

LUCIAD

GE 
Intelligence

Asia Pacific Forum

THE DATA
they are

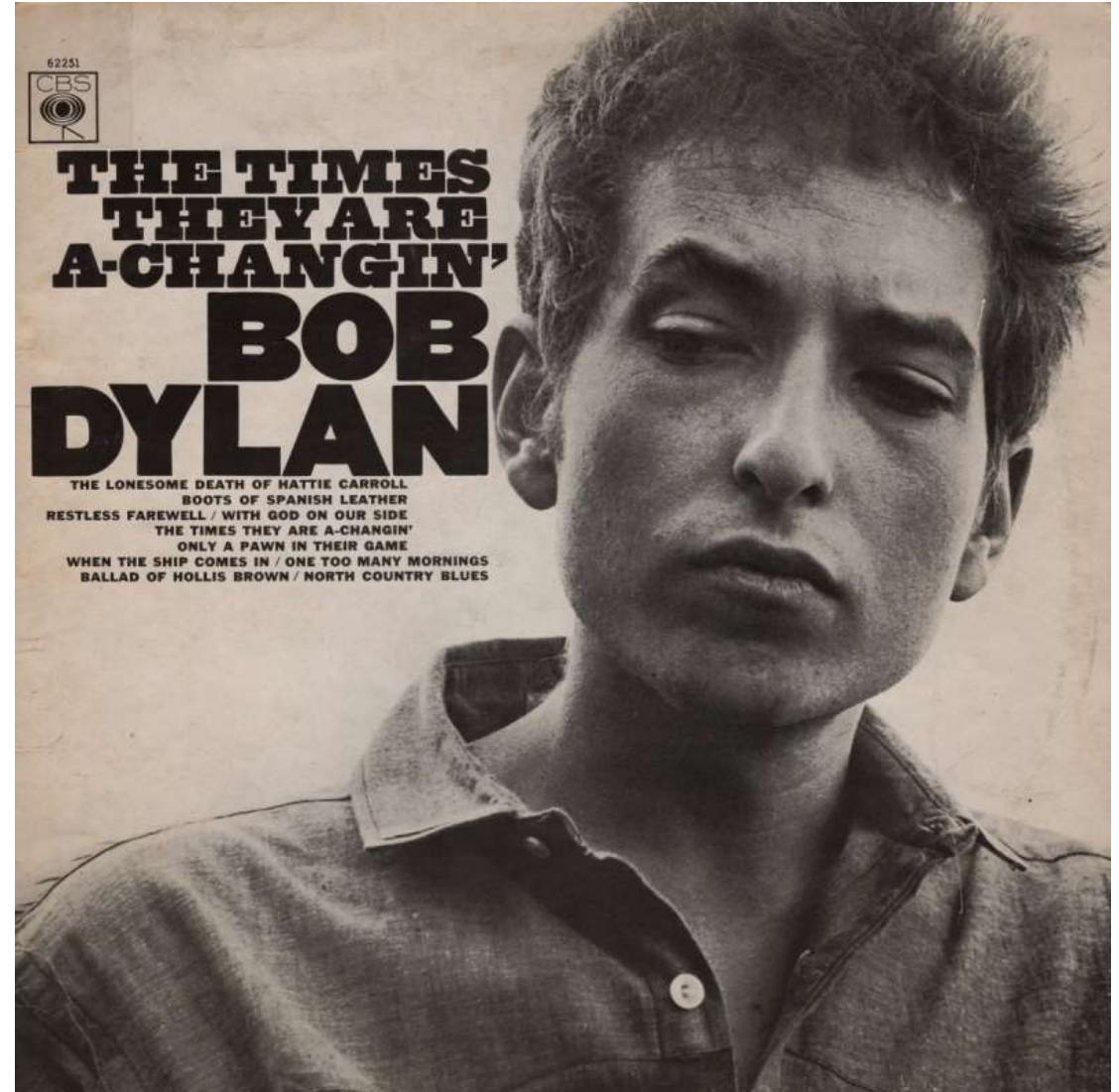
A-CHANGIN'

