

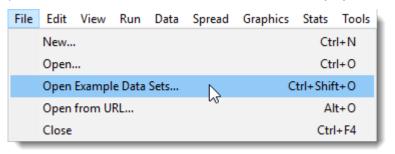


IMPORT YOUR DATA

1. Run Genstat by double-clicking the desktop shortcut.



2. Select an example data set to work with. From the menu select File | Open Example Data Sets.



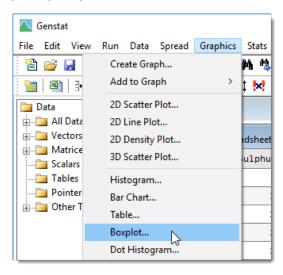
3. Type sulphur.gsh into the Look for file field then click Open data to display this spreadsheet.

			🛄 Sp	readsheet [S	ulphur.gsh]		
E	1	- I	Row	Sulphur	Windsp	Winddir	🛿 Rain
Example Data Se	ets >		1	0	14.8	W	no
ook for file:			2	13	14.3	N	no
sulphur.gsh		-	3	12	5.5	W	no
ilter by topic:		1	4	22	5	NW	no
(None)	~		5	12	4.5	W	no
File .	Description ^		6	6	4.8	NE	no
Scharghvenic.geh	Schargerenic data (Section 12.4.2, pages 356-358)		7	2	4.3	E	no
Seeds.gdh	Number of carola apple recovered in and cores 0-3 years Sentenceducity data Review 3.3.1, appendix 10.0103		8	24	4	SE	no
Pergilinensigh	Deep he weights from 2 inter with 2 treatments over 8 dates		9	36	9.3	s	no
Skull-geh	Data on 150 male Egyptian alula from 150 epochs		10	6	6.3	NE	no
Sunnul gen	Study of 25 varieties of wheat at Slate rial farm Number of only deaths from loss cancer and consultan analysis		11	10	5.8	SW	yes
Dacking ph	Stachings data (Section 2.4.1, pages 53-55)		12	4	8.3	W	yes
Students.geh	Assessment of the tolerance of students to statistics lectures		13	3	16	SW	yes
Sulphur.gsh	Measurements of sulphur in the air		14	7	15.8	W	no
<	>		15	2	16	SW	yes
?	Open data Close		16	3	16.7	u	yes





1. From the menu select Graphics | Boxplot.



- 2. a) Select Variate(s) with single grouping factor.
 - b) Double-click Sulphur to move it to the Data variate(s) field.
 - c) Move the mouse cursor to Grouping factor and double-click Rain to use this as the group factor.

Boxplot		×
Data Options Axis Fra	ame	
Data arrangement Variate(s) Variate(s) with combined Variate(s) with multiple gr		
Available data: Sulphur Windsp	Data variate(s): Grouping factor: Sulphur Rain C	
have a had		
« × 2	Run Canc	el Defaults

3. Click **Run** to open the Graphics Viewer, which will plot your graph.

	ools Window						
🎽 🖬 🚺 🖣 🖆	ු ු 🖨 🖆	# 🗣 🖶	🇆 🙆 🌠	夢叉	∿ №	$(\mathbb{R}^{k} \mid \mathbb{R}^{k})$	-
50	1	×					^
40	-	×	×				
30		×	×				
20			×				1
10	-						
0		Ţ					
		no	yes				
							× >

VSNi



RUN A STATISTICAL ANALYSIS

1. Compare two samples in sulphur.gsh – sulphur in the air on dry days and sulphur in the air on rainy days. From the menu select Stats | Summary Statistics | Summary Statistics.

🔼 Genstat		
File Edit View	v Run Data Spread Graphics Stats Tools Window Help	
1 📔 🚰 📓 📢	Summary Statistics > Summary Statistics	
	Statistical Tests > Summany of Circular Date	
2 1 1 3+ Data	Distributions > Diversity	
All Data	Regression Analysis > Tally	
+ Vectors	Design > Frequency Tables	

- 2. a) Double-click Sulphur to move it to the Variates field.
 - b) Place the cursor in the **By Groups** field then double-click Rain to use this as the group factor.

Summary Statistics		- • •
Available data:	Variates:	
Rain Winddir a	-> Sulphur	~
By groups: Rain	(b)	
Display		
No. of values	Minimum	Range (max-min)
No. of non-missing values	Maximum	Lower quartile
No. of missing values	Variance	Upper quartile
Arithmetic mean	Standard deviation	Sum of values (Total)
Median		More statistics
Graphics		
Histogram	Boxplot	Stem and leaf
Normal plot	Dot histogram	
► × 2	Run Cancel	Defaults Save

3. Click **Run** to display the results in the Output window.

Summary statistics for Su	lphur: Rain no
Number of observations = Number of missing values = Median = Minimum = Lower quartile = Upper quartile = Summary statistics for Su	0 12.09 7 0 49 4 16.5
Number of observations = Number of missing values = Mean = Median = Minimum = Maximum = Lower quartile = Upper quartile =	8.38 5 1 38 3

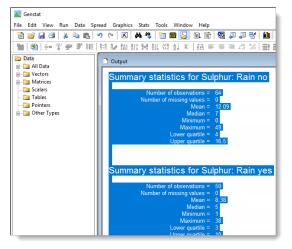
This numerical summary indicates that there is a higher than average sulphur content in the air on dry days: Rain no Mean = 12.09 vs Rain yes Mean = 8.38





SHARE YOUR RESULTS

 We'll save our Output window results and the boxplot into a Microsoft Word file so we can share it with colleagues. Place your mouse cursor within the Output window text and drag the mouse to highlight the parts you wish to copy – use the Windows shortcut keys CTRL+C to copy the highlighted text. Now open Microsoft Word and use the Windows shortcut keys CTRL+V to paste the summary results into your document.



2. Next we'll save the boxplot as an image file so we can insert it into Word. From the Genstat toolbar click ut to re-display the Graphics Viewer.

Tools Window Help	
🛅 📾 🔂 🗄 🕀 🖓 🚚	🛍 2
มุ#º2,Σ │ 詰 ☰ ☰ ;00	

3. From the Graphics Viewer menu, select **File | Save As...** then save the boxplot as a .png or file type of your choice. You can now insert this into your Word file.

())	Genstat Graphics View	er - Unnamed 1	
File	Edit View Tools	Window Help	
	Open	Ctrl+O	🕨 😽 💩 🌰 😤 😽
	Close	Ctrl+F4	
	Save	Ctrl+S	50 - ×
	Save As	Ctrl+Shift+S	
	Save All		40 - ×
	Save All to PDF		×
	Save Selection		^ ^
	Reload File		30 -
	Print	Ctrl+P	

WANT TO LEARN MORE?

All of the tasks in this document are explained in more detail in the *Introduction to Genstat for Windows* guide, which you can access from the Genstat Help menu:

Help | Genstat Guides | Introduction to Genstat for Windows.