

ANAVE – Circular de Régimen Interior

Madrid, 25 de octubre de 2018

Ref.: SMA 36/2018/ES

Asunto: Propuesta de Francia sobre la designación del Mar Mediterráneo como zona de control de emisiones de azufre (SECA) y Nitrógeno (NECA).

Muy Sres. nuestros:

En el día de ayer, en un evento paralelo del Comité de Protección del Medio Marino (MEPC 73), que se está celebrando esta semana en la OMI, Francia ha presentado una propuesta para convertir el Mediterráneo en zona ECA, endureciendo las normas de emisiones de SO_x y NO_x. Les adjuntamos las presentaciones utilizadas.

Como ya se informó en la reunión del Comité Directivo del pasado 9 de octubre, hacía tiempo que se venía hablando de esta posibilidad. Hoy mismo nos hemos puesto en contacto con Víctor Jimenez, representante de España en la OMI, quien nos ha indicado que *“la medida es compleja por muchos motivos. Se está todavía a la espera de los estudios de la UE y del REMPEC. Afecta también a competencias comunitarias. Y hay que tener en cuenta que hay estados del mediterráneo que no son parte del Anexo VI de MARPOL como Argelia y Egipto. Por todo ello, creo que debemos seguir de cerca la evolución del tema, pero con cierto grado de calma, ya que el camino será largo.”*

Les mantendremos informados de cualquier novedad en relación con este asunto.

Muy cordialmente,

Manuel Carlier
Director General

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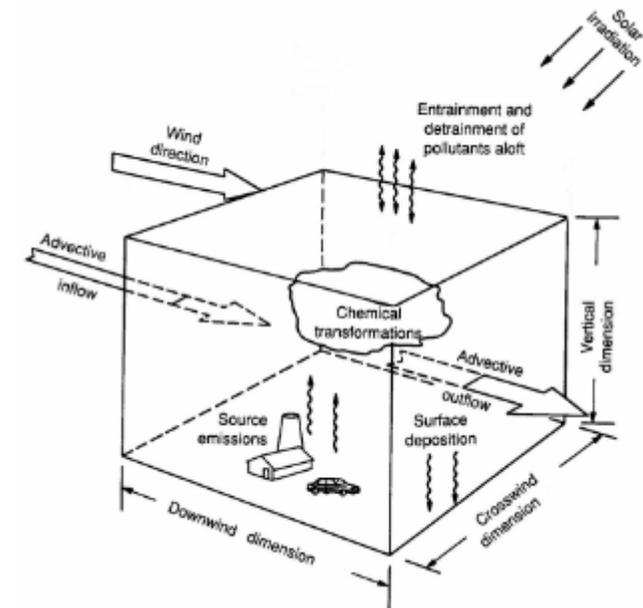
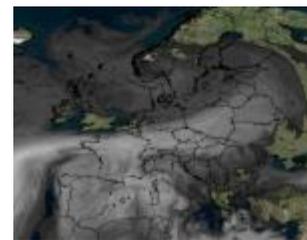
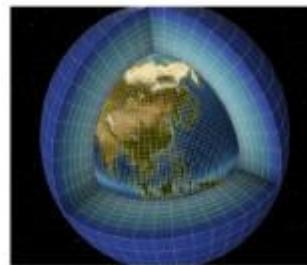
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ECAMED: IMPACT OF THE IMPLEMENTATION OF AN ECA IN THE MEDITERRANEAN SEA



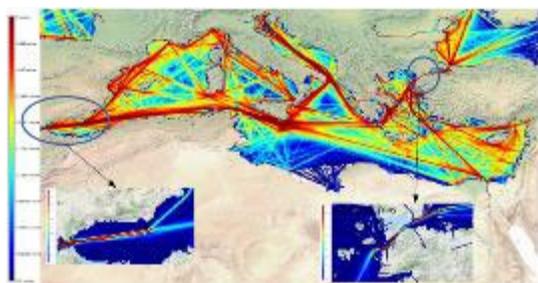
From emissions to concentrations

- Air pollutant ambient concentrations and deposition are simulated by chemistry transport models
- INERIS team develops the CHIMERE model together with CNRS since 2001
- CHIMERE is used by INERIS to assess the impact of emission control scenarios in France and in Europe. It is also the backbone of the national air quality forecasting platform PREv'air (www.prevoir.org)

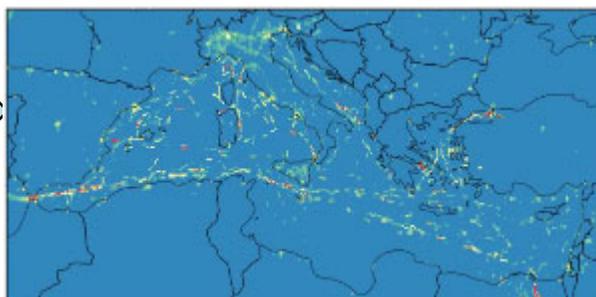
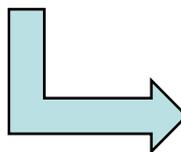


ECAMED set-up

1- Detailed description of ship traffic



2- Evaluation of associated emissions



In-land emissions from other activity sectors
(road, off-road, industry, residential, agriculture...)
for 2015:

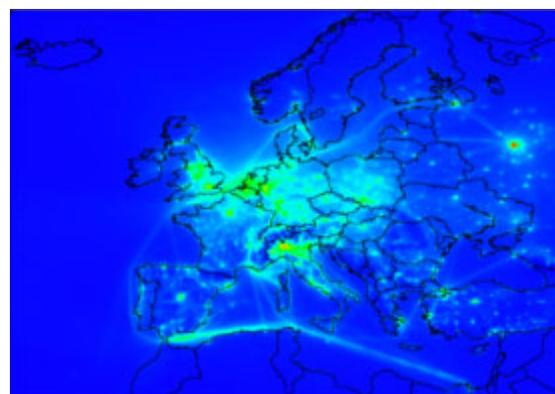
Official emissions reported according to the UN
Convention on long range Transboundary Pollution

**Reference years: 2015-2016 with 0,5%S
Projections :**

- 0,1% S rate in fuel used
- Tier3 engines to reduce NOx emissions

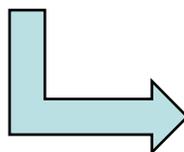


3- Simulated Air pollutant concentrations and deposition



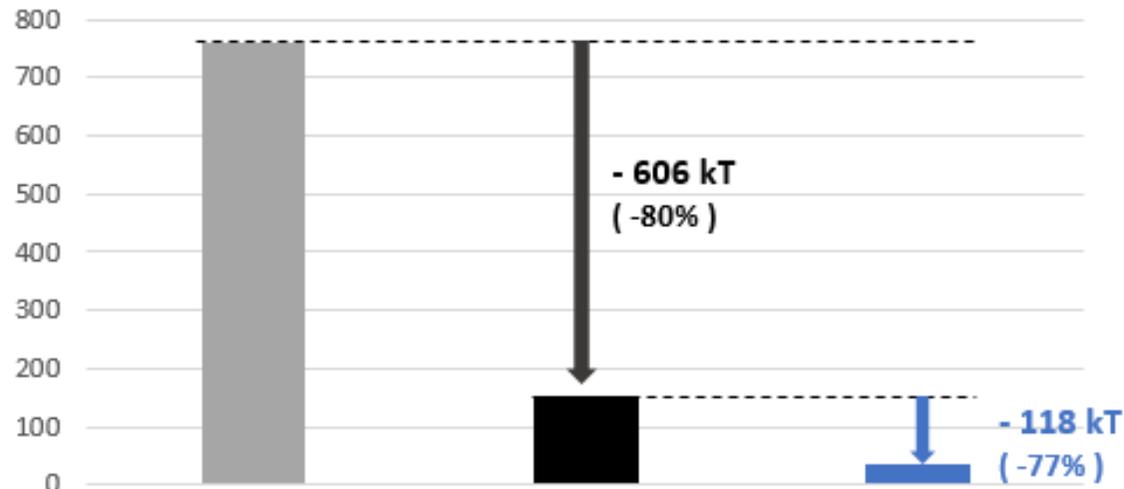
4- Cost-benefits analysis

Communication and networking
with stakeholders to share
methodologies and results

