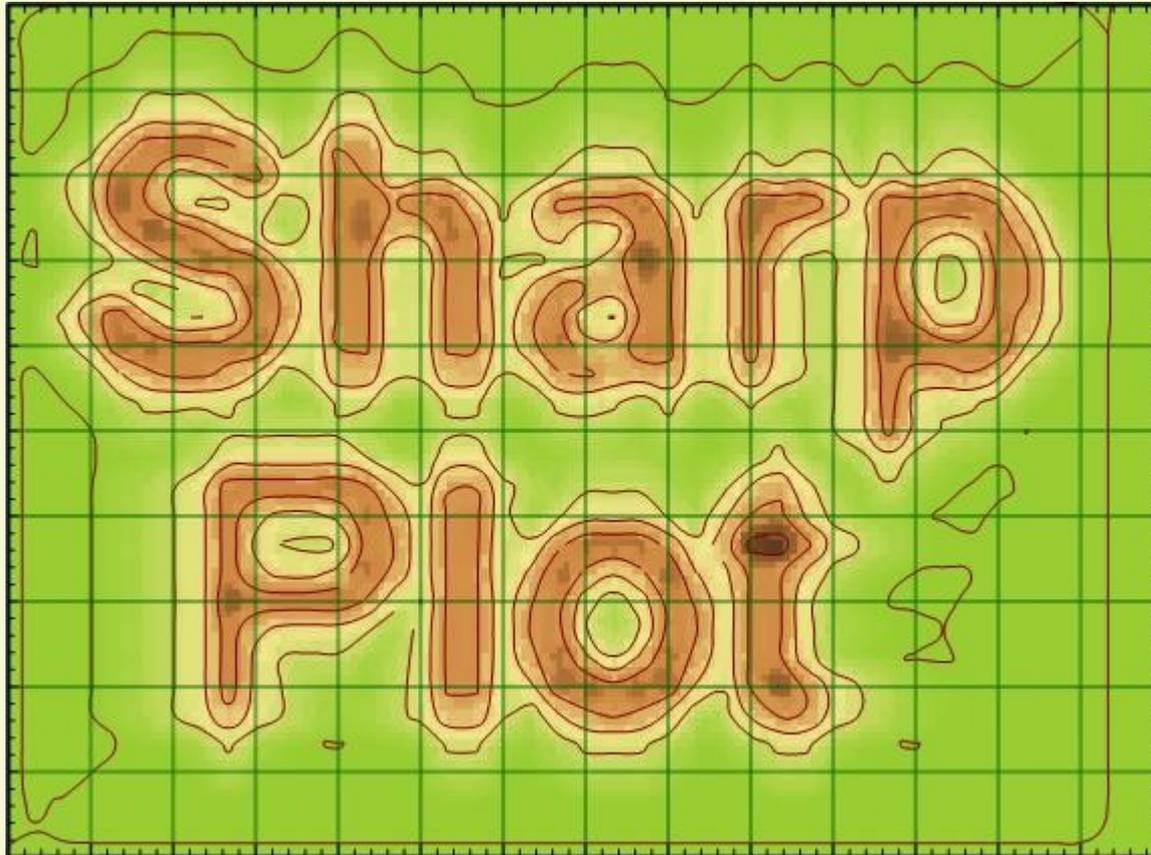


SharpPlot

Automated graphical representation of data



What is SharpPlot ?

- Charting package in APL (and .Net)
 - APL scripts generating charts from data
 - Output : Raster, Vector, Web, GUI
- Philosophy
 - Publication-quality output (PostScript)
 - Maximising data readability
 - Avoiding fashionable spurious decorations
 - Have a good set of defaults



How to use it ?

- PostScript-oriented state machine

- Set Frame

```
□USING←',sharpplot.dll' ',system.drawing.dll'  
sp←□NEW Causeway.SharpPlot (800 600)
```

- Set Parameters

```
sp.Heading←'My Chart'  
sp.LineGraphStyle←Causeway.LineGraphStyles.GridLines
```

- Draw

```
sp.DrawLineGraph c(+\^-40+?100p100)
```

- Output (to file or stream)

```
sp.SaveImage 'C:\mychart.png'  
System.Drawing.Imaging.ImageFormat.Png
```



How to use it ?

