

PREFACE

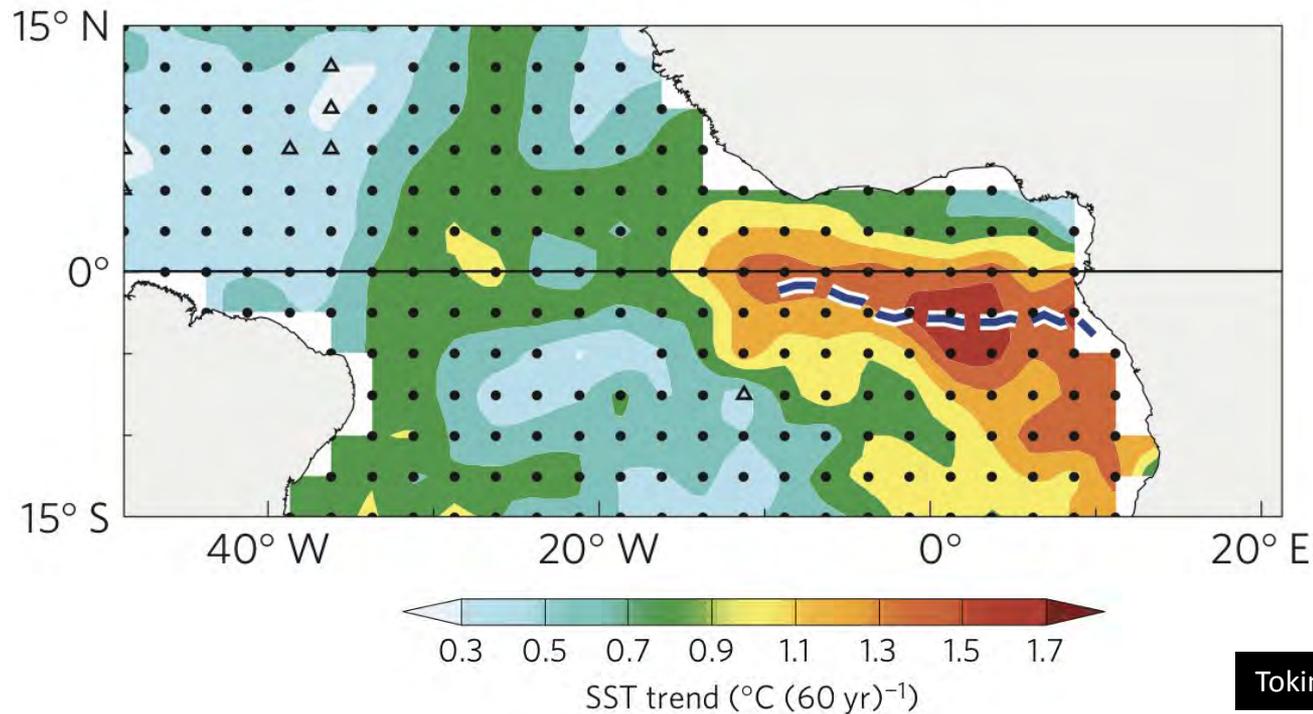
Towards the Galway Vision of collaboration in the Eastern Tropical Atlantic