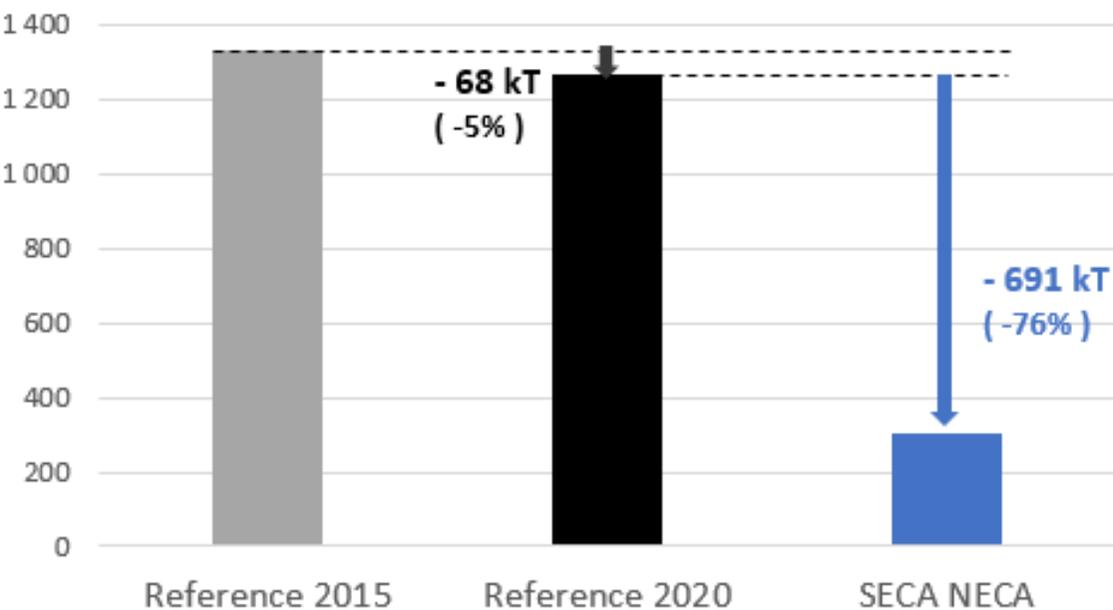


Assumptions on emissions

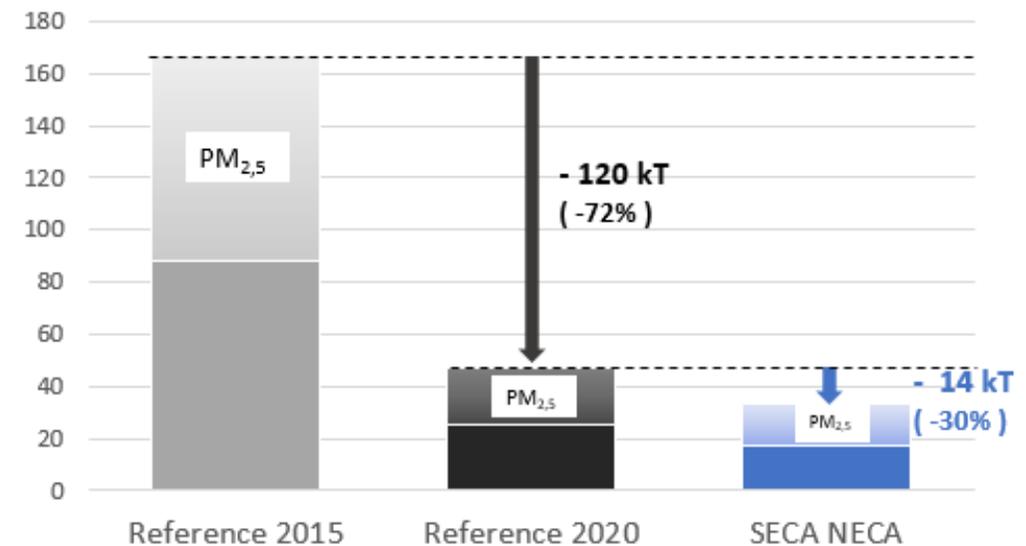
SOx emissions in kt



NOx emissions in kt

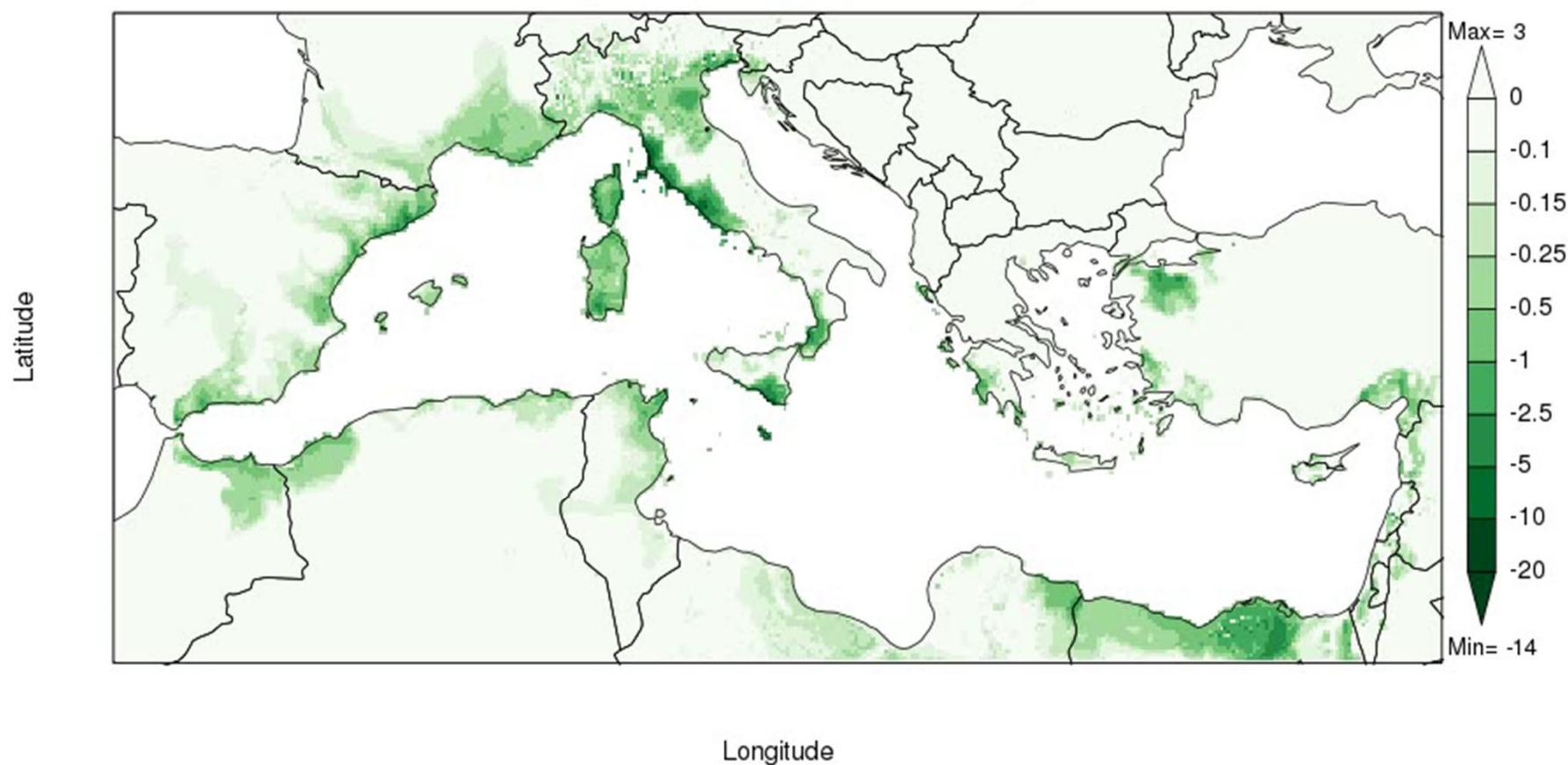


Total particle emissions in kt



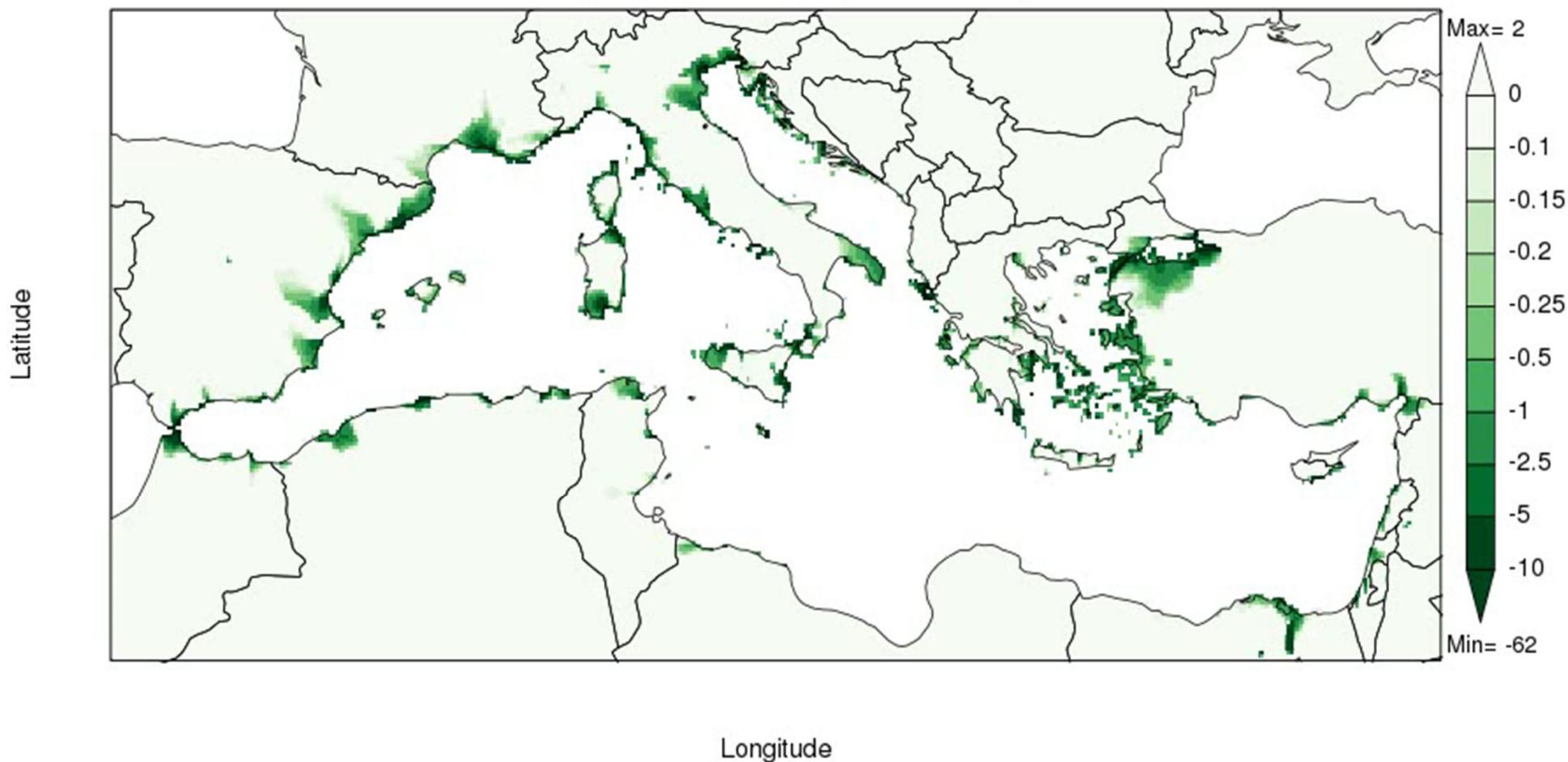