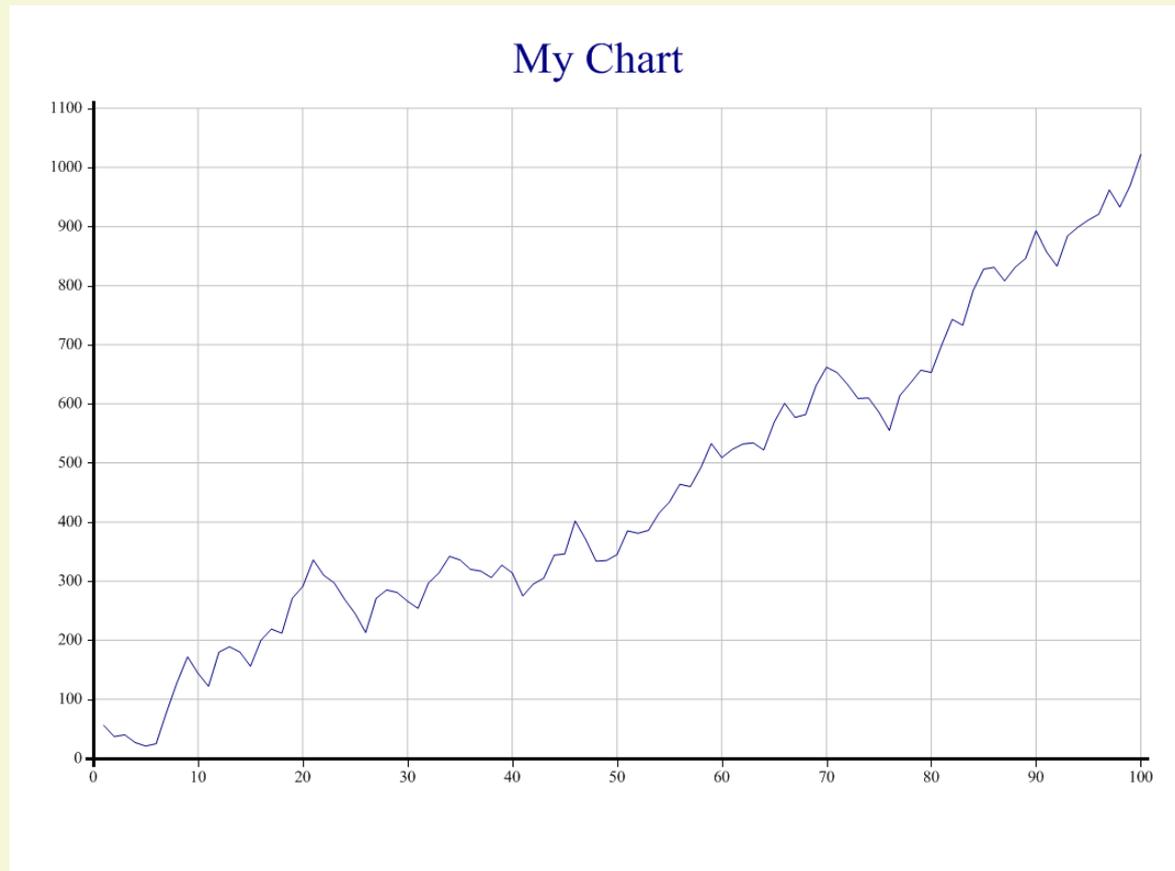


Chart Types : 1-d

- Pie
- Dial

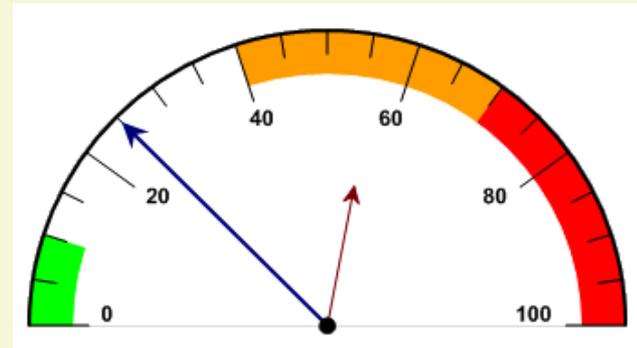
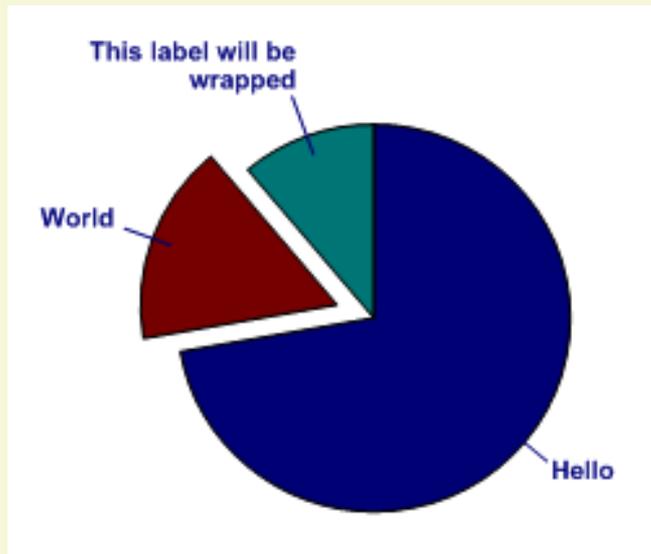
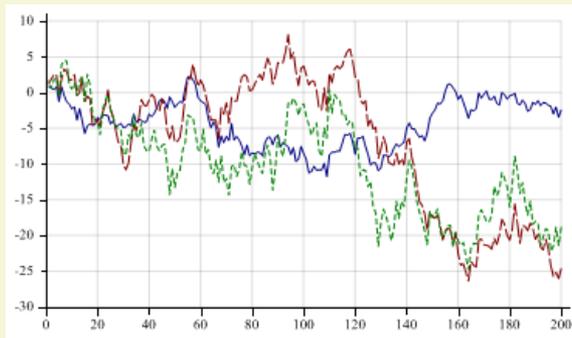
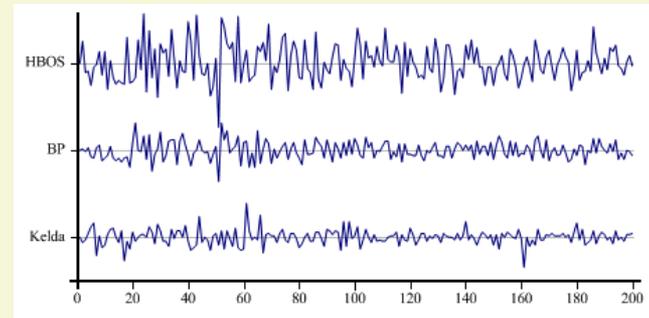


