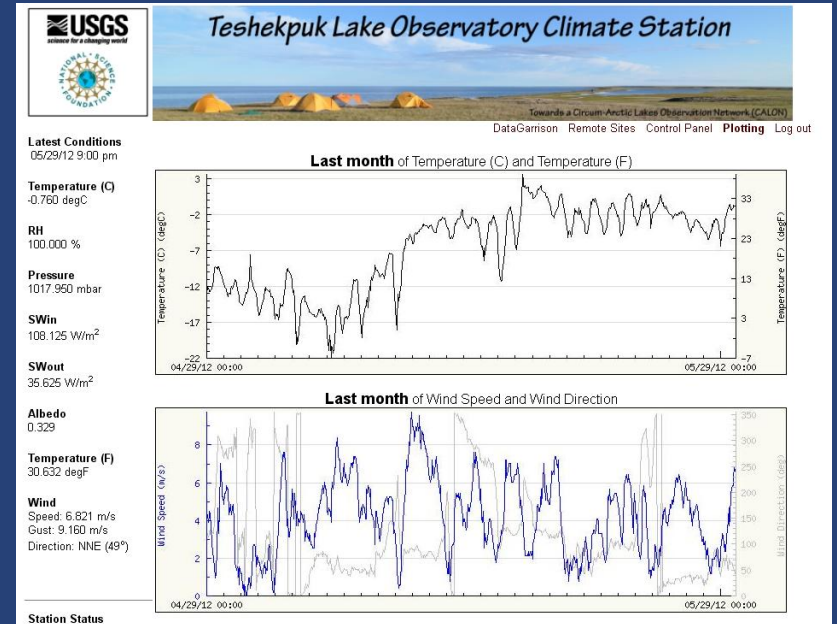
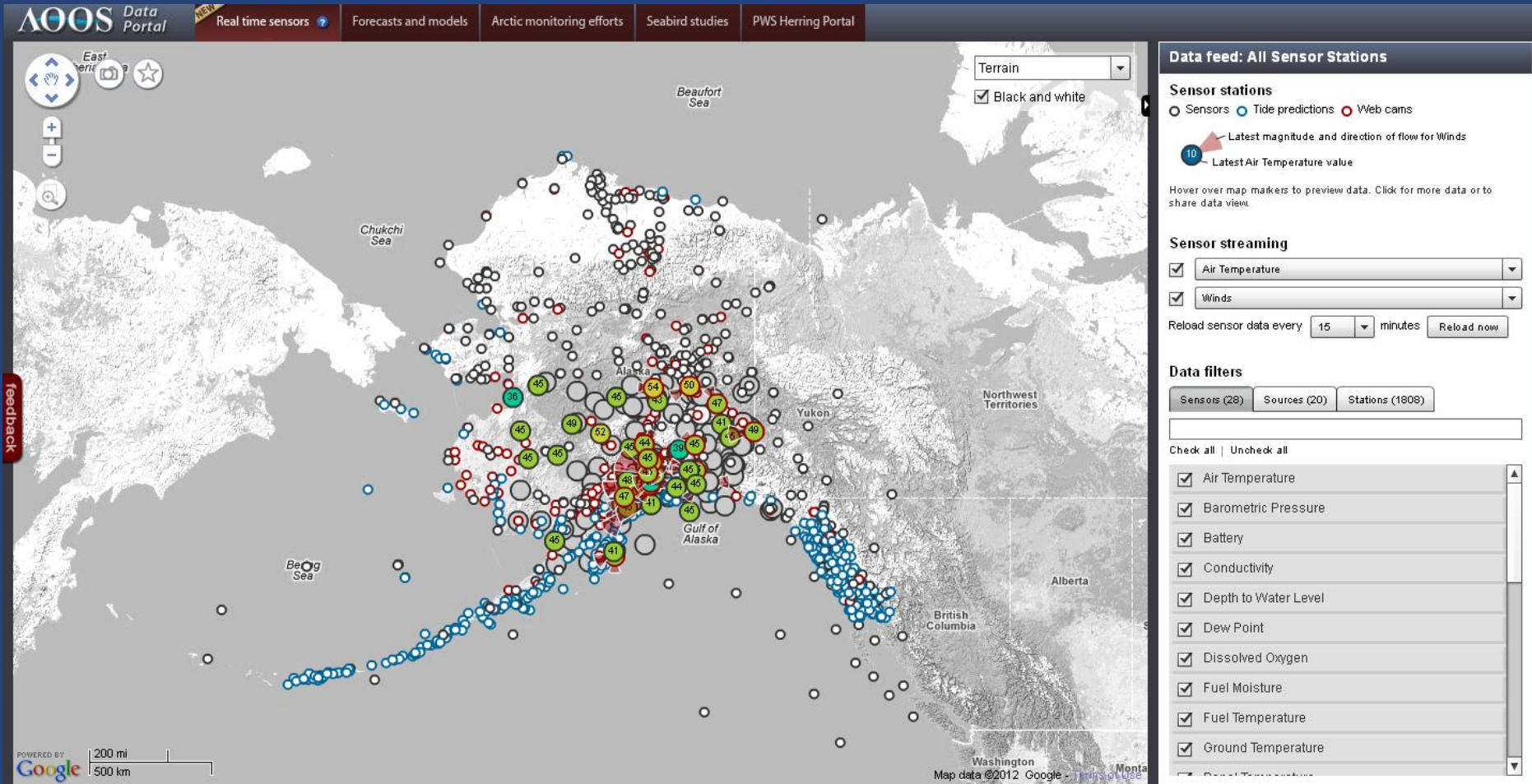


