



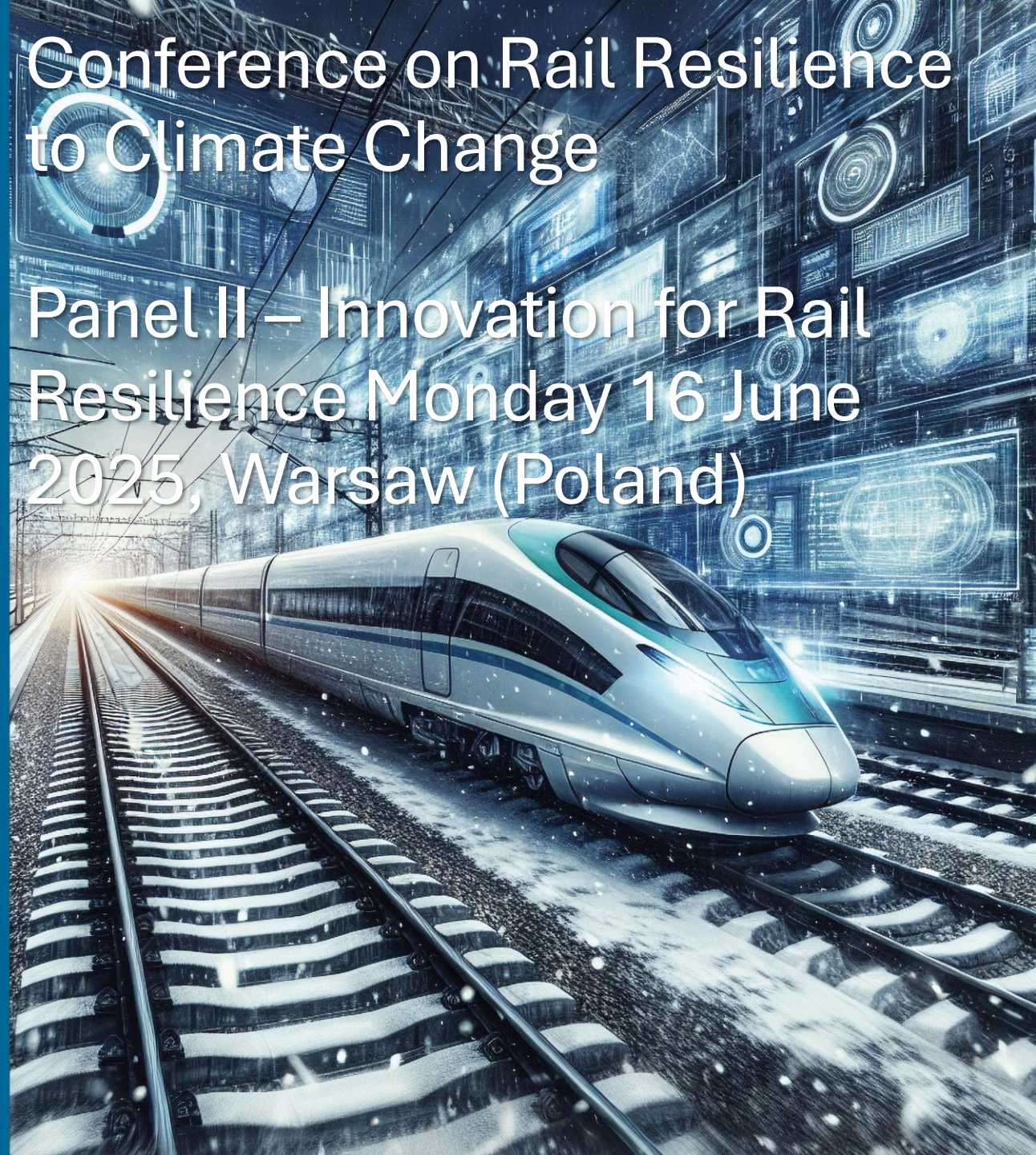
DATATHON

21 & 22 mai 2025

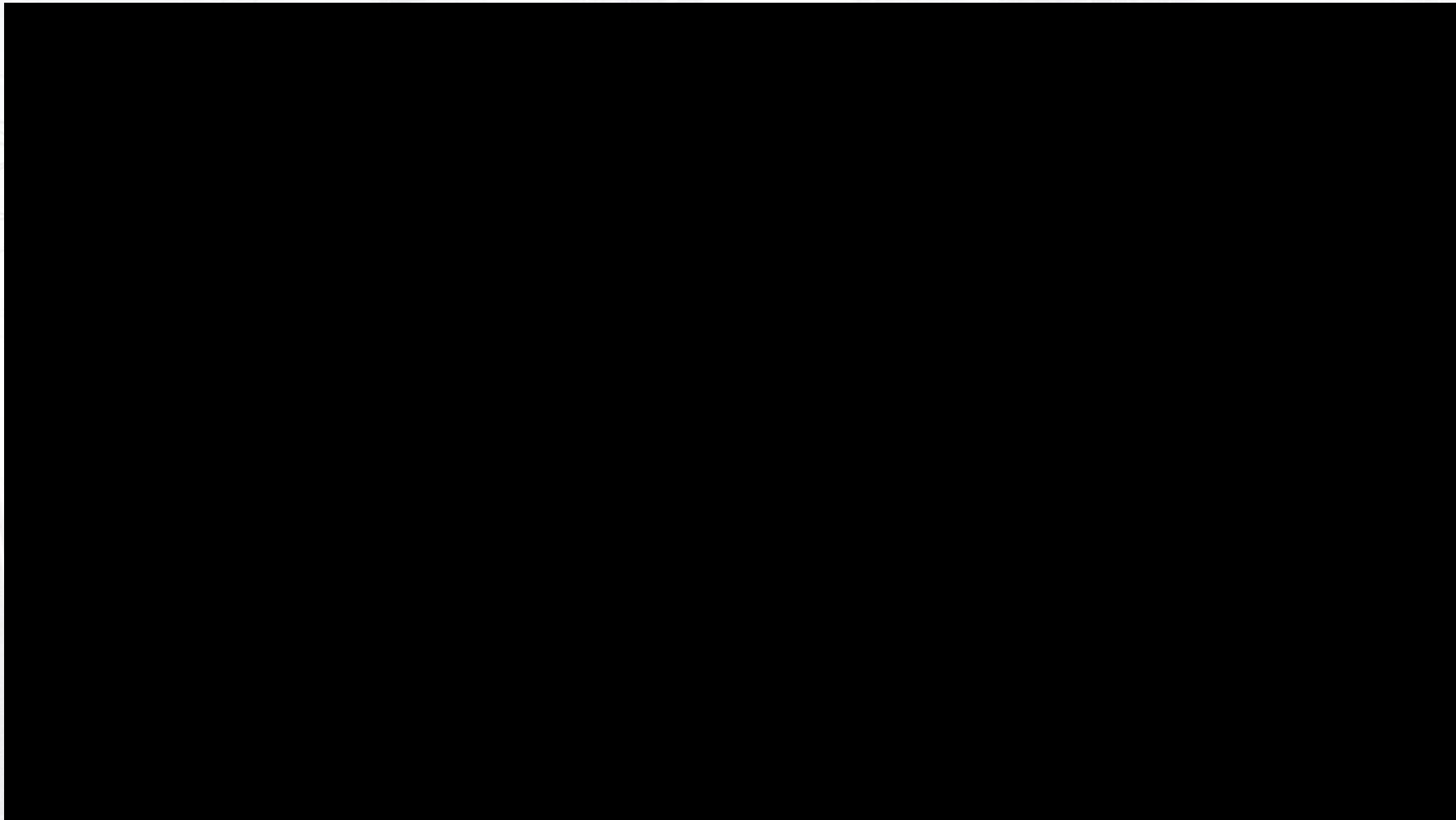


Conference on Rail Resilience
to Climate Change

Panel II – Innovation for Rail
Resilience Monday 16 June
2025, Warsaw (Poland)