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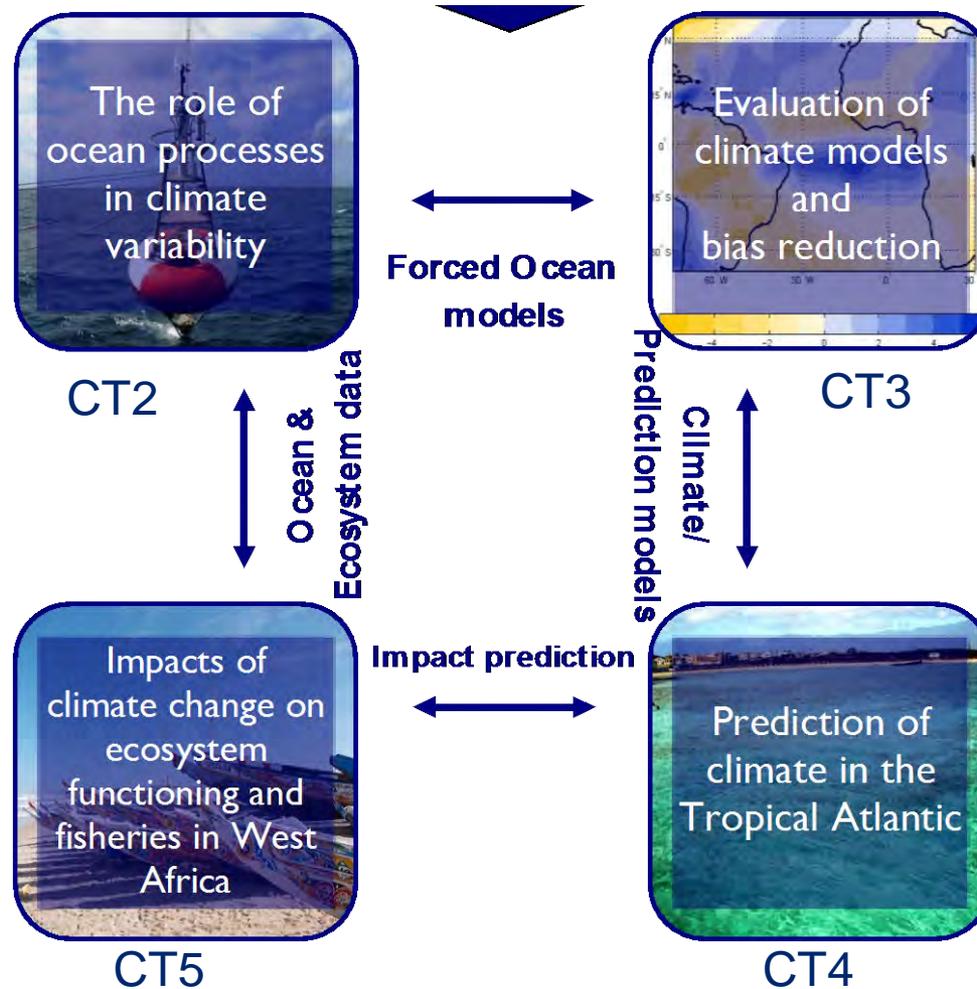
The context:

Eastern Tropical Atlantic warms at an exceptionally high rate compared with the rest of Tropical Ocean



