

Gubben i Lådan

En annorlunda presentation

Carl-Olow "Kalle" Magnusson



A 3D bar chart with golden bars of varying heights on a golden background. The bars are arranged in a grid-like pattern, with some bars being significantly taller than others, creating a sense of depth and perspective. The lighting is warm and golden, highlighting the metallic texture of the bars.

WHY I LOVE THE ART OF VISUALIZING DATA

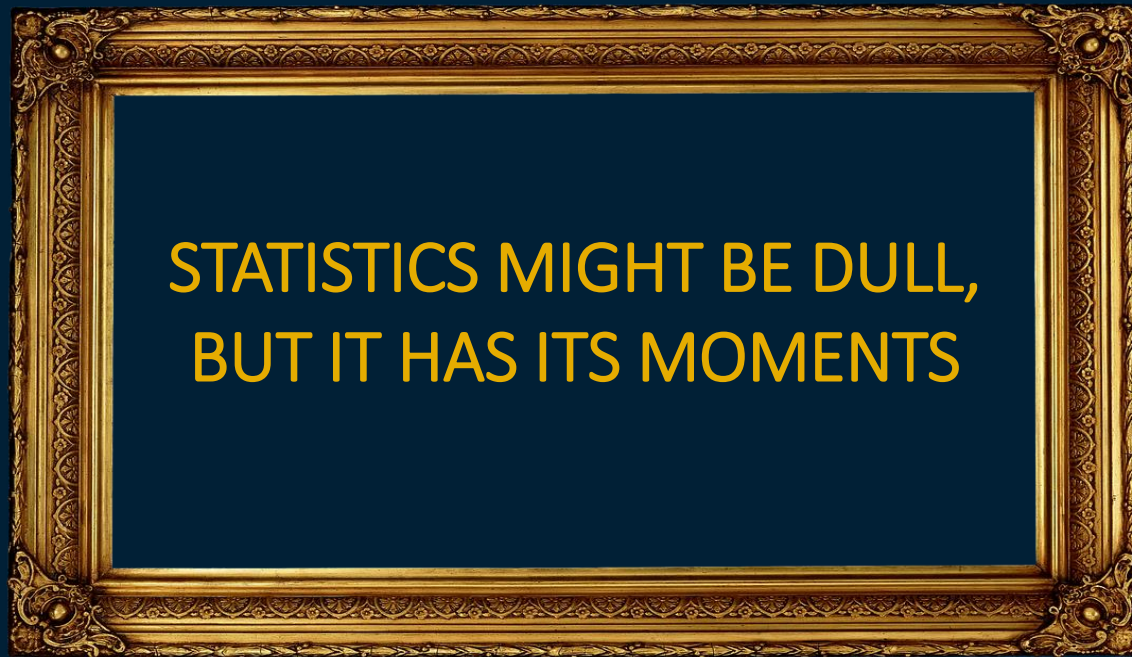
June 1st 1992 – this is when all started

Franzégatan 6, Stockholm, Kabi Pharmacia (Division Nutrition)



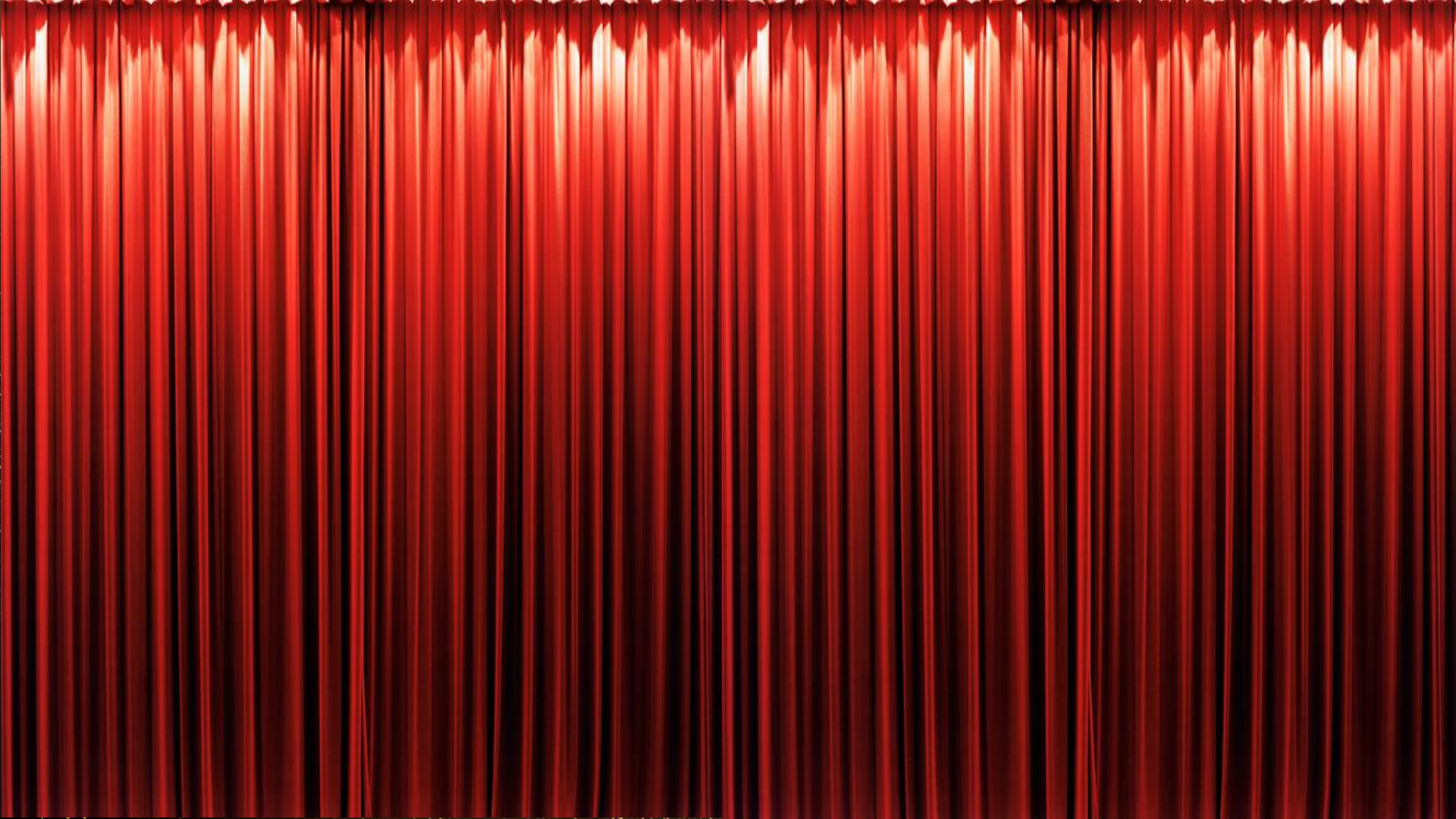
SAS Programmer & System Manager, assisting three Statisticians
Clinical Study Process, mostly Phase III studies

