

Input data form for the EMODNET Oil Platform Leak Bulletin

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Name of Bulletin: REAL-T 1

Oil platform position:

(1) Wider area of Caliph prospect 33.226402, 15.905063 and (2) Strait of Messina (38.247332, 15.632297)

Start date and time (UTC) of the leak:

(1) Sunday 27 July 2014 at 05:05:45 at Caliph prospect and (2) Monday 28 July between 06:15:00 and 10:20:00

Type of spill: leak from drillship at 2 locations

Surface: YES

Depth of the spill: N/A

Meters below the surface: N/A

Type of oil:

API N/A

oil type name N/A

Rate of spillage or total amount of oil spilled:

- (1) RATE OF SPILLAGE (at Caliph prospect): 10 tons per hour for an estimated duration of 5 hours (time of repair/stop spill 10:05:45). Total amount of 50 Tons crude oil
- (2) At Messina Strait: total amount of oil spilled: 2000 Tons of diesel fuel oil by 10:20:00 on Monday 28 July

Slick satellite observations provided by EMSA: No

Simulation length (maximum 10 days): 10 days

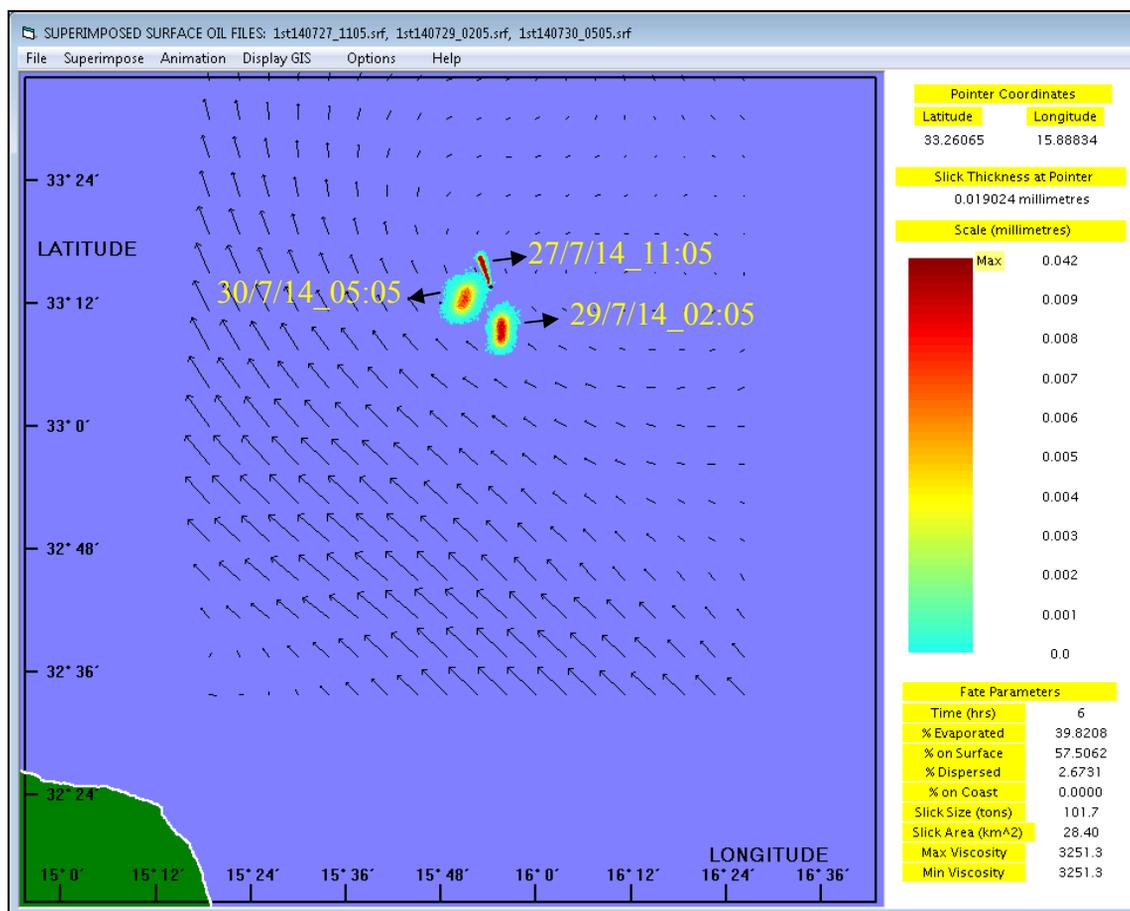
Caliph prospect

Description of MEDSLIK oil spill prediction results

Forecasting Data used:

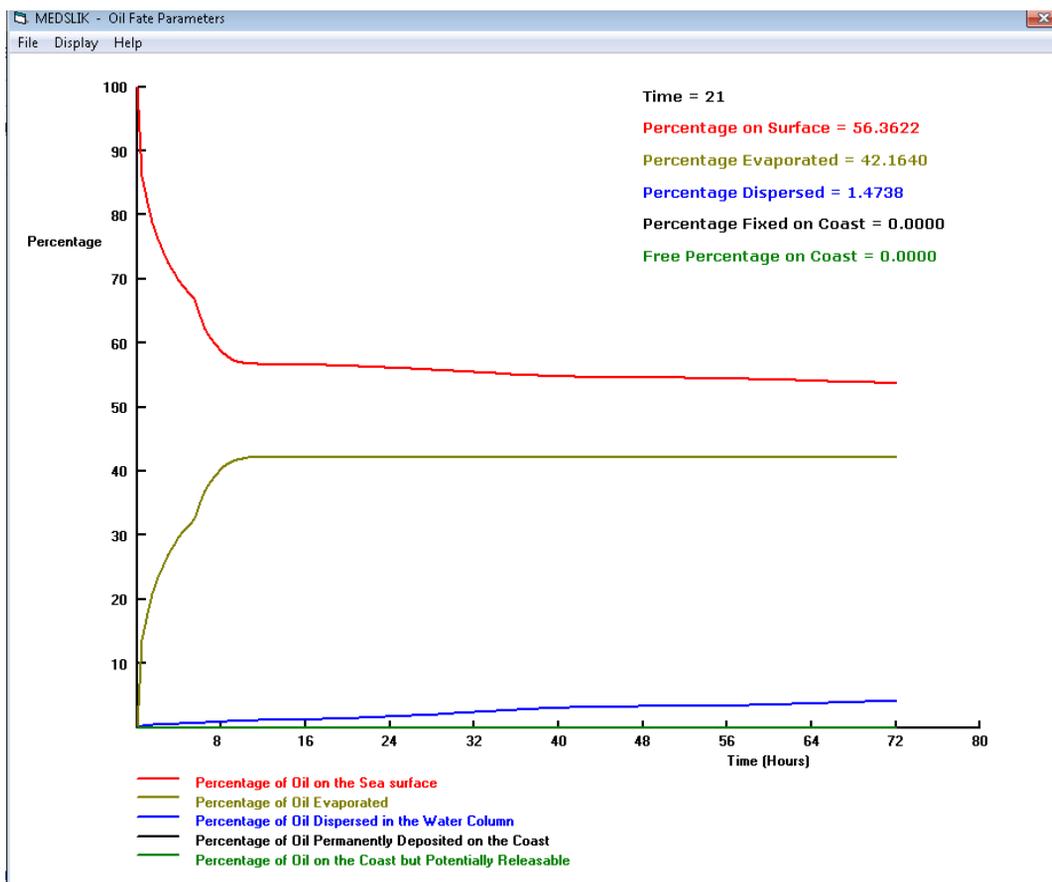
- 24 hours surface currents and SST from the MyOcean Mediterranean Forecast System
- 3 hourly wave from CYCOFOS
- 1-hourly SKIRON wind fields

Duration of the surface oil spill simulations: 27/07/2014 5:05 UTC – 30/07/2014 5:05 UTC



Superimposed oil spill predictions for 72 hrs starting from 27/07/2014 at 5:05 UTC. The dominant sea surface currents are North-West. At the beginning of the simulations, the wind is South-East, then North-West and finally again South-East.