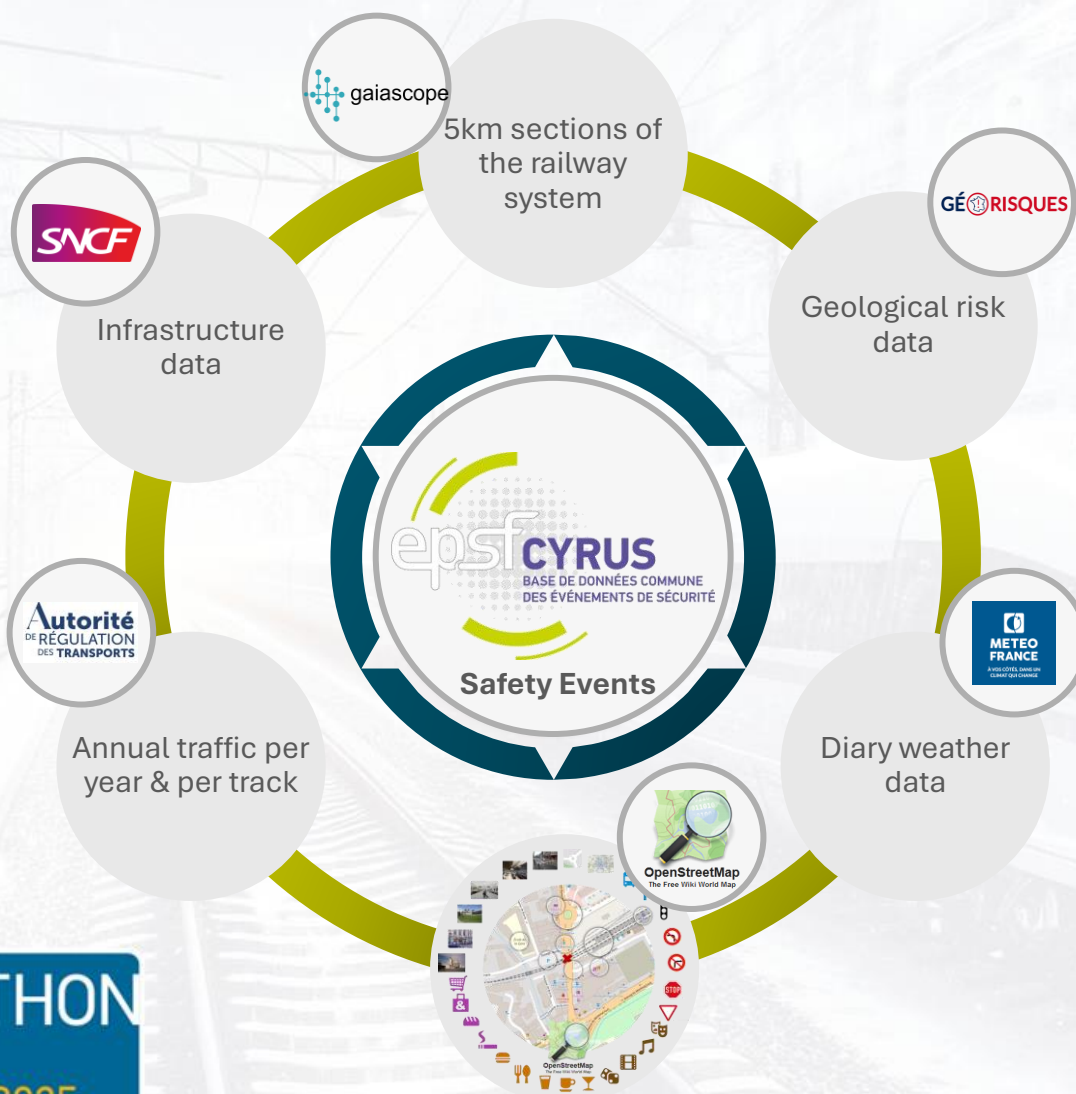
The Datathon (21-22 May 2025)



DATATHON



The reasons and methods used



Goals:

- Thanks to both railway & data experts from various sectors, better understand the impact of climate change on railway risks to anticipate them more effectively in the future

Datathon:

- 1 topic : Developing predictive models to facilitate the supervision activities of NSA and Railway entities
- 7 teams composed of 5 data scientists, 1 railway expert & 1 coordinator
- 2 days of intensive work in Paris
- Prestigious jury deliberating the winners

Methods:

- Provide exclusive access to the national safety events data base, crossed with a large amount of contextual data
- Providing access to a cloud computing solution (AWS)

DATATHON



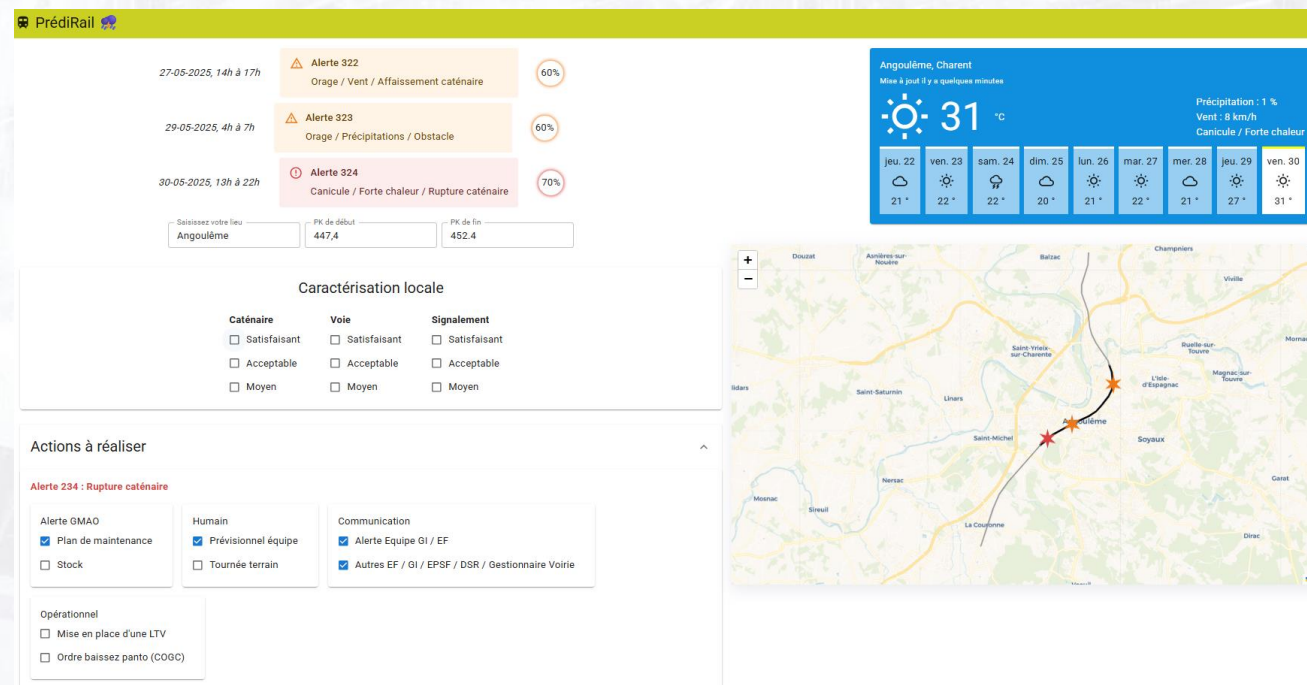
~16k events selected from 2021 to 2024

First results and prospectives

The heatwave team won with its "PREDIRAIL" solution:

- Best operational anchoring
- Use case for predicting tree falls on the track
- Useful features as weather alert, impacted area, infrastructure maintenance context, list of actions to be taken

All other solutions will be thoroughly studied for inclusion in our own safety analyses



This event has been a great opportunity to highlight NSA activities

Most of the attendees gave us excellent feedbacks even if they claimed the lack of time

➔ EPSF will organise another data event very soon !

DATATHON

