



Deliverable 8.12

Report on Annual Meeting 2

Date: December 31, 2021



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N°821001.

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Project acronym: SO-CHIC
Project website: www.sochic-h2020.eu
Project full title: Southern Ocean – Carbon and Heat Impact on Climate

Project start date: November 2019 (60 months)
Submission due date: December 31, 2021
Actual submission date: November 30, 2020

Project funded by the European Union's Horizon 2020 research and innovation programme (2019-2023)		
Dissemination Level		
PU	Public	X
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	



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Document properties

Work Package	WP 8 – Project management and dissemination
Lead Beneficiary	Sorbonne Université (SU)
Version	1.0
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Abstract

This document describes the discussions held during the second General Assembly of the project. This annual meeting is composed of at least one representative of each partner organization, to ensure the project is advancing in line with the work plan and is adapting as necessary to external changes, such as the COVID-19 pandemic which struck the SO-CHIC project.

This year, we took the decision to record the General Assembly in order to send the presentations and recording to members of the Advisory who couldn't participate. A restitution of their feedbacks and advices will occur during a dedicated meeting, in January 2022. Members of the Steering Committee will be present too, to have open discussions with the AB members.



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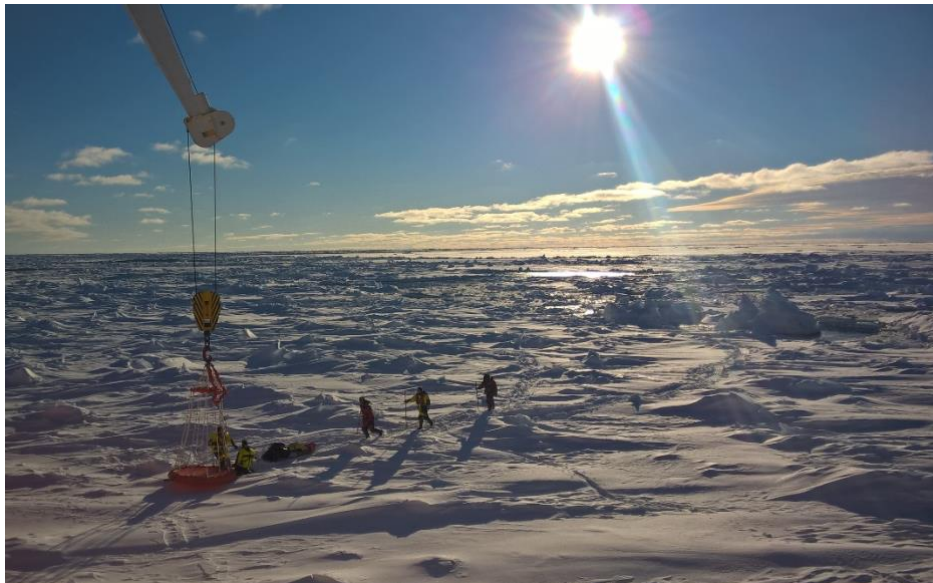
Plenary session minutes.....	5
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SO-CHIC Project 2020 General Assembly

9th December, 2021



Zoom link : <https://us02web.zoom.us/j/82918972525?pwd=Nmx3T2J0bjNPYjZVNxIsMjdmeERQdz09>

ID de réunion : 829 1897 2525

Code secret : C3trTc

For organizational reasons, this General Assembly will be recorded and communicated to the Advisory Board for feedbacks.



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Morning session

Opening speech and Cruise updates – Jean-Baptiste Sallée

COVID impacted our GA, hopefully we'll be able to meet in person next Spring

COVID impacted also the Cruise, deeply. In the past months, Recovery on Polarstern / BENFLEX with Pedro.

SO-CHIC cruise on the Aghulas II, 4 people are on the ship with the container and the rest in quarantine. 3 from UK couldn't come due to container complications and COVID variant.

Plans will be presented more precisely in the WP1 and 2 presentation.

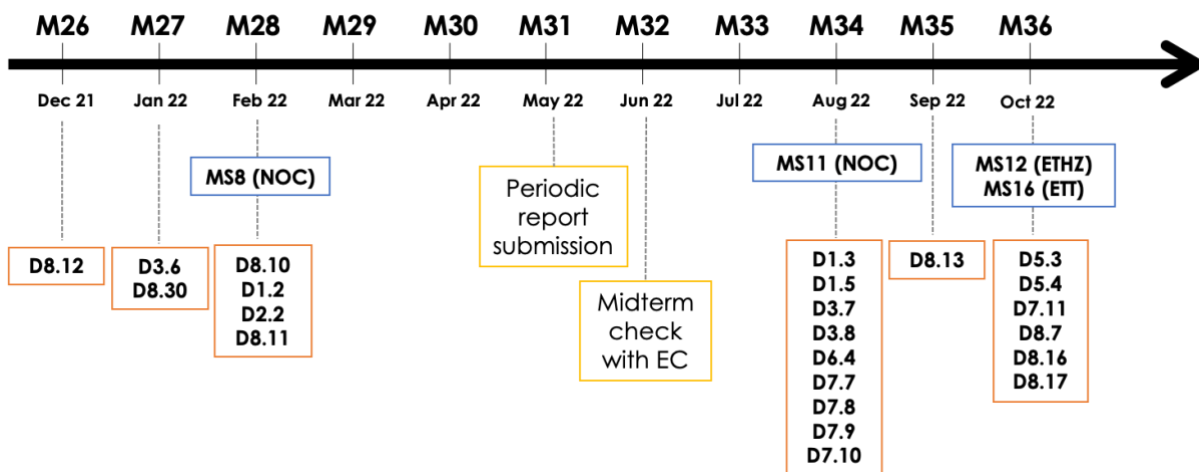
2 gliders and 4 moorings could be loaded