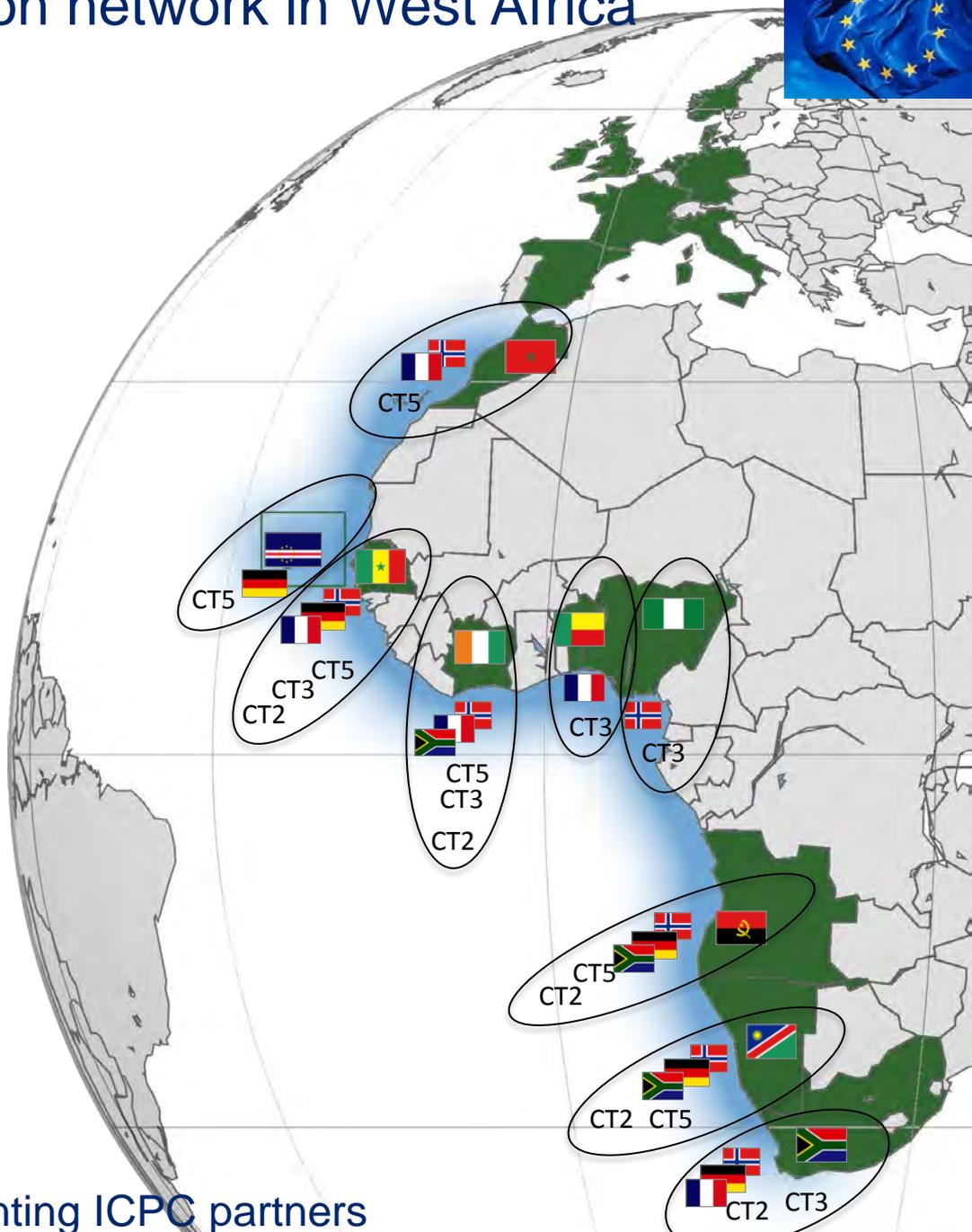
The Goal: To improve climate prediction in the Tropical Atlantic to a level where socio-economic benefit can be realised, with focus on sustainable management of marine ecosystems and fisheries

The PREFACE research collaboration model
Core Themes and interactions between them





