

# Status update & Overview of collected hydrographic data on the common sector (as a basis for the 1D model)



Republic of Serbia  
Ministry of Construction, Transport and Infrastructure  
Directorate for Inland Waterways

7th Stakeholder's Forum Meeting (Online)  
Thu, **31. January 2023** (09:00-11:30 CEST)

# Current status of the modelling activity

- Expectations from the previous SHFM that the procurement process would be completed by November were obviously too optimistic.
- High-level negotiations between representatives of the EIB and the Government of the Republic of Serbia resulted in some processes being "unlocked".
- Comments on objections during the evaluation of LOT 2 have been sent to the EIB. A positive opinion is expected.
- The impact of the delay on the PF2W project is reflected in the need to reduce the previously planned time from 12 to 9 months in order to complete the project on time.

Guide to Procurement  
for projects financed  
by the EIB

# Collected hydrographic data



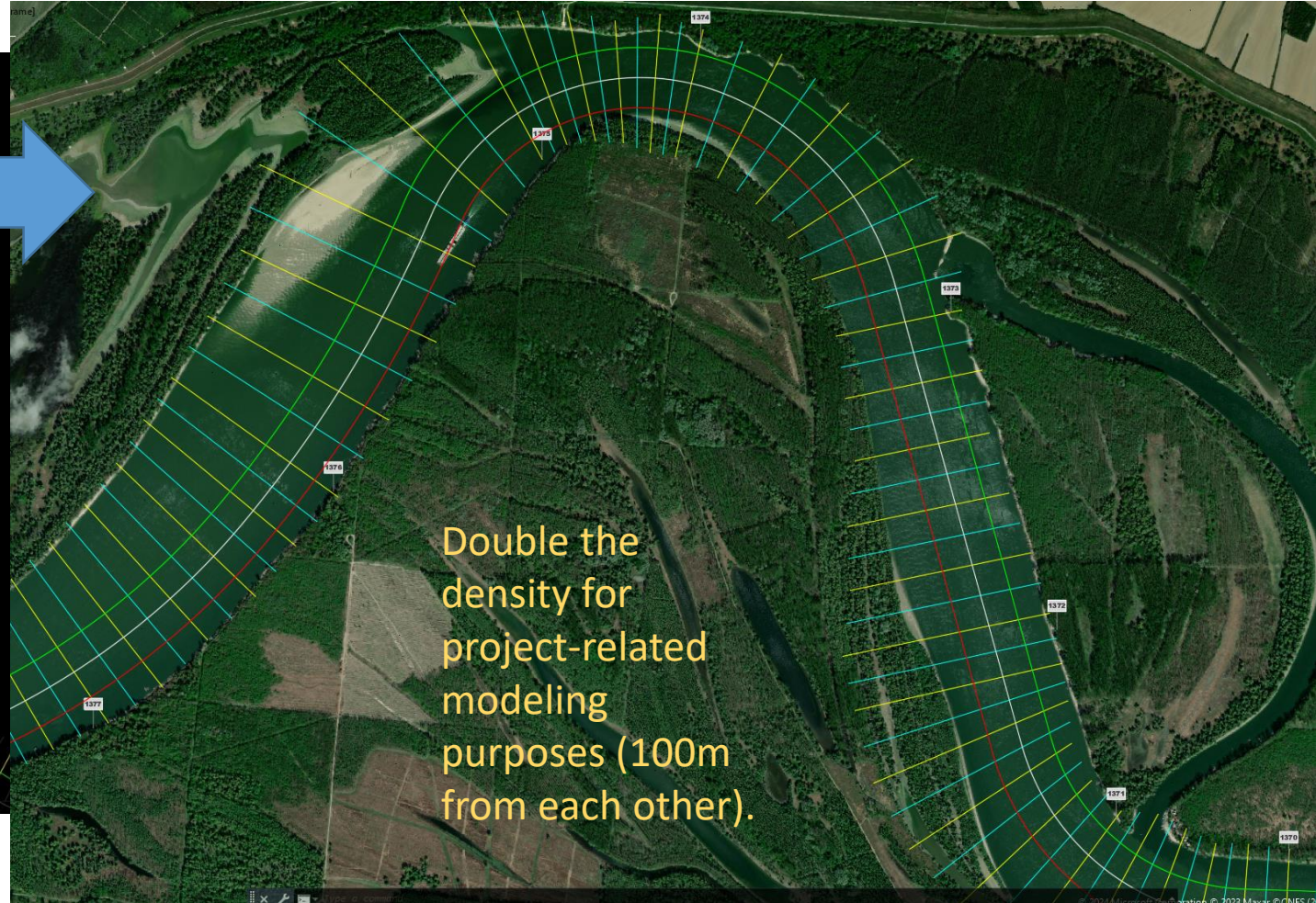
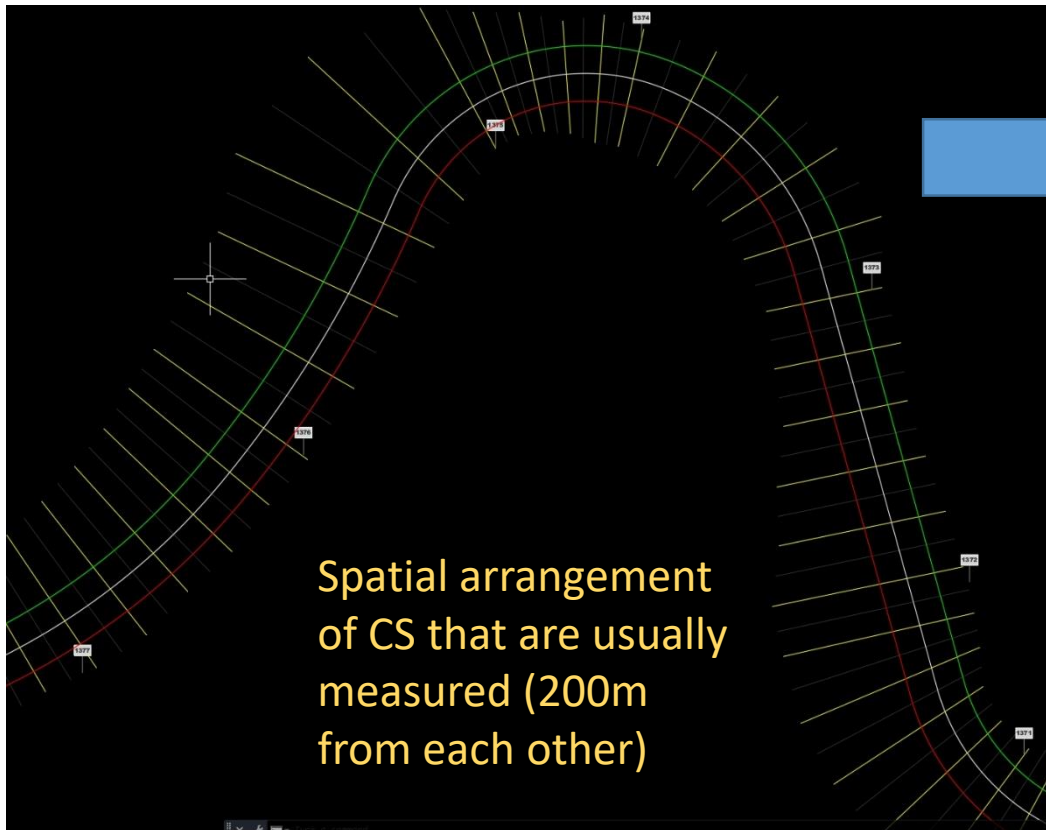
- Each planned Cross Sectional profile has been hydrographically measured and stored in an electronic database for later analysis.
- Total number of 1355 CS (688 NO + 687 DP)