Chart Types : 2-d

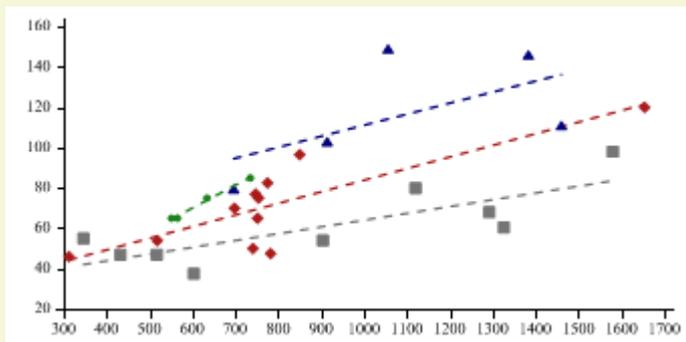
- Line



- Trace



- Scatter



- Bar

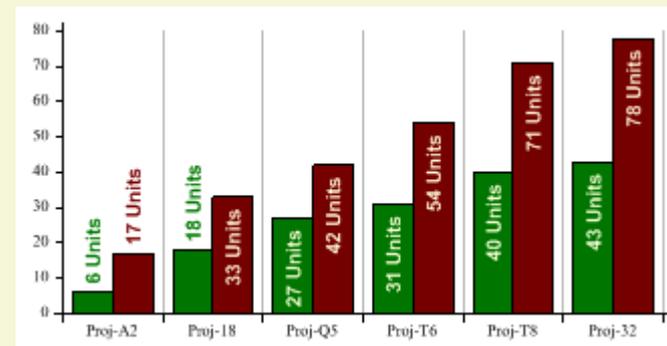
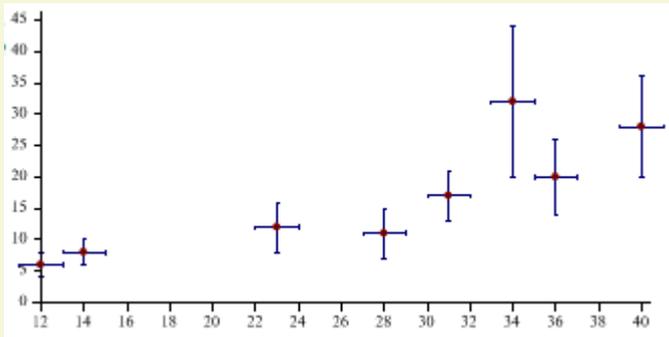
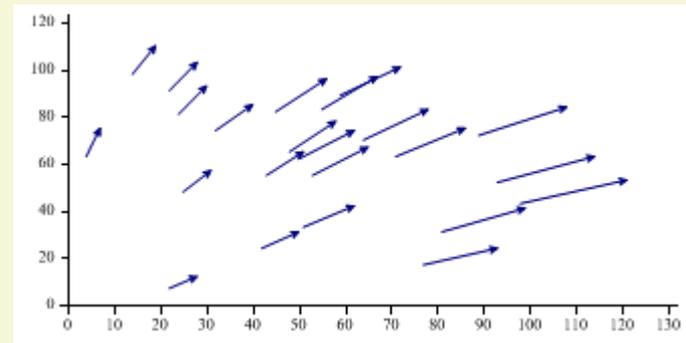


