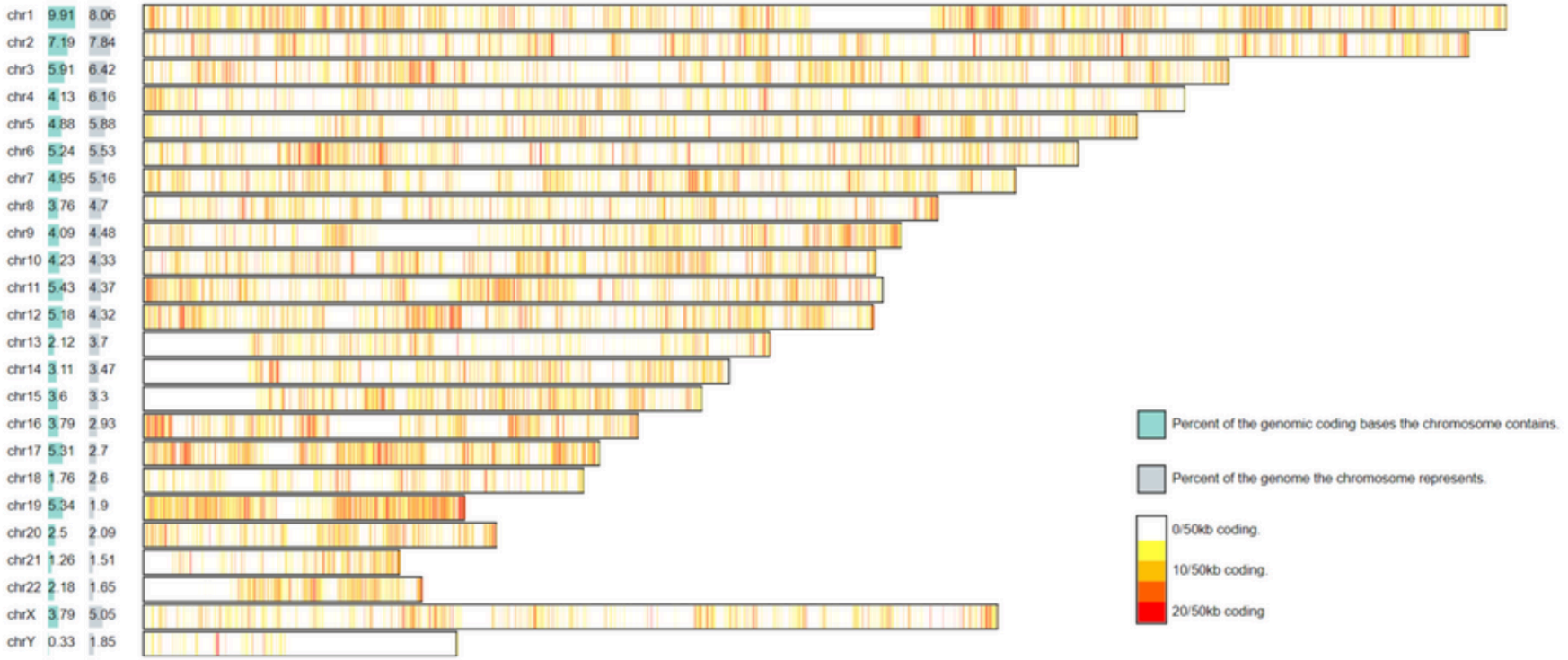
Displaying Data

Where on our chromosomes the most coding gene sequences are found. [OC]

OC



https://www.reddit.com/r/dataisbeautiful/comments/7myjiu/where_on_our_chromosomes_the_most_coding_gene/

- Entire wiki cluster on displaying data:

https://en.wikipedia.org/wiki/Data_visualization

- One of my favourite ways to procrastinate:

https://www.reddit.com/r/dataisbeautiful/

- The other way: Fivethirtyeight:

https://fivethirtyeight.com

Displaying Data

The importance of displaying your data cannot be over-emphasized

http://www.ted.com/talks/hans_rosling_shows_the_best_stats_you_ve_ever_seen.html

http://www.ted.com/talks/lang/en/david_mccandless_the_beauty_of_data_visualization.html

http://www.ted.com/talks/peter_donnelly_shows_how_stats_fool_juries.html

http://www.ted.com/talks/ben_goldacre_battling_bad_science.html

http://www.ted.com/talks/ben_goldacre_what_doctors_don_t_know_about_the_drugs_they_prescribe.html

