~~Geophysicist~~

~~Hydrograph~~

~~GNSS expert~~

Mariner

Project manager/communication officer

NtM Editor

Swedish Maritime Administration/Hydrographic office

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FAMOS

FINALISING SURVEYS FOR THE BALTIC MOTORWAYS OF THE SEA

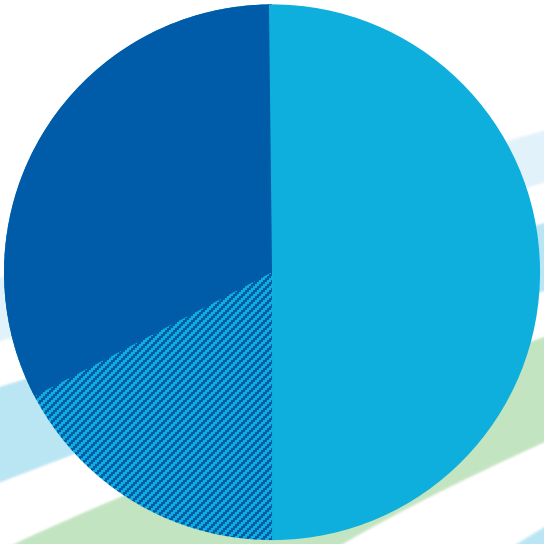
SWEDISH MARITIME ADMINISTRATION

Co-financed by the European Union

Connecting Europe Facility

Ready after
FAMOS Freja
FAMOS Odin
FAMOS Thor
surveyed earlier
surveyed FAMOS
After FAMOS:
100 000 km² more
(area of Portugal)
LANTMÄTERIET
NLS
FINNISH GEOSPATIAL
RESEARCH INSTITUTE
FGI
Liikennevirasto
SMHI
Geodatastyrelsen
Danish Geodata Agency
TALLINN UNIVERSITY OF
TECHNOLOGY
Bundesamt für
Kartographie und Geodäsie
SSPA
DTU
BSH
BUNDESAMT FÜR
SEESCHIFFFAHRT
UND
HYDROGRAPHIE
GFZ
Helmholtz Centre
POTSDAM
SWEDISH MARITIME
ADMINISTRATION
Co-financed by the European Union
Connecting Europe Facility