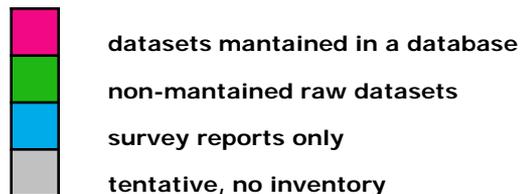
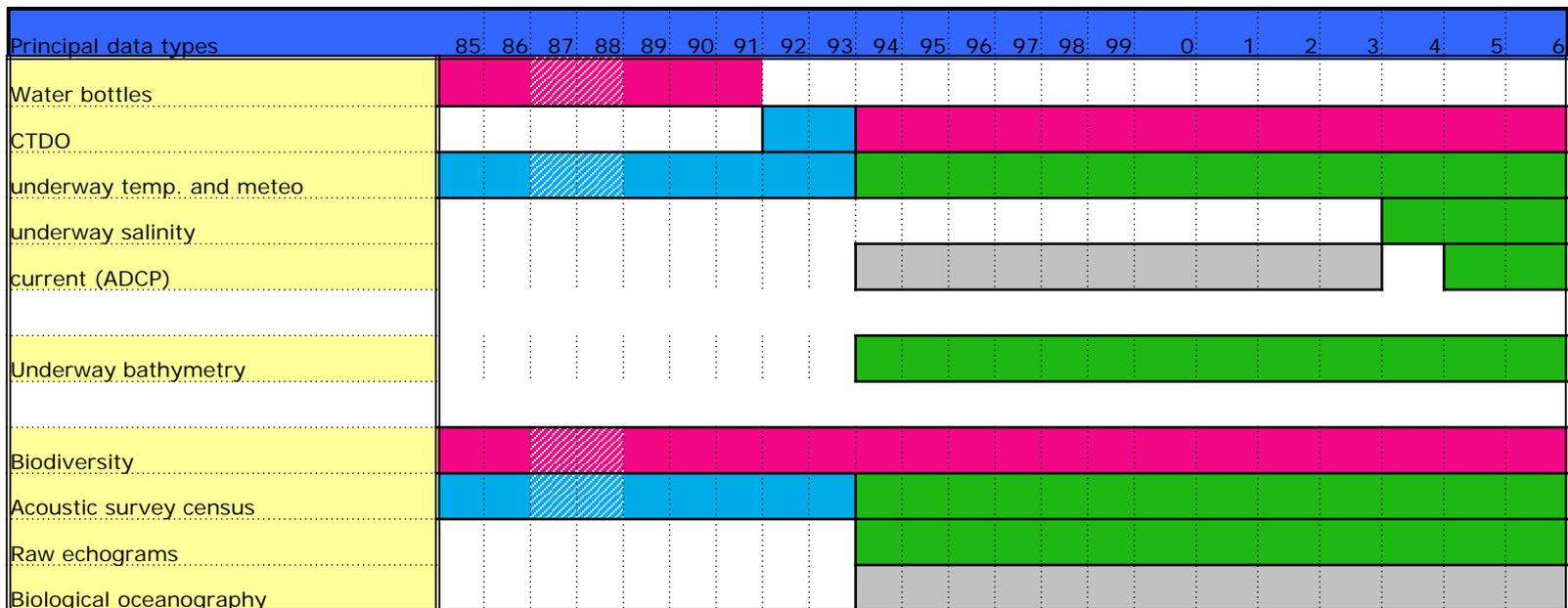
PREFACE cooperation network in West Africa



- 18. INIP, Pedro Tchipalanga 
- 19. MFMR, Anja van der Plas 
- 20. UCT, Mathieu Rouault 
- 21. INDP, Ivanice Monteiro 
- 22. INHR, Salahedine Ayoubi 
- 23. ISRA, Hamet Diadhrou 
- 24. UCAD, Amadou Gaye 
- 25. UAC Norbert Houkonnou 
- 26. CRO, Bamba Barthelemy 
- 27. UNN, Hyacinth Nnamchi 

28 partners total, 10 representing ICPC partners

The EAF Nansen historic dataset what it contains:



Water bottles

CTDO

underway temp. and meteo

underway salinity

Current (ADCP)

Underway bathymetry

Biodiversity

Acoustic survey census

Raw echograms

Biological oceanography

Salinity and oxygen collected at standard levels

Conductivity Temperature Depth and Oxygen probe

water temperature at the water intake; air temperature, wind speed and direction from the sensors mounted on the mast

conductivity sensor at the water intake

Acoustic Doppler Current Profiler

Bathymetry recorded underway, averaged over 1 nmi

fish and crustacean species- and length-compositions from trawl hauls

fish abundance, distribution, species- and length-compositions from trawl hauls and acoustics

