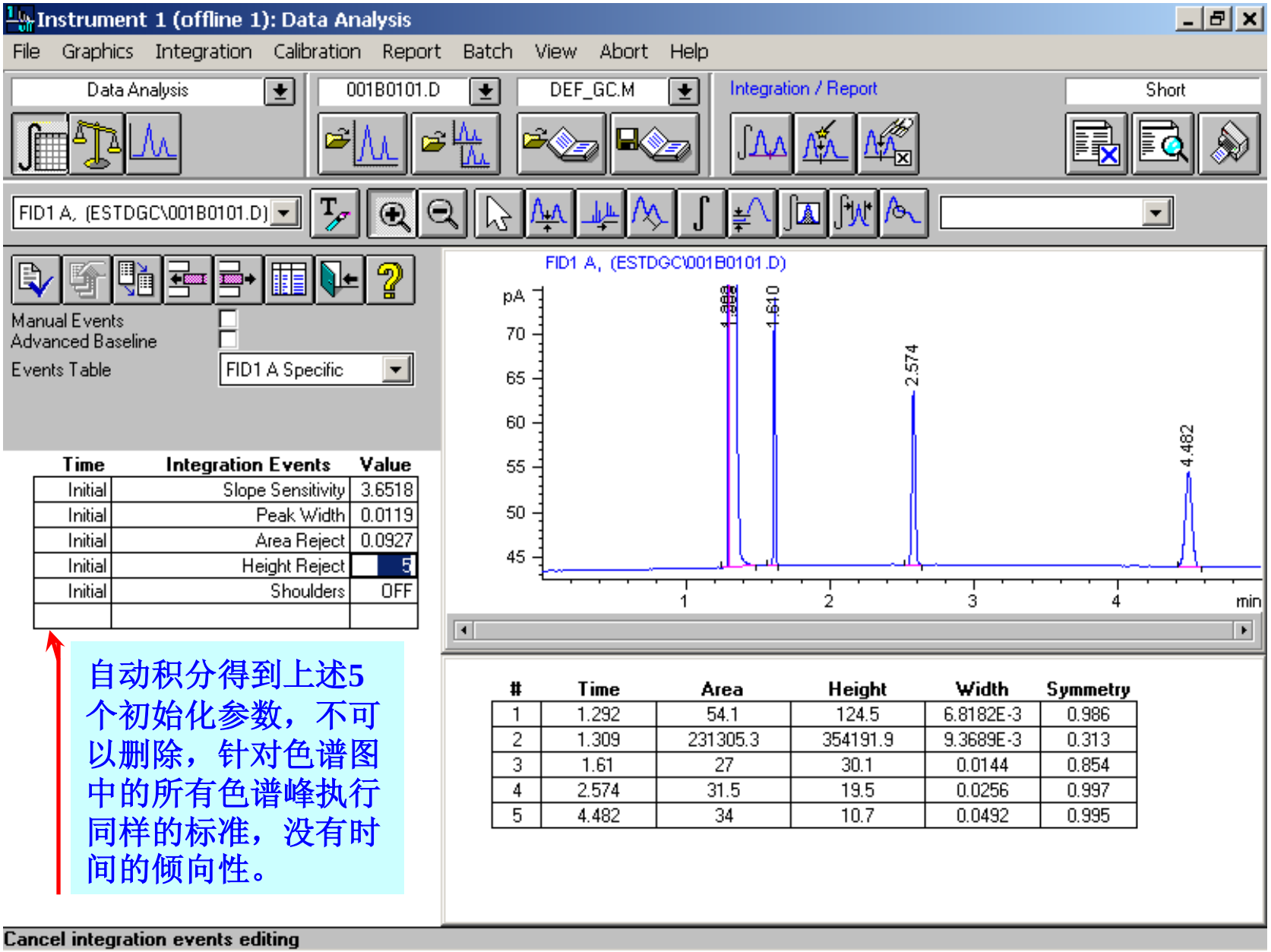
#	Time	Area	Height	Width	Symmetry
1	1.292	54.1	124.5	6.8182E-3	0.986
2	1.309	231305.3	354191.9	9.3689E-3	0.313
3	1.61	27	30.1	0.0144	0.854
4	2.417	9.7E-2	8.2E-2	0.015	0.721
5	2.574	31.5	19.5	0.0256	0.997
6	4.482	34	10.7	0.0492	0.995

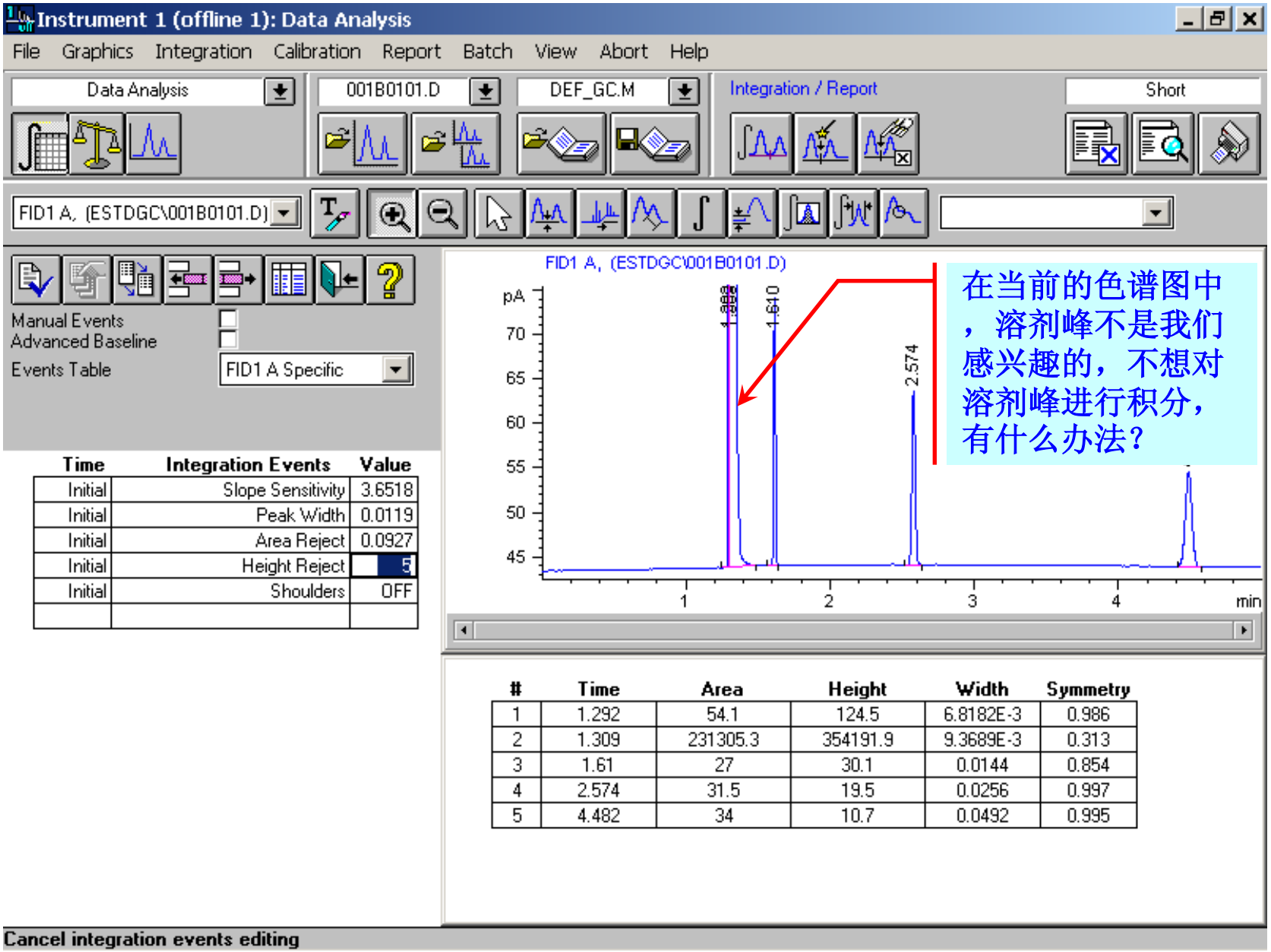


Time	Integration Events	Value
Initial	Slope Sensitivity	3.6518
Initial	Peak Width	0.0119
Initial	Area Reject	0.0927
Initial	Height Reject	5
Initial	Shoulders	OFF

#	Time	Area	Height	Width	Symmetry
1	1.292	54.1	124.5	6.8182E-3	0.986
2	1.309	231305.3	354191.9	9.3689E-3	0.313
3	1.61	27	30.1	0.0144	0.854
4	2.417	9.7E-2	8.2E-2	0.015	0.721
5	2.574	31.5	19.5	0.0256	0.997
6	4.482	34	10.7	0.0492	0.995

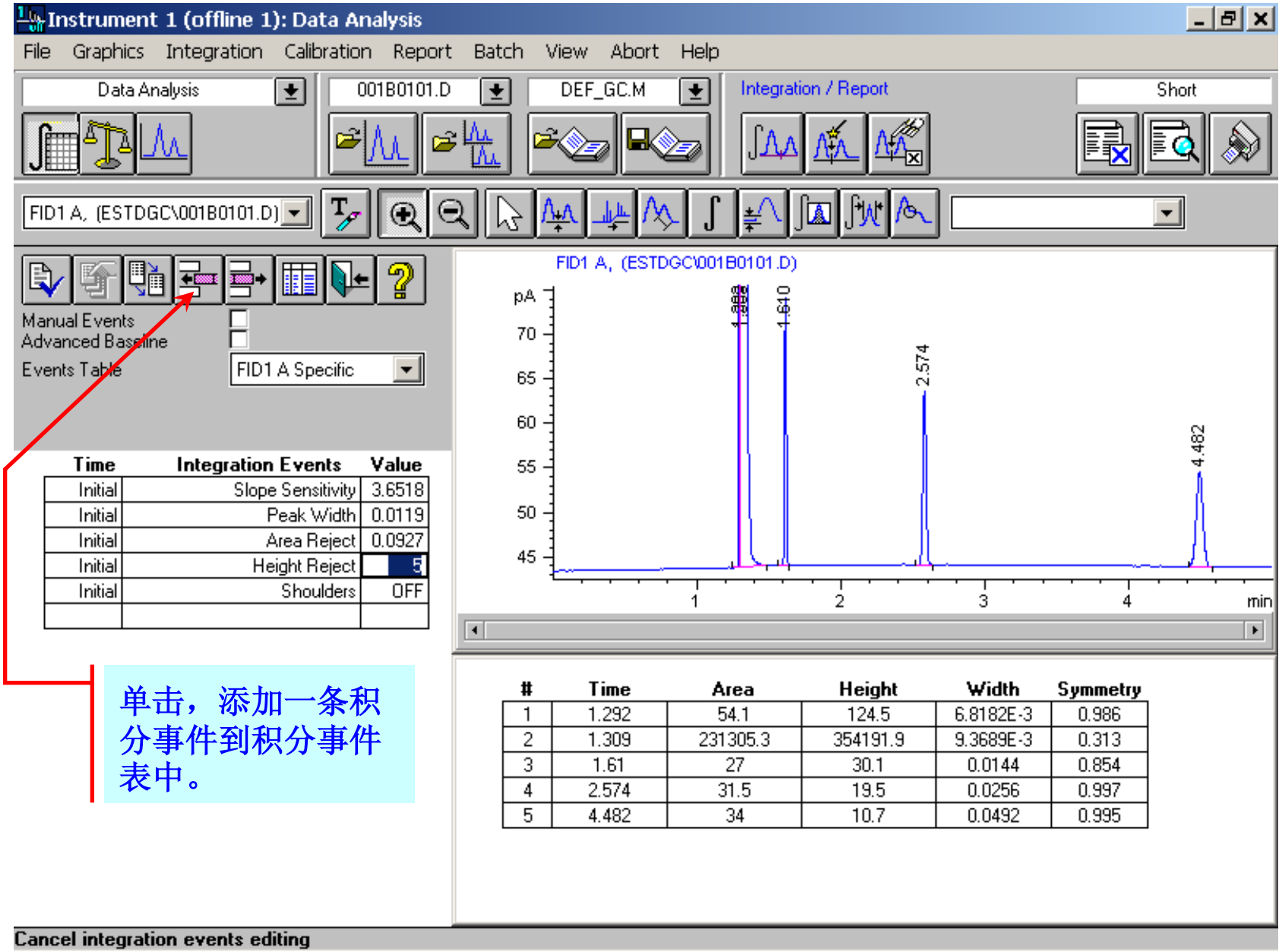

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0101.D
DEF_GC.M
Integration / Report
Short
FID1 A, (ESTDGC\001B0101.D)
Manual Events
Advanced Baseline
Events Table
FID1 A Specific
FID1 A, (ESTDGC\001B0101.D)
pA
70
65
60
55
50
45
1.610
2.574
4.482
1
2
3
4
min
Time Integration Events Value
Initial Slope Sensitivity 3.6518
Initial Peak Width 0.0119
Initial Area Reject 0.0327
Initial Height Reject 5
Initial Shoulders OFF
Time Area Height Width Symmetry
1 1.292 54.1 124.5 6.8182E-3 0.986
2 1.309 231305.3 354191.9 9.3689E-3 0.313
3 1.61 27 30.1 0.0144 0.854
4 2.574 31.5 19.5 0.0256 0.997
5 4.482 34 10.7 0.0492 0.995
去掉了当前谱图中峰高小于5 的所有色谱峰，而其他峰的峰高/峰面积/保留时间不受任何影响。
Cancel integration events editing


Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0101.D
DEF_GC.M
Integration / Report
Short
FID1 A, (ESTDGC\001B0101.D)
Manual Events
Advanced Baseline
Events Table
FID1 A Specific
FID1 A, (ESTDGC\001B0101.D)
pA
70
65
60
55
50
45
1.610
2.574
4.482
1
2
3
4
min
Time Integration Events Value
Initial Slope Sensitivity 3.6518
Initial Peak Width 0.0119
Initial Area Reject 0.0927
Initial Height Reject 5
Initial Shoulders OFF
自动积分得到上述5个初始化参数，不可以删除，针对色谱图中的所有色谱峰执行同样的标准，没有时间的倾向性。
Time Area Height Width Symmetry
1 1.292 54.1 124.5 6.8182E-3 0.986
2 1.309 231305.3 354191.9 9.3689E-3 0.313
3 1.61 27 30.1 0.0144 0.854
4 2.574 31.5 19.5 0.0256 0.997
5 4.482 34 10.7 0.0492 0.995
Cancel integration events editing

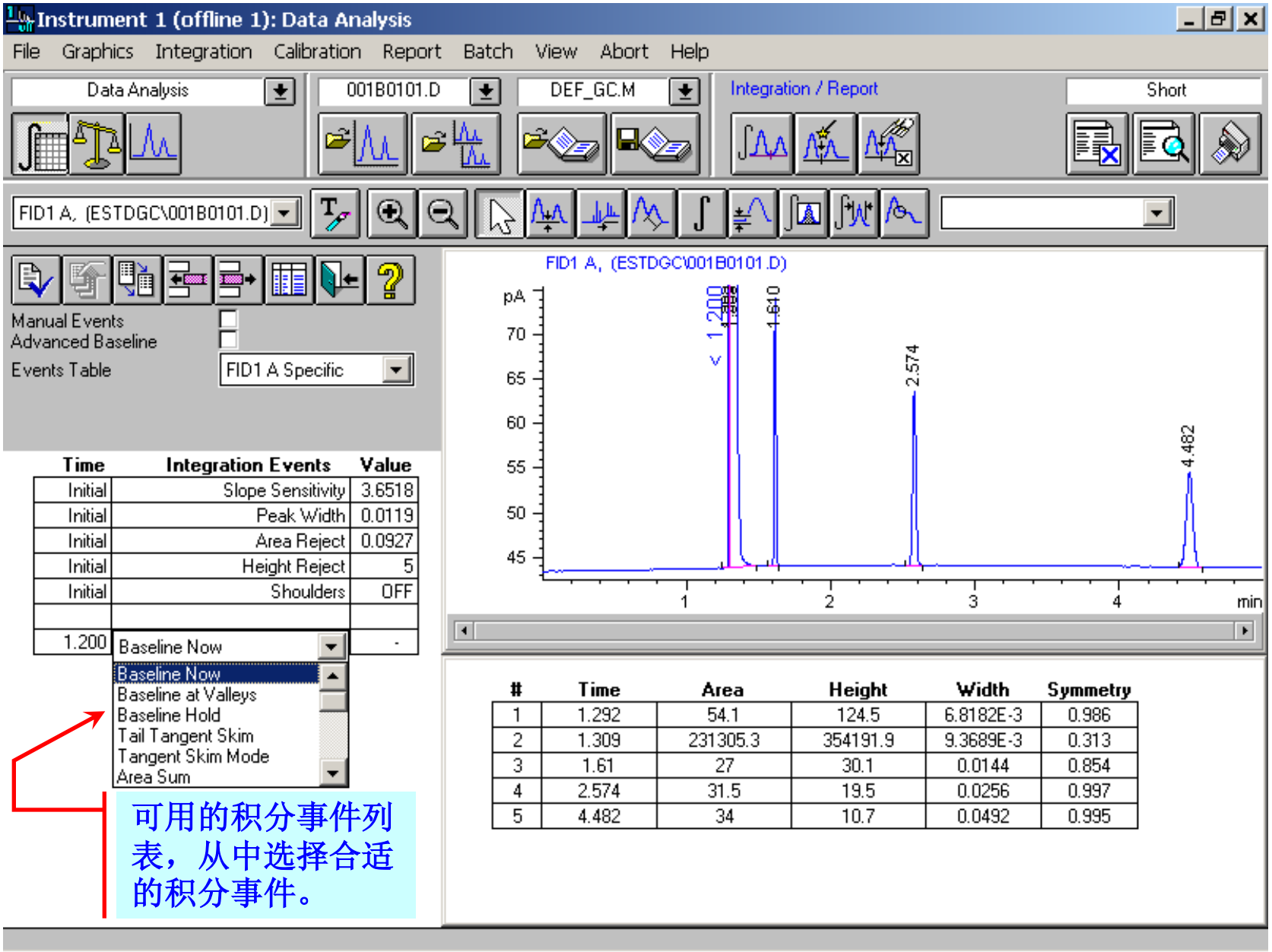


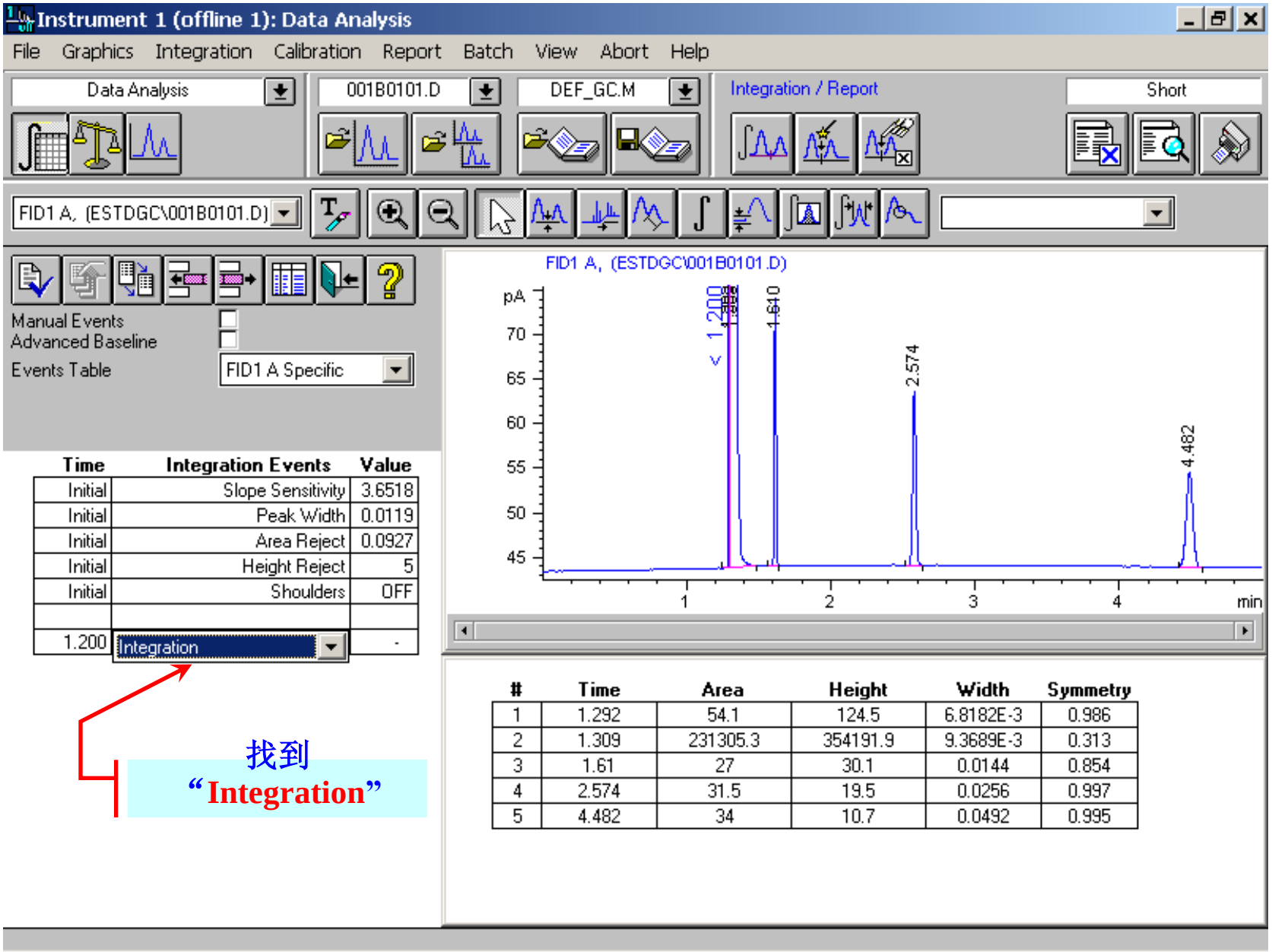
Time	Integration Events	Value
Initial	Slope Sensitivity	3.6518
Initial	Peak Width	0.0119
Initial	Area Reject	0.0927
Initial	Height Reject	5
Initial	Shoulders	OFF

#	Time	Area	Height	Width	Symmetry
1	1.292	54.1	124.5	6.8182E-3	0.986
2	1.309	231305.3	354191.9	9.3689E-3	0.313
3	1.61	27	30.1	0.0144	0.854
4	2.574	31.5	19.5	0.0256	0.997
5	4.482	34	10.7	0.0492	0.995

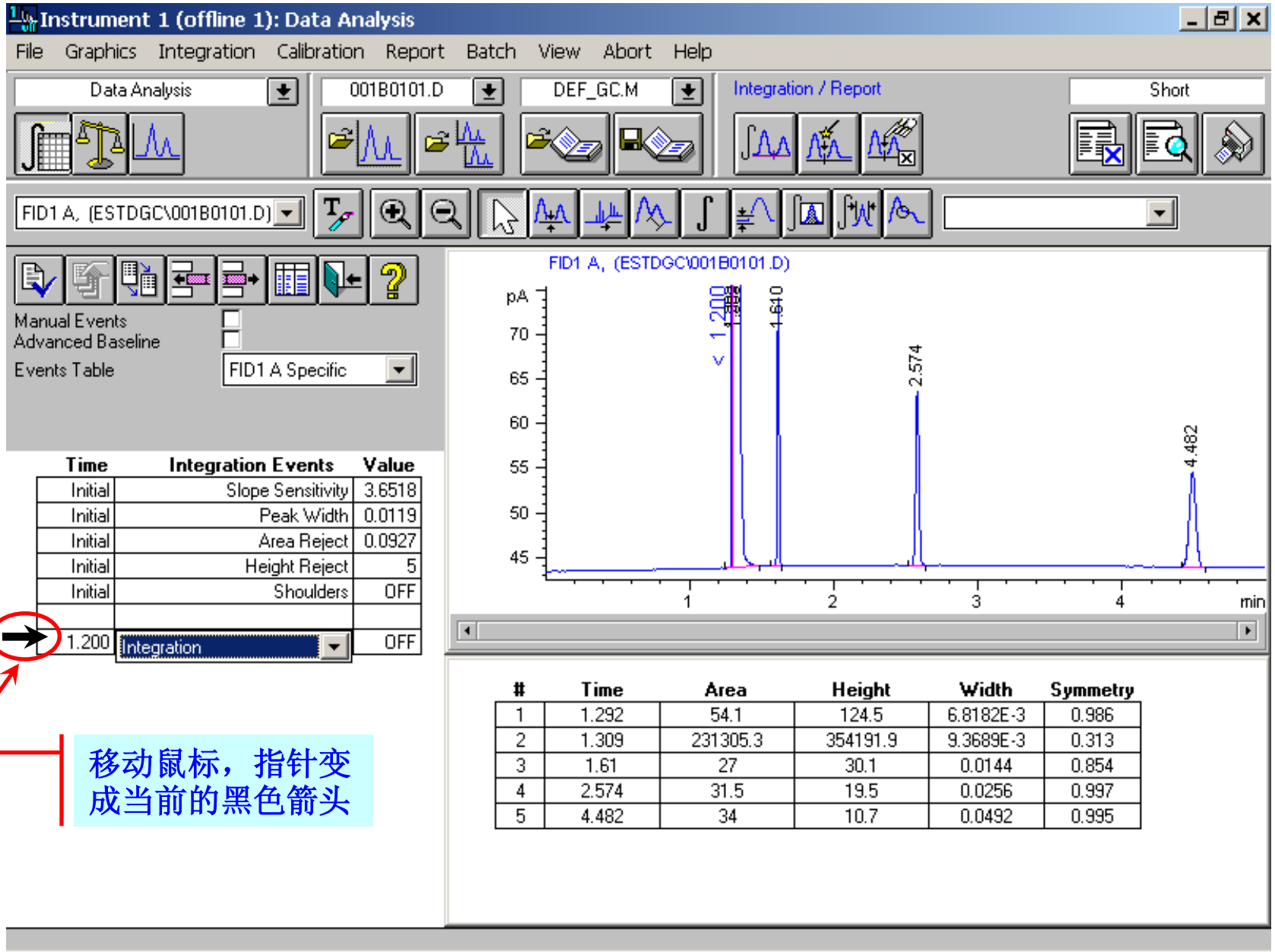


单击，添加一条积分事件到积分事件表中。

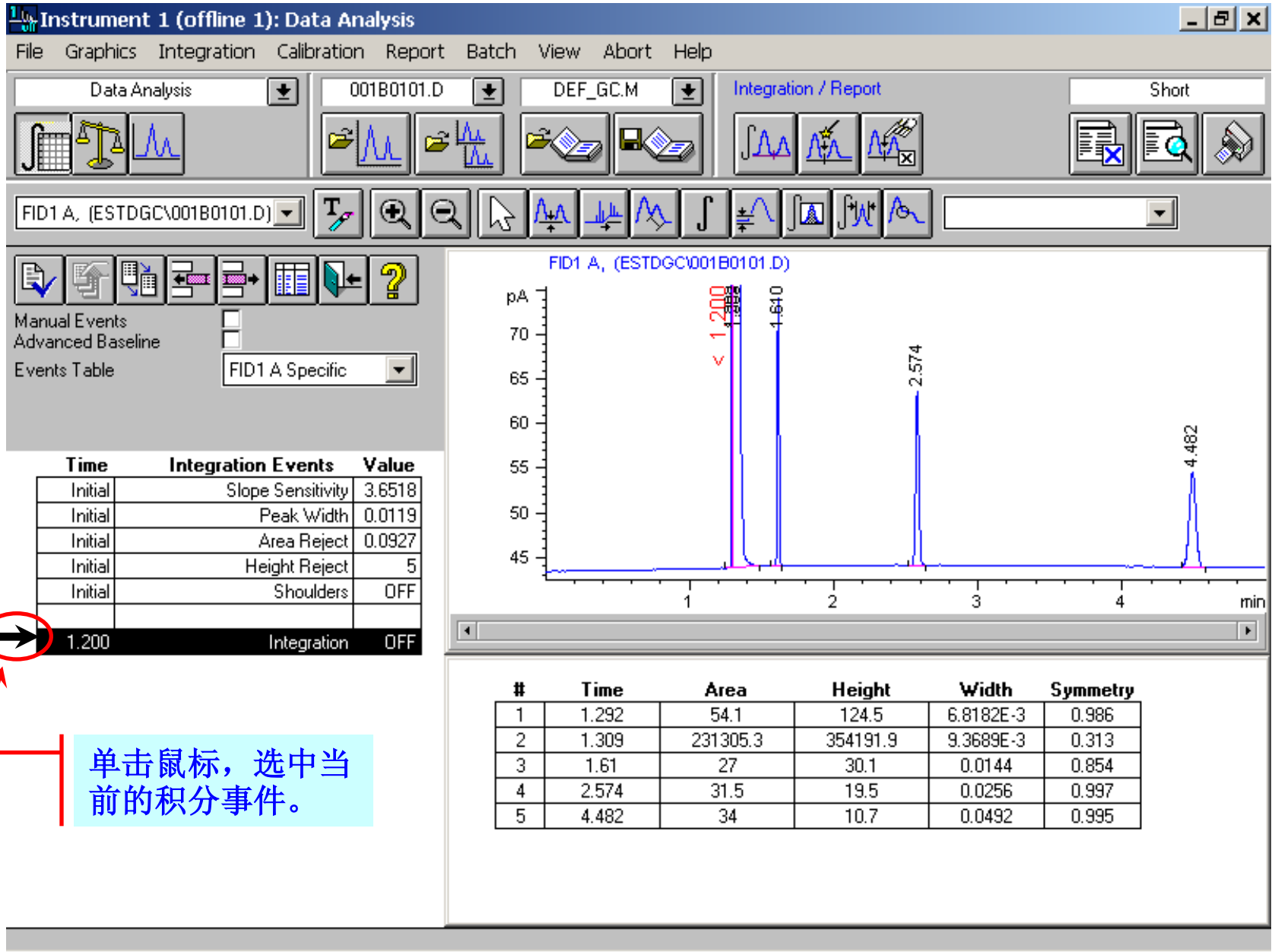

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0101.D
DEF_GC.M
Integration / Report
Short
FID1 A, (ESTDGC\001B0101.D)
Manual Events
Advanced Baseline
Events Table
FID1 A Specific
FID1 A, (ESTDGC\001B0101.D)
pA
70
65
60
55
50
45
1.200
1.610
2.574
4.482
1
2
3
4
min
Time Integration Events Value
Initial Slope Sensitivity 3.6518
Initial Peak Width 0.0119
Initial Area Reject 0.0927
Initial Height Reject 5
Initial Shoulders OFF
1.200 Baseline Now
Baseline Now
Baseline at Valleys
Baseline Hold
Tail Tangent Skim
Tangent Skim Mode
Area Sum
Time Area Height Width Symmetry
1 1.292 54.1 124.5 6.8182E-3 0.986
2 1.309 231305.3 354191.9 9.3689E-3 0.313
3 1.61 27 30.1 0.0144 0.854
4 2.574 31.5 19.5 0.0256 0.997
5 4.482 34 10.7 0.0492 0.995
可用的积分事件列表，从中选择合适的积分事件。



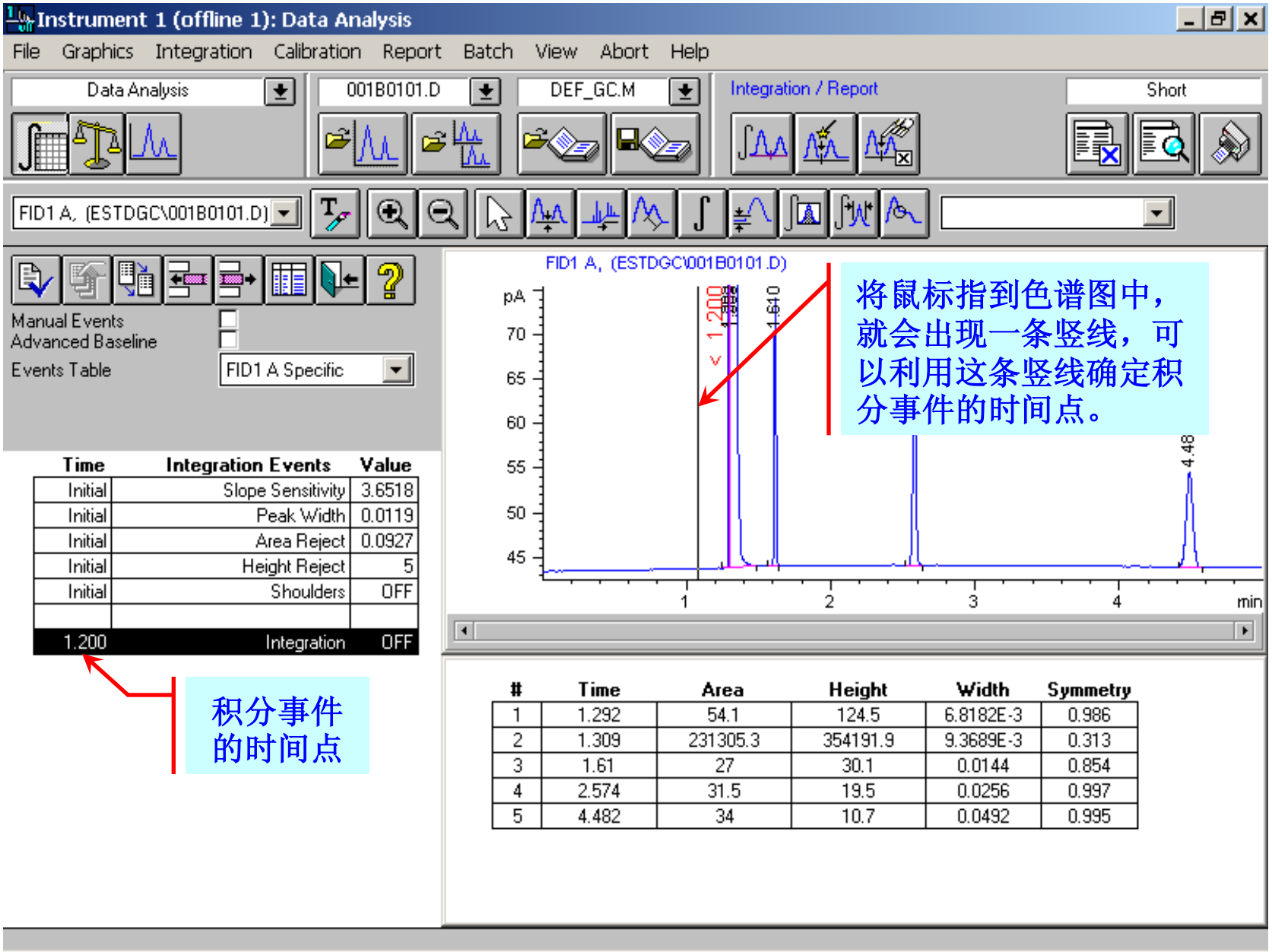
找到
“Integration”

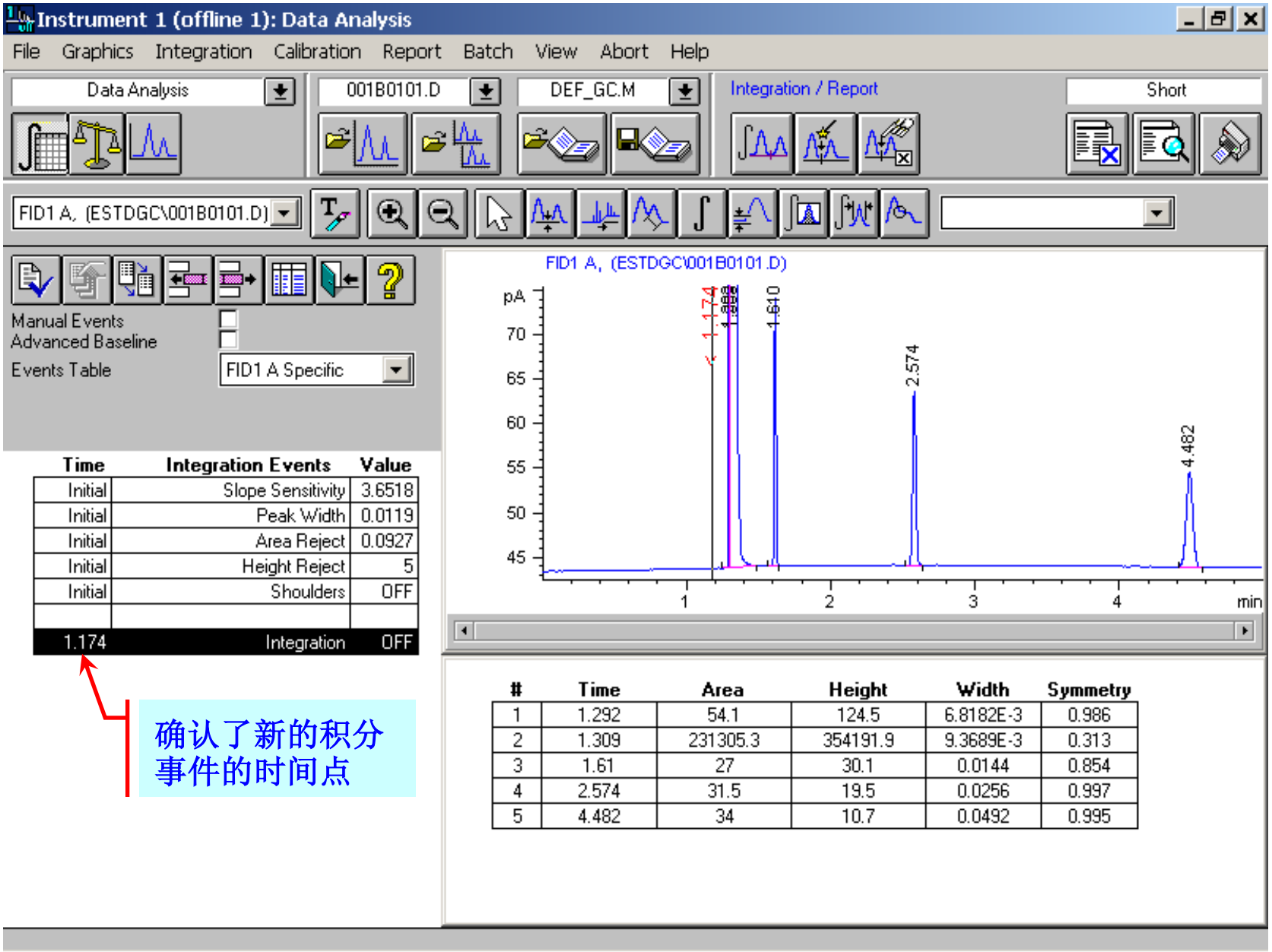


移动鼠标，指针变成当前的黑色箭头

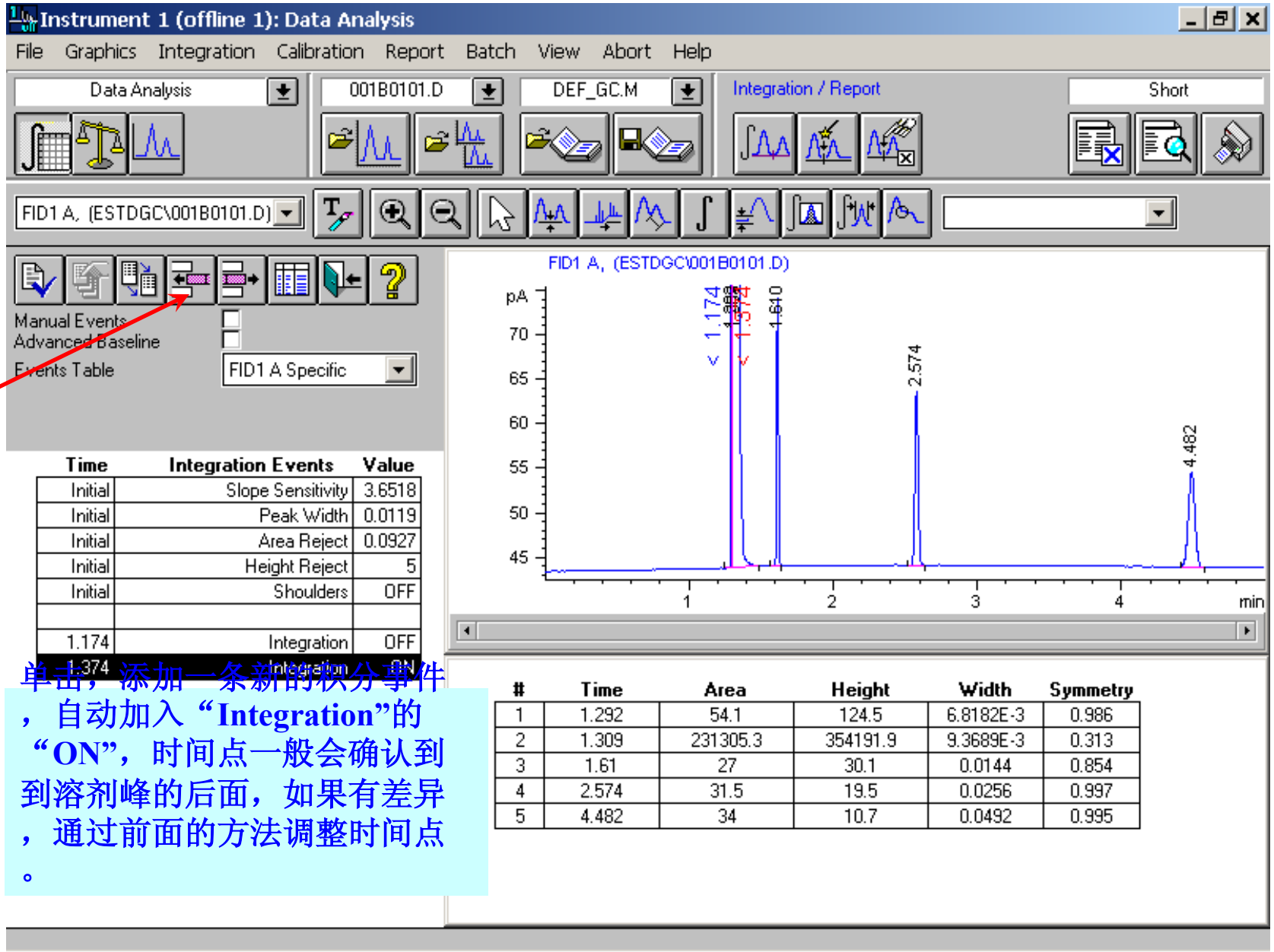


单击鼠标，选中当前的积分事件。

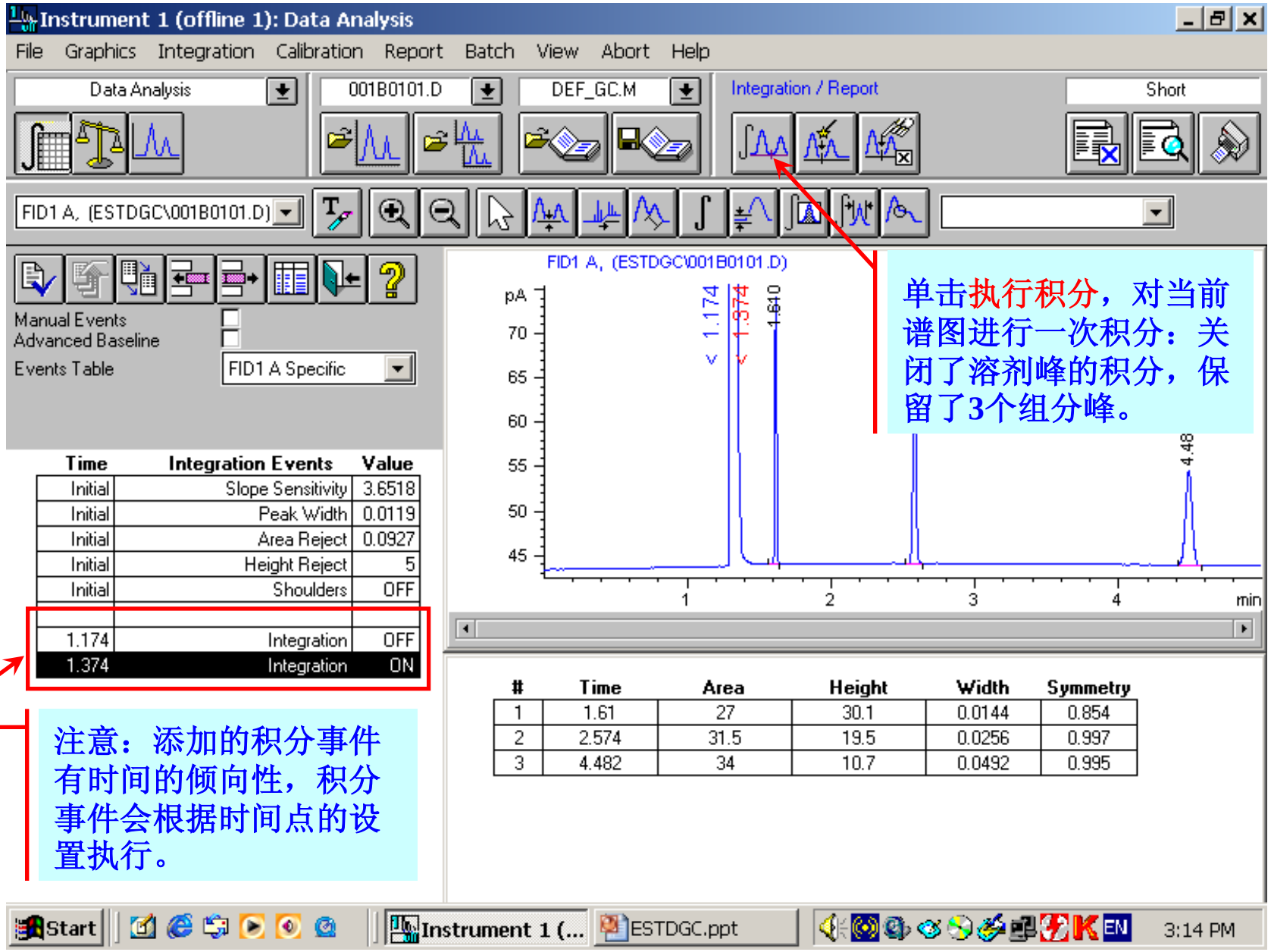

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0101.D
DEF_GC.M
Integration / Report
Short
FID1 A, (ESTDGC\001B0101.D)
Manual Events
Advanced Baseline
Events Table
FID1 A Specific
FID1 A, (ESTDGC\001B0101.D)
pA
70
65
60
55
50
45
1.200
1.610
4.48
1
2
3
4
min
将鼠标指到色谱图中，就会出现一条竖线，可以利用这条竖线确定积分事件的时间点。
Time Integration Events Value
Initial Slope Sensitivity 3.6518
Initial Peak Width 0.0119
Initial Area Reject 0.0927
Initial Height Reject 5
Initial Shoulders OFF
1.200 Integration OFF
积分事件的时间点
Time Area Height Width Symmetry
1 1.292 54.1 124.5 6.8182E-3 0.986
2 1.309 231305.3 354191.9 9.3689E-3 0.313
3 1.61 27 30.1 0.0144 0.854
4 2.574 31.5 19.5 0.0256 0.997
5 4.482 34 10.7 0.0492 0.995