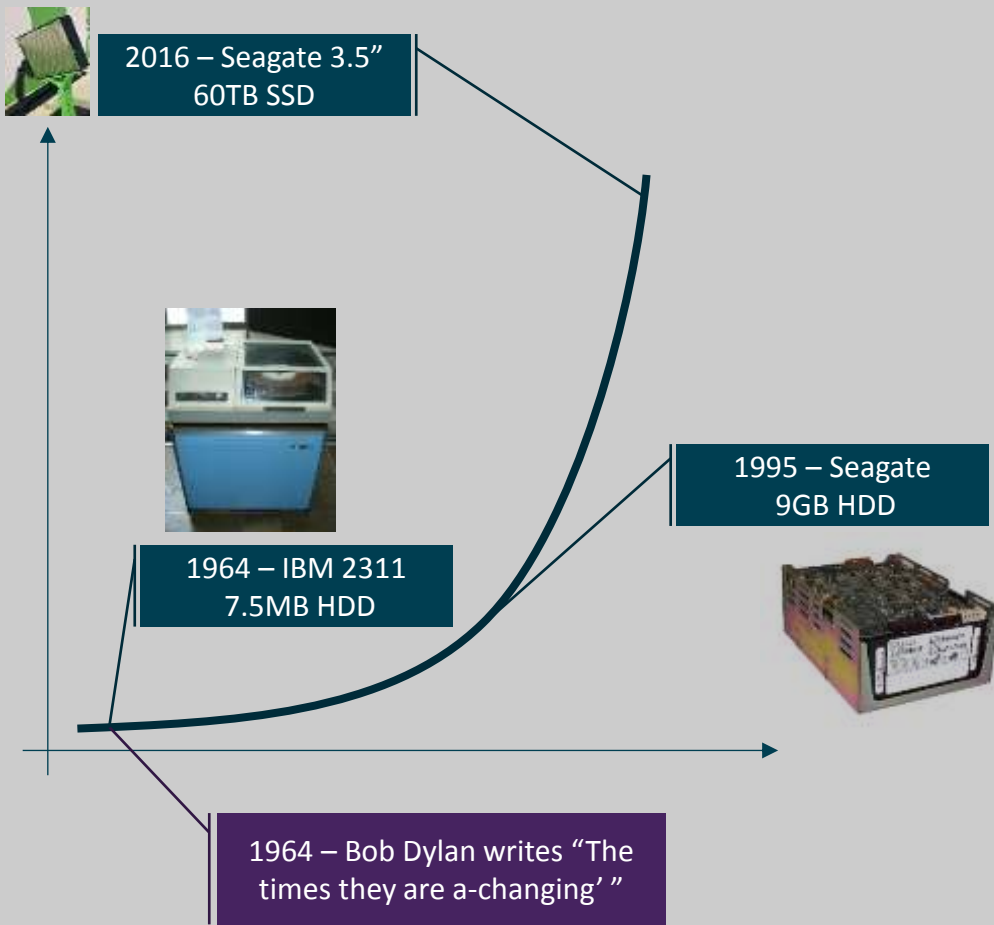
*Frank Suykens
Chief Technology Officer*

The Data They Are a-Changin'

*Come gather 'round people
Wherever you roam
And admit that the **data**
Around you have grown
And accept it that soon
You'll be drenched to the bone
If your **data** to you
Are worth savin'
Then you better start swimmin'
Or you'll sink like a stone
For the **data** they are a-changin'.*

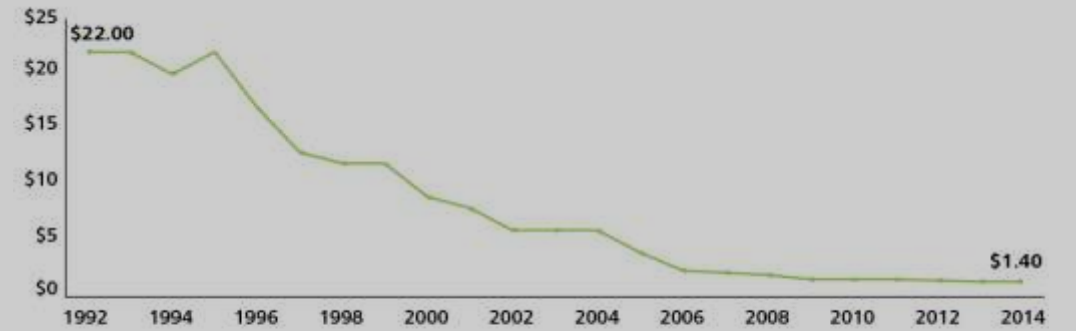
-Free after Bob Dylan





Cheap **storage**

Figure 5. Sensors prices on the decline over the last 25 years



Source: Rob Lineback, IC Insights Inc. "The market for next-generation microsystems: More than MEMS1," http://itac.ca/uploads/events/execforum2010/rob_lineback_10-6-10-2.ppt, June 10, 2010, accessed January 28, 2015; Lee Simpson and Robert Lamb, *IoT: Looking at sensors*, Jeffries Equity Research, February 20, 2014, p. 4.