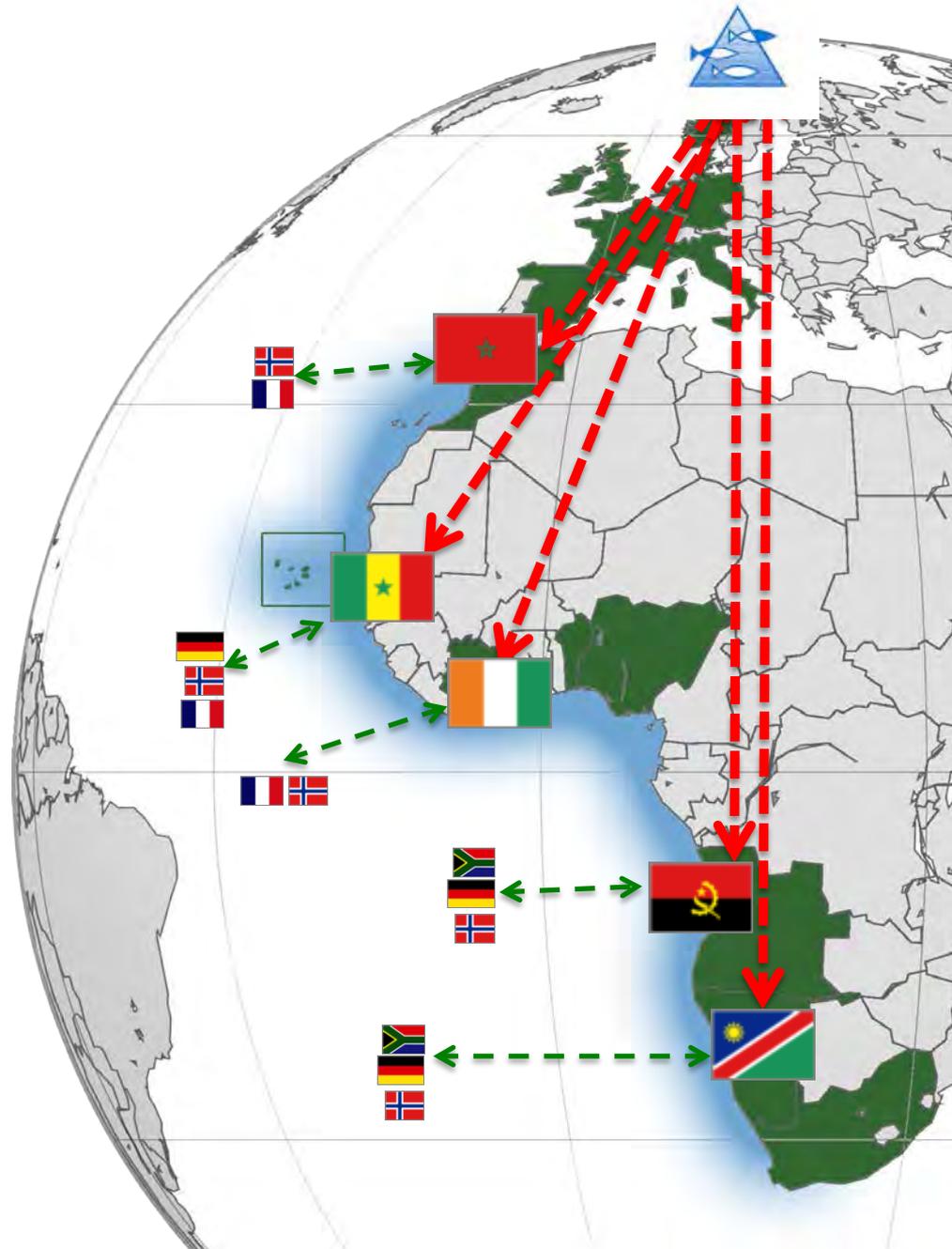
Electronic echograms produced by the fisheries echo sounders