Statistics has its roots in **Biology**

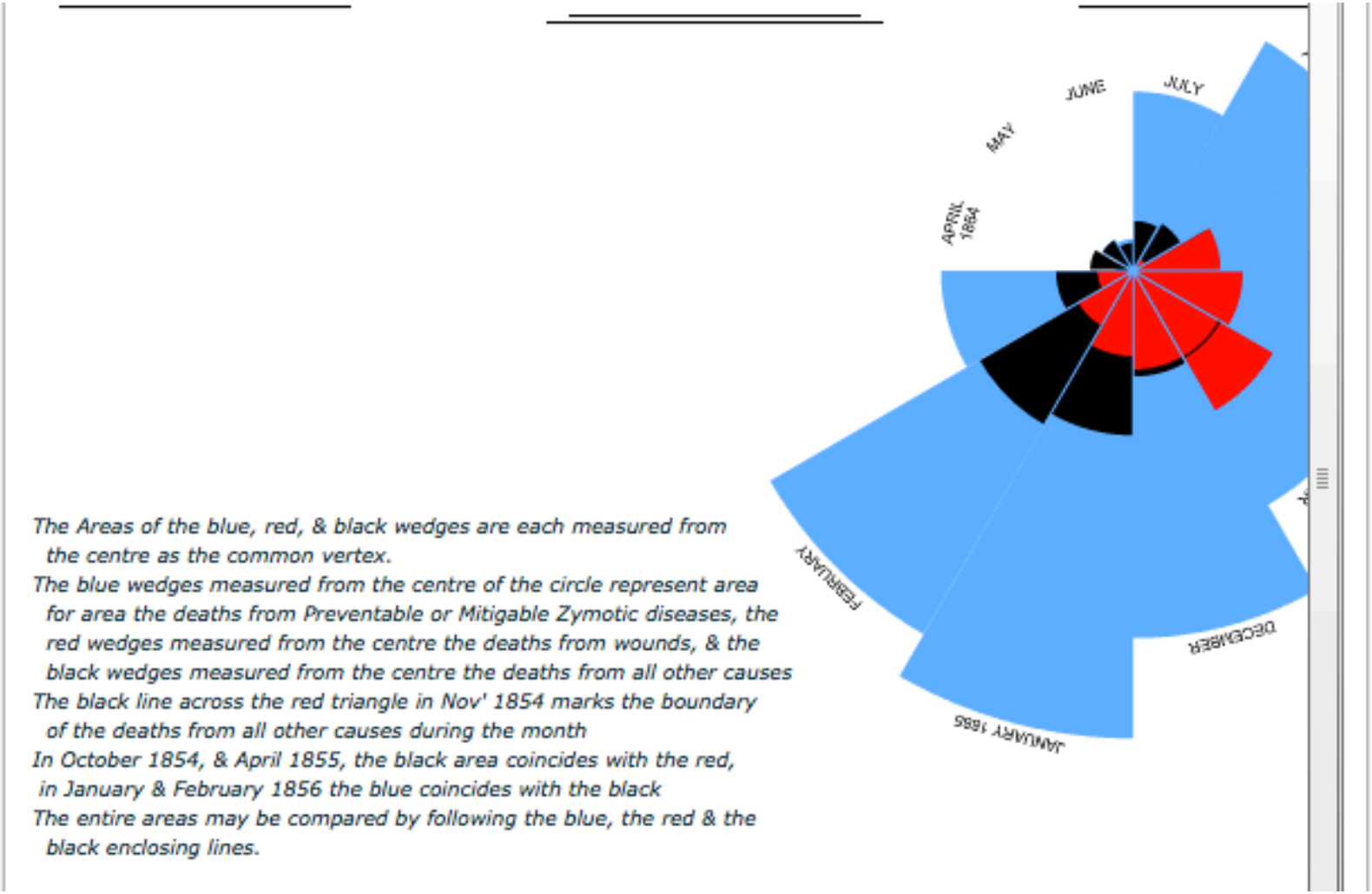
A modern problem in biology is ***too much data*** and not enough people who can interpret it effectively

