

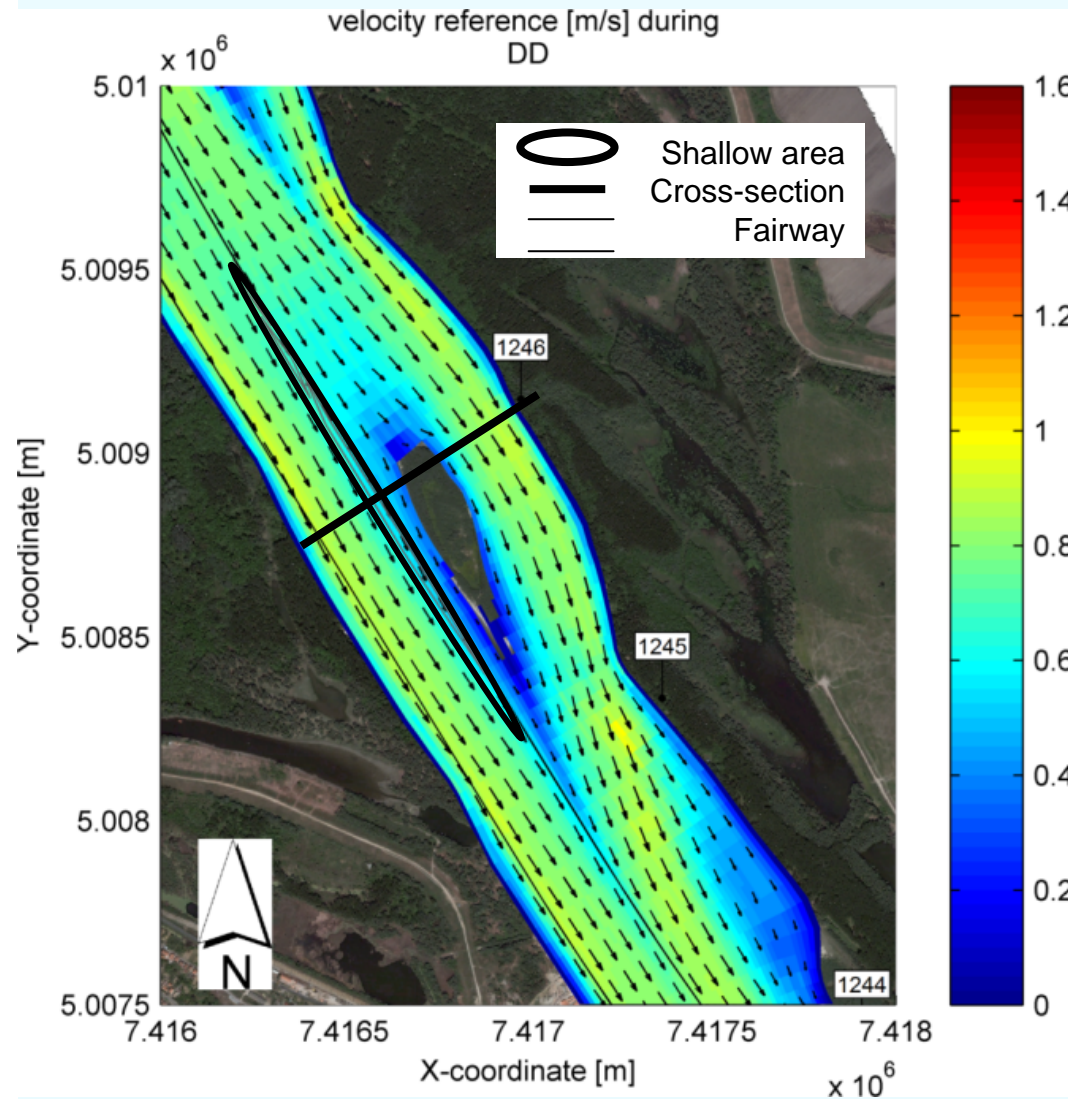
21. Sector – Arankina Ada (km 1,247-1,244.8)