Near-Real Time Weather Data Transmission

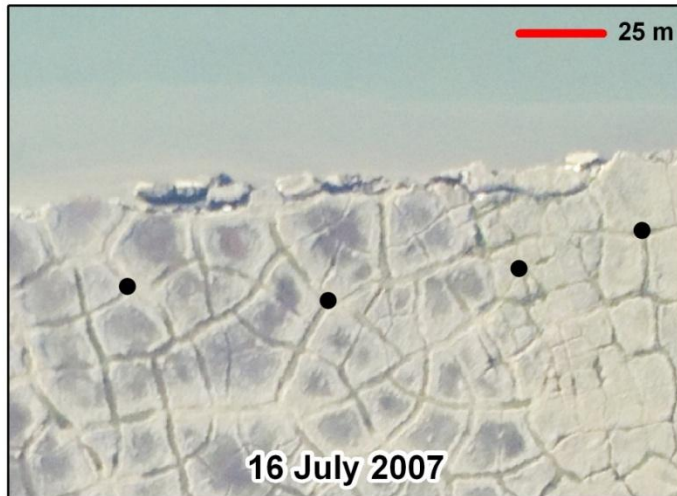


<https://datagarrison.com/users/300234011204340/300234011204340/plots.php>

AOOS Near-Real Time Data Portal



Repeat Aerial Photography and DGPS Surveys



Unmanned Airborne Vehicles



Aircraft (3 Each)



Day Payload
(3 Each)



IR Payload
(2 Each)



