



HORIZON 2020



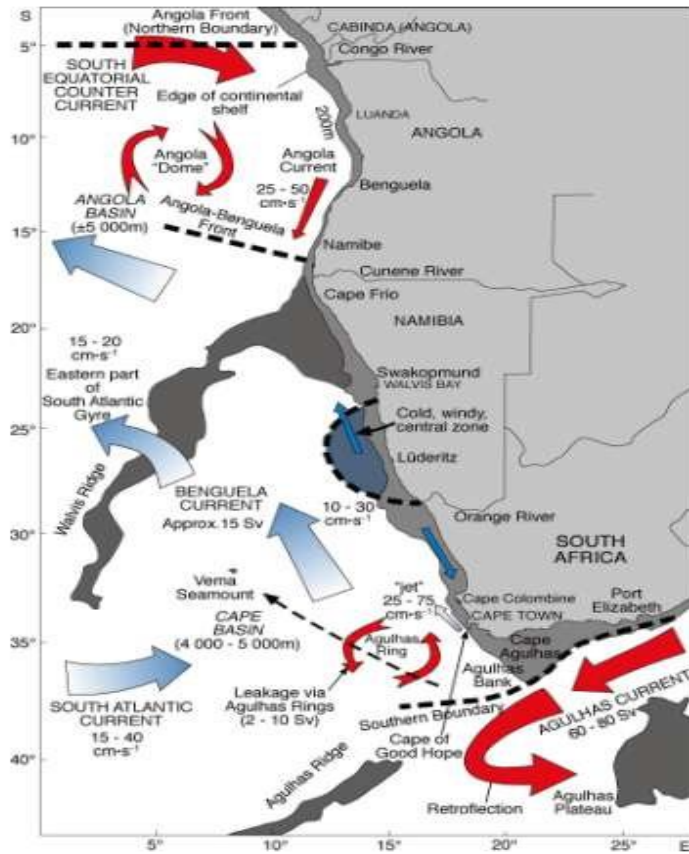
# PARTICIPATION IN PROJECTS HORIZON 2000

Filomena Vaz Velho

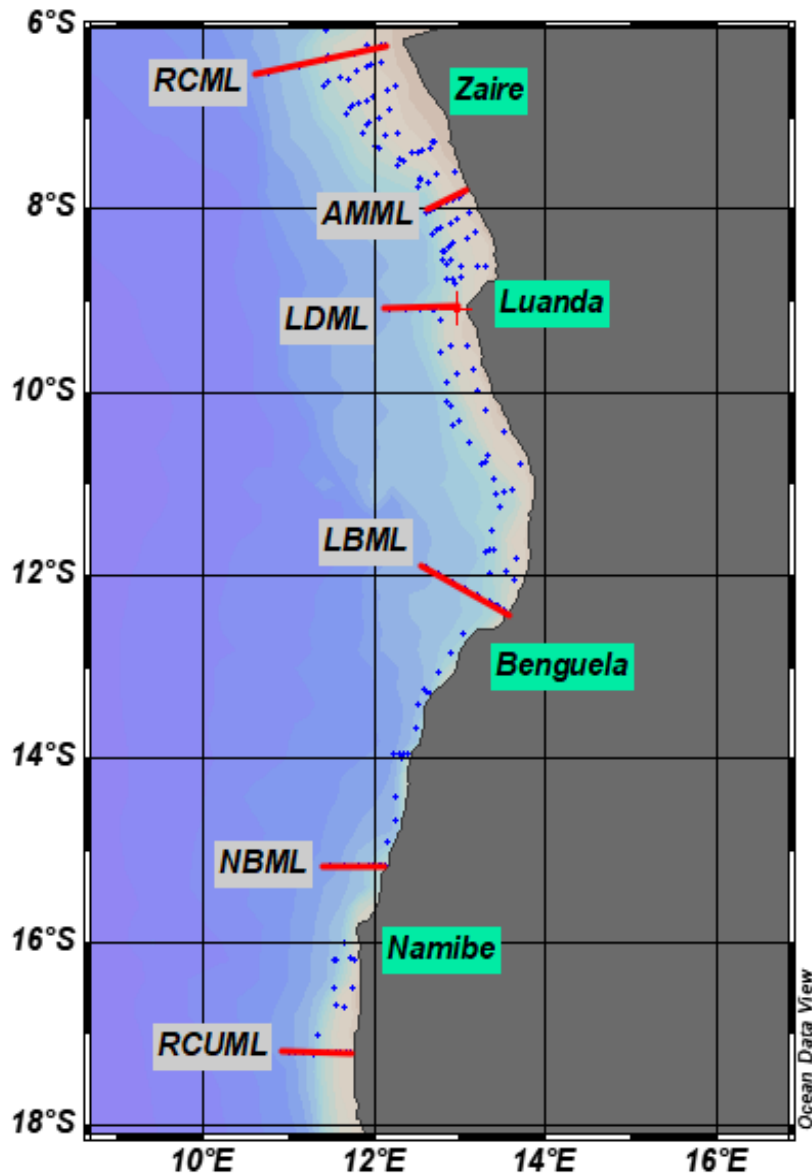
INIPM throughout its history maintains cooperation with several European countries, in the field of marine research: Professional Technical Assistance and training