<input type="checkbox"/> ID profila (delimiter: , )	Vrsta profila:
<input type="text"/>	136 <input type="checkbox"/> Evidencioni (EP)
Reka:	1059 <input type="checkbox"/> Kontrolni (KP)
Dunav	73 <input type="checkbox"/> Plicaci (PL)
Vrsta deonice:	84 <input type="checkbox"/> Zimovnici (ZM)
Cela duzina reke	688 <input checked="" type="checkbox"/> Novi -200m (NO)
Deonica:	687 <input checked="" type="checkbox"/> Dopunski -50m (DP)
Dunav	10 <input type="checkbox"/> Vodomeri (VS)
Uzvodna KM: 1433.000	7 <input type="checkbox"/> Mostovi (MO)
Nizvodna KM: 1295.600	40 <input type="checkbox"/> Sidrista (SI)
	Konv.

1355 CS



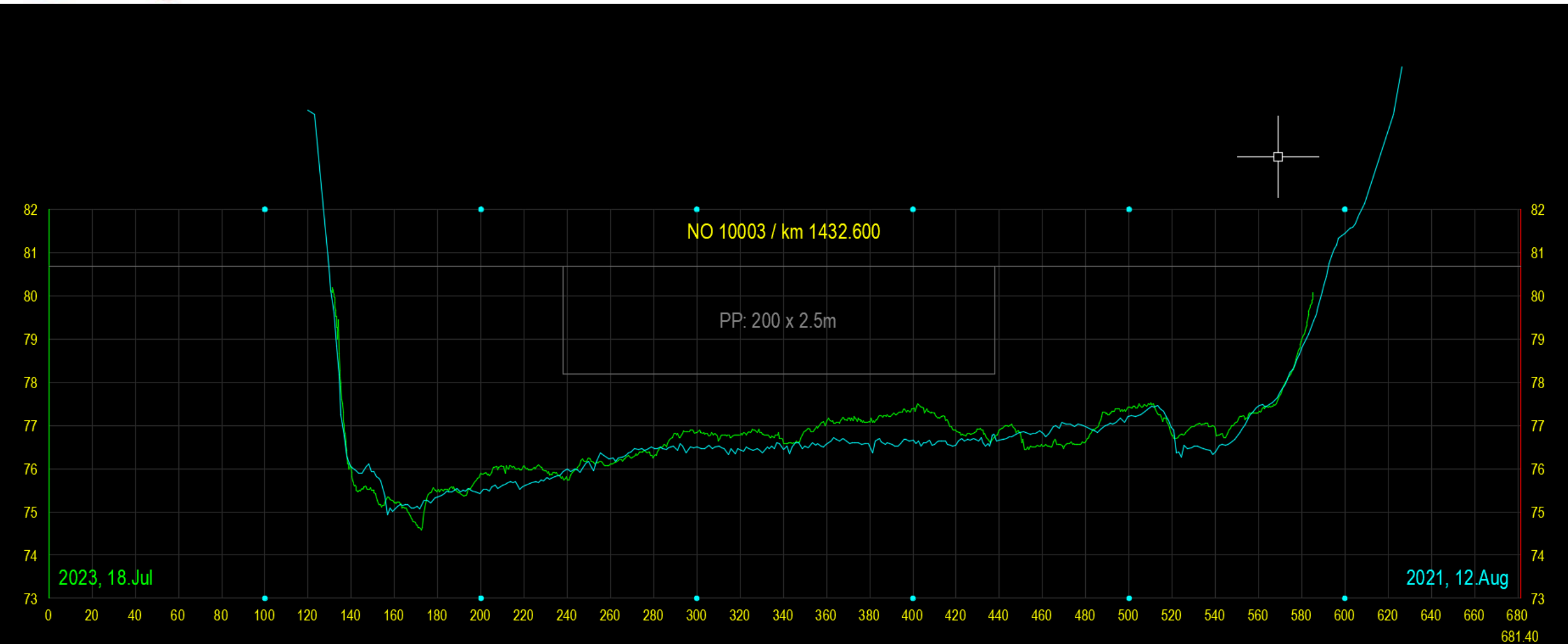
# Closer look at the cs layout



# Typical CS – newest survey

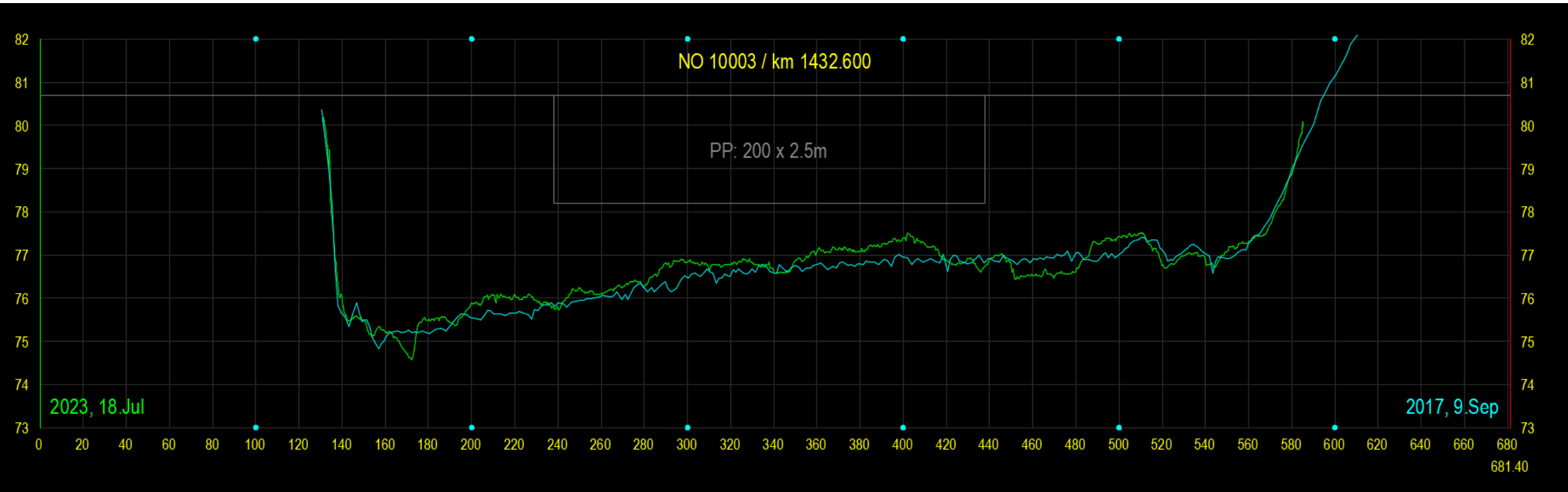


# Comparison with previous measurements

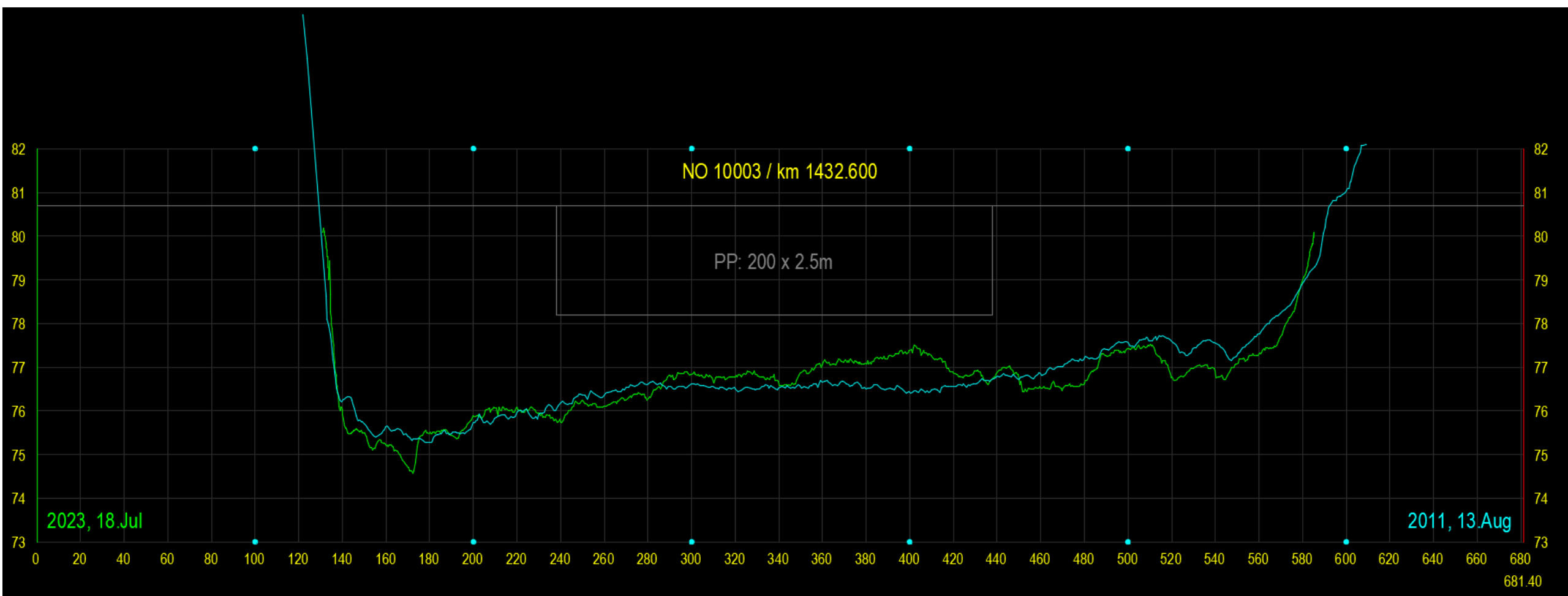




# Comparison with previous measurements



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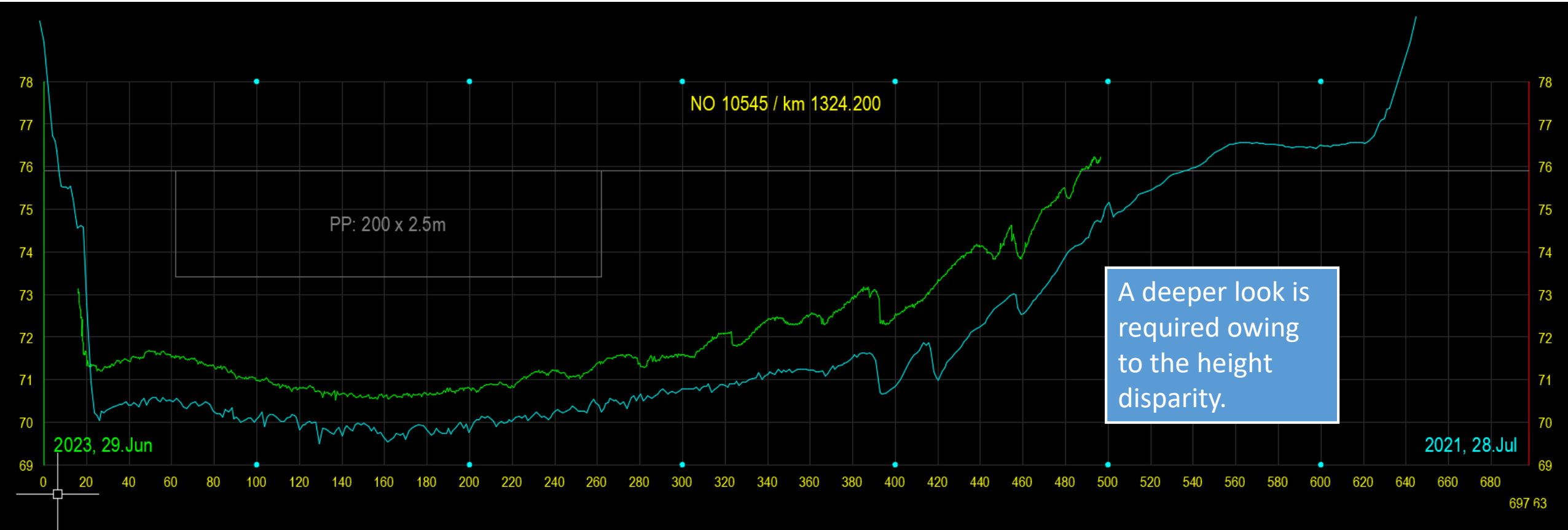


# Additional corrections



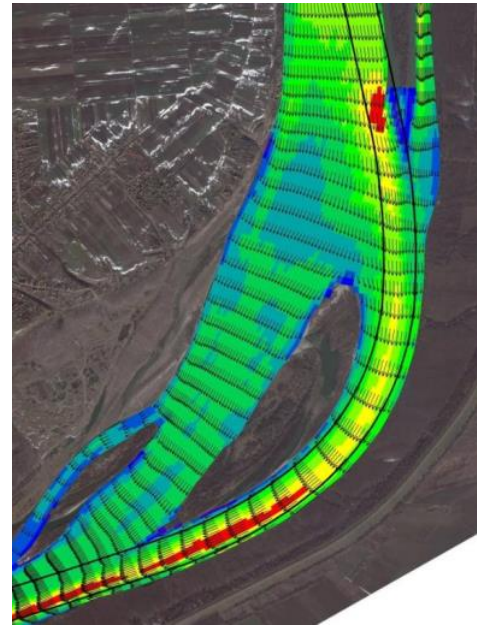
sawtooth-like  
CS shape

# Additional corrections



# 1D model

- 1D geometry file – most of the time we spend on creating this file (river connectivity, reaches, CS profiles, hydrolic structures, bridges, river banks etc.
- 1D flow (stedy/nosteady) file (flow and boundary conditions)
- 1D plan file (everything above) – 1D hydrolic simulation for multiple flow values (result: water surface elevetaion and velocity in each CS)



## Pros

- long time scales (10y, 50y)
- looking at large portion of the river
- looking at broad behaviour

## Cons

- difficult to capture changes at CS scale and discrete events
- we need to move to 2D

# Thank you for your kind attention

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