Chart Types : Specific 2-d

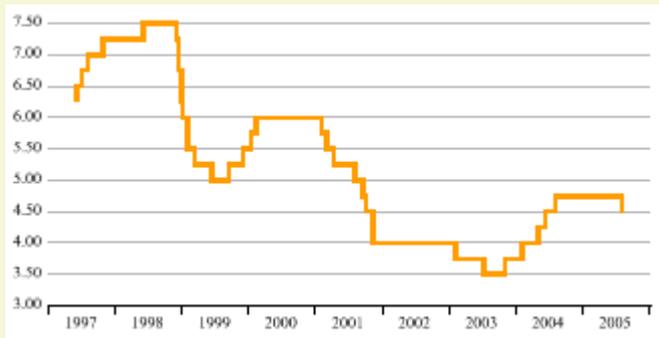
- MinMax



- Vectors



- Step



- Polar

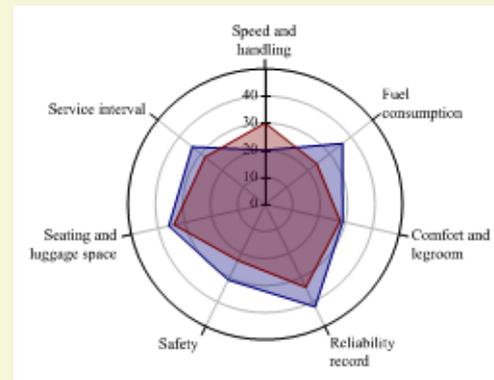
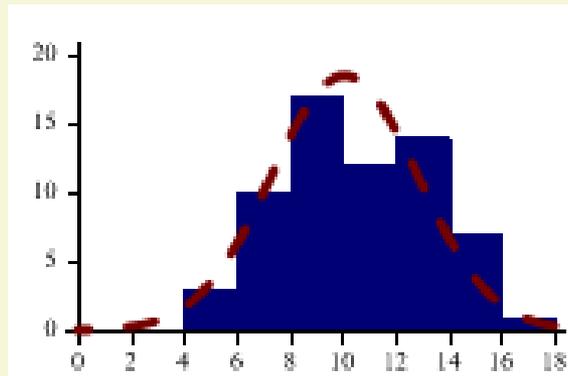


Chart Types : Statistical

- Histogram



- Box & Whiskers

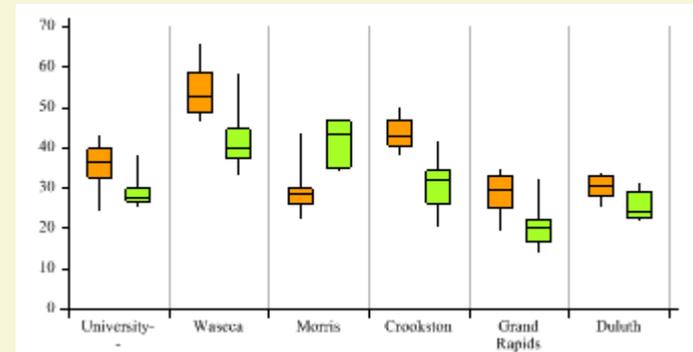
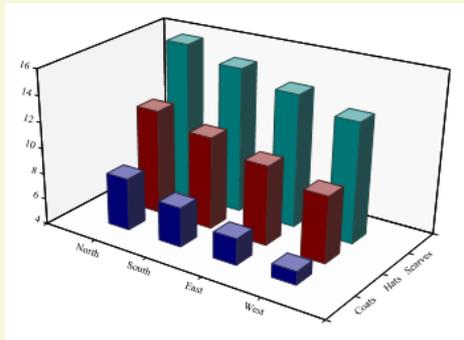
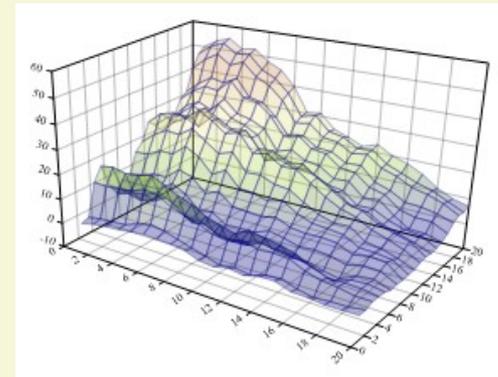