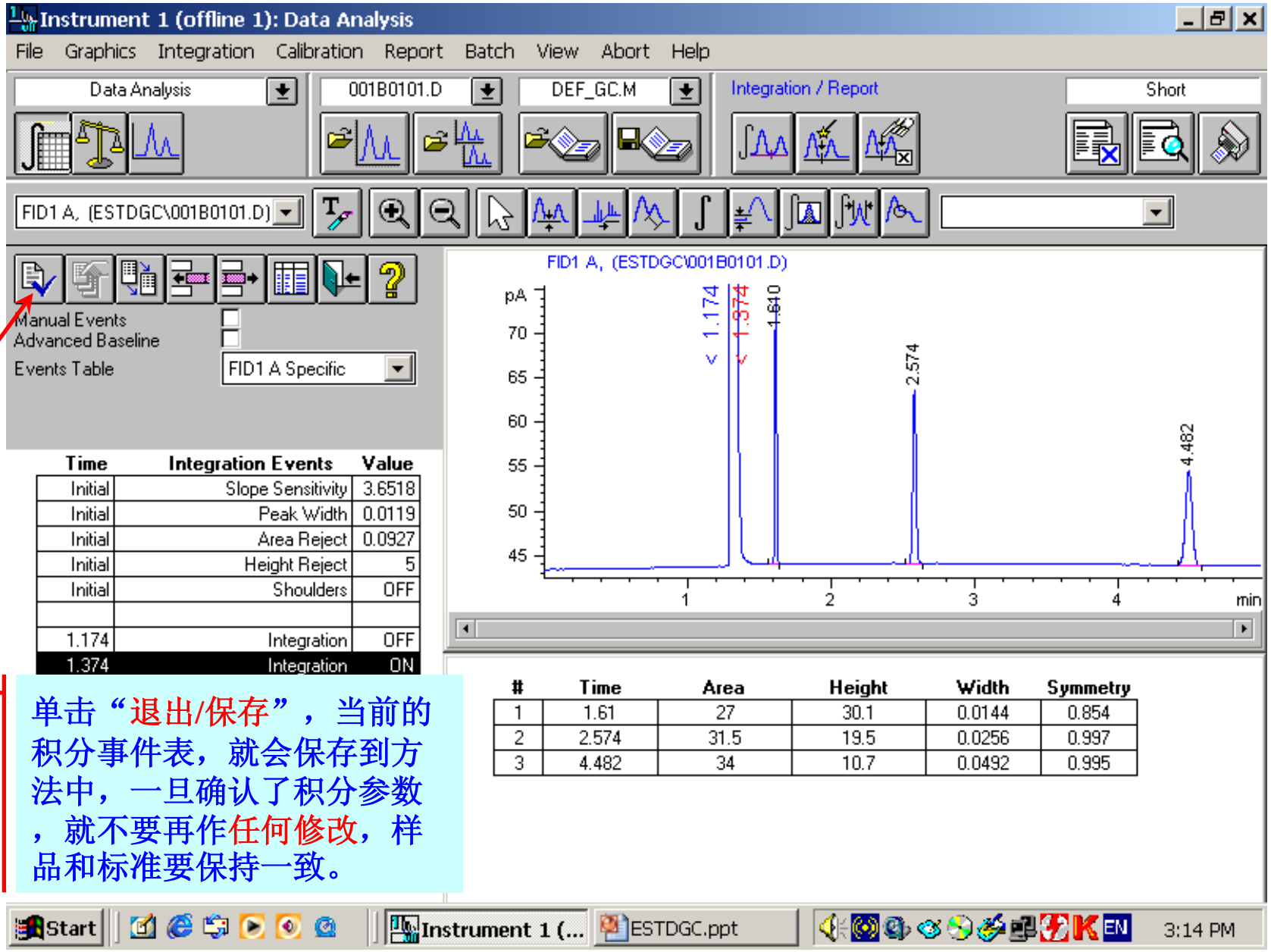


确认了新的积分事件的时间点

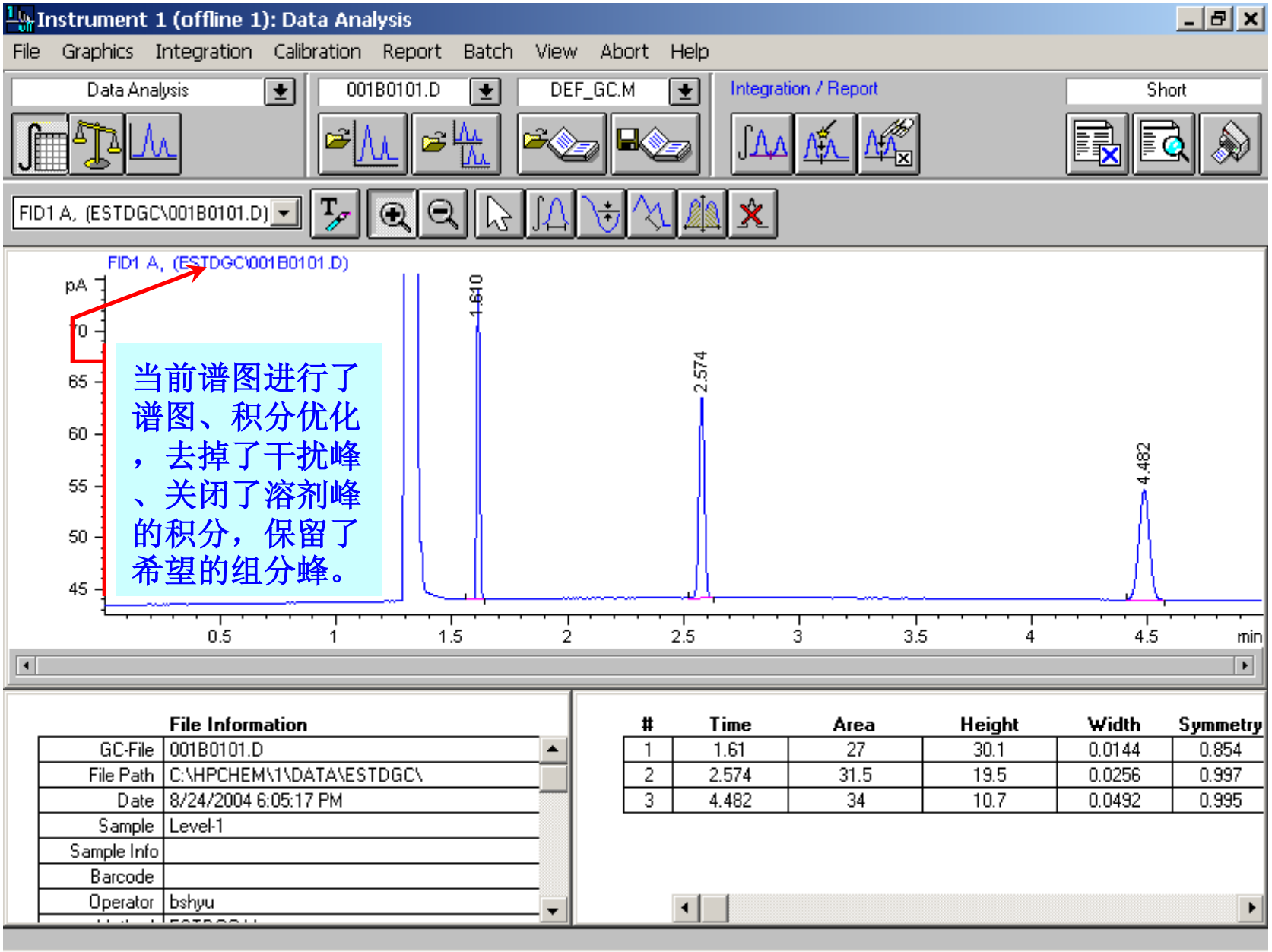


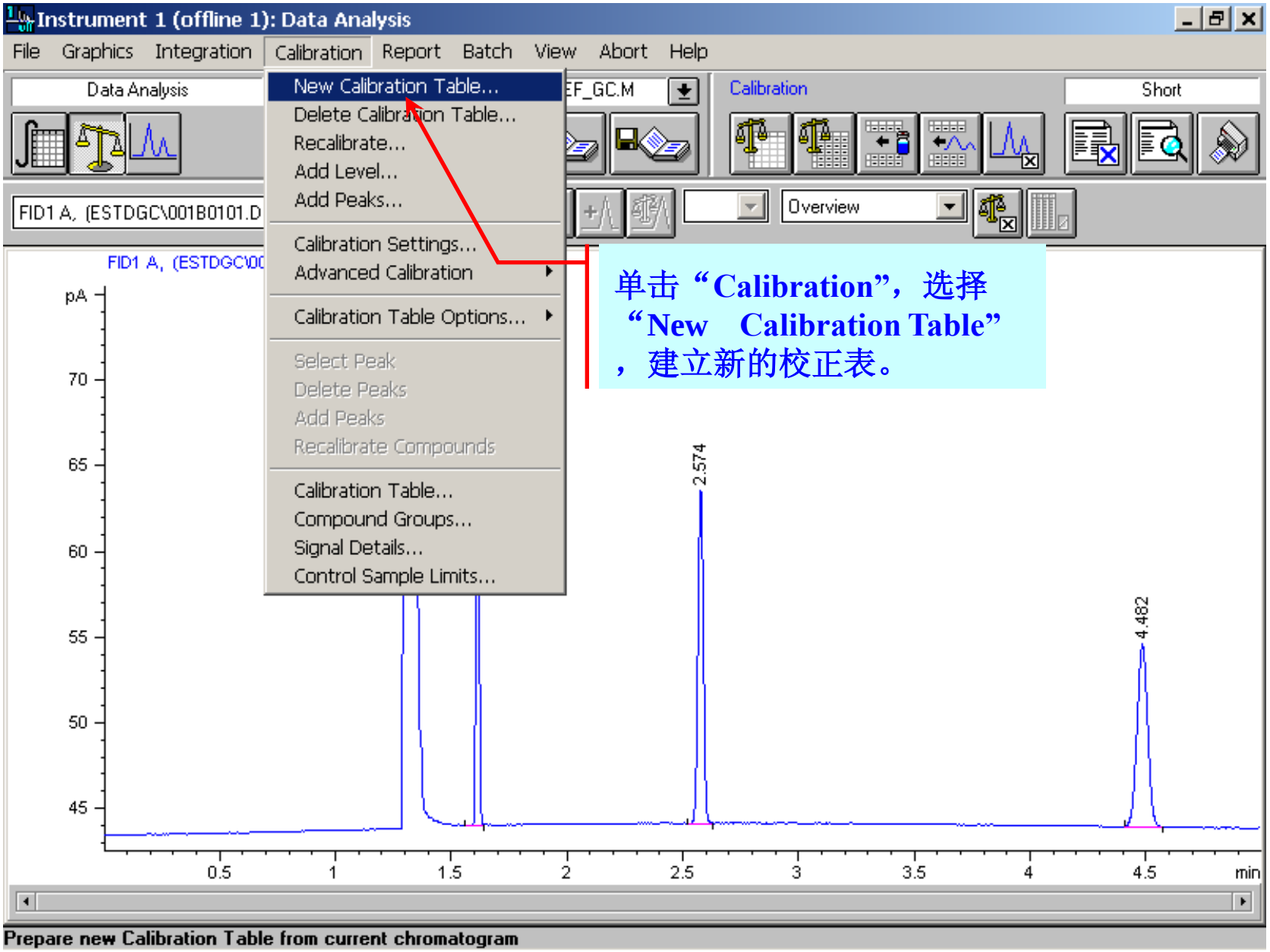
单击，添加一条新的积分事件，自动加入“Integration”的“ON”，时间点一般会确认到到溶剂峰的后面，如果有差异，通过前面的方法调整时间点。


Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0101.D
DEF_GC.M
Integration / Report
Short
FID1 A, (ESTDGC\001B0101.D)
Manual Events
Advanced Baseline
Events Table
FID1 A Specific
FID1 A, (ESTDGC\001B0101.D)
pA
70
65
60
55
50
45
1.174
1.374
1.640
4.48
1
2
3
4
min
单击执行积分，对当前谱图进行一次积分：关闭了溶剂峰的积分，保留了3个组分峰。
Time Integration Events Value
Initial Slope Sensitivity 3.6518
Initial Peak Width 0.0119
Initial Area Reject 0.0927
Initial Height Reject 5
Initial Shoulders OFF
1.174 Integration OFF
1.374 Integration ON
注意：添加的积分事件有时间的倾向性，积分事件会根据时间点的设置执行。
Time Area Height Width Symmetry
1 1.61 27 30.1 0.0144 0.854
2 2.574 31.5 19.5 0.0256 0.997
3 4.482 34 10.7 0.0492 0.995
Start
Instrument 1 (...
ESTDGC.ppt
EN
3:14 PM

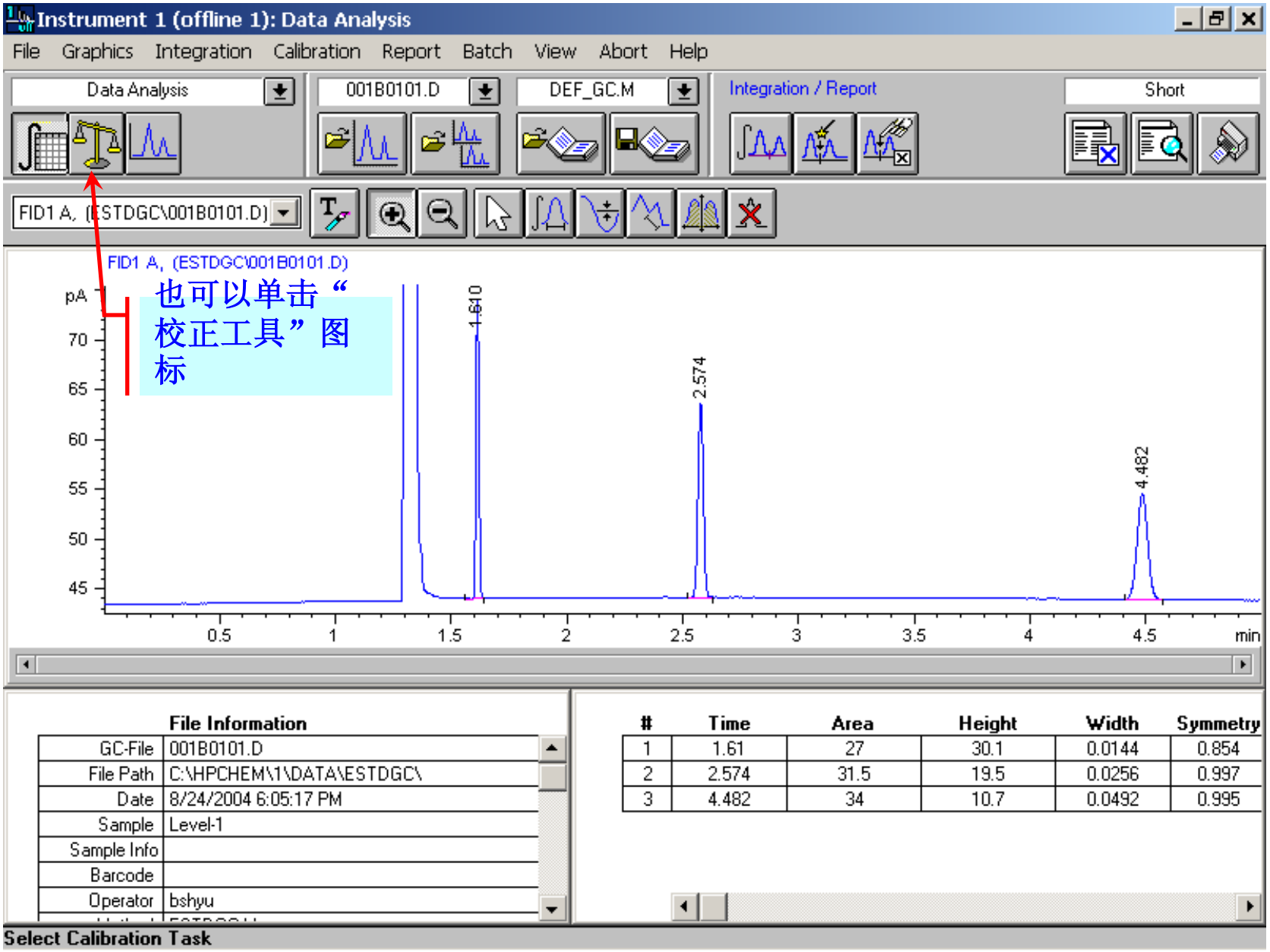


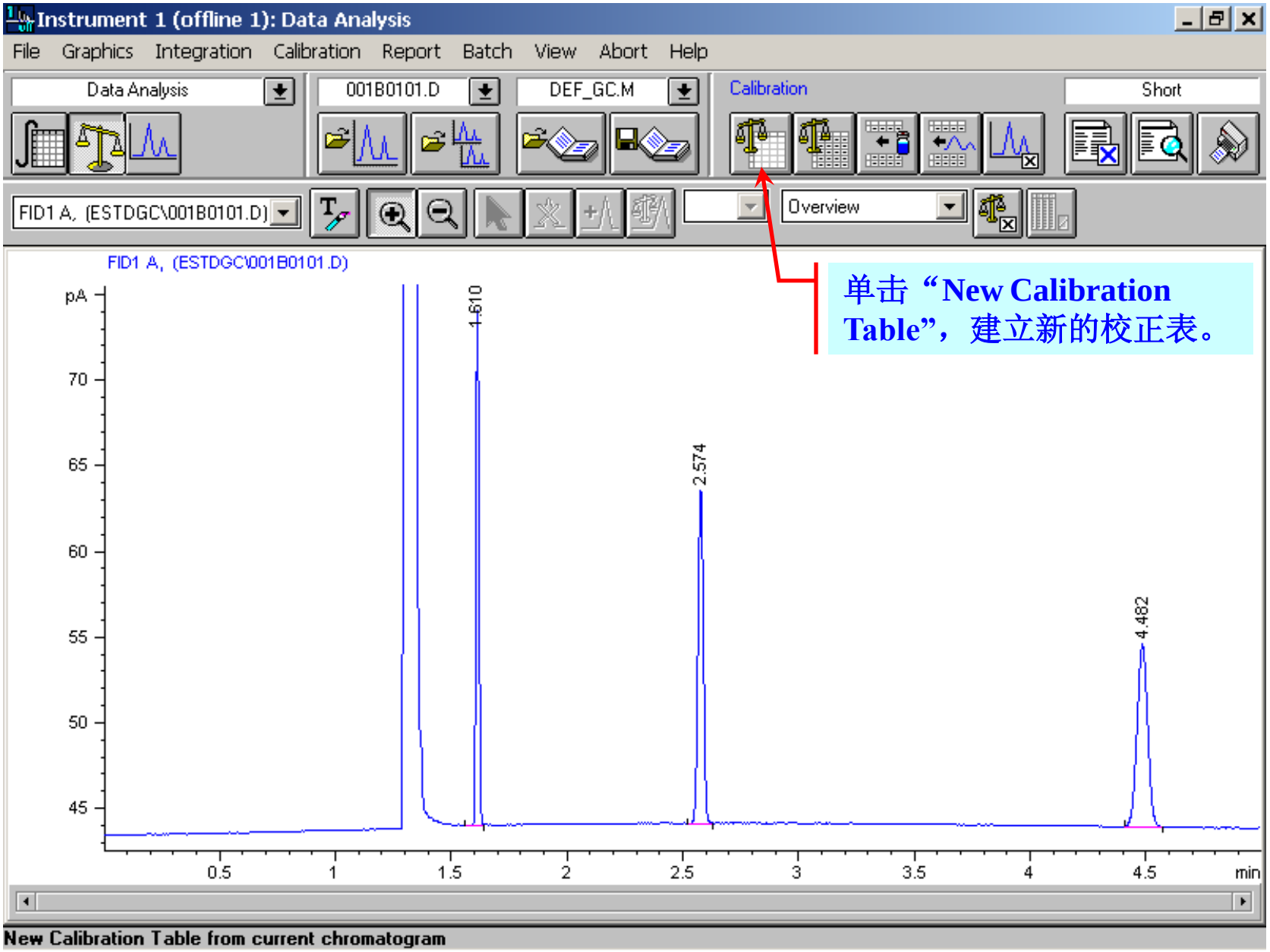
单击“退出/保存”，当前的积分事件表，就会保存到方法中，一旦确认了积分参数，就不要再作任何修改，样品和标准要保持一致。


Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0101.D
DEF_GC.M
Integration / Report
Short
FID1 A, (ESTDGC\001B0101.D)
FID1 A, (ESTDGC\001B0101.D)
pA
70
65
60
55
50
45
1.610
2.574
4.482
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
当前谱图进行了谱图、积分优化，去掉了干扰峰、关闭了溶剂峰的积分，保留了希望的组分峰。
File Information
GC-File 001B0101.D
File Path C:\HPCHEM\1\DATA\ESTDGC\
Date 8/24/2004 6:05:17 PM
Sample Level-1
Sample Info
Barcode
Operator bshyu
Time Area Height Width Symmetry
1 1.61 27 30.1 0.0144 0.854
2 2.574 31.5 19.5 0.0256 0.997
3 4.482 34 10.7 0.0492 0.995

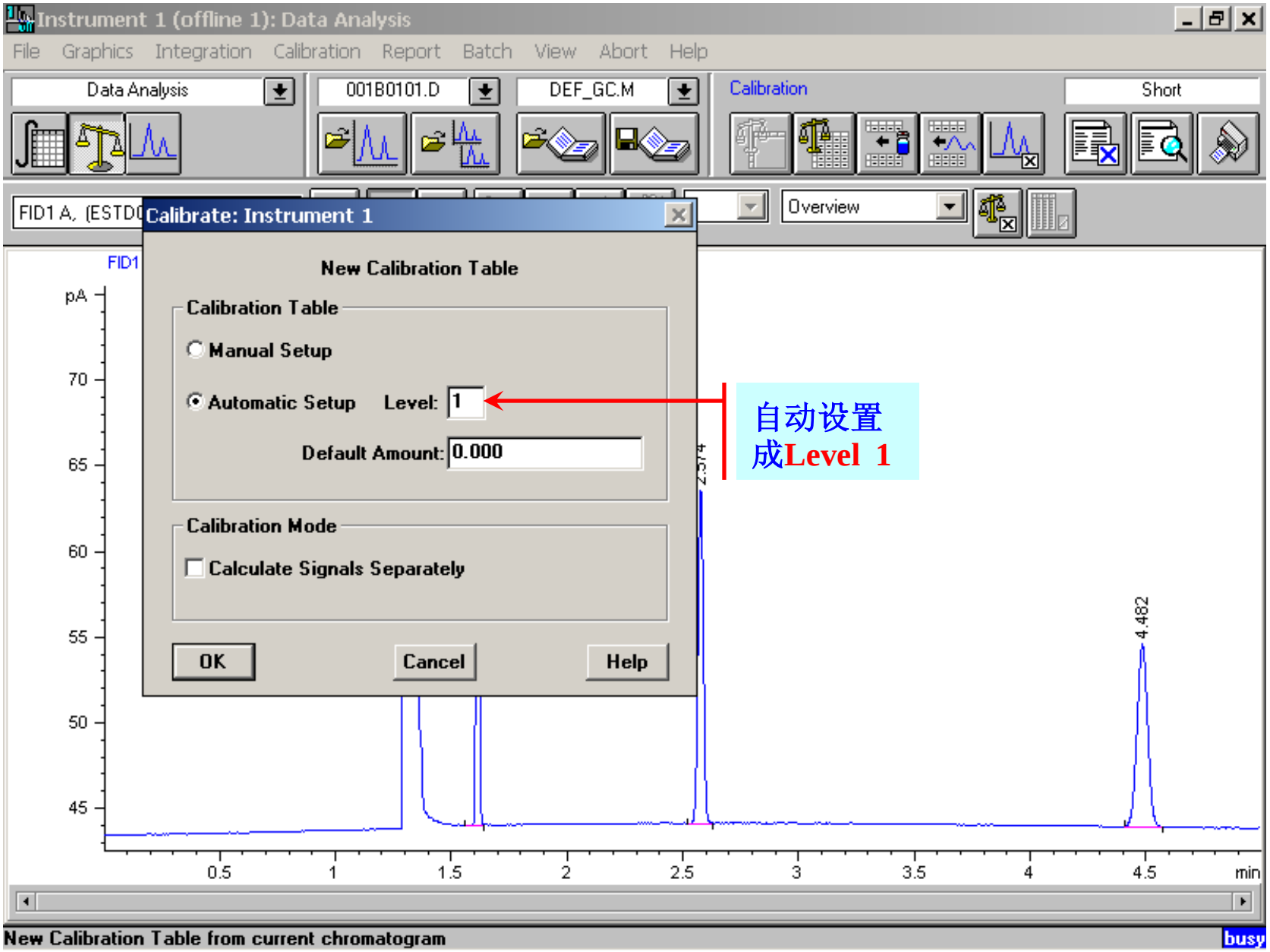


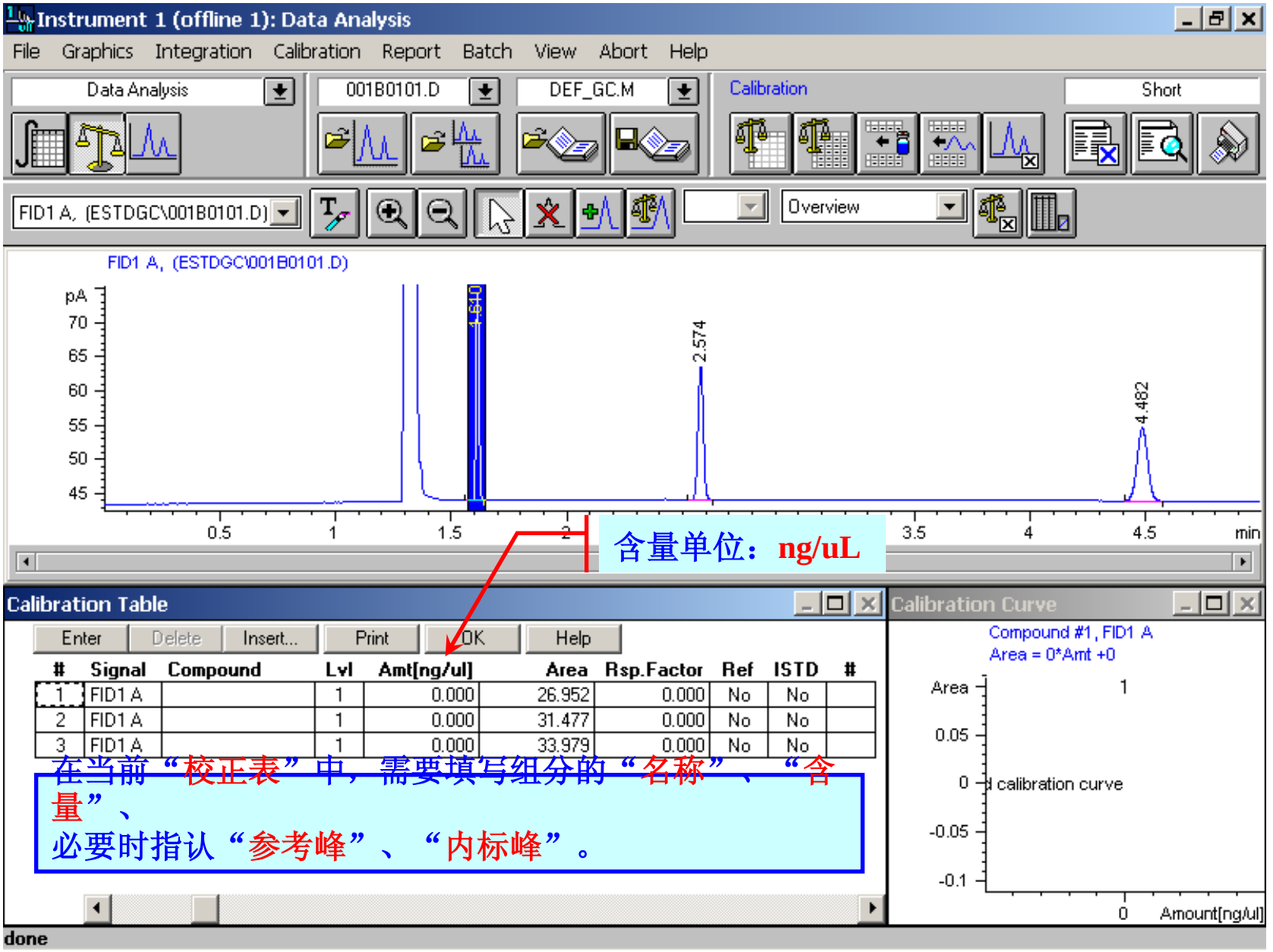
单击“Calibration”，选择“New Calibration Table”，建立新的校正表。

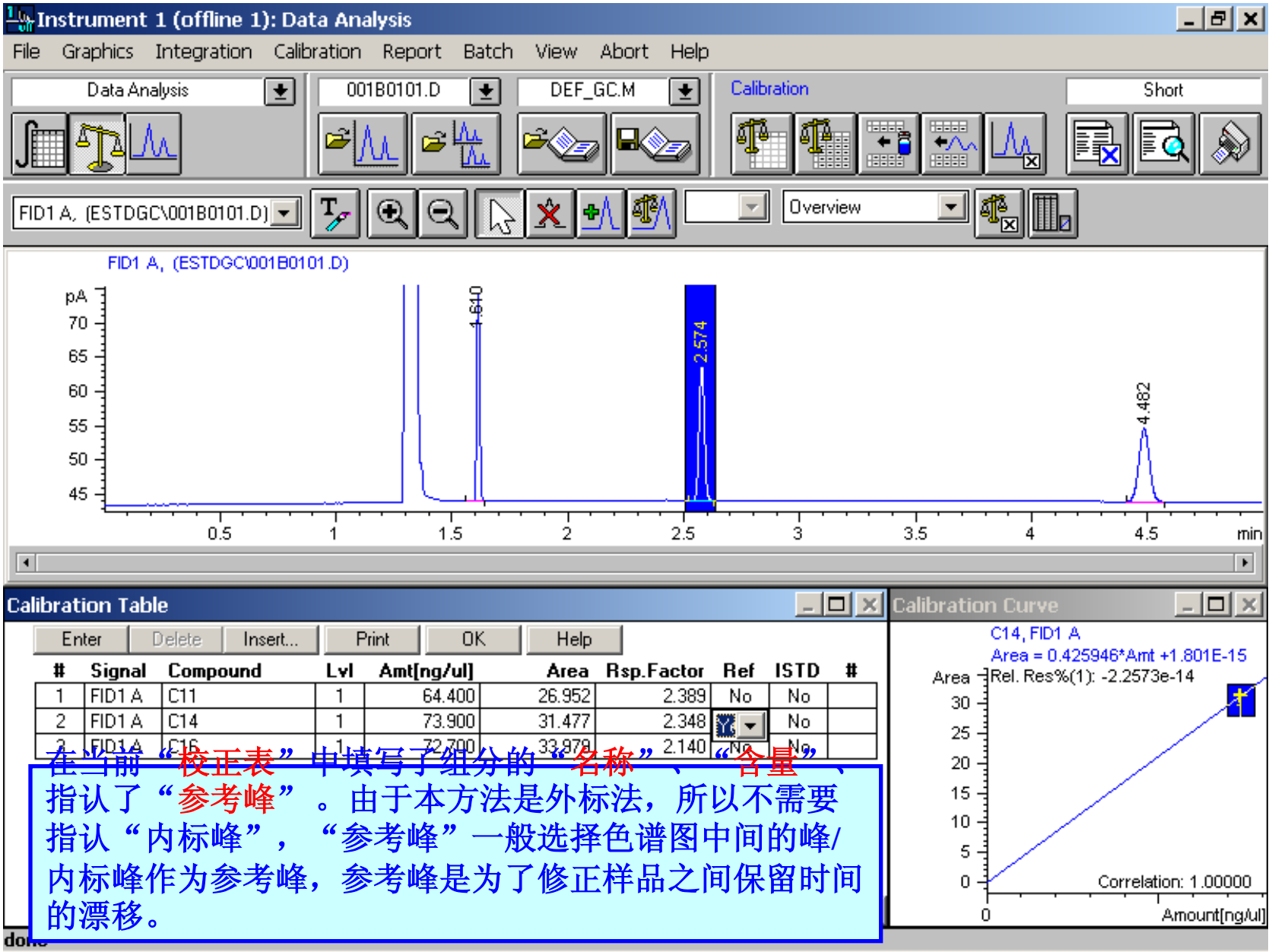

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0101.D
DEF_GC.M
Integration / Report
Short
FID1 A, (ESTDGC\001B0101.D)
FID1 A, (ESTDGC\001B0101.D)
也可以单击“校正工具”图标
pA
70
65
60
55
50
45
1.610
2.574
4.482
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
File Information
GC-File 001B0101.D
File Path C:\HPCHEM\1\DATA\ESTDGC\
Date 8/24/2004 6:05:17 PM
Sample Level-1
Sample Info
Barcode
Operator bshyu
Time Area Height Width Symmetry
1 1.61 27 30.1 0.0144 0.854
2 2.574 31.5 19.5 0.0256 0.997
3 4.482 34 10.7 0.0492 0.995
Select Calibration Task



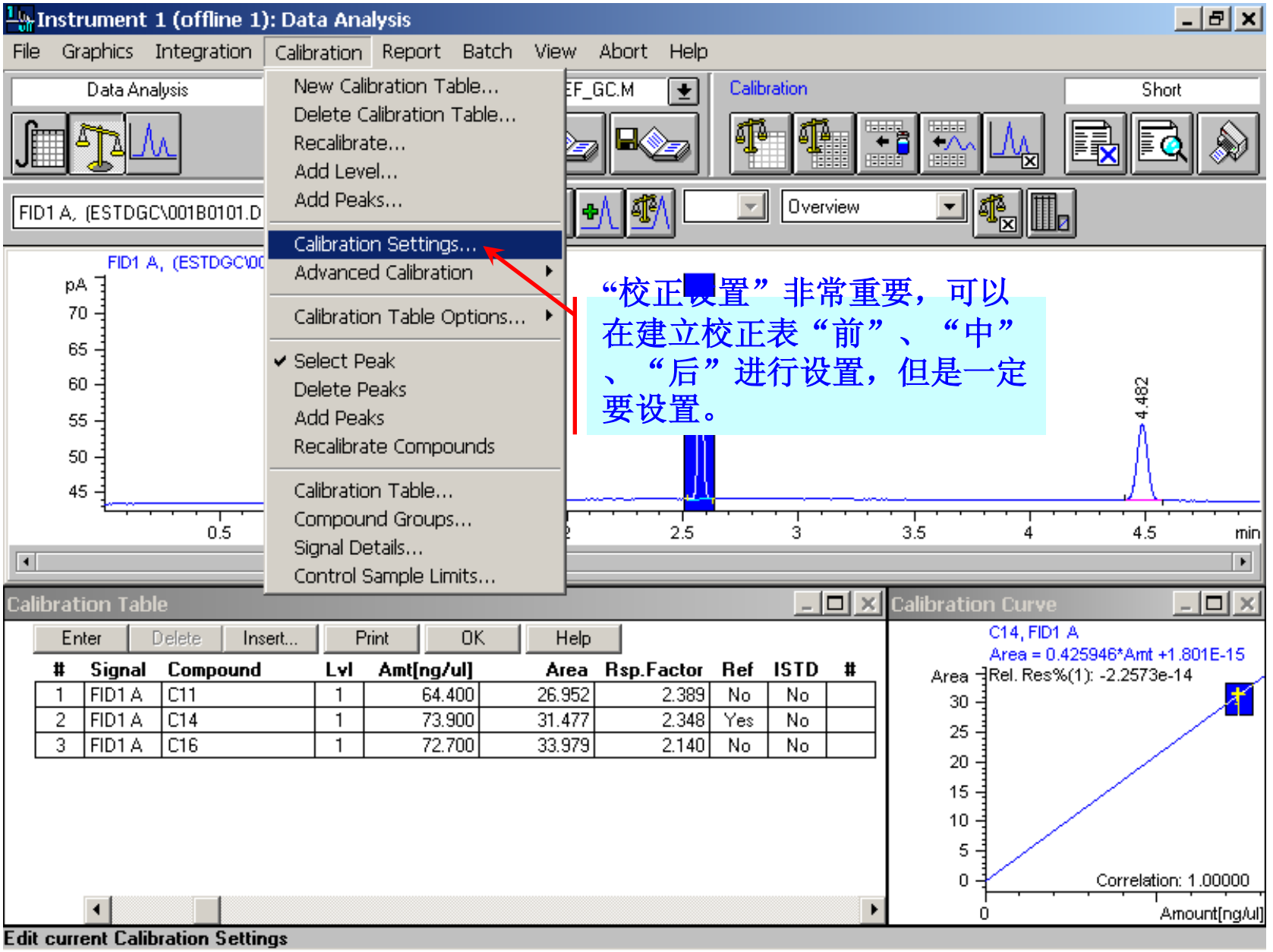
单击“New Calibration Table”，建立新的校正表。

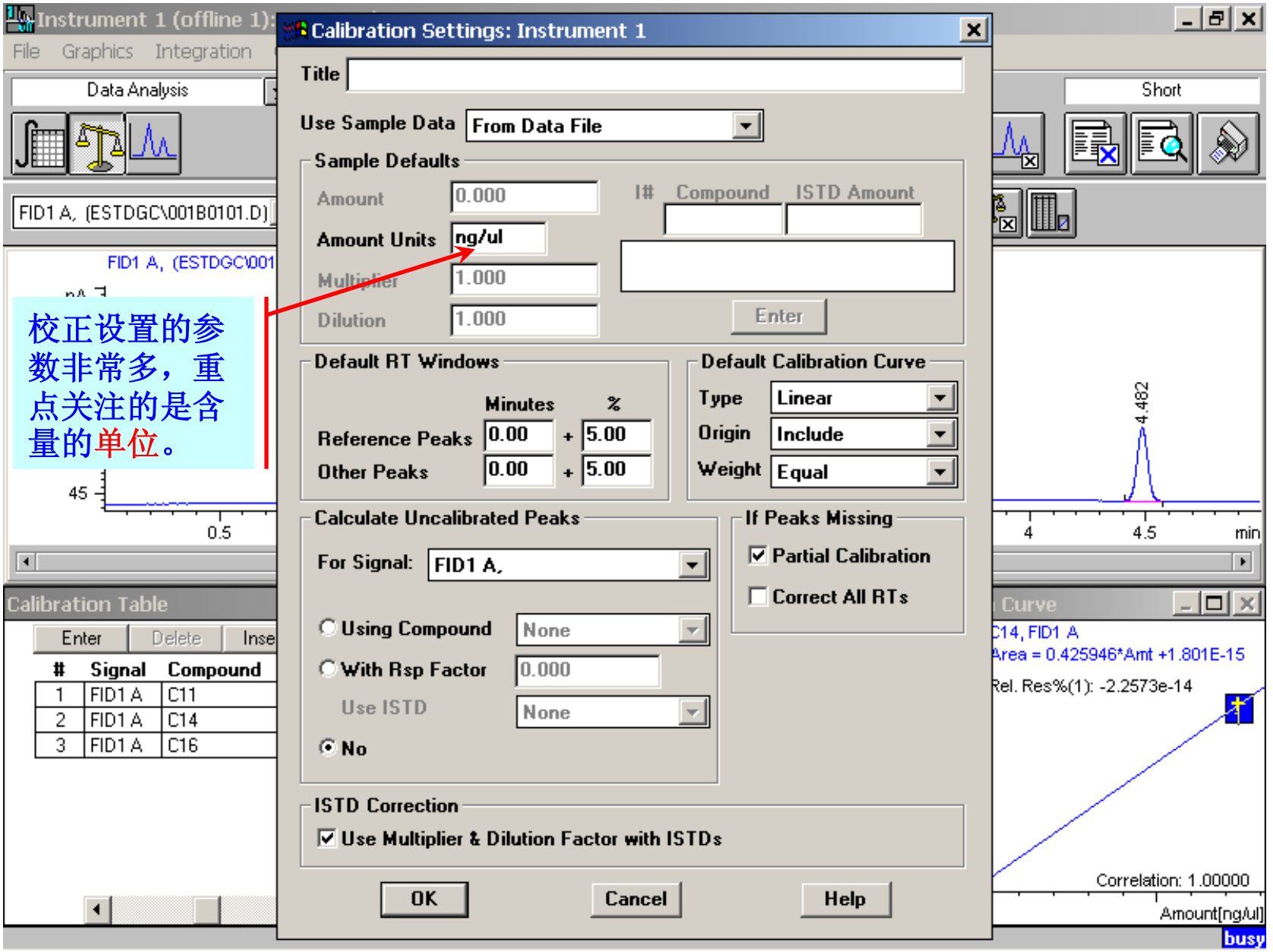

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0101.D
DEF_GC.M
Calibration
Short
Overview
Calibrate: Instrument 1
New Calibration Table
Calibration Table
Manual Setup
Automatic Setup
Level: 1
Default Amount: 0.000
Calibration Mode
Calculate Signals Separately
OK
Cancel
Help
自动设置
成Level 1
FID1
pA
70
65
60
55
50
45
2.574
4.482
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
New Calibration Table from current chromatogram
busy

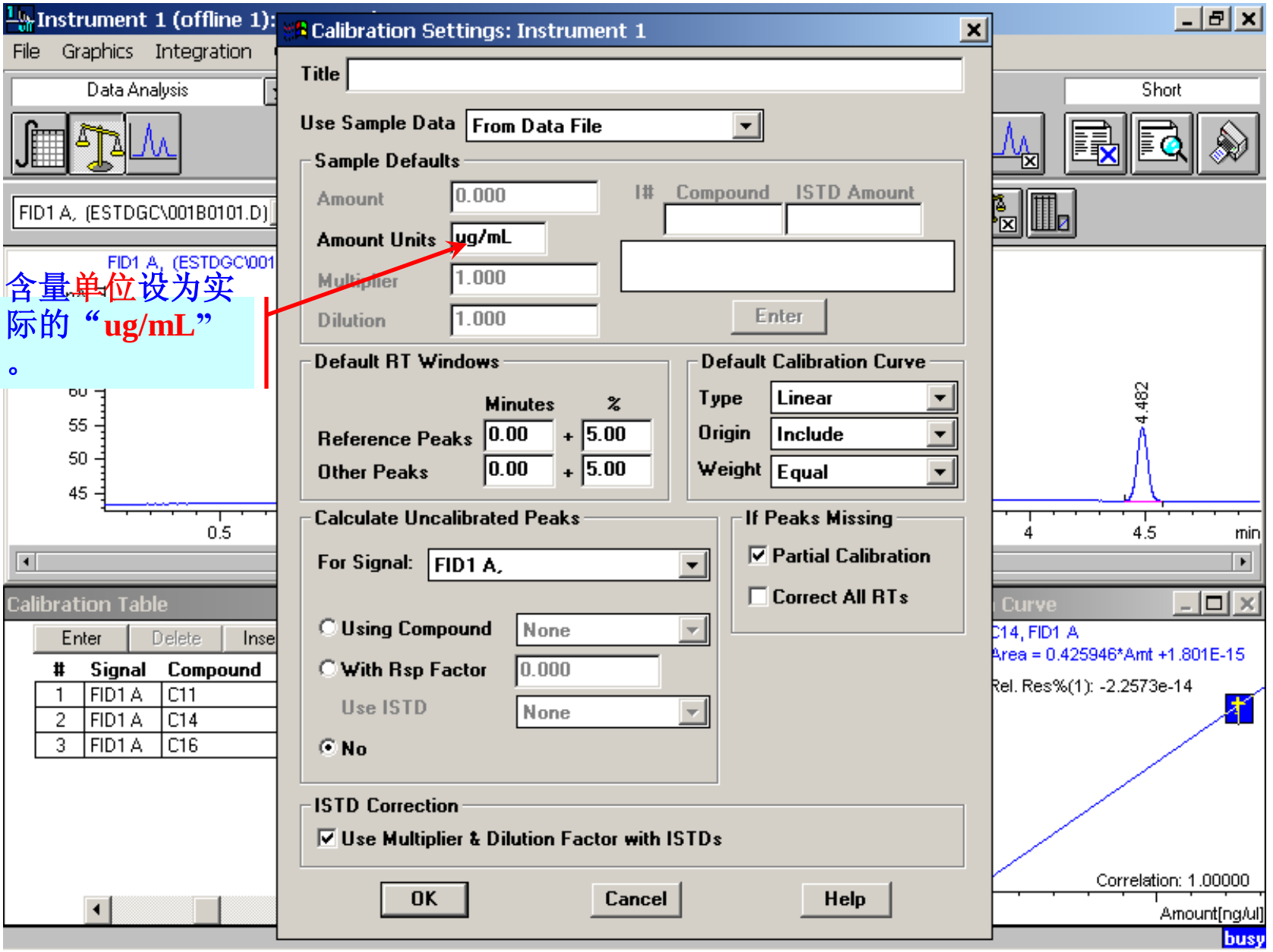

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0101.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\001B0101.D)
Overview
FID1 A, (ESTDGC\001B0101.D)
pA
70
65
60
55
50
45
1.610
2.574
4.482
0.5
1
1.5
2
3.5
4
4.5
min
含量单位：ng/uL
Calibration Table
Enter
Delete
Insert...
Print
OK
Help
Signal Compound Lvl Amt[ng/ul] Area Rsp.Factor Ref ISTD
1 FID1 A 1 0.000 26.952 0.000 No No
2 FID1 A 1 0.000 31.477 0.000 No No
3 FID1 A 1 0.000 33.979 0.000 No No
在当前“校正表”中，需要填写组分的“名称”、“含量”、
必要时指认“参考峰”、“内标峰”。
Calibration Curve
Compound #1, FID1 A
Area = 0*Amt +0
Area
1
0.05
0
calibration curve
-0.05
-0.1
0
Amount[ng/ul]
done

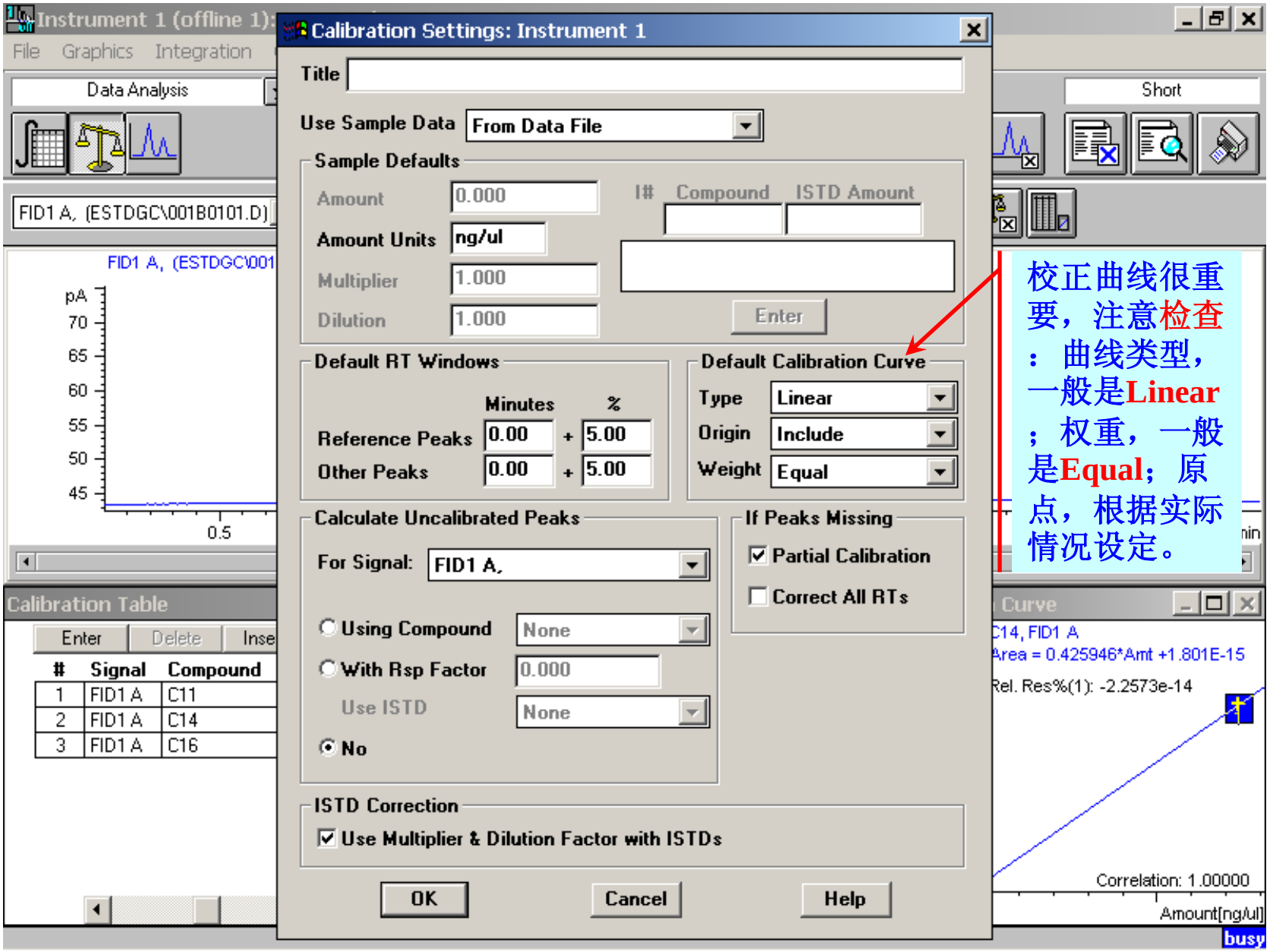


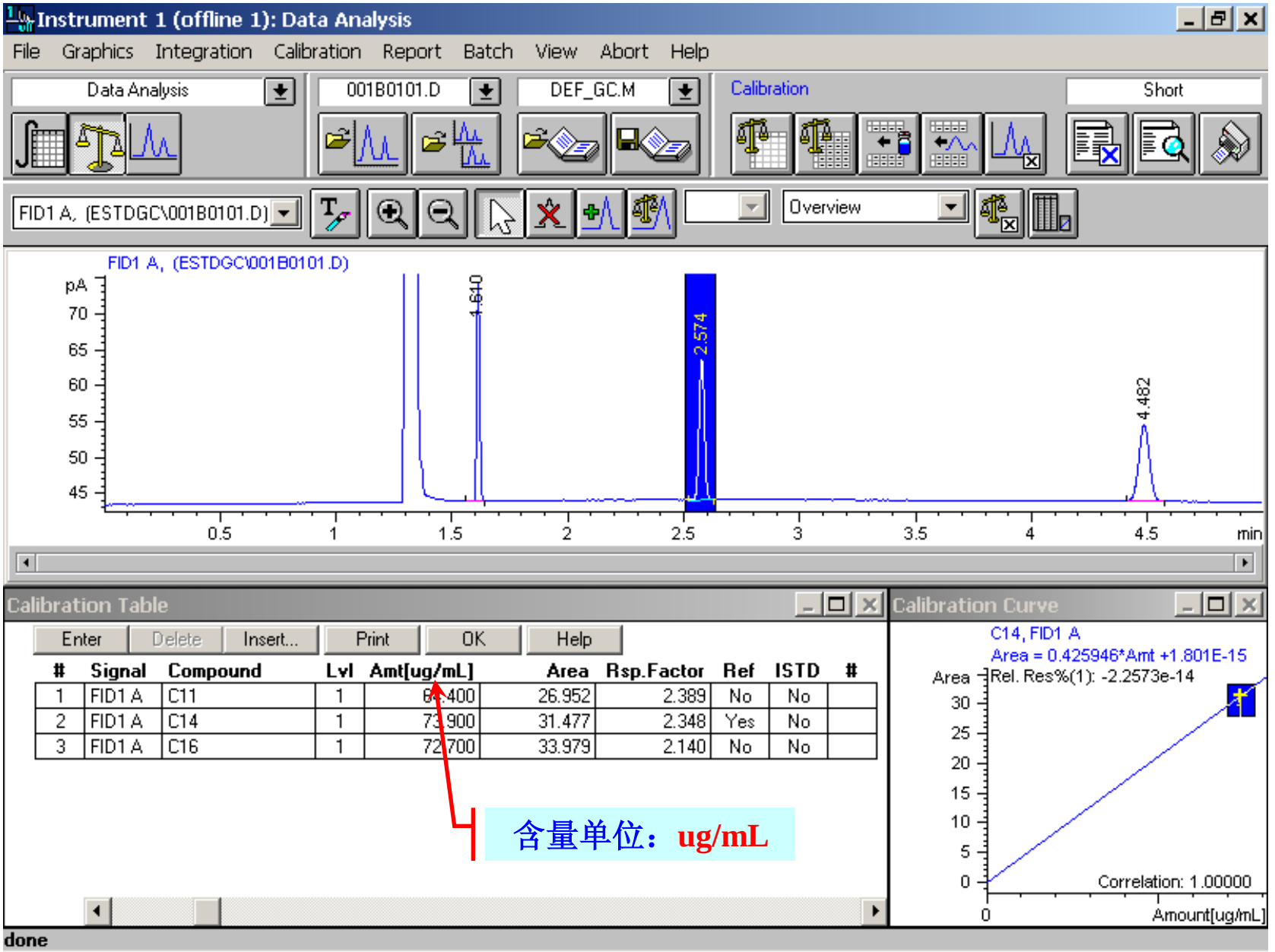
在当前“校正表”中填写子组分的“名称”、“含量”，指认了“参考峰”。由于本方法是外标法，所以不需要指认“内标峰”，“参考峰”一般选择色谱图中间的峰/内标峰作为参考峰，参考峰是为了修正样品之间保留时间的漂移。

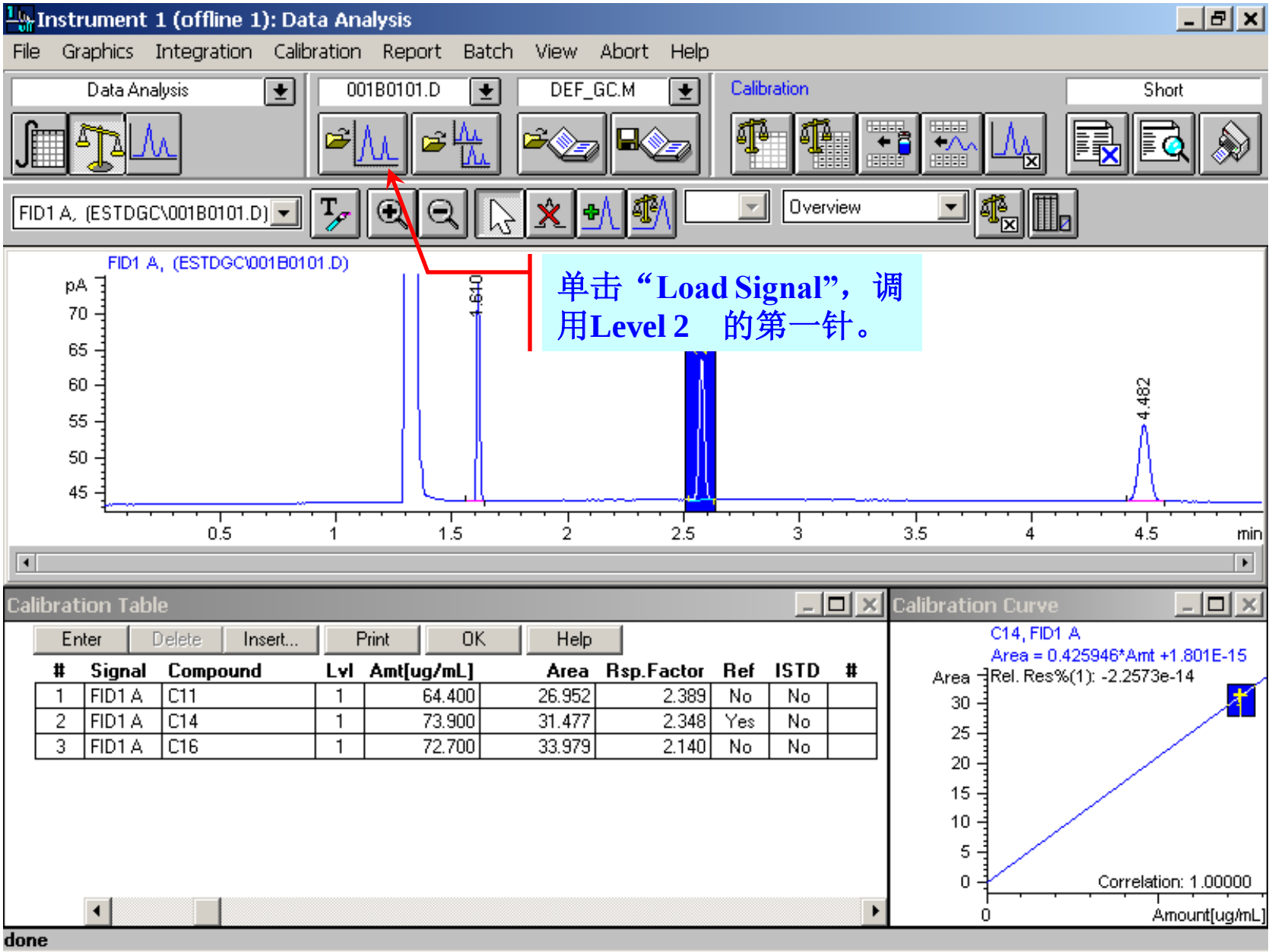

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
New Calibration Table...
Delete Calibration Table...
Recalibrate...
Add Level...
Add Peaks...
Calibration Settings...
Advanced Calibration
Calibration Table Options...
Select Peak
Delete Peaks
Add Peaks
Recalibrate Compounds
Calibration Table...
Compound Groups...
Signal Details...
Control Sample Limits...
Data Analysis
Calibration
Short
Overview
FID1 A, (ESTDGC\001B0101.D
“校正设置”非常重要，可以在建立校正表“前”、“中”、“后”进行设置，但是一定要设置。
4.482
min
Calibration Table
Enter Delete Insert... Print OK Help
Signal Compound Lvl Amt[ng/ul] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.952 2.389 No No
2 FID1 A C14 1 73.900 31.477 2.348 Yes No
3 FID1 A C16 1 72.700 33.979 2.140 No No
Calibration Curve
C14, FID1 A
Area = 0.425946*Amt +1.801E-15
Rel. Res%(1): -2.2573e-14
Correlation: 1.00000
Amount[ng/ul]
Edit current Calibration Settings