Daily Evolution of PM2.5 concentrations reduction (in-land) – July 2015

**Concentration reduction of PM25 in ug/m3 between SECA NECA and Reference 2020
July hourly average (2015070100)**



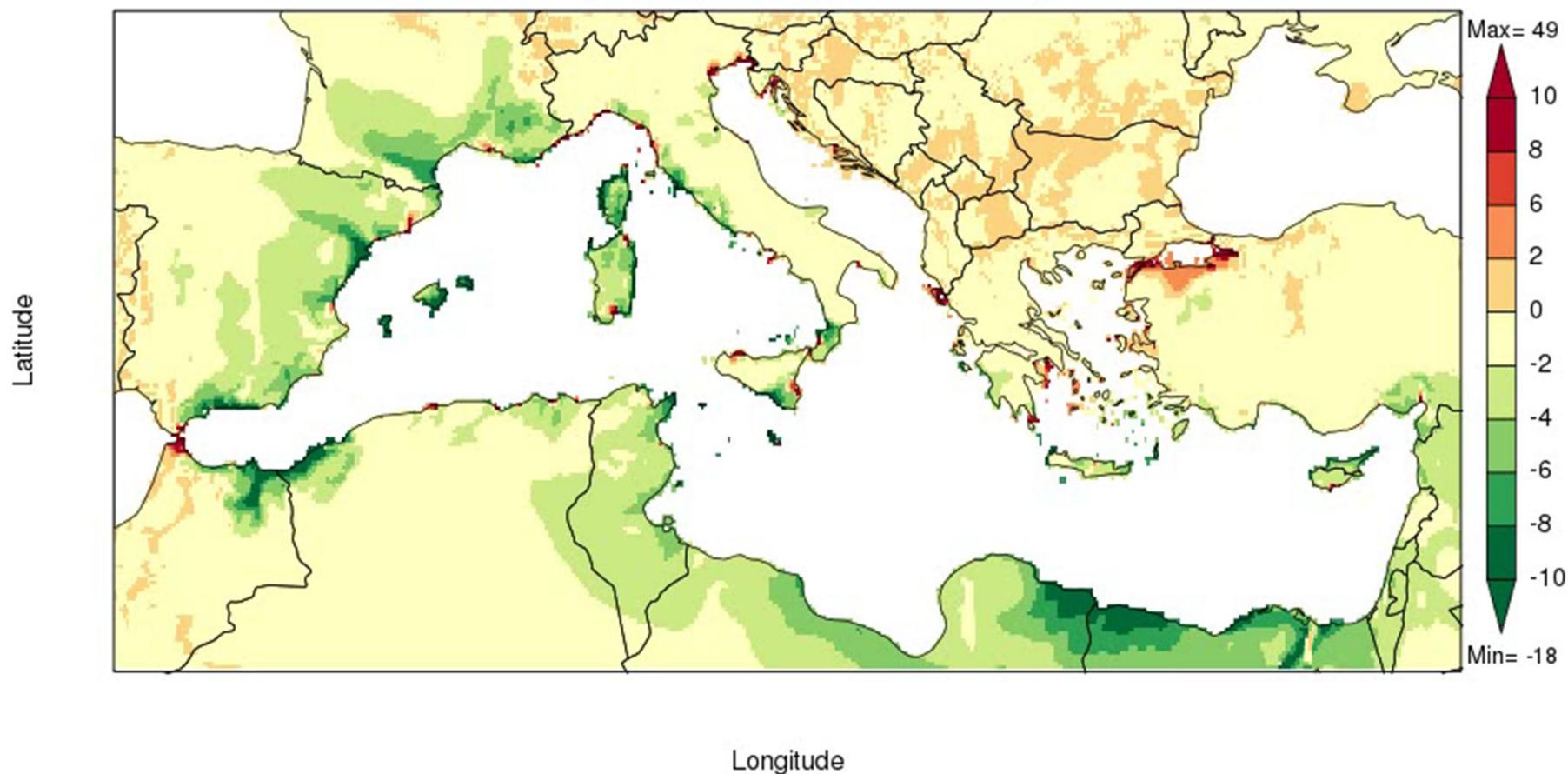
Daily Evolution of NO2 concentrations reduction (in-land) – July 2015