A second issue: how to convey (complicated) results **EFFECTIVELY?**

Making sense of complex data: a brief history of effective visualization

The lady with the lamp

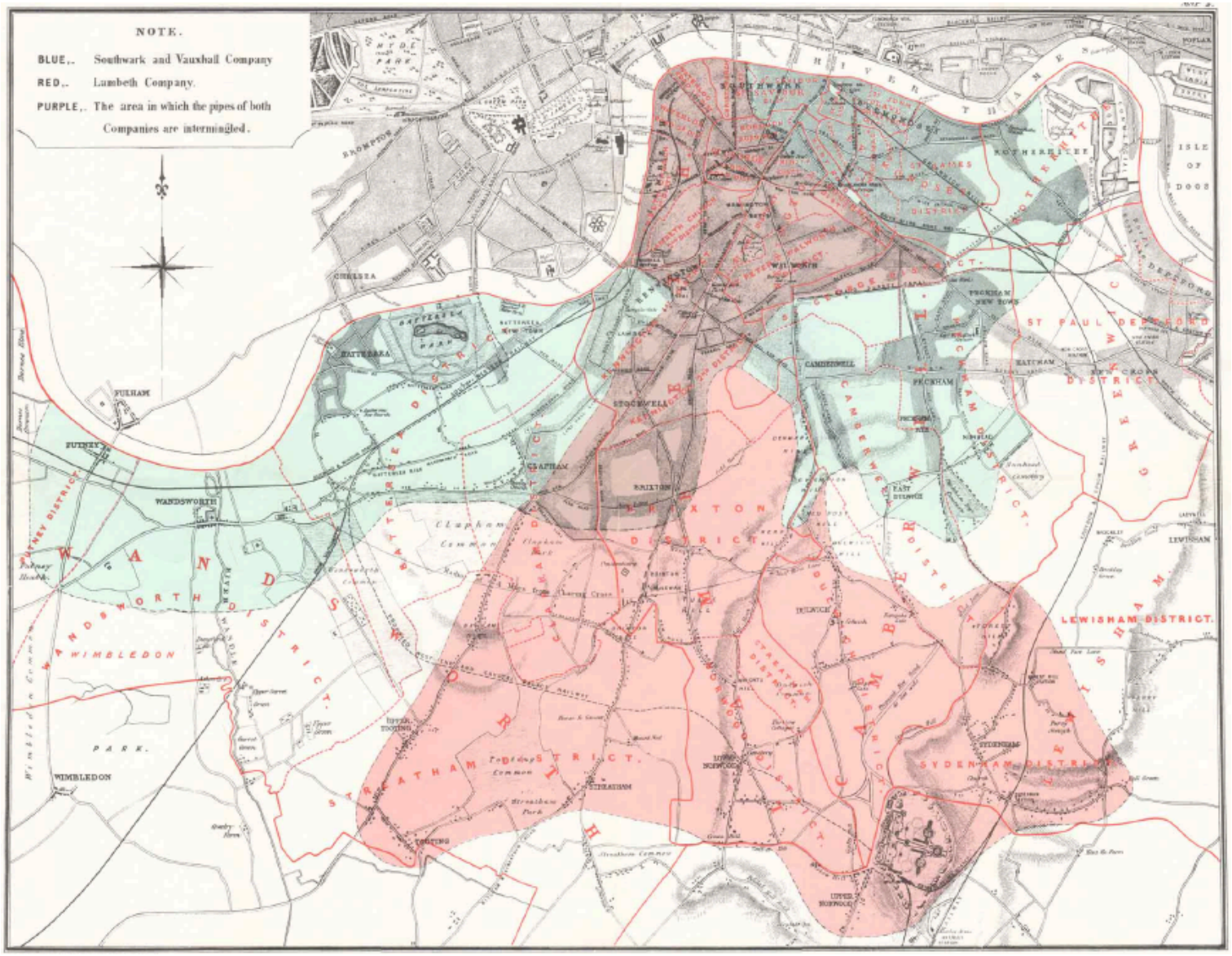
…and the informative graph



The Areas of the blue, red, & black wedges are each measured from the centre as the common vertex.
The blue wedges measured from the centre of the circle represent area for area the deaths from Preventable or Mitigable Zymotic diseases, the red wedges measured from the centre the deaths from wounds, & the black wedges measured from the centre the deaths from all other causes
The black line across the red triangle in Nov' 1854 marks the boundary of the deaths from all other causes during the month
In October 1854, & April 1855, the black area coincides with the red, in January & February 1856 the blue coincides with the black
The entire areas may be compared by following the blue, the red & the black enclosing lines.