GCS Components



Field Repair Kit

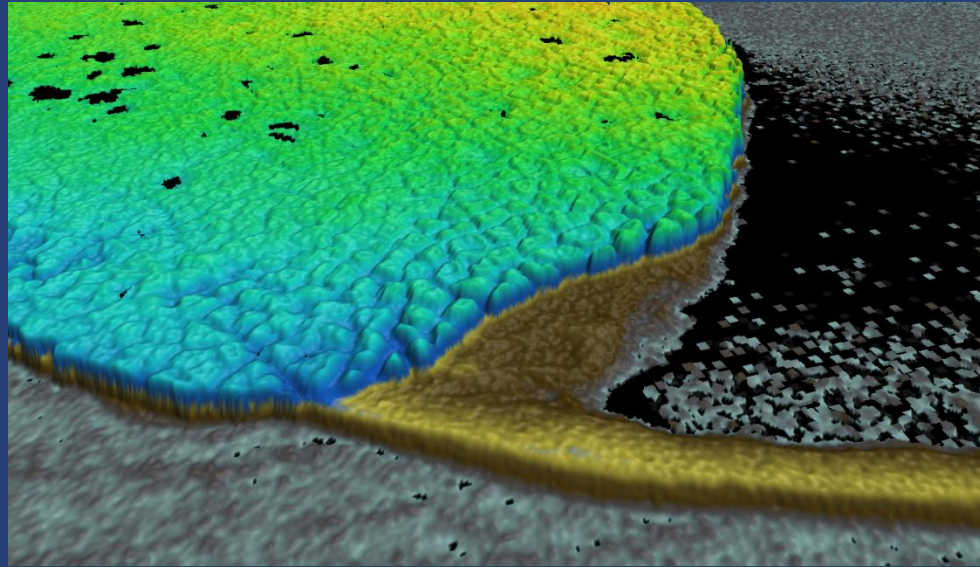


Manufacturer: AeroVironment

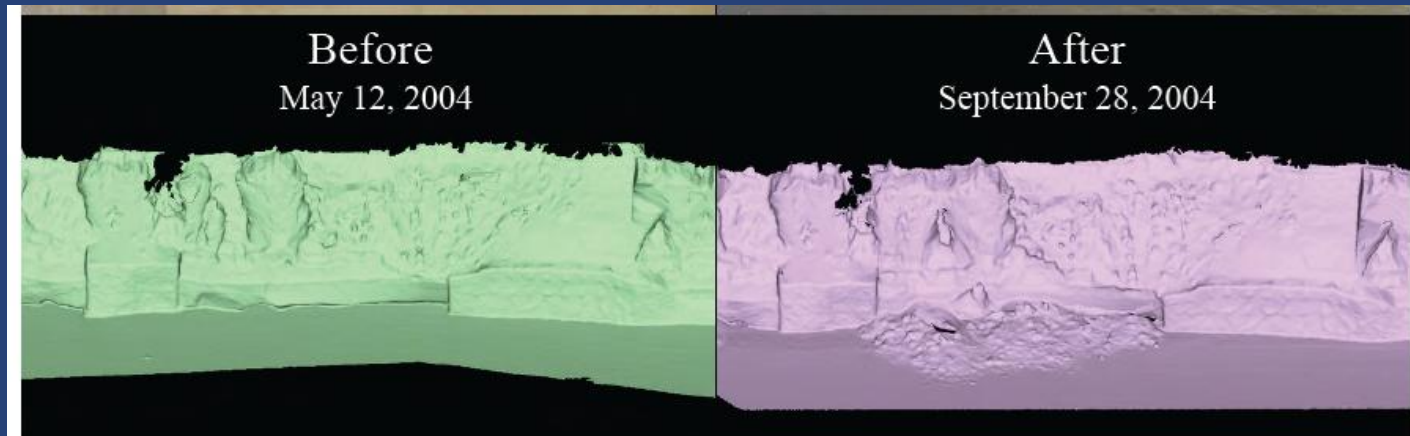
Description

Wing Span	4.5 ft
Air Vehicle Weight	4 lbs
Range	10+ km (LOS)
Airspeed	27-60 mph
Altitude	>300 AGL
Endurance	90 min Lithium
Payload	EO/IR Full Motion Video
	GPS- Radio uplink & down link
GCS/RVT	- Combined Weight – 14 lbs

Repeat Airborne and Ground-Based LIDAR



Gibbs



Young and Ashford

The name for our state is derived from the Aleut word *alaxsxaq* meaning “*the object towards which the action of the sea is directed*”