2014-2016 Freja	2016-2018 Odin	2018-2020 Thor

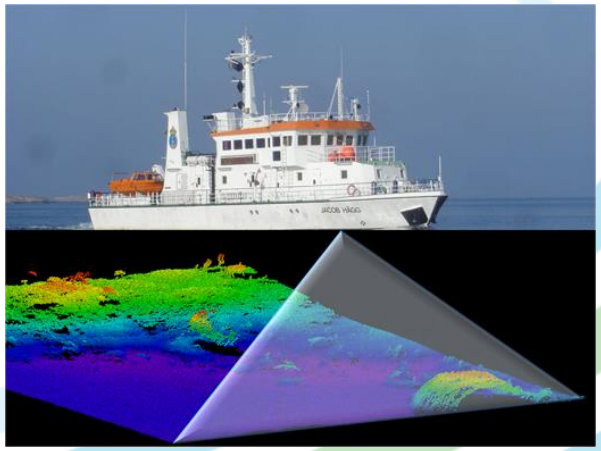


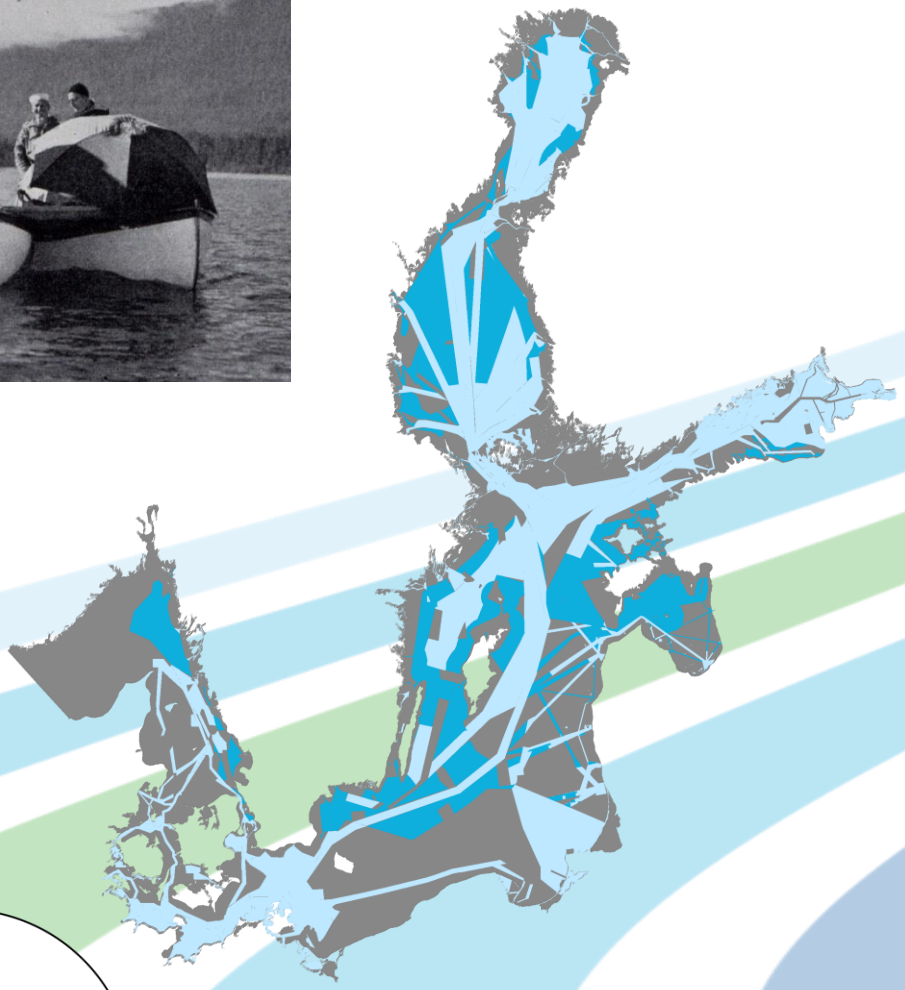
safety

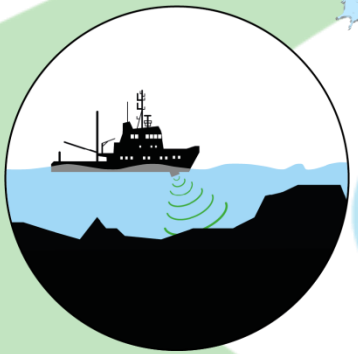
efficiency

accuracy

- Work activities:30% financing
- Study activities:50% financing
- Own financing: 50-70%