**Concentration reduction of NO2 in ug/m3 between SECA NECA and Reference 2020
July hourly average (2015070100)**



Evolution of O3 concentrations reduction (in-land) – July 2015

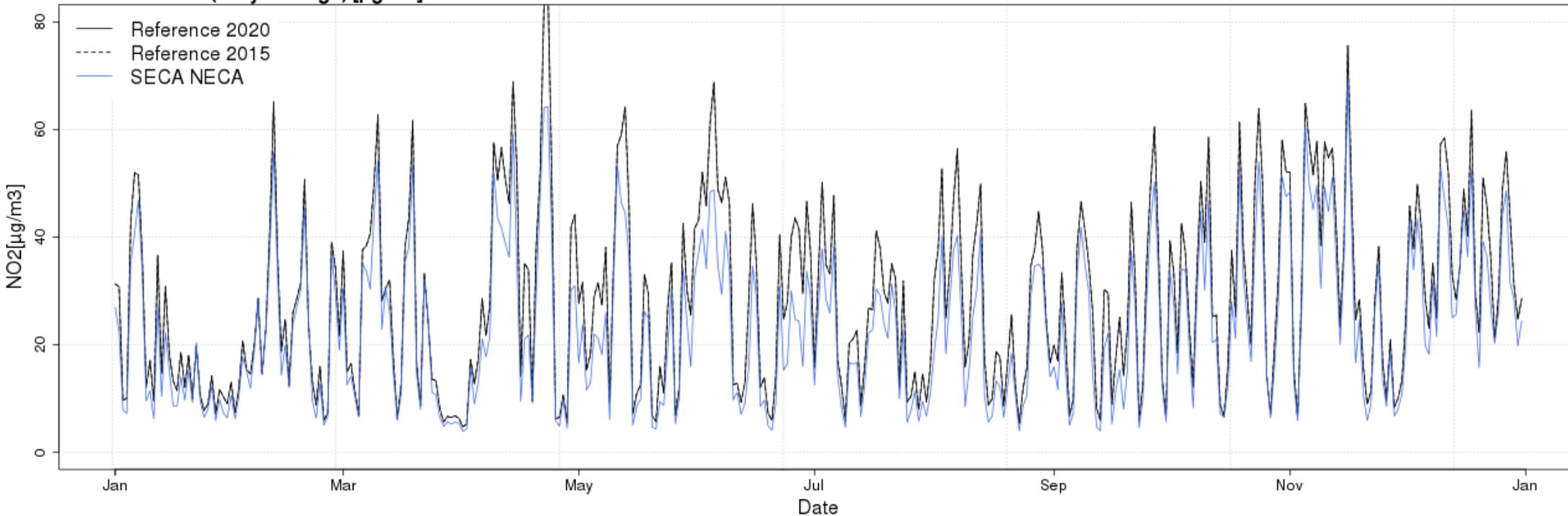
**Concentration reduction of O3 in ug/m3 between SECA NECA and Reference 2020
July hourly average (2015070100)**



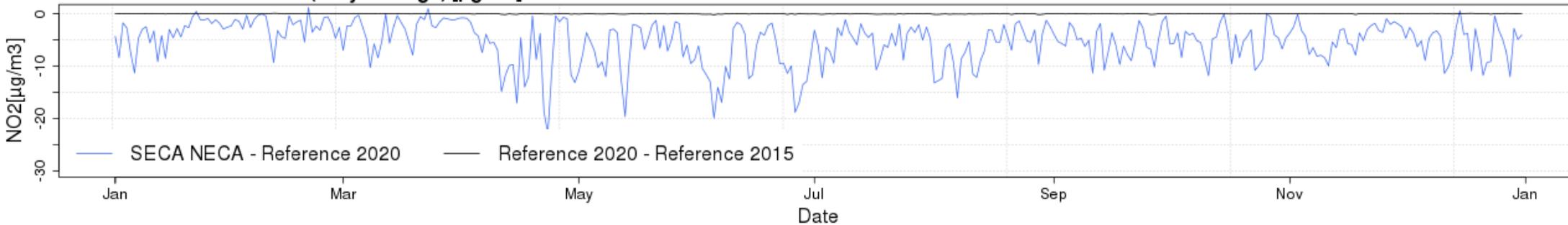
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Marseille NO2

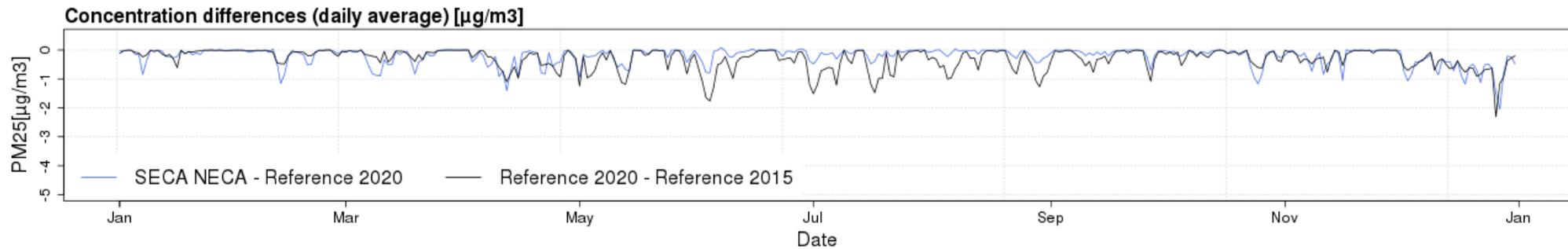
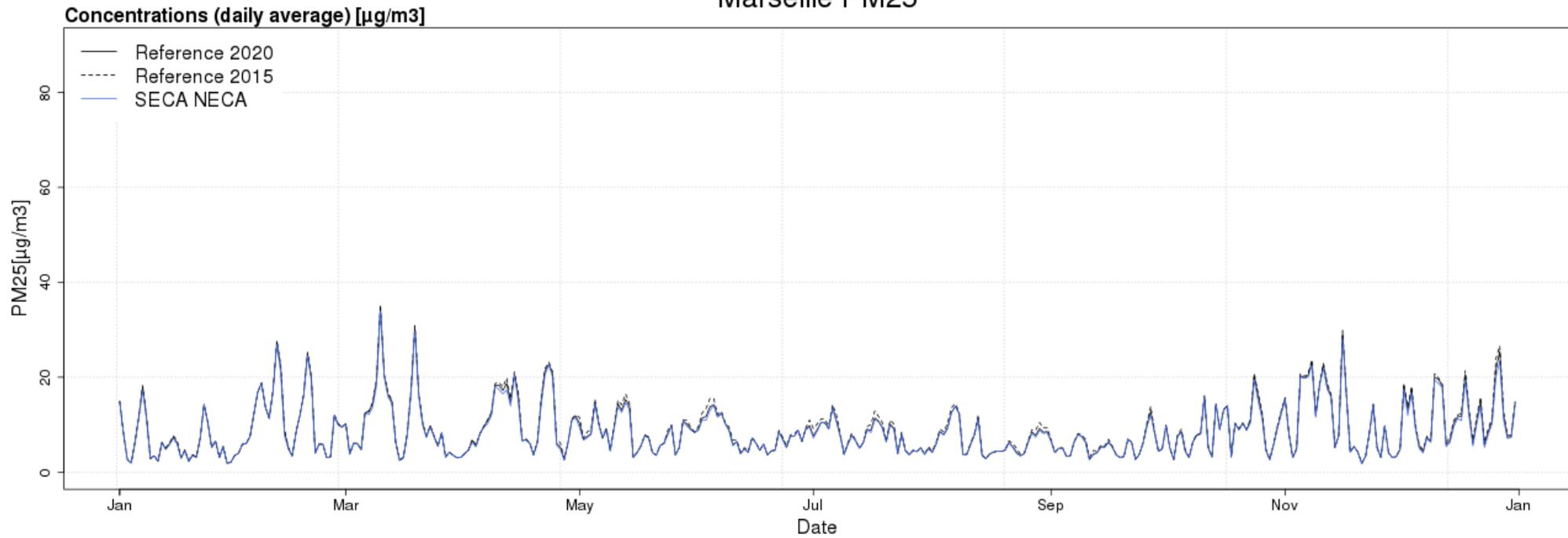
Concentrations (daily average) [$\mu\text{g}/\text{m}^3$]



Concentration differences (daily average) [$\mu\text{g}/\text{m}^3$]