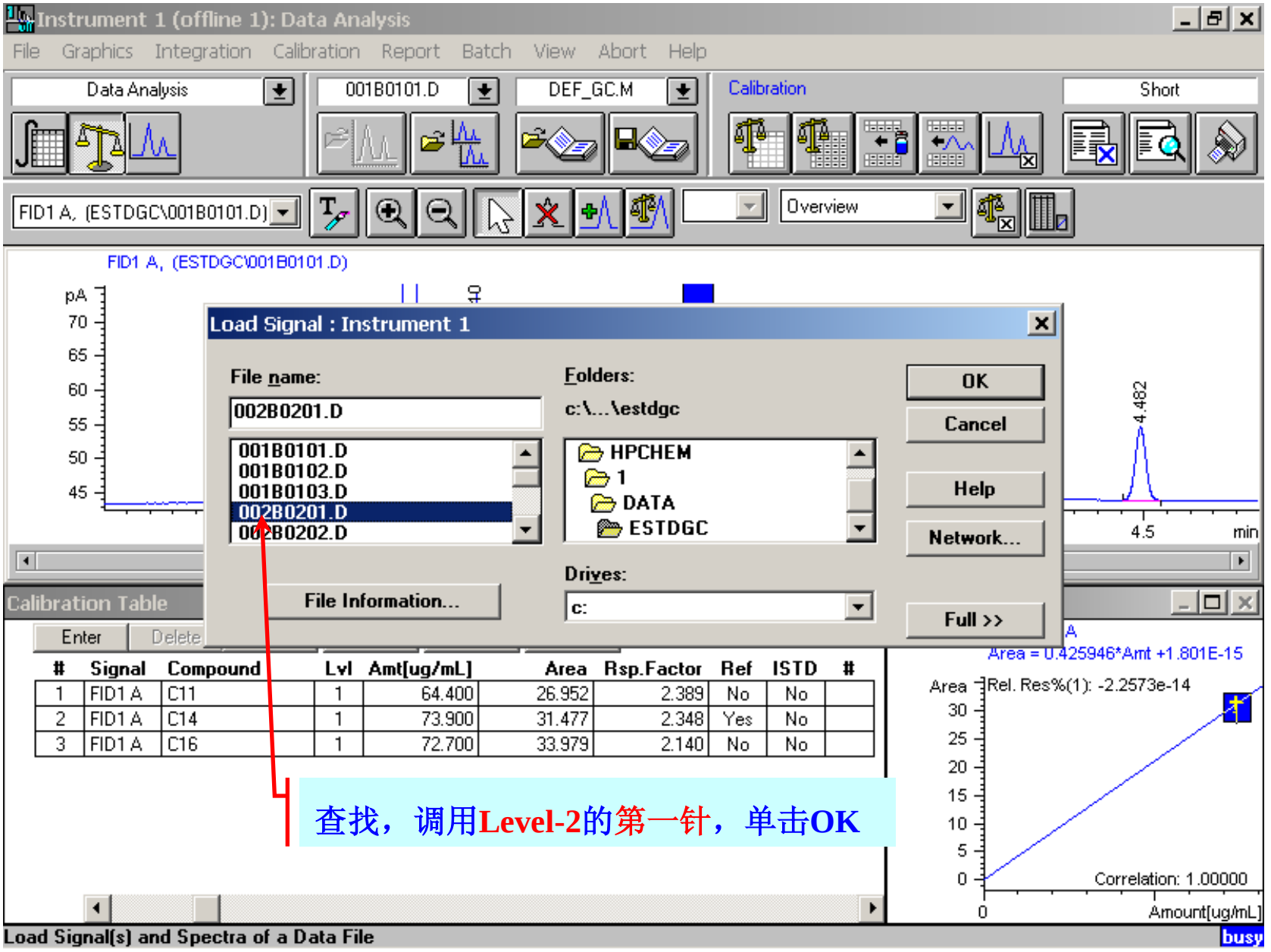

Instrument 1 (offline 1):
File Graphics Integration
Data Analysis
Short
FID1 A, (ESTDGC\001B0101.D)
FID1 A, (ESTDGC\001
Calibration Settings: Instrument 1
Title
Use Sample Data
From Data File
Sample Defaults
Amount
0.000
Amount Units
ng/ul
Multiplier
1.000
Dilution
1.000
I# Compound ISTD Amount
Enter
Default RT Windows
Minutes %
Reference Peaks 0.00 + 5.00
Other Peaks 0.00 + 5.00
Default Calibration Curve
Type Linear
Origin Include
Weight Equal
Calculate Uncalibrated Peaks
For Signal: FID1 A,
Using Compound None
With Rsp Factor 0.000
Use ISTD None
No
If Peaks Missing
Partial Calibration
Correct All RTs
ISTD Correction
Use Multiplier & Dilution Factor with ISTDs
OK
Cancel
Help
校正设置的参数非常多，重点关注的是含量的单位。
Calibration Table
Enter Delete Inse
Signal Compound
1 FID1 A C11
2 FID1 A C14
3 FID1 A C16
Curve
C14, FID1 A
Area = 0.425946*Amt +1.801E-15
Rel. Res%(1): -2.2573e-14
Correlation: 1.00000
Amount[ng/ul]
busy
4.482
min

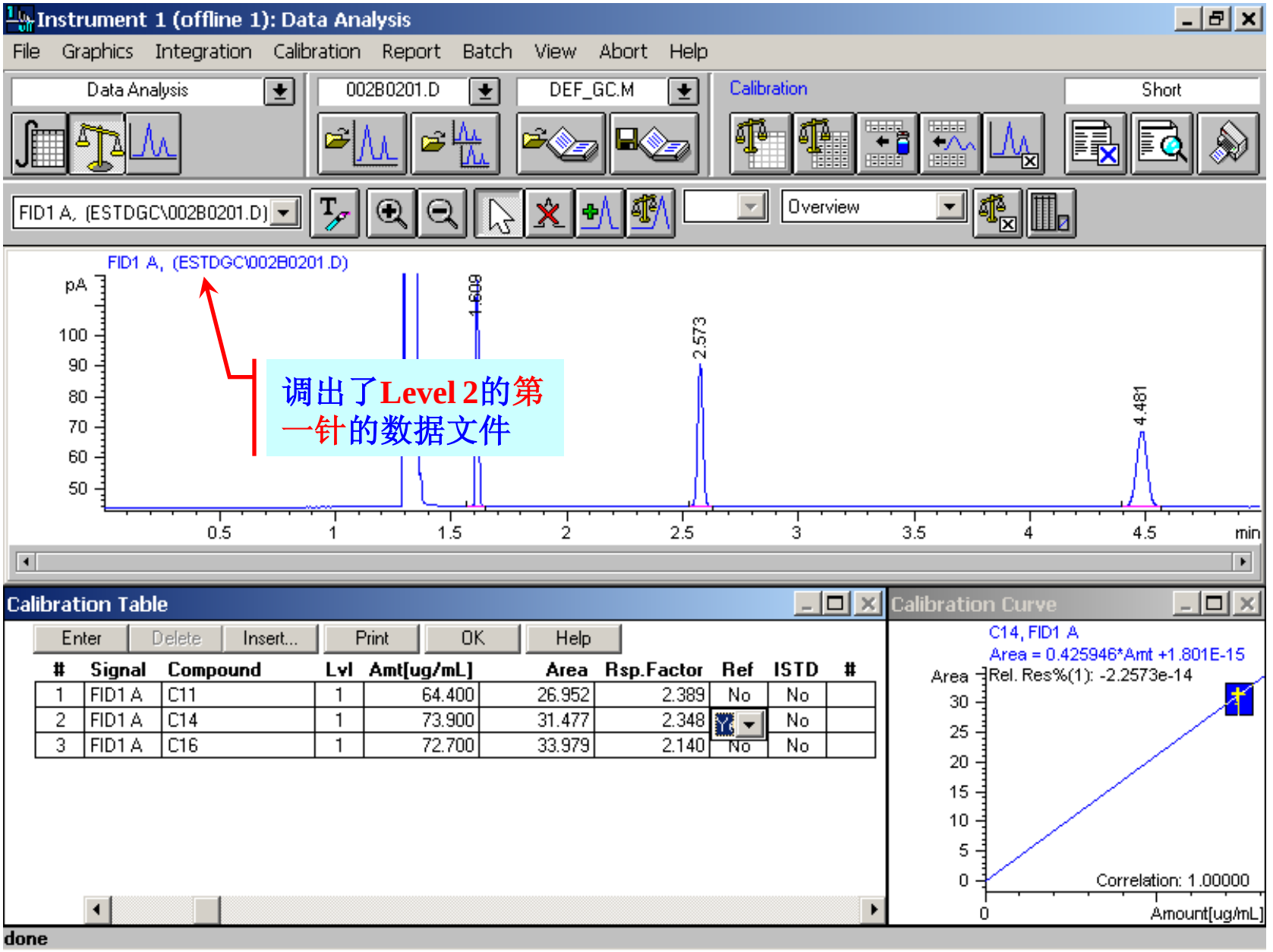

Instrument 1 (offline 1):
File Graphics Integration
Data Analysis
Short
FID1 A, (ESTDGC\001B0101.D)
含量单位设为实际的“ug/mL”。
Calibration Settings: Instrument 1
Title
Use Sample Data
From Data File
Sample Defaults
Amount
0.000
Amount Units
ug/mL
Multiplier
1.000
Dilution
1.000
I# Compound ISTD Amount
Enter
Default RT Windows
Minutes %
Reference Peaks 0.00 + 5.00
Other Peaks 0.00 + 5.00
Default Calibration Curve
Type Linear
Origin Include
Weight Equal
Calculate Uncalibrated Peaks
For Signal: FID1 A,
Using Compound None
With Rsp Factor 0.000
Use ISTD None
No
If Peaks Missing
Partial Calibration
Correct All RTs
ISTD Correction
Use Multiplier & Dilution Factor with ISTDs
OK
Cancel
Help
Calibration Table
Enter Delete
Signal Compound
1 FID1 A C11
2 FID1 A C14
3 FID1 A C16
4.482
min
C14, FID1 A
Area = 0.425946*Amt +1.801E-15
Rel. Res%(1): -2.2573e-14
Correlation: 1.00000
Amount[ng/ul]
busy

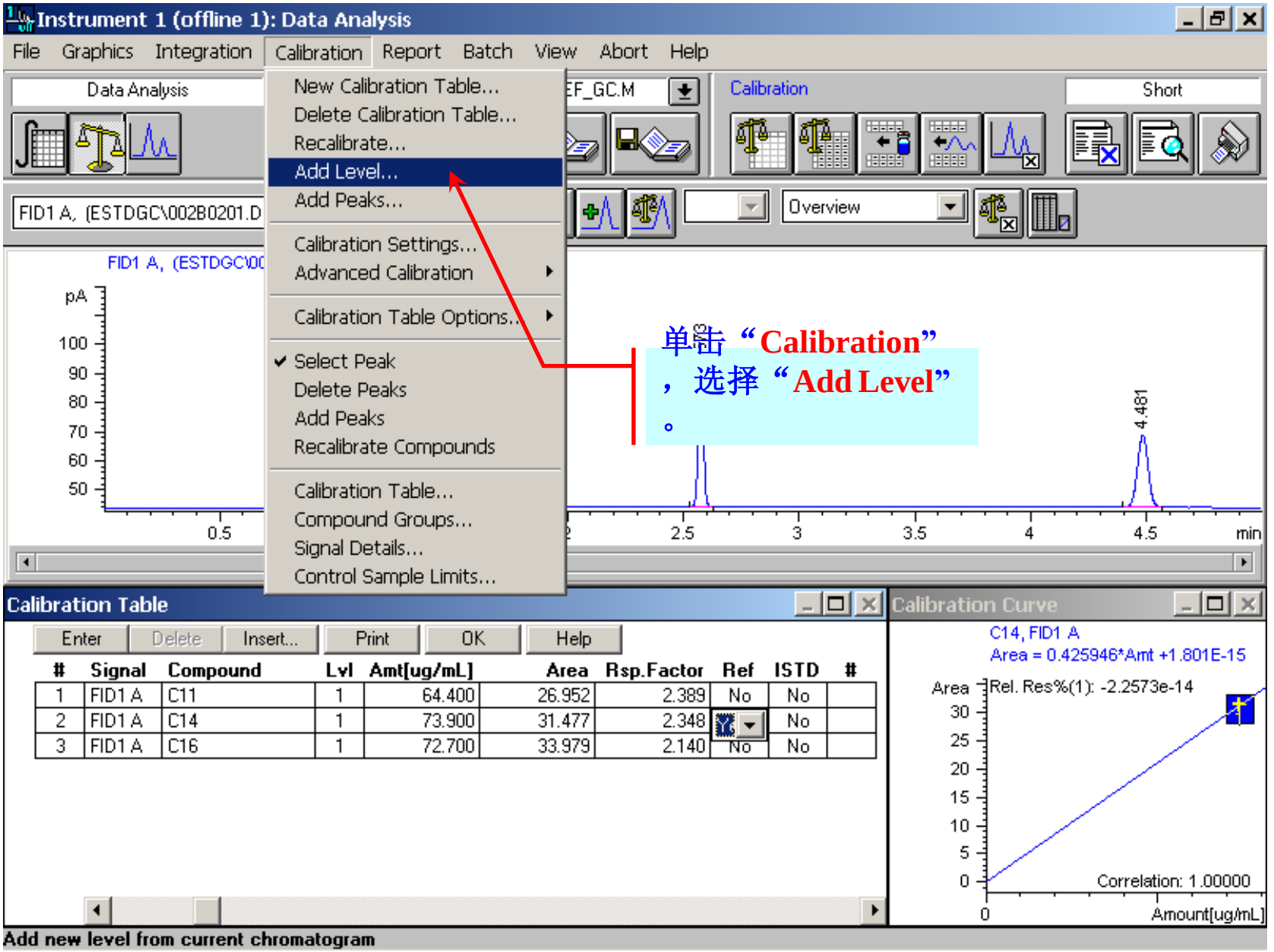

Instrument 1 (offline 1):
File Graphics Integration
Data Analysis
Short
FID1 A, (ESTDGC\001B0101.D)
FID1 A, (ESTDGC\001
pA
70
65
60
55
50
45
0.5
Calibration Table
Enter Delete Inse
Signal Compound
1 FID1 A C11
2 FID1 A C14
3 FID1 A C16
Calibration Settings: Instrument 1
Title
Use Sample Data From Data File
Sample Defaults
Amount 0.000
Amount Units ng/ul
Multiplier 1.000
Dilution 1.000
I# Compound ISTD Amount
Enter
Default RT Windows
Minutes %
Reference Peaks 0.00 + 5.00
Other Peaks 0.00 + 5.00
Default Calibration Curve
Type Linear
Origin Include
Weight Equal
Calculate Uncalibrated Peaks
For Signal: FID1 A,
Using Compound None
With Rsp Factor 0.000
Use ISTD None
No
If Peaks Missing
Partial Calibration
Correct All RTs
ISTD Correction
Use Multiplier & Dilution Factor with ISTDs
OK
Cancel
Help
Curve
C14, FID1 A
Area = 0.425946*Amt +1.801E-15
Rel. Res%(1): -2.2573e-14
Correlation: 1.00000
Amount[ng/ul]
busy
校正曲线很重要，注意检查：曲线类型，一般是Linear；权重，一般是Equal；原点，根据实际情况设定。

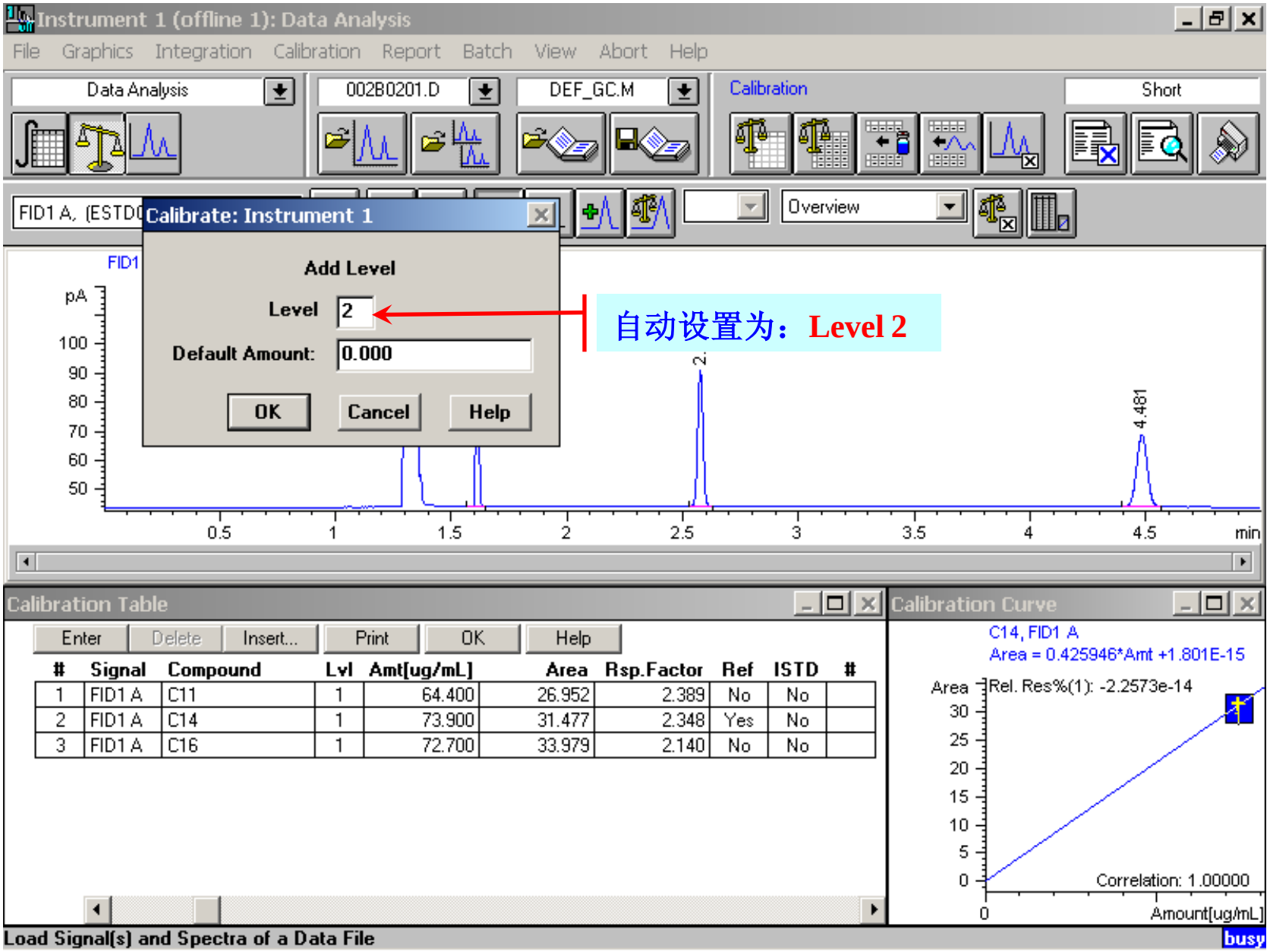

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0101.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\001B0101.D)
Overview
FID1 A, (ESTDGC\001B0101.D)
pA
70
65
60
55
50
45
1.610
2.574
4.482
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
Calibration Table
Enter
Delete
Insert...
Print
OK
Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 6.400 26.952 2.389 No No
2 FID1 A C14 1 73.900 31.477 2.348 Yes No
3 FID1 A C16 1 72.700 33.979 2.140 No No
含量单位：ug/mL
Calibration Curve
C14, FID1 A
Area = 0.425946*Amt +1.801E-15
Rel. Res%(1): -2.2573e-14
Area
30
25
20
15
10
5
0
Correlation: 1.00000
0
Amount[ug/mL]
done

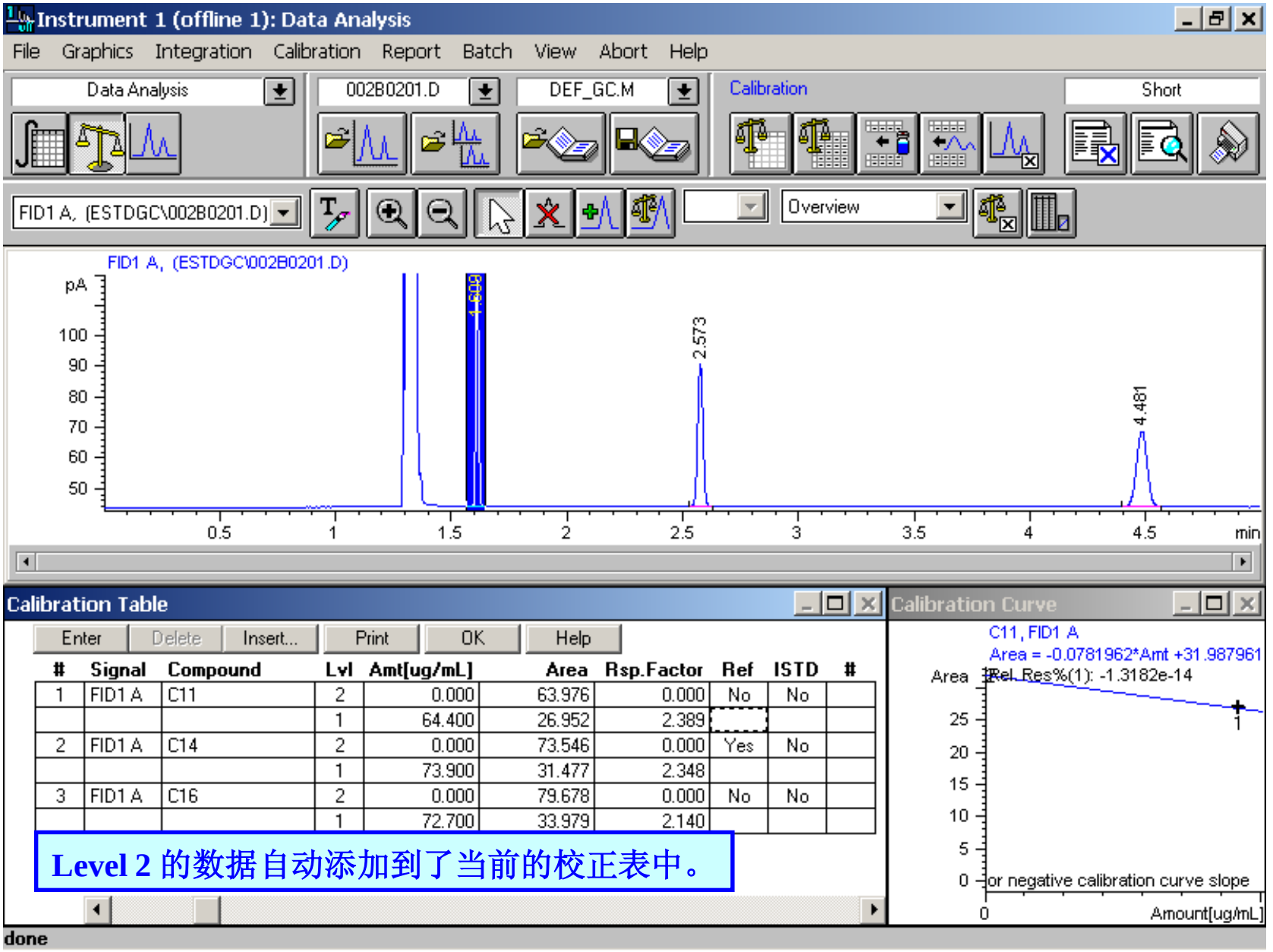

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0101.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\001B0101.D)
Overview
FID1 A, (ESTDGC\001B0101.D)
pA
1.610
4.482
min
单击“Load Signal”，调用Level 2 的第一针。
Calibration Table
Enter Delete Insert... Print OK Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.952 2.389 No No
2 FID1 A C14 1 73.900 31.477 2.348 Yes No
3 FID1 A C16 1 72.700 33.979 2.140 No No
Calibration Curve
C14, FID1 A
Area = 0.425946*Amt +1.801E-15
Rel. Res%(1): -2.2573e-14
Area
Correlation: 1.00000
Amount[ug/mL]
done

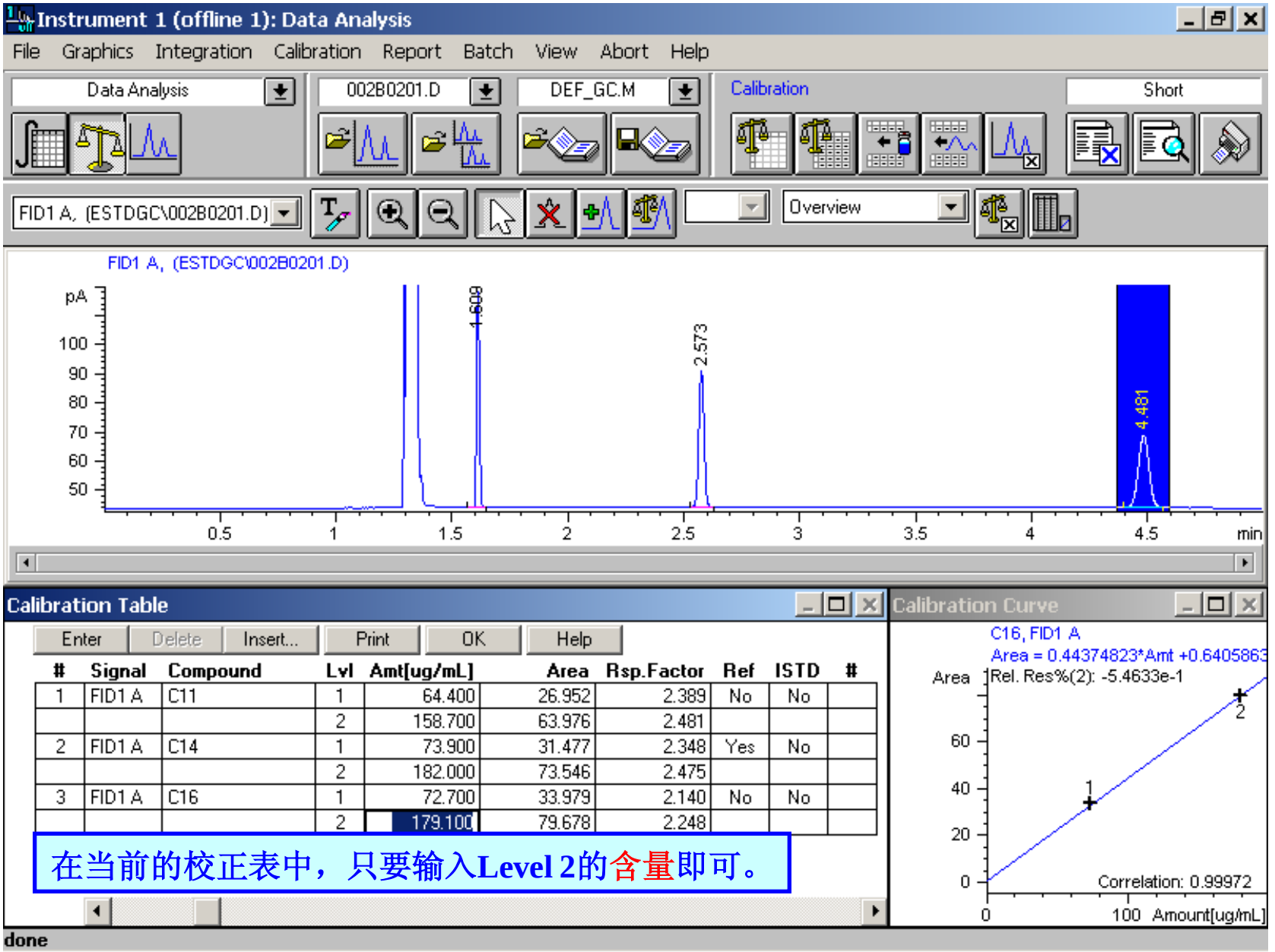

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0101.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\001B0101.D)
Overview
FID1 A, (ESTDGC\001B0101.D)
pA
70
65
60
55
50
45
4.482
4.5
min
Load Signal : Instrument 1
File name:
002B0201.D
001B0101.D
001B0102.D
001B0103.D
002B0201.D
002B0202.D
Folders:
c:\...\estdgc
HPCHEM
1
DATA
ESTDGC
Drives:
c:
File Information...
OK
Cancel
Help
Network...
Full >>
Calibration Table
Enter
Delete
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.952 2.389 No No
2 FID1 A C14 1 73.900 31.477 2.348 Yes No
3 FID1 A C16 1 72.700 33.979 2.140 No No
Area = 0.425946*Amt +1.801E-15
Rel. Res%(1): -2.2573e-14
Area
30
25
20
15
10
5
0
Correlation: 1.00000
0
Amount[ug/mL]
查找，调用Level-2的第一针，单击OK
Load Signal(s) and Spectra of a Data File
busy

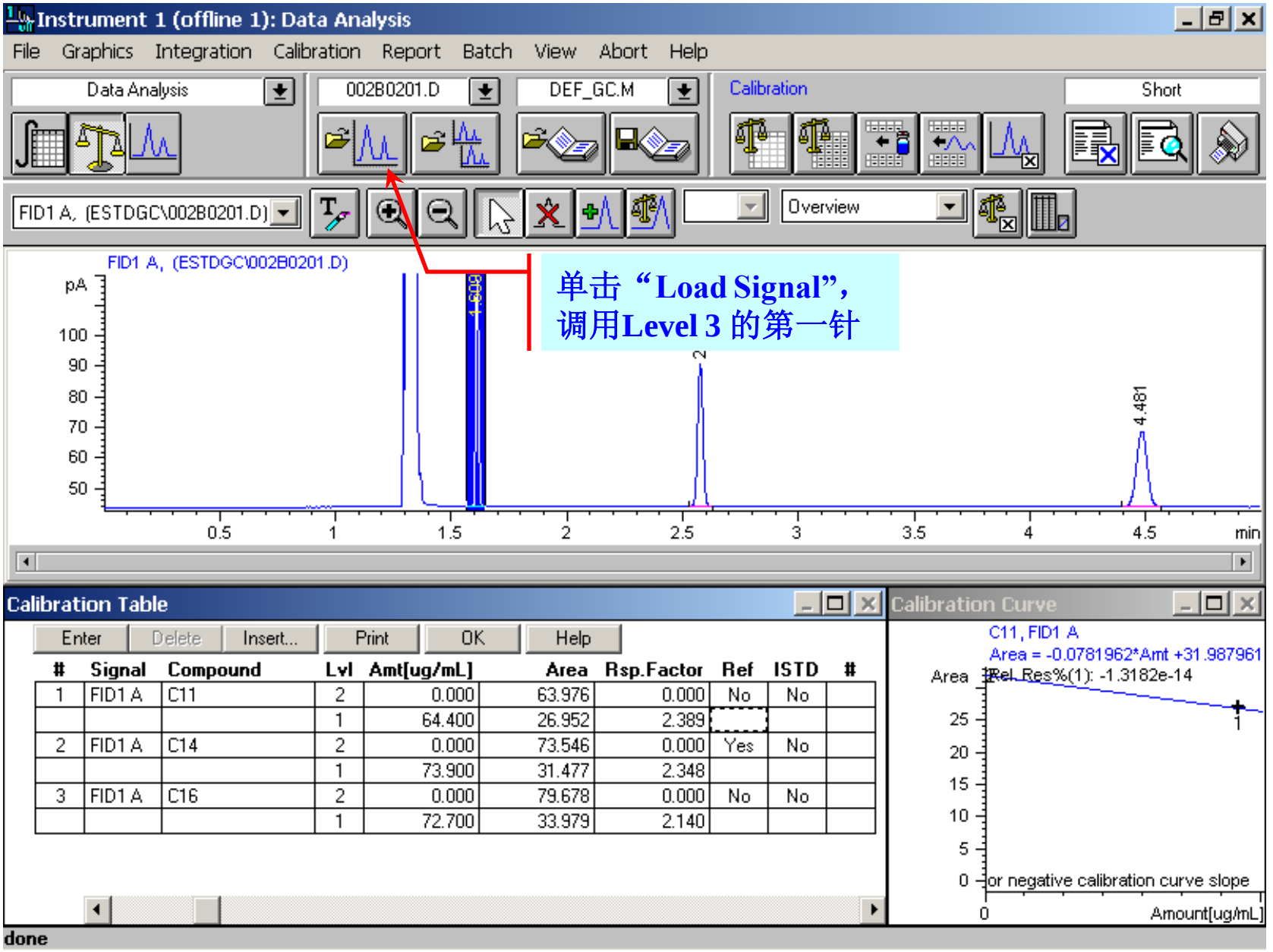

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
002B0201.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\002B0201.D)
Overview
FID1 A, (ESTDGC\002B0201.D)
pA
100
90
80
70
60
50
1.609
2.573
4.481
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
调出了Level 2的第一针的数据文件
Calibration Table
Enter
Delete
Insert...
Print
OK
Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.952 2.389 No No
2 FID1 A C14 1 73.900 31.477 2.348 No
3 FID1 A C16 1 72.700 33.979 2.140 No No
Calibration Curve
C14, FID1 A
Area = 0.425946*Amt +1.801E-15
Rel. Res%(1): -2.2573e-14
Area
30
25
20
15
10
5
0
Correlation: 1.00000
0
Amount[ug/mL]
done

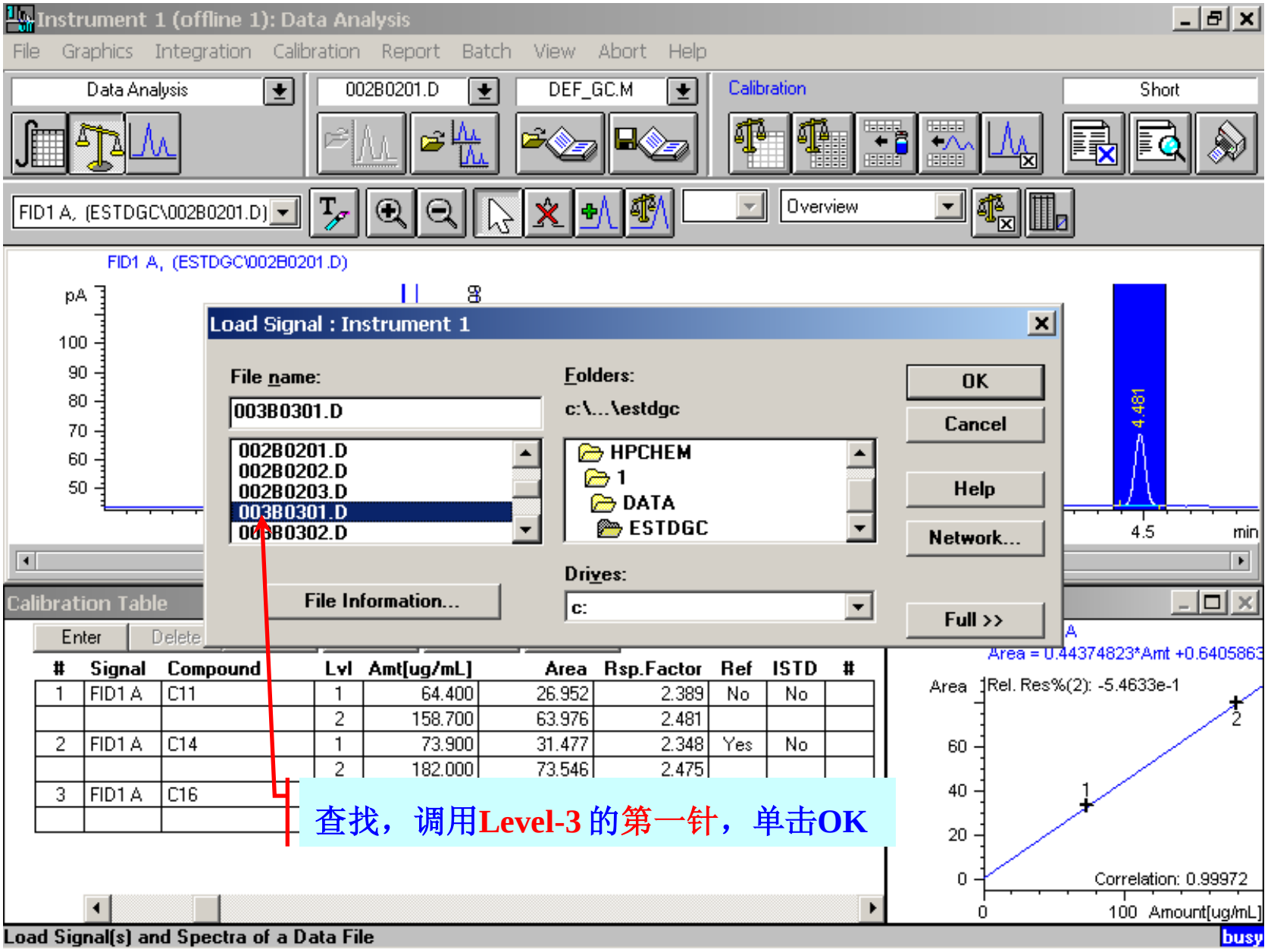

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
New Calibration Table...
Delete Calibration Table...
Recalibrate...
Add Level...
Add Peaks...
Calibration Settings...
Advanced Calibration
Calibration Table Options...
Select Peak
Delete Peaks
Add Peaks
Recalibrate Compounds
Calibration Table...
Compound Groups...
Signal Details...
Control Sample Limits...
单击“Calibration”，选择“Add Level”。
Calibration Table
Enter Delete Insert... Print OK Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.952 2.389 No No
2 FID1 A C14 1 73.900 31.477 2.348 No
3 FID1 A C16 1 72.700 33.979 2.140 No No
Calibration Curve
C14, FID1 A
Area = 0.425946*Amt +1.801E-15
Rel. Res%(1): -2.2573e-14
Correlation: 1.00000
Amount[ug/mL]
Add new level from current chromatogram

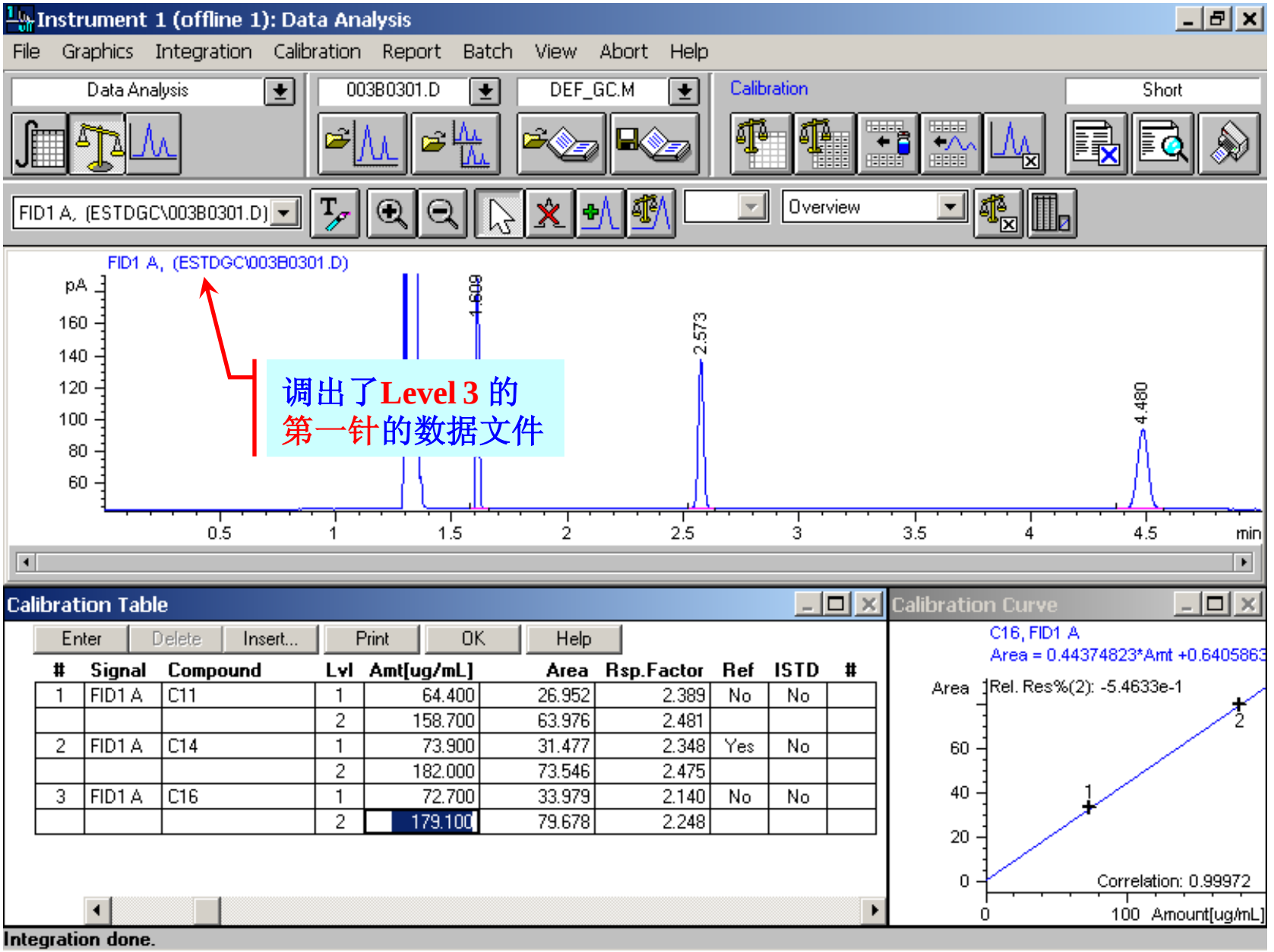

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
002B0201.D
DEF_GC.M
Calibration
Short
Overview
Calibrate: Instrument 1
Add Level
Level 2
Default Amount: 0.000
OK Cancel Help
自动设置为：Level 2
FID1
pA
100 90 80 70 60 50
0.5 1 1.5 2 2.5 3 3.5 4 4.5 min
4.481
Calibration Table
Enter Delete Insert... Print OK Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.952 2.389 No No
2 FID1 A C14 1 73.900 31.477 2.348 Yes No
3 FID1 A C16 1 72.700 33.979 2.140 No No
Calibration Curve
C14, FID1 A
Area = 0.425946*Amt +1.801E-15
Rel. Res%(1): -2.2573e-14
Area
30 25 20 15 10 5 0
Correlation: 1.00000
0
Amount[ug/mL]
Load Signal(s) and Spectra of a Data File
busy

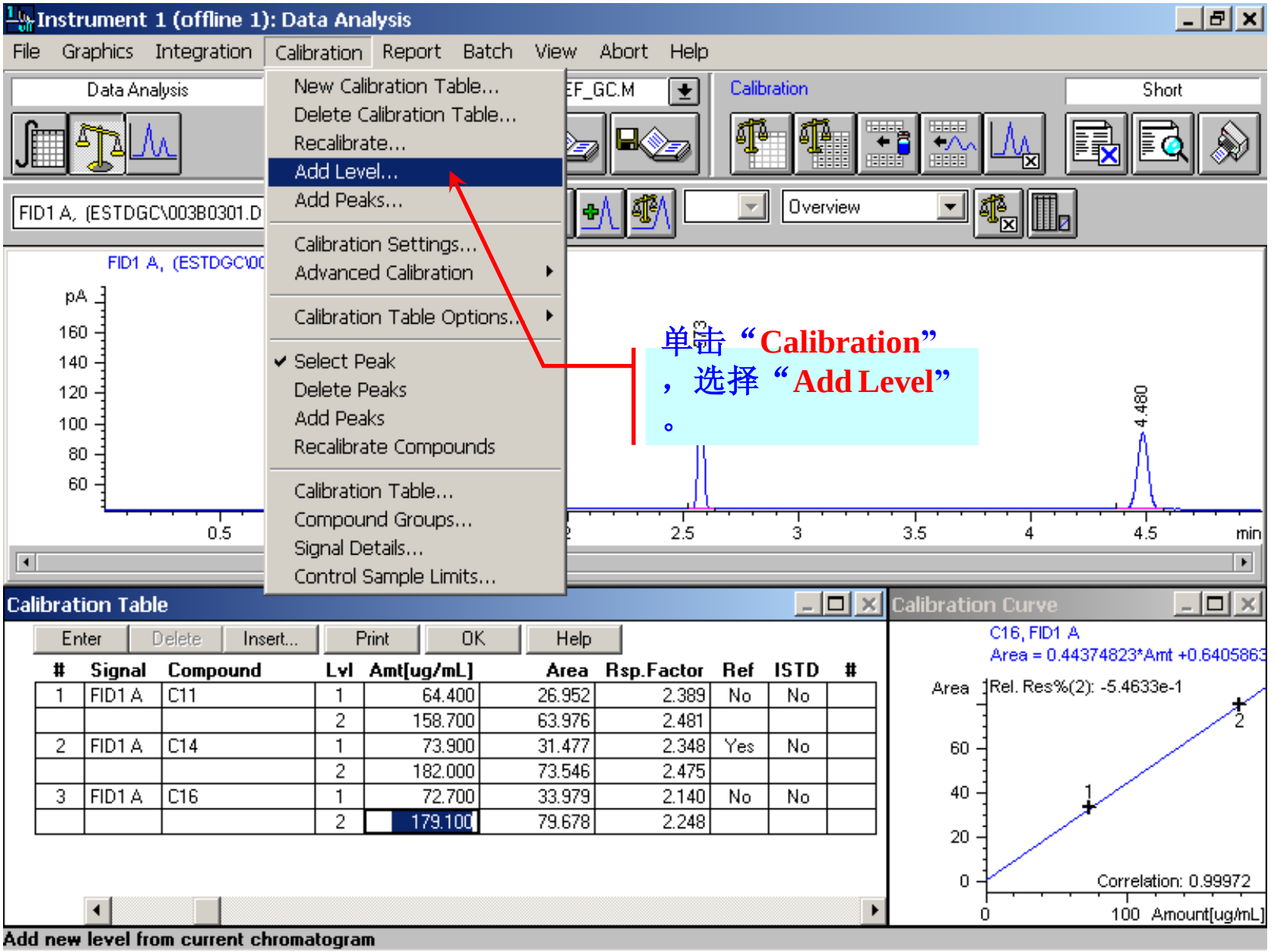

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
002B0201.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\002B0201.D)
Overview
FID1 A, (ESTDGC\002B0201.D)
pA
100
90
80
70
60
50
1.909
2.573
4.481
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
Calibration Table
Enter
Delete
Insert...
Print
OK
Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 2 0.000 63.976 0.000 No No
1 64.400 26.952 2.389
2 FID1 A C14 2 0.000 73.546 0.000 Yes No
1 73.900 31.477 2.348
3 FID1 A C16 2 0.000 79.678 0.000 No No
1 72.700 33.979 2.140
Level 2 的数据自动添加到了当前的校正表中。
Calibration Curve
C11, FID1 A
Area = -0.0781962*Amt +31.987961
Rel.Res%(1): -1.3182e-14
Area
25
20
15
10
5
0
1
or negative calibration curve slope
0
Amount[ug/mL]
done


Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
002B0201.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\002B0201.D)
Overview
FID1 A, (ESTDGC\002B0201.D)
pA
100
90
80
70
60
50
1.609
2.573
4.481
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
Calibration Table
Enter
Delete
Insert...
Print
OK
Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.952 2.389 No No
2 158.700 63.976 2.481
2 FID1 A C14 1 73.900 31.477 2.348 Yes No
2 182.000 73.546 2.475
3 FID1 A C16 1 72.700 33.979 2.140 No No
2 179.100 79.678 2.248
在当前的校正表中，只要输入Level 2的含量即可。
Calibration Curve
C16, FID1 A
Area = 0.44374823*Amt +0.6405863
Rel. Res%(2): -5.4633e-1
Area
60
40
20
0
Correlation: 0.99972
0
100 Amount[ug/mL]
done

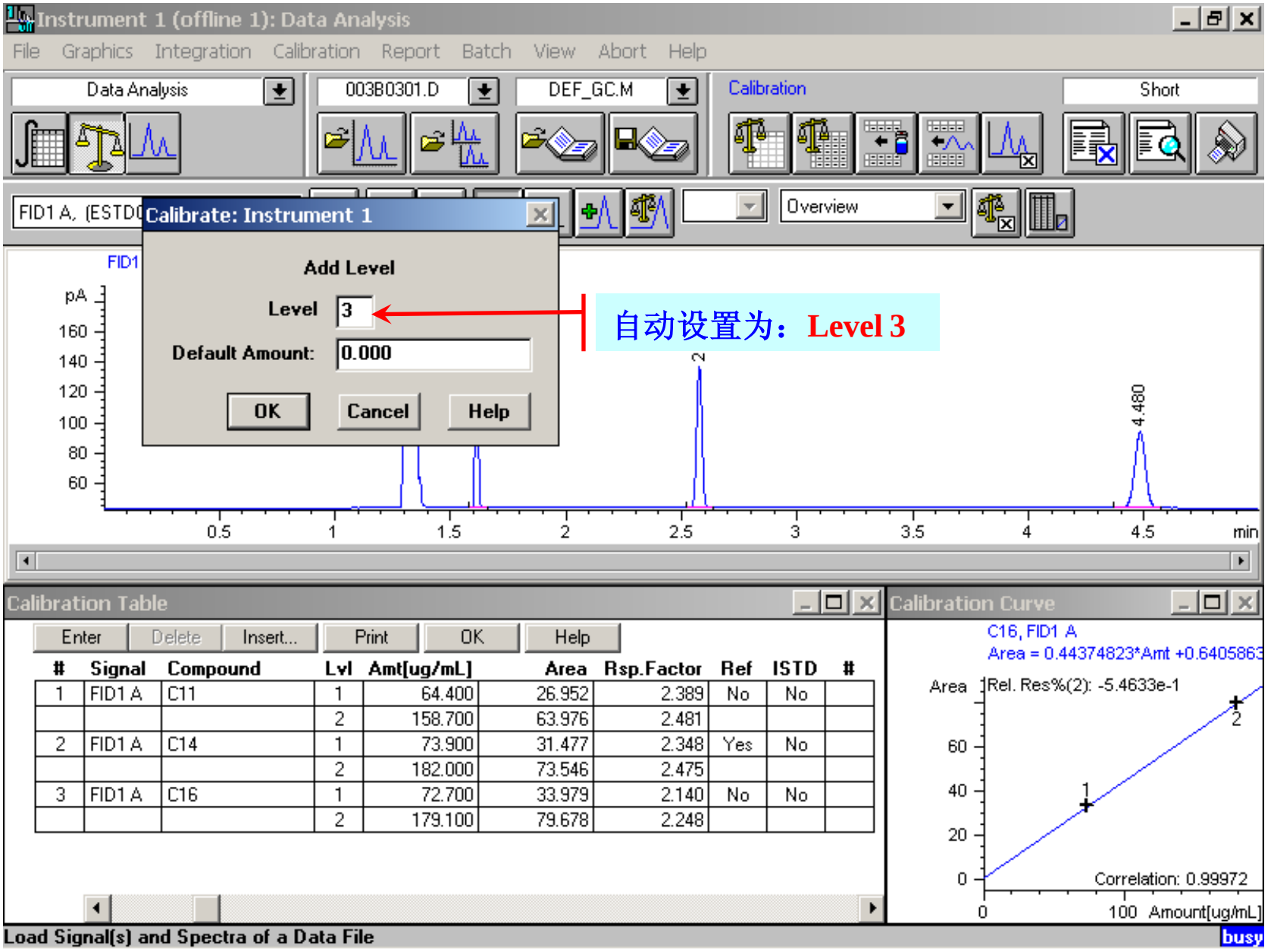

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
002B0201.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\002B0201.D)
Overview
FID1 A, (ESTDGC\002B0201.D)
pA
100
90
80
70
60
50
1.808
2
4.481
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
单击“Load Signal”，
调用Level 3 的第一针
Calibration Table
Enter Delete Insert... Print OK Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 2 0.000 63.976 0.000 No No
1 64.400 26.952 2.389
2 FID1 A C14 2 0.000 73.546 0.000 Yes No
1 73.900 31.477 2.348
3 FID1 A C16 2 0.000 79.678 0.000 No No
1 72.700 33.979 2.140
Calibration Curve
C11, FID1 A
Area = -0.0781962*Amt +31.987961
Rel. Res%(1): -1.3182e-14
Area
25
20
15
10
5
0
1
or negative calibration curve slope
0
Amount[ug/mL]
done