21. Arankina Ada – Existing situation

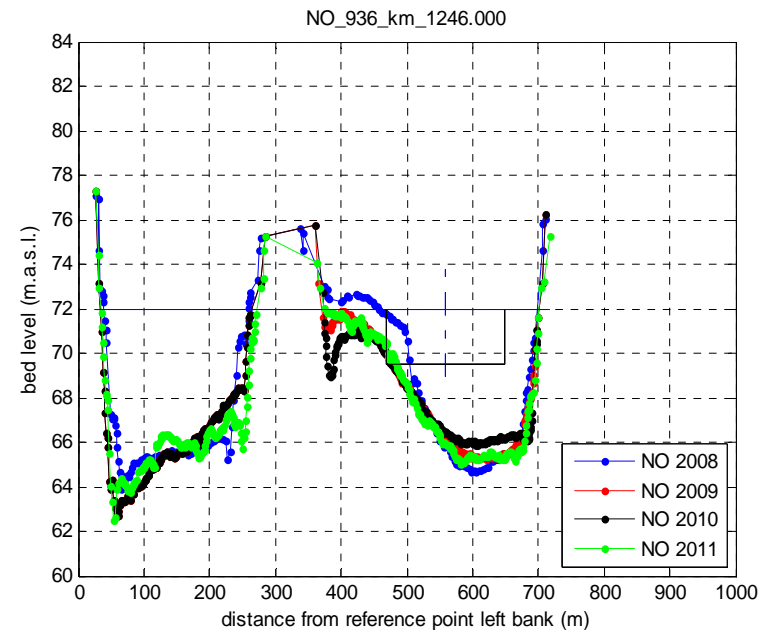


21. Arankina Ada - Existing situation