Chart Types : 3d

- Tower



- Response Surface



- Cloud

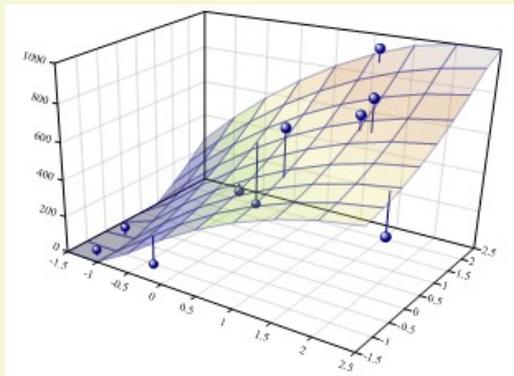
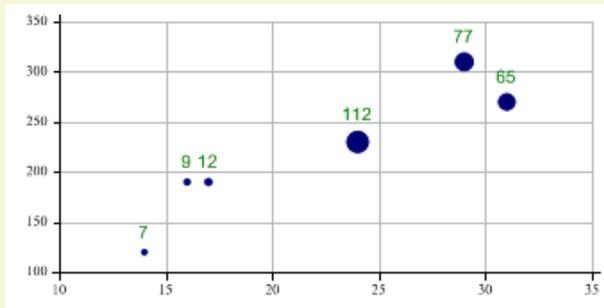
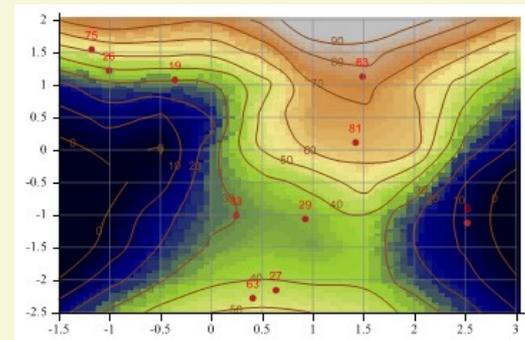


Chart Types : Readable 3d

- Bubble



- Contour



- Altitude Matrix

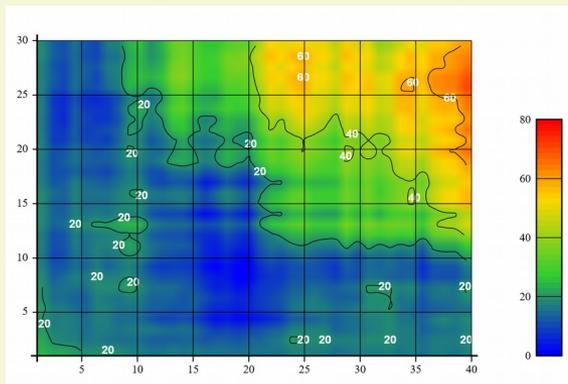


Chart Types : Hierarchy

- TreeMap
- NetworkMap

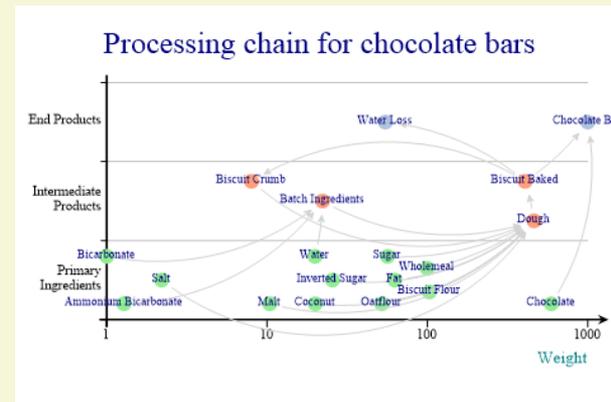
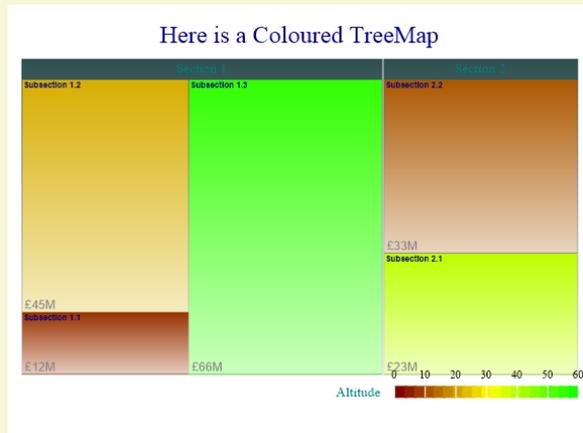
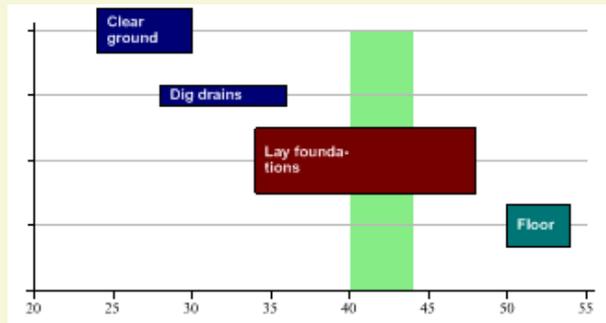
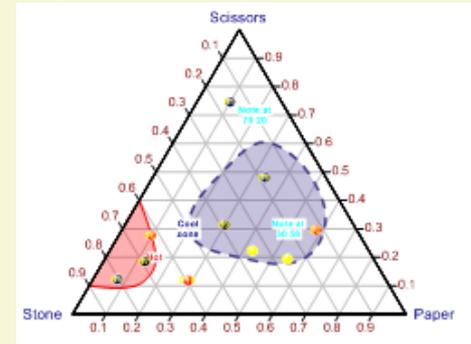