Oil Fate Parameters:



Oil Fate parameters, evolution in time: oil spill at sea surface, oil evaporated, dispersed in the water column.

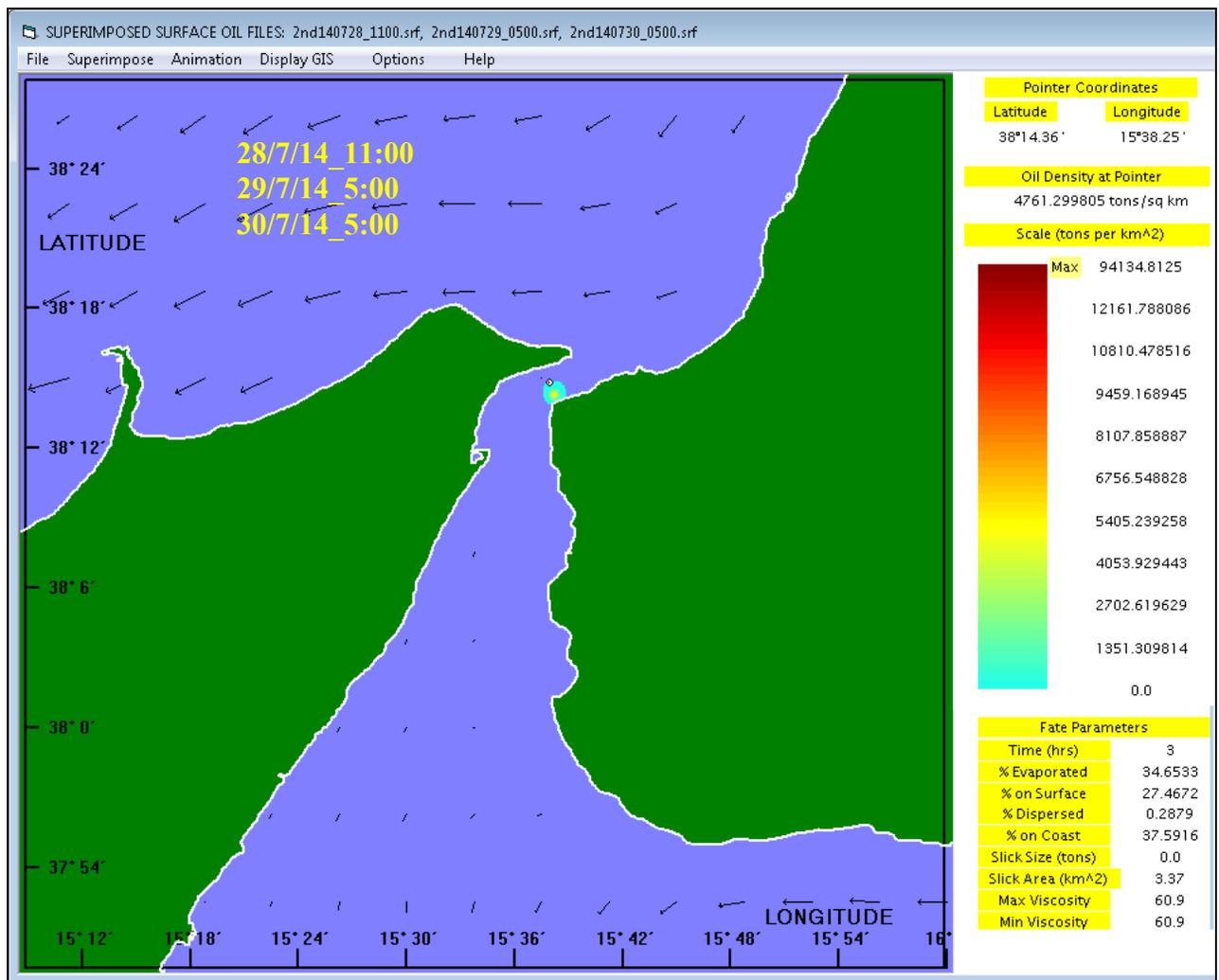
Messina Strait

Description of MEDSLIK oil spill prediction results

Forecasting Data:

- 24 hours surface currents and SST from the MyOcean Mediterranean Forecast System
- 3 hourly wave from CYCOFOS
- 1-hourly SKIRON wind fields

Duration of the surface oil spill simulation: 28/07/2014 8:00 UTC – 30/07/2014 8:00 UTC