... and this was the sign hanging on our door 😊



The background of the image consists of a dense, vertical pattern of red curtains. The curtains are a deep, vibrant red color and have a subtle texture that suggests folds and light reflecting off the fabric. The lighting is slightly brighter at the top, where the curtains are gathered, and darker towards the bottom, creating a sense of depth and atmosphere.

My first moment...
...a real halleluiah moment



How can a single number create so many emotions?

A decorative gold frame with intricate scrollwork and a black interior. Inside the frame, the text $P \leq 0.05$ is written in a bold, gold, sans-serif font. The frame is centered on a dark background with a dense field of gold stars and sparkles.
$$P \leq 0.05$$

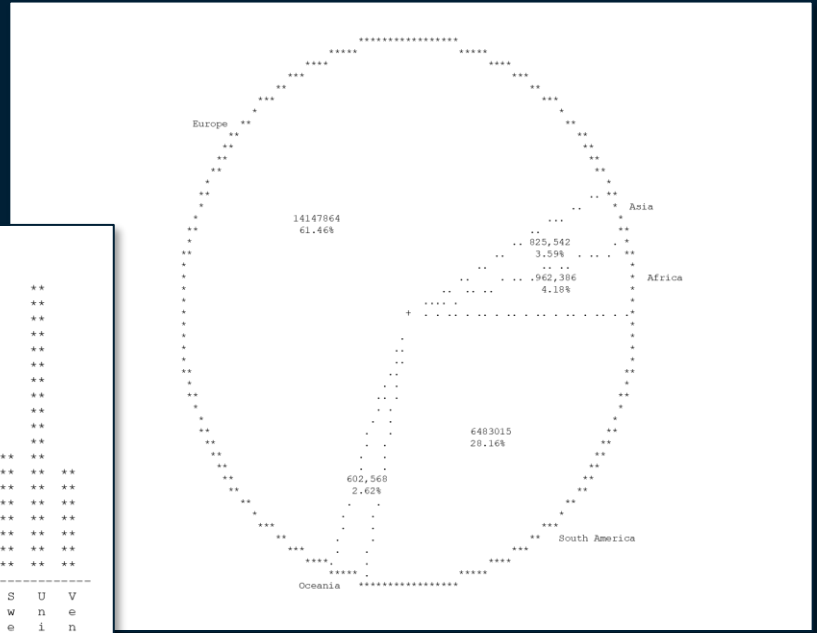
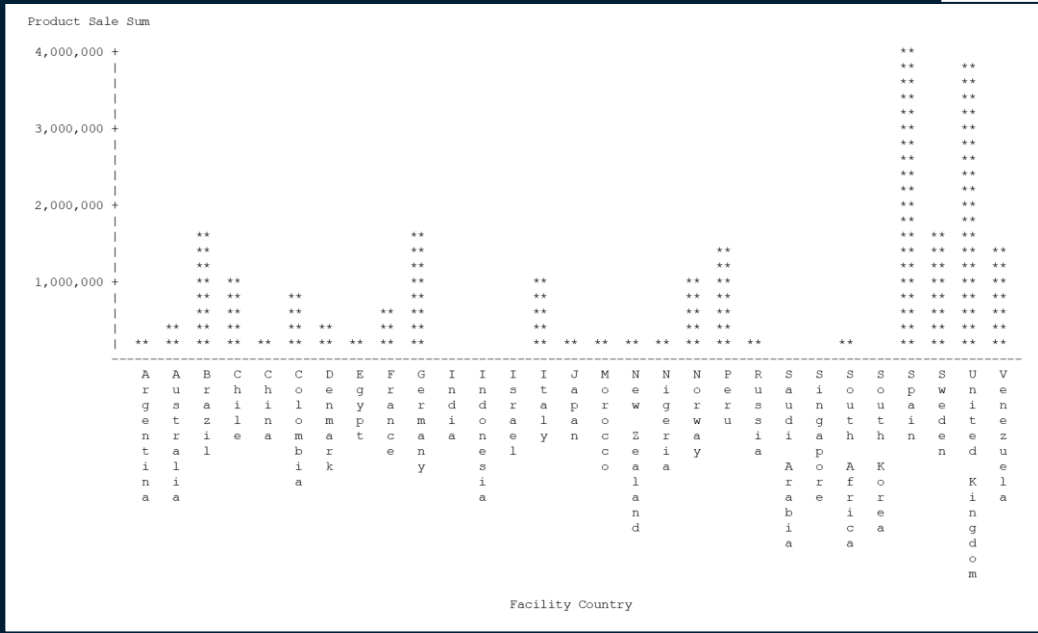
Working with SAS back in 1992 (version 5.18 on MVS)



```
File Edit Edit_Settings Menu Utilities Compilers Test Help
EDIT      FMAC.CUR.HCPHGS.DHTL(UPTST) - 91.01      Columns 08001 00072
Command (***):
***** Top of Data *****
000001 //1500      EXEC SAS
000002 //MVSDB  DD DSN=TRIS, IS.HY, DATA, DISP=SHR
000003 //BLINK  DD DSN=TRIS, IS.HY, BLINK, FILE(TCPUNIK), DISP=SHR
000004 //SVSDA  DD *
000005
000006 $let node = 333.444.444.444;
000007 Options COMPILOID=TOP REMOTE="node";
000008 $ENDM *****
000009 RSUBMIT *****
000010
000011 //fence= unitout 'zxxxxxxx/xxxx/xxx/test.out';
000012
000013 proc upload
000014   inf file=main;
000015   out file=unitout;
000016 run;
000017
000018 ENDRSUBMIT;
000019 $SIGOFF reDunK25;
```