Chart Types : Misc

- Gantt



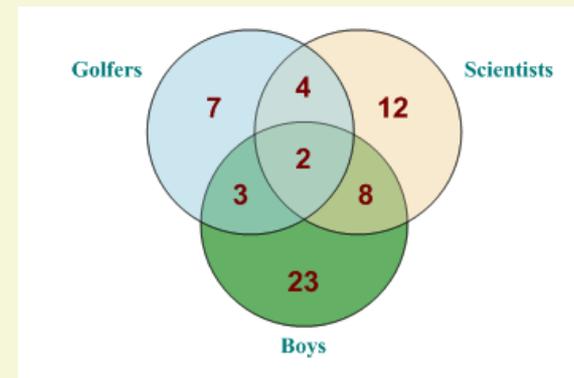
- Triangle



- Table

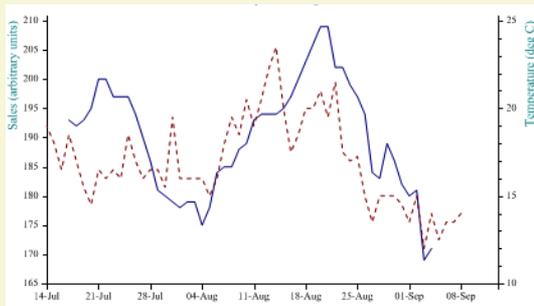
| Average Yield | University-Farm | Waseca | Morris | Crookston | Grand Rapids | Duluth |
|------------------|-----------------|--------|--------|-----------|--------------|--------|
| Manchuria | 26.66 | 41.17 | 30.90 | 36.45 | 27.55 | 25.77 |
| Gilabron | 39.94 | 48.47 | 31.95 | 32.15 | 21.78 | 27.77 |
| Svansota | 31.28 | 42.92 | 30.40 | 30.55 | 23.15 | 23.87 |
| Velvet | 33.35 | 43.82 | 32.48 | 36.70 | 27.63 | 24.38 |
| Trebi | 32.82 | 56.53 | 45.20 | 44.38 | 25.20 | 32.27 |
| No. 457 | 34.85 | 50.15 | 36.12 | 40.00 | 25.82 | 28.15 |
| No. 462 | 31.09 | 65.24 | 38.68 | 39.55 | 22.42 | 25.30 |
| Pearland | 30.42 | 42.30 | 36.54 | 33.42 | 30.74 | 31.69 |
| No. 475 | 27.34 | 64.02 | 33.42 | 38.12 | 17.47 | 30.22 |
| Wisconsin No. 38 | 38.55 | 68.49 | 38.32 | 42.89 | 27.57 | 30.47 |

