

Creating Beach Profiles in Excel

Download the Beach Profile Drawer spreadsheet from That Blue Square Thing (<http://www.bluesquarething.co.uk/geography/beach.htm>)

Enter the data you have for angles and distances. It's easiest to start at the shore and work up the beach for this I think.

You should end up with something like this. Just ignore any blank rows underneath – they're there in case you have a really wide beach!

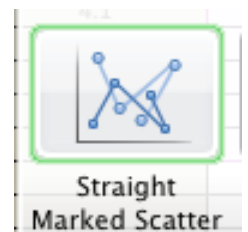
Now, we need to draw a beach profile. This is a touch tricky, so follow the steps and see what you get.

Beach Profile Calculator - distance along beach version
Use this version if you laid your measuring tape along the beach

Point	Angle	Dist along beach	Distance from shore	Actual Vertical Change
1 (Sea)	0	0	0	0
2	15	4.1	3.96	1.06
3	-4	4.5	8.45	0.75
4	15	4.7	12.99	1.96
5	1	7.9	20.89	2.10
6	5	8.1	28.96	2.81
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

1. **Highlight** the cells in columns J and K with numbers in (not the words) – don't forget the zeros in row 6. In the example above I'll highlight from J6 down to K11.
2. Go **Insert > Chart**
3. Choose a **Scatter Chart** – you want the one with straight marked points

This will draw a basic profile – but it looks a bit odd so we need to get formatting



4. **Right click** on one of the **vertical axis numbers**. Choose **Format Axis** from the options
5. Set the **Maximum Value** to 15 (you can play with different values till you get a helpful looking profile). You might want to set the **Minimum Value** to 1 as well

This should produce a better looking profile

6. **Delete** the legend from the chart – it doesn't add anything
7. **Move** the chart to a **New Sheet** – there's a Move Chart button in the top right corner. This will make the chart bigger and easier to print and use
8. **Add titles** – you'll find these on the Format tab at the top. You need axis titles and a chart title.
 - The vertical (y) axis is the Height of Beach
 - The horizontal (x) axis is the Distance from shoreline
9. You can now **add textboxes** as annotations to the chart or add photos to it. Try adding **minor gridlines** as well on the vertical axis (right click again)