What about the visuals back in 1992?

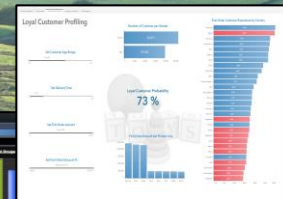


Visualization with SAS 1992 – 2022

SAS Enterprise BI Server
2004

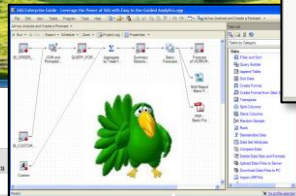
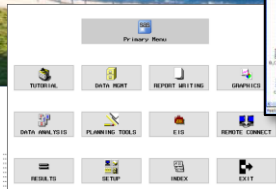
A complete BI platform
with many clients, Web
Report Studio, Portal, STP,
AMO etc.

SAS VA on Viya
2017-



SAS/ASSIST
1995-ish
First self-service
application
(SAS AF)

SAS 5.18
1992



SAS Enterprise Guide
1999

First client based “real” self-service
application/BI Tool. Swiss-army knife of SAS



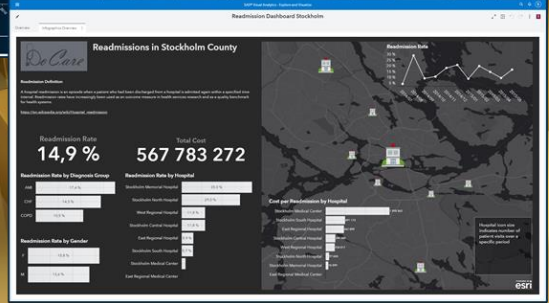
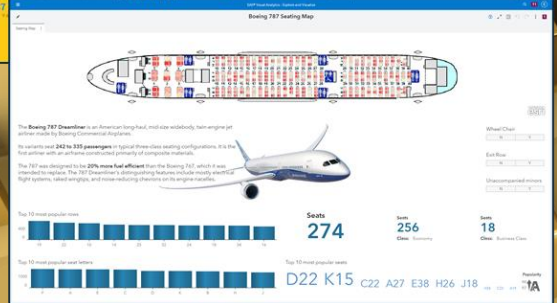
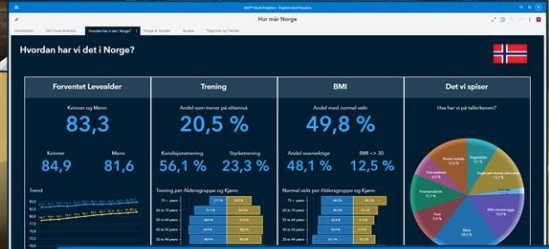
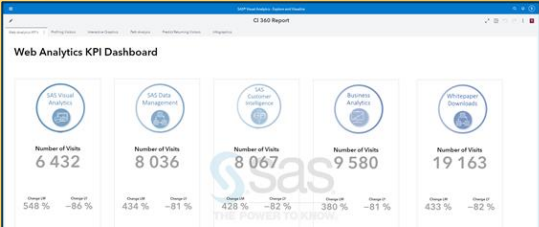
SAS BI Dashboard
2010

