

LONG TERM DEVELOPMENT OF SHOALS

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Long term development of shoals

Shoals = "Platen": tidal flats surrounded by channels

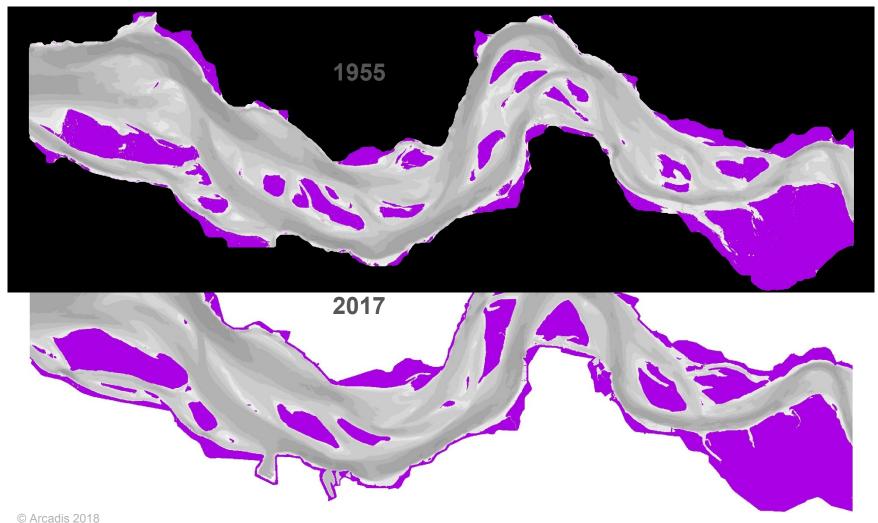
"Slikken" (= tidal flats between channel and embankment) display different developments

Three messages:

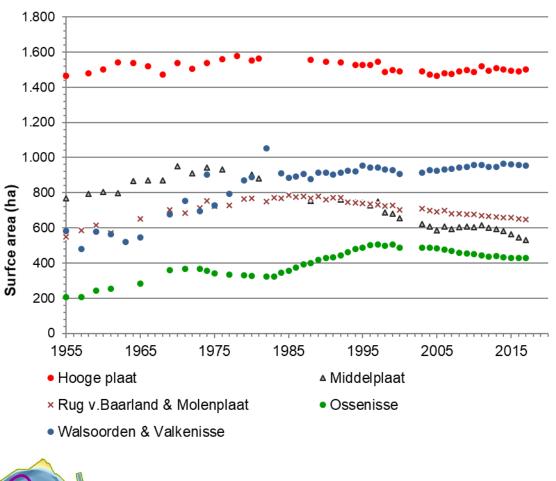
- 1. Ongoing consolidation of shoals: from fragmented shoal complexes to 2-3 large shoals per meso-cel
- 2. Developments (height, surface area) differ per meso-cel
- 3. Long-term changes govern, recent dredge disposal strategy ("plaatrandstortingen") seem to have relatively limited impact