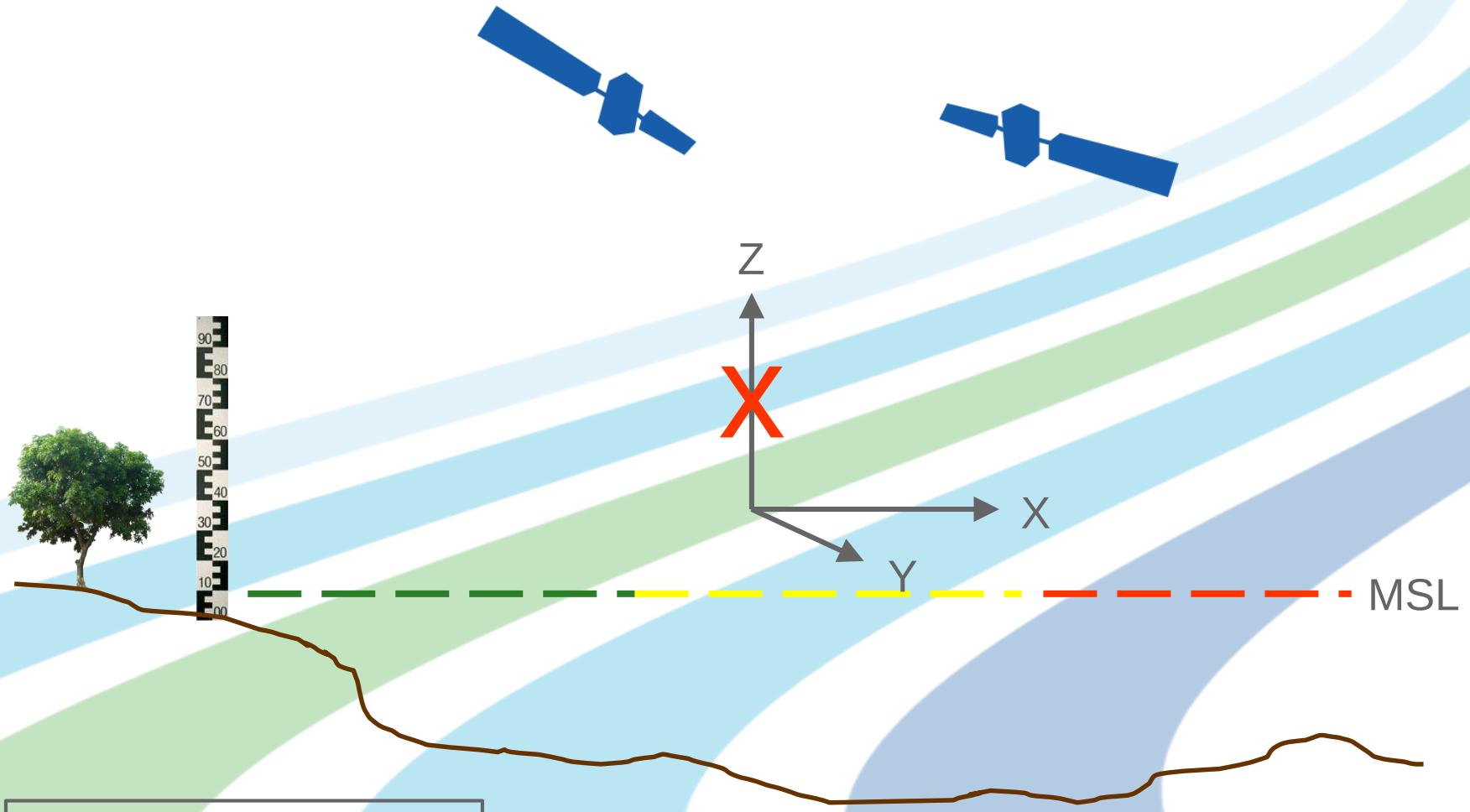




96600 km²

Improvement of surveying infrastructure

TODAY



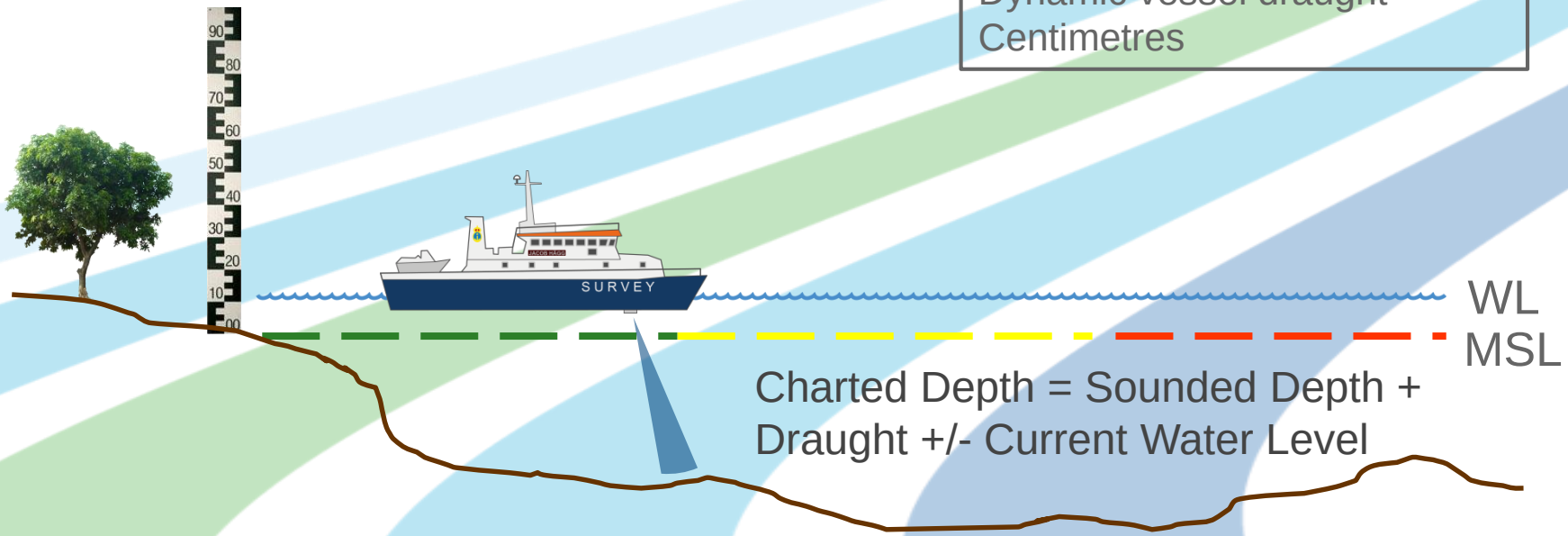
Error Source 1

Uncertainties of level height (decimetres) when far from land.

TODAY