First “real” tool creating
dashboards, flash-based
with cool graphical
effects

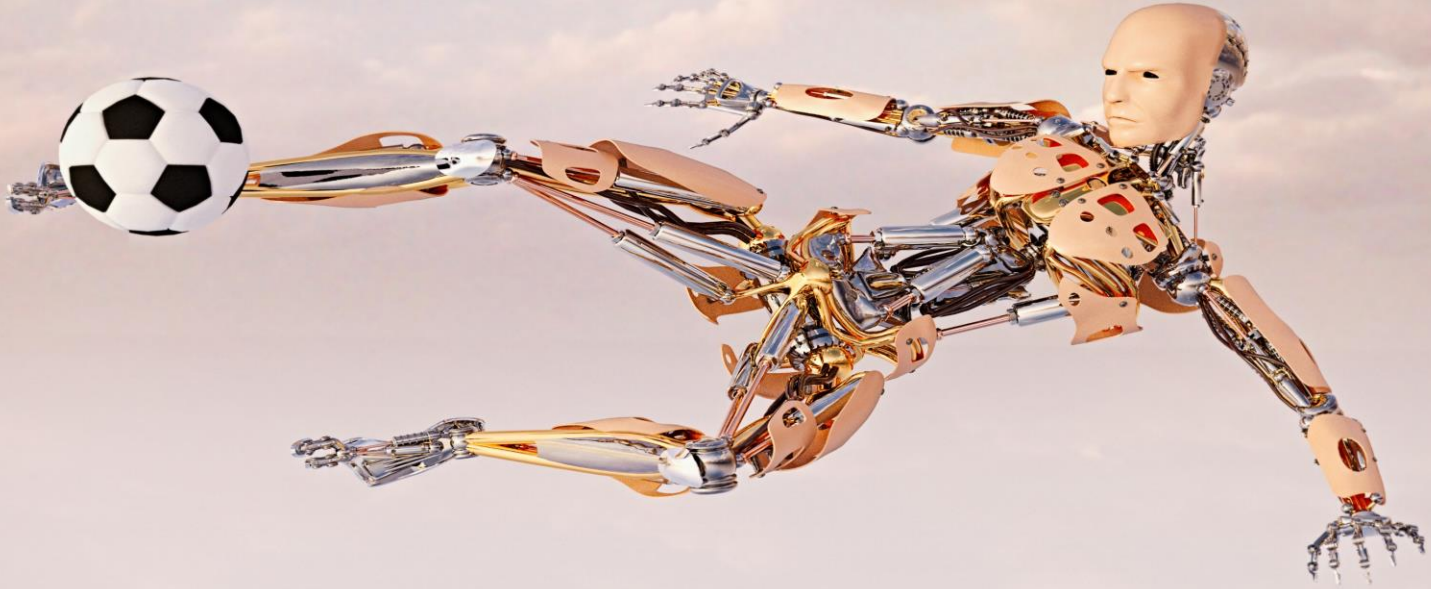


SAS Visual Analytics
2012
Visualization (BI), data
exploration and
analytics in one
application. Great
visuals and extremely
easy to use

DATA VISUALIZATION IN SAS VISUAL ANALYTICS



DATA VISUALIZATION IS AN ART



*What, How and Why
Storytelling*

BEST VISUALIZATION EVER CREATED (1869)

Carte Figurative des pertes successives en hommes de l'Armée Française dans la campagne de Russie 1812-1813.
 Dessiné par M. Minard, Inspecteur Général des Ponts et Chaussées en retraite. Paris, le 20 Novembre 1869.

Les nombres d'hommes présents sont représentés par les largeurs des zones colorées à raison d'un millimètre pour dix mille hommes; ils sont de plus écrits en travers des zones. Le rouge désigne les hommes qui ont été en Russie, le noir ceux qui en sortent. Les renseignements qui ont servi à dresser la carte ont été puisés dans les ouvrages de M. M. Chiers, de Légué, de Fezensac, de Chambray et le journal inédit de Jacob, pharmacien de l'Armée depuis le 23 Octobre. Pour mieux faire juger à l'œil la diminution de l'armée, j'ai supposé que les corps du Prince Jérôme et du Maréchal Davout qui avaient été détachés sur Minsk et Mohilow et ont rejoint vers Oescha et Witebsk, avaient toujours marché avec l'armée.