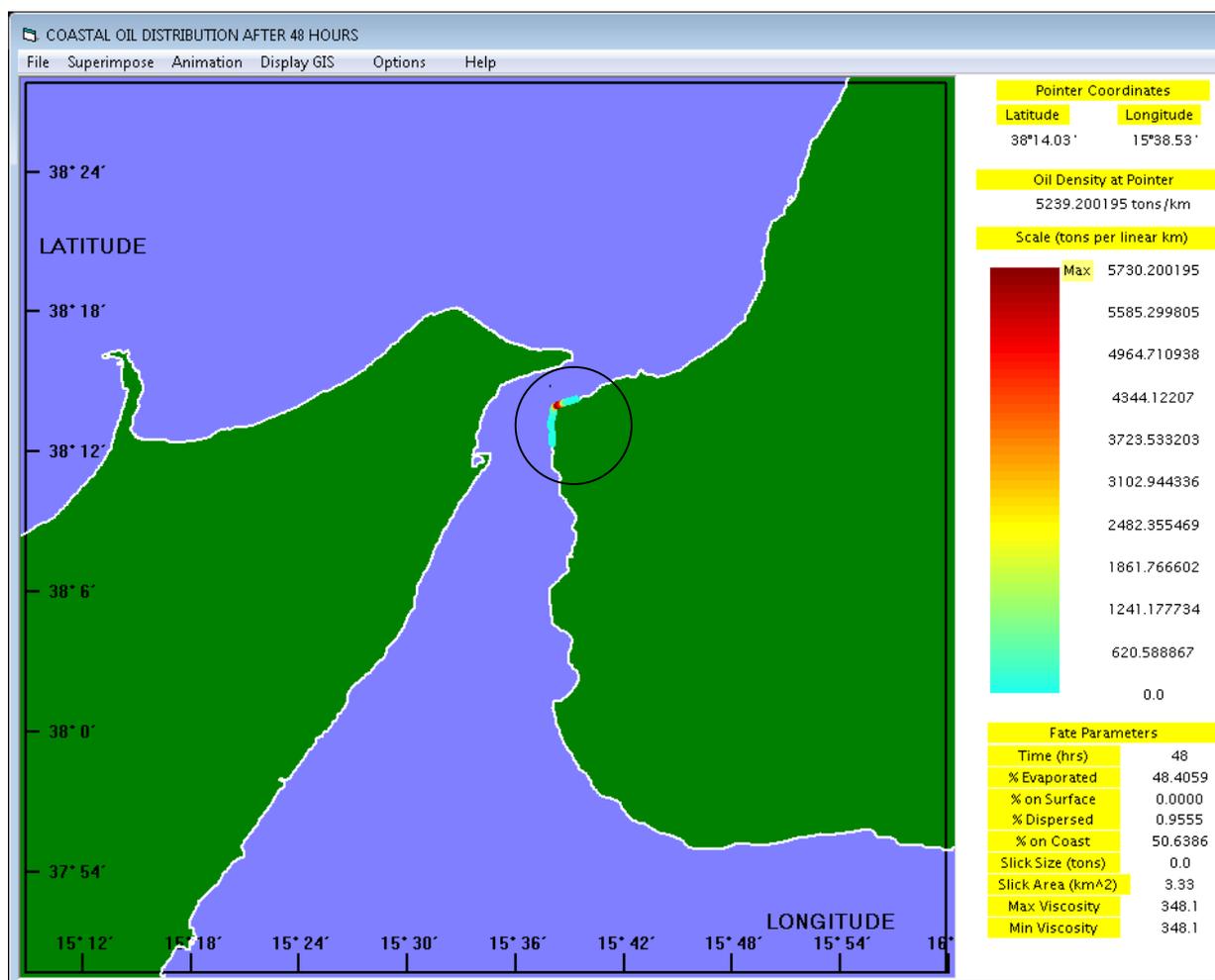


Superimposed diesel spill predictions for 48 hrs starting from 28/07/2014 at 8:00 UTC.

The dominant sea surface currents are South-West. The wind is North.

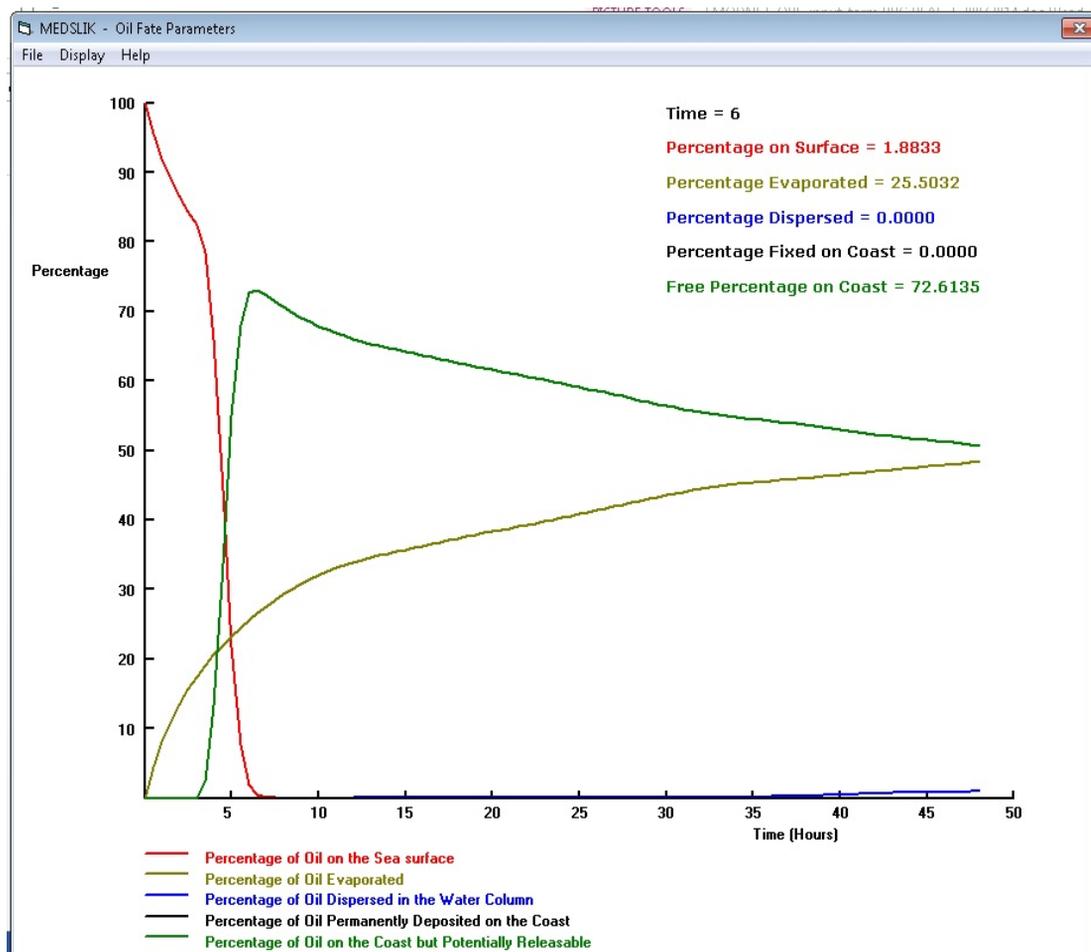
After 6 hours the diesel spill stack on the coast, while the evaporated continued during the entire period of the simulations.

Oil on the coast: 28/07/2014 8:00 UTC – 30/7/2014 8:00 UTC



The diesel permanent stack at the coastal zone constitute the 50% of the total amount, while 48.4% was evaporated, during the 48 hours of the simulation.

Oil Fate Parameters:

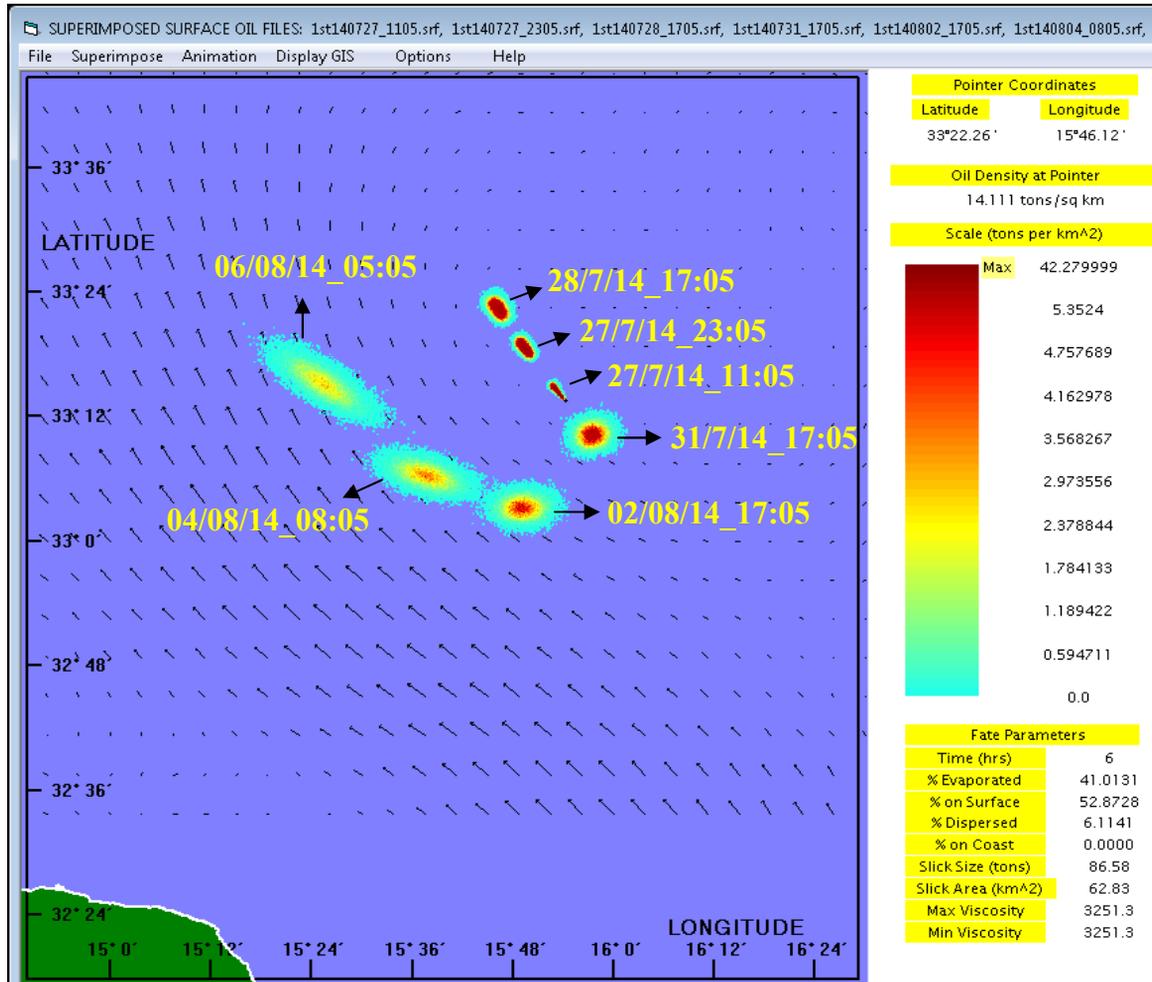


Oil Fate parameters in time: oil spill at sea surface, oil evaporated, dispersed in the water column.

Caliph prospect

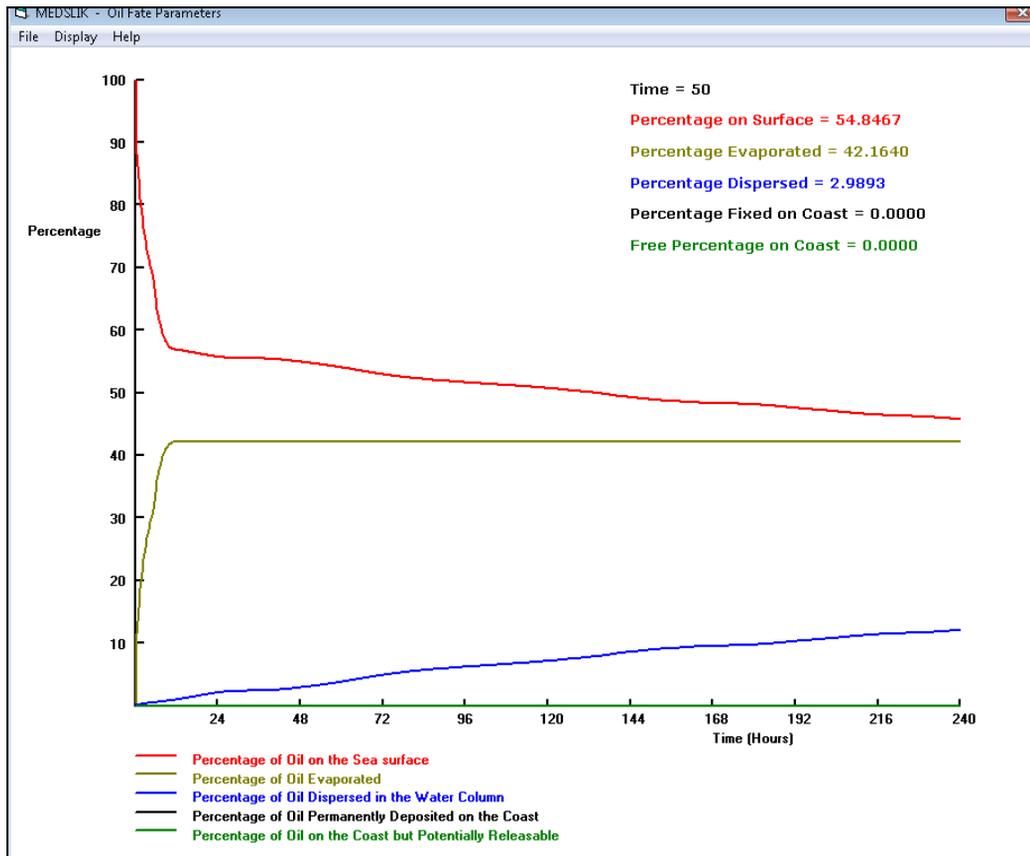
Simulations using MyOcean MFS Forecasting Data and ECMWF wind data

Duration of the surface oil spill simulations: 27/07/2014 5:05 UTC – 30/07/2014 5:05 UTC



Superimposed oil spill predictions for 240 hrs (10 days), starting from 27/07/2014 at 5:05 UTC. The dominant sea surface currents are North-West. At the beginning of the simulations, the wind is South-East, then North-West and finally again South-East.

Oil Fate Parameters:

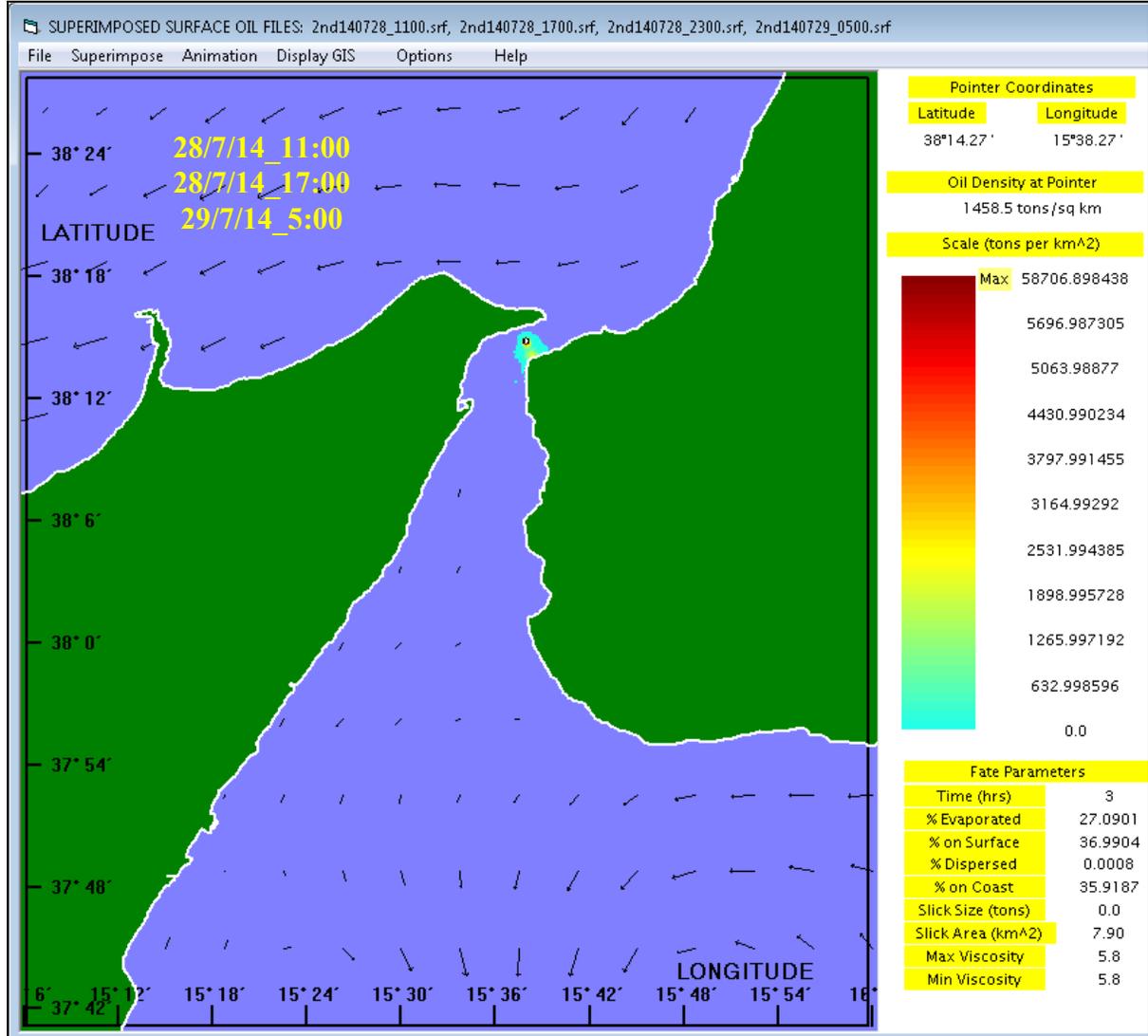


Oil Fate parameters, evolution in time: oil spill at sea surface, oil evaporated, dispersed in the water column.

Messina Strait

Simulations using MyOcean MFS Forecasting Data and ECMWF wind data

Duration of the surface oil spill simulation: 28/07/2014 8:00 UTC – 6/8/2014 8:00 UTC

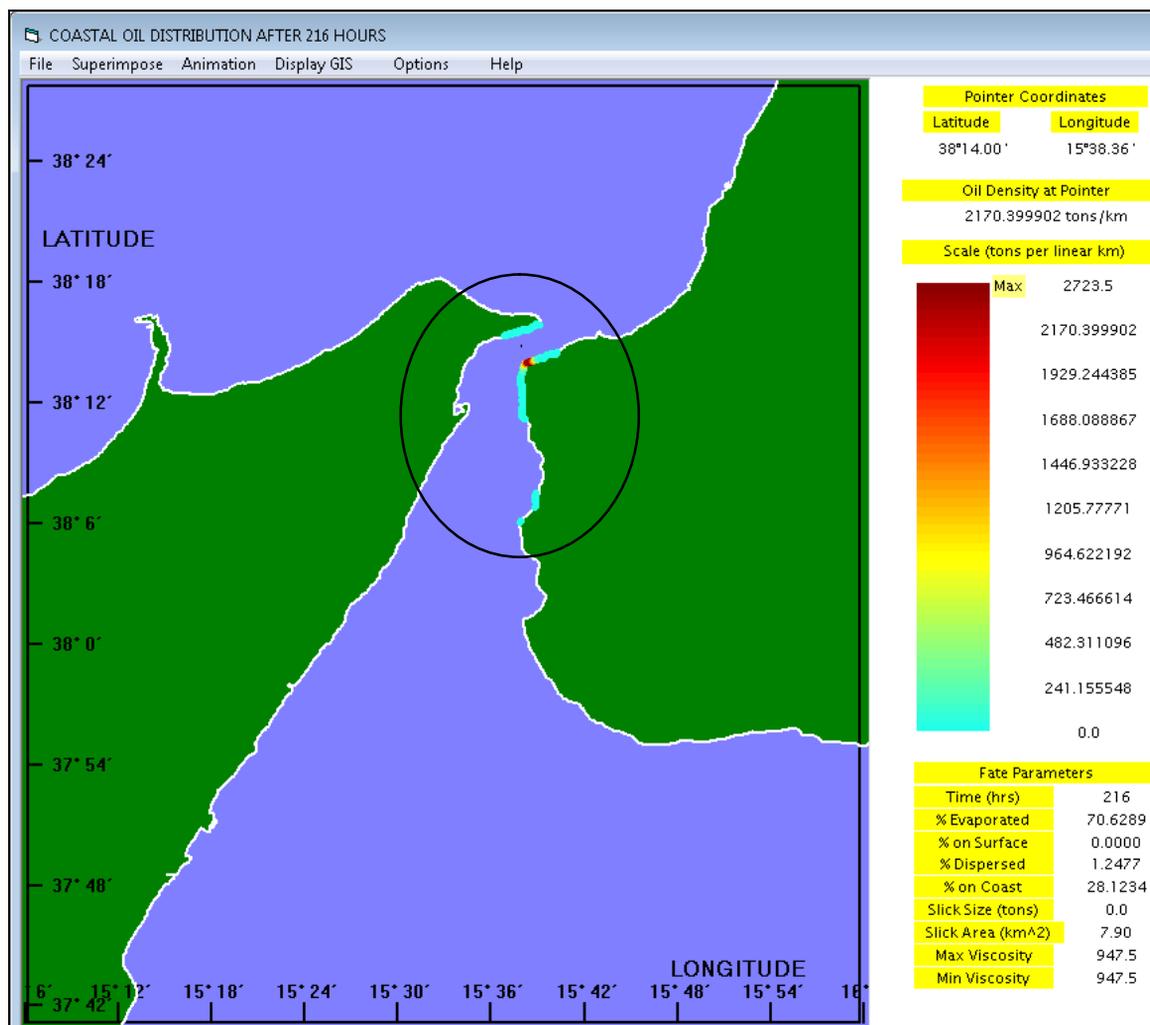


Superimposed diesel spill predictions for 216 hrs (9 days) starting from 28/07/2014 at 8:00 UTC.

The dominant sea surface currents are South-West. The wind is North.

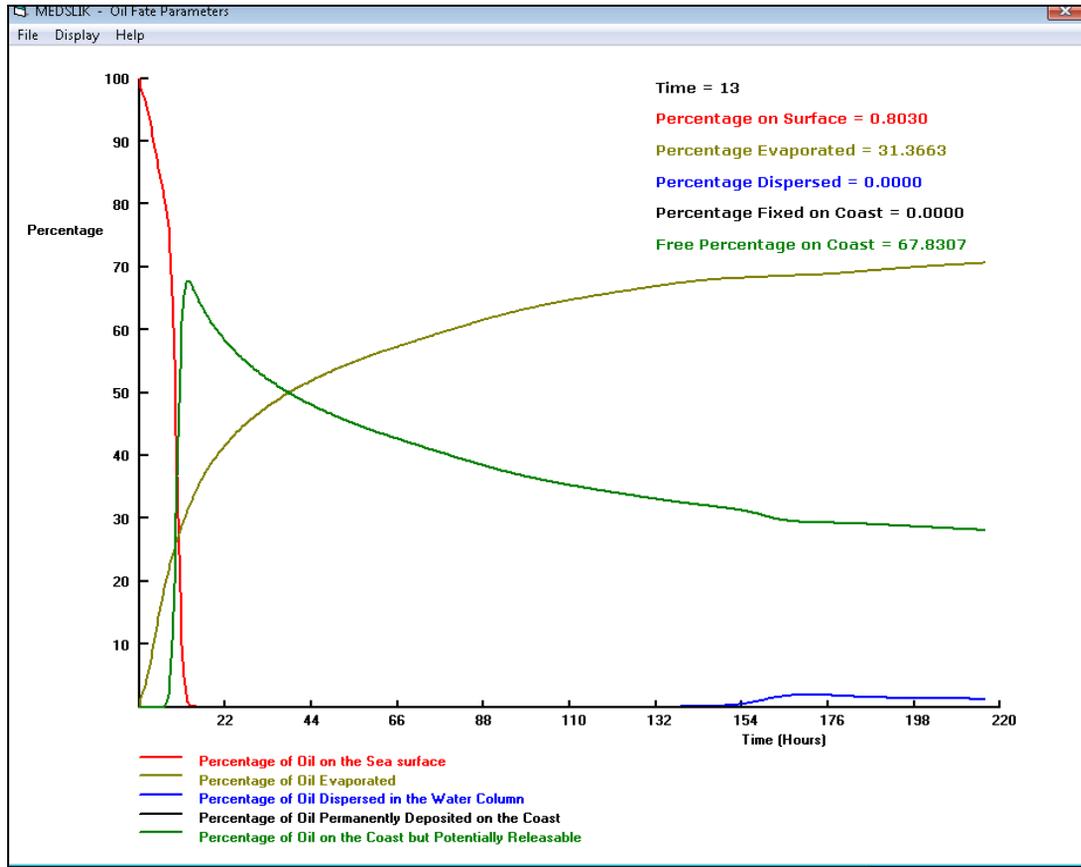
After 6 hours the diesel spill stack on the coast, while the evaporated continued during the entire period of the simulations.

