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MORPHOLOGICAL EVOLUTION OF A SMALL-SCALE BEACH NOURISHMENT IN A NON-TIDAL AREA

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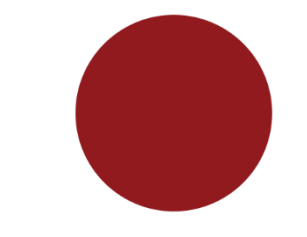
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MORPHOLOGICAL EVOLUTION OF A SMALL-SCALE BEACH NOURISHMENT IN A NON-TIDAL AREA



UNIVERSITY OF
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Objective with the nourishment

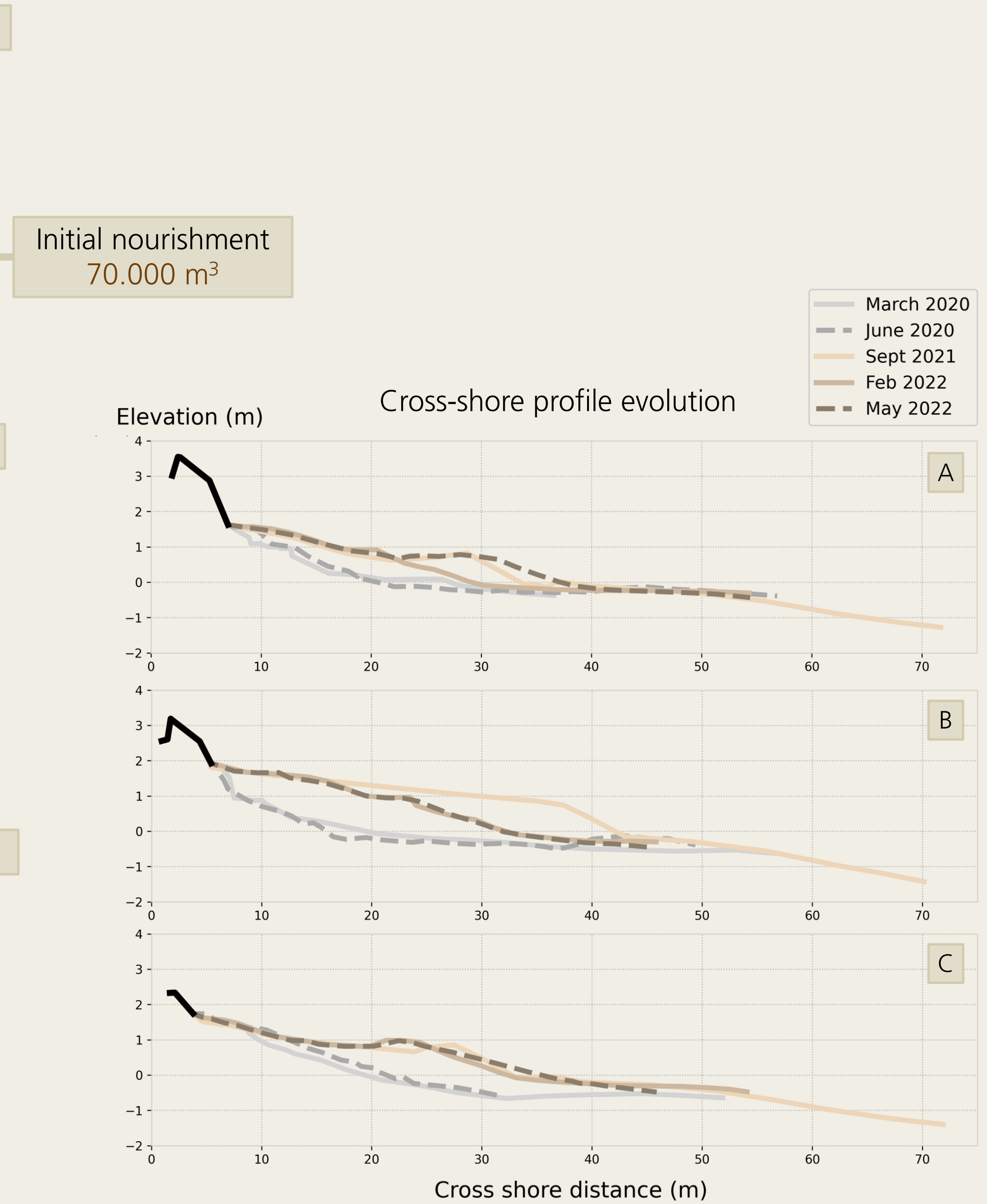
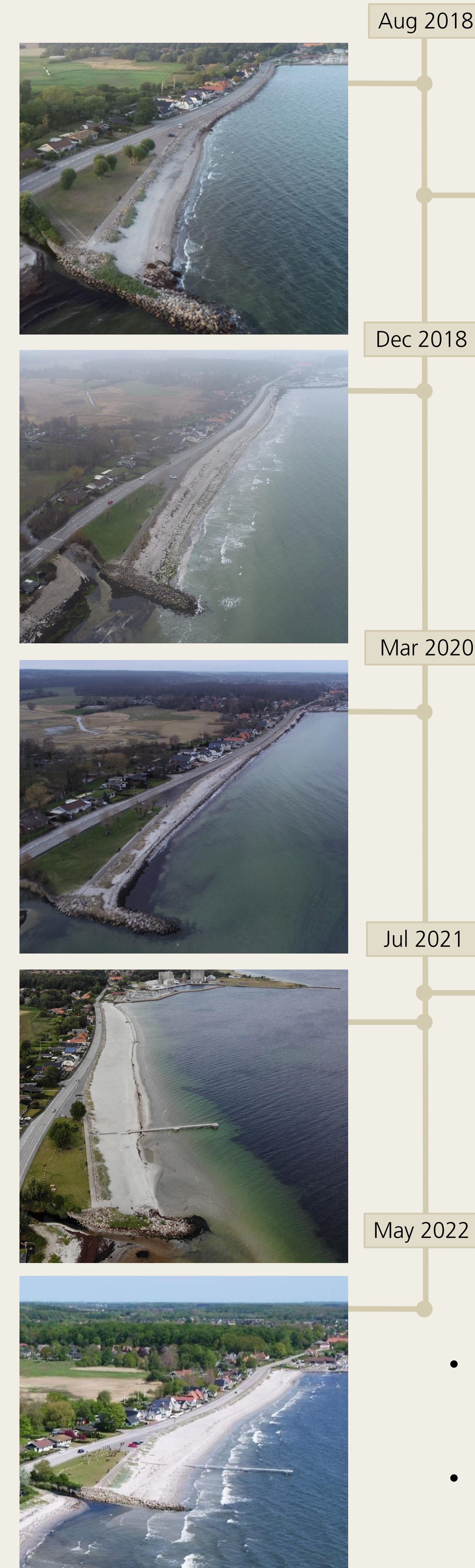
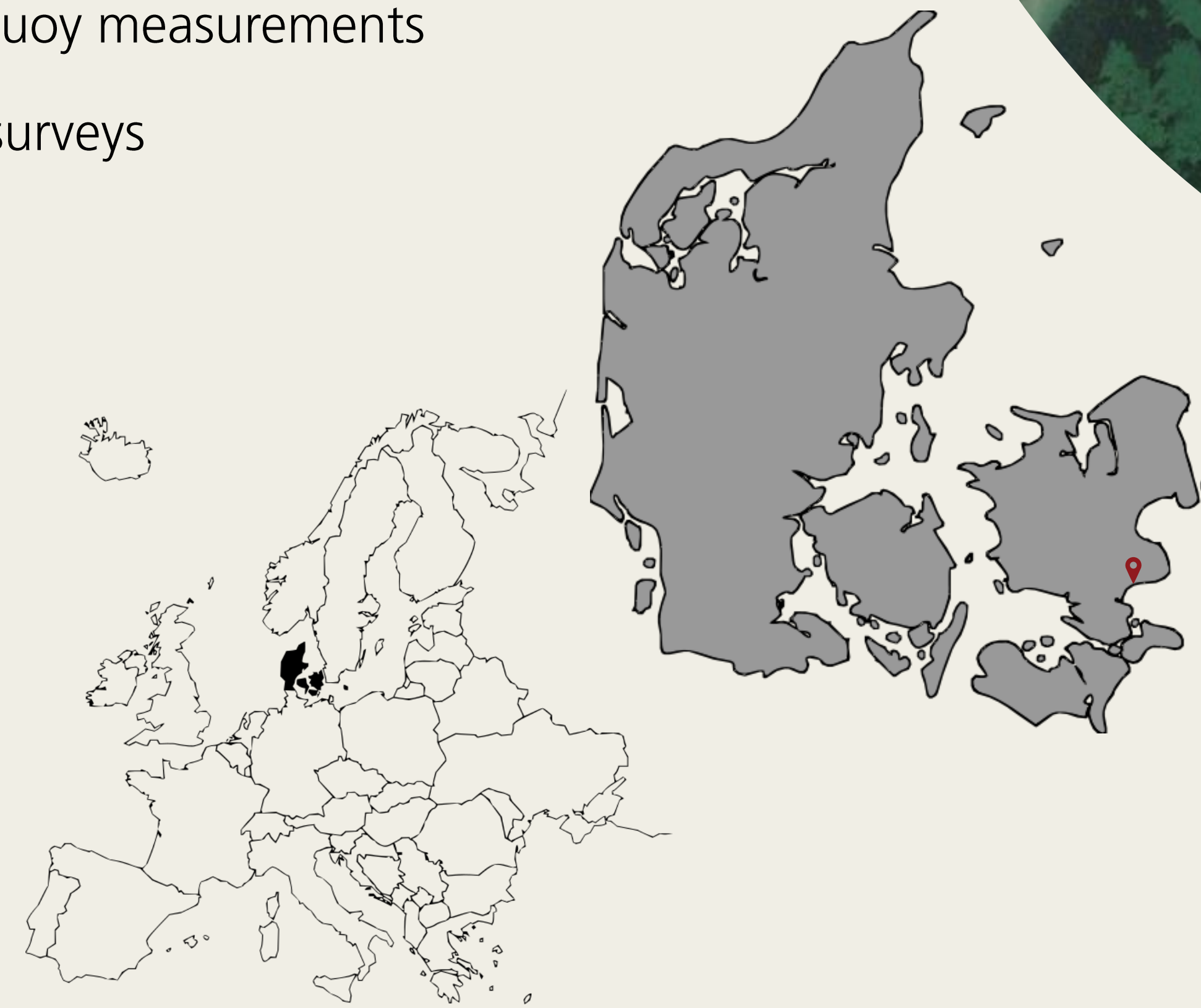
- Reduce wave overtopping onto adjacent road
- Combine hard and soft coastal protection
- Re-establish beach for recreation