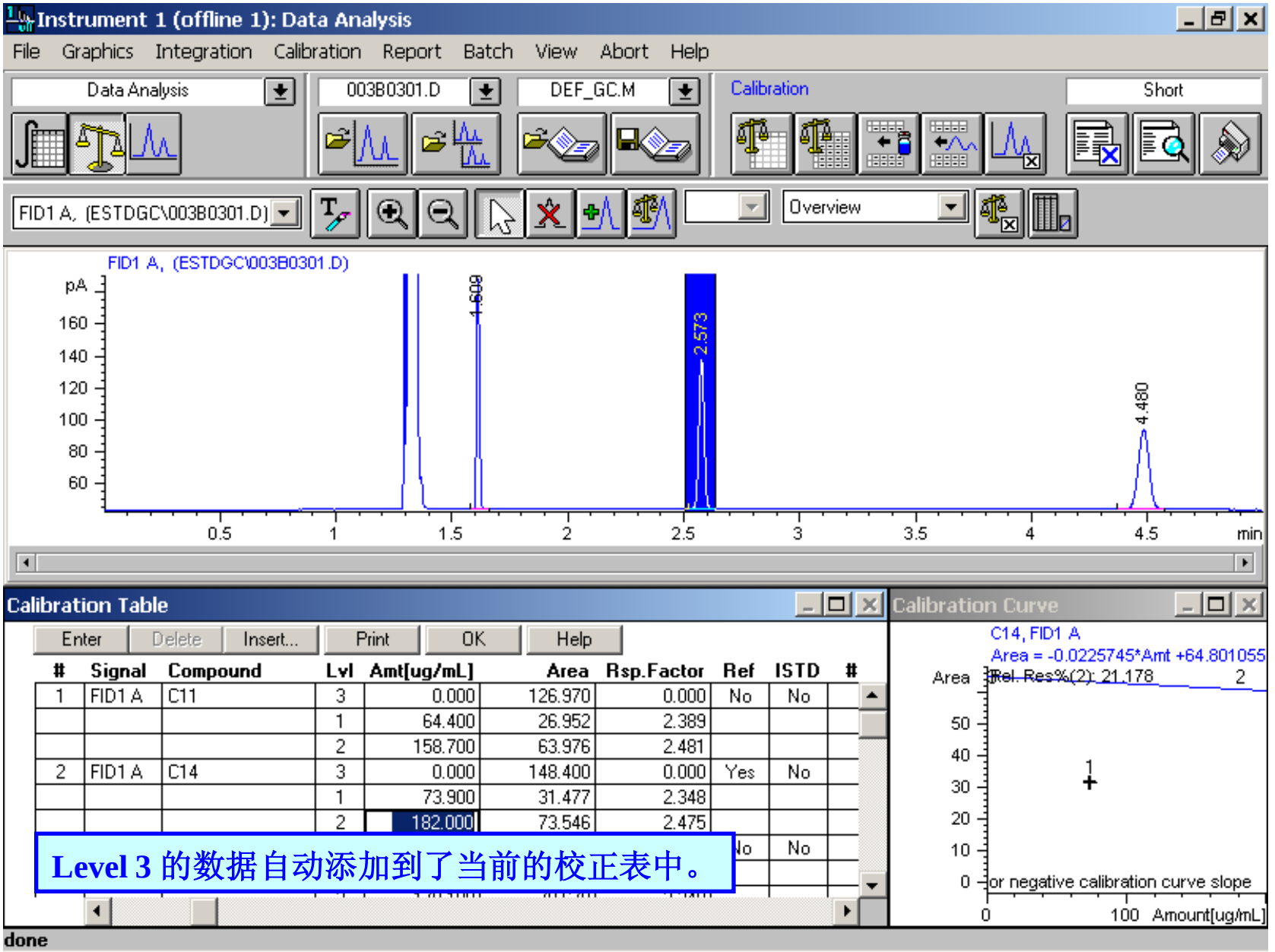

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
002B0201.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\002B0201.D)
Overview
FID1 A, (ESTDGC\002B0201.D)
pA
100
90
80
70
60
50
4.481
4.5
min
Load Signal : Instrument 1
File name:
003B0301.D
002B0201.D
002B0202.D
002B0203.D
003B0301.D
003B0302.D
Folders:
c:\...\estdgc
HPCHEM
1
DATA
ESTDGC
Drives:
c:
File Information...
OK
Cancel
Help
Network...
Full >>
Calibration Table
Enter
Delete
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.952 2.389 No No
2 158.700 63.976 2.481
2 FID1 A C14 1 73.900 31.477 2.348 Yes No
2 182.000 73.546 2.475
3 FID1 A C16
Area = 0.44374823*Amt +0.6405863
Area
Rel. Res%(2): -5.4633e-1
60
40
20
0
Correlation: 0.99972
0
100 Amount[ug/mL]
查找，调用Level-3 的第一针，单击OK
Load Signal(s) and Spectra of a Data File
busy

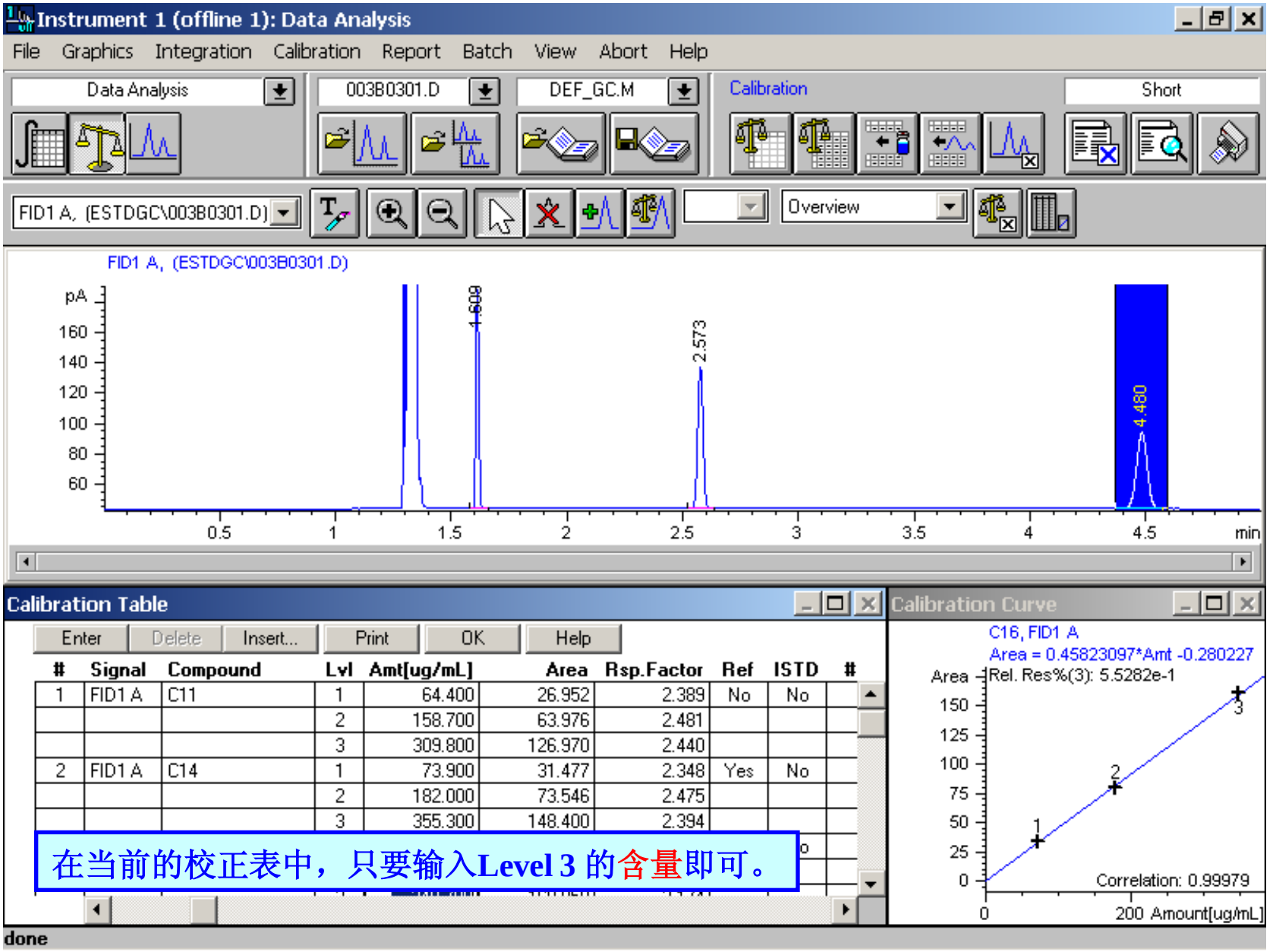

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0301.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\003B0301.D)
Overview
FID1 A, (ESTDGC\003B0301.D)
pA
160
140
120
100
80
60
1.609
2.573
4.480
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
调出了Level 3 的
第一针的数据文件
Calibration Table
Enter
Delete
Insert...
Print
OK
Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.952 2.389 No No
2 158.700 63.976 2.481
2 FID1 A C14 1 73.900 31.477 2.348 Yes No
2 182.000 73.546 2.475
3 FID1 A C16 1 72.700 33.979 2.140 No No
2 179.100 79.678 2.248
Calibration Curve
C16, FID1 A
Area = 0.44374823*Amt +0.6405863
Area
Rel. Res%(2): -5.4633e-1
60
40
20
0
1
2
Correlation: 0.99972
0
100 Amount[ug/mL]
Integration done.

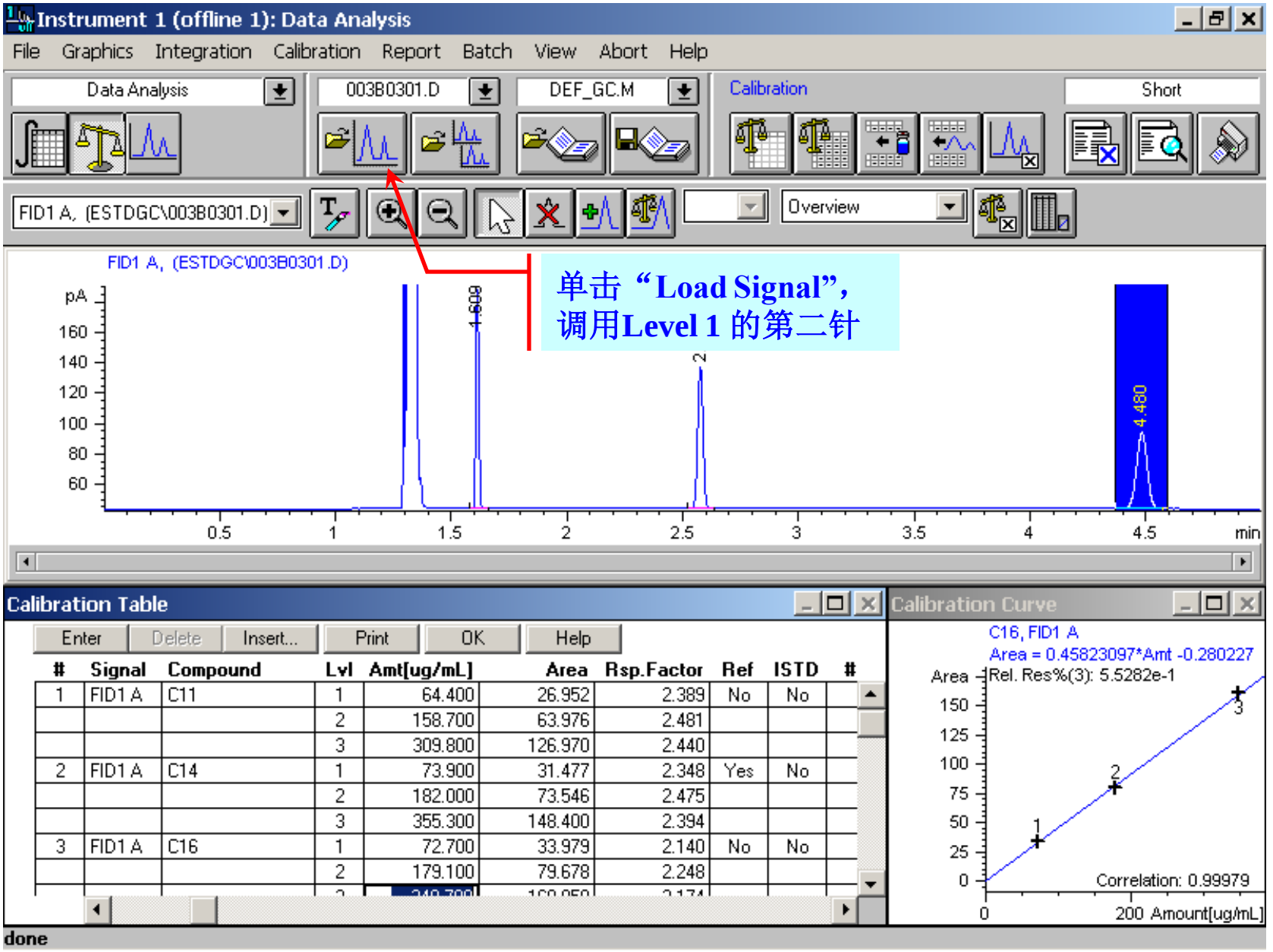


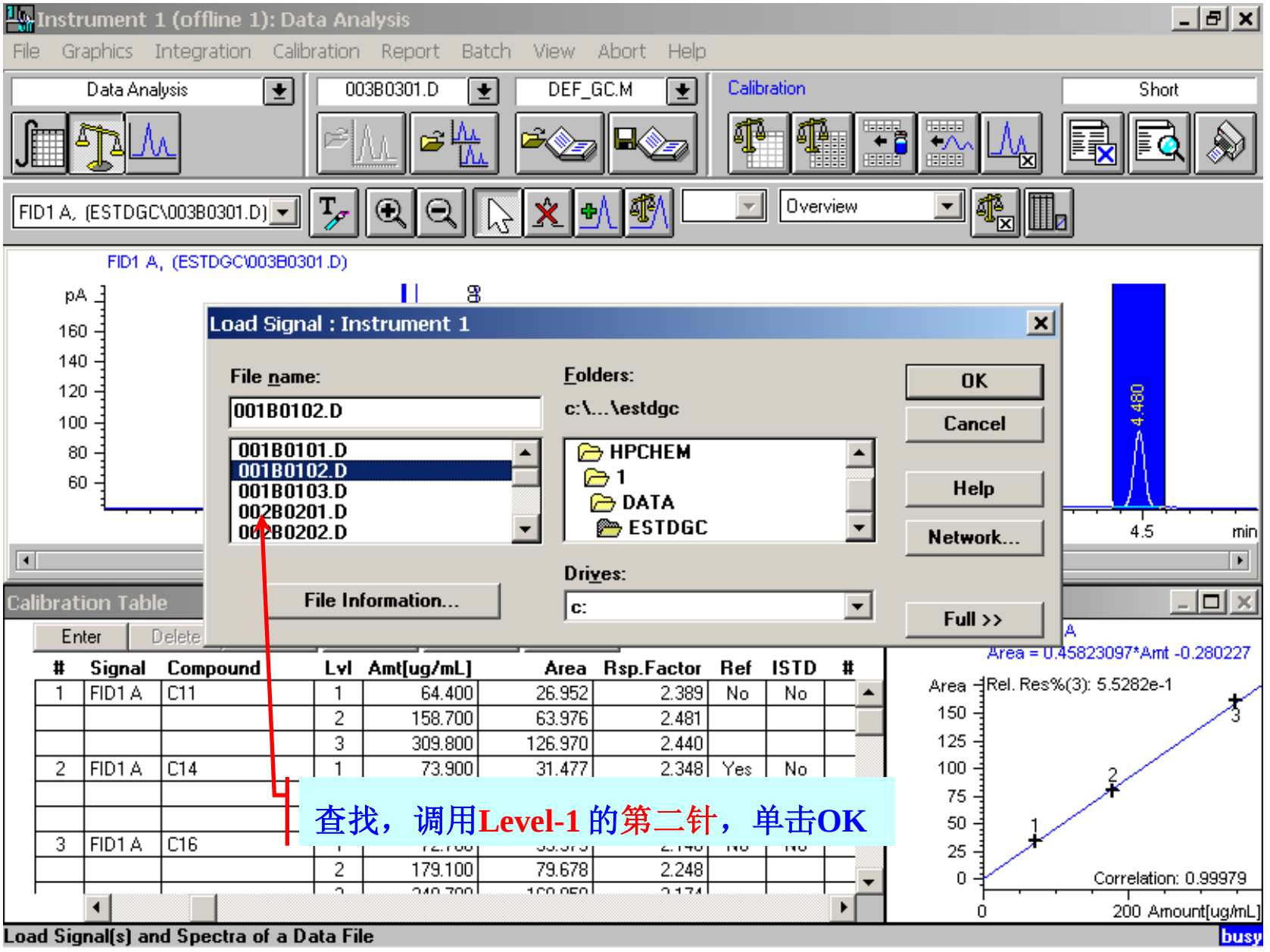
#	Signal	Compound	Lvl	Amt[ug/mL]	Area	Rsp.Factor	Ref	ISTD	#
1	FID1 A	C11	1	64.400	26.952	2.389	No	No	
			2	158.700	63.976	2.481			
2	FID1 A	C14	1	73.900	31.477	2.348	Yes	No	
			2	182.000	73.546	2.475			
3	FID1 A	C16	1	72.700	33.979	2.140	No	No	
			2	179.100	79.678	2.248			

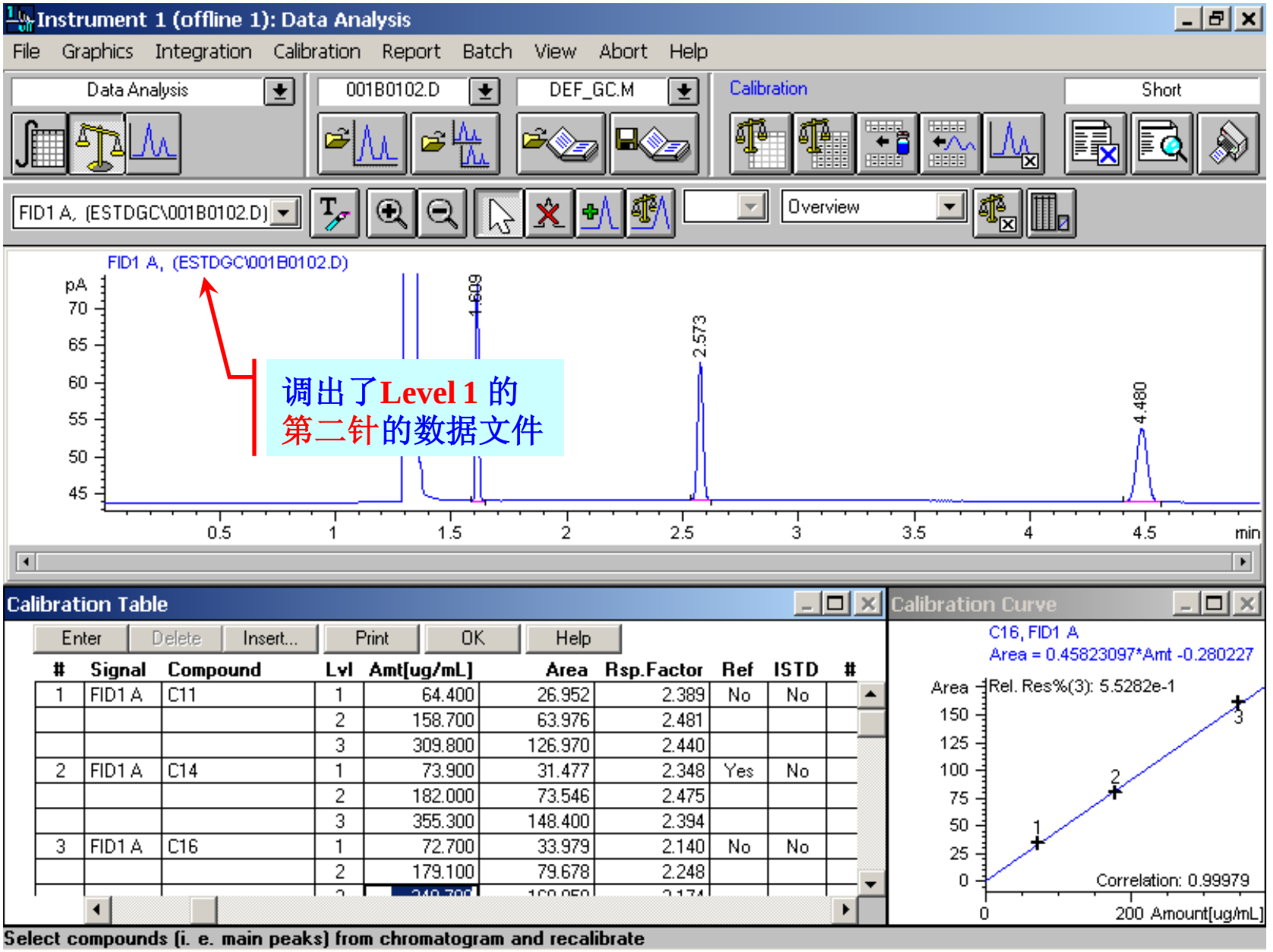

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0301.D
DEF_GC.M
Calibration
Short
Overview
Calibrate: Instrument 1
Add Level
Level 3
Default Amount: 0.000
OK Cancel Help
自动设置为：Level 3
FID1
pA
160
140
120
100
80
60
0.5 1 1.5 2 2.5 3 3.5 4 4.5 min
4.480
Calibration Table
Enter Delete Insert... Print OK Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.952 2.389 No No
2 158.700 63.976 2.481
2 FID1 A C14 1 73.900 31.477 2.348 Yes No
2 182.000 73.546 2.475
3 FID1 A C16 1 72.700 33.979 2.140 No No
2 179.100 79.678 2.248
Calibration Curve
C16, FID1 A
Area = 0.44374823*Amt +0.6405863
Area
Rel. Res%(2): -5.4633e-1
60
40
20
0
Correlation: 0.99972
0 100 Amount[ug/mL]
Load Signal(s) and Spectra of a Data File
busy

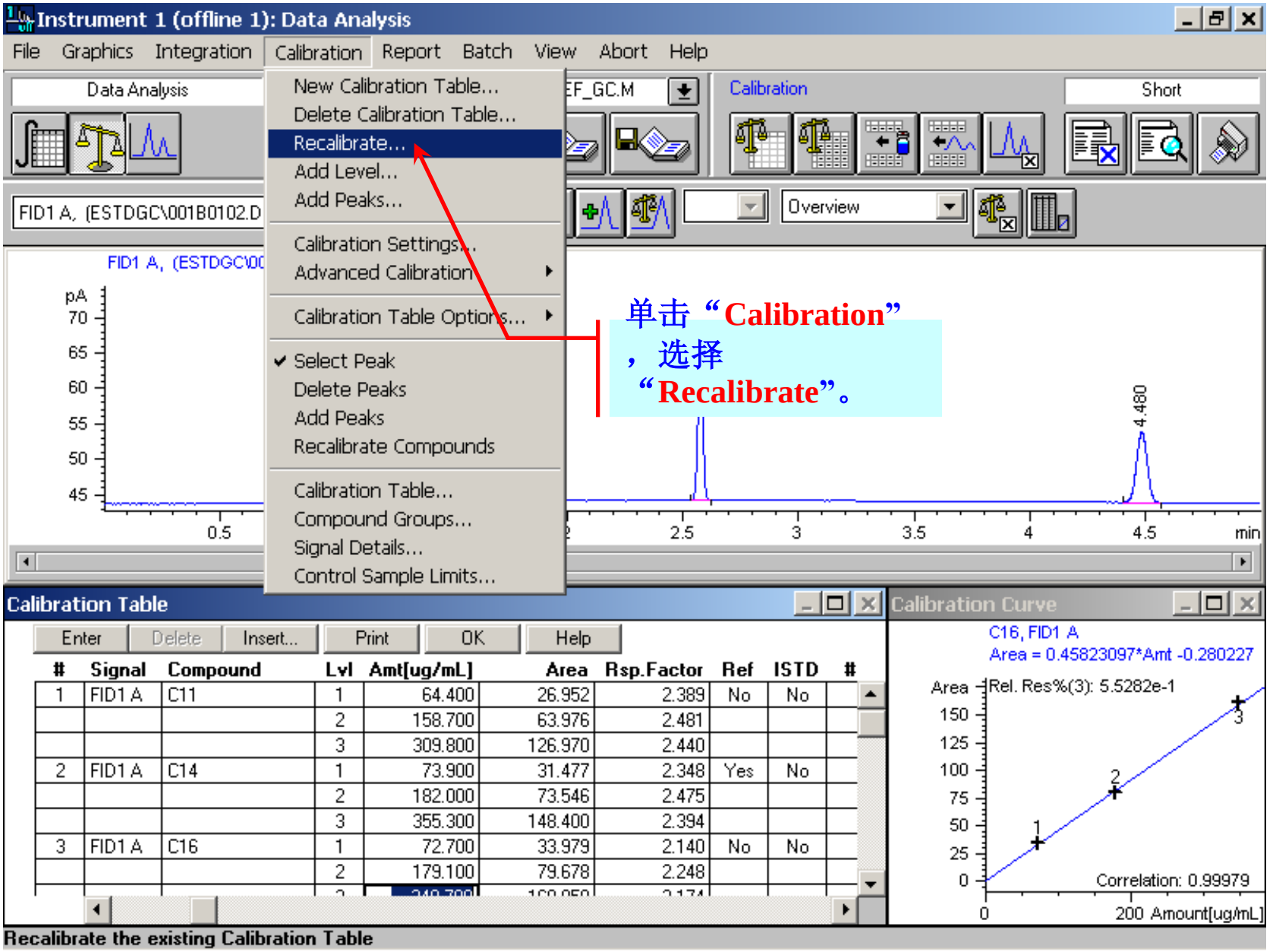

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0301.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\003B0301.D)
Overview
FID1 A, (ESTDGC\003B0301.D)
pA
160
140
120
100
80
60
1.609
2.573
4.480
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
Calibration Table
Enter
Delete
Insert...
Print
OK
Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 3 0.000 126.970 0.000 No No
1 64.400 26.952 2.389
2 158.700 63.976 2.481
2 FID1 A C14 3 0.000 148.400 0.000 Yes No
1 73.900 31.477 2.348
2 182.000 73.546 2.475
No No
Level 3 的数据自动添加到了当前的校正表中。
Calibration Curve
C14, FID1 A
Area = -0.0225745*Amt +64.801055
Rel. Res%(2): 21.178
Area
50
40
30
20
10
0
or negative calibration curve slope
0
100
Amount[ug/mL]
done

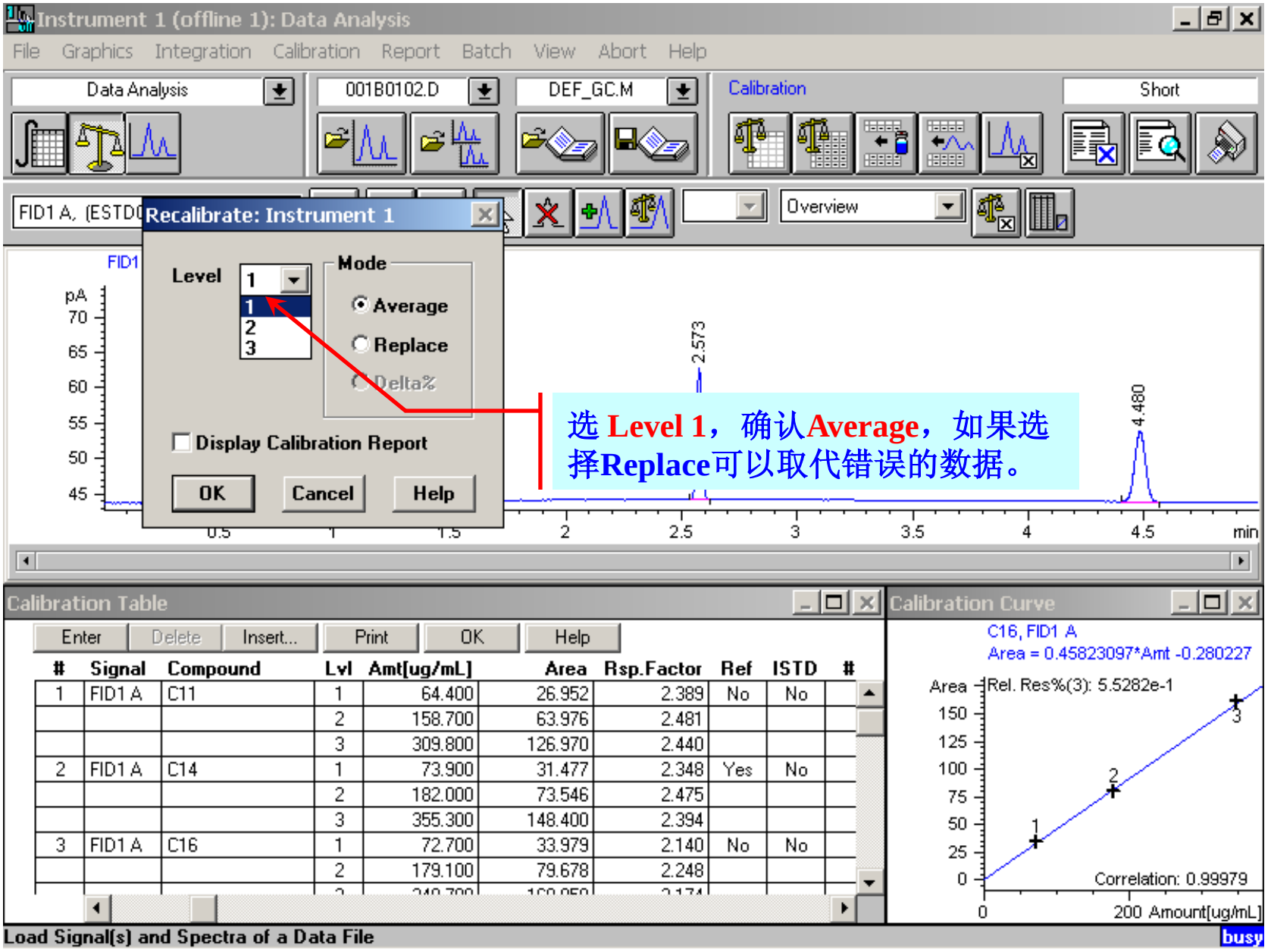

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0301.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\003B0301.D)
Overview
FID1 A, (ESTDGC\003B0301.D)
pA
160
140
120
100
80
60
1.609
2.573
4.480
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
Calibration Table
Enter
Delete
Insert...
Print
OK
Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.952 2.389 No No
2 158.700 63.976 2.481
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 31.477 2.348 Yes No
2 182.000 73.546 2.475
3 355.300 148.400 2.394
在当前的校正表中，只要输入Level 3 的含量即可。
Calibration Curve
C16, FID1 A
Area = 0.45823097*Amt -0.280227
Rel. Res%(3): 5.5282e-1
Area
150
125
100
75
50
25
0
1
2
3
Correlation: 0.99979
0
200 Amount[ug/mL]
done

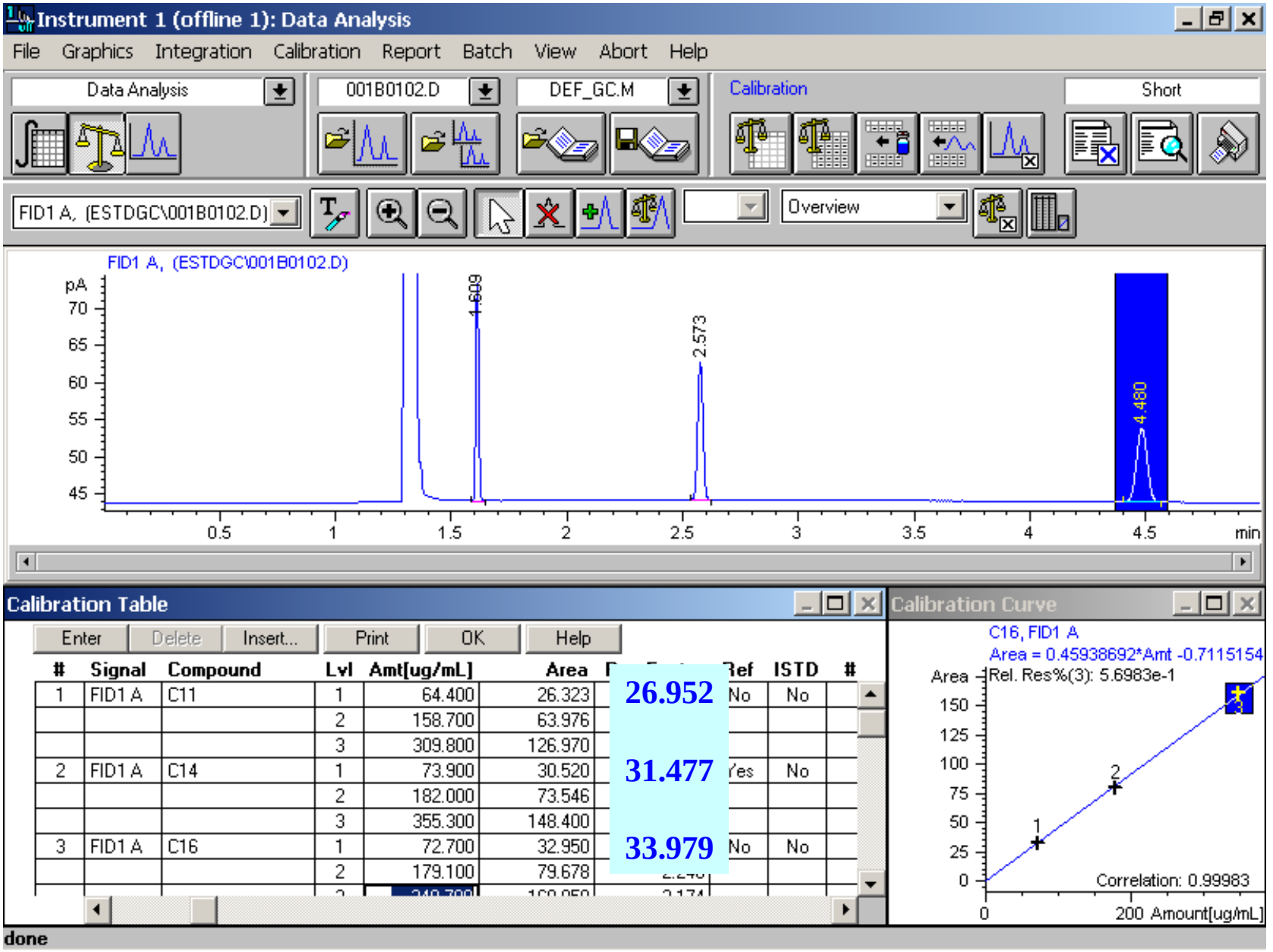

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0301.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\003B0301.D)
Overview
FID1 A, (ESTDGC\003B0301.D)
pA
160
140
120
100
80
60
1.609
2
4.480
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
单击“Load Signal”，
调用Level 1 的第二针
Calibration Table
Enter Delete Insert... Print OK Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.952 2.389 No No
2 158.700 63.976 2.481
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 31.477 2.348 Yes No
2 182.000 73.546 2.475
3 355.300 148.400 2.394
3 FID1 A C16 1 72.700 33.979 2.140 No No
2 179.100 79.678 2.248
Calibration Curve
C16, FID1 A
Area = 0.45823097*Amt -0.280227
Rel. Res%(3): 5.5282e-1
Area
150
125
100
75
50
25
0
1
2
3
Correlation: 0.99979
0
200 Amount[ug/mL]
done

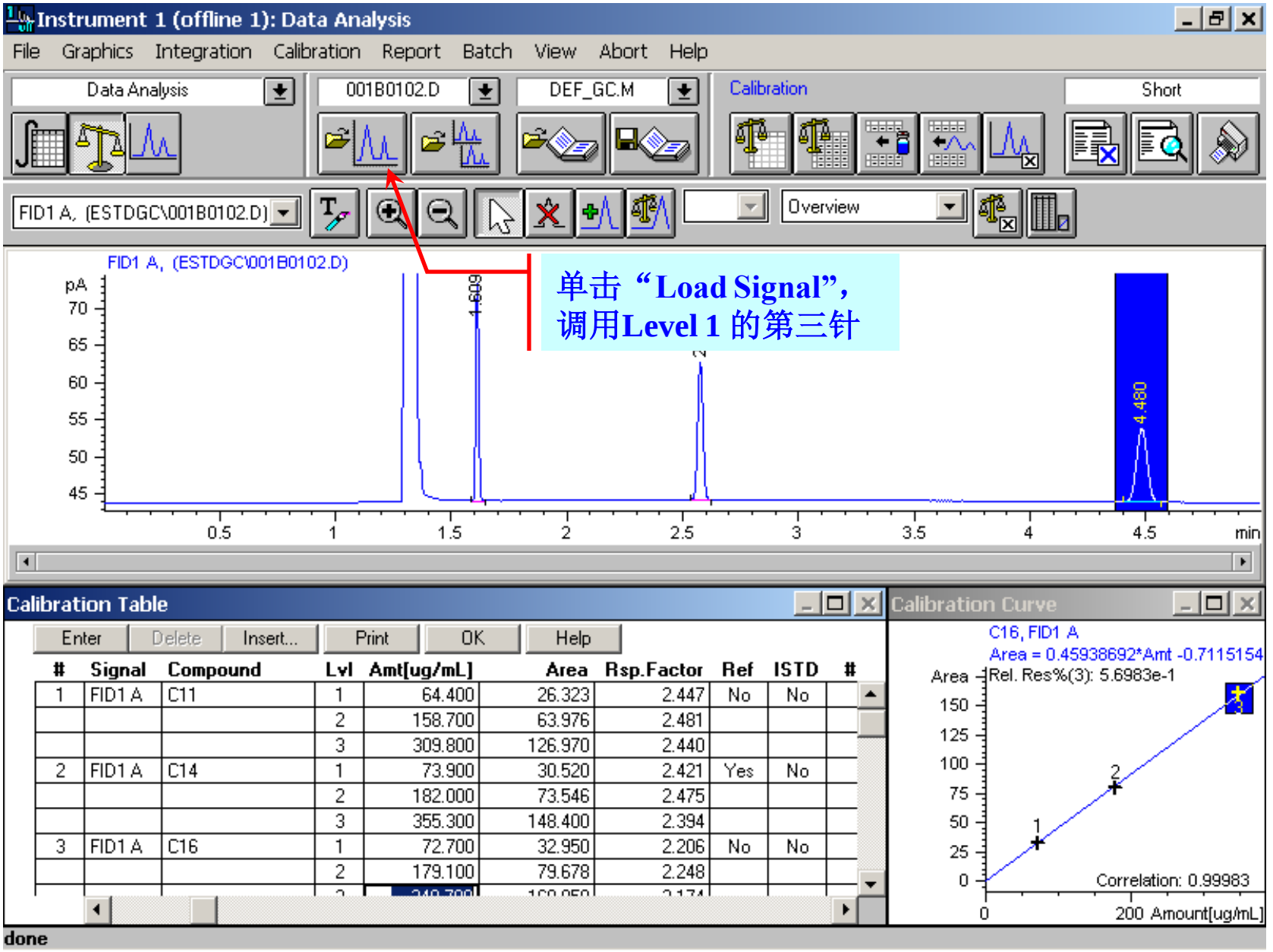

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0301.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\003B0301.D)
Overview
FID1 A, (ESTDGC\003B0301.D)
pA
160
140
120
100
80
60
4.480
4.5
min
Load Signal : Instrument 1
File name:
001B0102.D
001B0101.D
001B0102.D
001B0103.D
002B0201.D
002B0202.D
Folders:
c:\...\estdgc
HPCHEM
1
DATA
ESTDGC
OK
Cancel
Help
Network...
Drives:
c:
Full >>
File Information...
Calibration Table
Enter
Delete
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.952 2.389 No No
2 158.700 63.976 2.481
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 31.477 2.348 Yes No
3 FID1 A C16 2 179.100 79.678 2.248
Area = 0.45823097*Amt -0.280227
Rel. Res%(3): 5.5282e-1
Area
150
125
100
75
50
25
0
1
2
3
Correlation: 0.99979
0
200 Amount[ug/mL]
查找，调用Level-1 的第二针，单击OK
Load Signal(s) and Spectra of a Data File
busy

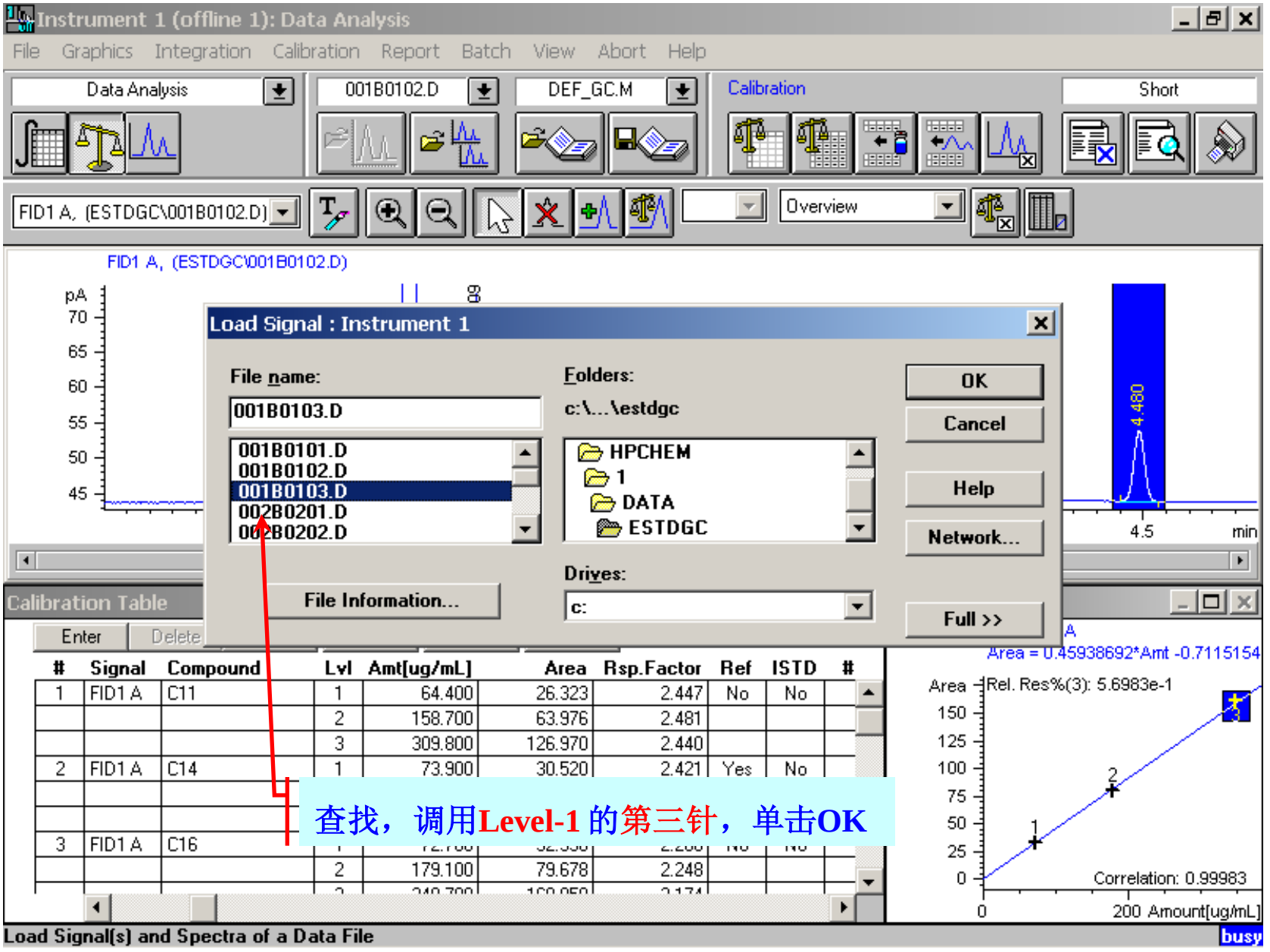

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0102.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\001B0102.D)
Overview
FID1 A, (ESTDGC\001B0102.D)
pA
70
65
60
55
50
45
1.609
2.573
4.480
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
调出了Level 1 的
第二针的数据文件
Calibration Table
Enter
Delete
Insert...
Print
OK
Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.952 2.389 No No
2 158.700 63.976 2.481
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 31.477 2.348 Yes No
2 182.000 73.546 2.475
3 355.300 148.400 2.394
3 FID1 A C16 1 72.700 33.979 2.140 No No
2 179.100 79.678 2.248
Calibration Curve
C16, FID1 A
Area = 0.45823097*Amt -0.280227
Area
Rel. Res%(3): 5.5282e-1
150
125
100
75
50
25
0
1
2
3
Correlation: 0.99979
0
200 Amount[ug/mL]
Select compounds (i. e. main peaks) from chromatogram and recalibrate

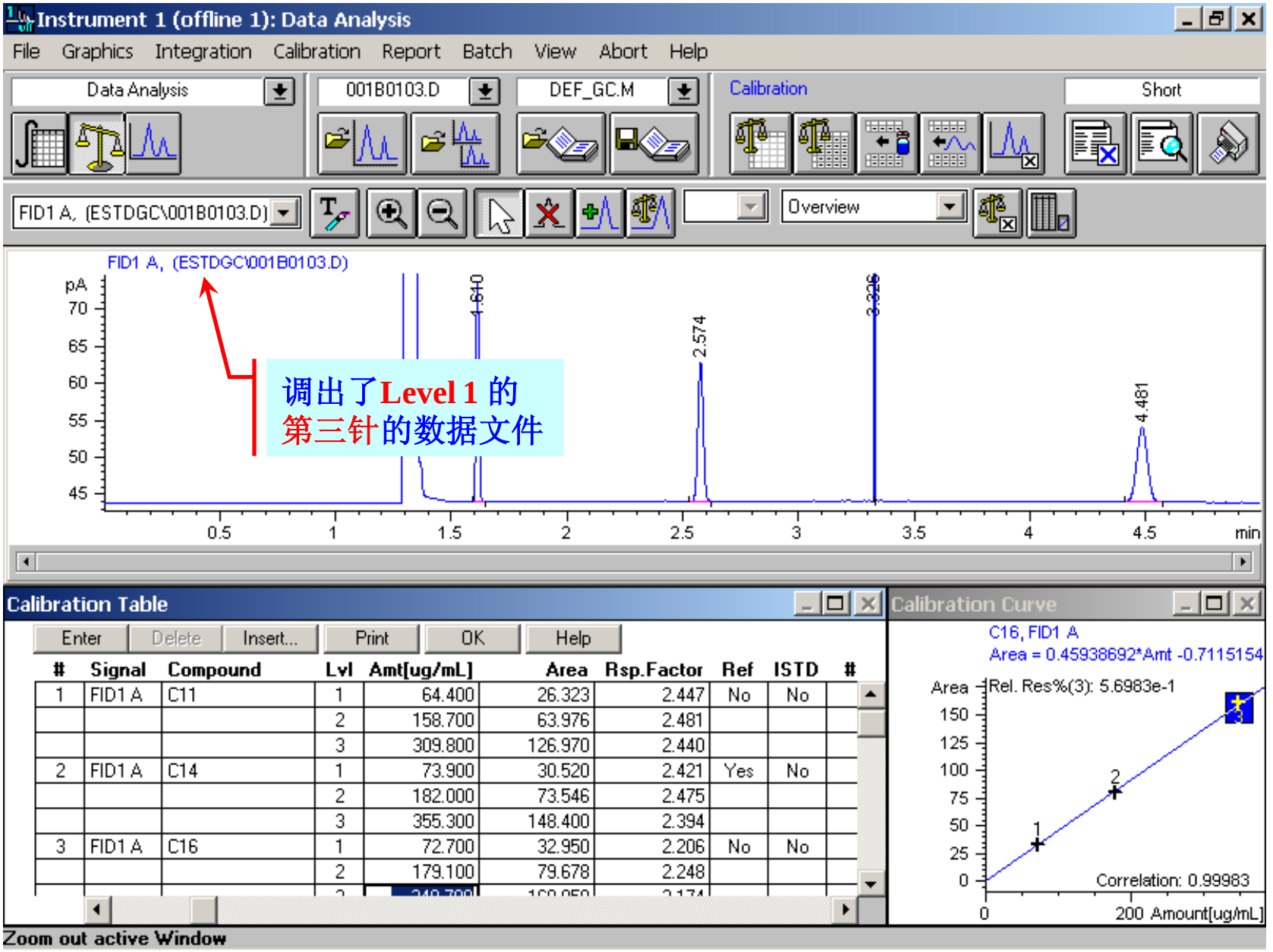

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
New Calibration Table...
Delete Calibration Table...
Recalibrate...
Add Level...
Add Peaks...
Calibration Settings...
Advanced Calibration
Calibration Table Options...
Select Peak
Delete Peaks
Add Peaks
Recalibrate Compounds
Calibration Table...
Compound Groups...
Signal Details...
Control Sample Limits...
单击“Calibration”，选择“Recalibrate”。
Calibration Table
Enter Delete Insert... Print OK Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.952 2.389 No No
2 158.700 63.976 2.481
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 31.477 2.348 Yes No
2 182.000 73.546 2.475
3 355.300 148.400 2.394
3 FID1 A C16 1 72.700 33.979 2.140 No No
2 179.100 79.678 2.248
Calibration Curve
C16, FID1 A
Area = 0.45823097*Amt -0.280227
Rel. Res%(3): 5.5282e-1
Correlation: 0.99979
Amount[ug/mL]
Recalibrate the existing Calibration Table

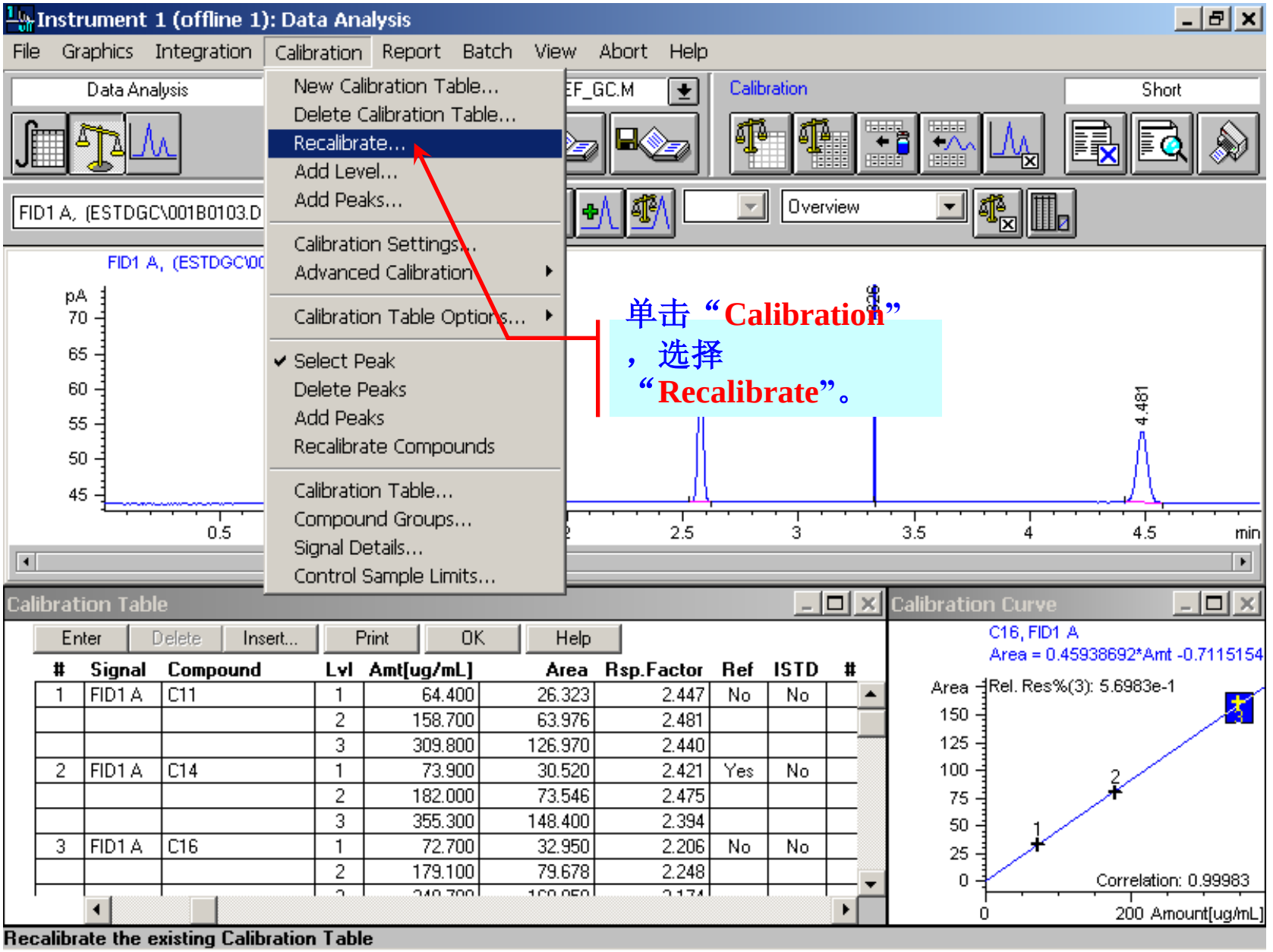

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0102.D
DEF_GC.M
Calibration
Short
Recalibrate: Instrument 1
Level
1
2
3
Mode
Average
Replace
Delta%
Display Calibration Report
OK
Cancel
Help
选 Level 1，确认Average，如果选择Replace可以取代错误的数据。
2.573
4.480
min
Calibration Table
Enter
Delete
Insert...
Print
OK
Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.952 2.389 No No
2 158.700 63.976 2.481
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 31.477 2.348 Yes No
2 182.000 73.546 2.475
3 355.300 148.400 2.394
3 FID1 A C16 1 72.700 33.979 2.140 No No
2 179.100 79.678 2.248
Calibration Curve
C16, FID1 A
Area = 0.45823097*Amt -0.280227
Rel. Res%(3): 5.5282e-1
Correlation: 0.99979
Amount[ug/mL]
Load Signal(s) and Spectra of a Data File
busy


Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0102.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\001B0102.D)
Overview
FID1 A, (ESTDGC\001B0102.D)
pA
70
65
60
55
50
45
1.609
2.573
4.480
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
Calibration Table
Enter
Delete
Insert...
Print
OK
Help
Signal Compound Lvl Amt[ug/mL] Area Ref ISTD
1 FID1 A C11 1 64.400 26.323 No No
2 158.700 63.976
3 309.800 126.970
2 FID1 A C14 1 73.900 30.520 Yes No
2 182.000 73.546
3 355.300 148.400
3 FID1 A C16 1 72.700 32.950 No No
2 179.100 79.678
26.952
31.477
33.979
Calibration Curve
C16, FID1 A
Area = 0.45938692*Amt -0.7115154
Rel. Res%(3): 5.6983e-1
Area
150
125
100
75
50
25
0
1
2
3
Correlation: 0.99983
0
200 Amount[ug/mL]
done

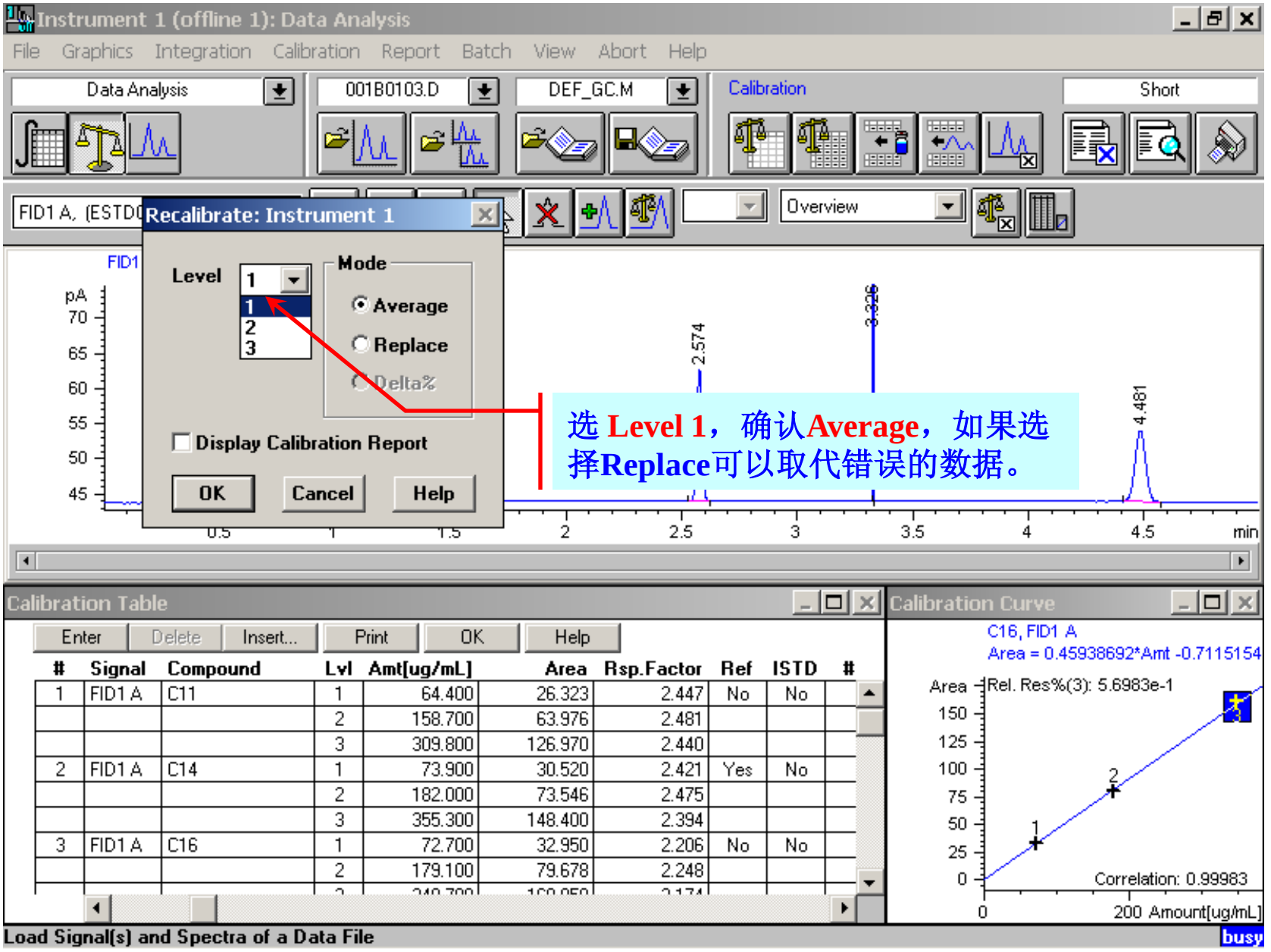

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0102.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\001B0102.D)
Overview
FID1 A, (ESTDGC\001B0102.D)
pA
1.609
4.480
单击“Load Signal”，
调用Level 1 的第三针
min
Calibration Table
Enter Delete Insert... Print OK Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.323 2.447 No No
2 158.700 63.976 2.481
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 30.520 2.421 Yes No
2 182.000 73.546 2.475
3 355.300 148.400 2.394
3 FID1 A C16 1 72.700 32.950 2.206 No No
2 179.100 79.678 2.248
Calibration Curve
C16, FID1 A
Area = 0.45938692*Amt -0.7115154
Rel. Res%(3): 5.6983e-1
Area
Correlation: 0.99983
Amount[ug/mL]
done

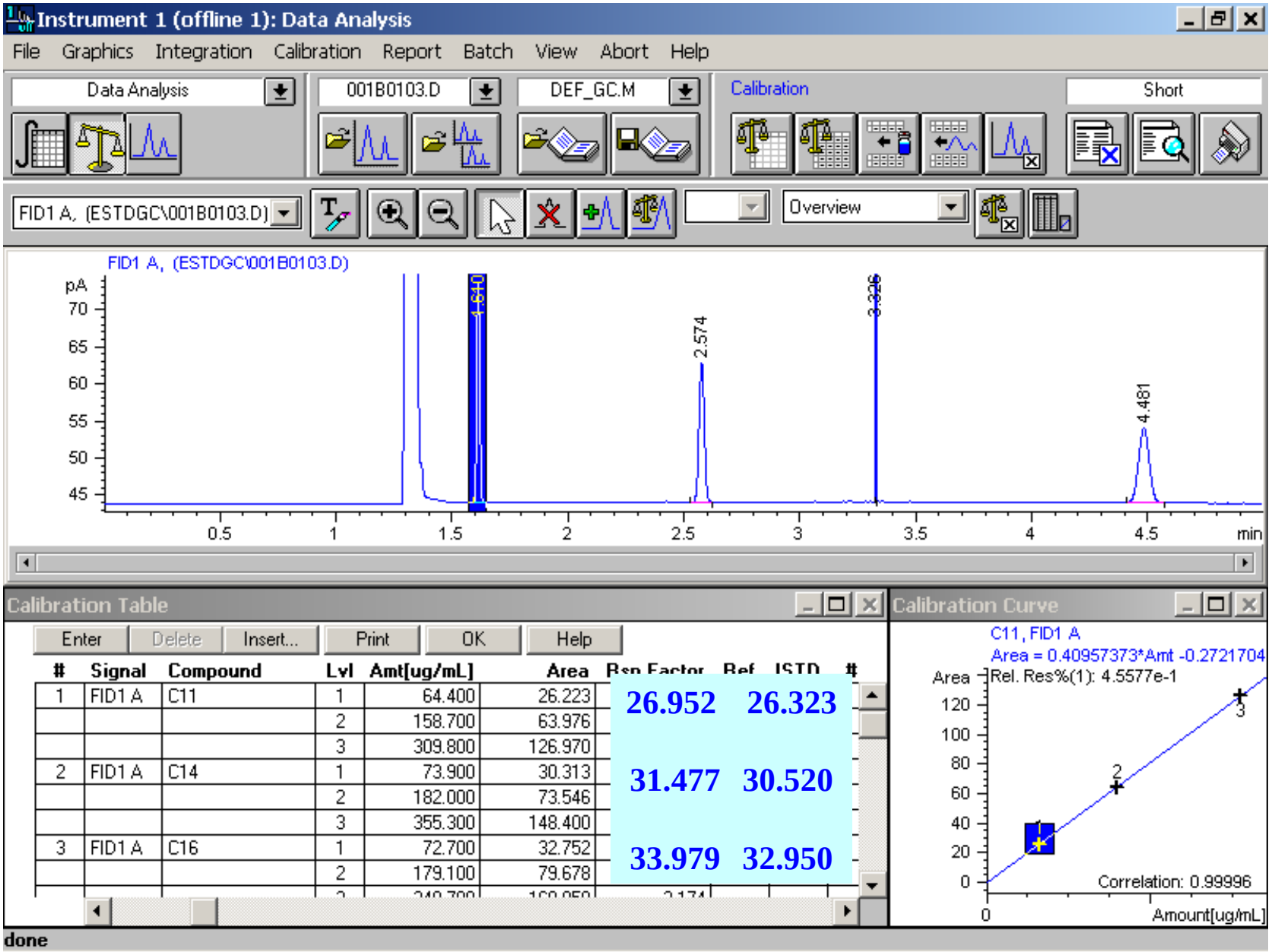

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0102.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\001B0102.D)
Overview
FID1 A, (ESTDGC\001B0102.D)
pA
70
65
60
55
50
45
4.480
4.5
min
Load Signal : Instrument 1
File name:
001B0103.D
001B0101.D
001B0102.D
001B0103.D
002B0201.D
002B0202.D
Folders:
c:\...\estdgc
HPCHEM
1
DATA
ESTDGC
OK
Cancel
Help
Network...
Drives:
c:
File Information...
Full >>
Calibration Table
Enter
Delete
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.323 2.447 No No
2 158.700 63.976 2.481
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 30.520 2.421 Yes No
3 FID1 A C16 2 179.100 79.678 2.248
Area = 0.45938692*Amt -0.7115154
Rel. Res%(3): 5.6983e-1
Area
150
125
100
75
50
25
0
1
2
3
Correlation: 0.99983
0
200 Amount[ug/mL]
查找，调用Level-1 的第三针，单击OK
Load Signal(s) and Spectra of a Data File
busy

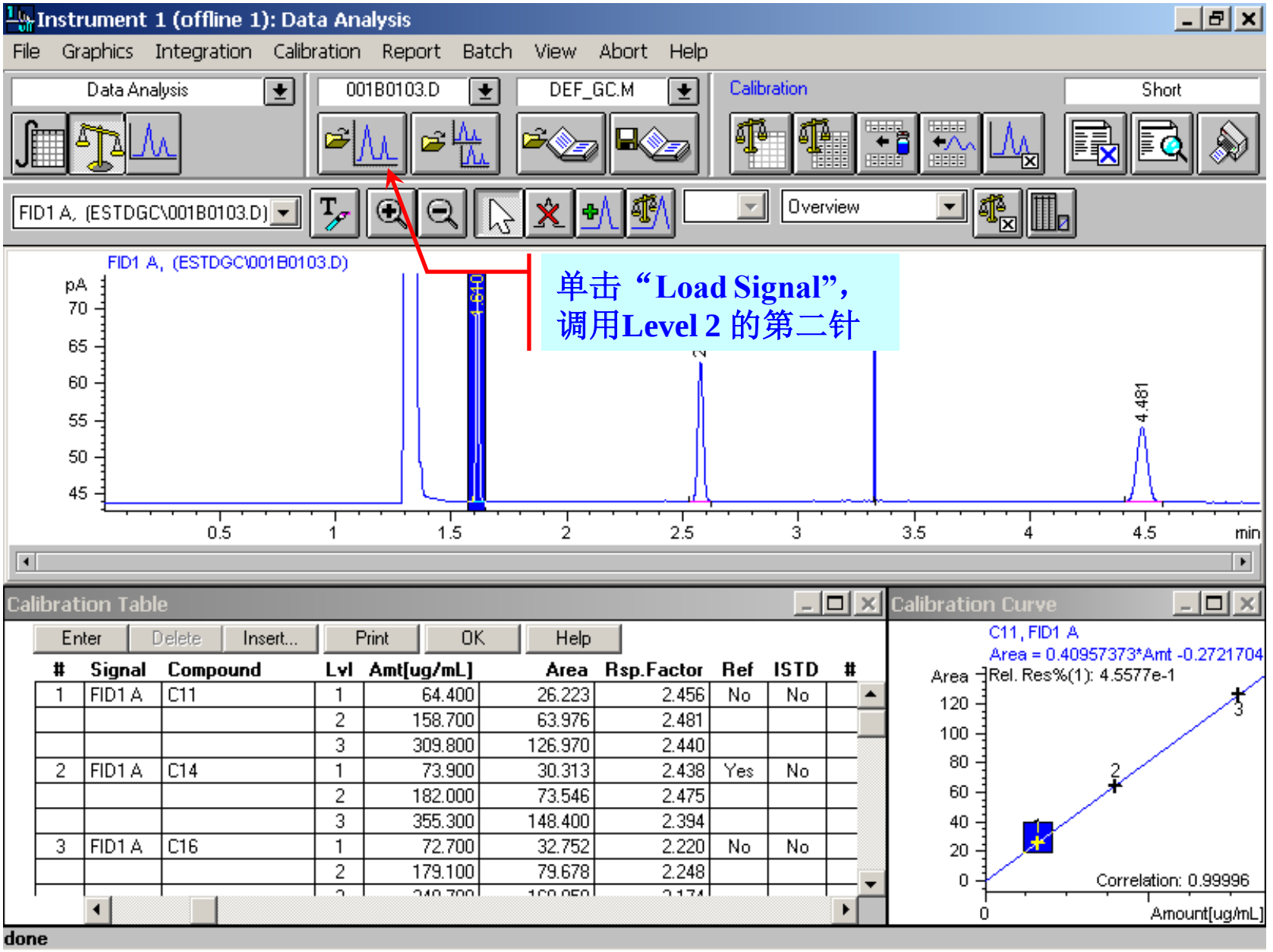

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0103.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\001B0103.D)
Overview
FID1 A, (ESTDGC\001B0103.D)
pA
1.640
2.574
3.326
4.481
调出了Level 1 的
第三针的数据文件
min
Calibration Table
Enter
Delete
Insert...
Print
OK
Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.323 2.447 No No
2 158.700 63.976 2.481
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 30.520 2.421 Yes No
2 182.000 73.546 2.475
3 355.300 148.400 2.394
3 FID1 A C16 1 72.700 32.950 2.206 No No
2 179.100 79.678 2.248
Calibration Curve
C16, FID1 A
Area = 0.45938692*Amt -0.7115154
Area
Rel. Res%(3): 5.6983e-1
Correlation: 0.99983
Amount[ug/mL]
Zoom out active Window

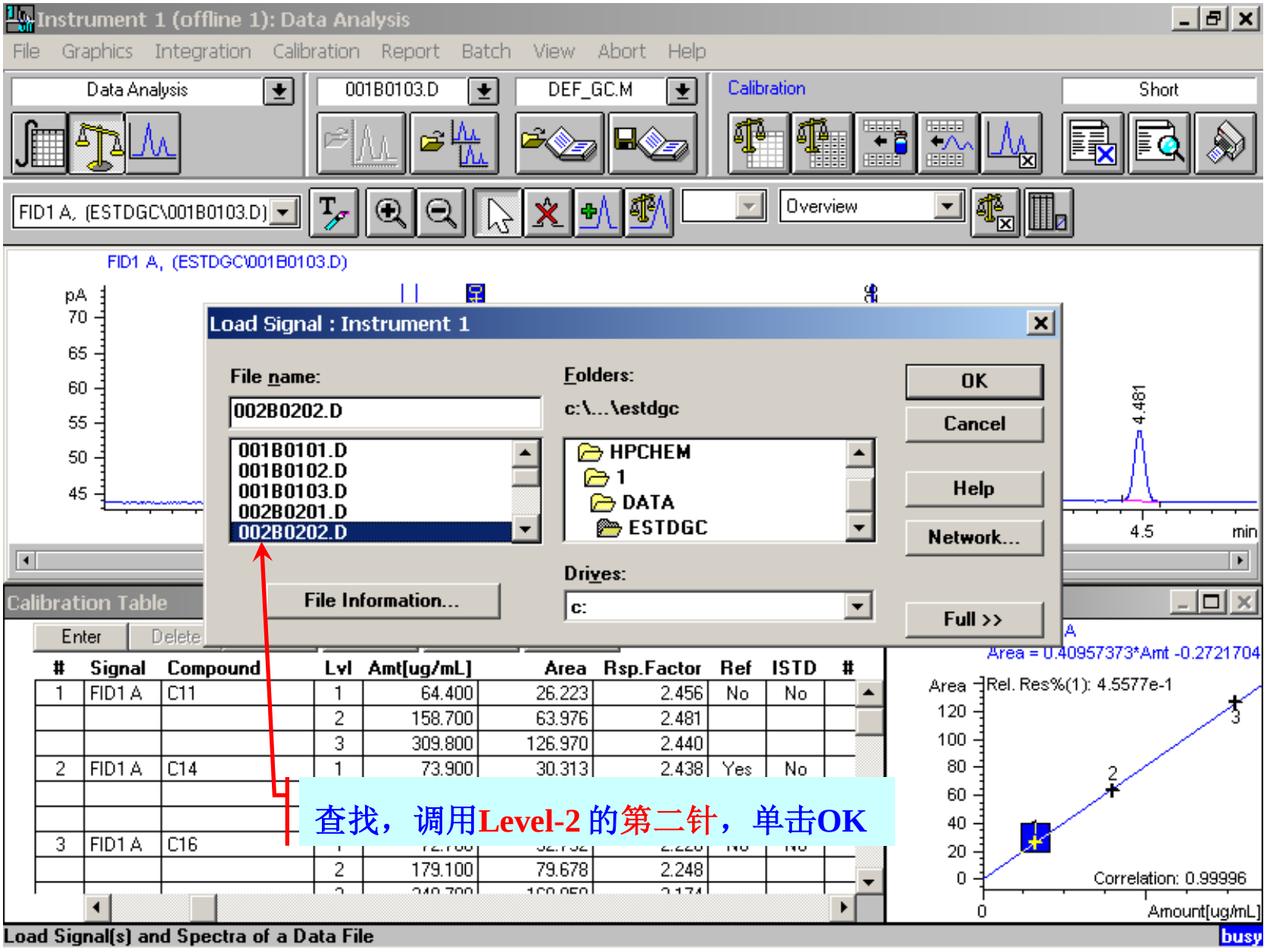


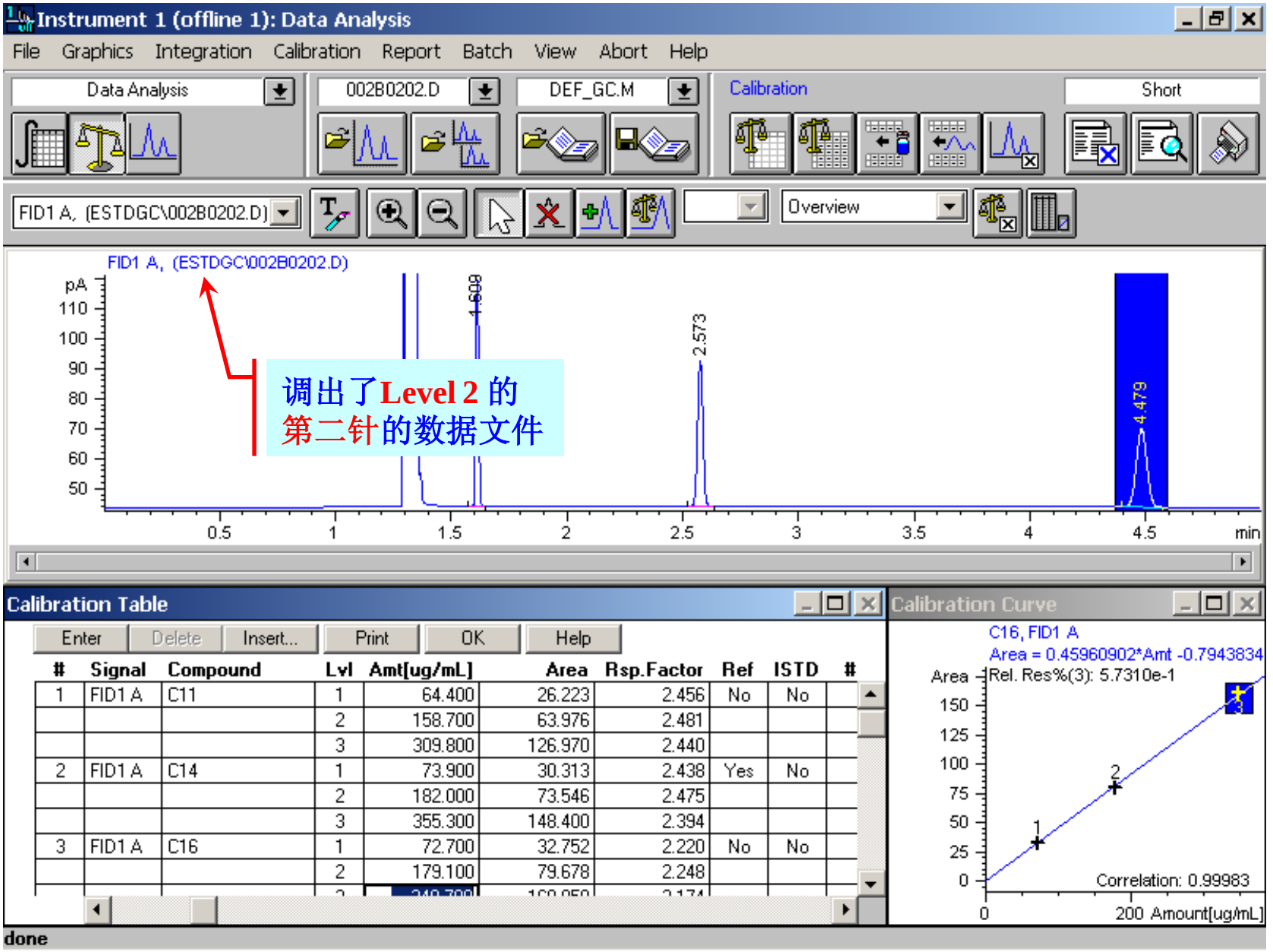
#	Signal	Compound	Lvl	Amt[ug/mL]	Area	Rsp.Factor	Ref	ISTD	#
1	FID1 A	C11	1	64.400	26.323	2.447	No	No	
			2	158.700	63.976	2.481			
			3	309.800	126.970	2.440			
2	FID1 A	C14	1	73.900	30.520	2.421	Yes	No	
			2	182.000	73.546	2.475			
			3	355.300	148.400	2.394			
3	FID1 A	C16	1	72.700	32.950	2.206	No	No	
			2	179.100	79.678	2.248			

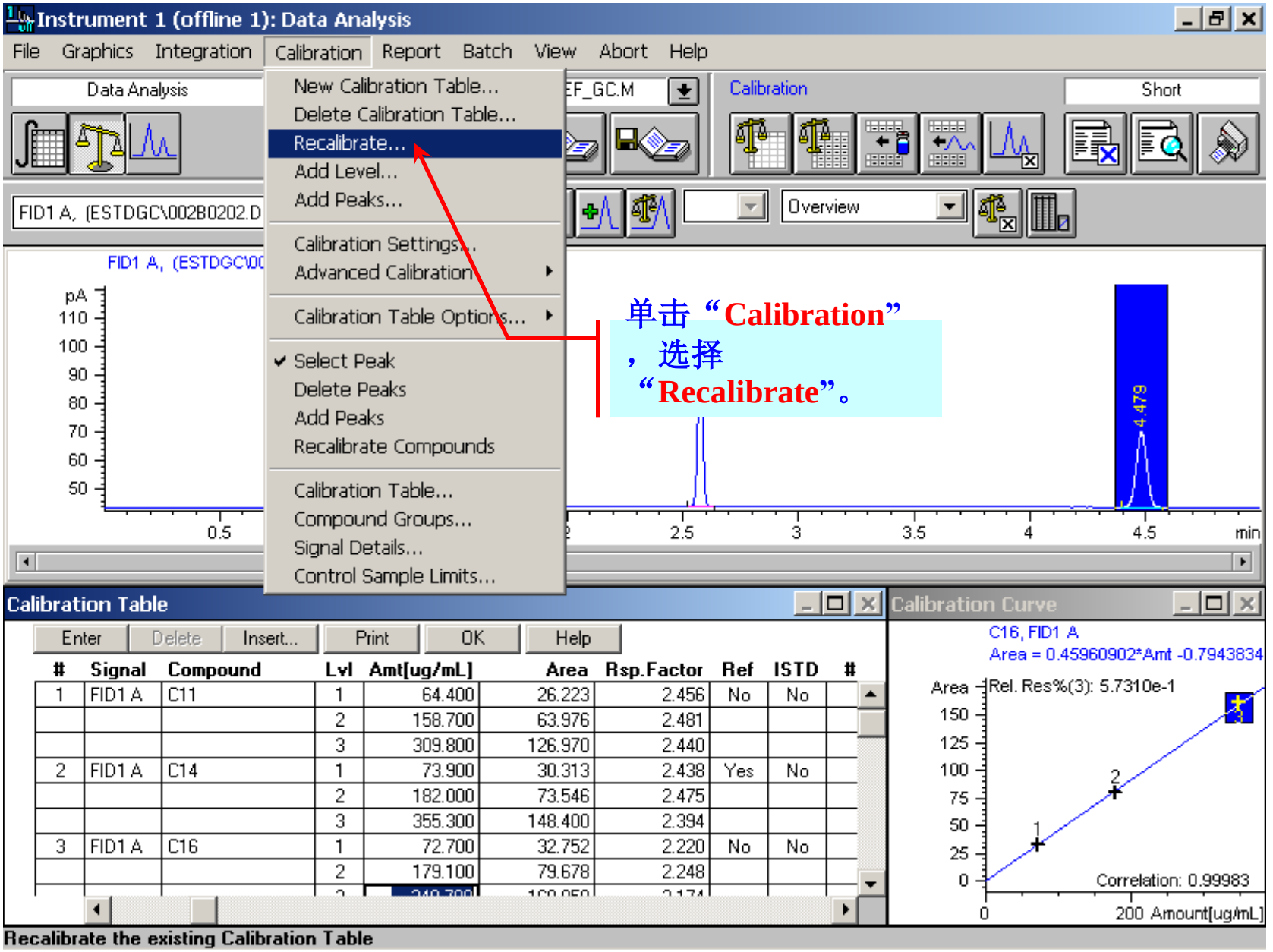

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0103.D
DEF_GC.M
Calibration
Short
Overview
Recalibrate: Instrument 1
Level
1
2
3
Mode
Average
Replace
Delta%
Display Calibration Report
OK
Cancel
Help
选 Level 1，确认Average，如果选择Replace可以取代错误的数据。
FID1
pA
2.574
3.326
4.481
min
Calibration Table
Enter
Delete
Insert...
Print
OK
Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.323 2.447 No No
2 158.700 63.976 2.481
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 30.520 2.421 Yes No
2 182.000 73.546 2.475
3 355.300 148.400 2.394
3 FID1 A C16 1 72.700 32.950 2.206 No No
2 179.100 79.678 2.248
Calibration Curve
C16, FID1 A
Area = 0.45938692*Amt -0.7115154
Rel. Res%(3): 5.6983e-1
Area
Correlation: 0.99983
Amount[ug/mL]
Load Signal(s) and Spectra of a Data File
busy

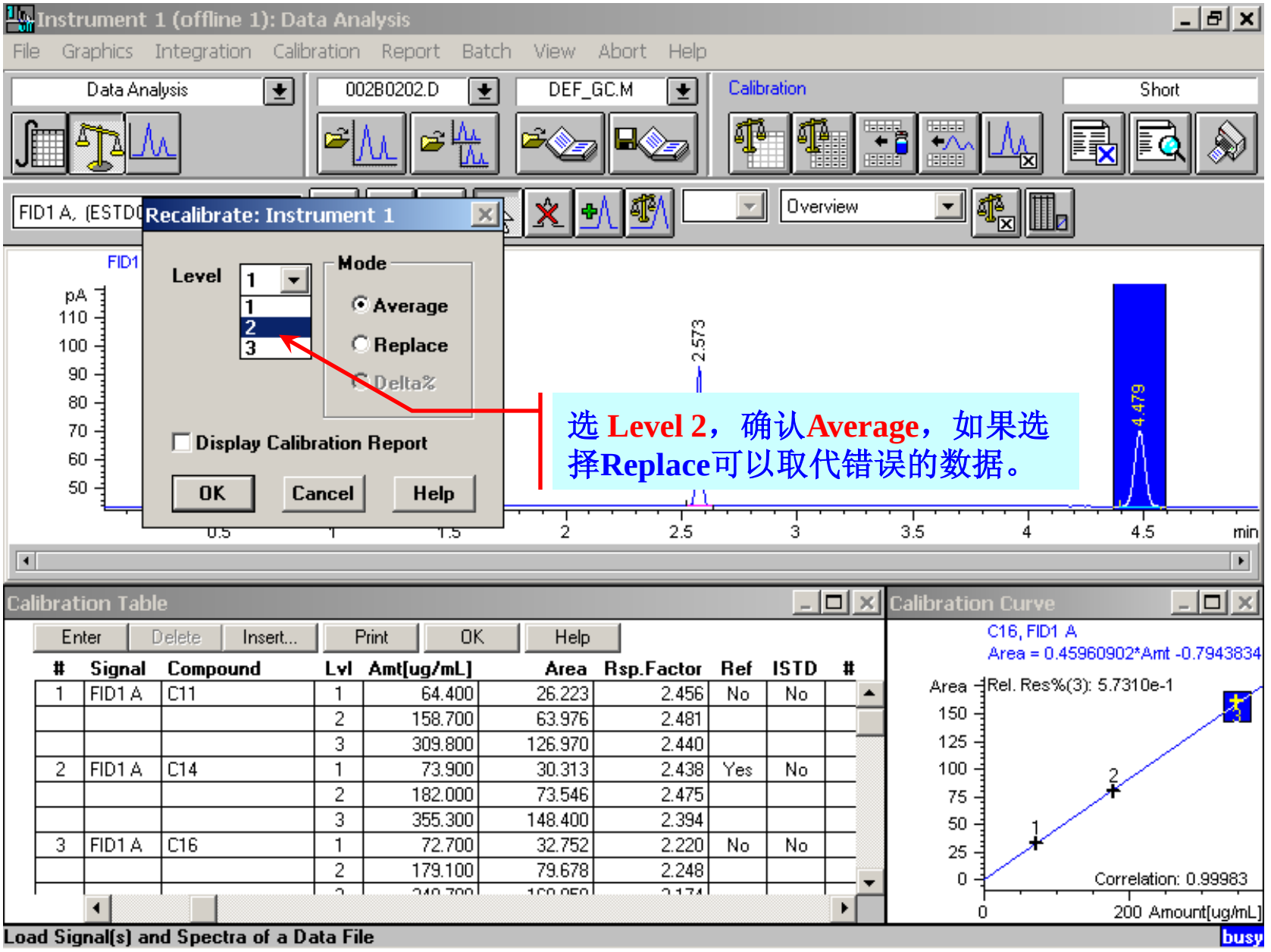

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0103.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\001B0103.D)
Overview
FID1 A, (ESTDGC\001B0103.D)
pA
70
65
60
55
50
45
1.510
2.574
3.326
4.481
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
Calibration Table
Enter
Delete
Insert...
Print
OK
Help
Signal Compound Lvl Amt[ug/mL] Area Rsp Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223
2 158.700 63.976
3 309.800 126.970
2 FID1 A C14 1 73.900 30.313
2 182.000 73.546
3 355.300 148.400
3 FID1 A C16 1 72.700 32.752
2 179.100 79.678
26.952 26.323
31.477 30.520
33.979 32.950
Calibration Curve
C11, FID1 A
Area = 0.40957373*Amt -0.2721704
Rel. Res%(1): 4.5577e-1
Area
120
100
80
60
40
20
0
Correlation: 0.99996
0
Amount[ug/mL]
done

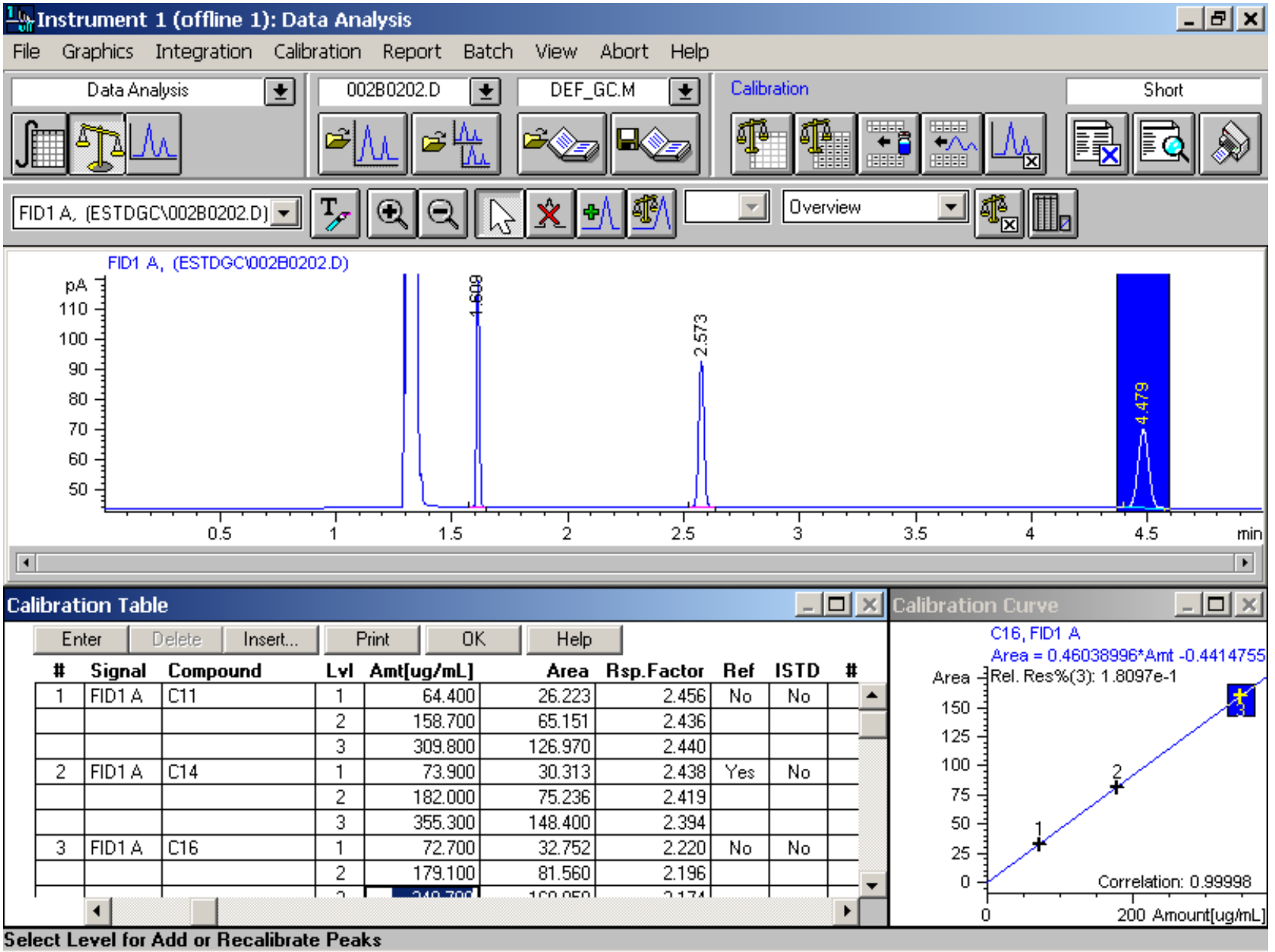

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0103.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\001B0103.D)
Overview
FID1 A, (ESTDGC\001B0103.D)
pA
1.510
4.481
单击“Load Signal”，
调用Level 2 的第二针
min
Calibration Table
Enter Delete Insert... Print OK Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223 2.456 No No
2 158.700 63.976 2.481
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 30.313 2.438 Yes No
2 182.000 73.546 2.475
3 355.300 148.400 2.394
3 FID1 A C16 1 72.700 32.752 2.220 No No
2 179.100 79.678 2.248
Calibration Curve
C11, FID1 A
Area = 0.40957373*Amt -0.2721704
Rel. Res%(1): 4.5577e-1
Area
Correlation: 0.99996
Amount[ug/mL]
done

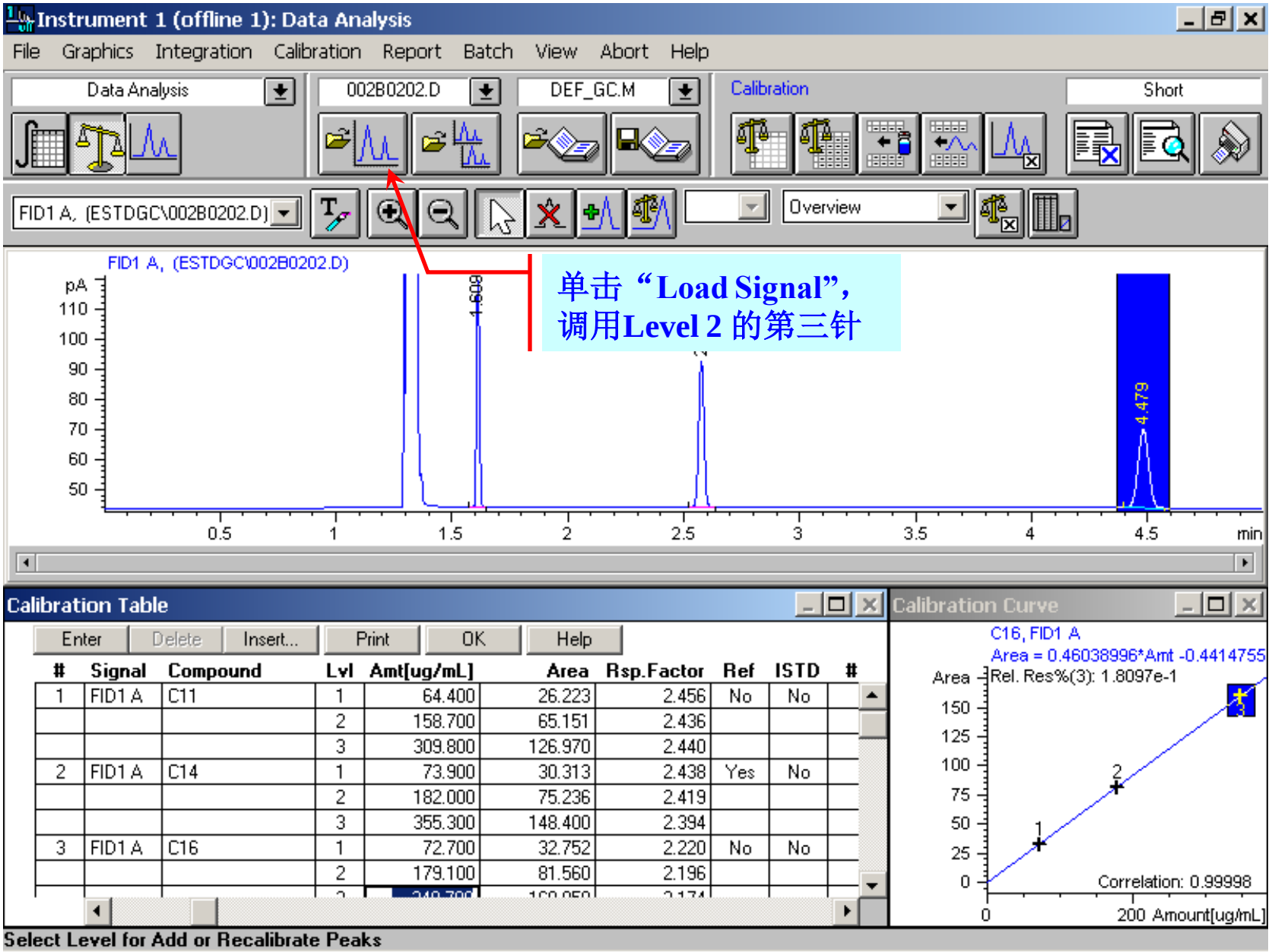

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
001B0103.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\001B0103.D)
Overview
FID1 A, (ESTDGC\001B0103.D)
pA
70
65
60
55
50
45
4.481
4.5
min
Load Signal : Instrument 1
File name:
002B0202.D
001B0101.D
001B0102.D
001B0103.D
002B0201.D
002B0202.D
Folders:
c:\...\estdgc
HPCHEM
1
DATA
ESTDGC
OK
Cancel
Help
Network...
Drives:
c:
File Information...
Full >>
Calibration Table
Enter
Delete
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223 2.456 No No
2 158.700 63.976 2.481
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 30.313 2.438 Yes No
3 FID1 A C16 2 179.100 79.678 2.248
Area = 0.40957373*Amt -0.2721704
Rel. Res%(1): 4.5577e-1
Area
120
100
80
60
40
20
0
Correlation: 0.99996
0
Amount[ug/mL]
查找，调用Level-2 的第二针，单击OK
Load Signal(s) and Spectra of a Data File
busy

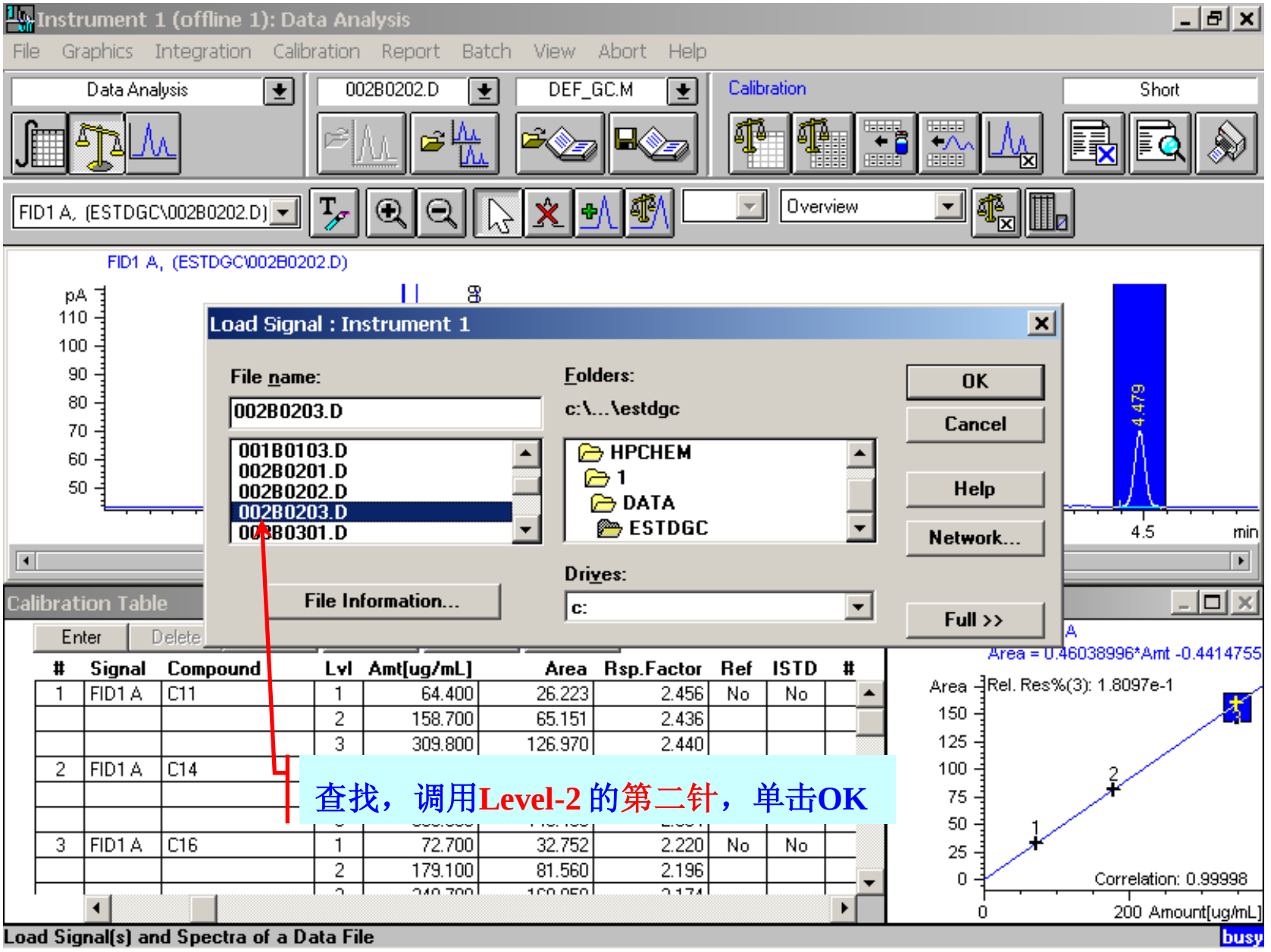

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
002B0202.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\002B0202.D)
Overview
FID1 A, (ESTDGC\002B0202.D)
pA
110
100
90
80
70
60
50
1.609
2.573
4.479
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
调出了Level 2 的
第二针的数据文件
Calibration Table
Enter
Delete
Insert...
Print
OK
Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223 2.456 No No
2 158.700 63.976 2.481
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 30.313 2.438 Yes No
2 182.000 73.546 2.475
3 355.300 148.400 2.394
3 FID1 A C16 1 72.700 32.752 2.220 No No
2 179.100 79.678 2.248
Calibration Curve
C16, FID1 A
Area = 0.45960902*Amt -0.7943834
Rel. Res%(3): 5.7310e-1
Area
150
125
100
75
50
25
0
1
2
3
Correlation: 0.99983
0
200 Amount[ug/mL]
done

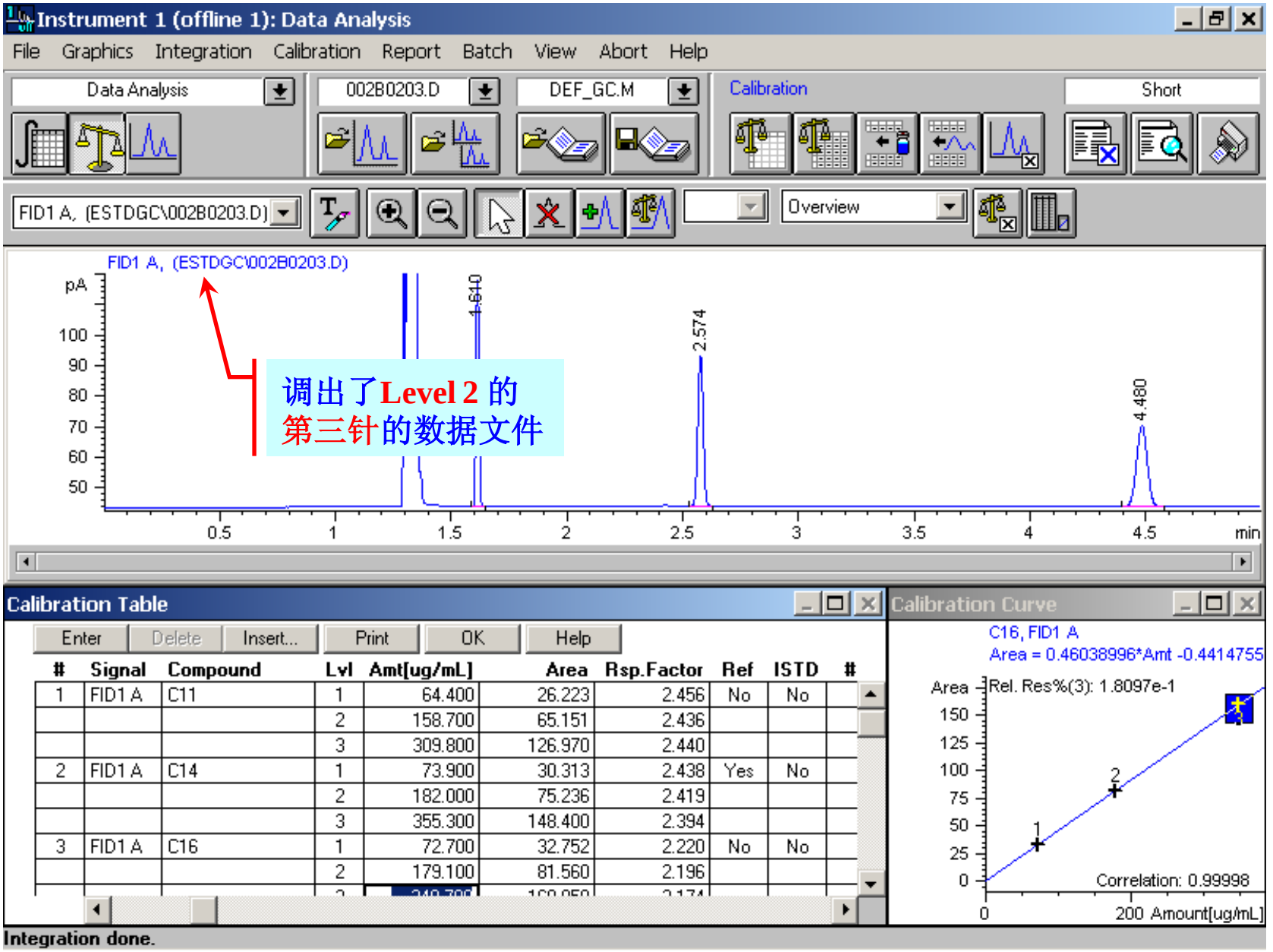

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
New Calibration Table...
Delete Calibration Table...
Recalibrate...
Add Level...
Add Peaks...
Calibration Settings...
Advanced Calibration
Calibration Table Options...
Select Peak
Delete Peaks
Add Peaks
Recalibrate Compounds
Calibration Table...
Compound Groups...
Signal Details...
Control Sample Limits...
单击“Calibration”，选择“Recalibrate”。
Calibration Table
Enter Delete Insert... Print OK Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223 2.456 No No
2 158.700 63.976 2.481
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 30.313 2.438 Yes No
2 182.000 73.546 2.475
3 355.300 148.400 2.394
3 FID1 A C16 1 72.700 32.752 2.220 No No
2 179.100 79.678 2.248
Calibration Curve
C16, FID1 A
Area = 0.45960902*Amt -0.7943834
Rel. Res%(3): 5.7310e-1
Correlation: 0.99983
Amount[ug/mL]
Recalibrate the existing Calibration Table