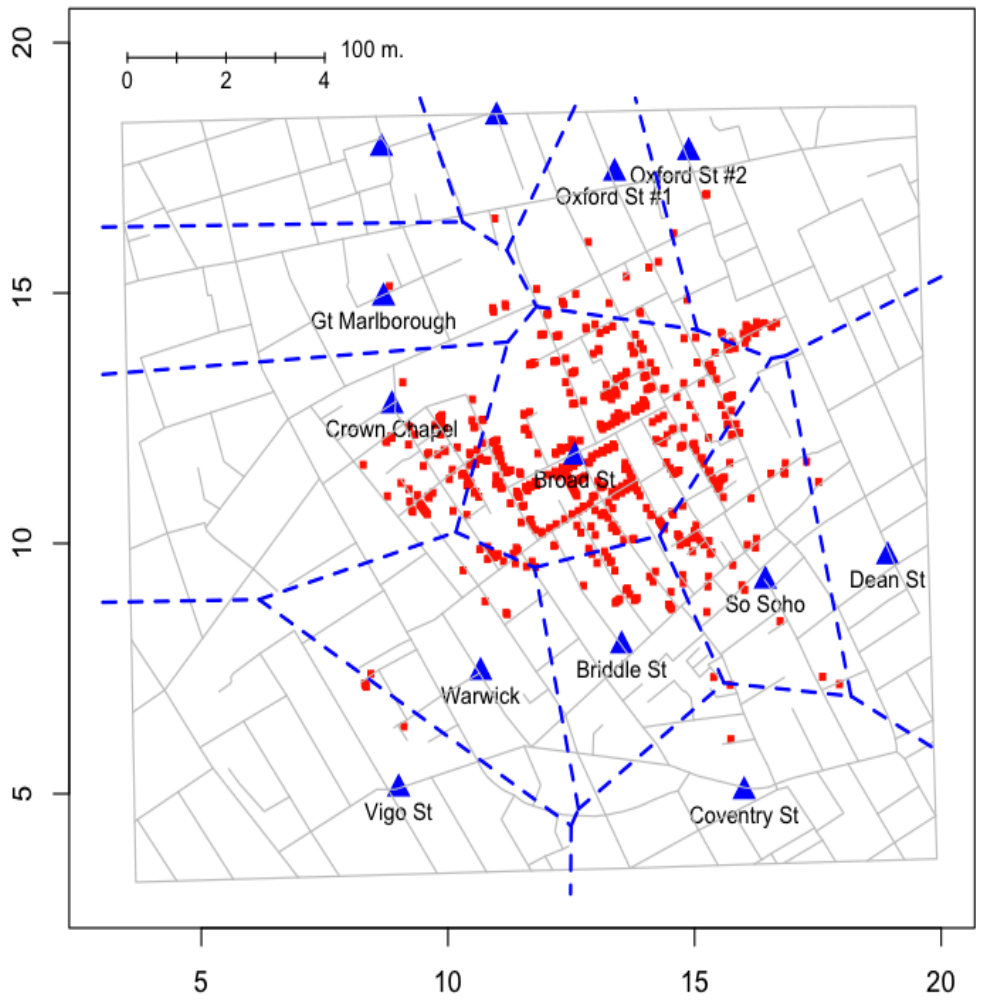
http://understandinguncertainty.org/coxcombs