Mapa político da Europa

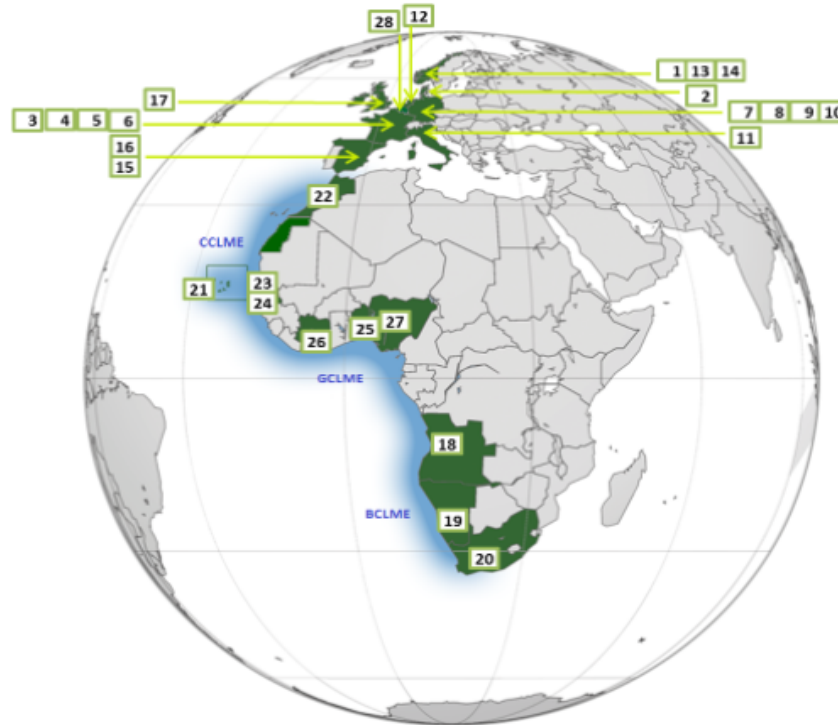


## MOTIVATION TO BE INVOLVED IN THE EU PROJECTS



- ❑ 1984-2019 Time Series of Recording Sea Surface Temperature, Salinity and Oxygen
- ❑ ADCP data-acoustic data to measure the velocity of currents over a depth range, using the doppler effect of sonar waves scattered by particles within the water column
- ❑ Data from 2007 to 2011 and 2015 to 2020 from the Automatic Weather Station (AWS) of Namibe
- ❑ Small group of oceanographers willing to explore these data, in terms of calibration, validation and analysis

- ❑ The INIPM with support of the researchers of GEOMAR Research Institute was select as beneficiary of the project “Enhancing Prediction of Tropical Atlantic Climate and its Impacts”
- ❑ Improve understanding of climate variability in the Tropical Atlantic, focusing on the eastern boundary upwelling regions and the Gulf of Guinea
- ❑ Under the 7th EC Framework Programme for Research, Technological Development and Demonstration Activities- 603521-2
- ❑ Duração: 2013-2017



# INIPM was involved in the following in Components

- ❑ 2: Circulation of tropical Atlantic currents and current variability
- ❑ 5: Interaction between sardinella stock dynamics and climate events in the southeastern Tropical Atlantic