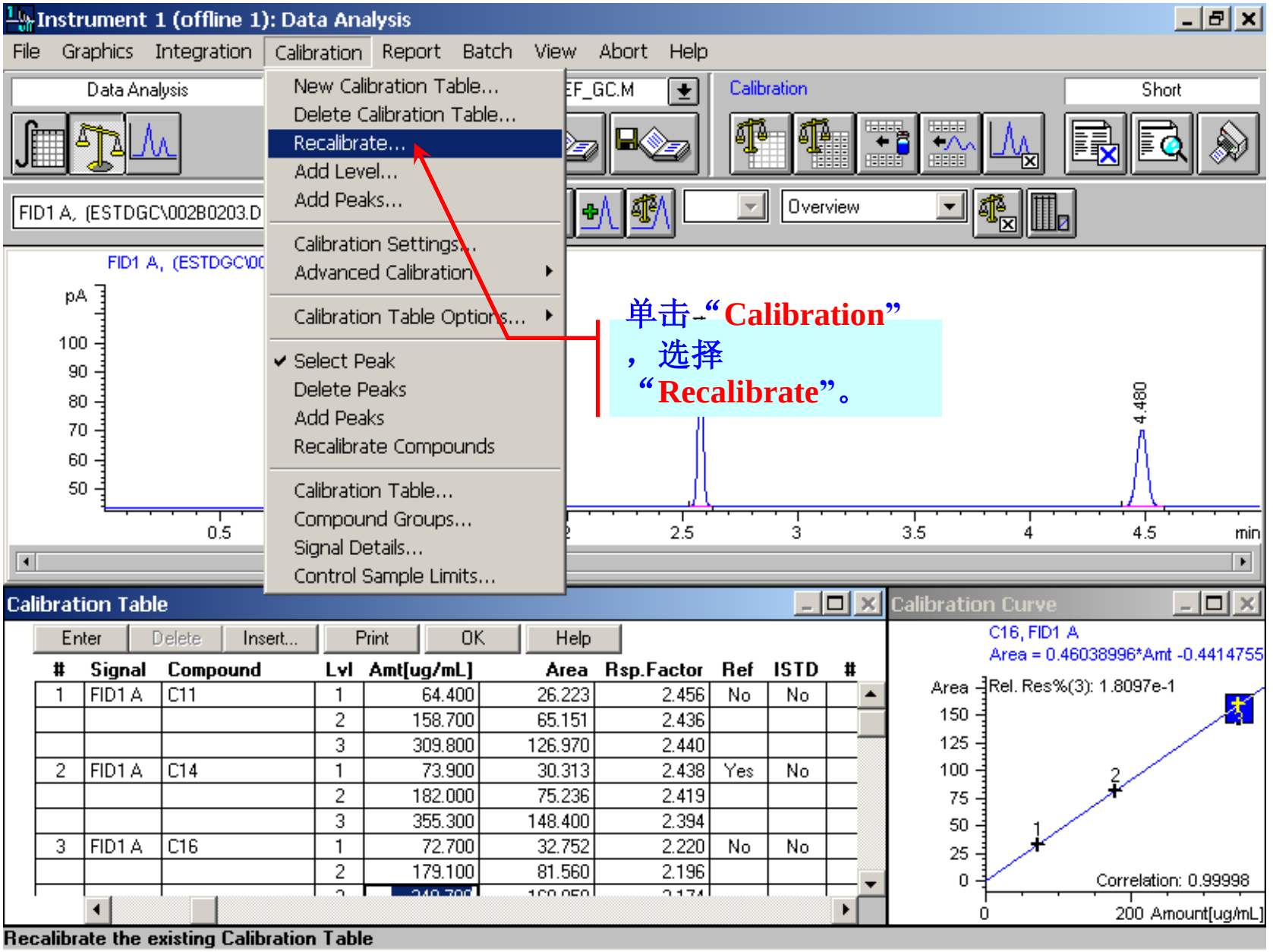

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
002B0202.D
DEF_GC.M
Calibration
Short
Overview
Recalibrate: Instrument 1
Level
1
2
3
Mode
Average
Replace
Delta%
Display Calibration Report
OK
Cancel
Help
选 Level 2，确认Average，如果选择Replace可以取代错误的数据。
2.573
4.479
min
Calibration Table
Enter
Delete
Insert...
Print
OK
Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223 2.456 No No
2 158.700 63.976 2.481
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 30.313 2.438 Yes No
2 182.000 73.546 2.475
3 355.300 148.400 2.394
3 FID1 A C16 1 72.700 32.752 2.220 No No
2 179.100 79.678 2.248
Calibration Curve
C16, FID1 A
Area = 0.45960902*Amt -0.7943834
Rel. Res%(3): 5.7310e-1
Correlation: 0.99983
Amount[ug/mL]
Load Signal(s) and Spectra of a Data File
busy


Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
002B0202.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\002B0202.D)
Overview
FID1 A, (ESTDGC\002B0202.D)
pA
110
100
90
80
70
60
50
1.609
2.573
4.479
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
Calibration Table
Enter Delete Insert... Print OK Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223 2.456 No No
2 158.700 65.151 2.436
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 30.313 2.438 Yes No
2 182.000 75.236 2.419
3 355.300 148.400 2.394
3 FID1 A C16 1 72.700 32.752 2.220 No No
2 179.100 81.560 2.196
Calibration Curve
C16, FID1 A
Area = 0.46038996*Amt -0.4414755
Rel. Res%(3): 1.8097e-1
Area
150
125
100
75
50
25
0
1
2
3
Correlation: 0.99998
0
200 Amount[ug/mL]
Select Level for Add or Recalibrate Peaks

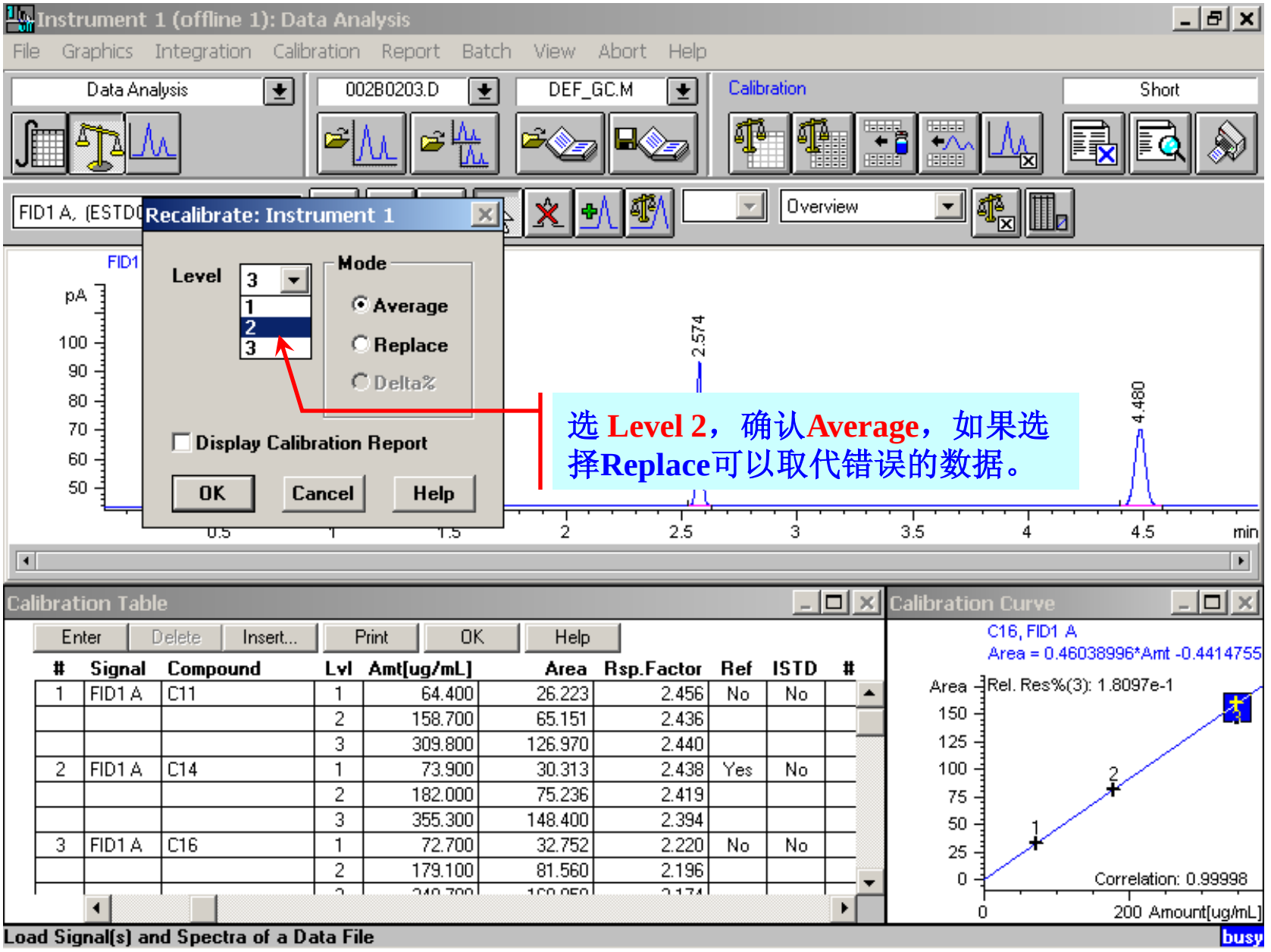

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
002B0202.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\002B0202.D)
Overview
FID1 A, (ESTDGC\002B0202.D)
pA
1.608
4.479
min
单击“Load Signal”，
调用Level 2 的第三针
Calibration Table
Enter Delete Insert... Print OK Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223 2.456 No No
2 158.700 65.151 2.436
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 30.313 2.438 Yes No
2 182.000 75.236 2.419
3 355.300 148.400 2.394
3 FID1 A C16 1 72.700 32.752 2.220 No No
2 179.100 81.560 2.196
Calibration Curve
C16, FID1 A
Area = 0.46038996*Amt -0.4414755
Rel. Res%(3): 1.8097e-1
Area
Correlation: 0.99998
Amount[ug/mL]
Select Level for Add or Recalibrate Peaks

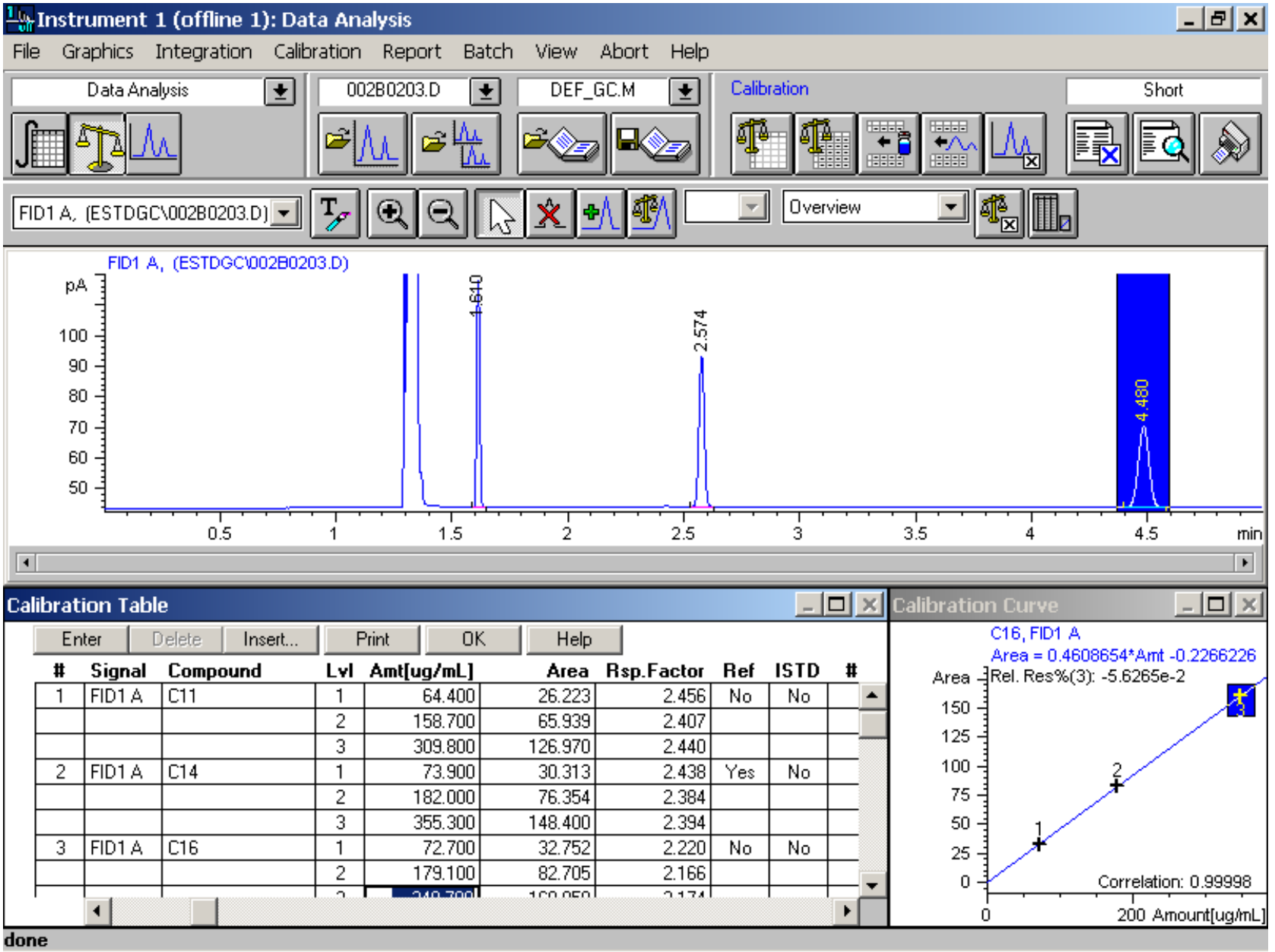

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
002B0202.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\002B0202.D)
Overview
FID1 A, (ESTDGC\002B0202.D)
pA
110
100
90
80
70
60
50
4.479
4.5
min
Load Signal : Instrument 1
File name:
002B0203.D
001B0103.D
002B0201.D
002B0202.D
002B0203.D
002B0301.D
Folders:
c:\...\estdgc
HPCHEM
1
DATA
ESTDGC
OK
Cancel
Help
Network...
Drives:
c:
Full >>
File Information...
Calibration Table
Enter
Delete
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223 2.456 No No
2 158.700 65.151 2.436
3 309.800 126.970 2.440
2 FID1 A C14
3 FID1 A C16 1 72.700 32.752 2.220 No No
2 179.100 81.560 2.196
Area = 0.46038996*Amt -0.4414755
Rel. Res%(3): 1.8097e-1
Area
150
125
100
75
50
25
0
1
2
Correlation: 0.99998
0
200 Amount[ug/mL]
查找，调用Level-2 的第二针，单击OK
Load Signal(s) and Spectra of a Data File
busy

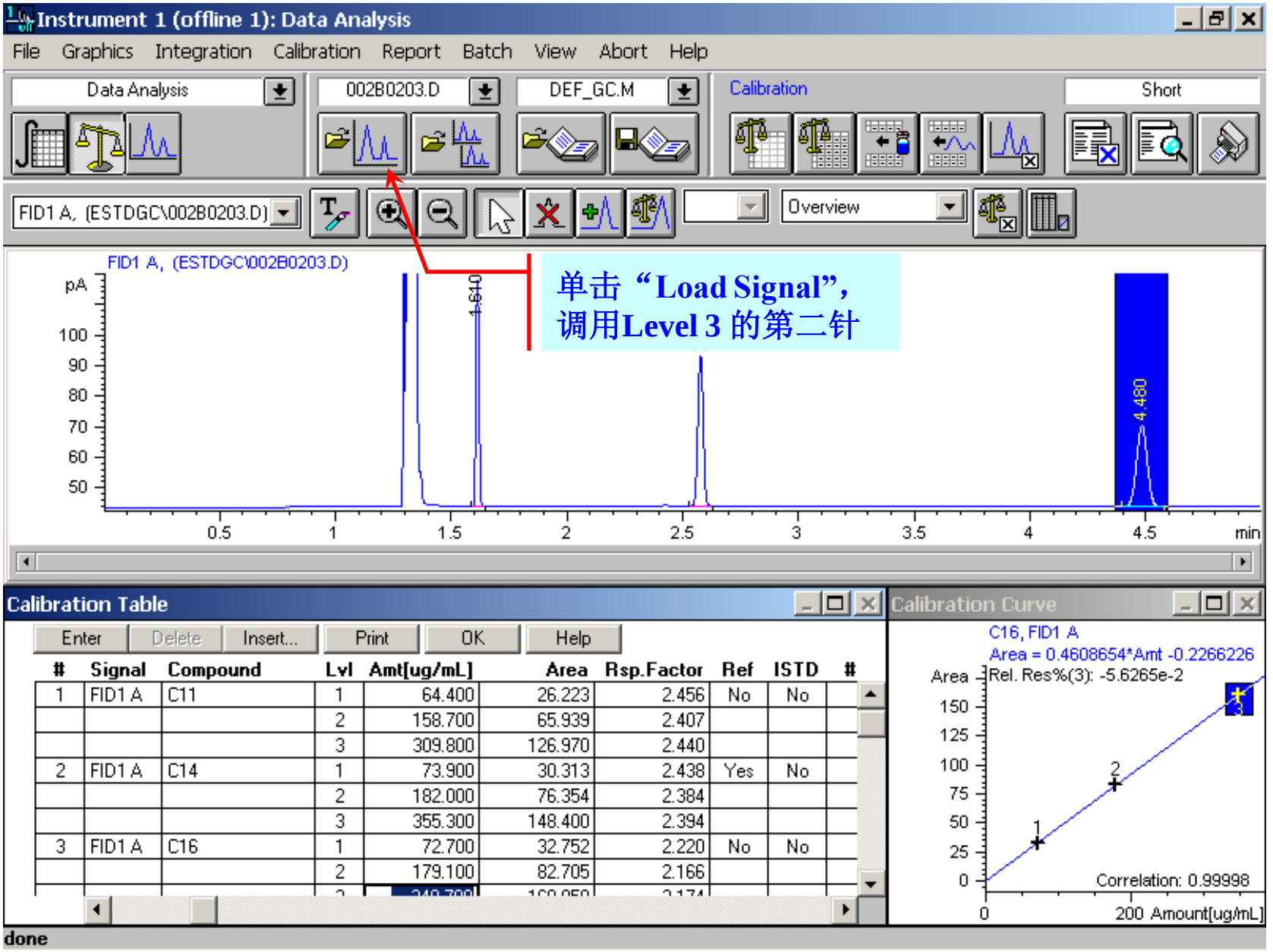

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
002B0203.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\002B0203.D)
Overview
FID1 A, (ESTDGC\002B0203.D)
pA
1.640
2.574
4.480
调出了Level 2 的
第三针的数据文件
min
Calibration Table
Enter Delete Insert... Print OK Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223 2.456 No No
2 158.700 65.151 2.436
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 30.313 2.438 Yes No
2 182.000 75.236 2.419
3 355.300 148.400 2.394
3 FID1 A C16 1 72.700 32.752 2.220 No No
2 179.100 81.560 2.196
Calibration Curve
C16, FID1 A
Area = 0.46038996*Amt -0.4414755
Area
Rel. Res%(3): 1.8097e-1
Correlation: 0.99998
Amount[ug/mL]
Integration done.

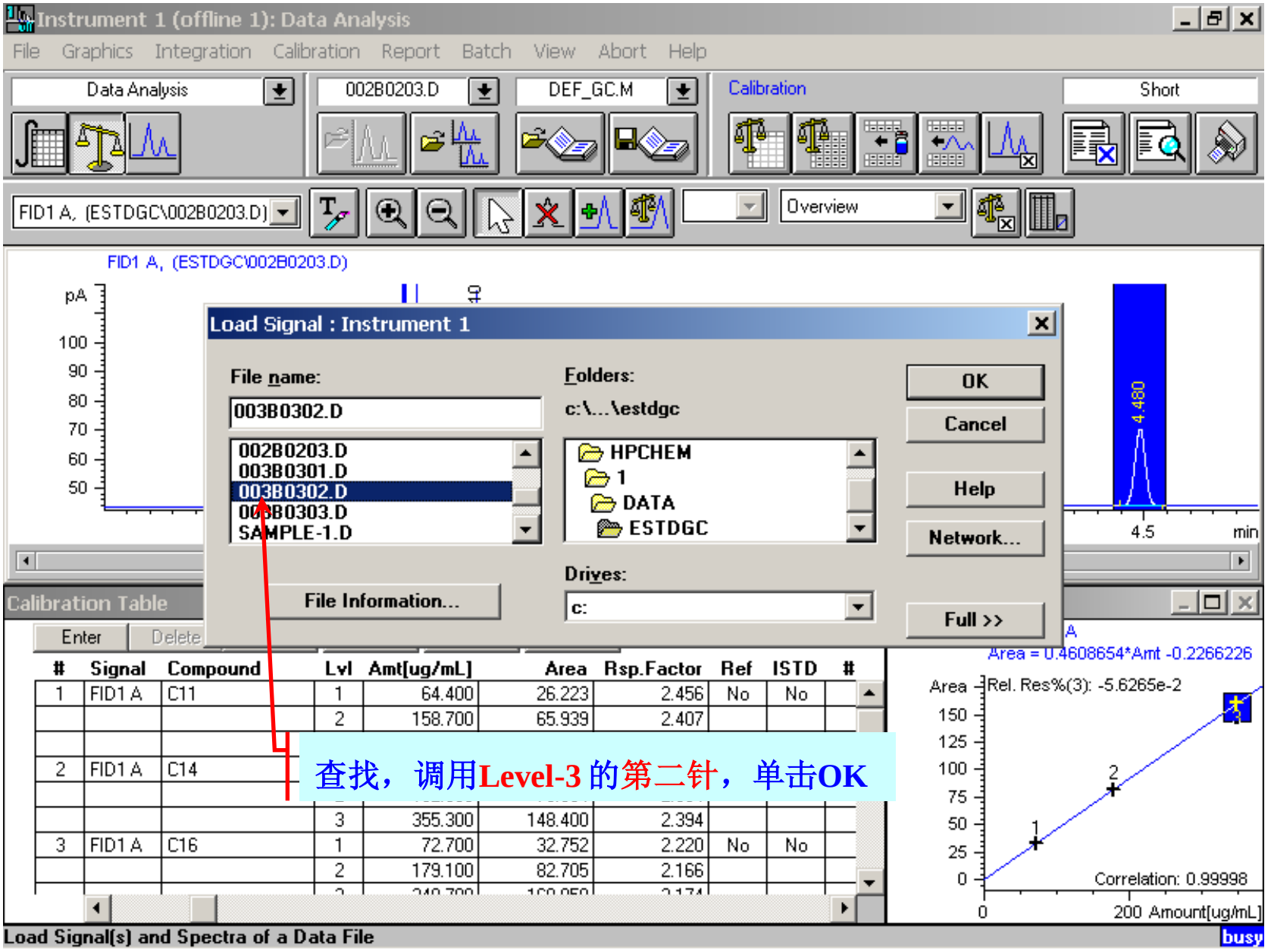


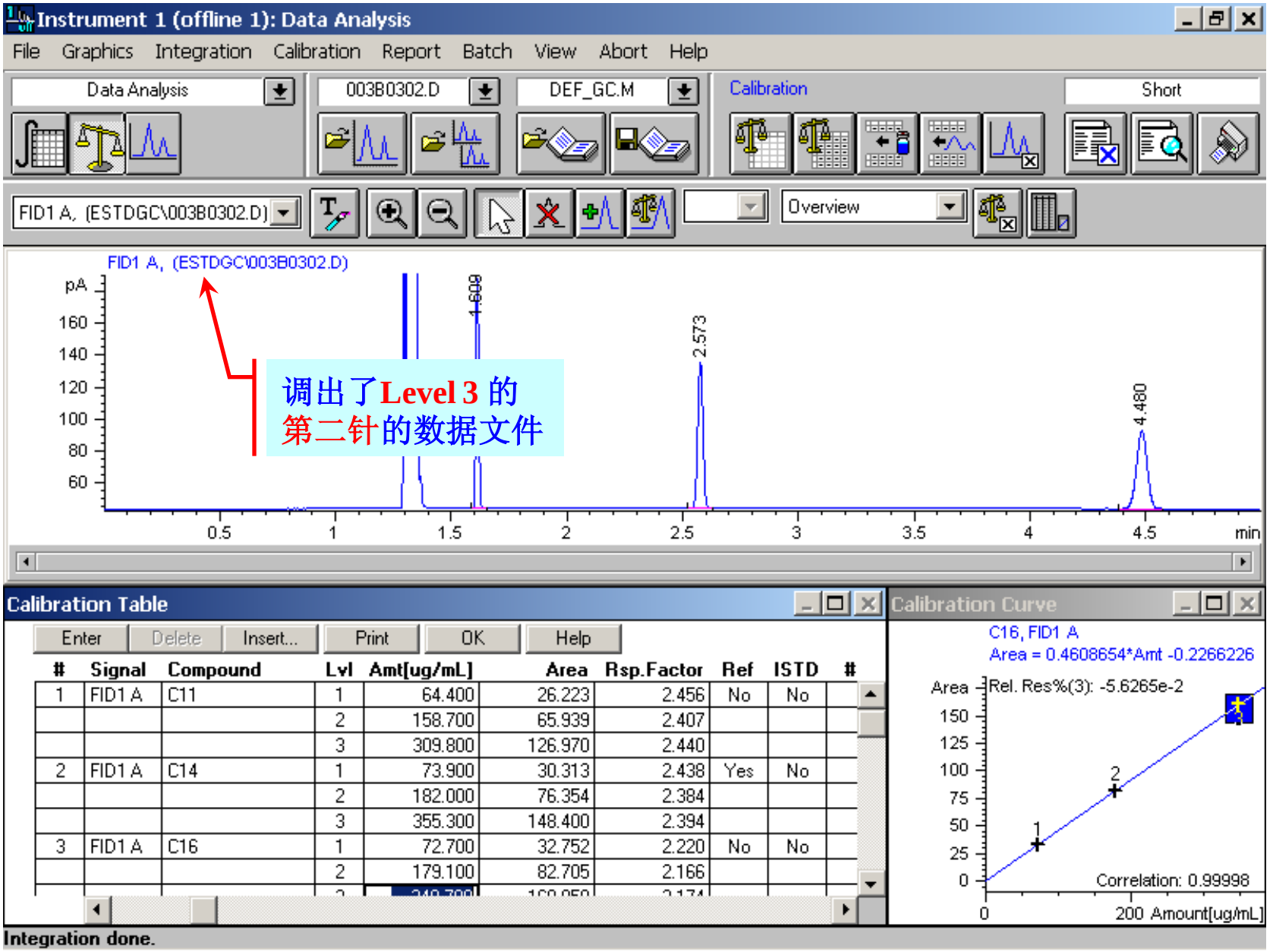
#	Signal	Compound	Lvl	Amt[ug/mL]	Area	Rsp.Factor	Ref	ISTD	#
1	FID1 A	C11	1	64.400	26.223	2.456	No	No	
			2	158.700	65.151	2.436			
			3	309.800	126.970	2.440			
2	FID1 A	C14	1	73.900	30.313	2.438	Yes	No	
			2	182.000	75.236	2.419			
			3	355.300	148.400	2.394			
3	FID1 A	C16	1	72.700	32.752	2.220	No	No	
			2	179.100	81.560	2.196			

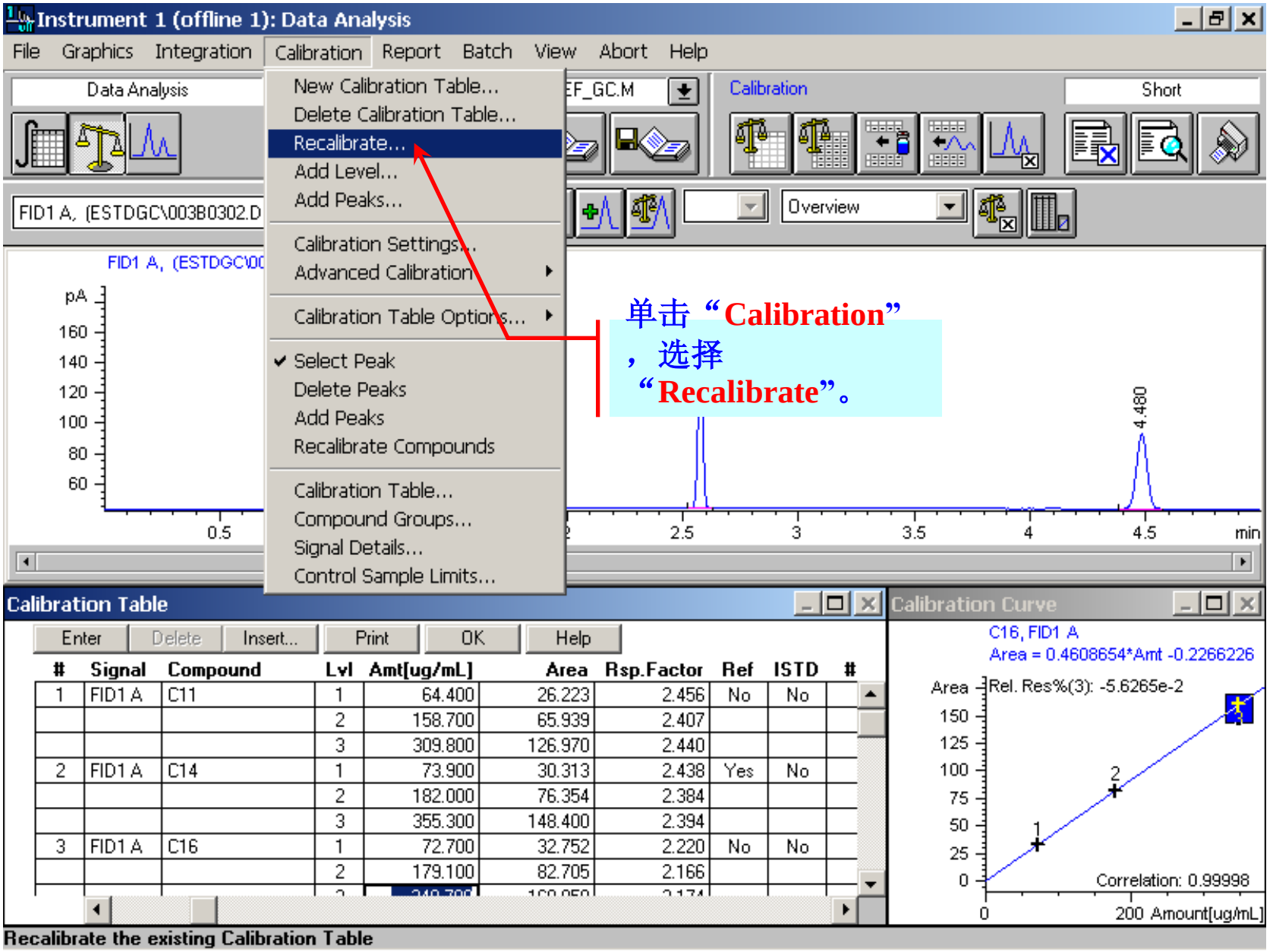

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
002B0203.D
DEF_GC.M
Calibration
Short
Overview
Recalibrate: Instrument 1
Level
3
1
2
3
Mode
Average
Replace
Delta%
Display Calibration Report
OK
Cancel
Help
FID1
pA
2.574
4.480
min
选 Level 2，确认Average，如果选择Replace可以取代错误的数据。
Calibration Table
Enter
Delete
Insert...
Print
OK
Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223 2.456 No No
2 158.700 65.151 2.436
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 30.313 2.438 Yes No
2 182.000 75.236 2.419
3 355.300 148.400 2.394
3 FID1 A C16 1 72.700 32.752 2.220 No No
2 179.100 81.560 2.196
Calibration Curve
C16, FID1 A
Area = 0.46038996*Amt -0.4414755
Rel. Res%(3): 1.8097e-1
Area
Correlation: 0.99998
Amount[ug/mL]
Load Signal(s) and Spectra of a Data File
busy

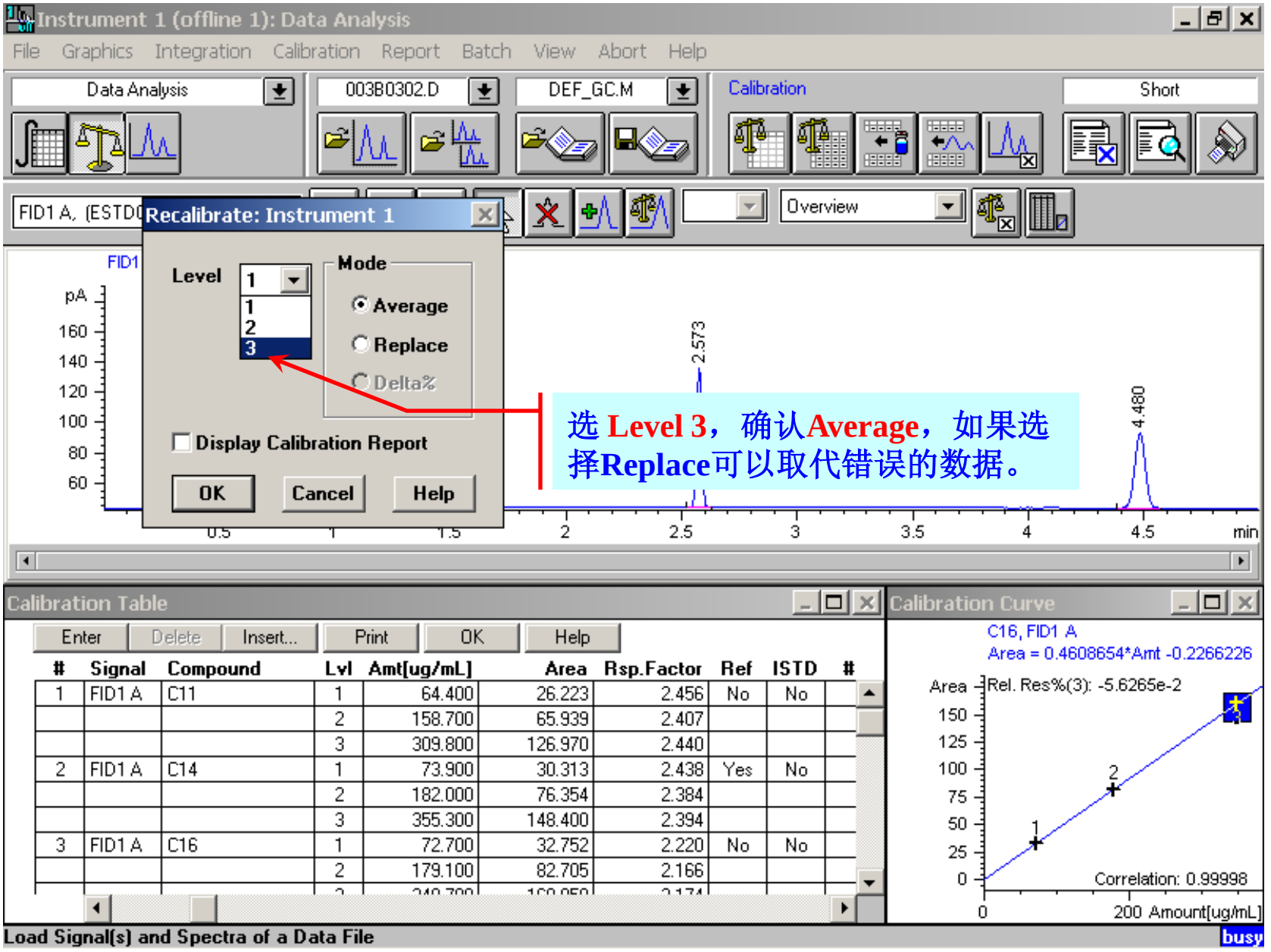

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
002B0203.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\002B0203.D)
Overview
FID1 A, (ESTDGC\002B0203.D)
pA
100
90
80
70
60
50
1.640
2.574
4.480
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
Calibration Table
Enter Delete Insert... Print OK Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223 2.456 No No
2 158.700 65.939 2.407
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 30.313 2.438 Yes No
2 182.000 76.354 2.384
3 355.300 148.400 2.394
3 FID1 A C16 1 72.700 32.752 2.220 No No
2 179.100 82.705 2.166
Calibration Curve
C16, FID1 A
Area = 0.4608654*Amt -0.2266226
Rel. Res%(3): -5.6265e-2
Area
150
125
100
75
50
25
0
1
2
3
Correlation: 0.99998
0
200 Amount[ug/mL]
done

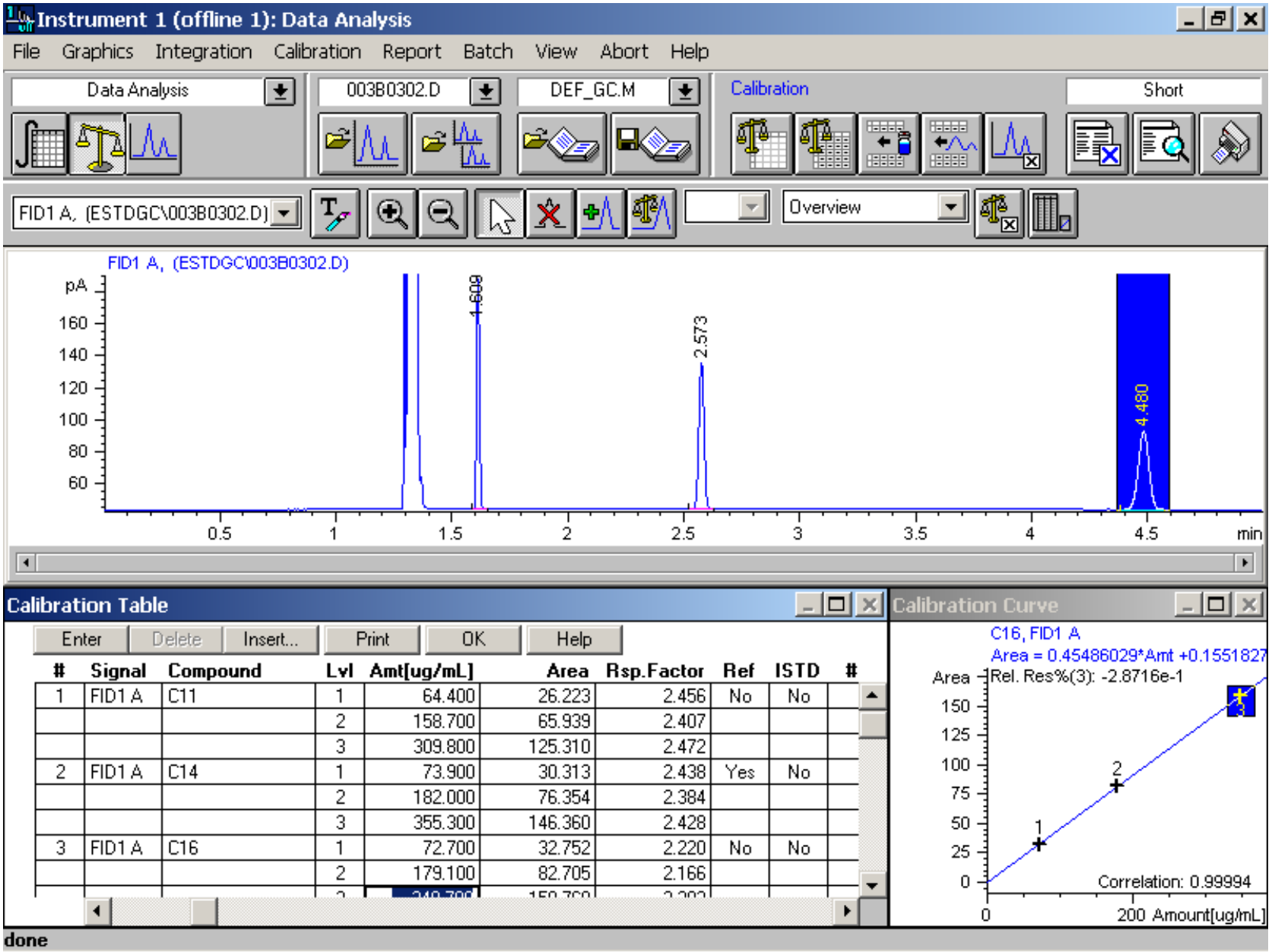

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
002B0203.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\002B0203.D)
Overview
FID1 A, (ESTDGC\002B0203.D)
pA
100
90
80
70
60
50
1.610
4.480
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
单击“Load Signal”，
调用Level 3 的第二针
Calibration Table
Enter Delete Insert... Print OK Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223 2.456 No No
2 158.700 65.939 2.407
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 30.313 2.438 Yes No
2 182.000 76.354 2.384
3 355.300 148.400 2.394
3 FID1 A C16 1 72.700 32.752 2.220 No No
2 179.100 82.705 2.166
Calibration Curve
C16, FID1 A
Area = 0.4608654*Amt -0.2266226
Rel. Res%(3): -5.6265e-2
Area
150
125
100
75
50
25
0
1
2
3
Correlation: 0.99998
0
200 Amount[ug/mL]
done

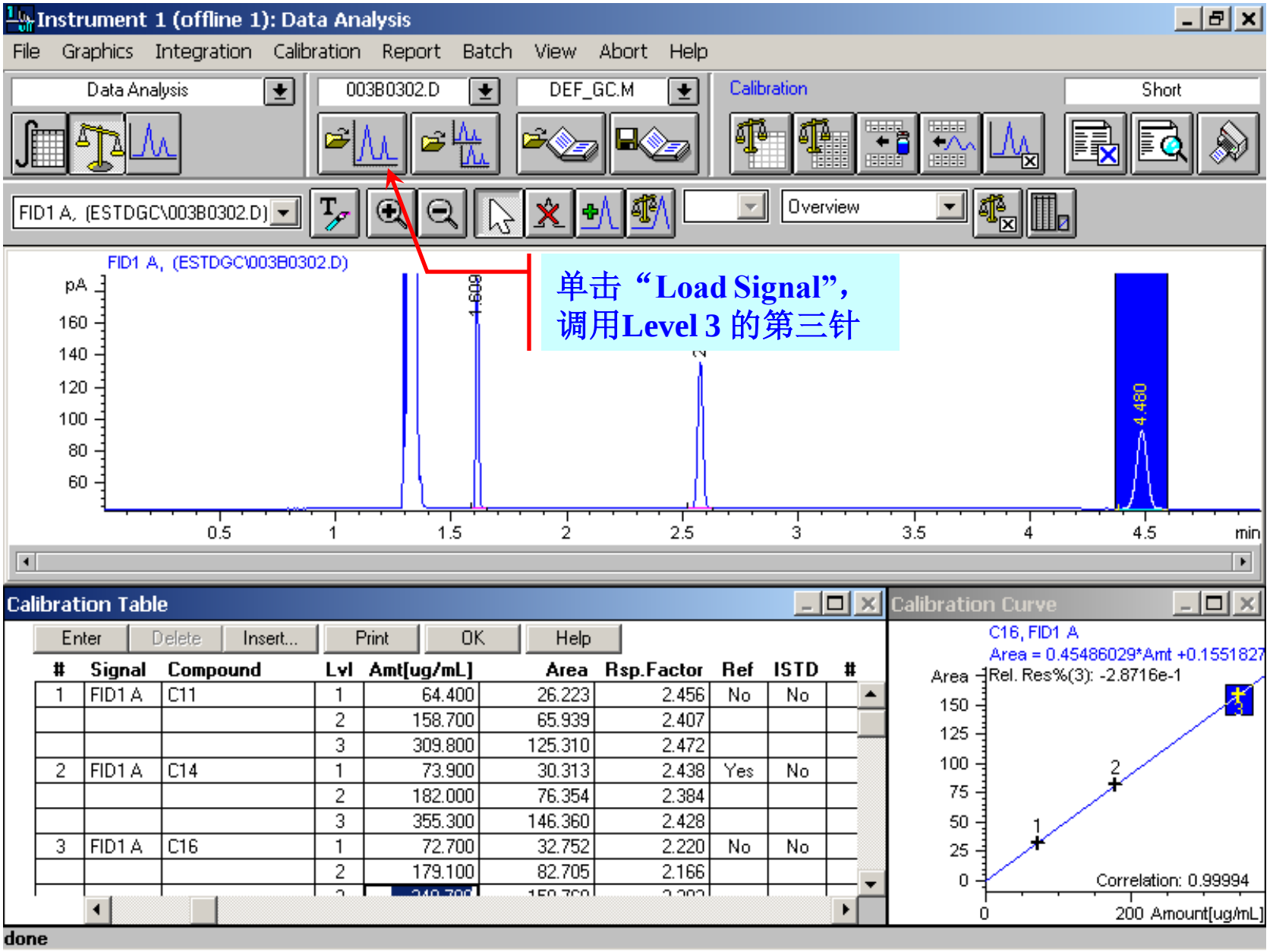

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
002B0203.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\002B0203.D)
Overview
FID1 A, (ESTDGC\002B0203.D)
pA
100
90
80
70
60
50
4.480
4.5
min
Load Signal : Instrument 1
File name:
003B0302.D
002B0203.D
003B0301.D
003B0302.D
003B0303.D
SAMPLE-1.D
Folders:
c:\...\estdgc
HPCHEM
1
DATA
ESTDGC
OK
Cancel
Help
Network...
Drives:
c:
Full >>
File Information...
Calibration Table
Enter
Delete
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223 2.456 No No
2 158.700 65.939 2.407
2 FID1 A C14
3 355.300 148.400 2.394
3 FID1 A C16 1 72.700 32.752 2.220 No No
2 179.100 82.705 2.166
查找，调用Level-3 的第二针，单击OK
Area = 0.4608654*Amt -0.2266226
Rel. Res%(3): -5.6265e-2
Area
150
125
100
75
50
25
0
1
2
Correlation: 0.99998
0
200 Amount[ug/mL]
Load Signal(s) and Spectra of a Data File
busy

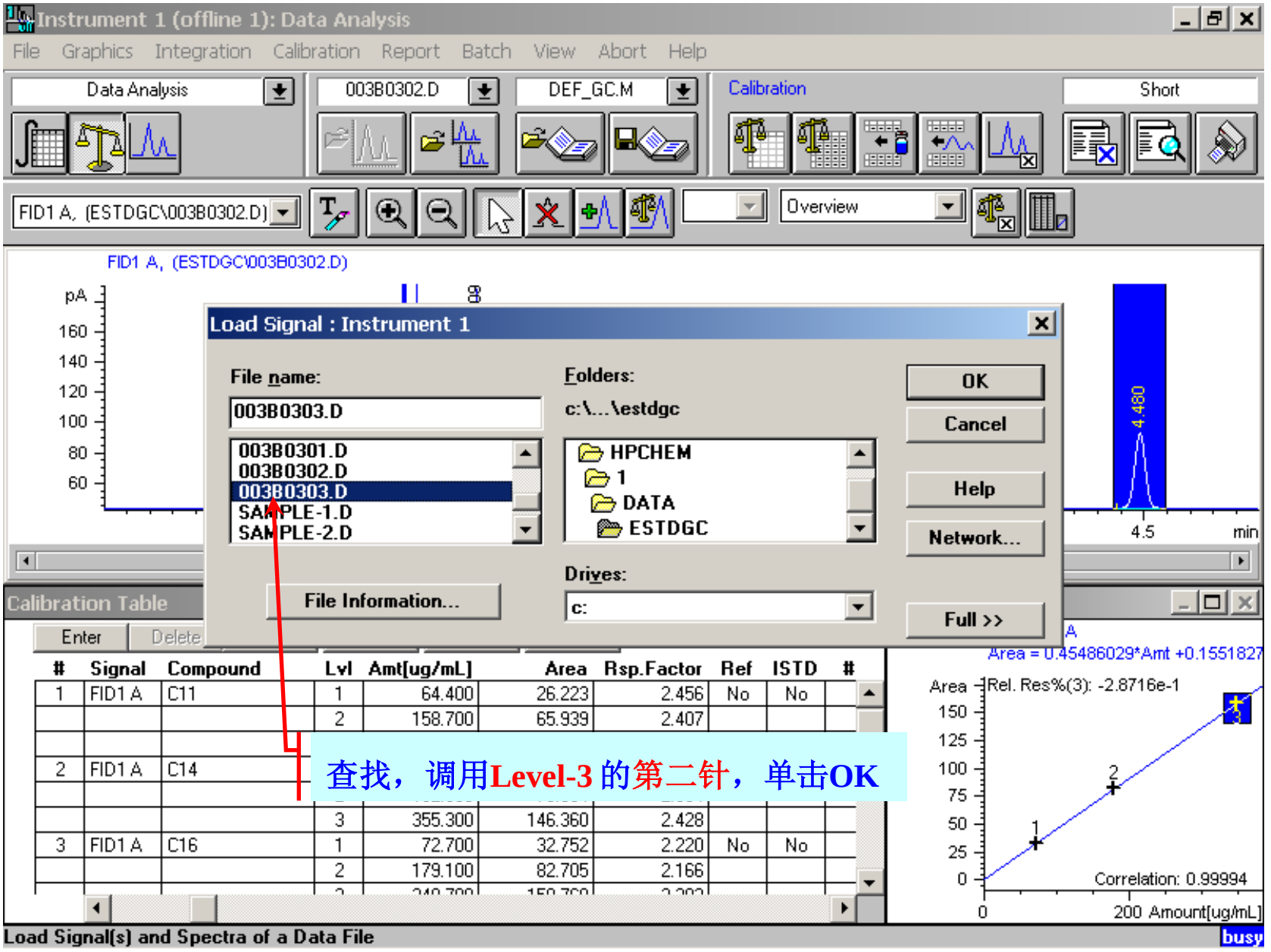

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0302.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\003B0302.D)
Overview
FID1 A, (ESTDGC\003B0302.D)
pA
160
140
120
100
80
60
1.609
2.573
4.480
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
调出了Level 3 的
第二针的数据文件
Calibration Table
Enter
Delete
Insert...
Print
OK
Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223 2.456 No No
2 158.700 65.939 2.407
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 30.313 2.438 Yes No
2 182.000 76.354 2.384
3 355.300 148.400 2.394
3 FID1 A C16 1 72.700 32.752 2.220 No No
2 179.100 82.705 2.166
Calibration Curve
C16, FID1 A
Area = 0.4608654*Amt -0.2266226
Area
Rel. Res%(3): -5.6265e-2
150
125
100
75
50
25
0
1
2
Correlation: 0.99998
0
200 Amount[ug/mL]
Integration done.