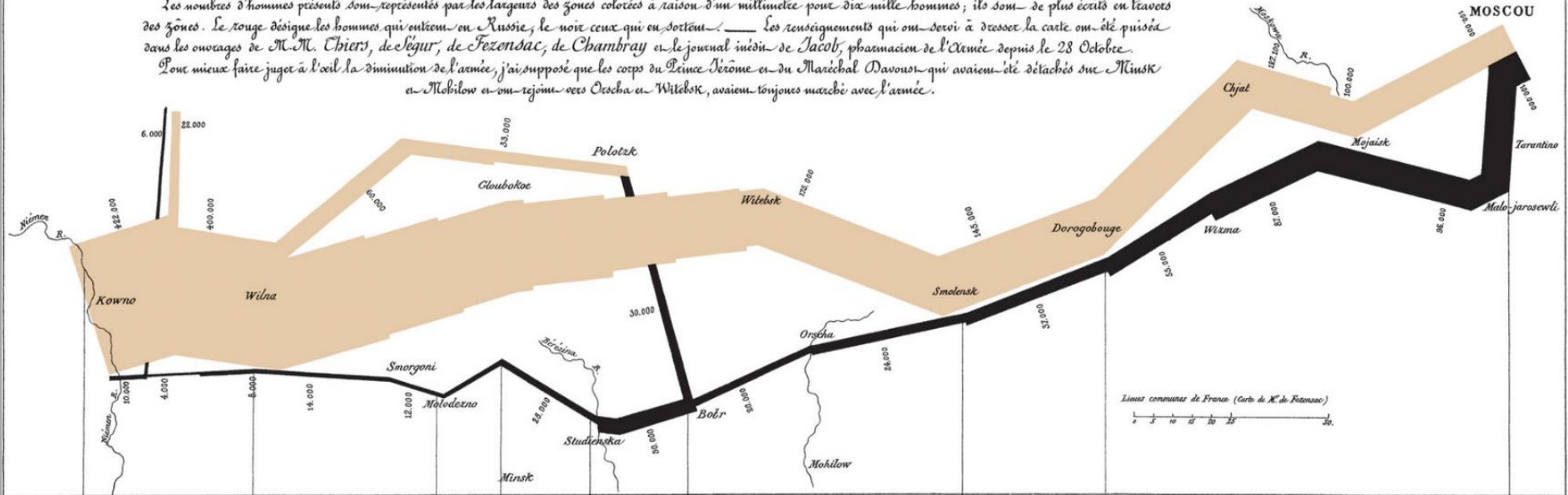
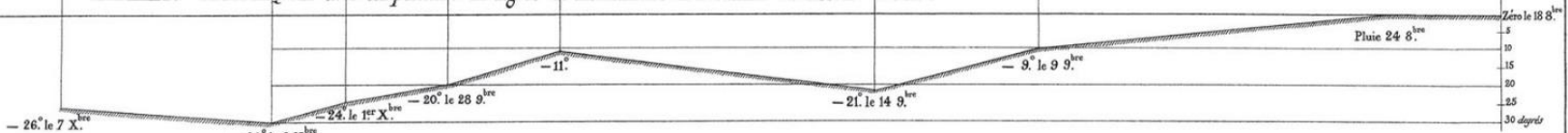


TABLEAU GRAPHIQUE de la température en degrés du thermomètre de Réaumur au dessous de zéro.

Les Cosaques passent au galop le Nilman gelé.



Geography, time, temperature, the course and direction of the army's movement, and the number of troops remaining

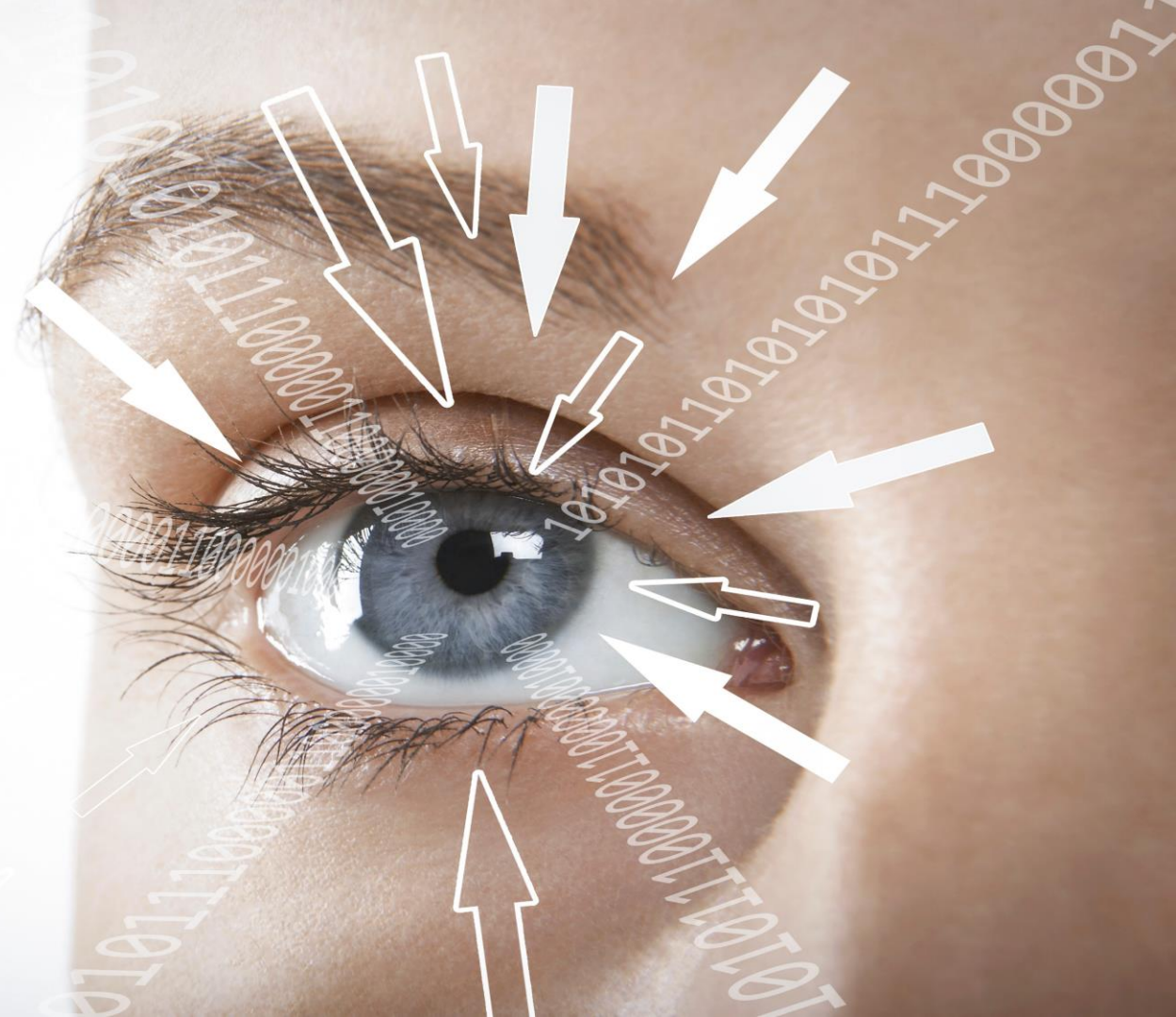
Hans Rosling in action, the master of storytelling