Oil on the coast: 28/07/2014 8:00 UTC – 6/8/2014 8:00 UTC



The diesel permanent stack at the coastal zone constitute the 28% of the total amount, while 70% was evaporated, during the 216 hours simulation (28/07/2014 8:00 UTC – 6/8/2014 8:00 UTC)

Oil Fate Parameters:

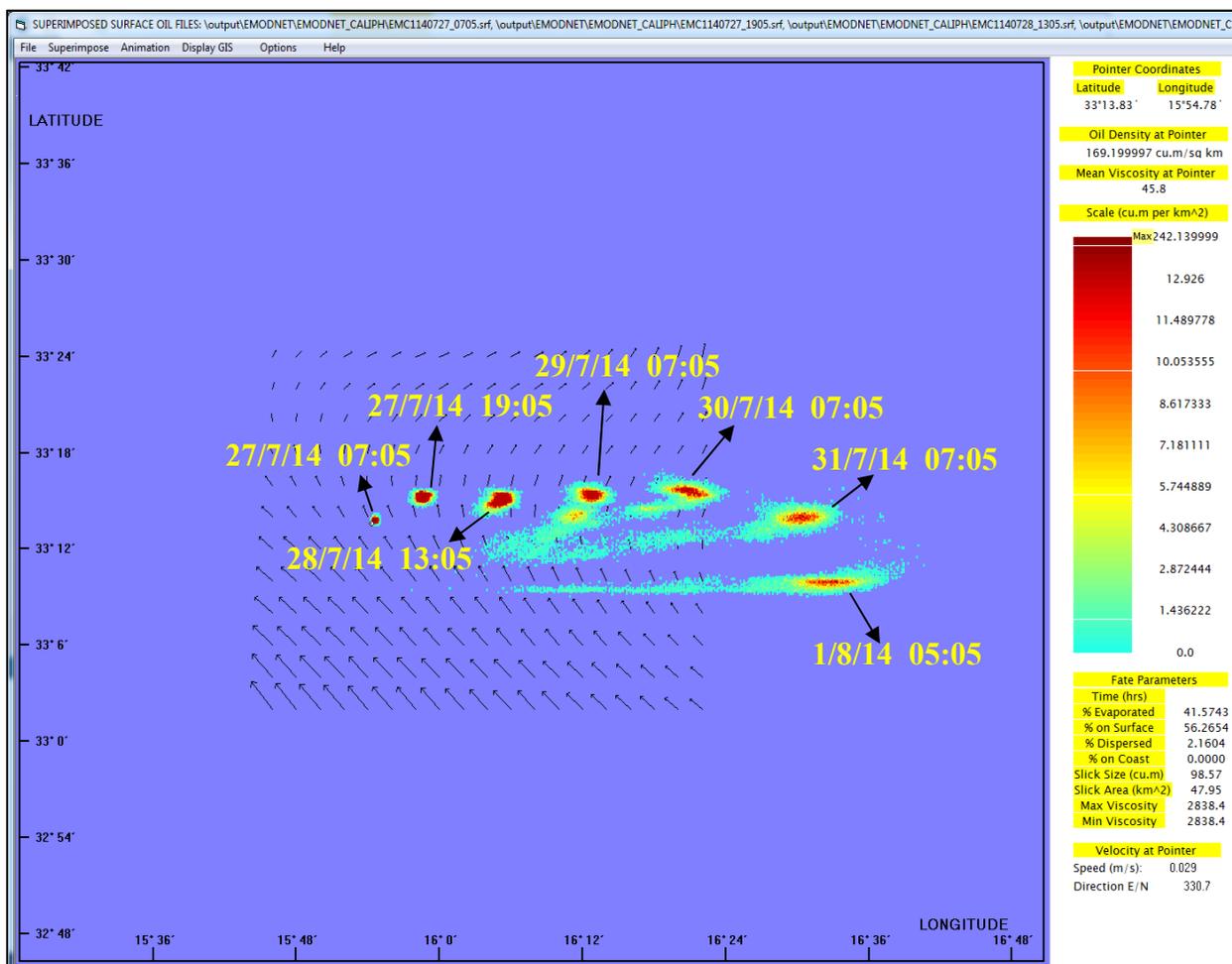


Oil Fate parameters, evolution in time: oil spill at sea surface, oil evaporated, dispersed in the water column.