Cholera

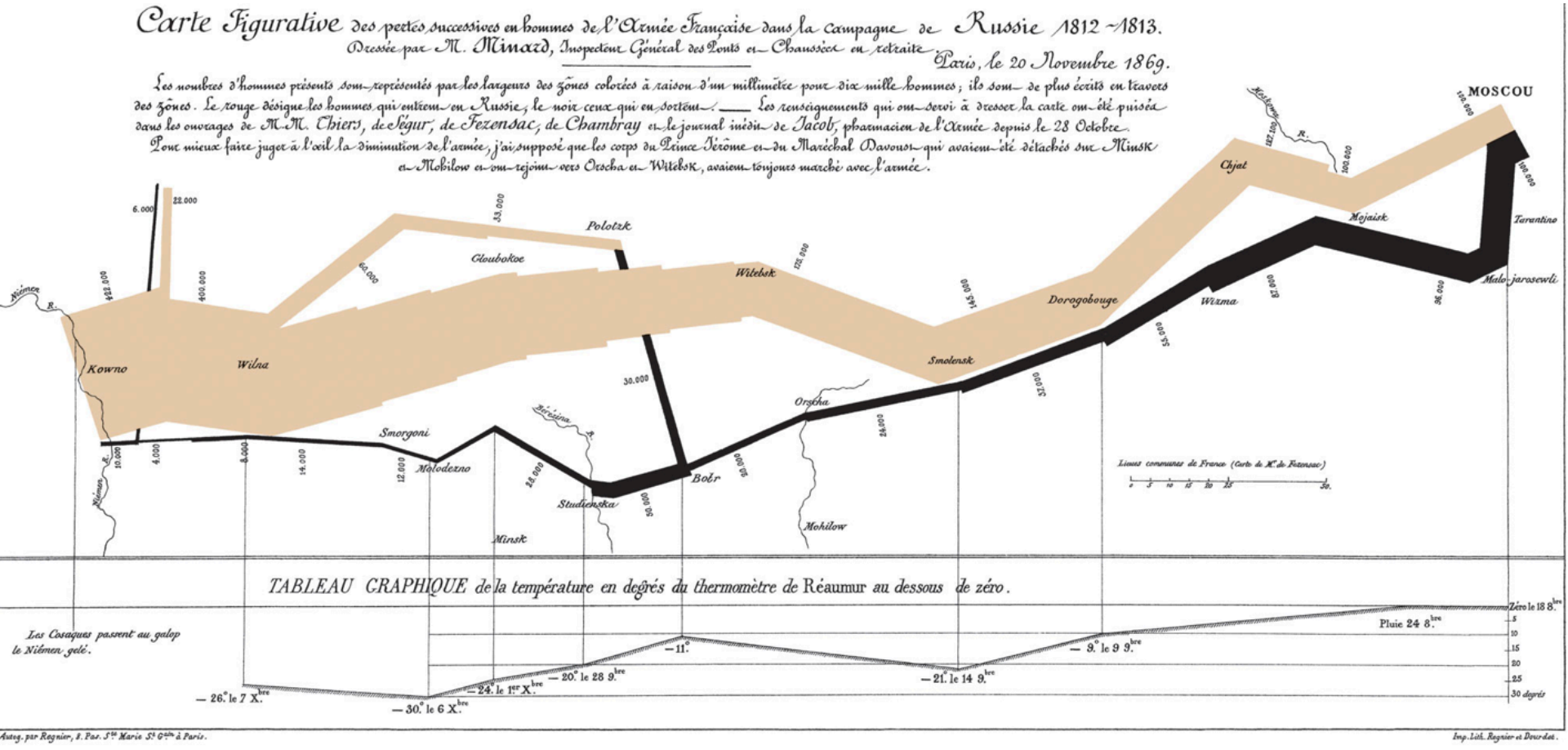


http://www.datavis.ca/R/index.php#heplots

Cholera


Snow's Cholera Map of London
100 m.
0
2
4
Oxford St #2
Oxford St #1
Gt Marlborough
Crown Chapel
Broad St
Dean St
So Soho
Briddle St
Warwick
Vigo St
Coventry St
5
10
15
20