zooplankton, fish eggs, fish larvae



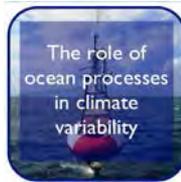


Sharing of the EAF Nansen data in PREFACE follows FAO data policies

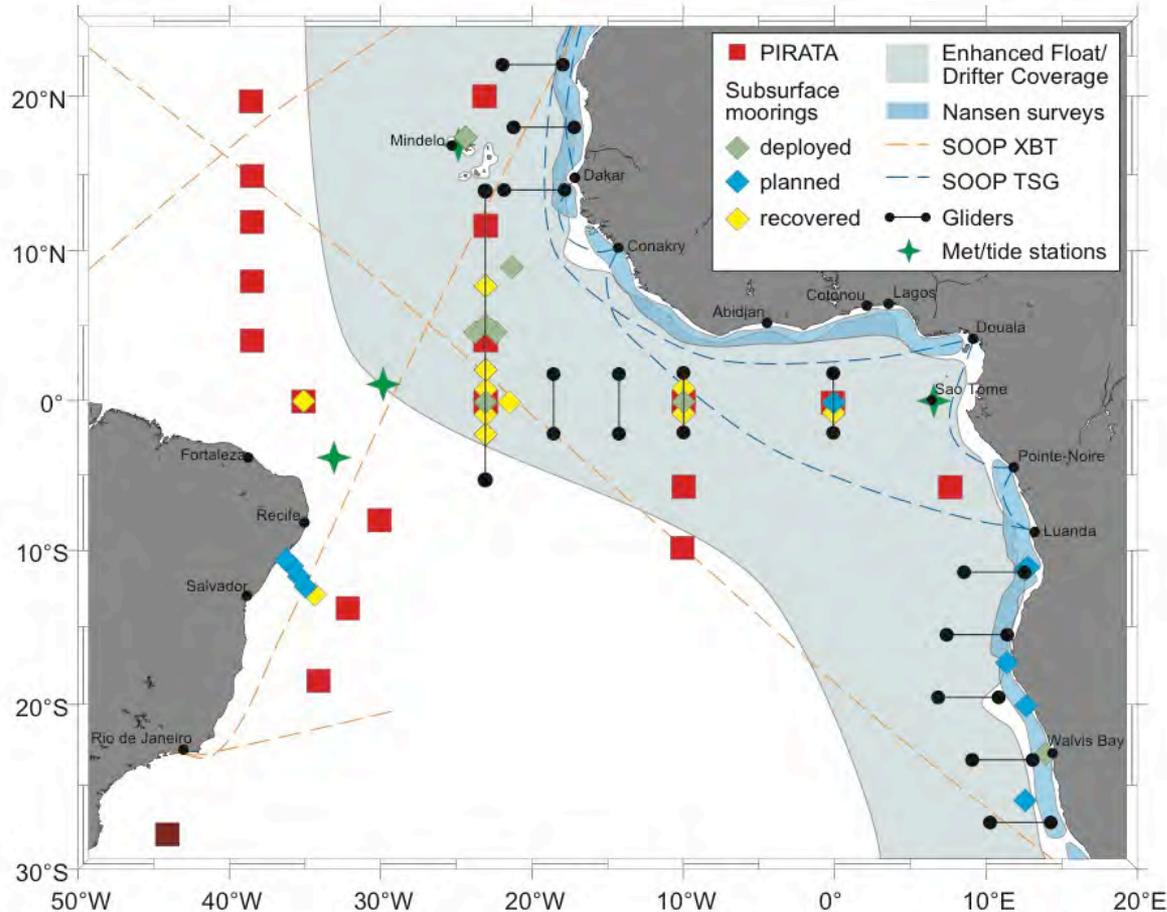




PREFACE enhances observational network in the tropical network and expands participation in this network for West African countries



CT2



Glider campaigns and cruises in 2015 and 2016, various seasons

Enhanced ARGO floats in Eastern Atlantic

8°E,6°S PIRATA mooring

Current meter at 0°E,eq

Moorings deployed on the shelf off Angola and Namibia at 11°S 18°S, 20°S and 23°S.