Caliph prospect

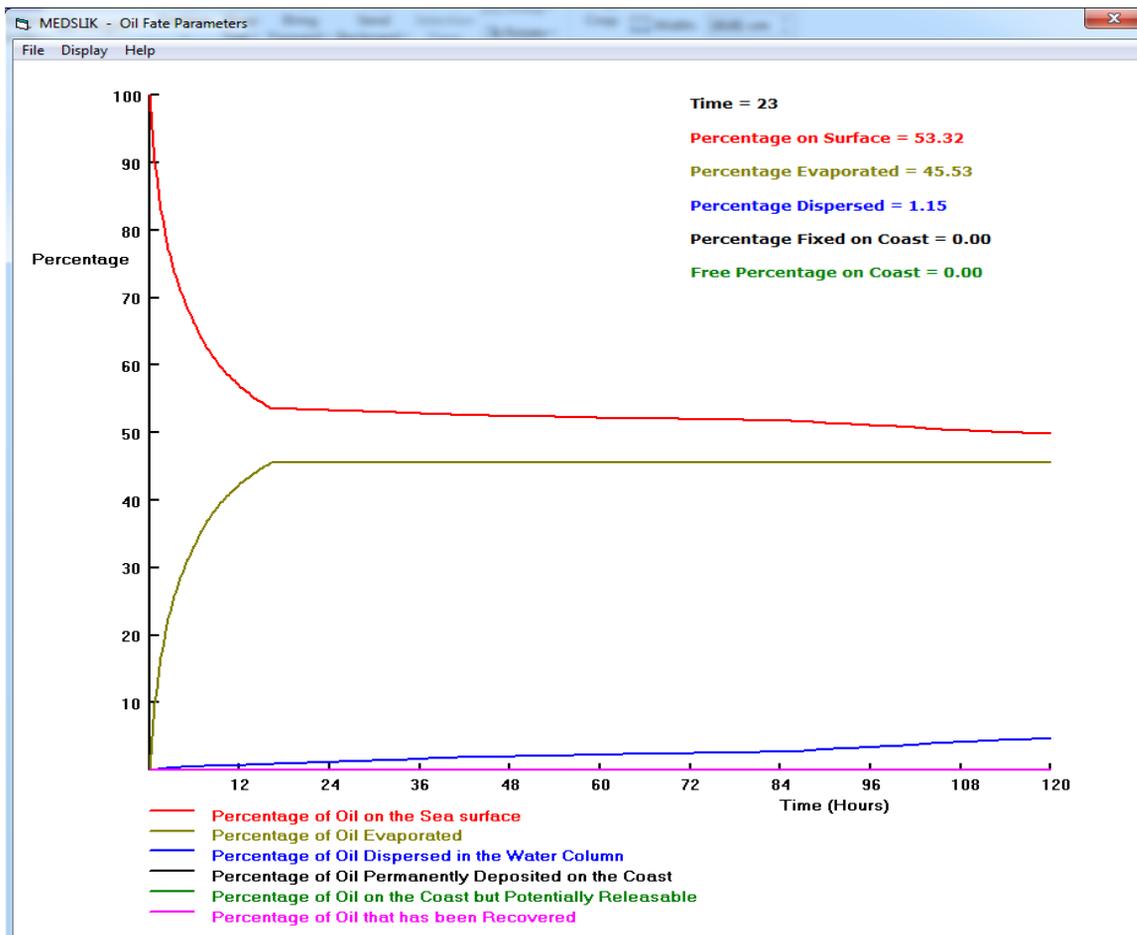
Simulations using the MyOcean MFS hourly currents and waves and the hourly POSEIDON winds

Duration of the surface oil spill simulations: 27/07/2014 5:05 UTC – 1/08/2014 5:05 UTC



Superimposed oil spill predictions for 120 hrs (5 days), starting from 27/07/2014 at 5:05 UTC. The dominant sea surface currents are North-West and then North-East. At the beginning of the simulation, the wind is South-West, then West and finally South-West and then North-West.

Oil Fate Parameters:

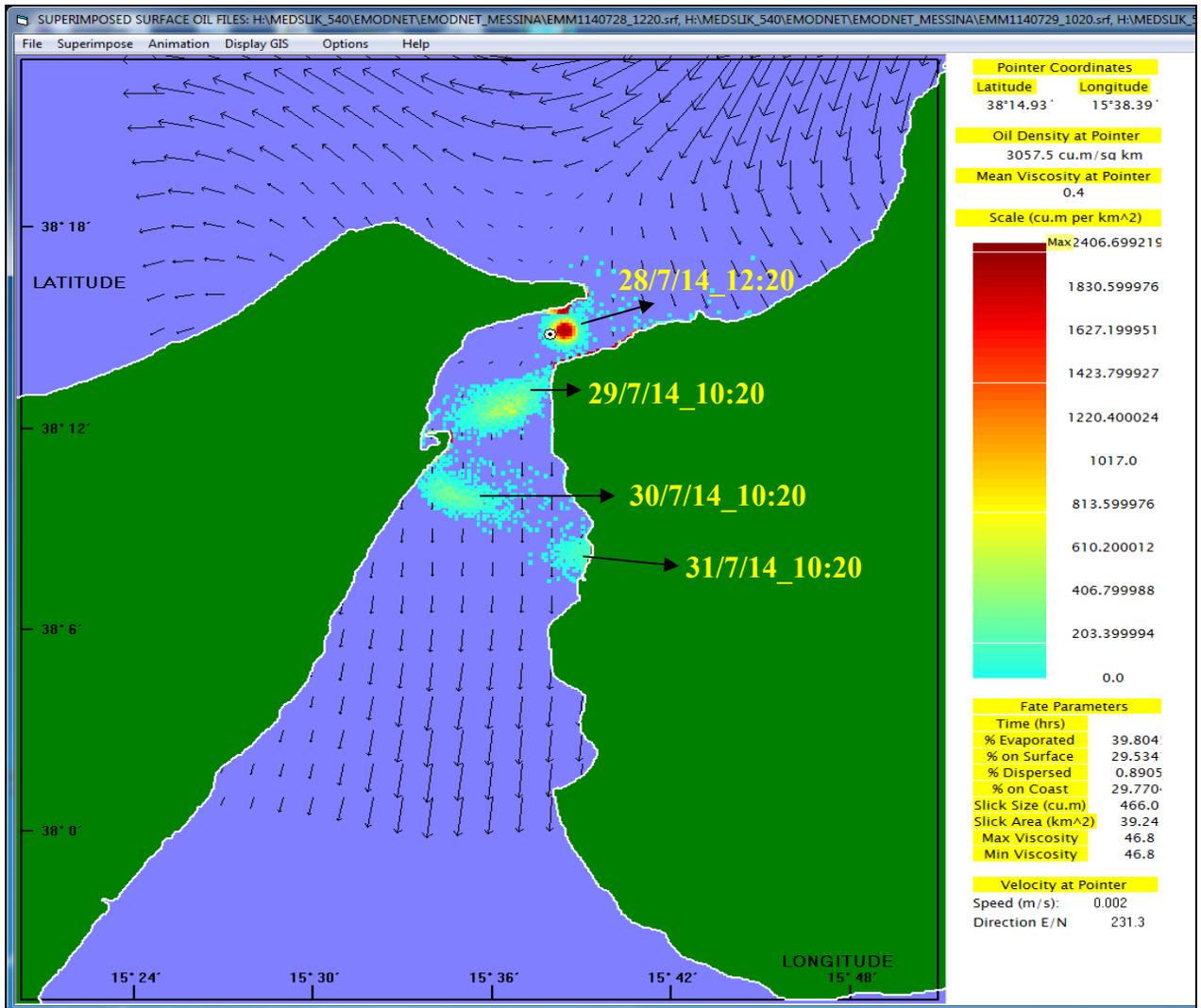


Oil Fate parameters in time: oil spill at sea surface, oil evaporated, dispersed in the water column.