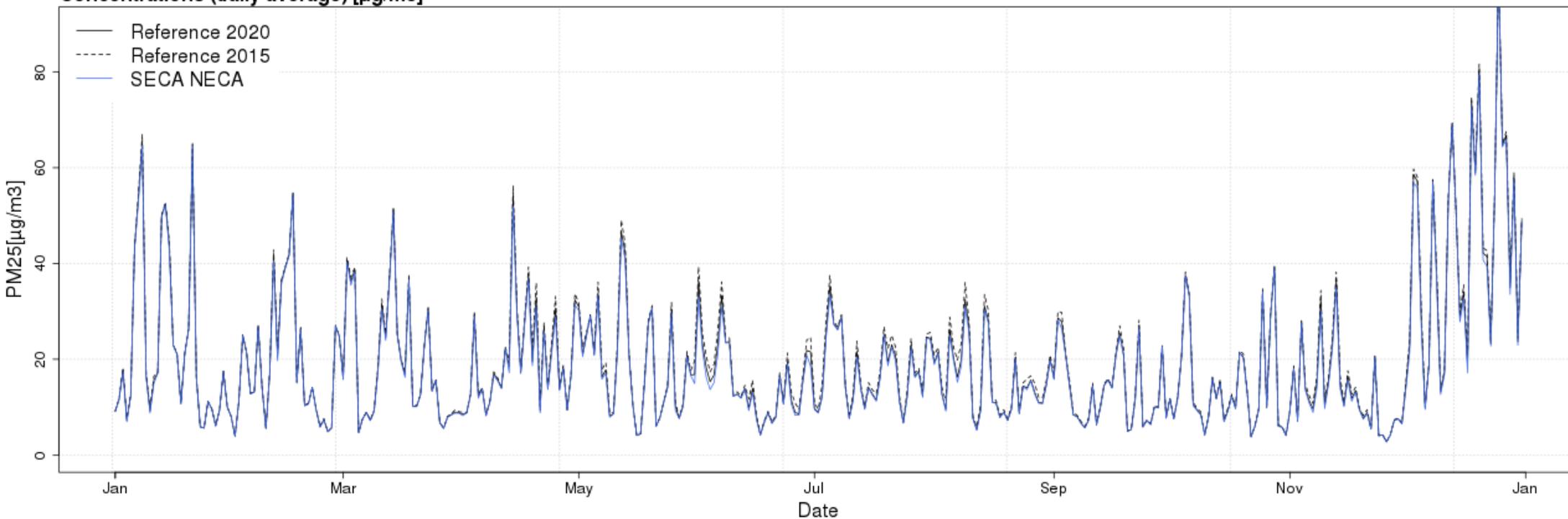
Marseille PM25



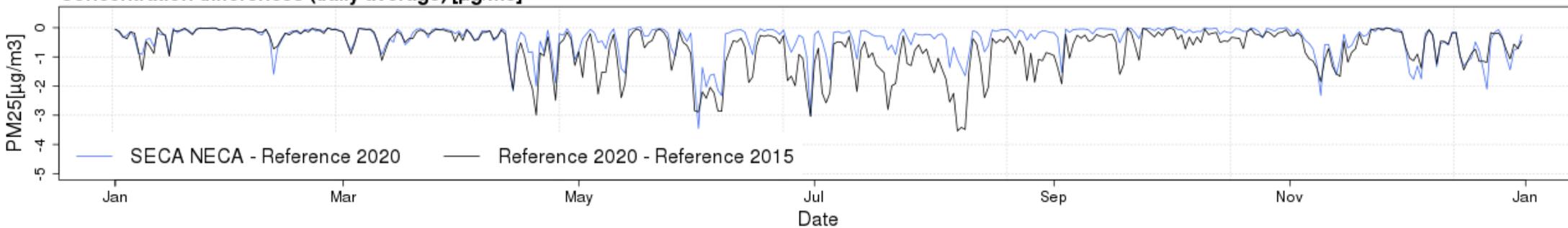
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Tunis PM25

Concentrations (daily average) [$\mu\text{g}/\text{m}^3$]

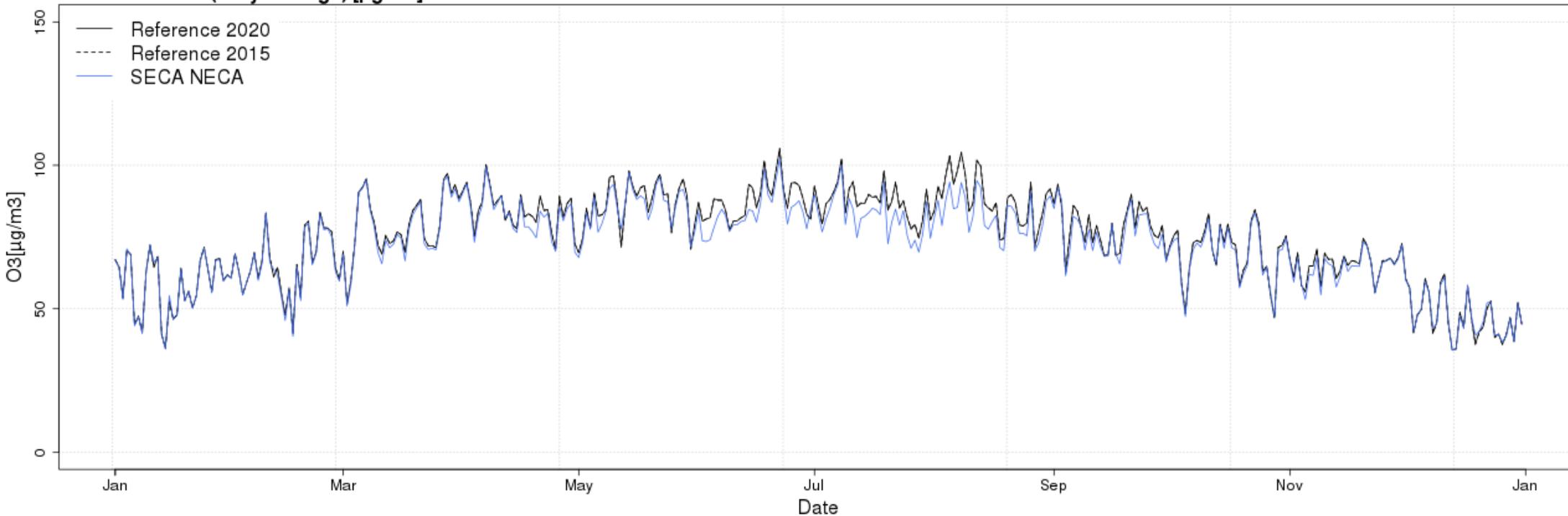


Concentration differences (daily average) [$\mu\text{g}/\text{m}^3$]

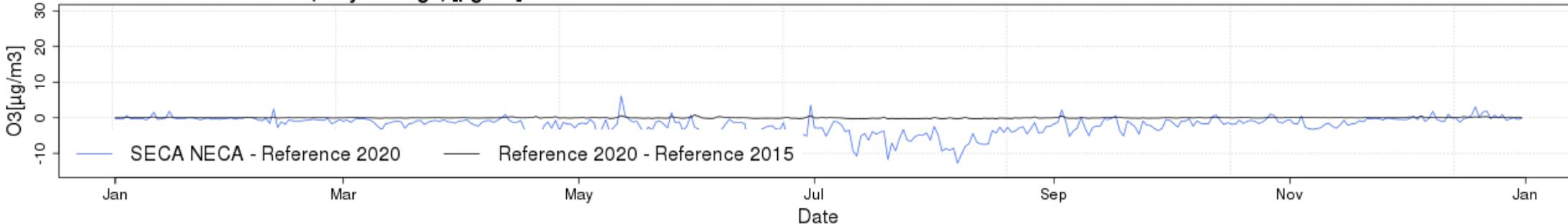


Tunis O3

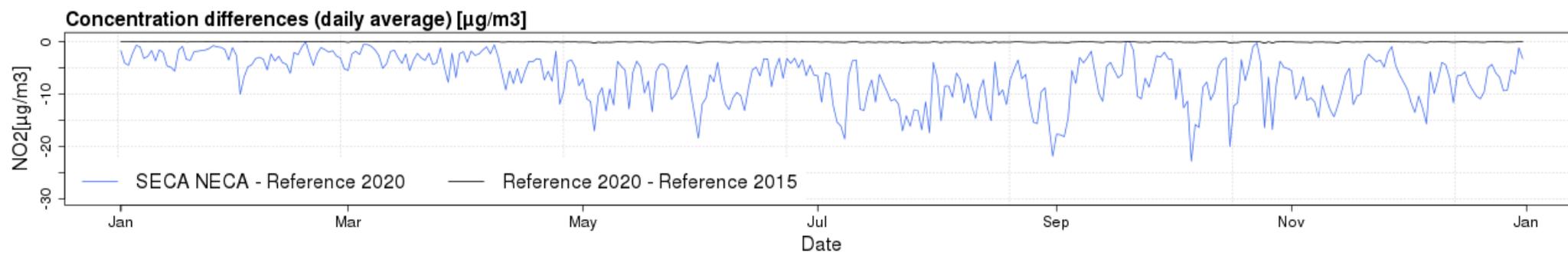
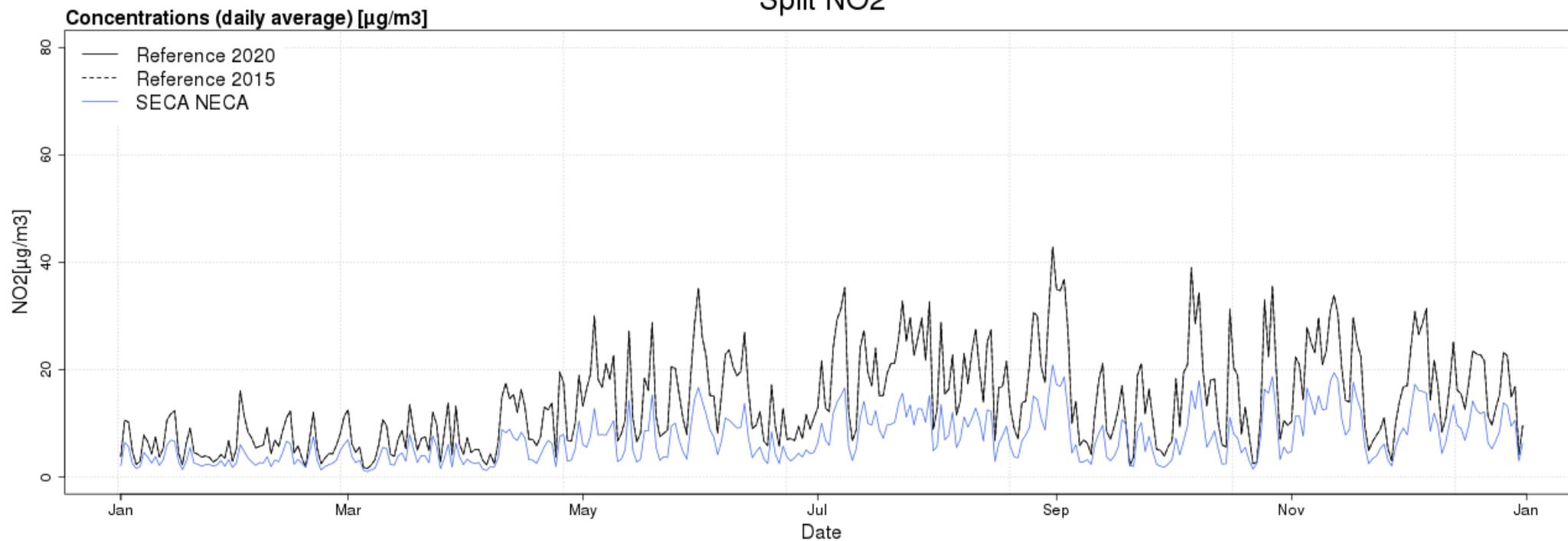
Concentrations (daily average) [$\mu\text{g}/\text{m}^3$]