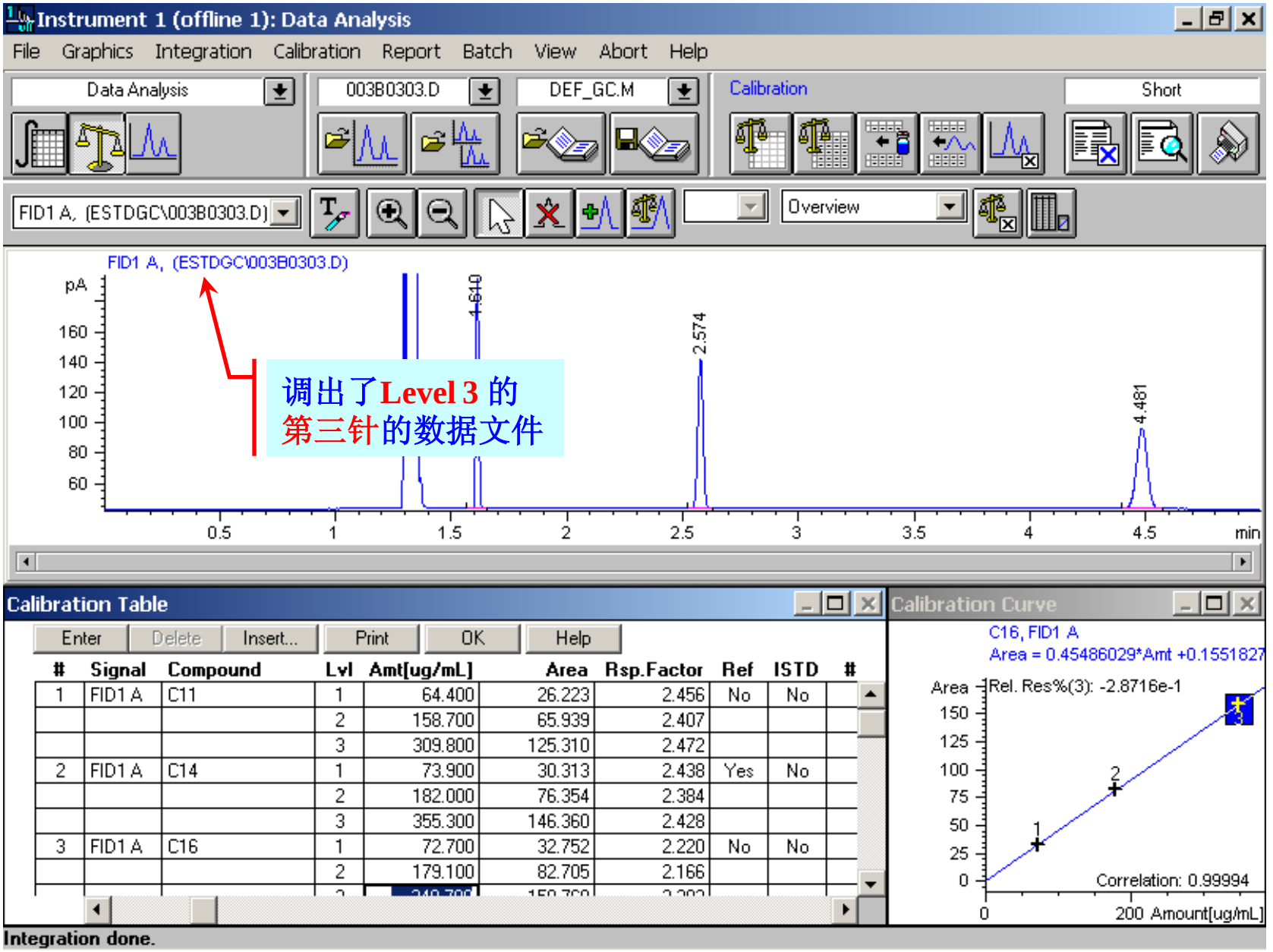

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
New Calibration Table...
Delete Calibration Table...
Recalibrate...
Add Level...
Add Peaks...
Calibration Settings...
Advanced Calibration
Calibration Table Options...
Select Peak
Delete Peaks
Add Peaks
Recalibrate Compounds
Calibration Table...
Compound Groups...
Signal Details...
Control Sample Limits...
单击“Calibration”，选择“Recalibrate”。
Calibration Table
Enter Delete Insert... Print OK Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223 2.456 No No
2 158.700 65.939 2.407
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 30.313 2.438 Yes No
2 182.000 76.354 2.384
3 355.300 148.400 2.394
3 FID1 A C16 1 72.700 32.752 2.220 No No
2 179.100 82.705 2.166
Calibration Curve
C16, FID1 A
Area = 0.4608654*Amt -0.2266226
Rel. Res%(3): -5.6265e-2
Correlation: 0.99998
Amount[ug/mL]
Recalibrate the existing Calibration Table

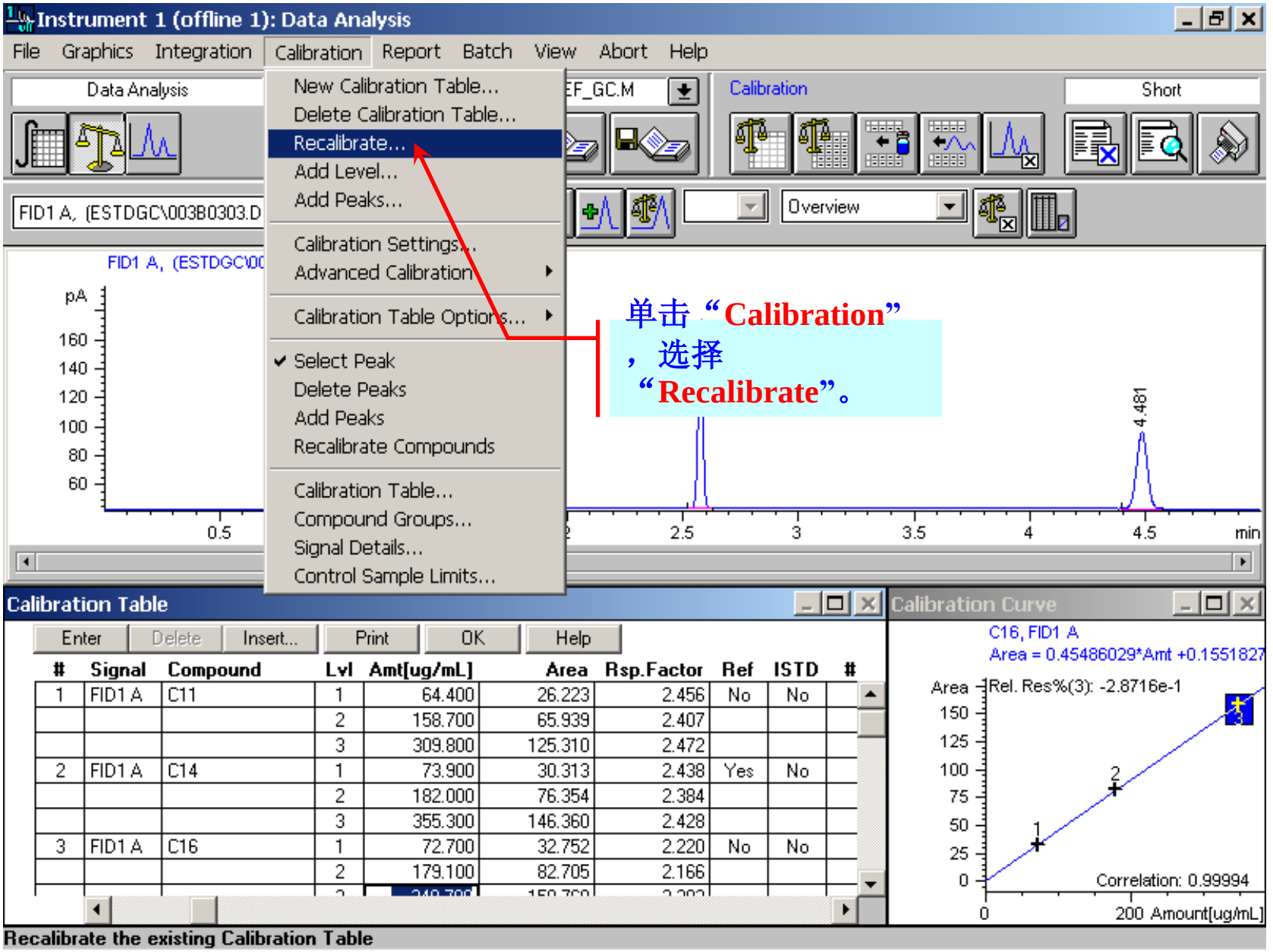

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0302.D
DEF_GC.M
Calibration
Short
Overview
Recalibrate: Instrument 1
Level
1
2
3
Mode
Average
Replace
Delta%
Display Calibration Report
OK
Cancel
Help
选 Level 3，确认Average，如果选择Replace可以取代错误的数据。
2.573
4.480
min
Calibration Table
Enter
Delete
Insert...
Print
OK
Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223 2.456 No No
2 158.700 65.939 2.407
3 309.800 126.970 2.440
2 FID1 A C14 1 73.900 30.313 2.438 Yes No
2 182.000 76.354 2.384
3 355.300 148.400 2.394
3 FID1 A C16 1 72.700 32.752 2.220 No No
2 179.100 82.705 2.166
Calibration Curve
C16, FID1 A
Area = 0.4608654*Amt -0.2266226
Rel. Res%(3): -5.6265e-2
Correlation: 0.99998
Amount[ug/mL]
Load Signal(s) and Spectra of a Data File
busy


Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0302.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\003B0302.D)
Overview
FID1 A, (ESTDGC\003B0302.D)
pA
160
140
120
100
80
60
1.609
2.573
4.480
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
Calibration Table
Enter Delete Insert... Print OK Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223 2.456 No No
2 158.700 65.939 2.407
3 309.800 125.310 2.472
2 FID1 A C14 1 73.900 30.313 2.438 Yes No
2 182.000 76.354 2.384
3 355.300 146.360 2.428
3 FID1 A C16 1 72.700 32.752 2.220 No No
2 179.100 82.705 2.166
Calibration Curve
C16, FID1 A
Area = 0.45486029*Amt +0.1551827
Rel. Res%(3): -2.8716e-1
Area
150
125
100
75
50
25
0
1
2
3
Correlation: 0.99994
0
200 Amount[ug/mL]
done

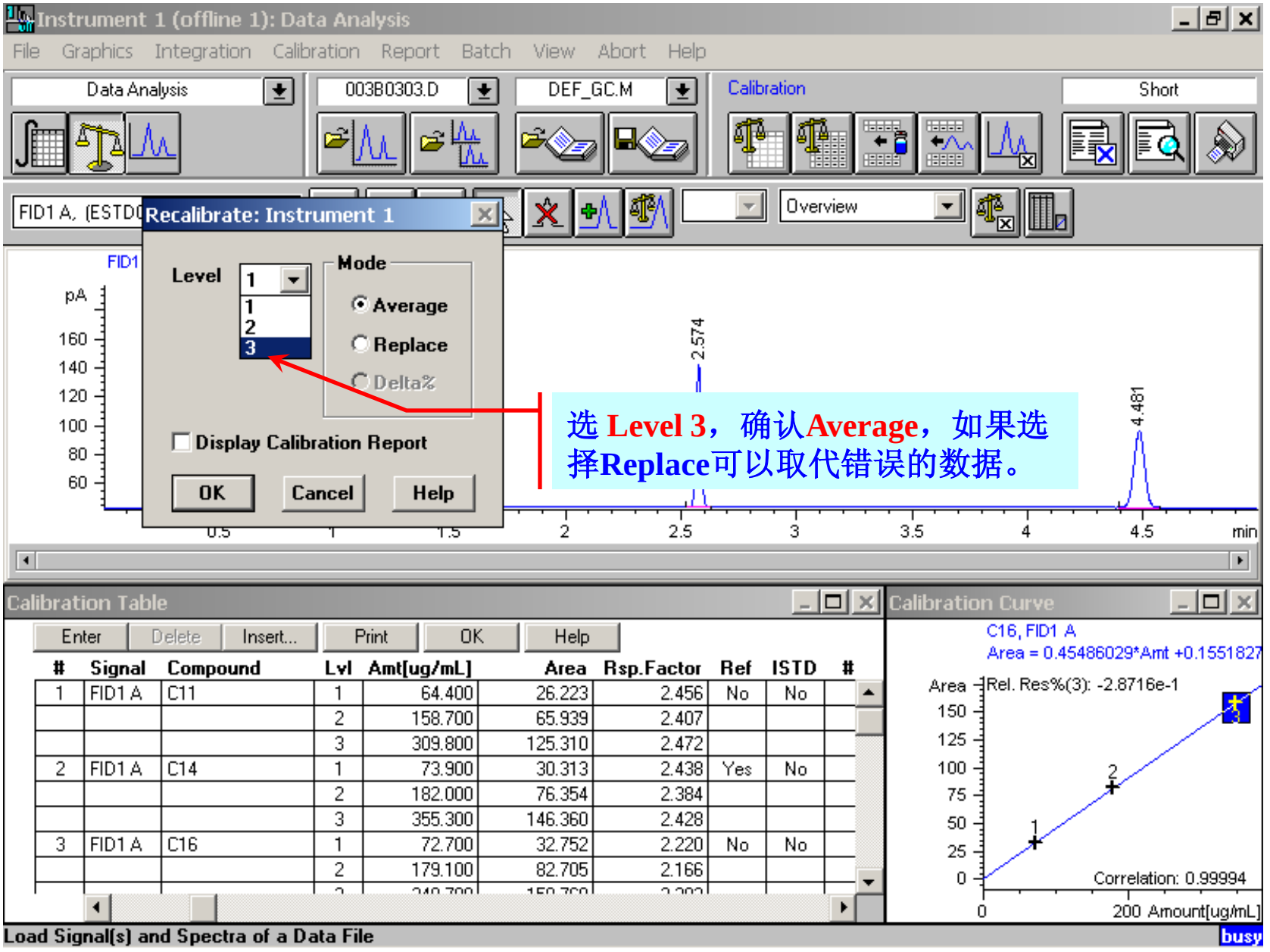

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0302.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\003B0302.D)
Overview
FID1 A, (ESTDGC\003B0302.D)
pA
160
140
120
100
80
60
1.609
4.480
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
单击“Load Signal”，
调用Level 3 的第三针
Calibration Table
Enter Delete Insert... Print OK Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223 2.456 No No
2 158.700 65.939 2.407
3 309.800 125.310 2.472
2 FID1 A C14 1 73.900 30.313 2.438 Yes No
2 182.000 76.354 2.384
3 355.300 146.360 2.428
3 FID1 A C16 1 72.700 32.752 2.220 No No
2 179.100 82.705 2.166
Calibration Curve
C16, FID1 A
Area = 0.45486029*Amt +0.1551827
Rel. Res%(3): -2.8716e-1
Area
150
125
100
75
50
25
0
1
2
3
Correlation: 0.99994
0
200 Amount[ug/mL]
done

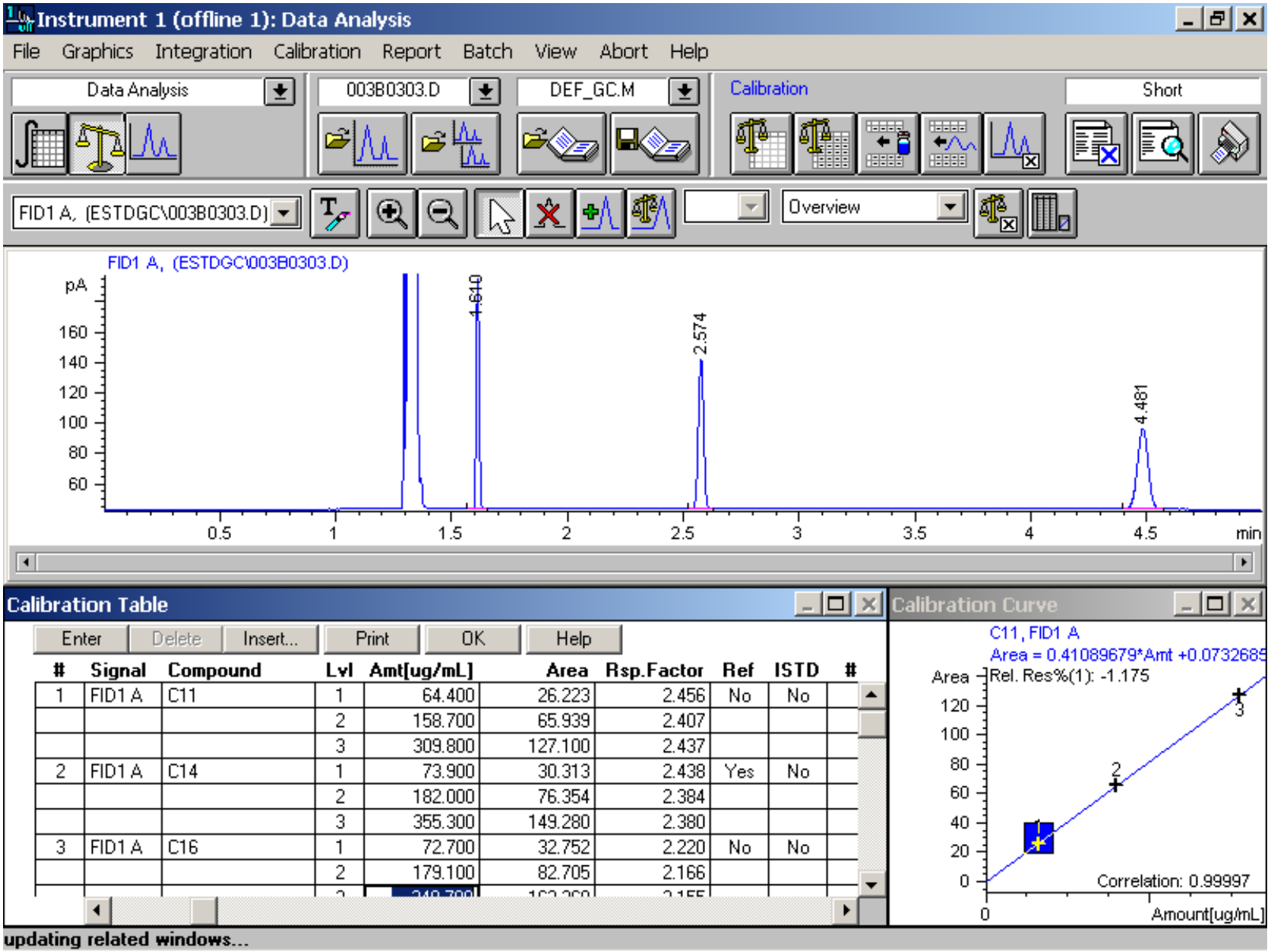

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0302.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\003B0302.D)
Overview
FID1 A, (ESTDGC\003B0302.D)
pA
160
140
120
100
80
60
4.480
4.5
min
Load Signal : Instrument 1
File name:
003B0303.D
003B0301.D
003B0302.D
003B0303.D
SAMPLE-1.D
SAMPLE-2.D
Folders:
c:\...\estdgc
HPCHEM
1
DATA
ESTDGC
Drives:
c:
OK
Cancel
Help
Network...
Full >>
File Information...
Calibration Table
Enter
Delete
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223 2.456 No No
2 158.700 65.939 2.407
2 FID1 A C14
3 355.300 146.360 2.428
3 FID1 A C16 1 72.700 32.752 2.220 No No
2 179.100 82.705 2.166
Area = 0.45486029*Amt +0.1551827
Rel. Res%(3): -2.8716e-1
Area
150
125
100
75
50
25
0
Correlation: 0.99994
0
200 Amount[ug/mL]
查找，调用Level-3 的第二针，单击OK
Load Signal(s) and Spectra of a Data File
busy

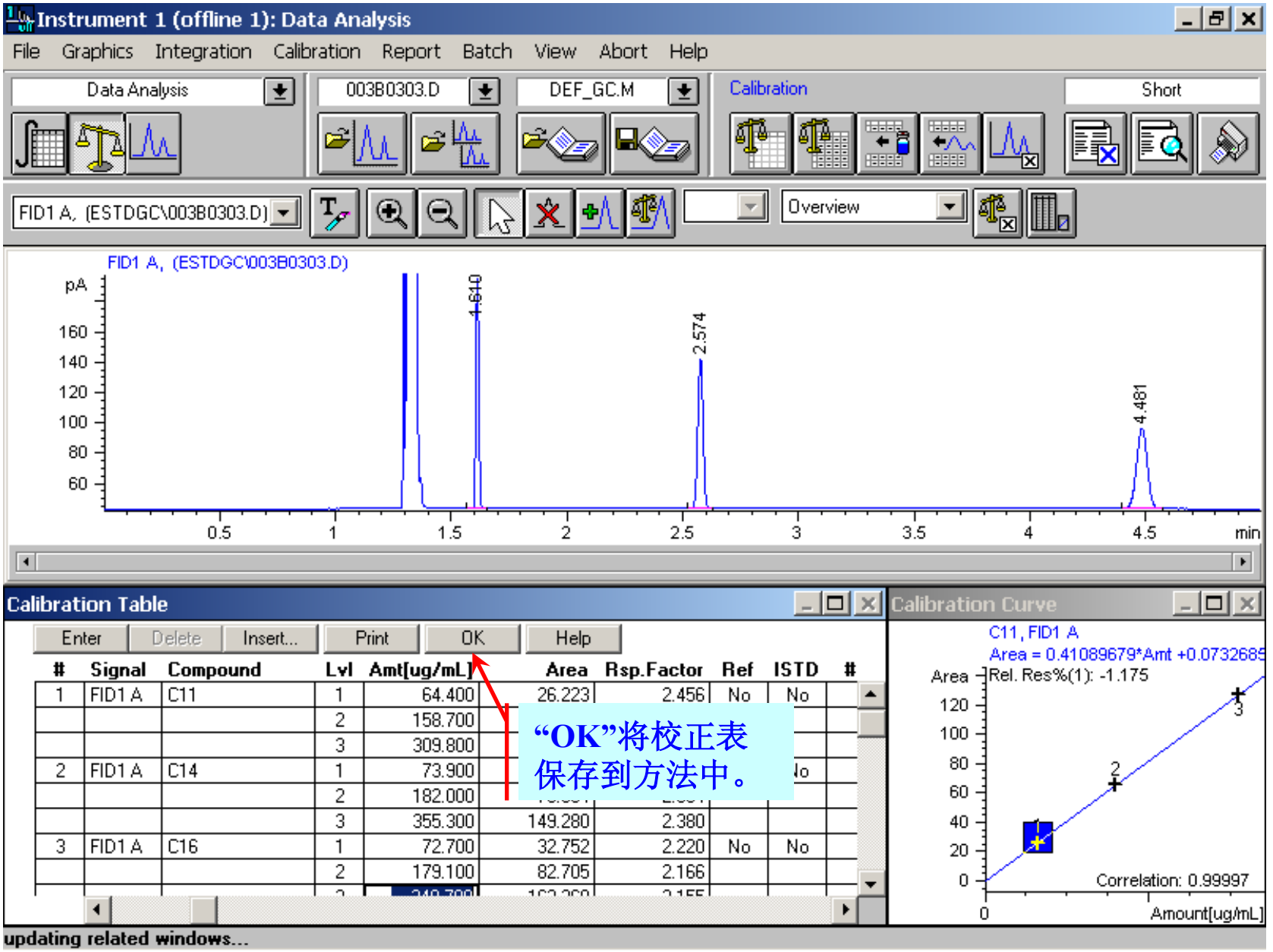

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0303.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\003B0303.D)
Overview
FID1 A, (ESTDGC\003B0303.D)
pA
160
140
120
100
80
60
1.610
2.574
4.481
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
调出了Level 3 的
第三针的数据文件
Calibration Table
Enter
Delete
Insert...
Print
OK
Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223 2.456 No No
2 158.700 65.939 2.407
3 309.800 125.310 2.472
2 FID1 A C14 1 73.900 30.313 2.438 Yes No
2 182.000 76.354 2.384
3 355.300 146.360 2.428
3 FID1 A C16 1 72.700 32.752 2.220 No No
2 179.100 82.705 2.166
Calibration Curve
C16, FID1 A
Area = 0.45486029*Amt +0.1551827
Area
Rel. Res%(3): -2.8716e-1
150
125
100
75
50
25
0
1
2
3
Correlation: 0.99994
0
200 Amount[ug/mL]
Integration done.

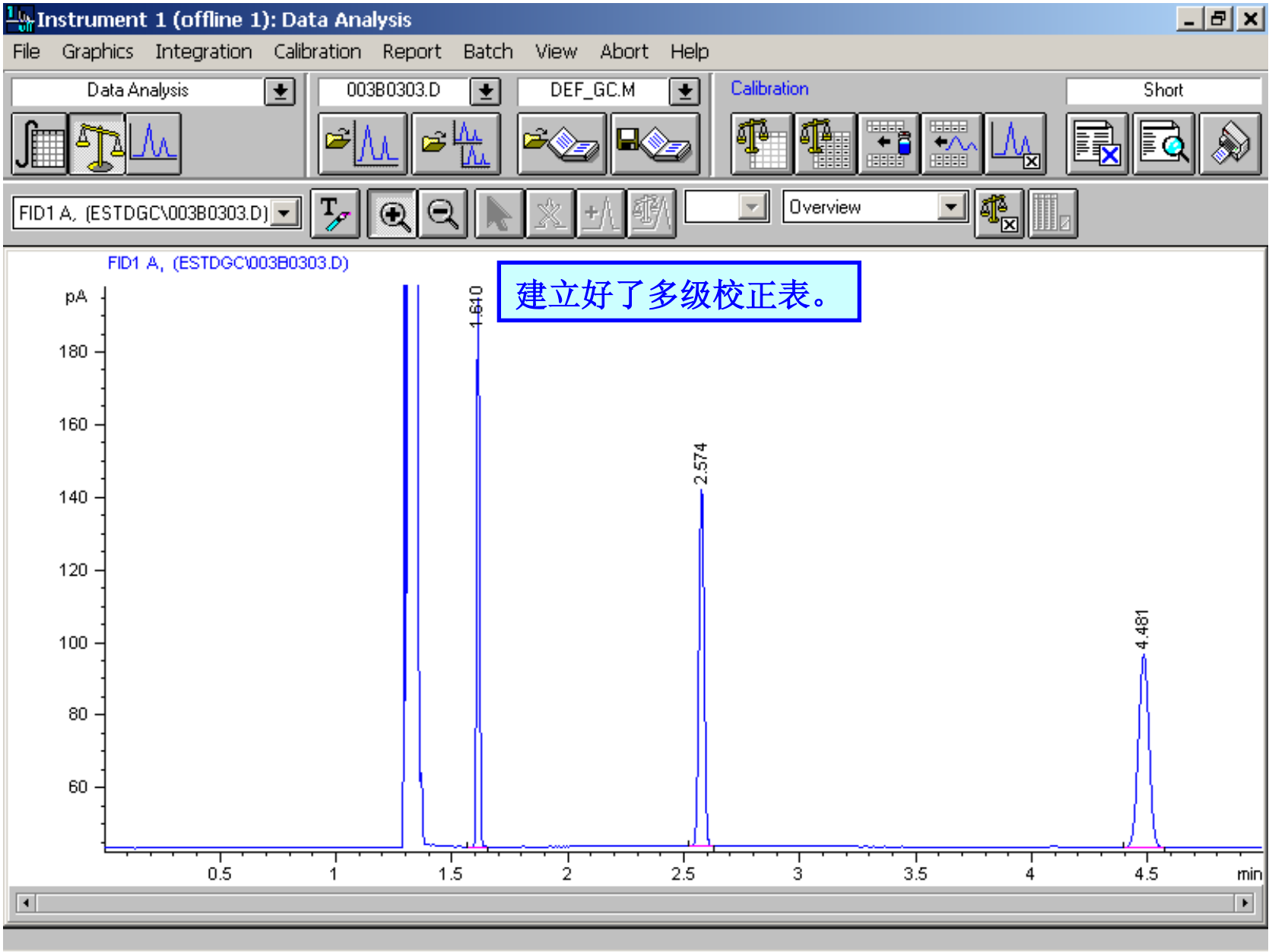


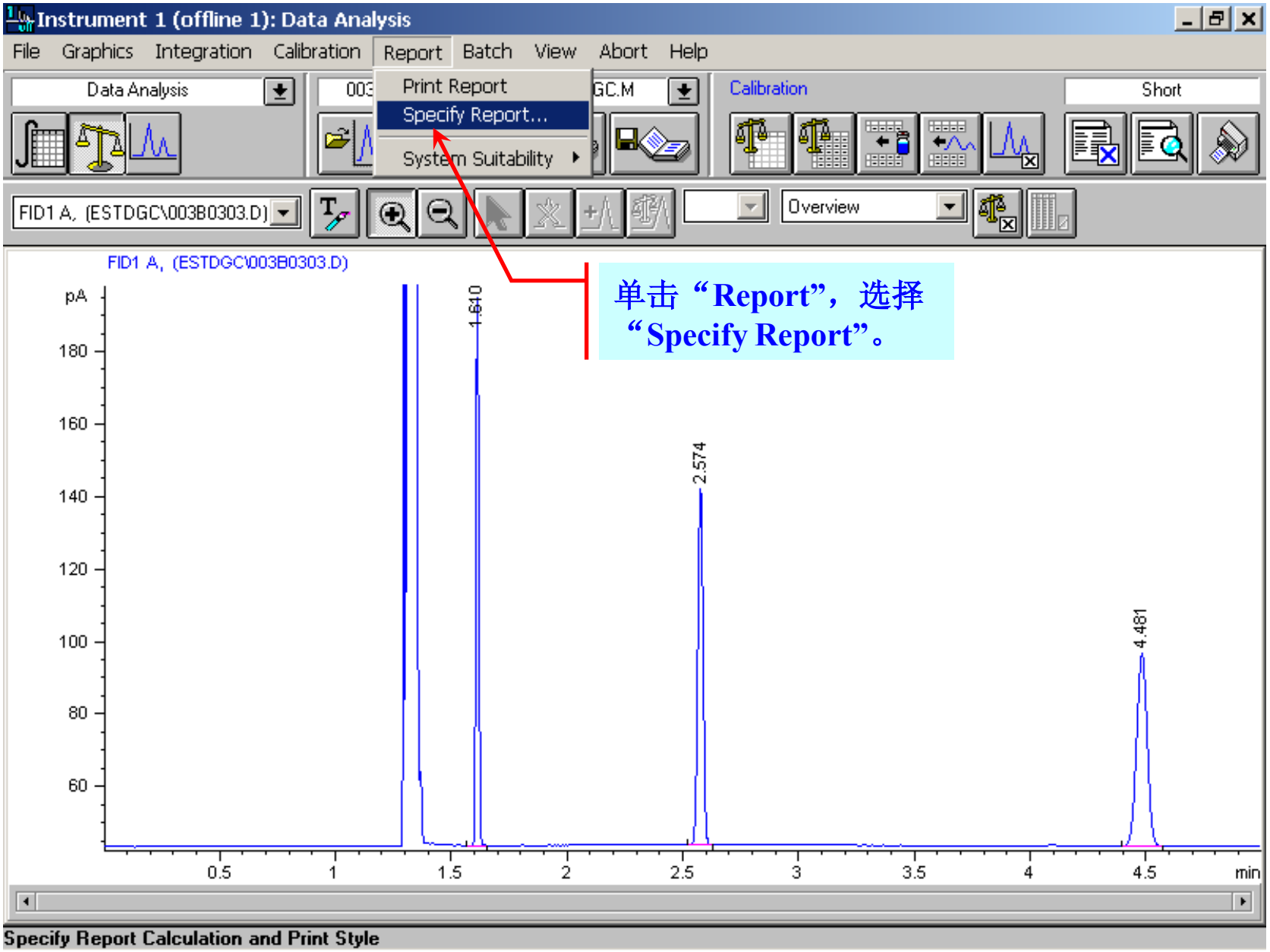
#	Signal	Compound	Lvl	Amt[ug/mL]	Area	Rsp.Factor	Ref	ISTD	#
1	FID1 A	C11	1	64.400	26.223	2.456	No	No	
			2	158.700	65.939	2.407			
			3	309.800	125.310	2.472			
2	FID1 A	C14	1	73.900	30.313	2.438	Yes	No	
			2	182.000	76.354	2.384			
			3	355.300	146.360	2.428			
3	FID1 A	C16	1	72.700	32.752	2.220	No	No	
			2	179.100	82.705	2.166			

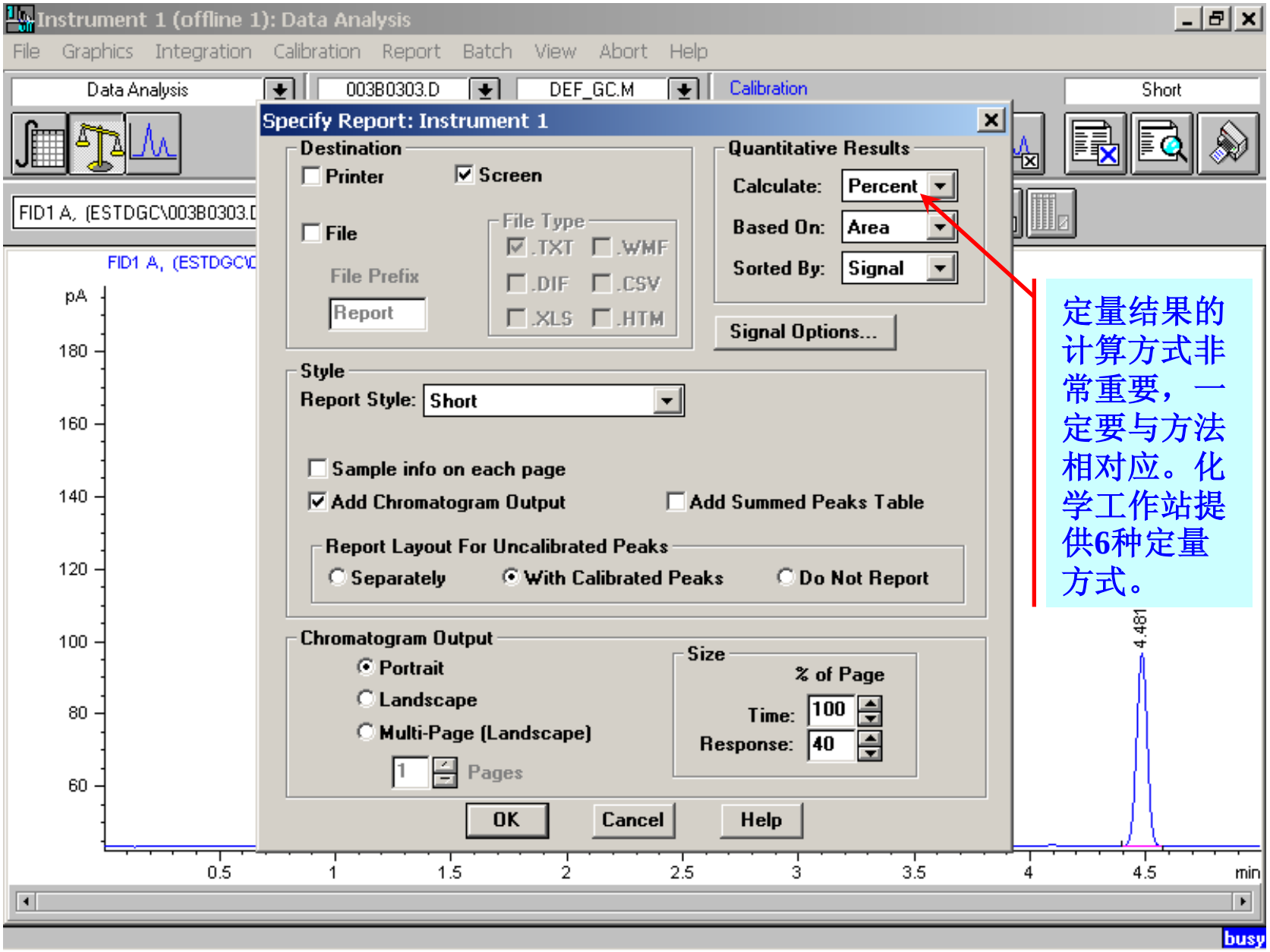

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0303.D
DEF_GC.M
Calibration
Short
Overview
Recalibrate: Instrument 1
Level
1
2
3
Mode
Average
Replace
Delta%
Display Calibration Report
OK
Cancel
Help
选 Level 3，确认Average，如果选择Replace可以取代错误的数据。
2.574
4.481
min
Calibration Table
Enter
Delete
Insert...
Print
OK
Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223 2.456 No No
2 158.700 65.939 2.407
3 309.800 125.310 2.472
2 FID1 A C14 1 73.900 30.313 2.438 Yes No
2 182.000 76.354 2.384
3 355.300 146.360 2.428
3 FID1 A C16 1 72.700 32.752 2.220 No No
2 179.100 82.705 2.166
Calibration Curve
C16, FID1 A
Area = 0.45486029*Amt +0.1551827
Rel. Res%(3): -2.8716e-1
Correlation: 0.99994
Amount[ug/mL]
Load Signal(s) and Spectra of a Data File
busy


Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0303.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\003B0303.D)
Overview
FID1 A, (ESTDGC\003B0303.D)
pA
160
140
120
100
80
60
1.640
2.574
4.481
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
Calibration Table
Enter Delete Insert... Print OK Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223 2.456 No No
2 158.700 65.939 2.407
3 309.800 127.100 2.437
2 FID1 A C14 1 73.900 30.313 2.438 Yes No
2 182.000 76.354 2.384
3 355.300 149.280 2.380
3 FID1 A C16 1 72.700 32.752 2.220 No No
2 179.100 82.705 2.166
Calibration Curve
C11, FID1 A
Area = 0.41089679*Amt +0.0732685
Rel. Res%(1): -1.175
Area
120
100
80
60
40
20
0
1
2
3
Correlation: 0.99997
0
Amount[ug/mL]
updating related windows...

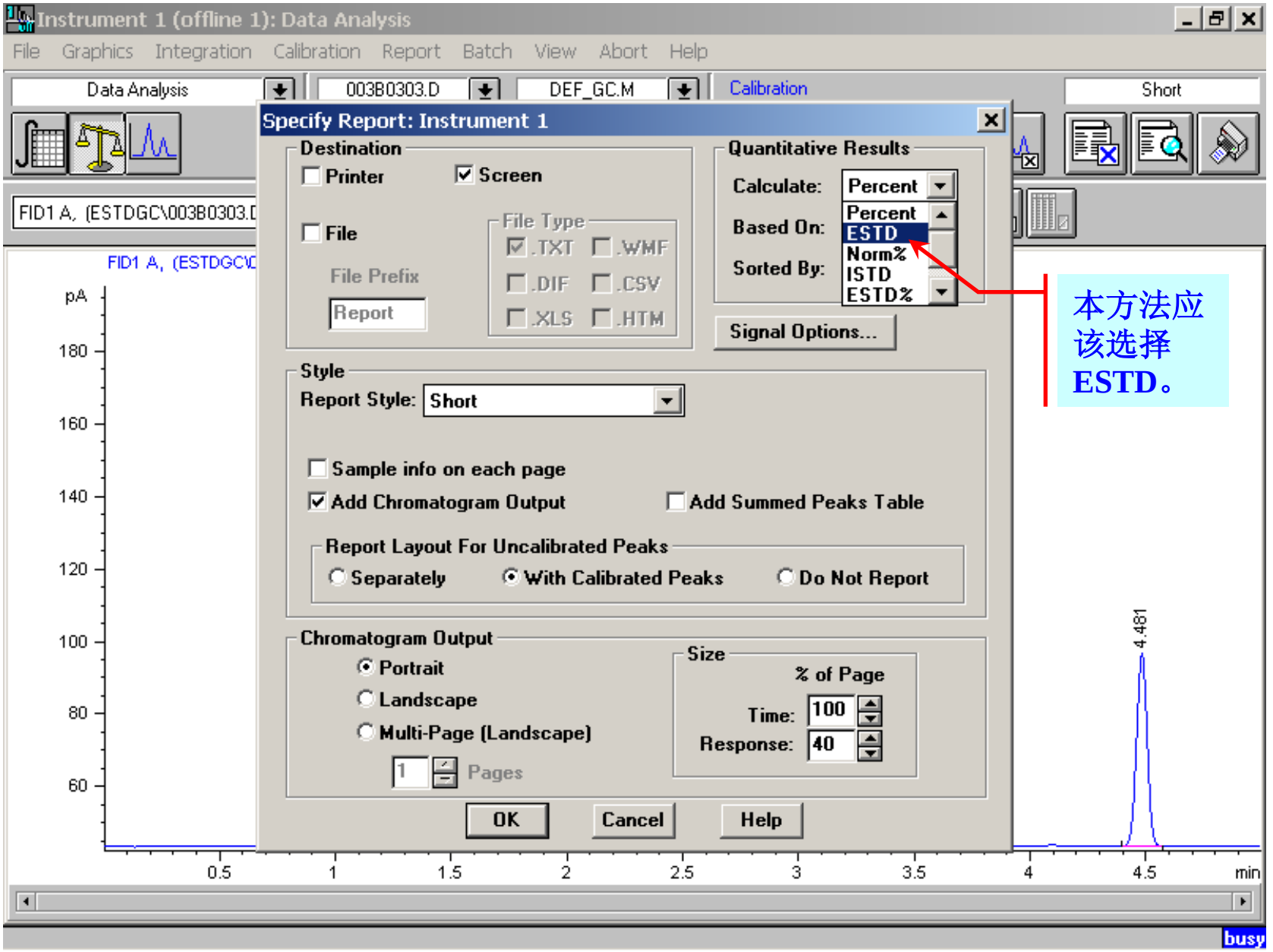

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0303.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\003B0303.D)
Overview
FID1 A, (ESTDGC\003B0303.D)
pA
160
140
120
100
80
60
1.640
2.574
4.481
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
Calibration Table
Enter
Delete
Insert...
Print
OK
Help
Signal Compound Lvl Amt[ug/mL] Area Rsp.Factor Ref ISTD
1 FID1 A C11 1 64.400 26.223 2.456 No No
2 158.700
3 309.800
2 FID1 A C14 1 73.900
2 182.000
3 355.300 149.280 2.380
3 FID1 A C16 1 72.700 32.752 2.220 No No
2 179.100 82.705 2.166
“OK”将校正表保存到方法中。
Calibration Curve
C11, FID1 A
Area = 0.41089679*Amt +0.0732685
Rel. Res%(1): -1.175
Area
120
100
80
60
40
20
0
Correlation: 0.99997
0
Amount[ug/mL]
updating related windows...

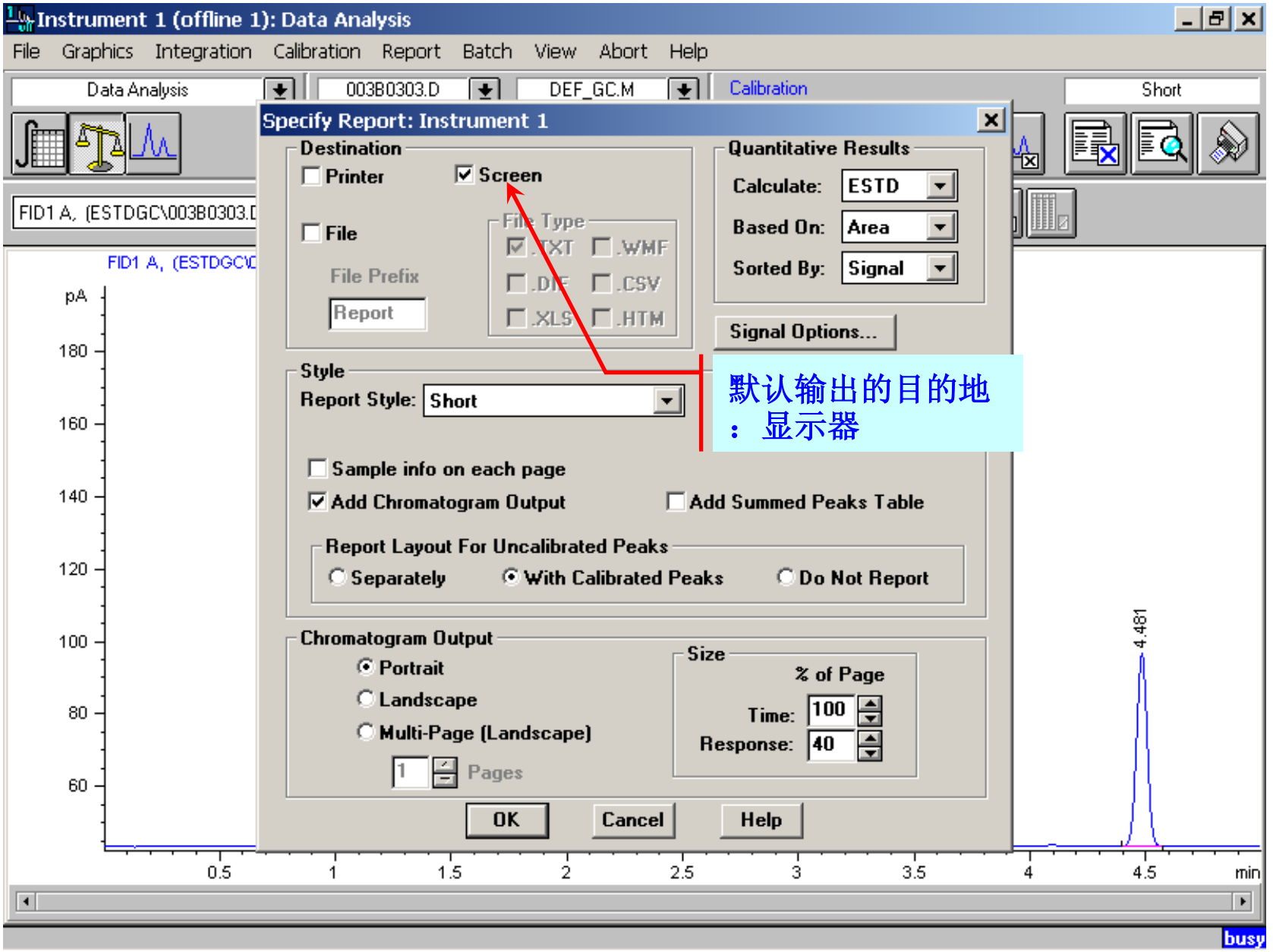

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0303.D
DEF_GC.M
Calibration
Short
FID1 A, (ESTDGC\003B0303.D)
Overview
FID1 A, (ESTDGC\003B0303.D)
建立好了多级校正表。
pA
180
160
140
120
100
80
60
1.640
2.574
4.481
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min

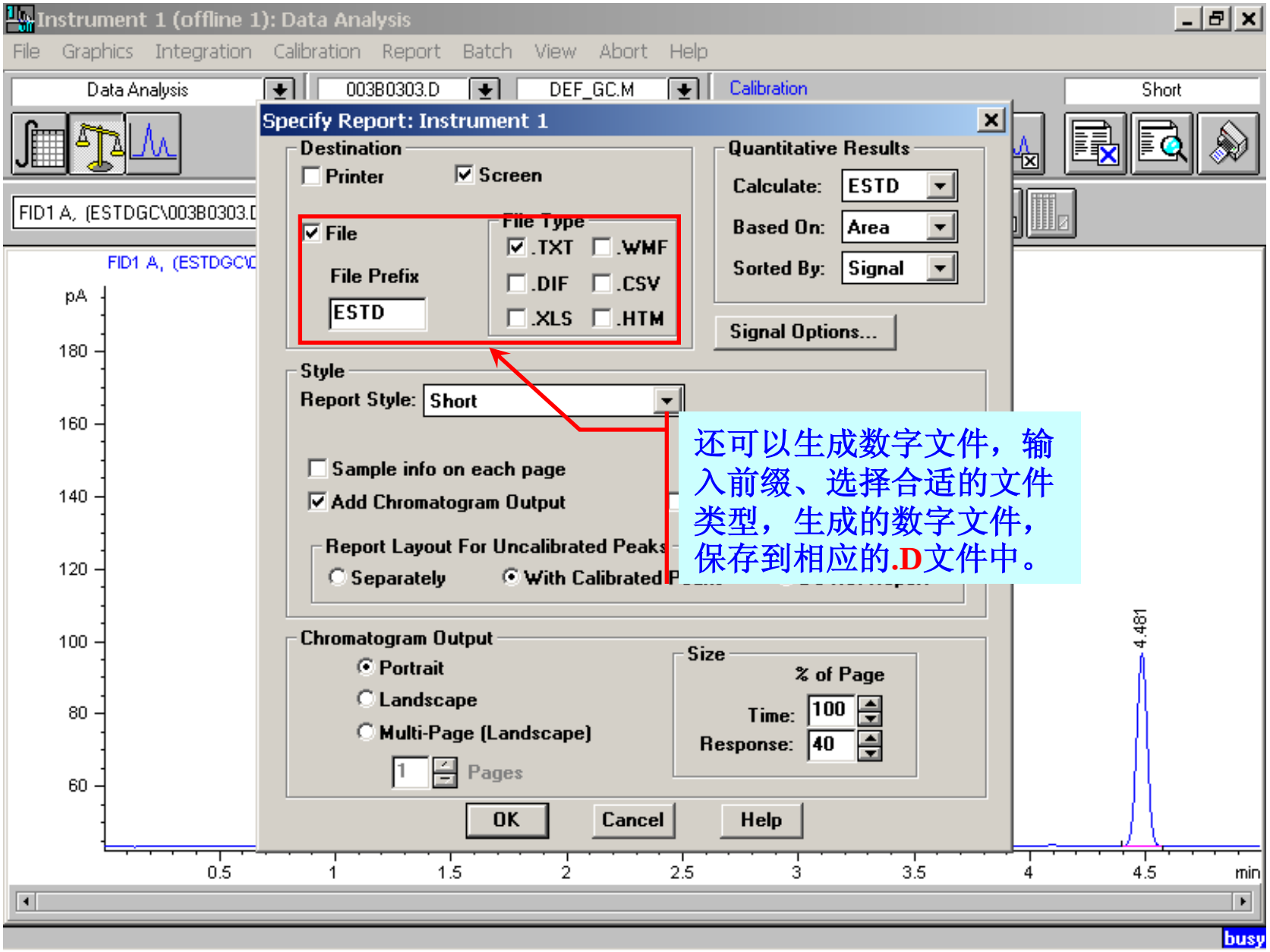

Instrument 1 (offline 1): Data Analysis
File
Graphics
Integration
Calibration
Report
Batch
View
Abort
Help
Print Report
Specify Report...
System Suitability
Data Analysis
Calibration
Short
FID1 A, (ESTDGC\003B0303.D)
Overview
FID1 A, (ESTDGC\003B0303.D)
pA
180
160
140
120
100
80
60
1.640
2.574
4.481
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
单击“Report”，选择“Specify Report”。
Specify Report Calculation and Print Style

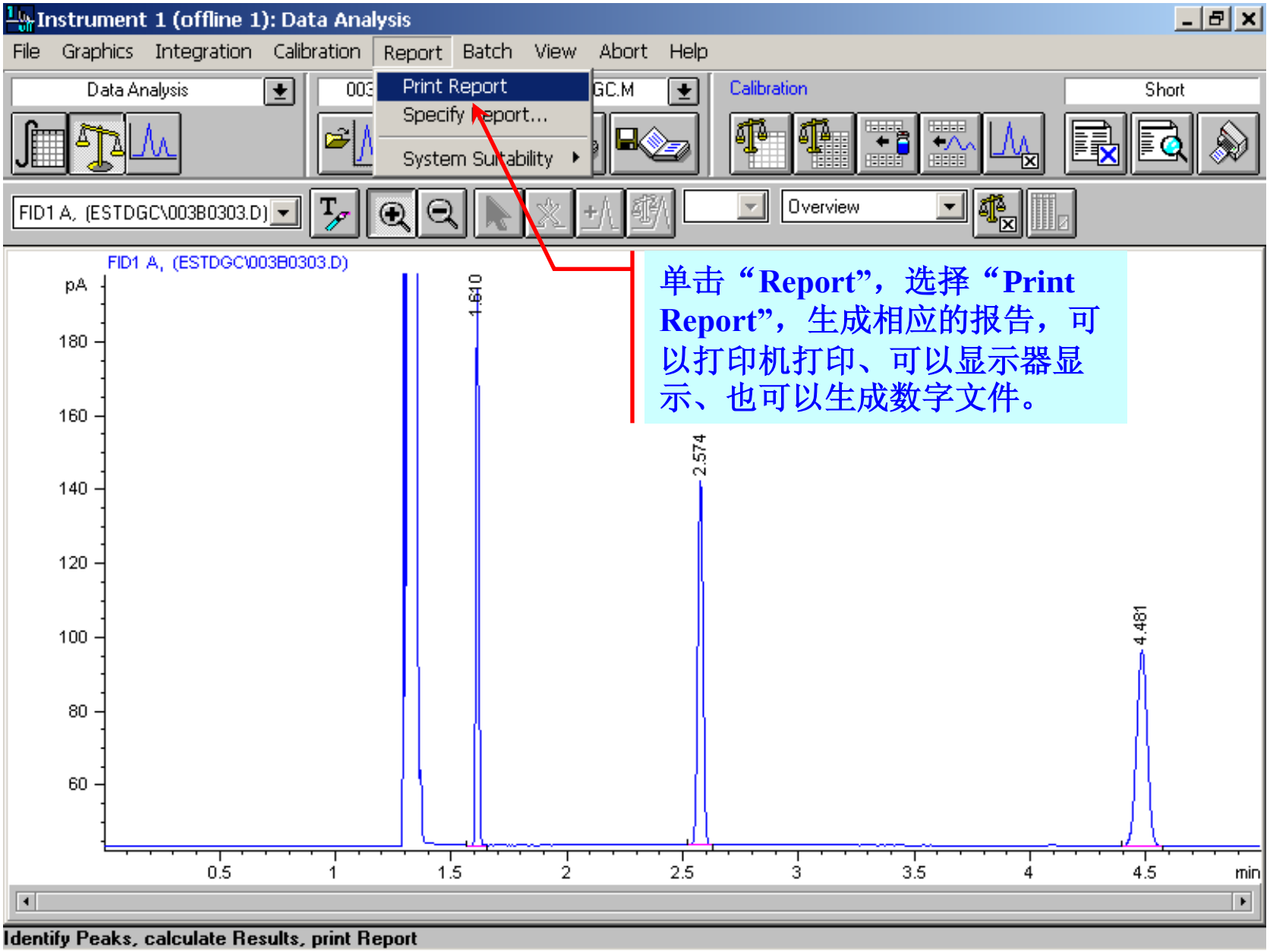


定量结果的计算方式非常重要，一定要与方法相对应。化学工作站提供6种定量方式。

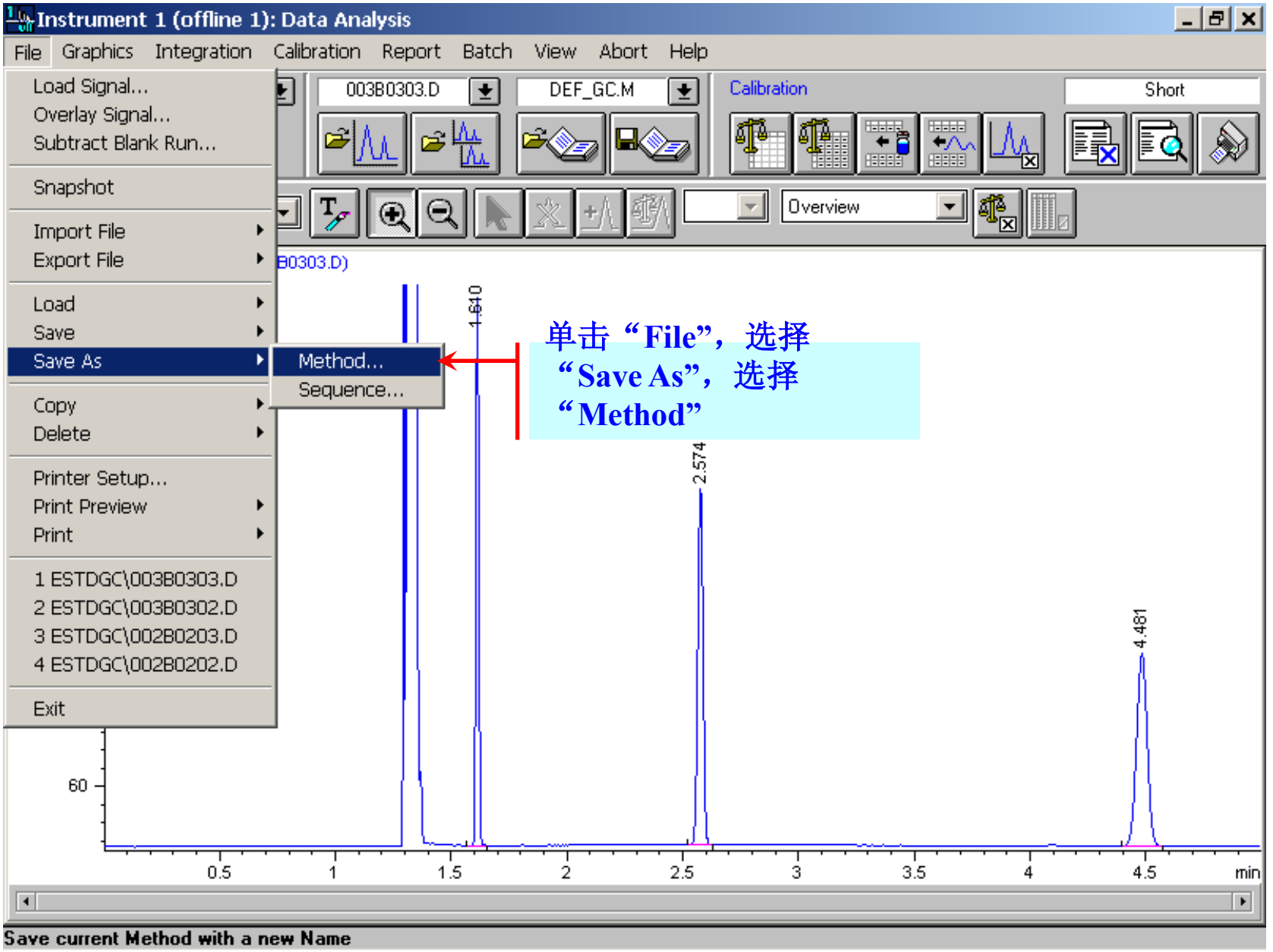

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0303.D
DEF_GC.M
Calibration
Short
Specify Report: Instrument 1
Destination
Printer
Screen
File
File Type
.TXT .WMF
.DIF .CSV
.XLS .HTM
File Prefix
Report
Quantitative Results
Calculate: Percent
Based On: ESTD
Sorted By: Norm%
ISTD
ESTD%
Signal Options...
Style
Report Style: Short
Sample info on each page
Add Chromatogram Output
Add Summed Peaks Table
Report Layout For Uncalibrated Peaks
Separately
With Calibrated Peaks
Do Not Report
Chromatogram Output
Portrait
Landscape
Multi-Page (Landscape)
1 Pages
Size
% of Page
Time: 100
Response: 40
OK
Cancel
Help
本方法应该选择ESTD。
FID1 A, (ESTDGC\003B0303.D
pA
180
160
140
120
100
80
60
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
4.481
busy