Error Source 3
Faults in soundings (e.g. calibration of instruments)
Centimetres

Error Source 4
Dynamic vessel draught
Centimetres

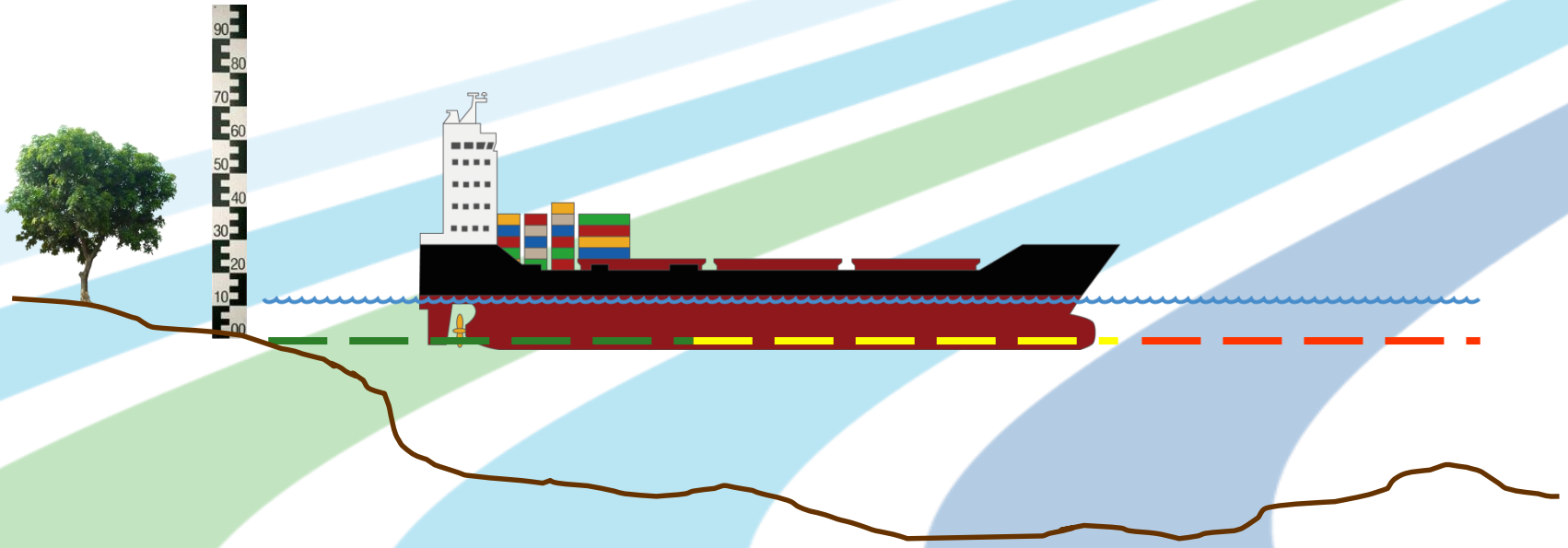


Error Source 2
Current water level at open sea (decimetres).

