

# Variability Chart Options

- Vertical Charts
  - Variability Chart
  - Show Points
  - Show Range Bars
  - Show Cell Means
  - Connect Cell Means
  - Show Separators
  - Show Group Means
  - Show Grand Mean
  - Show Grand Median
  - Show Box Plots
  - Mean Diamonds
  - XBar Control Limits
  - Points Jittered
  - Show Standard Mean
  - Variability Summary Report
- Std Dev Chart
  - Mean of Std Dev
  - S Control Limits
  - Group Means of Std Dev
  - Heterogeneity of Variance Tests
- Variance Components
- Gauge Studies ▶

# JMP 16

The screenshot displays the JMP 16 interface with three main windows:

- Big Class - JMP:** A data table with columns: name, age, sex, height, weight. The table contains 33 rows of student data.
- Big Class - Variability Chart of height by age -...:** Two vertically stacked variability charts. The top chart is for females (sex=F) and the bottom for males (sex=M). Both charts show height (y-axis) by age (x-axis) using box plots and jittered points.
- Script Window - JMP:** A script window containing the following code:

```
1  
2 Variability Chart(  
3   Y( :height ),  
4   X( :age ),  
5   By( :sex ),  
6   Analysis Type( "Choose best analysis (EMS REML Bayesian)" ),  
7   Show Range Bars( 0 ),  
8   Show Cell Means( 0 ),  
9   Std Dev Chart( 0 ),  
10  Points Jittered( 1 ),  
11  Show Box Plots( 1 ),  
12 );  
13
```

A red arrow points to the `Show Box Plots( 1 )` line. A yellow box with the text "OK" is positioned below the script window.

# JMP 16

The screenshot displays the JMP 16 software interface with three main windows:

- Big Class - JMP:** The main data table window showing a dataset with columns: name, age, sex, height, and weight. The data is as follows:

	name	age	sex	height	weight
1	KATIE	12	F	59	95
2	LOUISE	12	F	61	123
3	JANE	12	F	55	74
4	JACLYN	12	F	66	145
5	LILLIE	12	F	52	64
6	TIM	12	M	60	84
7	JAMES	12	M	61	128
8	ROBERT	12	M	51	79
9	BARBARA	13	F	60	112
10	ALICE	13	F	61	107
11	SUSAN	13	F	56	67
12	JOHN	13	M	65	98
13	JOE	13	M	63	105
14	MICHAEL	13	M	58	95
15	DAVID	13	M	59	79
16	JUDY	14	F	61	81
17	ELIZABETH	14	F	62	91
18	LESLIE	14	F	65	142
19	CAROL	14	F	63	84
20	PATTY	14	F	62	85
21	FREDERICK	14	M	63	93
22	ALFRED	14	M	64	99
23	HENRY	14	M	65	119
24	LEWIS	14	M	64	92
25	EDWARD	14	M	68	112
26	CHRIS	14	M	64	99
27	JEFFREY	14	M	69	113
28	MARY	15	F	62	92
29	AMY	15	F	64	112
30	ROBERT	15	M	67	128
31	WILLIAM	15	M	65	111
32	CLAY	15	M	66	105
33	MARK	15	M	62	104
- Big Class - Variability Chart of height by age 2...:** Two variability charts for height. The top chart is for 'sex=F' and the bottom for 'sex=M'. Both charts plot height (y-axis, 50-70) against age (x-axis, 12-17). The 'sex=F' chart shows data points for ages 12-16, while the 'sex=M' chart shows data points for ages 12-17.
- Script Window - JMP:** A script window containing the following code:

```
1 Variability Chart(  
2 Y( :height ),  
3 X( :age ),  
4 By( :sex ),  
5 Analysis Type( "Choose best analysis (EMS REML Bayesian)" ),  
6 Show Range Bars( 0 ),  
7 Show Cell Means( 0 ),  
8 Std Dev Chart( 0 ),  
9 Points Jittered( 1 ),  
10 Show Box Plots( 0 ),  
11 );  
12  
13
```

A red arrow points to the 'Show Box Plots( 0 )' line. A yellow box with the text 'OK' is positioned below the script window.