**EASTERN BOUNDARY CIRCULATION AND HYDROGRAPHY OFF ANGOLA**  
Building Angolan Oceanographic Capacities

P. TCHIPALANGA, M. DENGLER, P. BRANDT, R. KOPTÉ, M. MACUÉRIA, P. COELHO, M. OSTROWSKI, AND N. S. KEENLYSIDE

AGU PUBLICATIONS

Journal of Geophysical Research: Oceans

RESEARCH ARTICLE  
10.1002/2016JC012374

Key Points:  
• Moored observations of the Angola Current at 11°S  
• Semannual cycle of current strength and stratification  
• Assessment of ocean reanalysis' performance in terms of current

The Angola Current: Flow and hydrographic characteristics as observed at 11°S

R. Kopte<sup>1</sup>, P. Brandt<sup>1,2</sup>, M. Dengler<sup>1</sup>, P. C. M. Tchipalanga<sup>3</sup>, M. Macuéria<sup>4</sup>, and M. Ostrowski<sup>4</sup>

<sup>1</sup>GEOMAR Helmholtz Centre for Ocean Research Kiel, Kiel, Germany, <sup>2</sup>Christian-Albrechts-Universität zu Kiel, Kiel, Germany, <sup>3</sup>Instituto Nacional de Investigação Pesqueira (INIP), Luanda, Angola, <sup>4</sup>Institute for Marine Research (IMR), Bergen, Norway

frontiers  
in Marine Science

REVIEW  
published: 05 December 2019  
doi: 10.3389/fmars.2019.00722

**Multidisciplinary Observing in the World Ocean's Oxygen Minimum Zone Regions: From Climate to Fish — The VOICE Initiative**

Véronique Garçon<sup>1\*</sup>, Johannes Karstensen<sup>2\*</sup>, Artur Palacz<sup>3</sup>, Maciej Telszewski<sup>3</sup>, Tony Aparco Lara<sup>4</sup>, Denise Breitbart<sup>5</sup>, Francisco Chavez<sup>6</sup>, Paulo Coelho<sup>7</sup>, Marcela Cornejo-D'Ottone<sup>8</sup>, Carmen Santos<sup>9</sup>, Björn Fiedler<sup>10</sup>, Natalya D. Gallo<sup>10,11</sup>, Marilouise Grégoire<sup>12</sup>, Dimitri Gutiérrez<sup>13,14</sup>, Martin Hernandez-Ayon<sup>15</sup>, Kirsten Ieensee<sup>16</sup>, Tony Koslow<sup>16</sup>, Lisa Levin<sup>16,17</sup>, Francis Marsac<sup>17</sup>, Helmut Maske<sup>17</sup>, Baye C. Mbaye<sup>18</sup>, Ivonne Montes<sup>19</sup>, Wajih Naqvi<sup>1</sup>, Jay Pearlman<sup>20</sup>, Edwin Pinto<sup>21</sup>, Grant Pitcher<sup>24,25</sup>, Oscar Pizarro<sup>26,27</sup>, Kenneth Ross<sup>28</sup>, Damodar Shenoy<sup>29</sup>, Anja Van der Plas<sup>30</sup>, Melo R. Vito<sup>31</sup> and Kevin Weng<sup>32</sup>

OPEN ACCESS

Edited by:

SpringerLink

Published: 11 December 2018

Causes and evolution of the southeastern tropical Atlantic warm event in early 2016

Joke F. Lübbecke<sup>✉</sup>, Peter Brandt, Marcus Dengler, Robert Kopte, Jan Lüdke, Ingo Richter, Meike Sena Martins & Pedro C. M. Tchipalanga

**THE EVOLUTION OF THE ANGOLAN SARDINELLA STOCK IN RELATION TO THE CLIMATIC EVENTS IN THE EASTERN TROPICAL ATLANTIC 1985-2014**

Barradas A.<sup>1</sup>, Sangolay, B.B<sup>1</sup>, Rouault M.<sup>2,3</sup> and M. Ostrowski<sup>4</sup>

PREFACE-PIRATA-CLIVAR-TAY CONFERENCE  
August 25th-27th 2015, Cape Town

  
UNIVERSIDADE FEDERAL DE PERNAMBUCO  
CENTRO DE TECNOLOGIA E GEOCIÊNCIAS  
DEPARTAMENTO DE OCEANOGRAFIA  
PROGRAMA DE PÓS-GRADUAÇÃO EM OCEANOGRAFIA