THE EYE

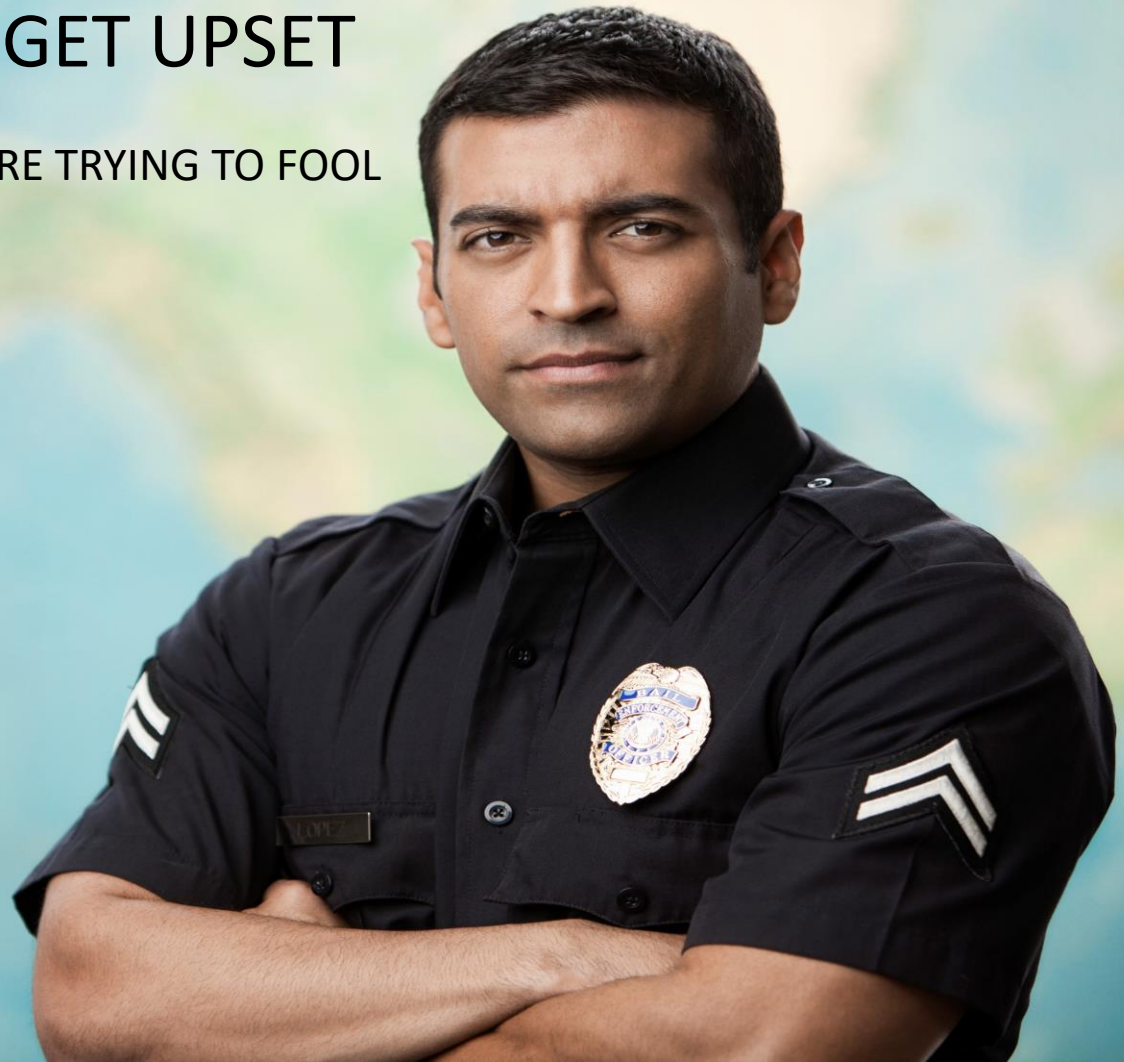
FANTASTIC
INTEPRETATION TOOL

DO NOT TRY TO FOOL IT



SOMETIMES I CAN GET UPSET

I DO NOT LIKE WHEN PEOPLE ARE TRYING TO FOOL
THEIR AUDIENCE...