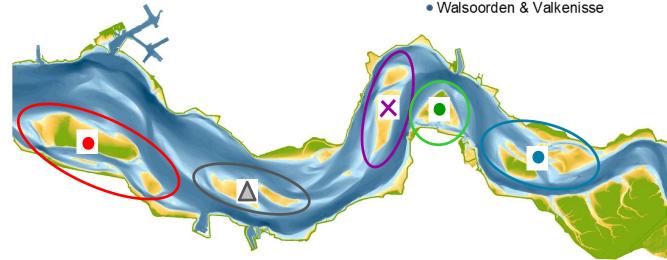


Consolidation of shoals



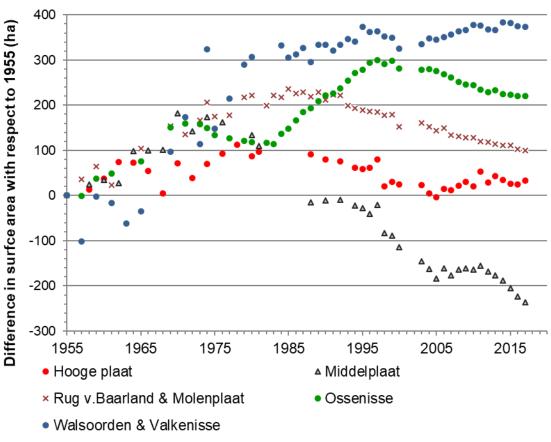
Development per macrocel: Area

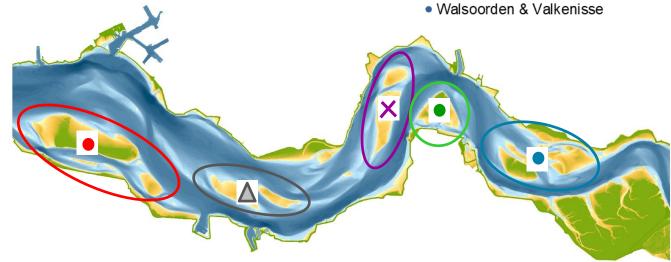




Area with height over NAP -1,5 m

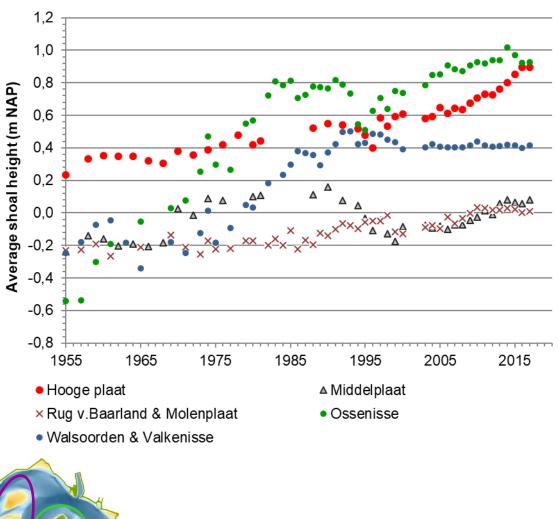
Development per macrocel: Area

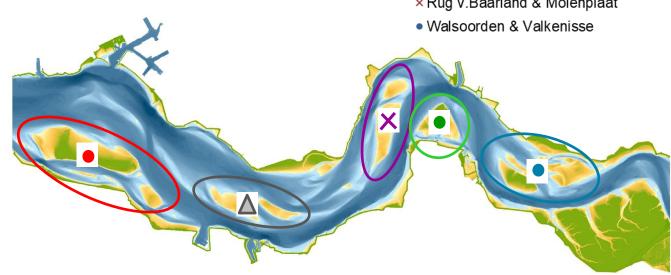




Area with height over NAP -1,5 m

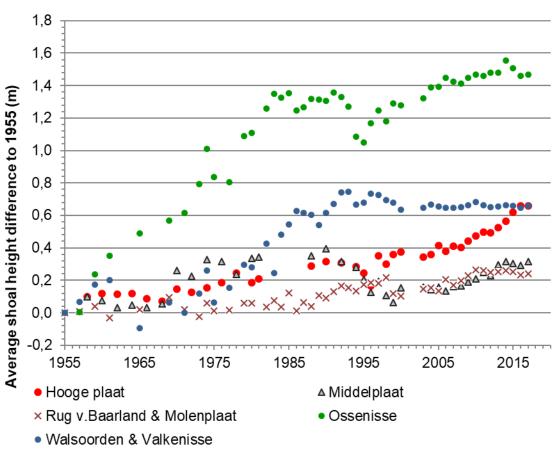
Development per macrocel: Height

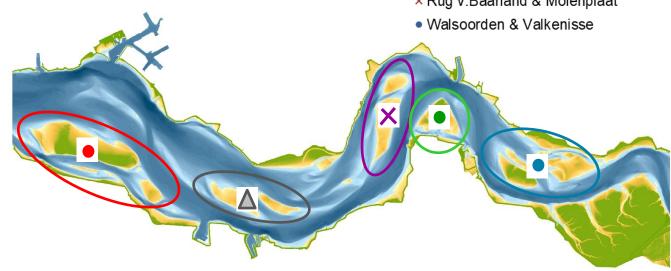




Average height in area with height over NAP -1,5 m

Development per macrocel: Height





Average height in area with height over NAP -1,5 m



Long term development of shoals

Three messages:

- 1. Ongoing consolidation of shoals: from fragmented shoal complexes to 2-3 large shoals per meso-cel
- 2. Developments (height, surface area) differ per meso-cel
- 3. Long-term changes govern, recent dredge disposal strategy ("plaatrandstortingen") seem to have relatively limited impact

One request:

Changes are not driven by (changes in) tides, waves, sediment availability (dredge disposal), ... alone:

A conceptual model that can explain the (differences in) developments is needed