Messina Strait

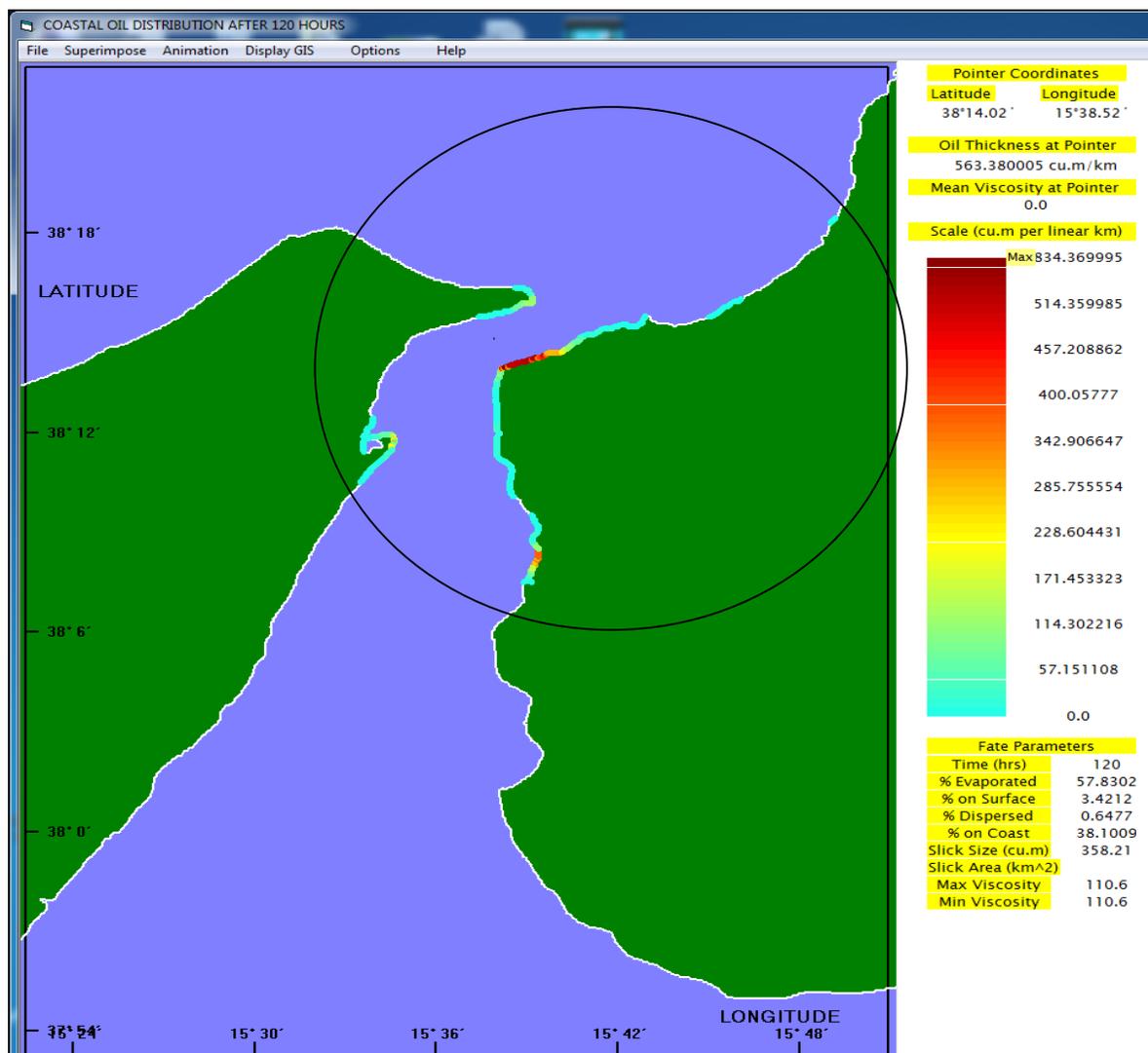
Simulations using the MyOcean MFS hourly currents and waves and hourly POSEIDON winds.

Duration of the surface oil spill simulations: 28/07/2014 10:20 UTC – 2/08/2014 10:20 UTC



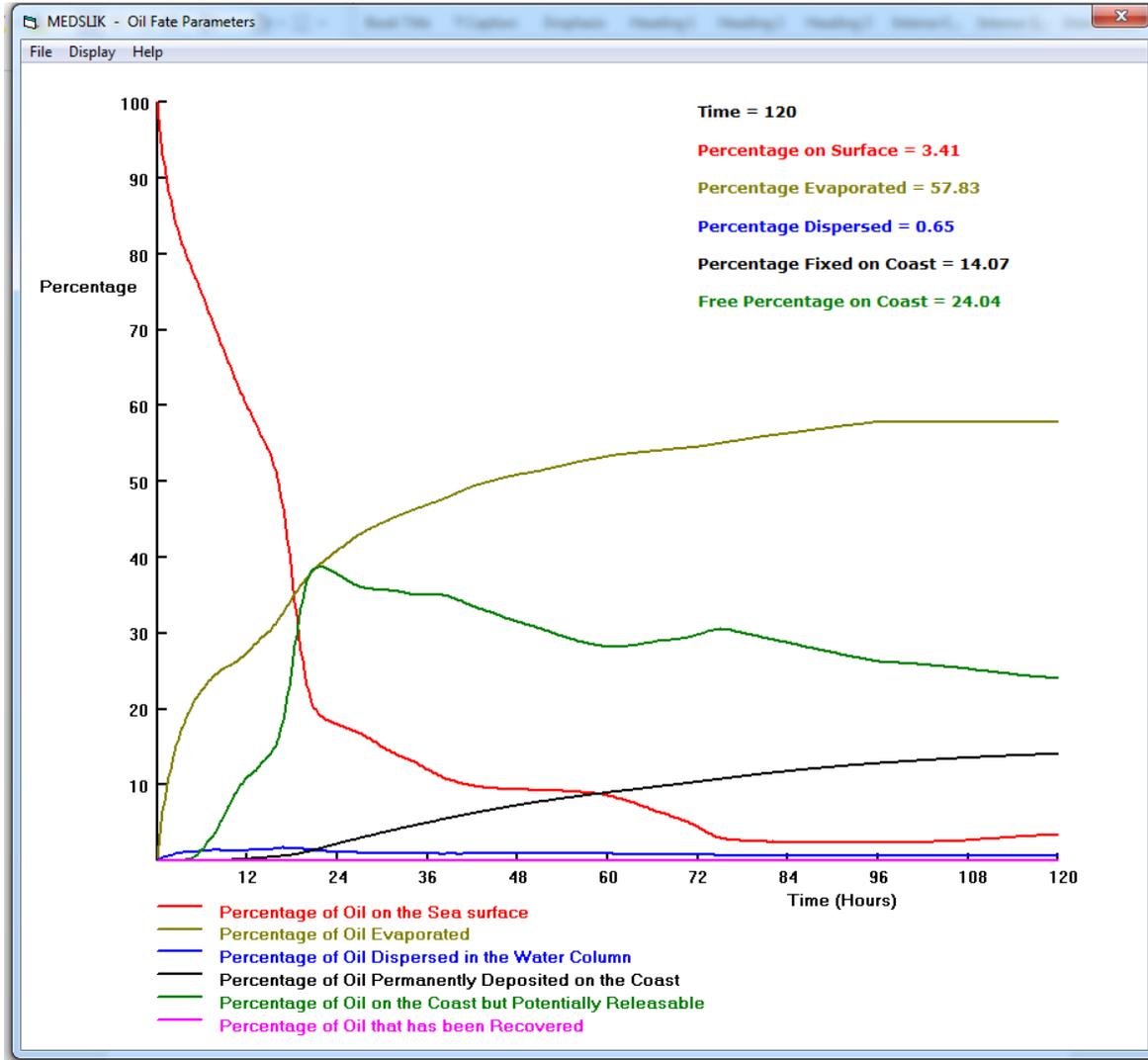
Superimposed oil spill predictions for 120 hrs (5 days), starting from 28/07/2014 at 10:05 UTC. At the beginning of the simulation, the wind is South-West, then North West and finally West and then South-West.

Oil on the coast: 28/07/2014 10:20 UTC – 2/08/2014 10:20 UTC



The diesel permanent stack at the coastal zone constitute the 38% of the total amount, while 57% was evaporated, during the 120 hours simulation (28/07/2014 10:20 UTC – 2/08/2014 10:20 UTC).

Oil Fate Parameters:



Oil Fate parameters in time: oil spill at sea surface, oil evaporated, dispersed in the water column.