DRIVEN BY DATA

Data drives me towards better results



Track	Start Date	CyclingTime	Altitude in Meters	Cadence	Cycling Time from Start (Seconds)	Distance in Meters	Latitude Degrees	Longitude Degrees	Speed (km/h)	Total Cycling Time Seconds	Watts
Campolongo Pordoi Sella Gardena	7 april 2018	7:21:05	1435	71	1	8.84	46,578397	11,897053	19,404	9 748	92
Campolongo Pordoi Sella Gardena	7 april 2018	7:21:06	1435,1	70	2	13,5	46,578375	11,897001	15,804	9 748	92
Campolongo Pordoi Sella Gardena	7 april 2018	7:21:07	1435,2	67	3	17,2	46,578357	11,896961	12,6	9 748	102
Campolongo Pordoi Sella Gardena	7 april 2018	7:21:08	1435,3	68	4	20,7	46,57834	11,896922	12,6	9 748	102
Campolongo Pordoi Sella Gardena	7 april 2018	7:21:09	1435,4	69	5	24,95	46,578319	11,896875	16,2	9 748	159
Campolongo Pordoi Sella Gardena	7 april 2018	7:21:10	1435,5	67	6	29,95	46,578295	11,896882	18	9 748	159
Campolongo Pordoi Sella Gardena	7 april 2018	7:21:11	1435,6	67	7	34,9	46,578271	11,896766	17,604	9 748	156
Campolongo Pordoi Sella Gardena	7 april 2018	7:21:12	1435,7	67	8	39,8	46,578248	11,896712	17,604	9 748	156
Campolongo Pordoi Sella Gardena	7 april 2018	7:21:13	1435,9	67	9	44,75	46,578224	11,896657	18	9 748	160
Campolongo Pordoi Sella Gardena	7 april 2018	7:21:14	1435,9	67	10	47,26	46,578212	11,896629	18	9 748	160
Campolongo Pordoi Sella Gardena	7 april 2018	7:21:15	1436,1	69	11	55	46,578174	11,896544	19,008	9 748	173
Campolongo Pordoi Sella Gardena	7 april 2018	7:21:16	1436,3	69	12	60,2	46,578149	11,896487	19,008	9 748	173
Campolongo Pordoi Sella Gardena	7 april 2018	7:21:17	1436,4	67	13	65,8	46,578122	11,896425	20,088	9 748	187
Campolongo Pordoi Sella Gardena	7 april 2018	7:21:18	1436,5	67	14	71,4	46,578095	11,896363	20,088	9 748	187
Campolongo Pordoi Sella Gardena	7 april 2018	7:21:19	1436,7	66	15	77	46,578068	11,896302	20,088	9 748	187
Campolongo Pordoi Sella Gardena	7 april 2018	7:21:20	1436,8	66	16	82,6	46,578041	11,89624	20,088	9 748	187
Campolongo Pordoi Sella Gardena	7 april 2018	7:21:21	1437	66	17	88,05	46,578015	11,89618	19,008	9 748	173
Campolongo Pordoi Sella Gardena	7 april 2018	7:21:22	1437,1	66	18	93,35	46,577989	11,896122	19,008	9 748	173
Campolongo Pordoi Sella Gardena	7 april 2018	7:21:23	1437,2	66	19	98,6	46,577964	11,896064	18,684	9 748	169

Analys Cykling med Karta



Cycling Analytics : Map View Cycling Data My Use Case

Rouvy Route Analyzer

Select Route

- Campolongo Pordoi Sella Gardena
- CFL Sprint Triathlon #4
- Luz-Saint Sauveur
- Mount-Royal
- Saint-Lazare
- YNP Norris to Mammoth