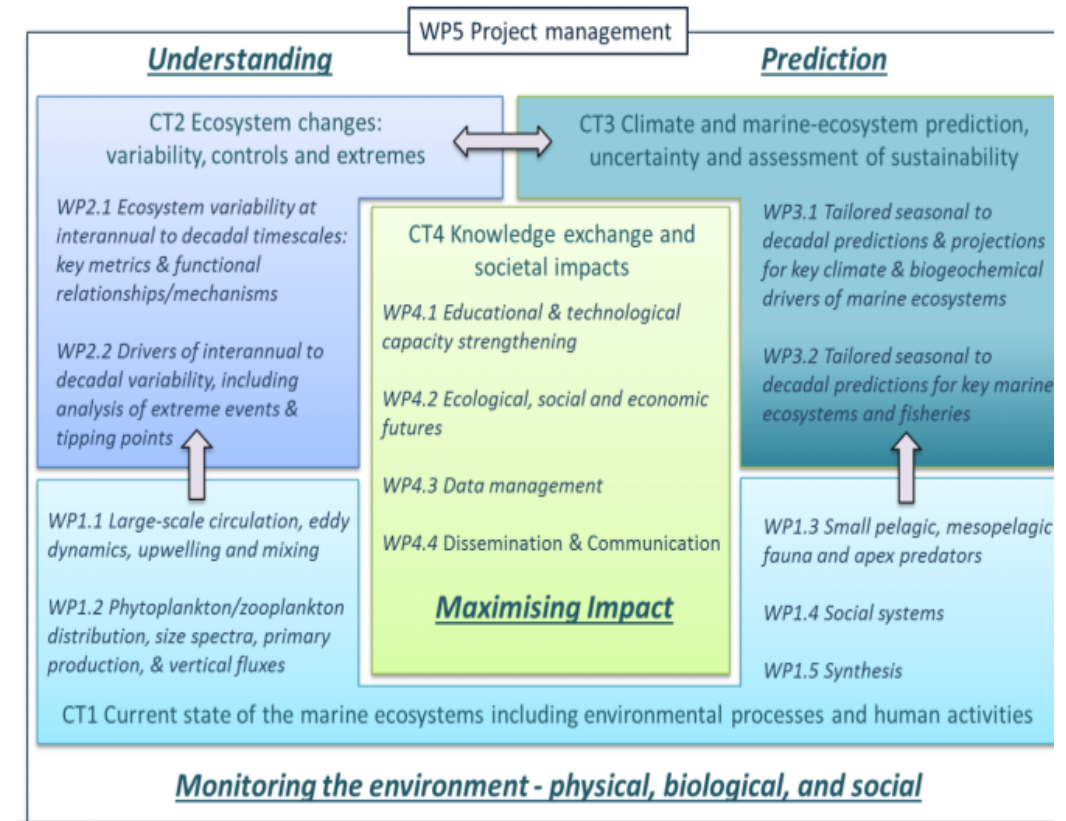
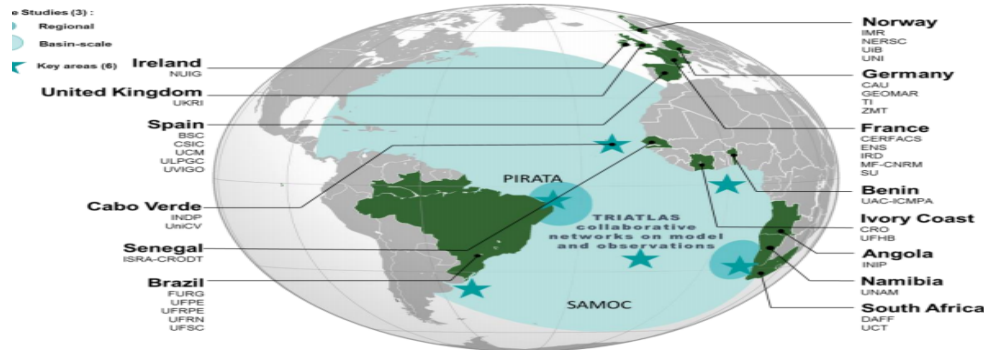
MARISA FRANCISCA DE NOVATO MACUÉRIA

WARM AND COLD EVENTS IN THE TROPICAL EASTERN ATLANTIC OFF ANGOLA



## South and Tropical Atlantic climate-based marine ecosystem prediction for sustainable management

**Duration : 2019-2023**



**Main Objective:** Enable sustainable management of human activities in the Atlantic Ocean as a whole, by closing knowledge gaps on the status of the South and Tropical Atlantic marine ecosystem and developing a framework for predicting its future changes, from months to decades.