Note: Prices shown above are average selling prices for image sensors and accelerometers.

Graphic: Deloitte University Press | DUPress.com

Cheaper, smaller **sensors**



WE STORE EVERYTHING

Keeping a history of most data



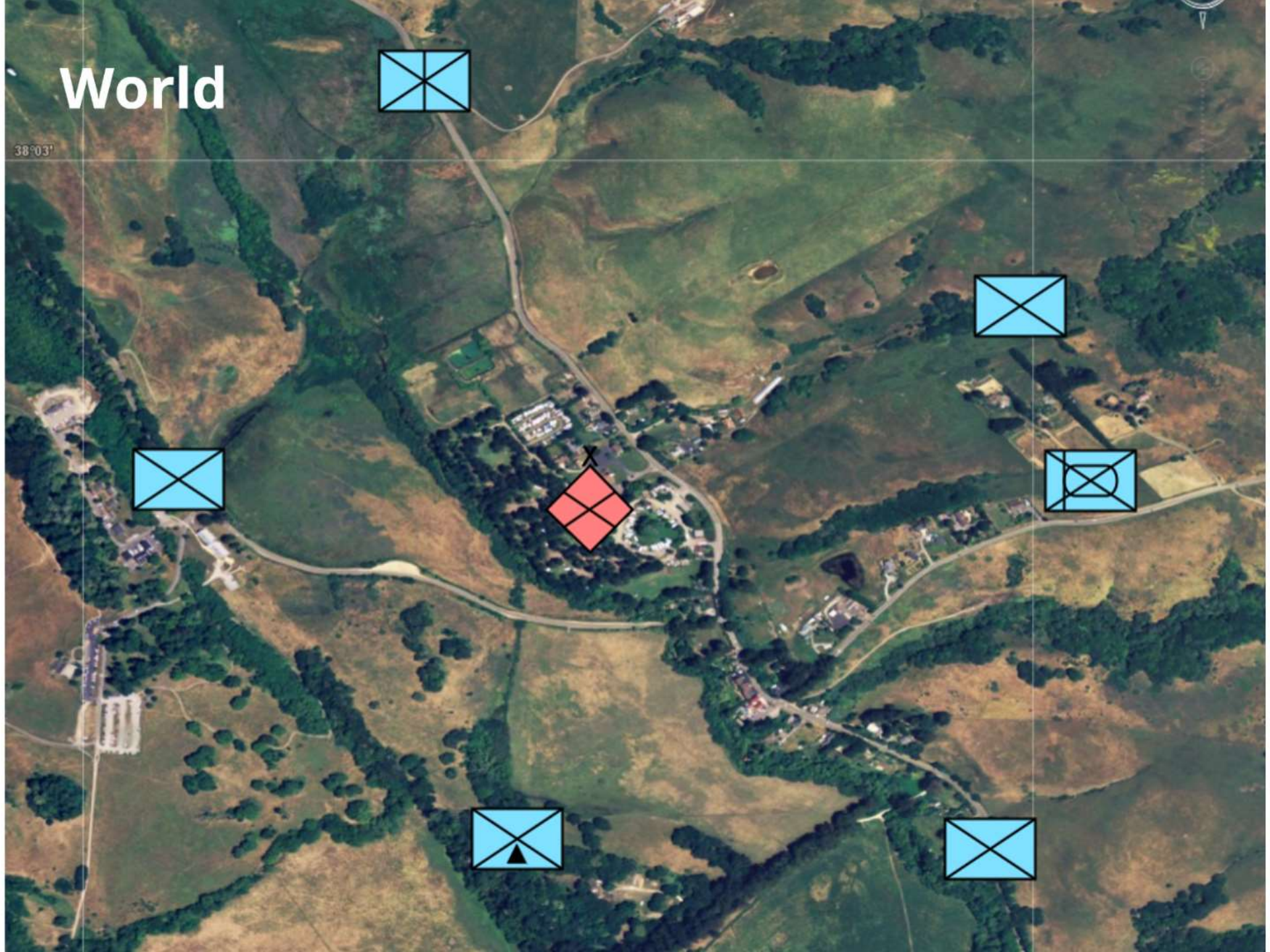
WE TRACK EVERYTHING

Real-time data

TIME is the
most important dimension
of geospatial
data

World

38°03'



dWorld

dt

38°03'



How can we make

time & **CHANGE**

visible

to users?