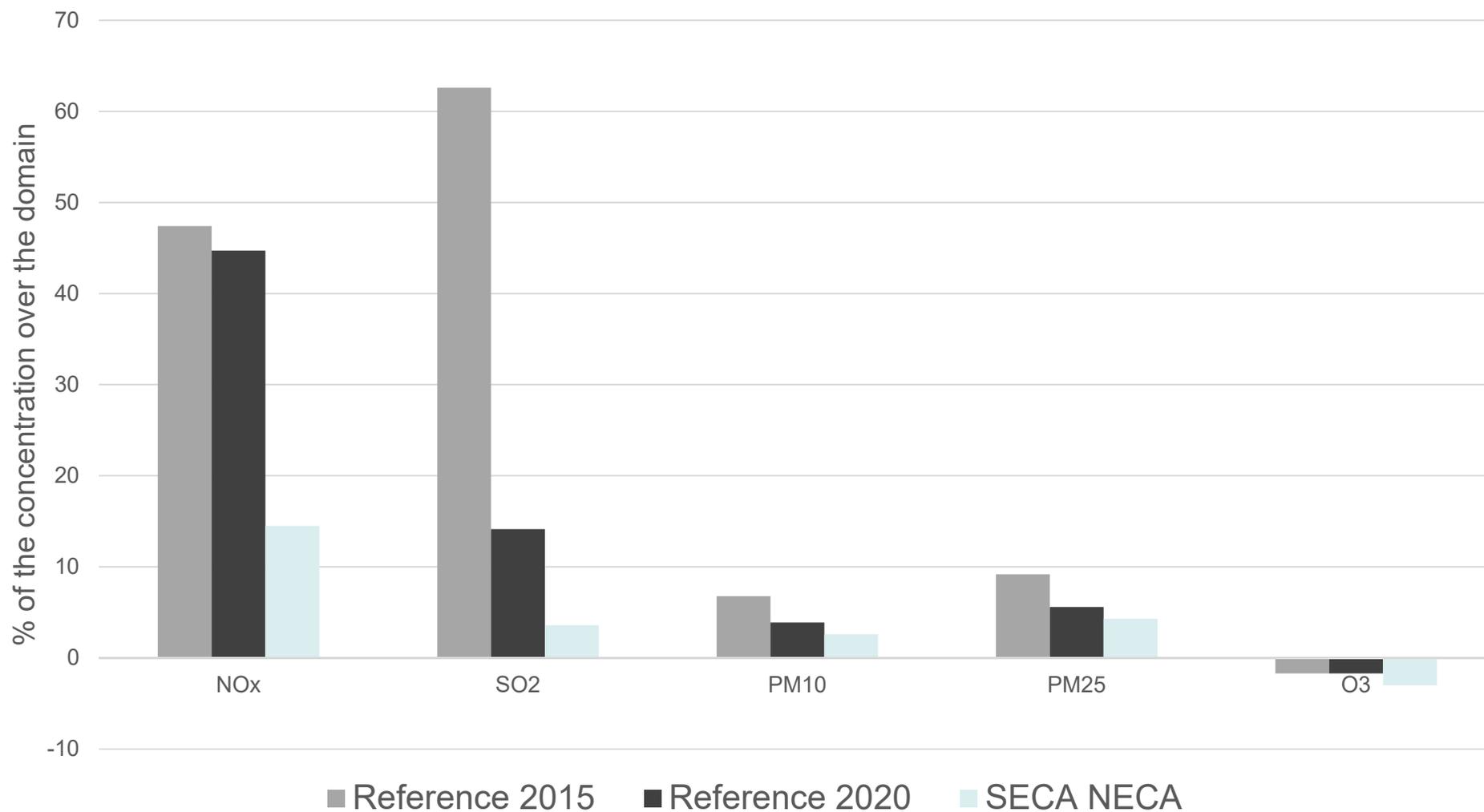
Concentration differences (daily average) [$\mu\text{g}/\text{m}^3$]



Split NO2



Air pollutant concentrations attributed to ships emissions over the whole domain



Health Impacts

Health impacts considered and monetary unit

Health impact	Impact unit	Pollutant	Unit valuation (€ price base 2015)
Acute Mortality (All ages) median VOLY*	Premature deaths	O ₃	66 728
Respiratory hospital admissions (>64)	Cases		2 567
Cardiovascular hospital admissions (>64)	Cases		2 567
Minor Restricted Activity Days (MRADs all ages)	Days		49
Chronic Mortality (All ages) LYL median VOLY	Life years lost	PM _{2.5}	66 728
Chronic Mortality (30yr +) deaths mean VSL**	Premature deaths		2 567 364
Infant Mortality (0-1yr) mean VSL	Premature deaths		3 851 047
Chronic Bronchitis (27yr +)	Cases		61 987
Bronchitis in children aged 6 to 12	Cases		680
Respiratory Hospital Admissions (All ages)	Cases		2 567
Cardiac Hospital Admissions All ages)	Cases		2 567
Restricted Activity Days (all ages)	Days		106
Asthma symptom days (children 5-19yr)	Days		49
Lost working days (15-64 years)	Days		150
Bronchitis in children aged 5 to 14	Cases	NO ₂	680
Respiratory Hospital Admissions (All ages)	Cases		2 567
Chronic Mortality (All ages) LYL median VOLY	Life years lost		66 728
Chronic Mortality (30yr +) deaths mean VSL	Premature deaths		2 567 364

Alpha-RiskPoll tool used – developed by EMRC (Mike Holland) for use in evaluation of health benefits of European air policy Directives