Open sea →

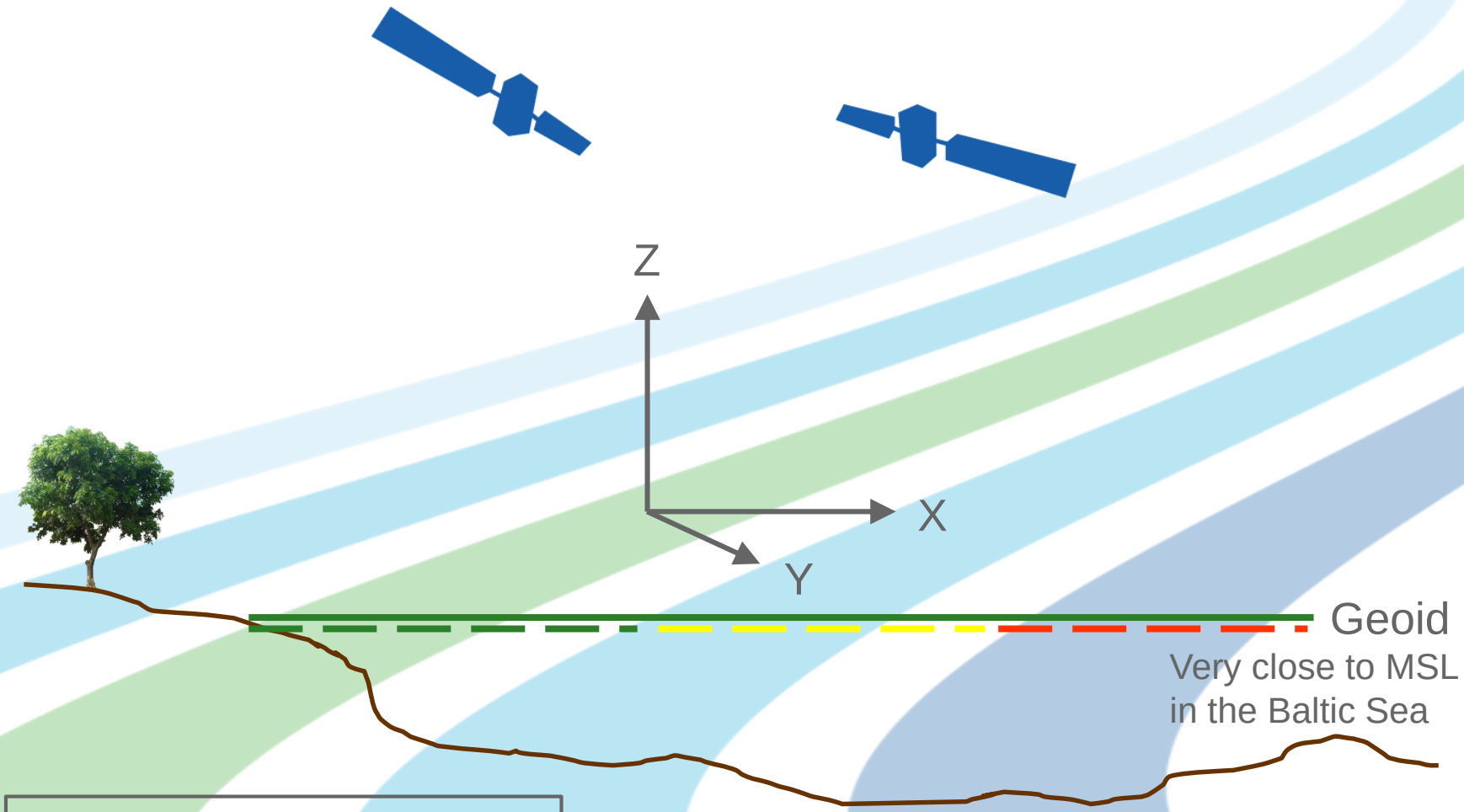
TODAY

UKC = Charted Depth
+/- Current Water Level - Draught
(with safety margins added for all possible error sources…)