# JMP 17

Big Class - JMP

File Edit Tables Rows Cols DOE Analyze Graph Tools View Window Help

Big Class

- Distribution
- Bivariate
- Oneway
- Logistic
- Contingency
- Fit Model
- Set Sex Value Labels
- Set Age Value Labels
- Graph Builder...moother Line
- Graph Builder...nd Bar Charts
- Graph Builder Line Chart
- Graph Builder Heatmap
- JMP Applicat...uality Graphs

Columns (5/0)

- name
- age
- sex
- height
- weight

Rows

	name	age	sex	height	weight
1	KATIE	12	F	59	95
2	LOUISE	12	F	61	123
3	JANE	12	F	55	74
4	JACLYN	12	F	66	145
5	LILLIE	12	F	52	64
6	TIM	12	M	60	84
7	JAMES	12	M	61	128
8	ROBERT	12	M	51	79
9	BARBARA	13	F	60	112
10	ALICE	13	F	61	107
11	SUSAN	13	F	56	67
12	JOHN	13	M	65	98
13	JOE	13	M	63	105
14	MICHAEL	13	M	58	95
15	DAVID	13	M	59	79
16	JUDY	14	F	61	81
17	ELIZABETH	14	F	62	91
18	LESLIE	14	F	65	142
19	CAROL	14	F	63	84
20	PATTY	14	F	62	85
21	FREDERICK	14	M	63	93
22	ALFRED	14	M	64	99
23	HENRY	14	M	65	119
24	LEWIS	14	M	64	92
25	EDWARD	14	M	68	112
26	CHRIS	14	M	64	99
27	JEFFREY	14	M	69	113
28	MARY	15	F	62	92
29	AMY	15	F	64	112
30	ROBERT	15	M	67	128
31	WILLIAM	15	M	65	111
32	CLAY	15	M	66	105
33	MARK	15	M	62	104
34	DANNY	15	M	66	106
35	MARTHA	16	F	65	112

Big Class - Variability Chart of height by age - JMP

File Edit Tables Rows Cols DOE Analyze Graph Tools View Window Help

Variability Gauge sex=F

Variability Gauge Analysis for height

Variability Chart for height

Variability Gauge sex=M

Variability Gauge Analysis for height

Variability Chart for height

Script Window - JMP

File Edit Tables DOE Analyze Graph Tools View Window Help

```
1  
2 Variability Chart(  
3   Y( :height ),  
4   Model( "Main Effect" ),  
5   X( :age ),  
6   Variability Analysis(  
7     :height,  
8     Show Range Bars( 0 ),  
9     Show Cell Means( 0 ),  
10    Std Dev Chart( 0 ),  
11    Points Jittered( 1 ),  
12    Show Box Plots( 1 )  
13  ),  
14  By( :sex )  
15 );  
16
```

evaluations done

# JMP 17

The image displays the JMP 17 interface with three main windows:

- Big Class - JMP:** A data table with columns: name, age, sex, height, weight. The table contains 35 rows of student data.
- Big Class - Variability Chart of height by age - JMP:** Two vertically stacked variability charts. The top chart is for 'sex=F' and the bottom for 'sex=M'. Both charts show height (y-axis) versus age (x-axis) with box plots and jittered points.
- Script Window - JMP:** A window containing the following JSL code:

```
1  
2 Variability Chart(  
3   Y( :height ),  
4   Model( "Main Effect" ),  
5   X( :age ),  
6   Variability Analysis(  
7     :height,  
8     Show Range Bars( 0 ),  
9     Show Cell Means( 0 ),  
10    Std Dev Chart( 0 ),  
11    Points Jittered( 1 ),  
12    Show Box Plots( 0 )  
13  ),  
14  By( :sex )  
15 );  
16
```

A blue arrow points to the `Show Box Plots( 0 )` line, and a yellow box with the text "Doesn't work" is overlaid on the script window.