Carte Figurative des pertes successives en hommes de l'Armée Française dans la campagne de Russie 1812-1813.

Dressée 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 traits des zones. Le rouge désigne les hommes qui ont été en Russie, le noir ceux qui en sont sortis. — Les renseignements qui ont servi à dresser la carte ont été puisés dans les ouvrages de M. M. Chiers, de Ségur, de Fezensac, de Chambray et le journal inédit de Jacob, pharmacien de l'Armée depuis le 28 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 Orscha et Witebsk, avaient toujours marché avec l'armée.

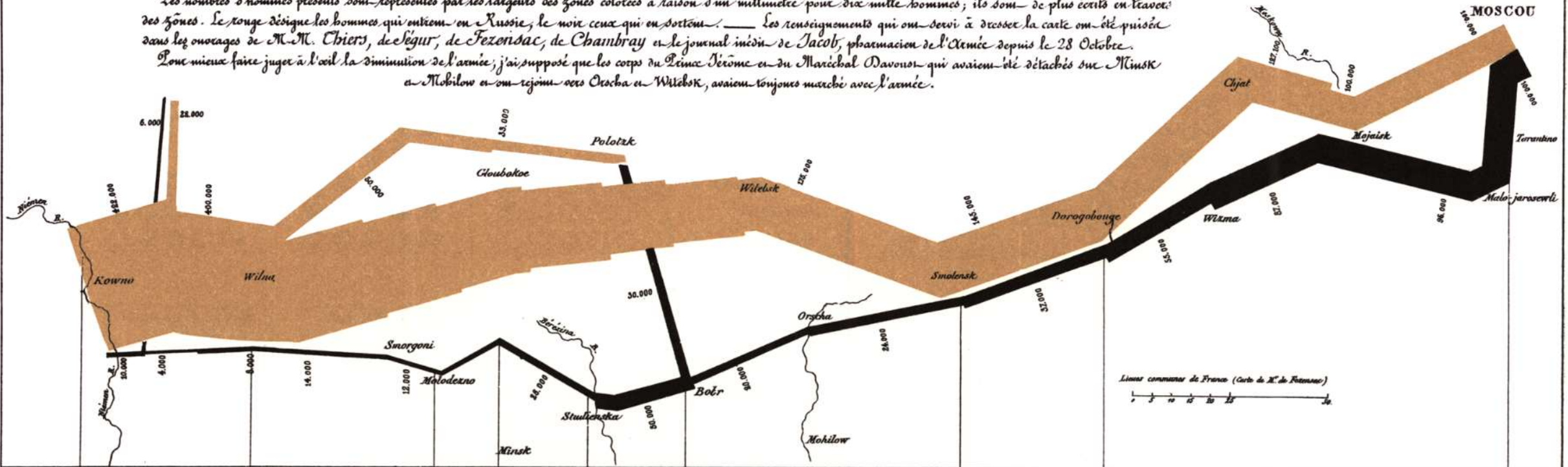
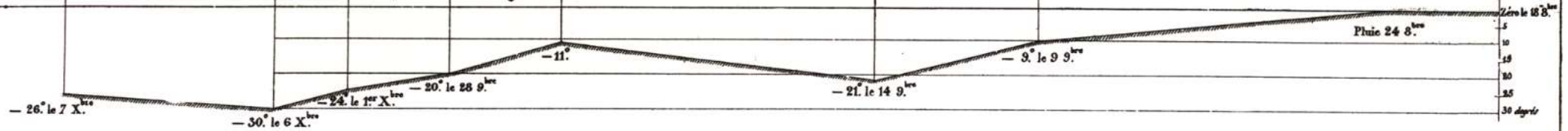
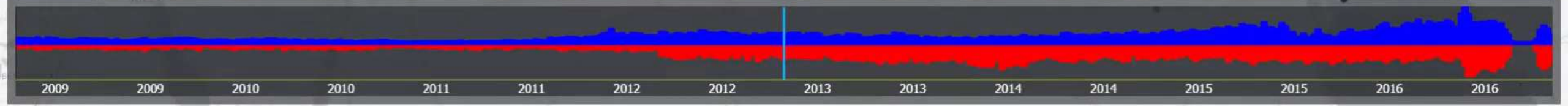
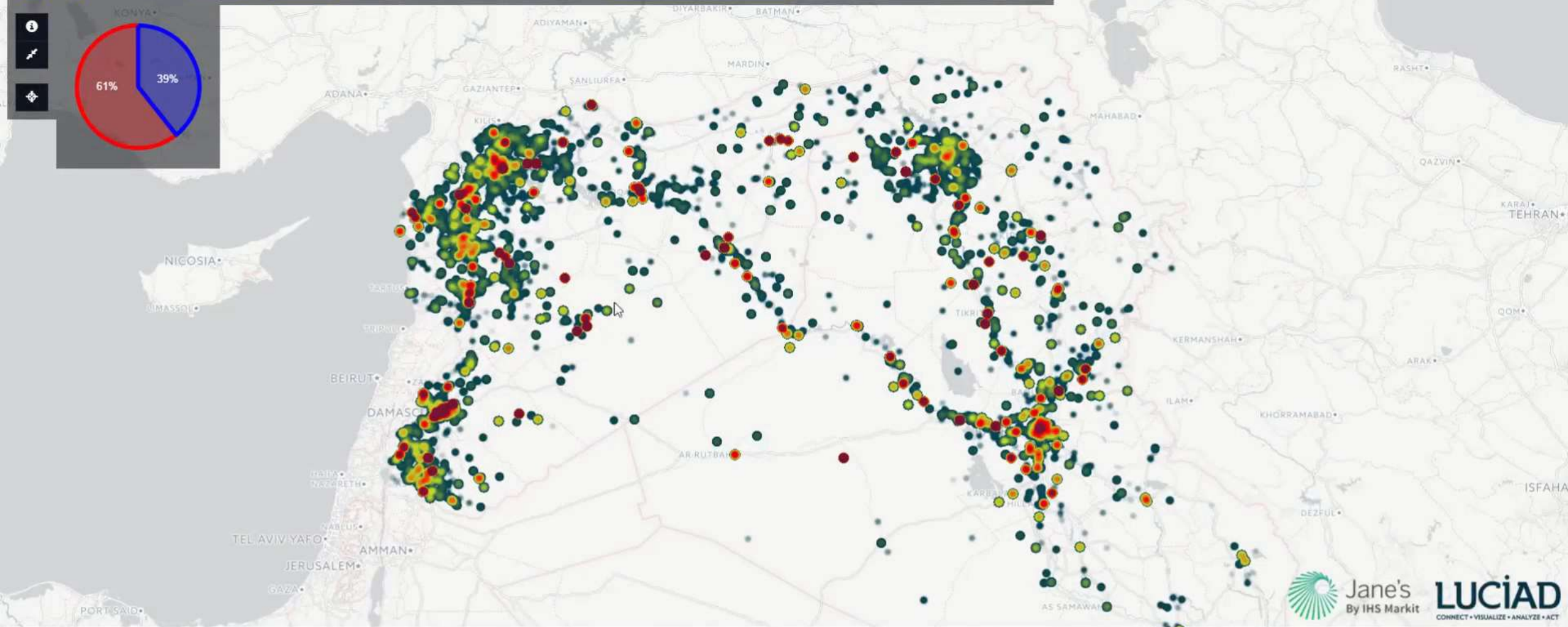
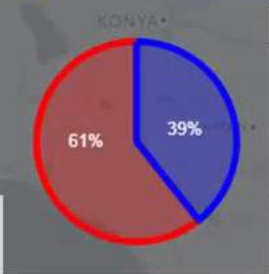
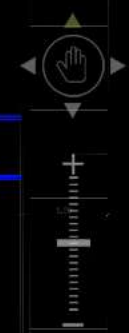
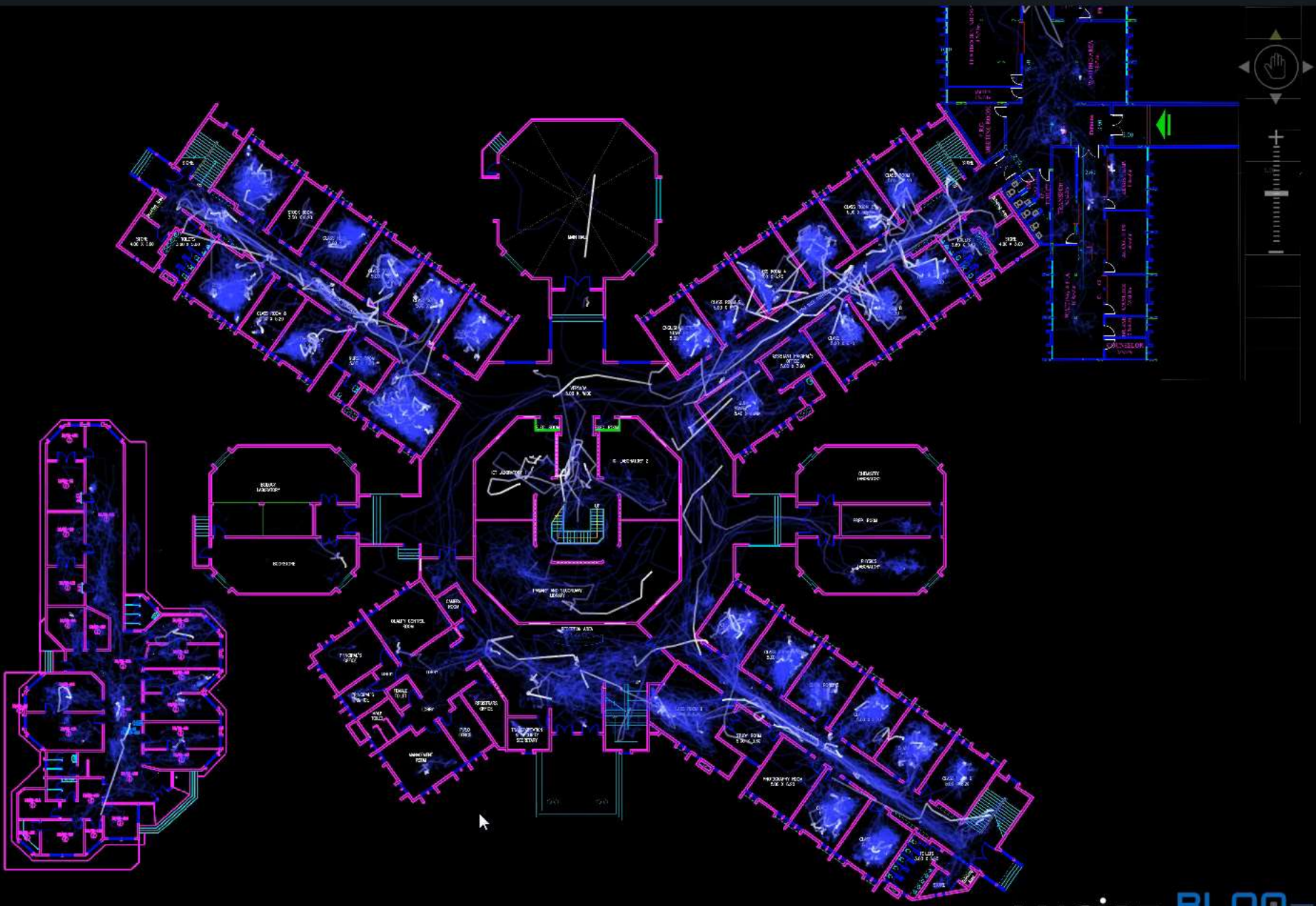