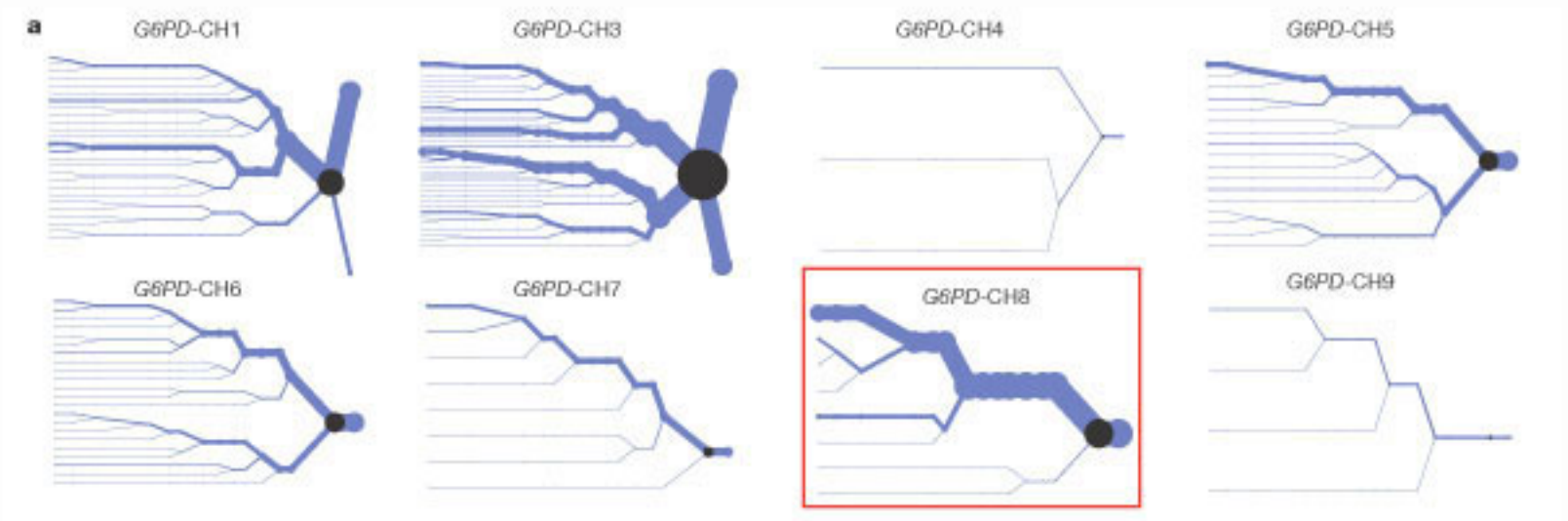
Complex information is interpreted most efficiently and effectively when it is represented **visually**



More in depth explanation of Napolean's defeat (and of Charles Minard's famous map) is found here: https://1812.tass.ru/en