**Deliverables D1.2.1:** Phytoplankton biomass, primary production and size

**D1.2.2:** Zooplankton biomass, diversity and trophic structure

**D1.2.3:** Vertical migration patterns and associated biogeochemical fluxes from dedicated sampling survey

**D3.1:** First comparative mapping of pelagic and mesopelagic fish size spectra, biomass distribution and biodiversity

**D3.2:** Comparative trophic structure of 4 LMEs in Central and South Atlantic investigated with standardised methodologies

#### COVID impacts

- Cruises & deployments cancelled/postponed
- Multidriver experiments postponed

#### Mediation plans

- Re-scheduling of field activities
- Focus on analysis of existing data

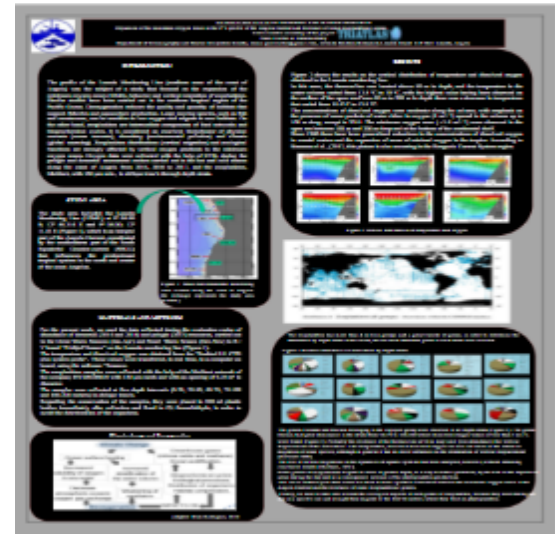