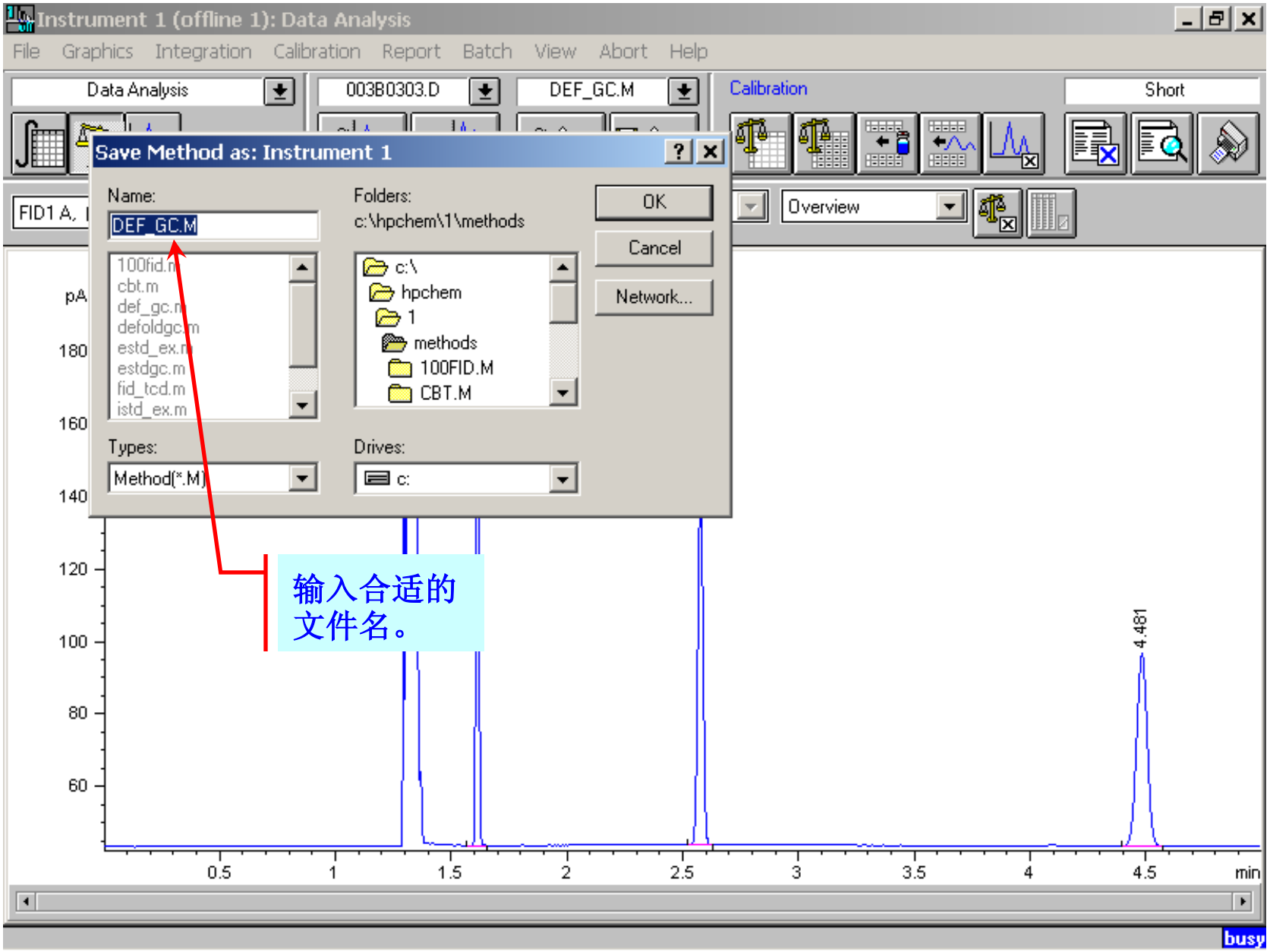

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0303.D
DEF_GC.M
Calibration
Short
Specify Report: Instrument 1
Destination
Printer
Screen
File
File Type
.TXT .WMF
.DIF .CSV
.XLS .HTM
File Prefix
Report
Quantitative Results
Calculate: ESTD
Based On: Area
Sorted By: Signal
Signal Options...
Style
Report Style: Short
默认输出的目的地：显示器
Sample info on each page
Add Chromatogram Output
Add Summed Peaks Table
Report Layout For Uncalibrated Peaks
Separately
With Calibrated Peaks
Do Not Report
Chromatogram Output
Portrait
Landscape
Multi-Page (Landscape)
Pages
Size
% of Page
Time: 100
Response: 40
OK
Cancel
Help
FID1 A, (ESTDGC\003B0303.D
pA
180
160
140
120
100
80
60
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
4.481
busy

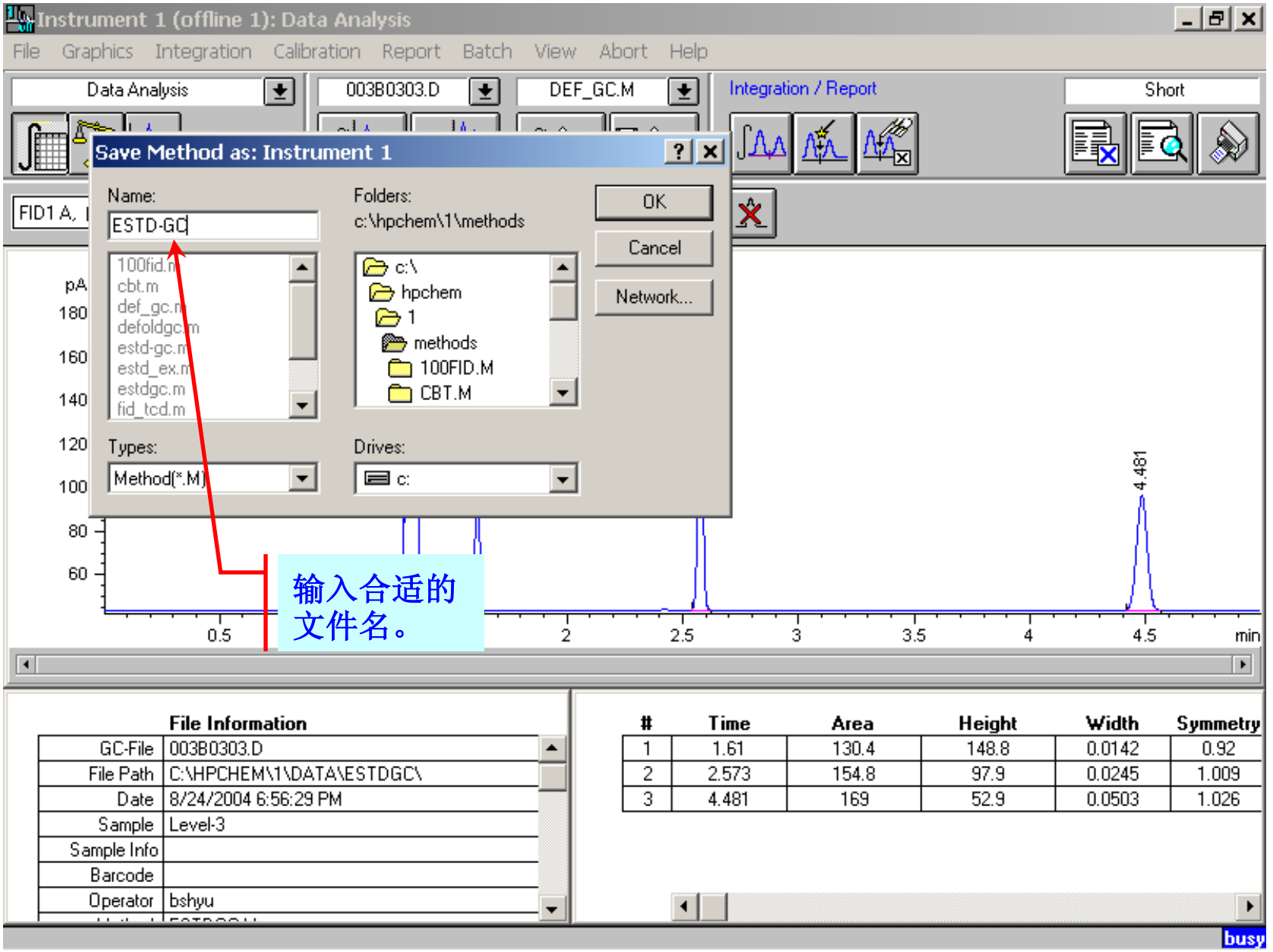

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0303.D
DEF_GC.M
Calibration
Short
Specify Report: Instrument 1
Destination
Printer
Screen
File
File Type
.TXT
.WMF
.DIF
.CSV
.XLS
.HTM
File Prefix
ESTD
Quantitative Results
Calculate: ESTD
Based On: Area
Sorted By: Signal
Signal Options...
Style
Report Style: Short
Sample info on each page
Add Chromatogram Output
Report Layout For Uncalibrated Peaks
Separately
With Calibrated
Chromatogram Output
Portrait
Landscape
Multi-Page (Landscape)
Pages
Size
% of Page
Time: 100
Response: 40
OK
Cancel
Help
还可以生成数字文件，输入前缀、选择合适的文件类型，生成的数字文件，保存到相应的.D文件中。
FID1 A, (ESTDGC\003B0303.D
pA
180
160
140
120
100
80
60
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
4.481
busy

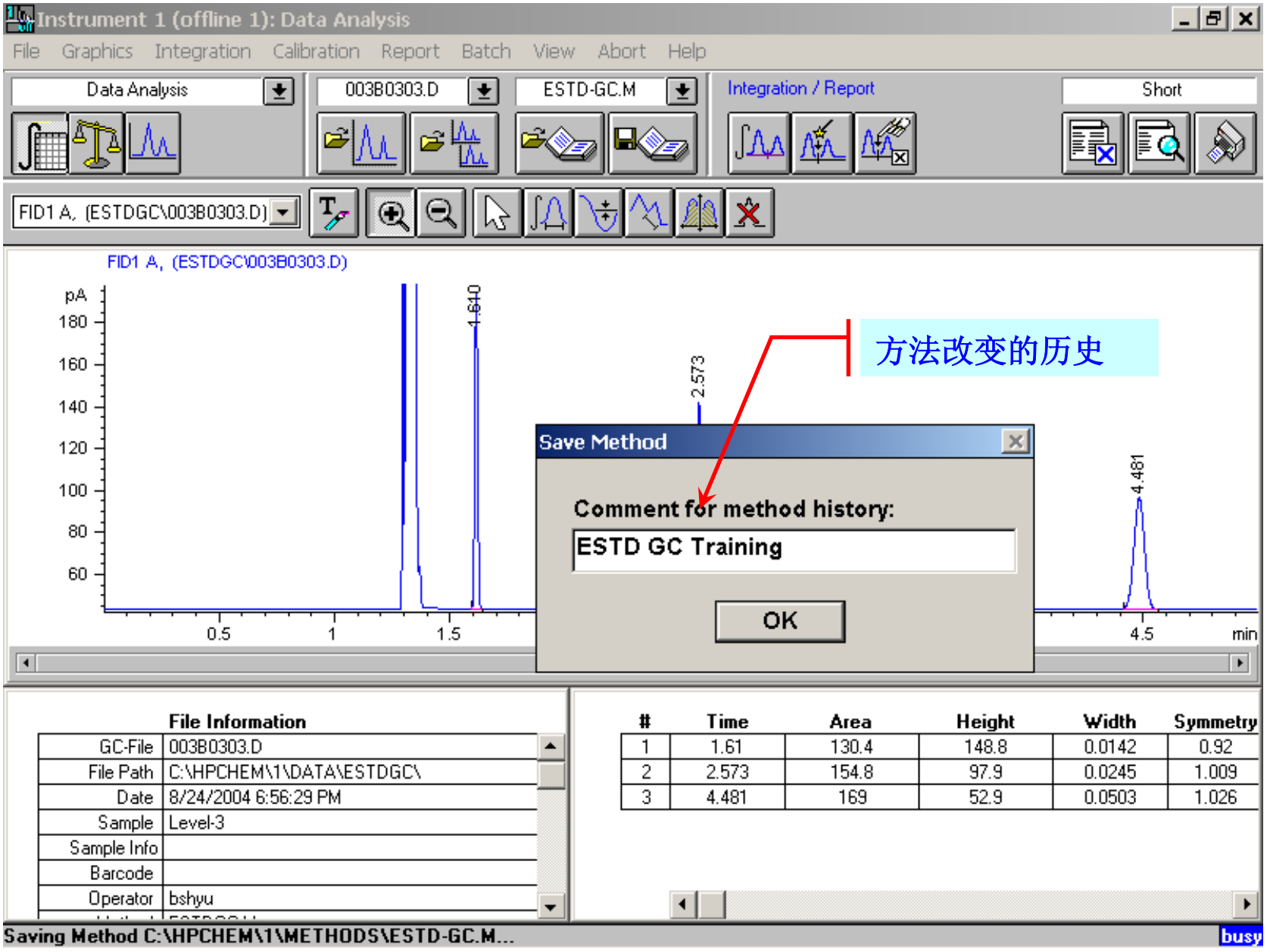


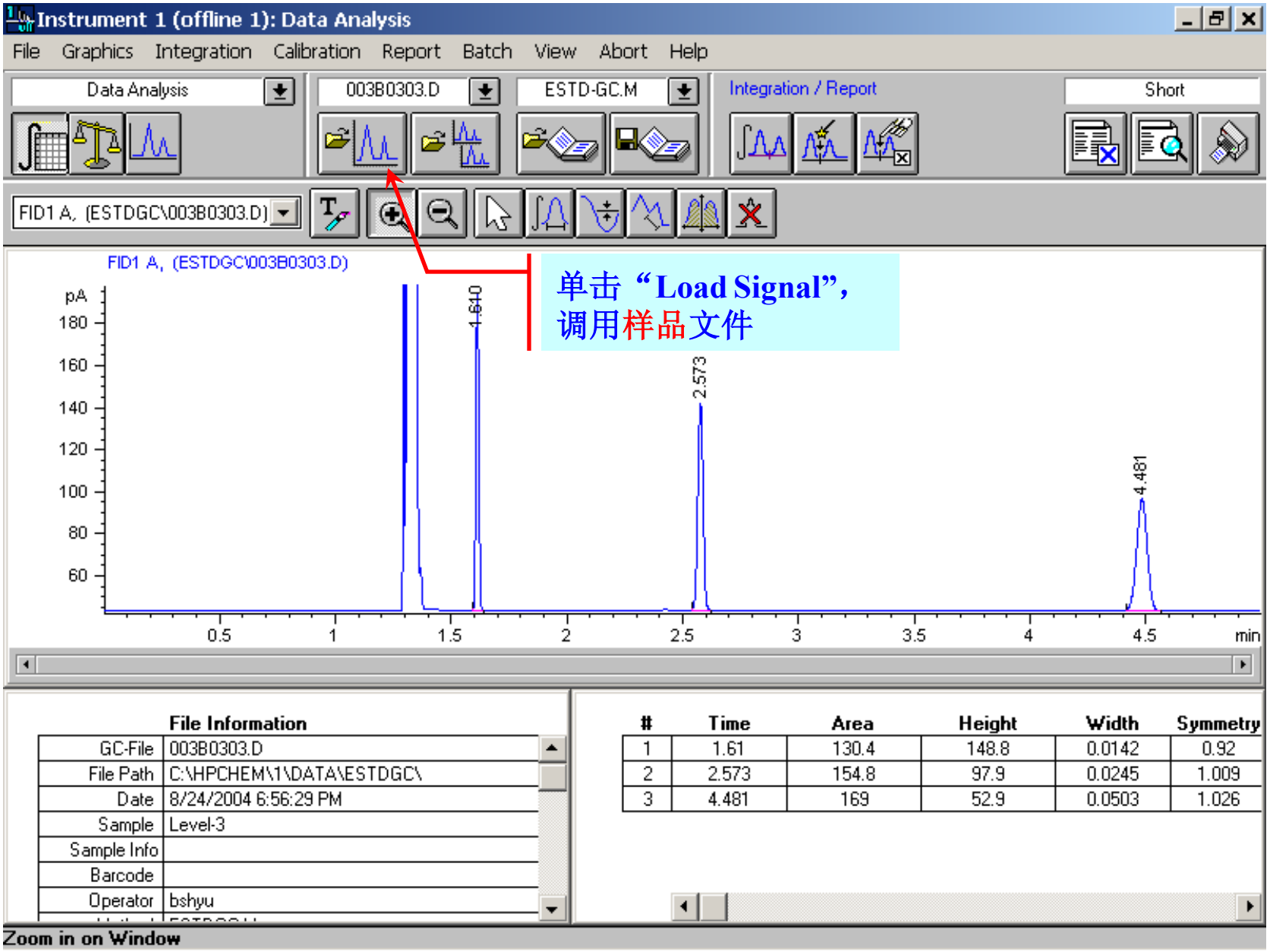
单击“Report”，选择“Print Report”，生成相应的报告，可以打印机打印、可以显示器显示、也可以生成数字文件。

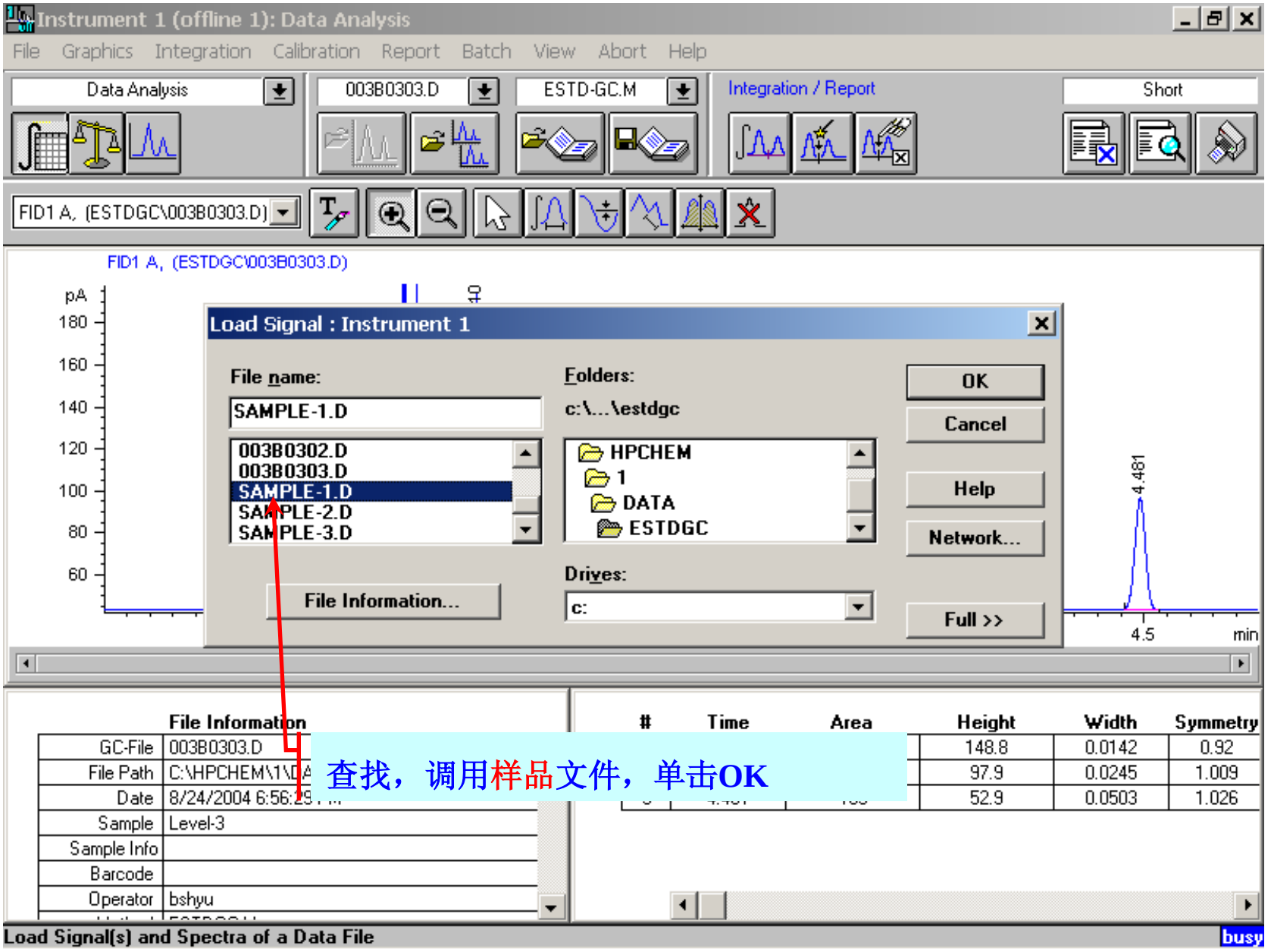

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Load Signal...
Overlay Signal...
Subtract Blank Run...
Snapshot
Import File
Export File
Load
Save
Save As
Copy
Delete
Printer Setup...
Print Preview
Print
1 ESTDGC\003B0303.D
2 ESTDGC\003B0302.D
3 ESTDGC\002B0203.D
4 ESTDGC\002B0202.D
Exit
Method...
Sequence...
003B0303.D
DEF_GC.M
Calibration
Short
Overview
1.640
2.574
4.481
60
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
单击“File”，选择
“Save As”，选择
“Method”
Save current Method with a new Name

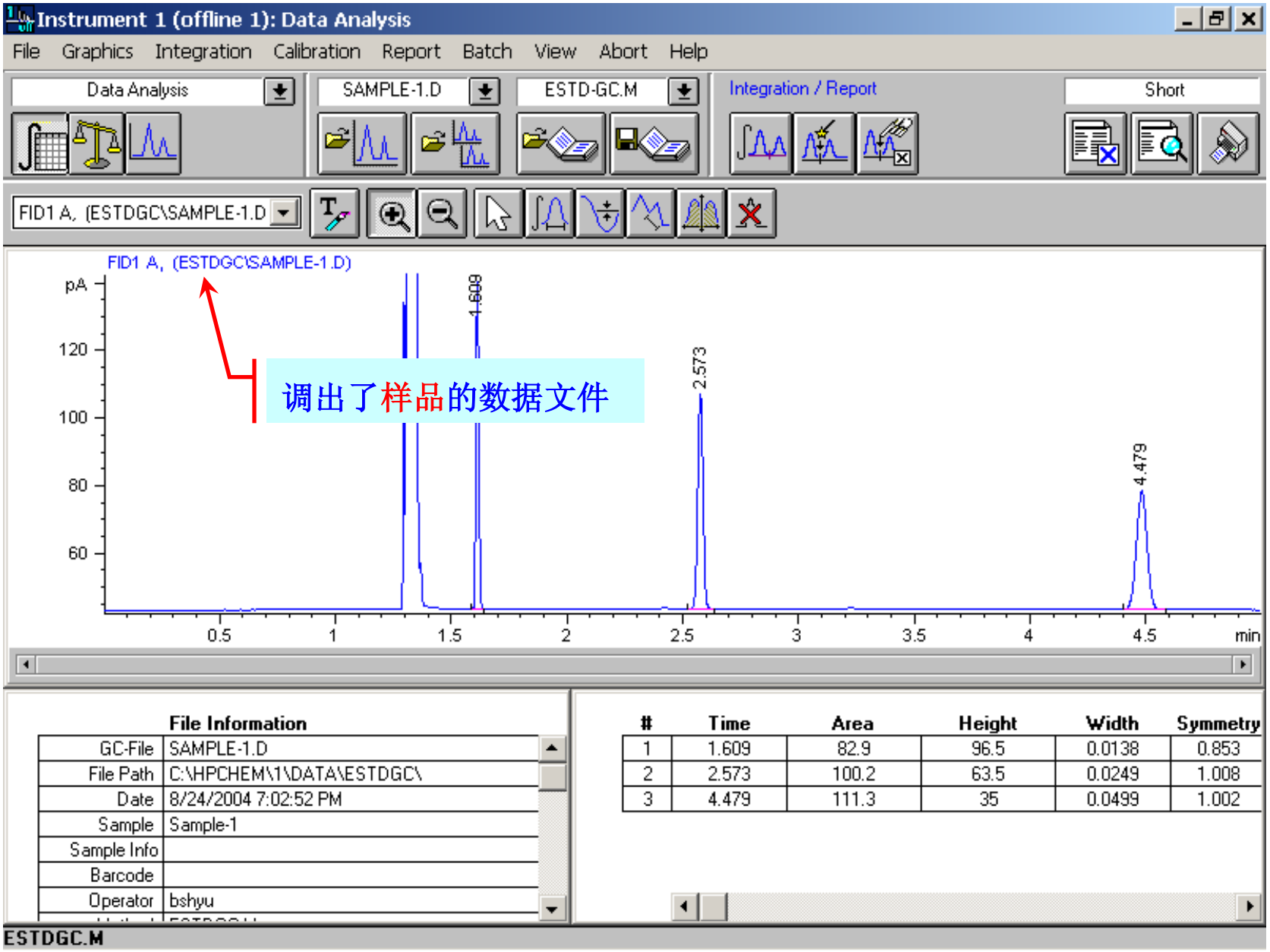

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0303.D
DEF_GC.M
Calibration
Short
Overview
Save Method as: Instrument 1
Name:
DEF_GC.M
Folders:
c:\hpchem\1\methods
OK
Cancel
Network...
100fid.m
cbt.m
def_gc.m
defoldgc.m
estd_ex.m
estdgc.m
fid_tcd.m
istd_ex.m
c:\
hpchem
1
methods
100FID.M
CBT.M
Types:
Method(*.M)
Drives:
c:
输入合适的
文件名。
pA
180
160
140
120
100
80
60
4.481
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
busy

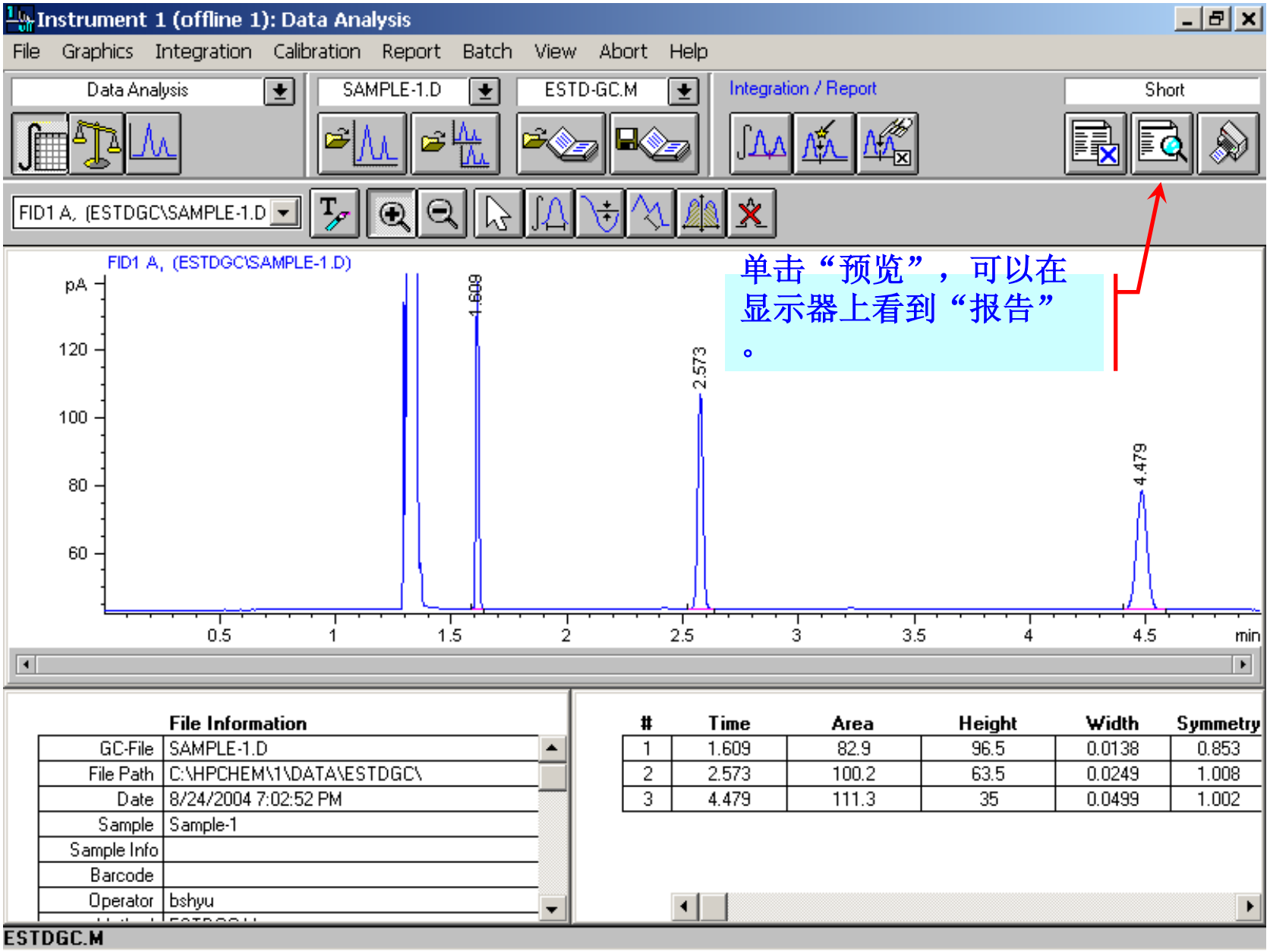

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0303.D
DEF_GC.M
Integration / Report
Short
Save Method as: Instrument 1
Name:
ESTD-GC
Folders:
c:\hpchem\1\methods
OK
Cancel
Network...
100fid.m
cbt.m
def_gc.m
defoldgc.m
estd-gc.m
estd_ex.m
estdgc.m
fid_tcd.m
c:\
hpchem
1
methods
100FID.M
CBT.M
Types:
Method(*.M)
Drives:
c:
输入合适的
文件名。
pA
180
160
140
120
100
80
60
0.5
2
2.5
3
3.5
4
4.5
min
4.481
File Information
GC-File 003B0303.D
File Path C:\HPCHEM\1\DATA\ESTDGC\
Date 8/24/2004 6:56:29 PM
Sample Level-3
Sample Info
Barcode
Operator bshyu
Time Area Height Width Symmetry
1 1.61 130.4 148.8 0.0142 0.92
2 2.573 154.8 97.9 0.0245 1.009
3 4.481 169 52.9 0.0503 1.026
busy

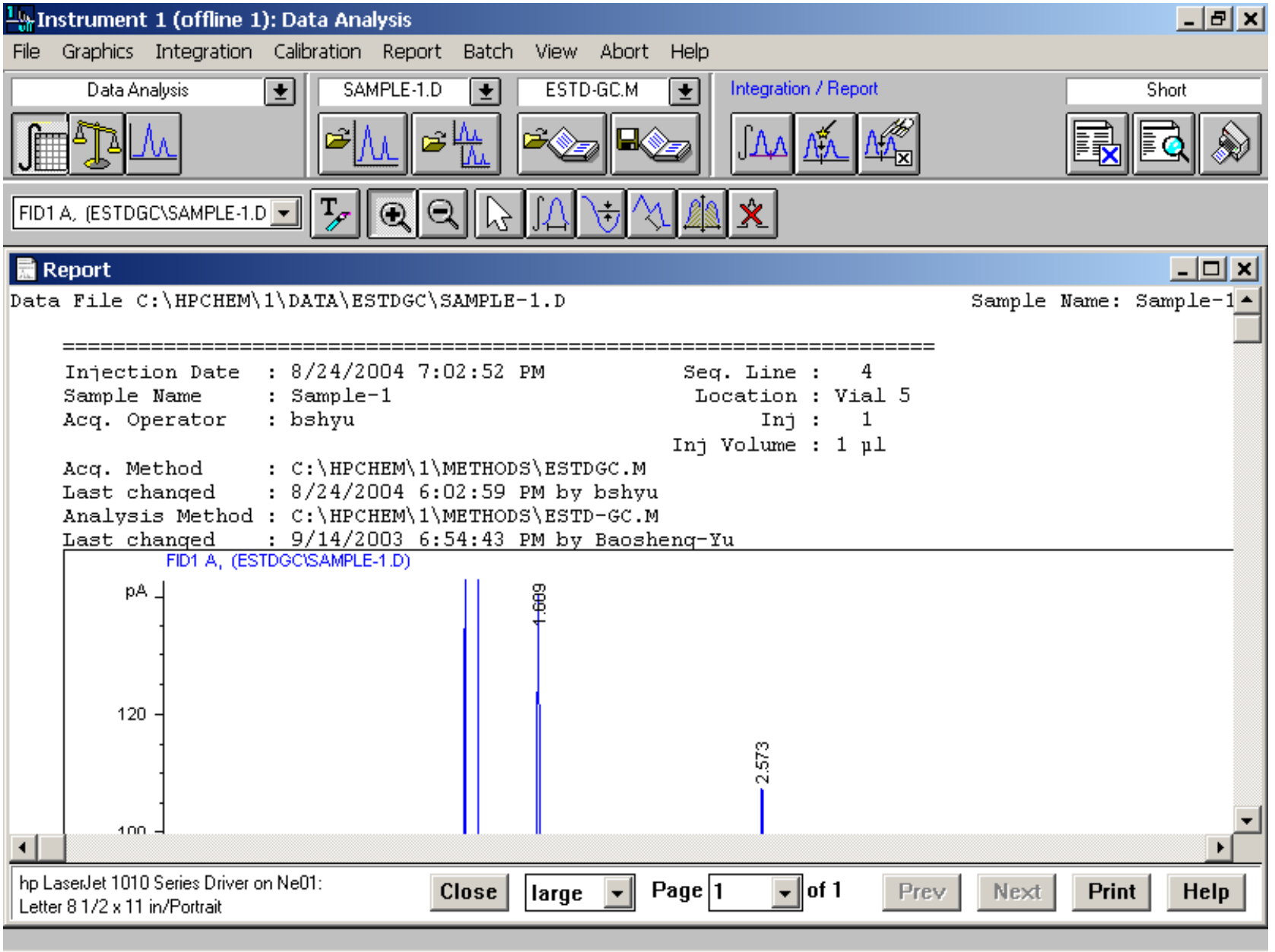

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0303.D
ESTD-GC.M
Integration / Report
Short
FID1 A, (ESTDGC\003B0303.D)
FID1 A, (ESTDGC\003B0303.D)
pA
180
160
140
120
100
80
60
1.640
2.573
4.481
0.5
1
1.5
4.5
min
方法改变的历史
Save Method
Comment for method history:
ESTD GC Training
OK
File Information
GC-File 003B0303.D
File Path C:\HPCHEM\1\DATA\ESTDGC\
Date 8/24/2004 6:56:29 PM
Sample Level-3
Sample Info
Barcode
Operator bshyu
Time Area Height Width Symmetry
1 1.61 130.4 148.8 0.0142 0.92
2 2.573 154.8 97.9 0.0245 1.009
3 4.481 169 52.9 0.0503 1.026
Saving Method C:\HPCHEM\1\METHODS\ESTD-GC.M...
busy

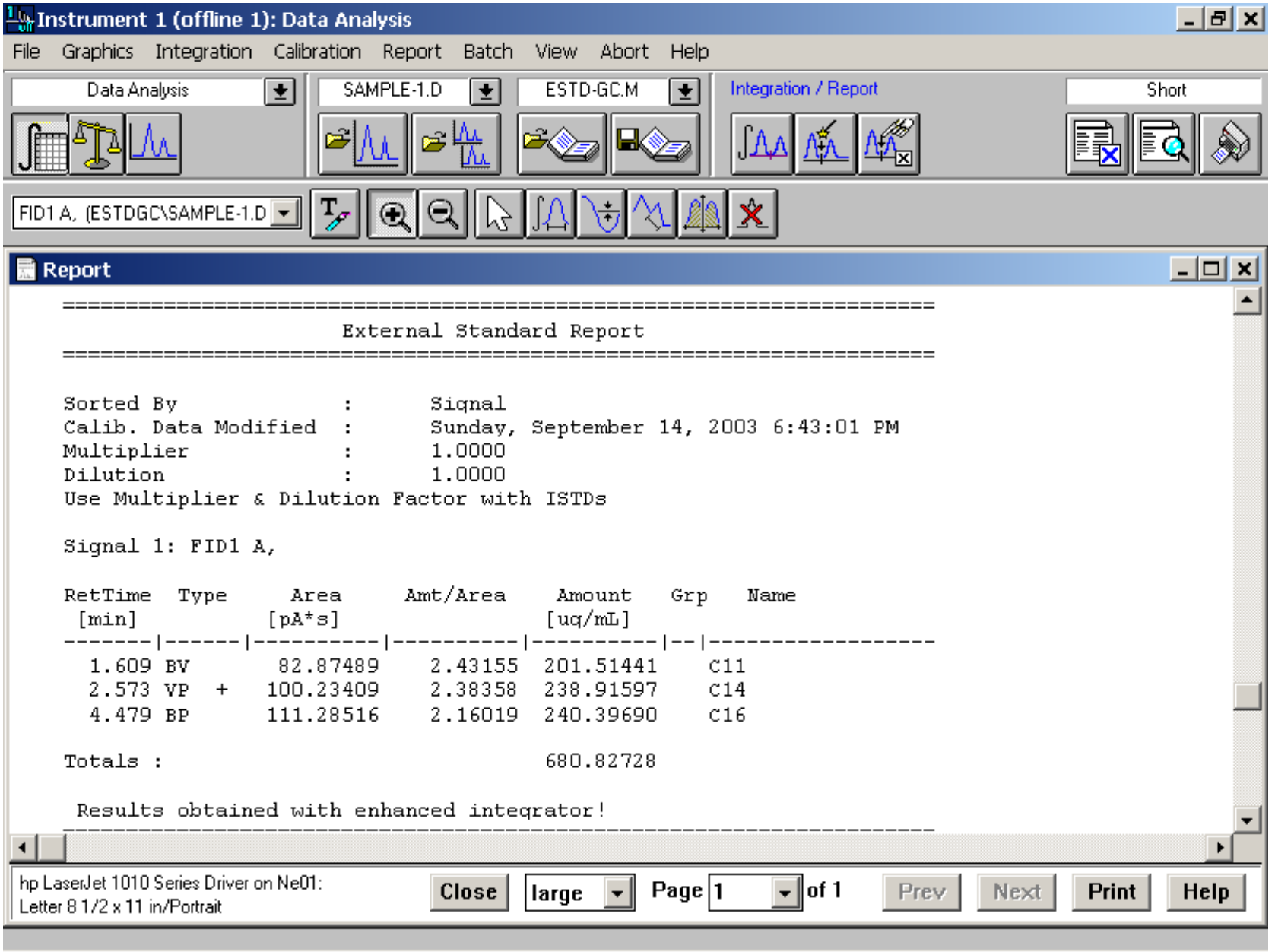

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0303.D
ESTD-GC.M
Integration / Report
Short
FID1 A, (ESTDGC\003B0303.D)
FID1 A, (ESTDGC\003B0303.D)
单击“Load Signal”，
调用样品文件
pA
180
160
140
120
100
80
60
1.640
2.573
4.481
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
File Information
GC-File 003B0303.D
File Path C:\HPCHEM\1\DATA\ESTDGC\
Date 8/24/2004 6:56:29 PM
Sample Level-3
Sample Info
Barcode
Operator bshyu
Time Area Height Width Symmetry
1 1.61 130.4 148.8 0.0142 0.92
2 2.573 154.8 97.9 0.0245 1.009
3 4.481 169 52.9 0.0503 1.026
Zoom in on Window

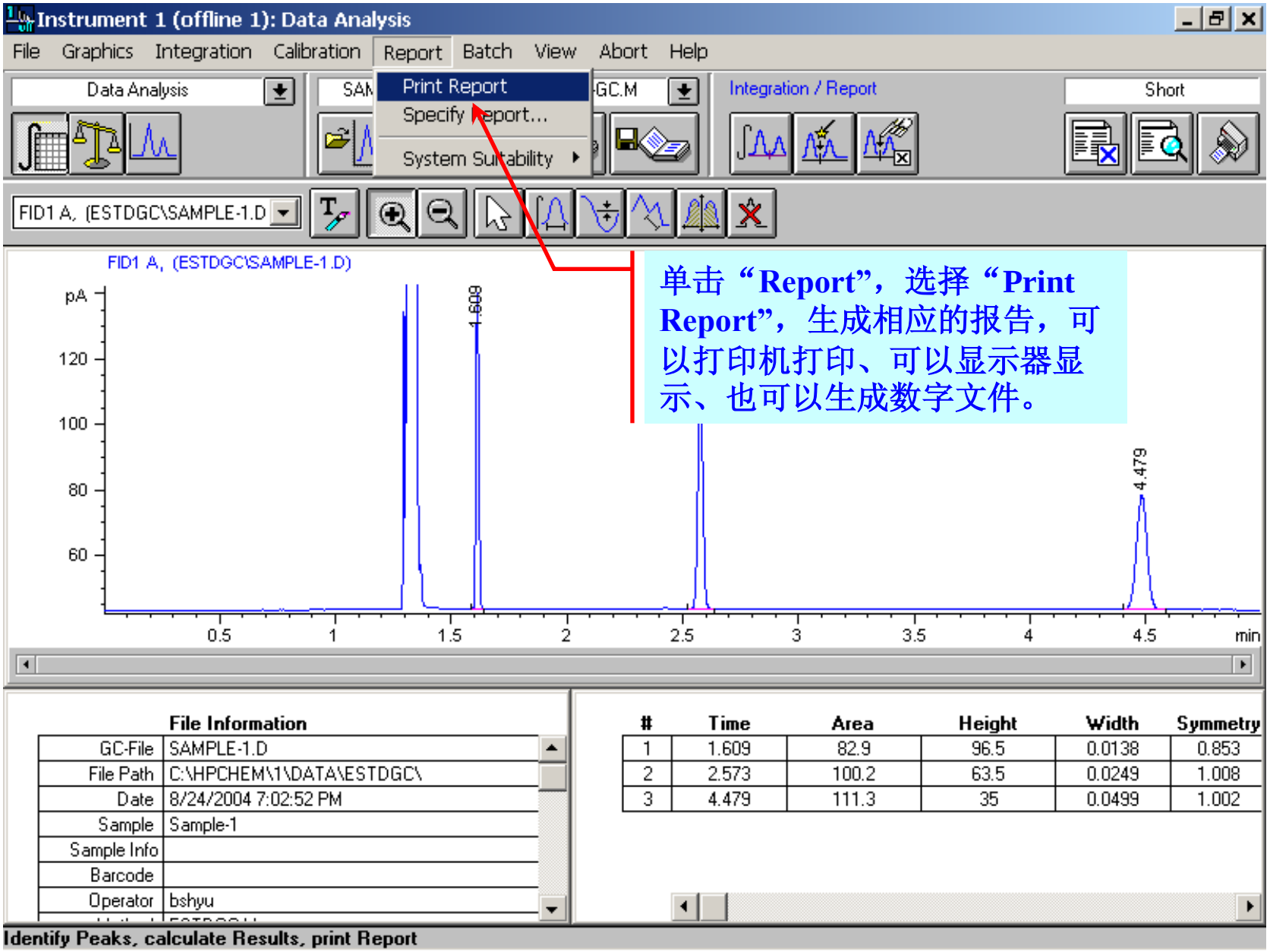

Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
003B0303.D
ESTD-GC.M
Integration / Report
Short
FID1 A, (ESTDGC\003B0303.D)
Load Signal : Instrument 1
File name:
SAMPLE-1.D
003B0302.D
003B0303.D
SAMPLE-1.D
SAMPLE-2.D
SAMPLE-3.D
Folders:
c:\...\estdgc
HPCHEM
1
DATA
ESTDGC
Drives:
c:
OK
Cancel
Help
Network...
Full >>
File Information...
4.481
4.5
min
File Information
GC-File 003B0303.D
File Path C:\HPCHEM\1\D
Date 8/24/2004 6:56:29
Sample Level-3
Sample Info
Barcode
Operator bshyu
Time Area Height Width Symmetry
148.8 0.0142 0.92
97.9 0.0245 1.009
52.9 0.0503 1.026
查找，调用样品文件，单击OK
Load Signal(s) and Spectra of a Data File
busy


Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
SAMPLE-1.D
ESTD-GC.M
Integration / Report
Short
FID1 A, (ESTDGC\SAMPLE-1.D
FID1 A, (ESTDGC\SAMPLE-1.D)
pA
120
100
80
60
1.609
2.573
4.479
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
调出了样品的数据文件
File Information
GC-File SAMPLE-1.D
File Path C:\HPCHEM\1\DATA\ESTDGC\
Date 8/24/2004 7:02:52 PM
Sample Sample-1
Sample Info
Barcode
Operator bshyu
Time Area Height Width Symmetry
1 1.609 82.9 96.5 0.0138 0.853
2 2.573 100.2 63.5 0.0249 1.008
3 4.479 111.3 35 0.0499 1.002
ESTDGC.M


Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
SAMPLE-1.D
ESTD-GC.M
Integration / Report
Short
FID1 A, (ESTDGC\SAMPLE-1.D
FID1 A, (ESTDGC\SAMPLE-1.D)
pA
120
100
80
60
1.609
2.573
4.479
0.5
1
1.5
2
2.5
3
3.5
4
4.5
min
单击“预览”，可以在显示器上看到“报告”。
File Information
GC-File SAMPLE-1.D
File Path C:\HPCHEM\1\DATA\ESTDGC\
Date 8/24/2004 7:02:52 PM
Sample Sample-1
Sample Info
Barcode
Operator bshyu
Time Area Height Width Symmetry
1 1.609 82.9 96.5 0.0138 0.853
2 2.573 100.2 63.5 0.0249 1.008
3 4.479 111.3 35 0.0499 1.002
ESTDGC.M


Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
SAMPLE-1.D
ESTD-GC.M
Integration / Report
Short
FID1 A, (ESTDGC\SAMPLE-1.D
Report
Data File C:\HPCHEM\1\DATA\ESTDGC\SAMPLE-1.D
Sample Name: Sample-1
Injection Date : 8/24/2004 7:02:52 PM
Seq. Line : 4
Sample Name : Sample-1
Location : Vial 5
Acq. Operator : bshyu
Inj : 1
Inj Volume : 1 µl
Acq. Method : C:\HPCHEM\1\METHODS\ESTDGC.M
Last changed : 8/24/2004 6:02:59 PM by bshyu
Analysis Method : C:\HPCHEM\1\METHODS\ESTD-GC.M
Last changed : 9/14/2003 6:54:43 PM by Baosheng-Yu
FID1 A, (ESTDGC\SAMPLE-1.D)
pA
120
100
1.669
2.573
hp LaserJet 1010 Series Driver on Ne01:
Letter 8 1/2 x 11 in/Portrait
Close
large
Page 1 of 1
Prev
Next
Print
Help


Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Data Analysis
SAMPLE-1.D
ESTD-GC.M
Integration / Report
Short
FID1 A, (ESTDGC\SAMPLE-1.D
Report
External Standard Report
Sorted By : Signal
Calib. Data Modified : Sunday, September 14, 2003 6:43:01 PM
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs
Signal 1: FID1 A,
RetTime Type Area Amt/Area Amount Grp Name
[min] [pA*s] [uq/mL]
1.609 BV 82.87489 2.43155 201.51441 C11
2.573 VP + 100.23409 2.38358 238.91597 C14
4.479 BP 111.28516 2.16019 240.39690 C16
Totals : 680.82728
Results obtained with enhanced integrator!
hp LaserJet 1010 Series Driver on Ne01:
Letter 8 1/2 x 11 in/Portrait
Close
large
Page 1 of 1
Prev
Next
Print
Help


Instrument 1 (offline 1): Data Analysis
File Graphics Integration Calibration Report Batch View Abort Help
Print Report
Specify Report...
System Suitability
Integration / Report
Short
FID1 A, (ESTDGC\SAMPLE-1.D)
pA
120
100
80
60
1.609
4.479
0.5 1 1.5 2 2.5 3 3.5 4 4.5 min
单击“Report”，选择“Print Report”，生成相应的报告，可以打印机打印、可以显示器显示、也可以生成数字文件。
File Information
GC-File SAMPLE-1.D
File Path C:\HPCHEM\1\DATA\ESTDGC\
Date 8/24/2004 7:02:52 PM
Sample Sample-1
Sample Info
Barcode
Operator bshyu
Time Area Height Width Symmetry
1 1.609 82.9 96.5 0.0138 0.853
2 2.573 100.2 63.5 0.0249 1.008
3 4.479 111.3 35 0.0499 1.002
Identify Peaks, calculate Results, print Report