Nourishment details

- 600 m long stretch
- Initial nourishment October 2018
Volume 70.000 m³
- Maintenance nourishment July 2021
Volume 20.000 m³

Monitoring techniques

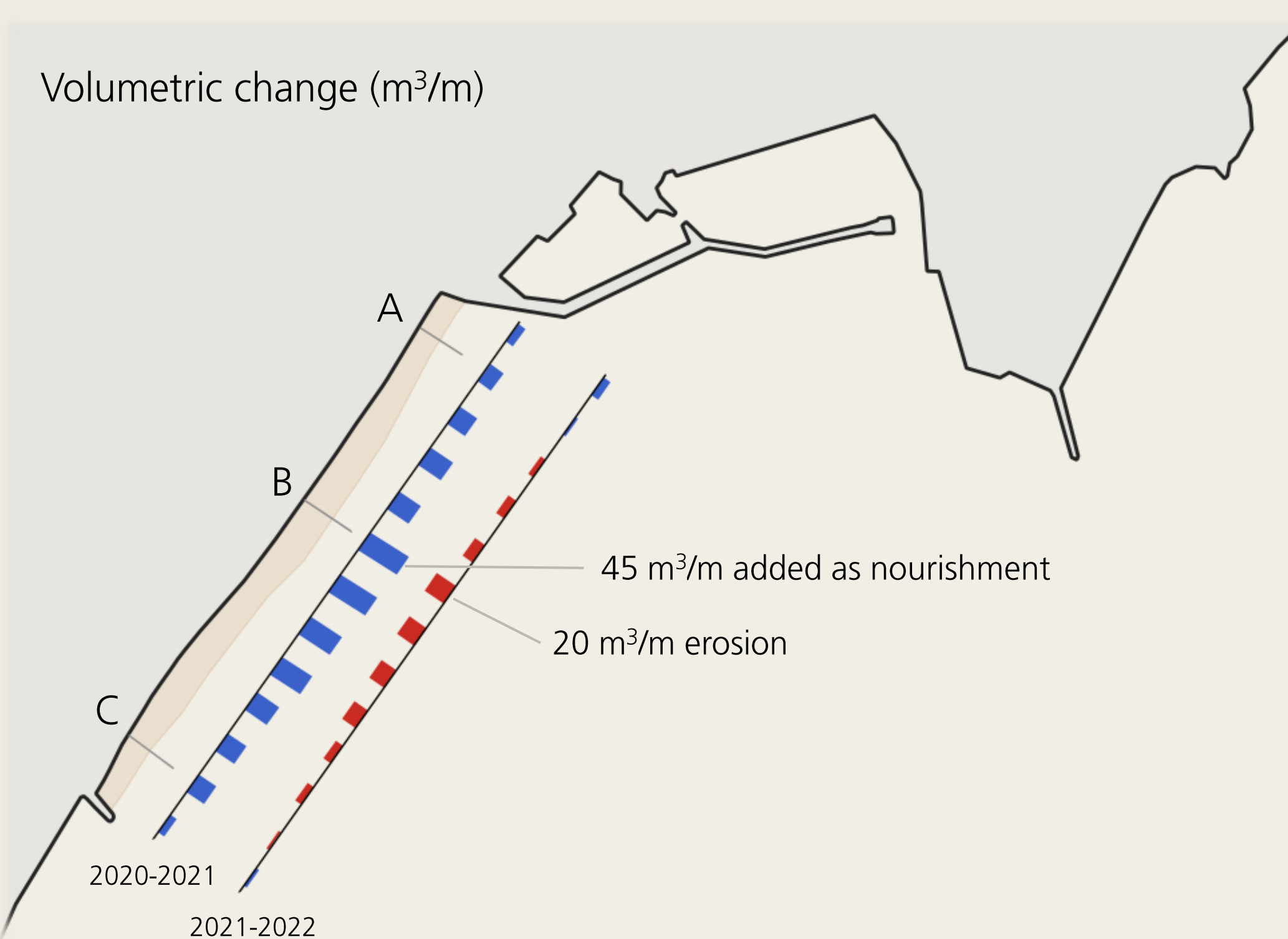
- Profile surveys with RTK-GPS, single beam
- Wave buoy measurements
- Drone surveys



Maintenance nourishment
20.000 m³

Conclusions

- Large spatial variation in re-distribution patterns, due to varying gradients influenced by hard structures
- Cross-shore volume changes between storm (erosion) and calm (recovery) conditions
- Re-occurring maintenance nourishment required to maintain critical beach width



Contact



Let's connect
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