TABLEAU GRAPHIQUE de la température en degrés du thermomètre de Réaumur au dessous de zéro.

Les Cosaques passent au galop le Niémer gelé.







- Layers**
- Trajectories
 - Trajectory
 - Plots
 - Level of service
 - Sectors
 - Floor plan

PRE-SCHOOL

LUCIAD BLOO-LOC



Technological enablers for dealing with temporal data

- Native, real-time data sources – No ETL
- Decouple data from representation – No precooked maps
- Flexibly combine multiple data sources – No fixed layers
- Standards based components – with API
- Interactive visualization – 2D, 3D, 4D

ACT



VISUALIZE · ANALYZE



CONNECT



Multiple data sources, real-time feeds, sensors, simulations, OGC and other services.
With Luciad, connect, visualize and analyze your data on any platform.

A background graphic consisting of a network of interconnected nodes and lines. The nodes are represented by circles of varying sizes and colors, including dark purple, light purple, and grey. The lines are thin and light grey, creating a web-like structure across the entire image.

YOUR USERS NEED

time.

A vibrant, futuristic cityscape at night. The background features a tall, illuminated skyscraper with a distinctive top section. The foreground is dominated by a curved, elevated roadway or bridge structure with a grid-like pattern on its underside, illuminated with blue and red lights. Light trails from moving vehicles create streaks of white, red, and blue across the lower portion of the image. The overall atmosphere is dynamic and modern.

THANK YOU

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