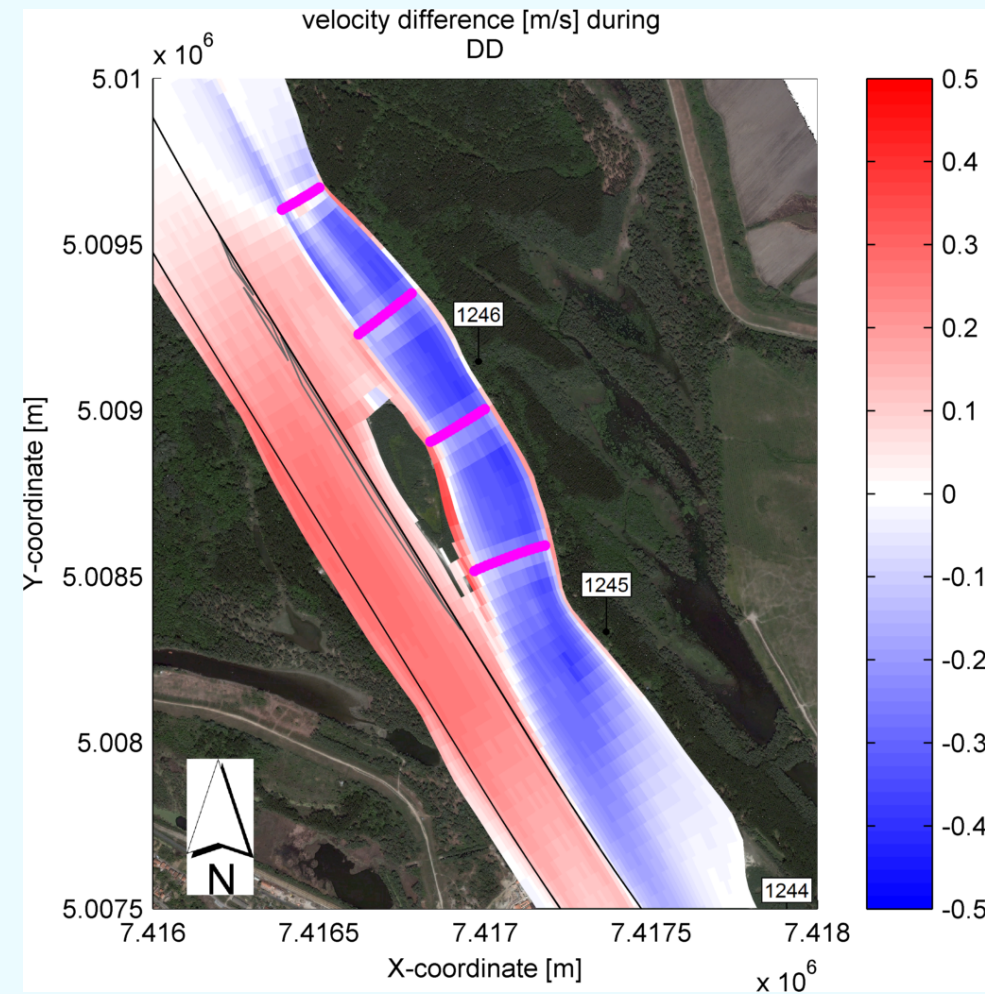
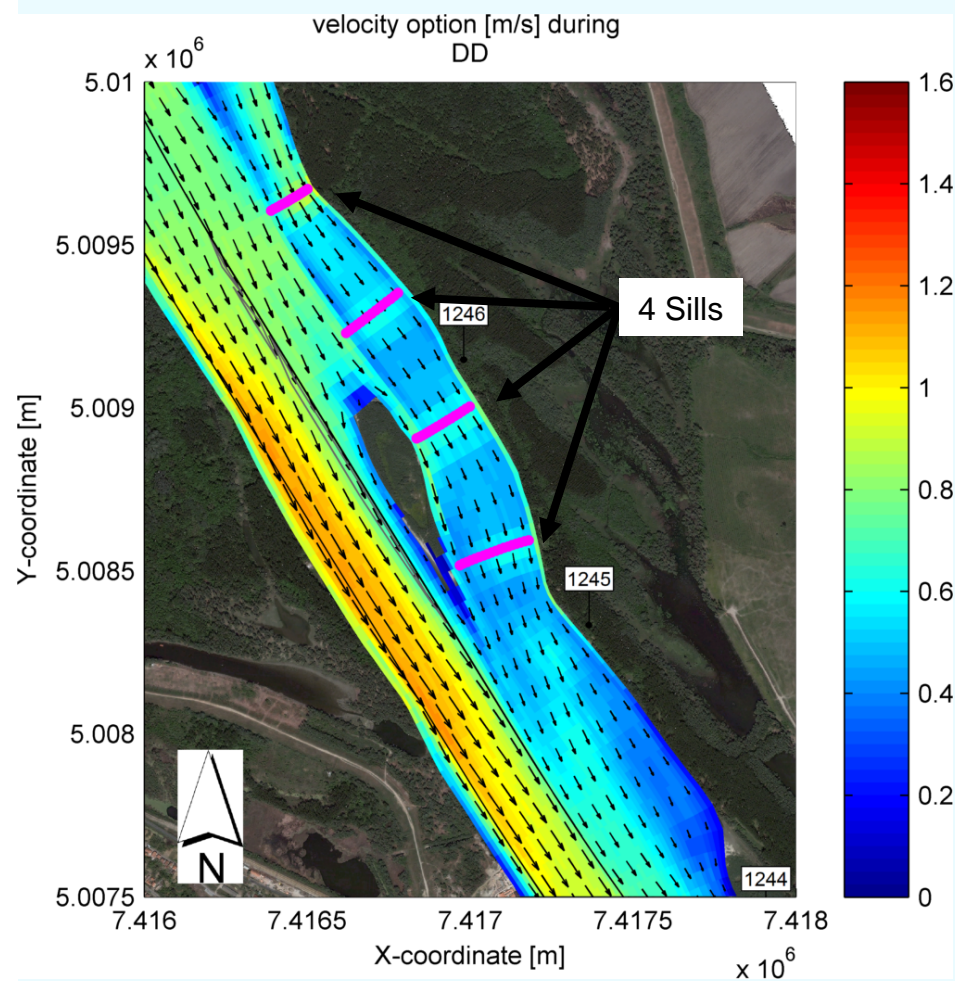


Navigation problems:

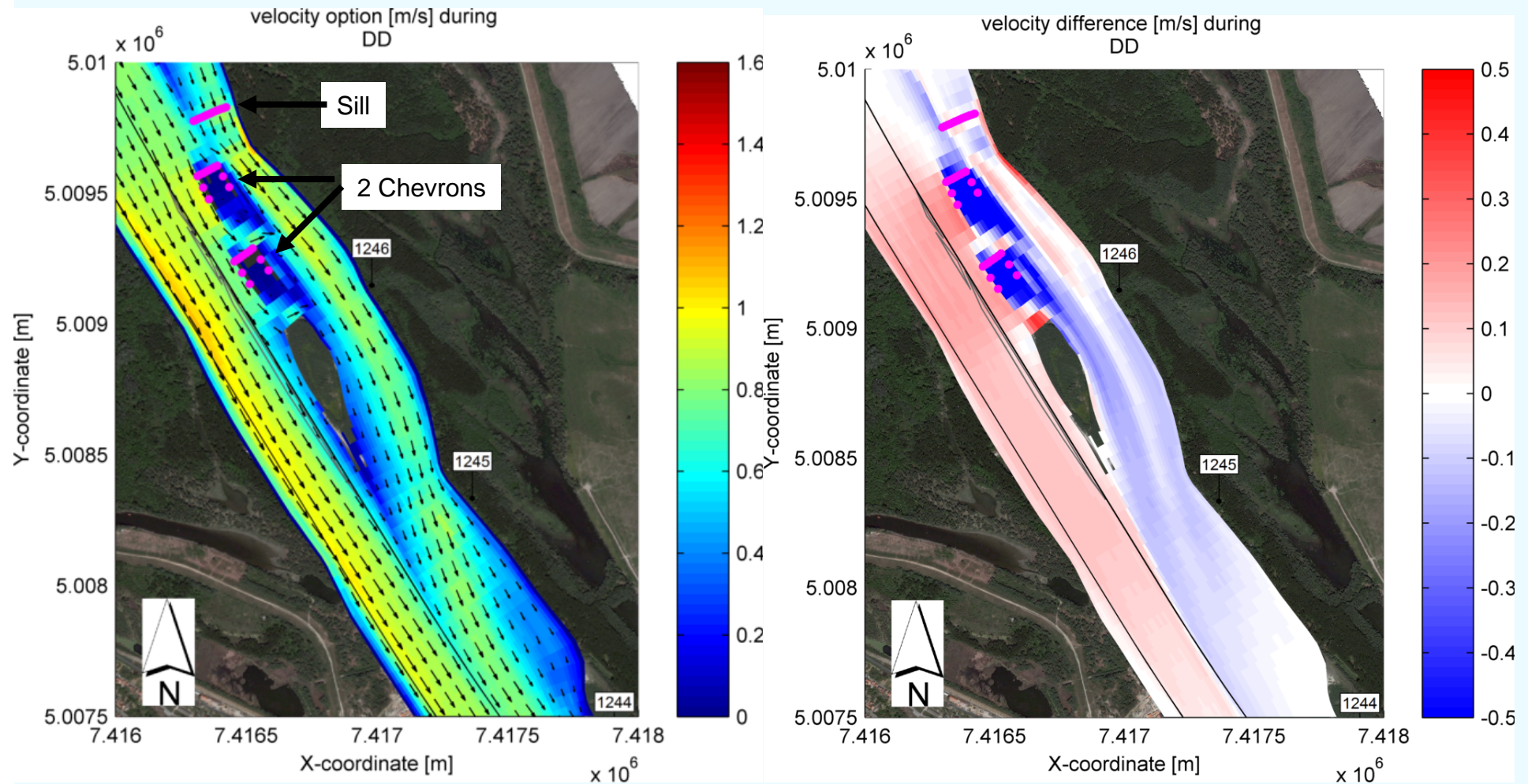
- Island protrudes into fairway along left side of fairway;



21. Arankina Ada: option 1: Sills



21. Arankina Ada – option 3: chevrons+sill



21. Arankina Ada – options 1 and 3

- Navigation:
 - increased flow in the fairway channel;
 - Option 3: additional dredging is required
- Environment:
 - Minimize erosion along right side island;
- Cost:
 - sills are about 150 m-200 m wide and 3 – 4 m high;
- Optimization of:
 - Sill crest level;
 - Exact location of structures.

21. Arankina Ada - MCA

Options	Effectiveness	Environment	Cost
Option 1 – sills	Effective	Minimal negative (+ some positive) impact	Limited
Option 3 – two chevrons + sill	Limited	Minimal negative (+ some positive) impact	Limited