Use of identical monetary values in all countries for the ECAMED study

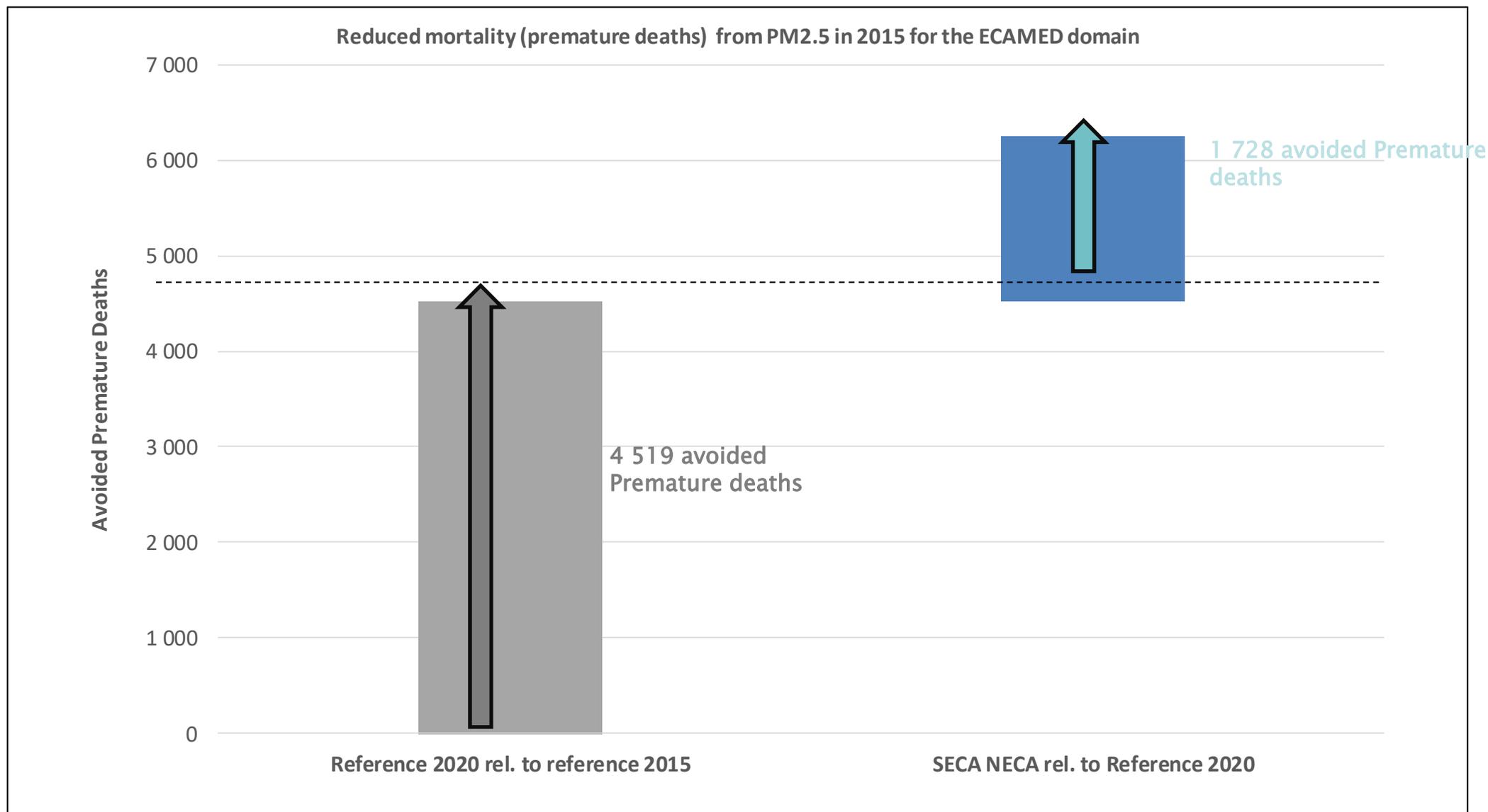
All results presented are for 2015

All monetary values expressed in € price base 2015

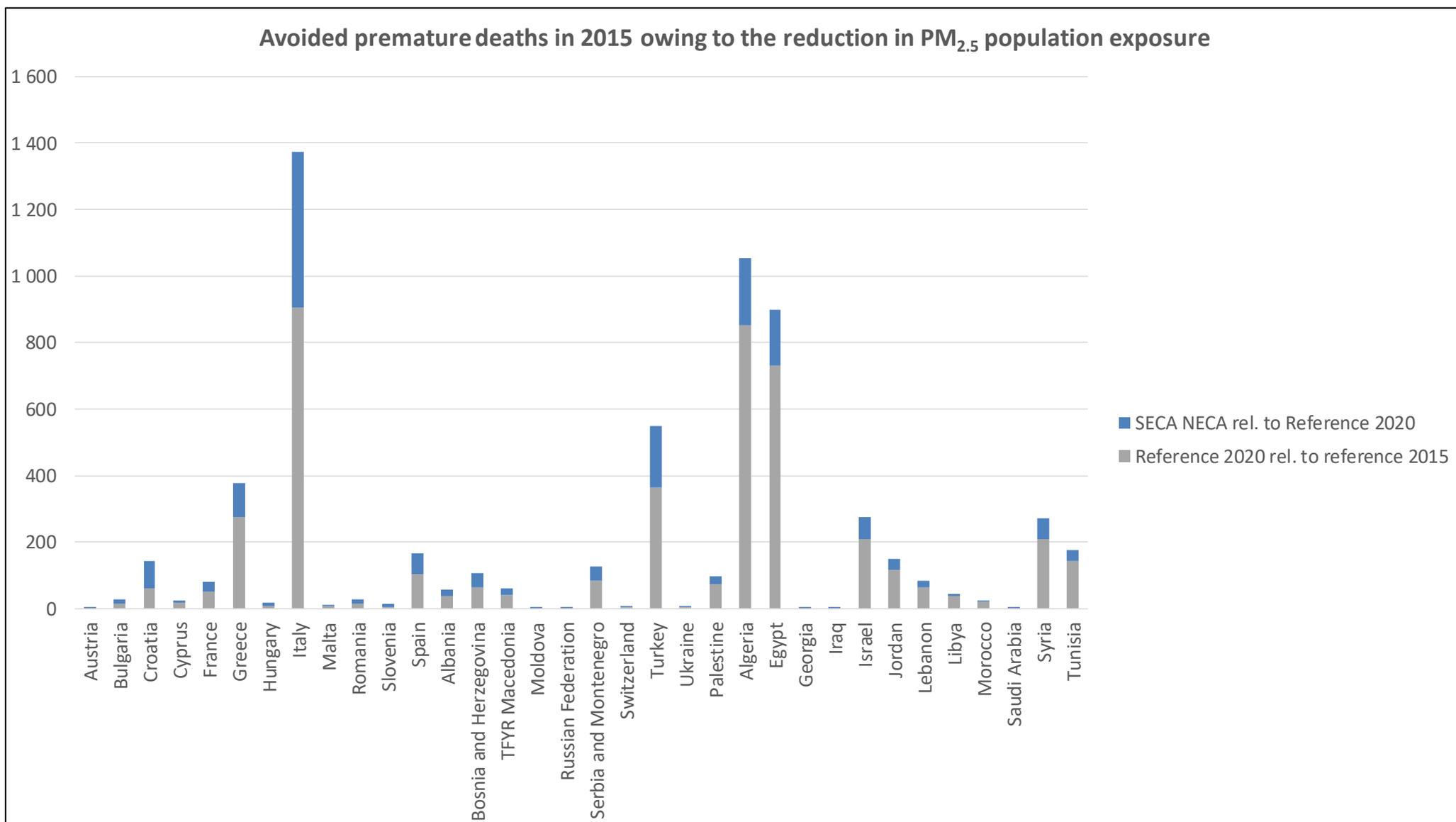
(*) VOLY = Value of Life Year ; (**) VSL = Value of Statistical Life ; values for the willingness to pay by society to reduce the risk of premature mortality.

Concentrations response functions according to WHO/Europe (2013) - HRAPIE study - Health Risks of Air Pollution in Europe. 67% of NO₂ chronic mortality accounted for in monetary cost (benefit) to avoid risk of double counting with PM_{2.5} chronic mortality.