Open sea →

The future

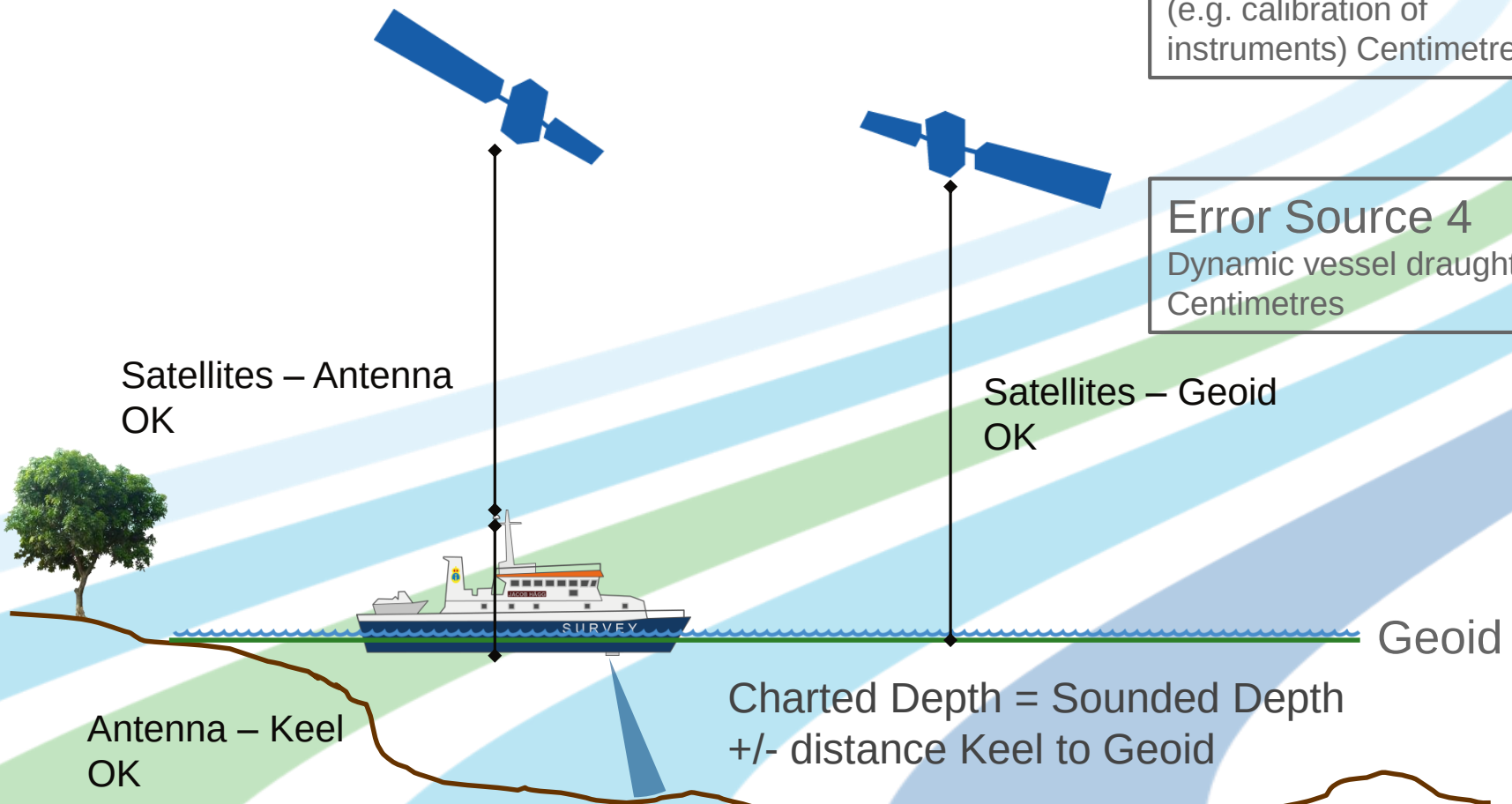


Error Source 1

Uncertainties of level height (decimetres) when far from land

– Reduced to Centimetres

The future

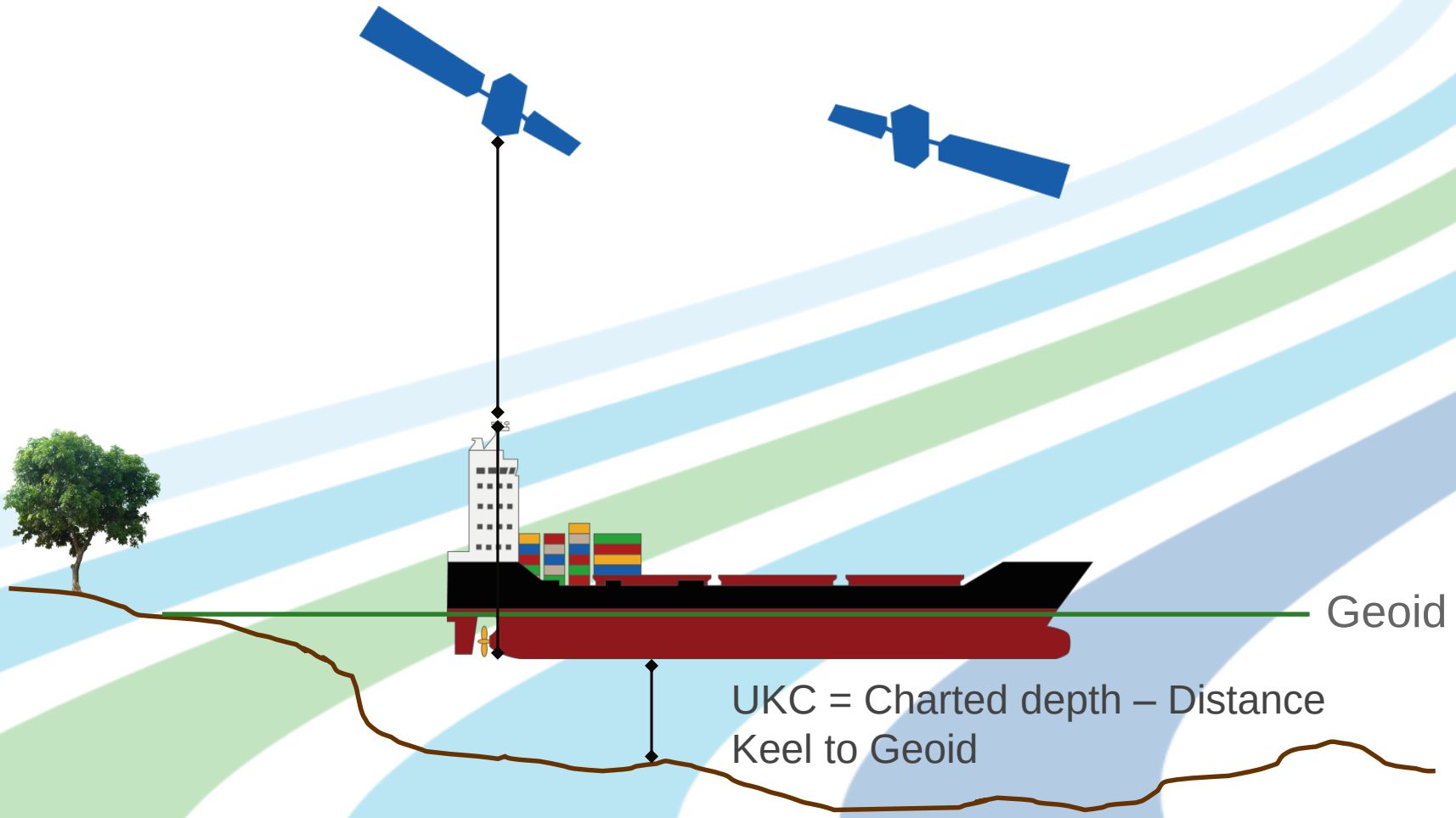


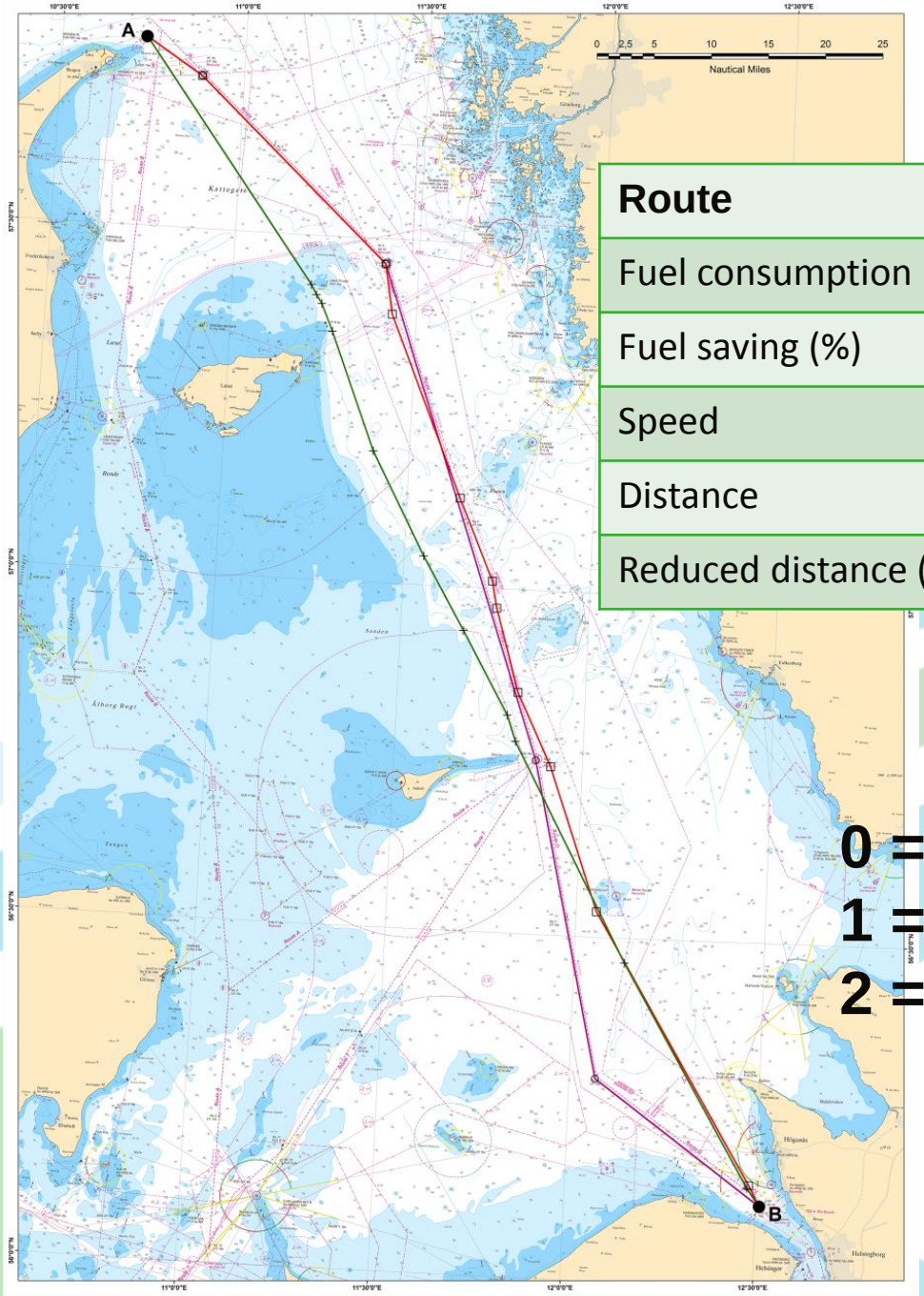
Error Source 3
Faults in soundings (e.g. calibration of instruments) Centimetres

Error Source 4
Dynamic vessel draught Centimetres

Error Source 2
Current water level at open sea (decimetres).
– Reduced to Centimetres through higher accuracy in Vessel's vertical positioning

Open sea →


Geoid
UKC = Charted depth – Distance
Keel to Geoid



Route	0	1	2
Fuel consumption (kg)	5364	4927	4700
Fuel saving (%)	0	8,1	12,4
Speed	13,4	13,1	12,8
Distance	147	144	141
Reduced distance (%)	0	2,0	4,1

0 = Purple
1 = Red
2 = Green

SSPA

http://spintra.sjofartsverket.se/sites/sjogeografi/sph/Dokument/Los-Farsund%20(1).mp4