Novel Biological Graphic tools

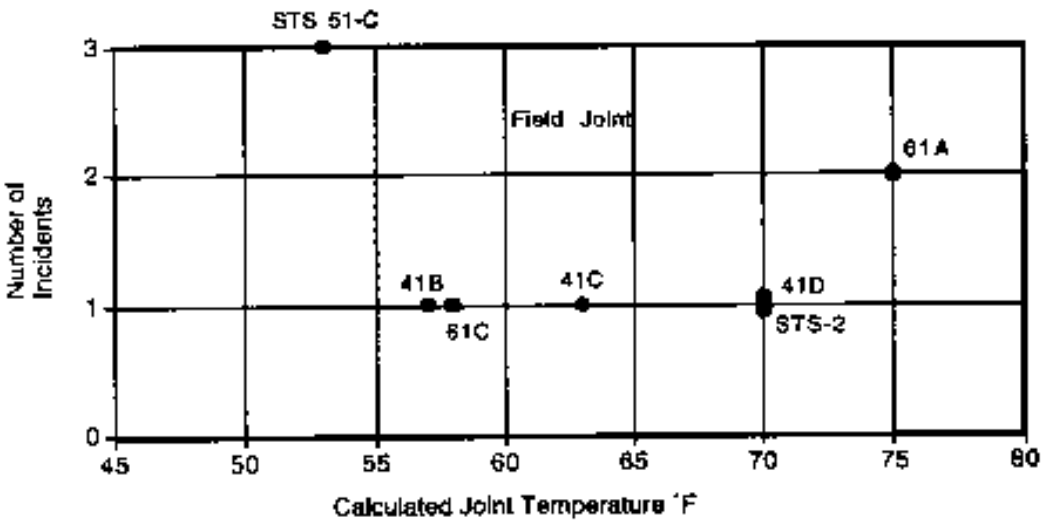
- Haplotype Bifurcation Diagrams



Sabeti et al 2002

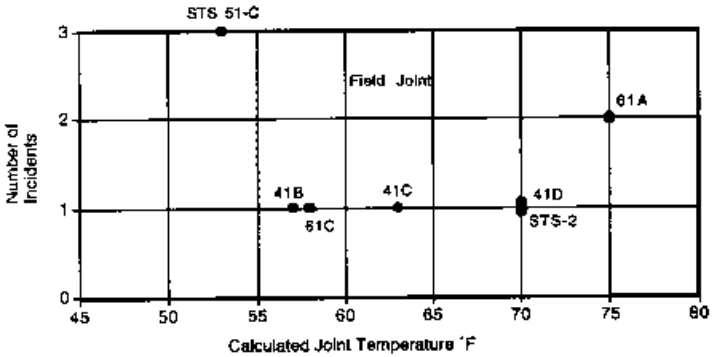
Missed Opportunities:

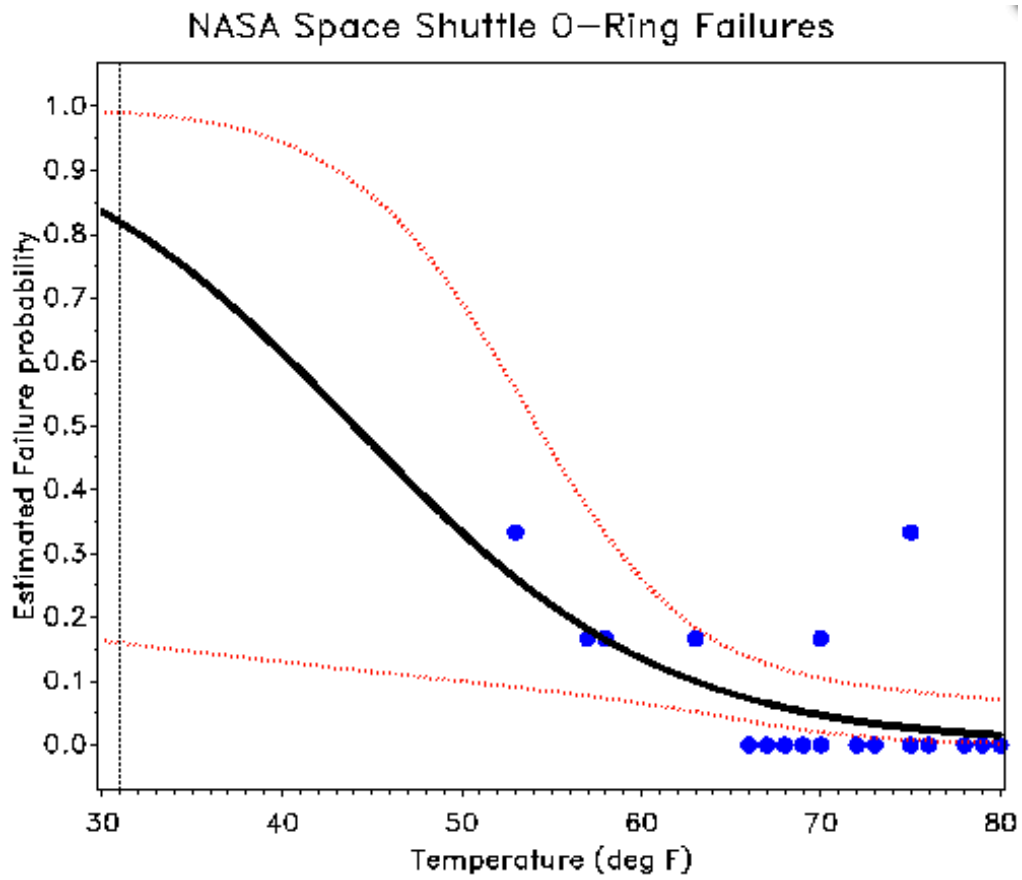
Displaying Data



http://www.datavis.ca/gallery/missed.php

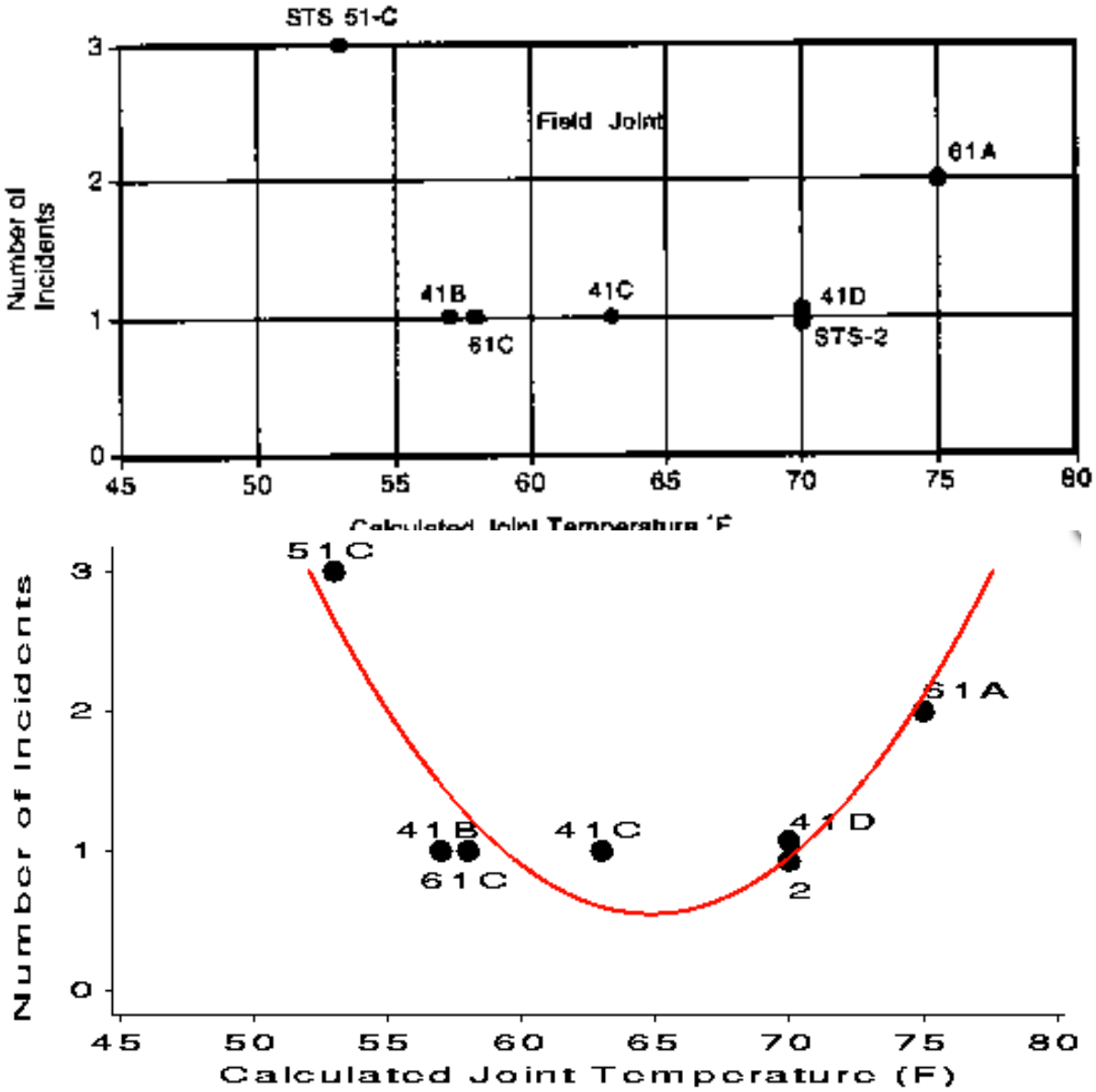
Displaying Data





https://www.youtube.com/watch?v=ZOzoLdfWyKw

Missed Opportunities: Displaying Data



http://www.datavis.ca/gallery/missed.php