- Venn diagram

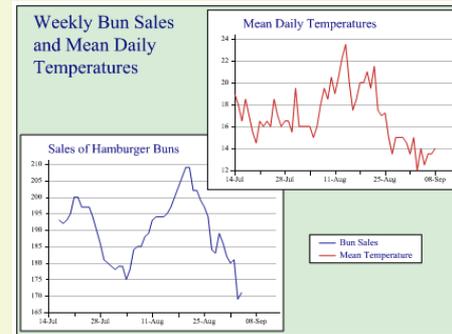


Multiple Charts

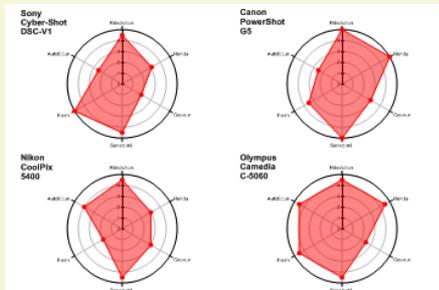
- Re-used/multiple axes



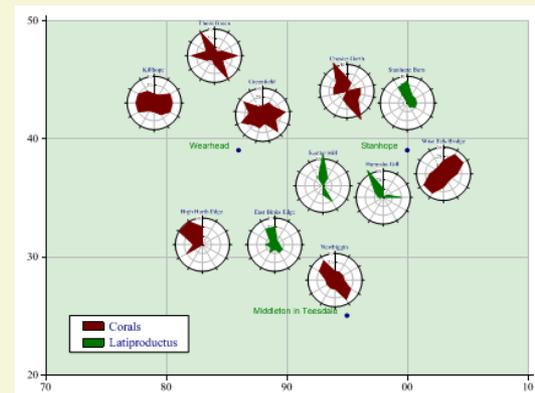
- Multiple frames



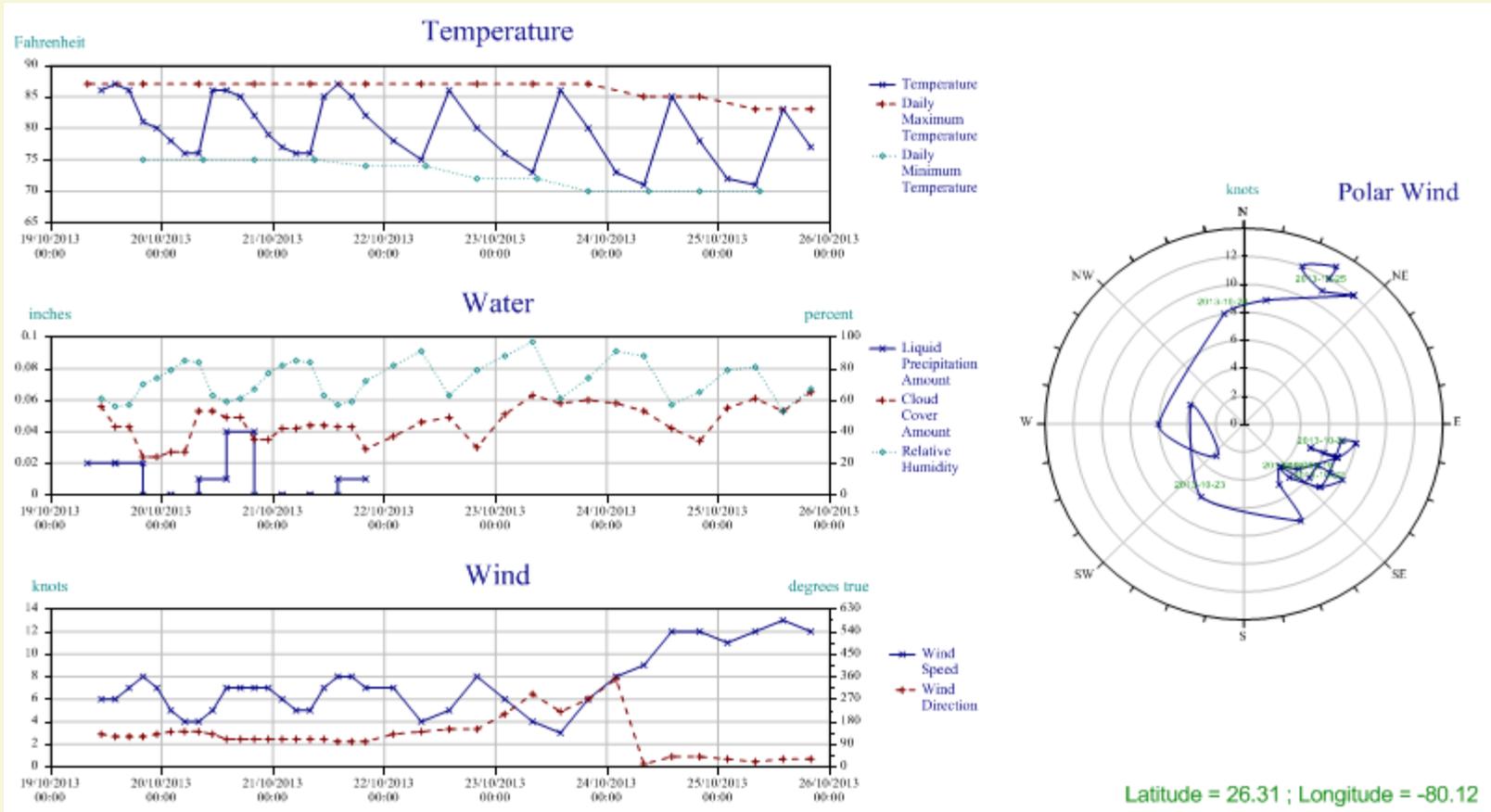
- Trellis



- Nested charts



Multiple Charts