Select Date

- 3 november 2017
- 4 november 2017

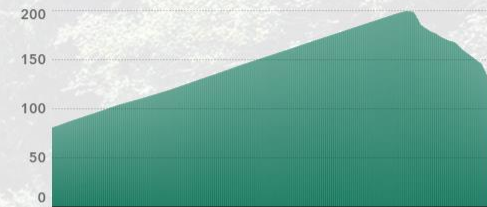
Speed (km/h)
18,01

Watts
205

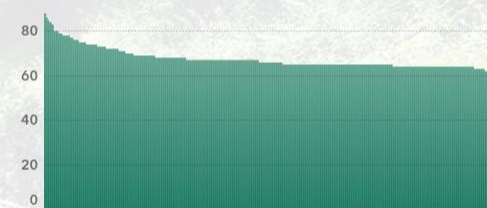
Total Cycling Time (sec)
662

Cadence
67,6

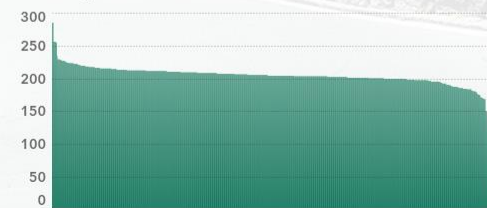
Altitude in Meters by Time in Seconds



Cadence by Time in Seconds



Watts by Time in Seconds



Analys Cykling med Karta



Cycling Analytics

Map View

Cycling Data

My Use Case

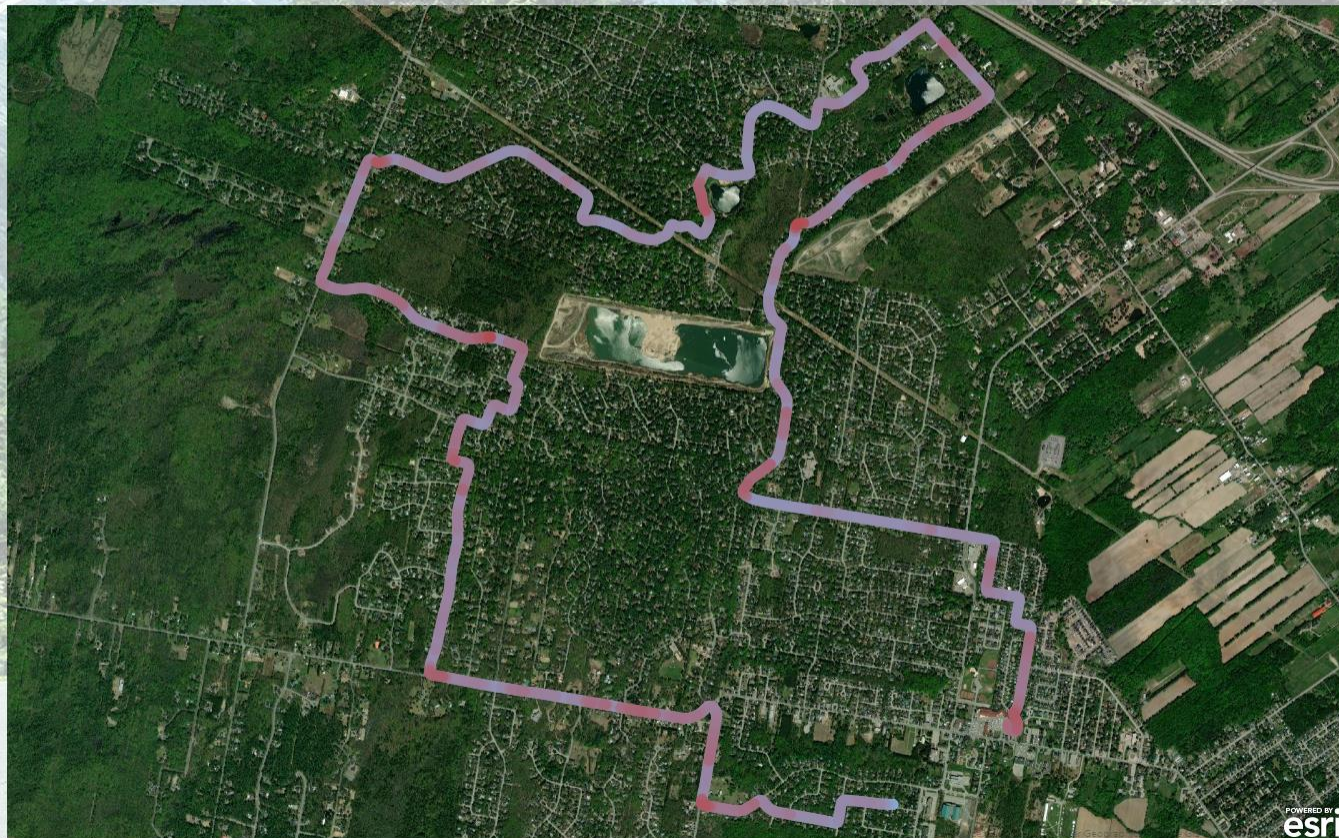
Map Analyzer

Select Route

- Campolongo Pordoi Sella Gardena
- CFL Sprint Triathlon #4
- Luz-Saint Sauveur
- Mount-Royal
- Saint-Lazare
- YNP Norris to Mammoth

Select Date

- 15 mars 2018
- 4 april 2018
- 17 april 2018



Analys Cykling med Karta



Cycling Analytics

Comparing Activities

Map View

Cycling Data

My Use Case

Comparing Activities

3 november 2017

4 november 2017

Select Route

- Campolongo Pordoi Sella Gardena
- CFL Sprint Triathlon #4
- Luz-Saint Sauveur
- Mount-Royal
- Saint-Lazare
- YNP Norris to Mammoth

Time (sec): 662, Watts (avg. 205)

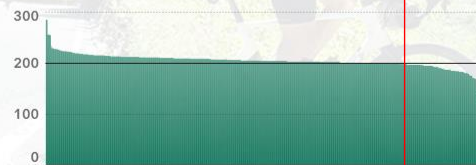
Altitude in Meters by Time in Seconds



Cadence by Time in Seconds



Watts by Time in Seconds



Time (sec): 637, Watts (avg. 180)

25 seconds faster

Altitude in Meters by Time in Seconds



Cadence by Time in Seconds



Watts by Time in Seconds



Even one data point can provide value as long
as it ignites action and the eager to explore
insights further.

Petri & Kalle



TACK NORGE



Ha en trevlig sommar 😊