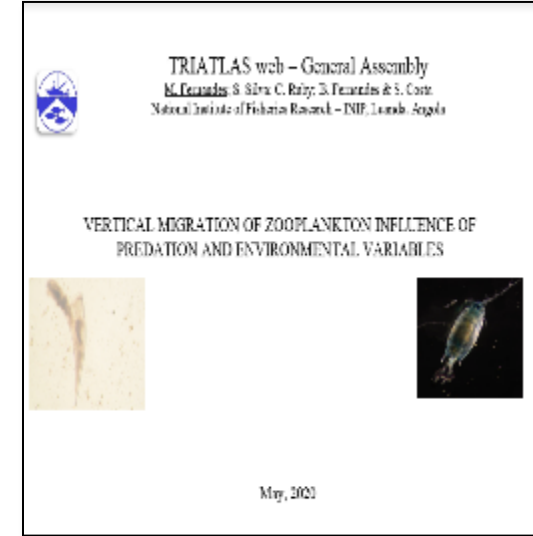
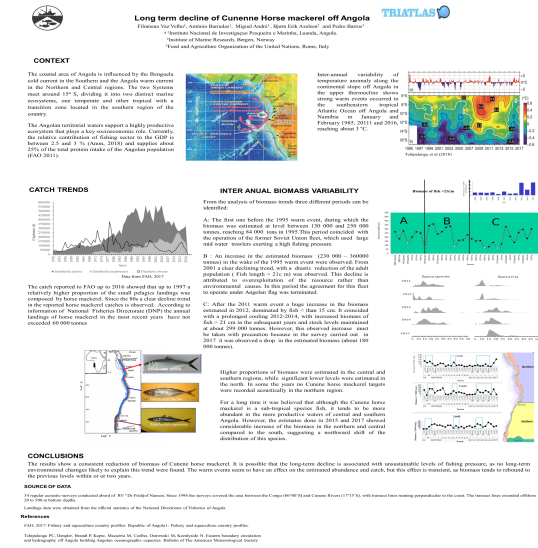
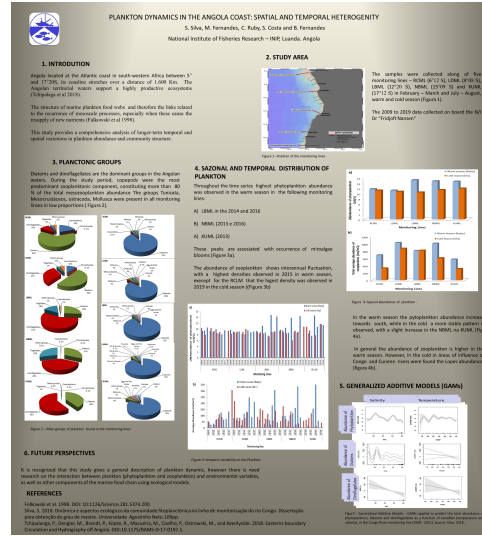
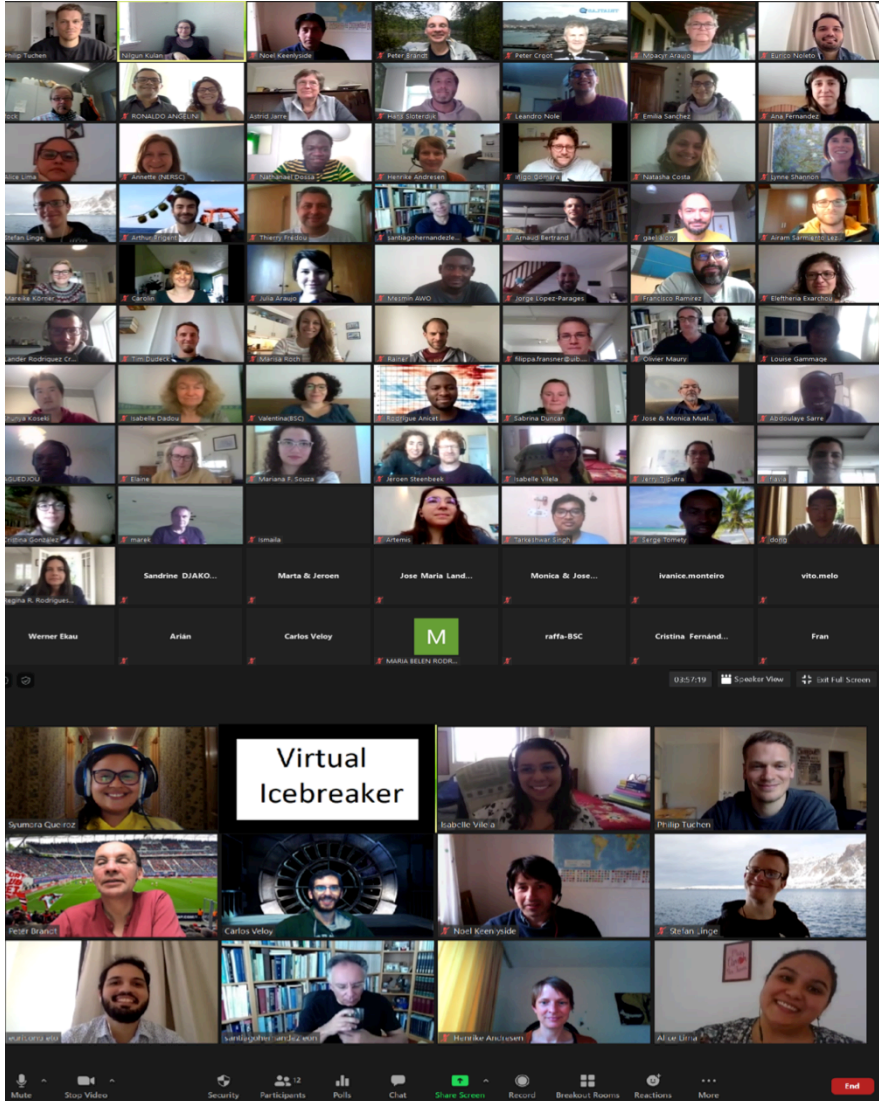
#### COVID consequences

- Benguela (M177 replaced by SO285)
- Lab analyses of samples

#### COVID mediation plans

- Data analysis based on Dr Fridtjof Nansen cruises

# Assembleia Geral do TRIATLAS -2020





# Experiencies Learning

- ❑ Increased interaction within the Atlantic marine scientific community, under the scope of TRIATLAS with Brazilian institutions
- ❑ AS INIPM participation was since the first phases of the project there was hight involvement on job description and report back of WP to EU
- ❑ Better knowledge of EU rules of procedure, regarding the project reporting cycle