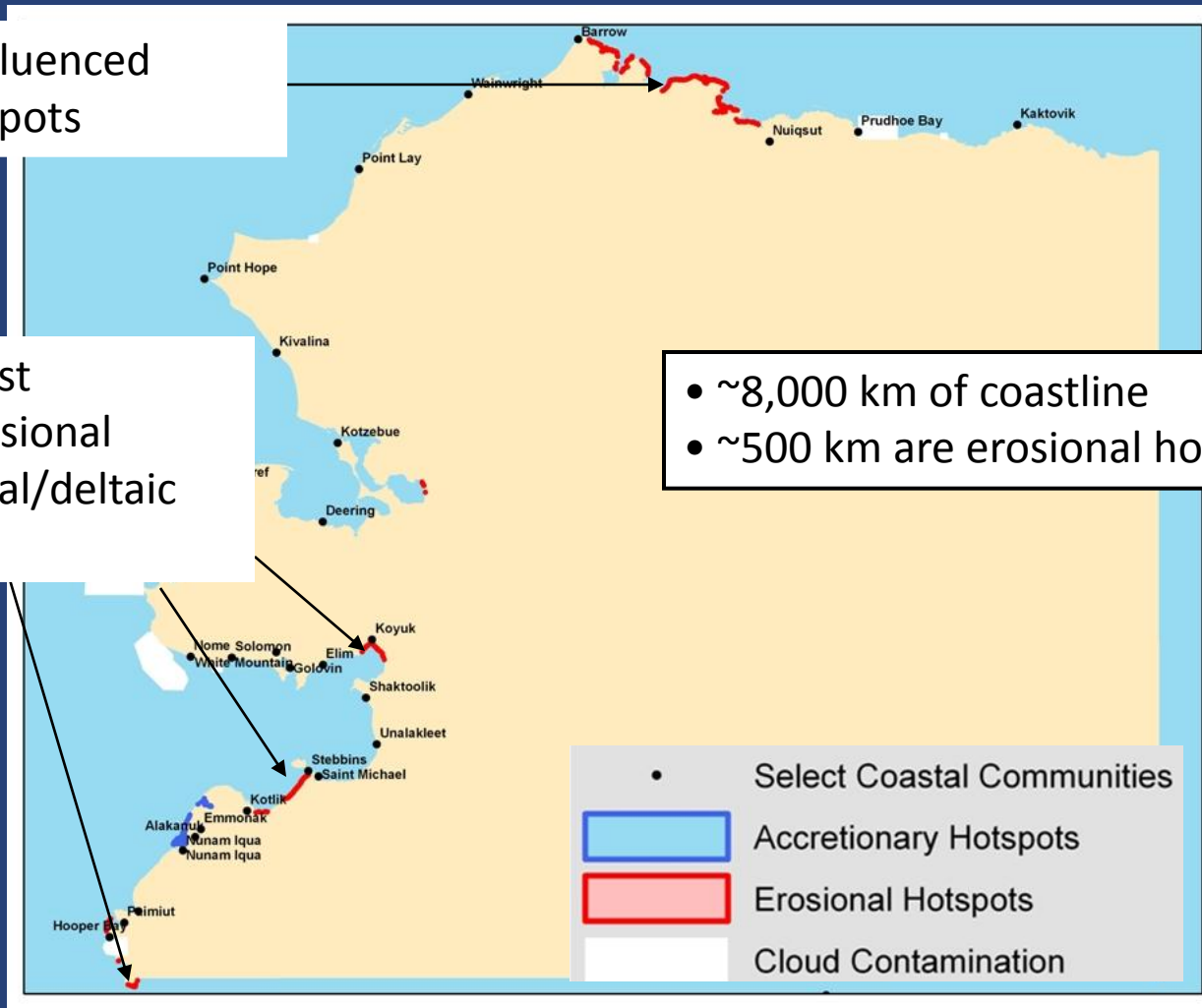
Remote Sensing of Changes to the Alaskan Coast



Change Detection of Northern and Western Coasts

Permafrost influenced
erosional hotspots

Non-permafrost
influenced erosional
hotspots (fluvial/deltaic
deposits)