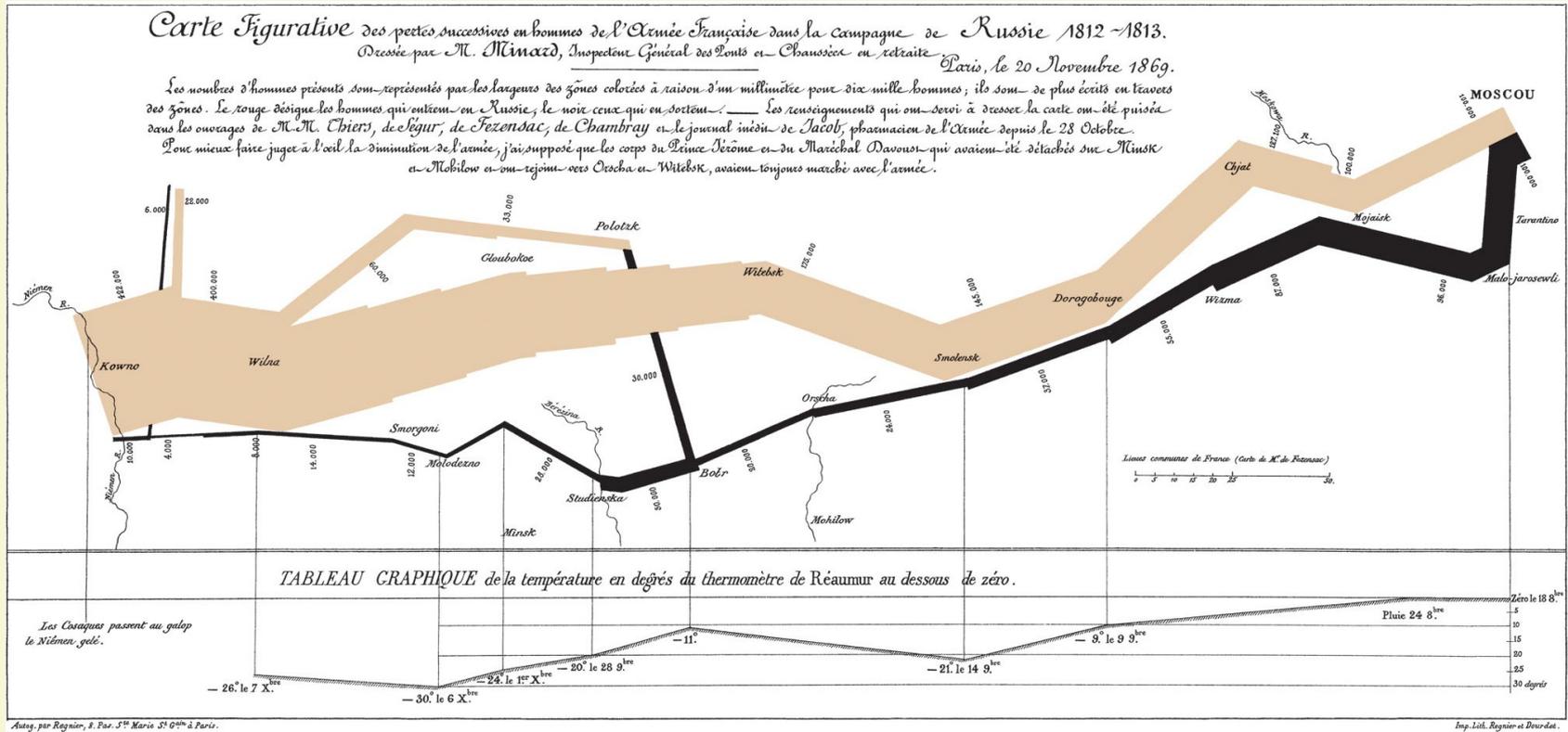
Multiple Charts



After M.Minard's "Carte figurative des pertes successives en hommes de l'Armée Française dans la campagne de Russie 1812-1813", Paris, 1869/11/20.



Multiple Charts



SharpPlot

Automated graphical representation of data