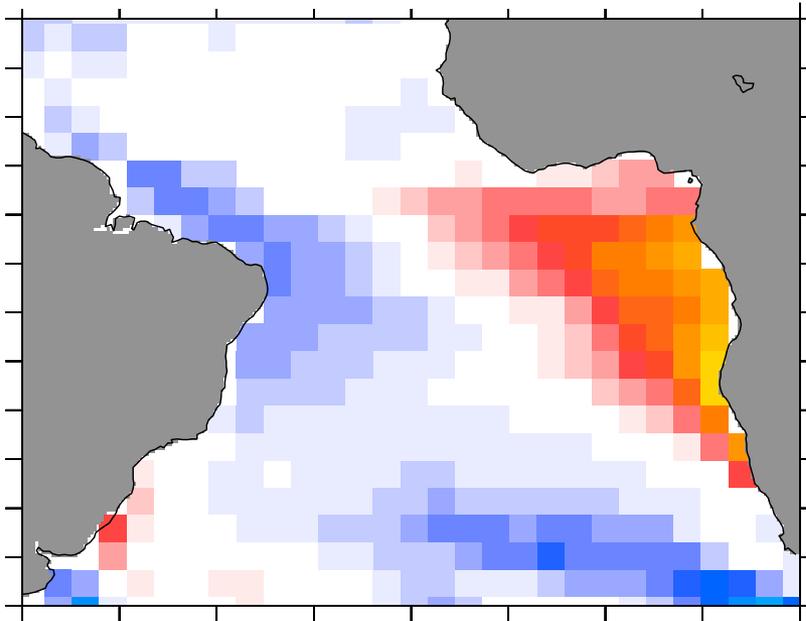
Historic EAF Nansen dataset

Improved model configurations

Tropical Atlantic SST errors in the Kiel Climate Model and its dependence on atmospheric model resolution

Low Resolution ($\sim 2.8 \times 2.8$ deg)

High Resolution ($\sim 0.75 \times 0.75$ deg)



Harlass et al. 2015

PREFACE also studies the impact of mean errors on the simulation and prediction of Tropical Atlantic climate



WP 13: Potential vulnerability of national economies to climate change impacts on fisheries

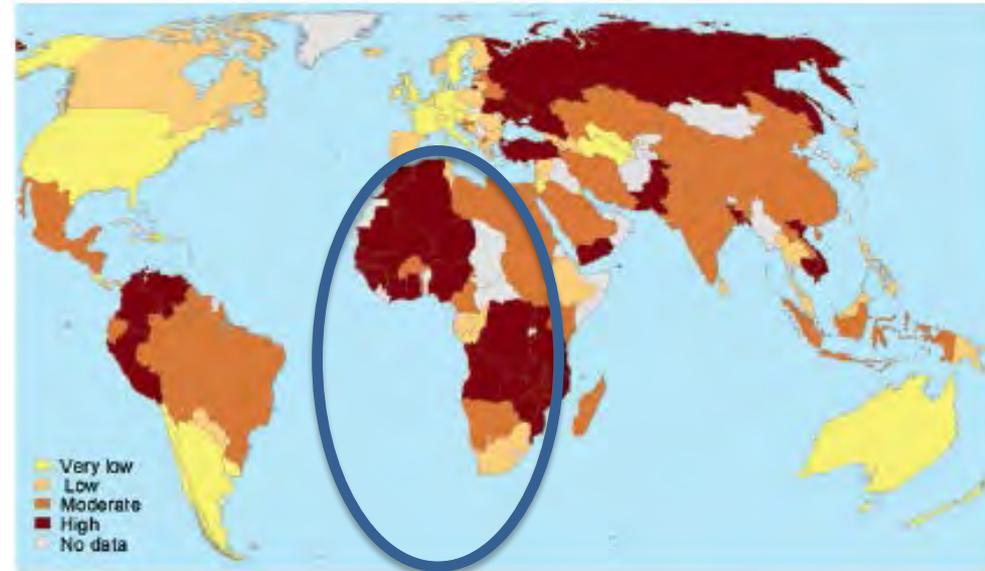


CT5

Integrating **exposure, sensitivity** and **adaptive capacity** using the IPCC scenario B2 (local development, lower emissions:

<http://www.ipcc.ch/ipccreports/tar/wg1/029.htm#f1>

)



Source: Allison *et al.* 2005

West African Coastal communities, and in particular fishermen, face various risks in their everyday life (uncertainty about the success of fishing, uncertain prices for fish and inputs such as fuel, and many more). Climate change puts additional risks and threats on top of this.

A field survey among West African fishing communities to assess how fishermen and -women perceive these risks and how they cope with them – currently ongoing in Senegal

(Jörn Schmidt, pers. comm.)



Summary: PREFACE cooperation vs. Galway Vision Statement (re the Tropical Eastern Atlantic and inclusive of West African countries)



Core Themes and the PREFACE research collaboration model