Based on 27 circa-1985 and 29 circa-2000 Landsat TM and ETM images

Change Detection Using High-Resolution Imagery



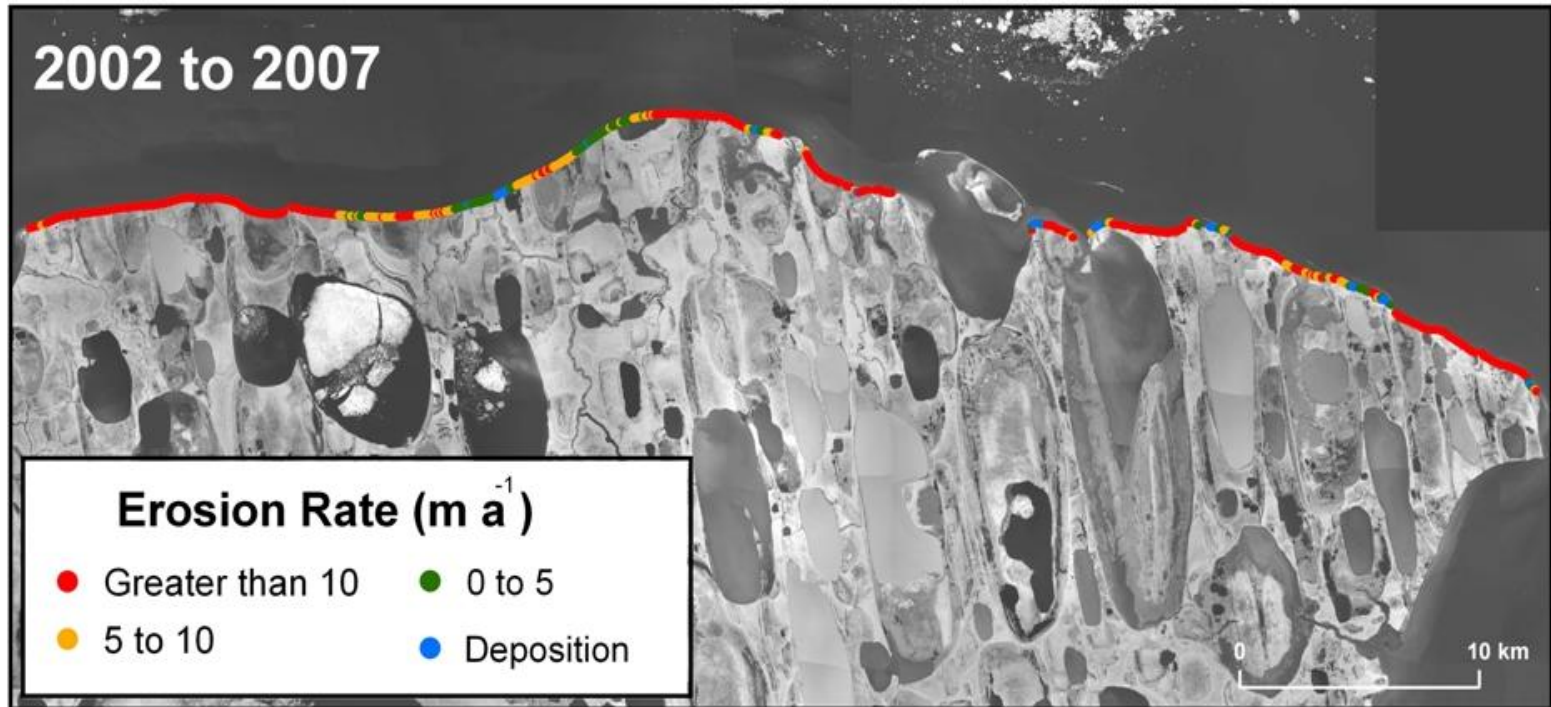
*also note increase in pit formation

Change Detection Using High-Resolution Imagery



*also note increase in pit formation

Permafrost Dominated Erosional Hotspot



