

HORIZON
2020

Two-way interactions between ocean heat transport and Arctic sea ice

Fact Sheet

Project Information

OSealce

Grant agreement ID: 834493

[Project website](#) 

DOI

[10.3030/834493](https://doi.org/10.3030/834493) 

Project closed

EC signature date

11 April 2019

Start date

1 November 2019

End date

31 October 2020

Funded under

EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions

Total cost

€ 101 926,08

EU contribution

€ 101 926,08

Coordinated by

SVERIGES METEOROLOGISKA
OCH HYDROLOGISKA INSTITUT



Sweden

Project description

Arctic sea ice and ocean heat transport interactions

Sea ice loss in the Arctic region is caused by several factors, including anthropogenic global warming, atmospheric circulation changes, climate feedbacks and ocean heat transport. As regards the latter, recent observations show that heat transport from the Atlantic Ocean has led to strong reductions in the Arctic sea-ice area. Conversely, changing sea ice also has an influence on ocean heat transport. The EU-funded OSealce project explored this reciprocal interaction between Arctic sea ice and

ocean heat transport. The project used a pioneering global climate model (EC-Earth) and performed diverse sensitivity experiments to understand these significant interactions and refine model projections of Arctic sea ice. OSealce delivered more reliable and robust insight on existing and future Arctic sea-ice changes.

Fields of science (EuroSciVoc)

[natural sciences](#) > [earth and related environmental sciences](#) > [atmospheric sciences](#) > [climatology](#) > [climatic zones](#)

[natural sciences](#) > [earth and related environmental sciences](#) > [atmospheric sciences](#) > [meteorology](#) > [biosphera](#)

[natural sciences](#) > [earth and related environmental sciences](#) > [atmospheric sciences](#) > [meteorology](#) > [atmospheric circulation](#)



Programme(s)

[H2020-EU.1.3. - EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions](#)

MAIN PROGRAMME

[H2020-EU.1.3.2. - Nurturing excellence by means of cross-border and cross-sector mobility](#)

Topic(s)

[MSCA-IF-2018 - Individual Fellowships](#)

Call for proposal

[H2020-MSCA-IF-2018](#) 

[See other projects for this call](#)

Funding Scheme

[MSCA-IF-EF-SE - Society and Enterprise panel](#)

Coordinator



SVERIGES METEOROLOGISKA OCH HYDROLOGISKA INSTITUT

Net EU contribution

€ 101 926,08

Total cost

€ 101 926,08

Address

**FOLKBORGSVAGEN 1
601 76 NORRKOEPING**

 Sweden 

Region

Östra Sverige > Stockholm > Stockholms län

Activity type

Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Last update: 18 August 2022

Permalink: <https://cordis.europa.eu/project/id/834493>

European Union, 2025