Reduction in PM_{2.5} mortality (premature deaths) – overall ECAMED domain

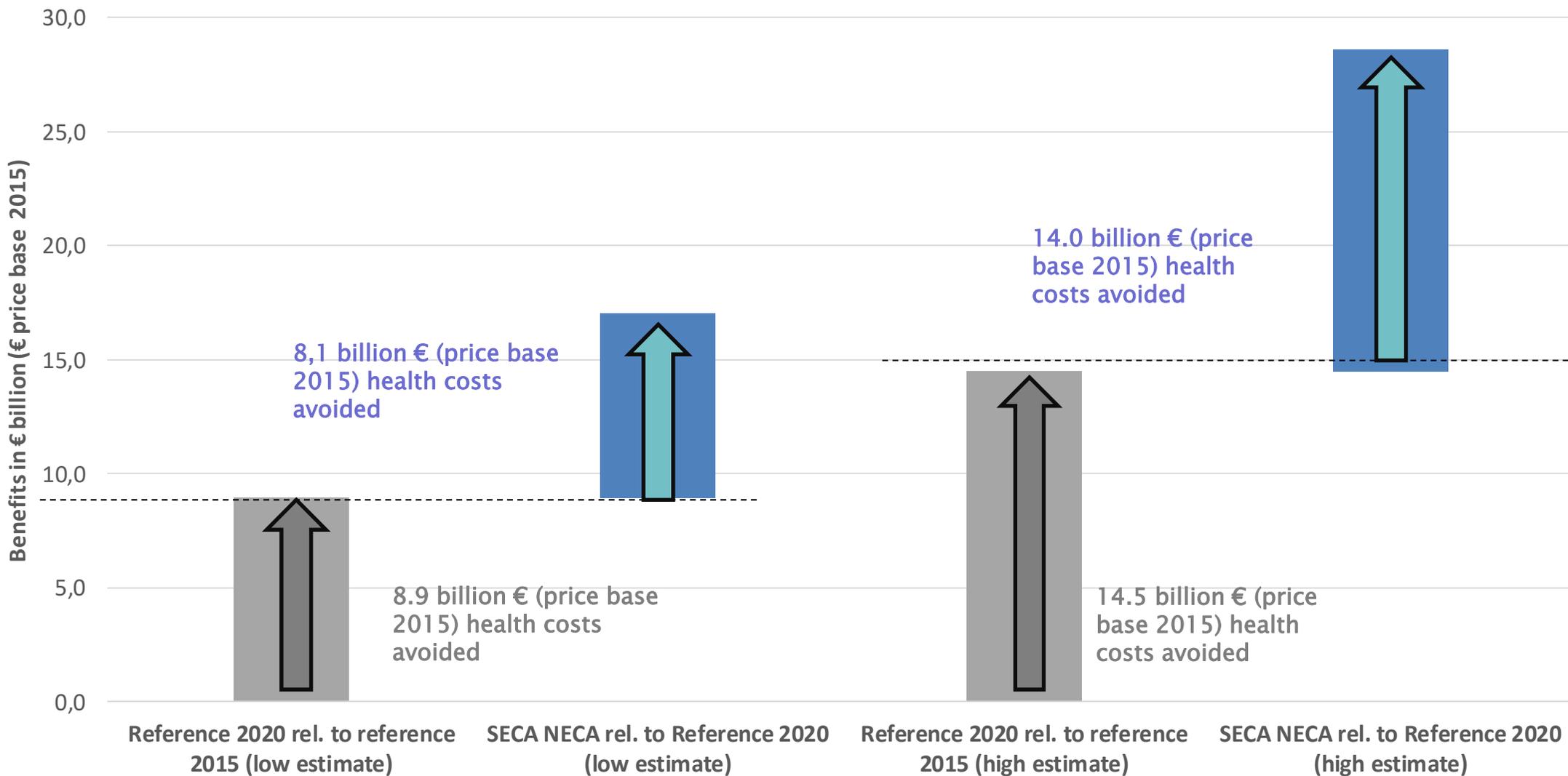


Reduction in PM_{2.5} mortality (premature deaths) – ECAMED domain per country



Aggregate health benefits – overall ECAMED domain

Health benefits in 2015 for the ECAMED domain - Low (median VOLY) and high (mean VSL) estimate



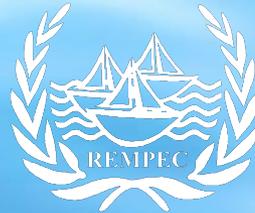
SECA NECA related to Reference 2020 - Benefit (in M€)



Thank you for your attention !

Laurence.rouil@ineris.fr



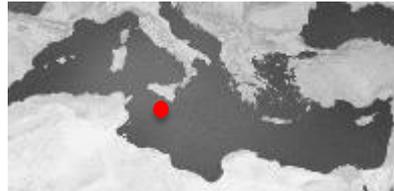


Examine the possibility of designating the Mediterranean Sea, or parts thereof, as SOx emission control area under MARPOL Annex VI

Gabino Gonzalez, Head of Officer, REMPEC

73rd Marine Environment Protection Committee of the International Maritime Organization, London, UK

Presentation of the REMPEC study on the possible designation of a Mediterranean ECA area, 23 October 2018



Marine Environment Protection

**1st Regional Seas Programme
Mediterranean Action Plan**

Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea

- Established in Malta in 1976
- Staff from the Mediterranean region
- Administered by IMO

IMO's Environmental Conventions & Protocols



Support 21 Mediterranean coastal States and EU in implementing

**Barcelona Convention
Prevention and
Emergency
Protocol**

**Regional Strategy for
Prevention of and Response to
Marine Pollution from Ships**

A possible Mediterranean SECA in the region's common agenda since 2005



2005-2015 **Regional Strategy** adopted by the Conference of Parties in 2005 (Specific Objective 13)

2008 **Guidelines & Procedures** on ratification process of Annex VI and requirements for submission of an Application to IMO developed

2010& 2014 MARPOL Annex VI **Regional Workshops**

2016-2021 **Regional Strategy** adopted by the Conference of Parties in 2016 (Specific Objective 15)

2016 **Establishment of a SOx ECA(s) Technical Committee of Experts.** (21/22 Contracting Parties):

2017 Consultation on the **ToRs** and

2018 launch of consultancy services for the preparation of a **technical and feasibility study** to examine the possibility of designating the Mediterranean Sea, or parts thereof, as SOx ECA(s) under MARPOL Annex VI

Next steps: Consultation Process

Co-funding: Mediterranean Trust Fund, IMO's ITCP, Italy and France

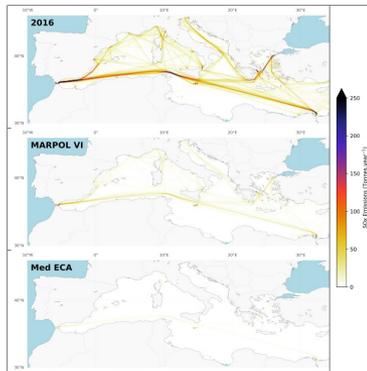
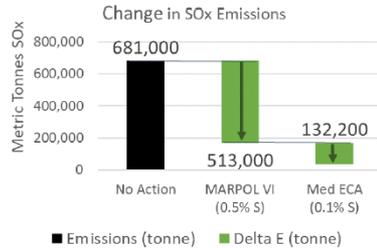


Figure 10: SOx emissions under 2016 baseline, 2020 MARPOL VI and 2020 Med ECA scenarios

Nation	2016 Baseline SOx		2020 MARPOL VI SOx		2020 Med ECA SOx	
	MT	Percent	MT	Percent	MT	Percent
Bosnia and Herzegovina*	0	0.0%	0	0.0%	0	0.0%
Cyprus	6,930	1.3%	2,420	1.4%	520	1.5%
Algeria	74,920	11.0%	15,690	9.4%	3,200	8.9%
Egypt	31,060	7.5%	11,710	7.0%	2,700	7.5%
Spain	113,080	16.6%	28,030	16.7%	5,980	16.7%
France	20,170	3.0%	6,450	3.8%	1,390	3.9%
Greece	155,110	22.8%	36,620	21.8%	7,670	21.4%
Croatia	11,720	1.7%	3,190	1.9%	670	1.9%
Israel	5,160	0.8%	1,820	1.1%	380	1.1%
Italy	359,440	52.4%	41,350	24.7%	8,820	24.6%
Lebanon	1,650	0.2%	570	0.3%	120	0.3%
Libya	13,240	1.9%	3,380	2.0%	770	2.1%
Morocco	2,120	0.3%	820	0.5%	180	0.5%
Monaco*	0	0.0%	0	0.0%	0	0.0%
Malta	10,990	1.6%	3,230	1.9%	750	2.1%
Montenegro	470	0.1%	200	0.1%	40	0.1%
Slovenia	70	0.0%	30	0.0%	10	0.0%
Syria	530	0.1%	170	0.1%	40	0.1%
Tunisia	34,960	5.1%	7,230	4.3%	1,490	4.2%
Turkey	15,970	2.3%	4,450	2.7%	1,010	2.8%

2018

1 Oct
5 Nov

Draft Technical and Feasibility Study
Consultation period

11-13 Dec

Regional Workshop on Ratification and Effective Implementation of MARPOL Annex VI

Examine “REMPEC” Study & Present French Study

2019

8 Feb

Revised draft Technical and Feasibility Study
Draft recommendations,
Draft road map
Initial draft submission to the IMO

22 Mar

Consultation period

Jan-Mar

MARPOL Annex VI National Workshops

11-13 Jun

Thirteenth Meeting Focal Points REMPEC

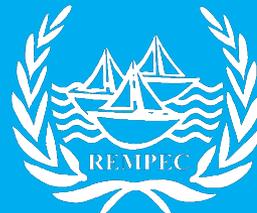
10-13 Sep

Meetings of the Focal Points of MAP

2-5 Dec

Meeting of the Contracting Parties to the Barcelona Convention (COP21)

REMPEC, an IMO / UN Environment Centre serving the Mediterranean in the implementation of environmental aspects of the IMO Strategic Plan (2018 to 2023)



Thank you

Gabino Gonzalez

Head of Office

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