Mean = 13.6 m/yr

- 91% erosional
- 9% depositional
- 70% > 10 m/yr

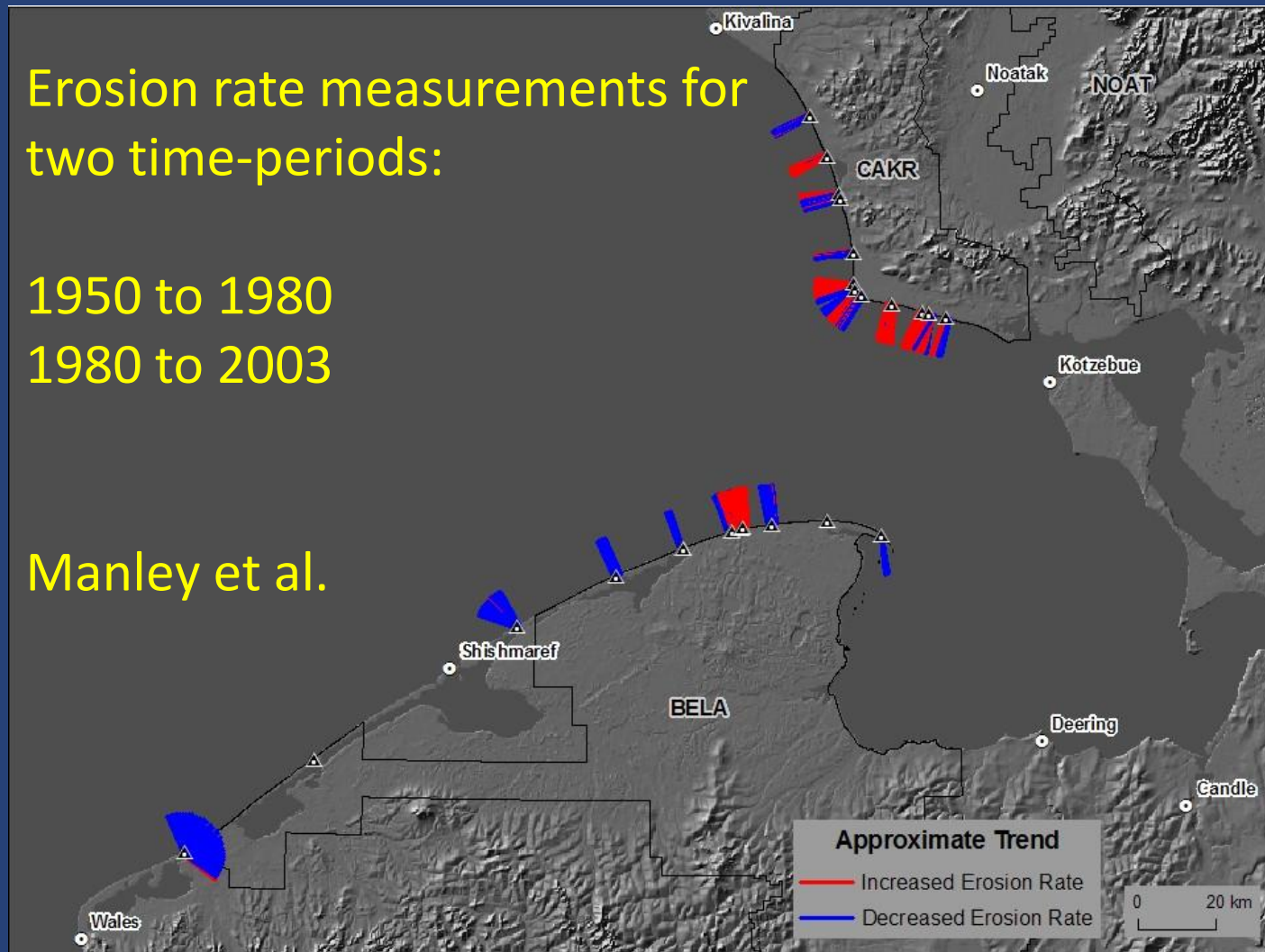
Permafrost Dominated Moderately Eroding Coast

Erosion rate measurements for
two time-periods:

1950 to 1980

1980 to 2003

Manley et al.



Non-permafrost erosional hotspot and stable coast

