



# Date 30 August 2021

# Bulletin **n° 5** for: "*MEDSLIK-II simulations of transport and fate of a massive oil spill from* the Banias electrical plant in the coastal area of Syria"

The bulletin is produced by CMCC and ORBITALEOS upon the operational current (CMEMS) and wind (ECMWF) products that force the two oil spill models MEDSLIK-II and MEDSLIK and using the satellite image of **20210829-1541-SYR-S1** as the initial condition for the MEDSLIK-II and simulations.

The bulletin contains the forecast of oil transport in the accident area.

# In comparison with the previous bulletins n°1- n°4,

- the simulations were re-started from the updated satellite-based slick polygons 2021-08-29 15:41 UTC
- the simulations have been prolonged to 01 September 2021.

The simulations are based on the daily updated meteo-oceanographic conditions obtained on **30 August 2021**.

# ANNEX I presents a report from ORBITALEOS. ANNEX II presents the description of simulation scenario.

## DISCLAIMER

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# Brief on the results:

**On 29–30 August**, the forefront of the slick drifts to the West, stretching in the form of a semi-ellipse along the NE–SW axis. The tail connecting the forefront with the area of Latakia narrows. The isolated minor part of the spill moves from the area of Banias to the NortWest.

**On 31 August – 1 September**, the forefront of the slick will reach Cyprus.

# The first beaching of the is expected onto the southern tip of the Cape Apostolos Andreas (Cyprus) on 31 August 2021 01:00 UTC.

The isolated part of the slick will pollute the coastlines from Banias to Jablah.

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## Acknowledgement:

Currents are provided by Copernicus Marine Environment Monitoring Service (CMEMS) Mediterranean Sea Analysis and Forecast (CMEMS MED-Currents, EAS5 system)

### https://doi.org/10.25423/CMCC/MEDSEA\_ANALYSIS\_FORECAST\_PHY\_006\_013\_EAS5 Wind from ECMWF system is provided by Italian Aeronautica Militare.

MEDSLIK-II simulation (29 August 2021 15:41 UTC - 01 September 2021 13:00 UTC) Initial polygon is shown in blue Modelled sea surface oil is shown in gray 15:41 UTC on 29 August 2021 Navigation Æ 12:00 UTC on 30 August 2021 Navigation







# **ANNEX I** Oil spill detection provided by ORBITALEOS on 30 August 2021.

• ORBITALEOS Earth Observation Solutions

# **OIL SPILL REPORT**

#### ACQUISITION ID - 20210829-1541-SYR-S1

Acquisition date	2021-08-29
Acquisition time	15:41 UTC
Satellite	Sentinel-1
Country	SYR

# EVENT ID - 20210829-1541-SYR-PL-B-01-S1

Position		35.43°N, 035.05°E
Area		1063.8 km2
Class		В
Possible Source	Detected	YES
	Identified	YES



# 

#### EVENT 1

#### ID: 20210829-1541-SYR-PL-B-01-S1

Acquisition time		2021-08-29 15:41 UTC
Position		35.43°N, 035.05°E
Area		1063.8 km2
Min. Volume		319.1 m3
Class		В
Source Position	Detected	YES
	Identified	YES
Distance to shor	e	0.0 km
Wind speed/dire	ction	N/A
Type of source		Oil Platform
Source Position		35.17°N, 035.92°E
Comments		



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# ANNEX II

Oil spill scenario of the first simulation

# Model: MEDSLIK-II Ocean currents: CMEMS Mediterranean Sea Analysis and Forecast, hourly. 1/24° (~4km) Winds: ECMWF Analysis and Forecast, 6-hourly, 1/8° (~12.5km) Waves: JONSWAP parameterization

Start time	15:41 UTC on 29 August 2021
Start location	6-polygon spill 20210829-1541-SYR-PL-B-01-S1
Oil type	Iranian Crude
Spill type	Instantaneous release
Spill amount	319.1 m <sup>3</sup>
Simulation length	72 hours
Number of Lagrangian parcels	30,000
Bin size	150 m
Integration time step	30 minutes