WP8 – Amélie Lecornec and Joseph Nolan

Administrative aspects:

Important information:

- Periodic report covering the period from Nov 2019 to April 2022, will be due on May 31, 2022. Templates and guidelines will be sent by Amélie in January to anticipate submission
- Midterm check will be organized in June 2022, with our PO and an external independent expert, alongside with the coordinator and WP leaders. Presentations must be prepared.
- Timeline with future deliverables and milestones:



Communication activities:



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- Webinars : Jan 21 and Sept 21 <https://www.youtube.com/channel/UCttAc0nXl4091-UU6tNliHw> SO-CHIC YouTube channel
- Press briefing in Oct 21 hosted by SMC in the framework of the COP26
- COP26 side event “Polar warming, global warning” jointly organized with other EU Polar cluster <https://www.youtube.com/watch?v=5JkaoyilSHM>
- Socials: working well
- EU Polar Cluster : EPB main contact for SO-CHIC

Need materials for comm

SU will communicate on the cruise and share a short cruise “carnet de bord” in January to be shared by other partners if possible !

The upcoming HAFOS expedition lead by Mario Hoppema to Weddell Sea should be a very good opportunity to produce nice photographs.

WP1– Sebastian Swart and Mario Hoppema

WP updates :

Science and plans stay the same

Site 1 moved a little bit north

- Saildrones integration around mid-Apr 22 > next meeting to discuss
- Sailbuoys
- Only have 4 or 5 days depending on the weather.
- ASIP is deployed and recovered from a zodiac, from a specific area on the Agulhas. Would be good to make a test deployment.
- Polarstern expedition in Mar-Apr 22
- Infrared sea surface temp autonomy radiometer (ISAR)

Scientific focus - Pedro Montero, Sarah Nicholson and Jacqueline Boutin

- Pedro : Benflex, supposed to be SO-CHICFlex, ‘cool skin effect’ hard to be observed directly. Experiment happening now with various instruments and gliders (wave gliders and slocum).
- Sarah : storms are important for CO2 and also for mix layer phenomenum. > **paper accepted by Nature Comms**
- Jacqueline : the CARIOCA is on the ship. Measures the interactions between atm and the upper surface. The existing trajectories convinced to deply the CARIOCA a little bit north (55°S instead ok 60°S).

WP2 – Alex Brearley

WP updates:

Integrated year-long field experiment and field site on prime meridian around 55S.

Unfortunately, global shipping issues led to late arrival of gliders (prepared, ballasted and tested) for the cruise. Following up options with Polarstern ...



Scientific focus – Ryan Patmore and Tasha Lucas

- Ryan: modelling component of the WP2, maximise the output of the cruise, save some battery requirements.
- Tasha: giant icebergs tracking used to differentiate between different sources of freshwater in the ocean.

WP3 – Svein Osterhus

WP updates :

Workshop in November on mooring data from Weddell sea continental shelf (2017-2021) to analyse those data.

Would need more meetings, early next year !

Reminder from Antonio, that all datas should be shared with him as soon as they are published to plug them into the SO-CHIC data portal !!

Updates from Pedro, Casimir and Mike.

SO-CHIC (via Shenjie is contributing to the new project SO-ICE in collaboration with WP3 (with JB, Mike, Svein, Pauvl, and Andrew)

Afternoon session

WP4 – Alberto Naveira Garabato

WP updates :

- **Eventually Post doc based in Southampton**
- Most of the elements planned are going to be deployed (buoys, ARGO system...) but the moorings will not because of shipping delays.

Scientific focus – Birte Gülk and Aditya Narayanan

- Birte : high resolution modelling using GLORYS 12 compared to other products to validate the fact that GLORYS12 can be used. MAUD12 has also been used to represent sea ice. Good agreement between MAUD12 and MAUD60.
- Aditya :

Back to WP3

Scientific focus – Shenjie Zhoo

Repeated CTD sections provide insights to lon term Weddell Sea water mass changes. See a significant deepening of the isopycnals.

Following plan is to conduct sea ice budget analysis to pin down the role of ice divergence.



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Q Torsten: There has been work by Hattermann et al 2021 on the link between sub ice shelf circulation at FRIS and large scale atmospheric forcing
<https://www.nature.com/articles/s41467-021-23131-x>

Early career researchers' updates – Marcel du Plessis and Hanna Rosenthal

Started last year in May 2020

10 to 15 active members

Monthly meetings sharing research, skills and invited experts

WP5 – David Ferreira

WP updates:

Various simulations ongoing : at-only (SIC and SST) and coupled climate with a nested high-res ocean, strongly interconnected. Plus PRIMAVERA HighRes MIP simulations.

Scientific focus – Holly Ayres and Malin Ödalen

- Holly : final model setup with specific conditions resulting from, to be repeated with OpenIFS comparisons. **Ayres et al in review**
limitations in Antarctic sea-ice loss response based on coupled model vs AGCM.
Working also on the PRIMAVERA dataset.
- Malin : studying coupled modelling linked to D5.1 already submitted (use of FOCI1 that allows to reduce SO warm bias and biogeochemical modelling // FOCI-OpenIFS being more realistic for Drake Passage transport) and currently working toward D5.4 and D5.5 and resolving minor problems.

WP6 – Nicolas Gruber

WP updates :

Diagnosed carbon cycle. Climate change leads to a loss of carbon from the SO (biggest at AAIW, where it is the most imp sink for anthropo CO₂, followed by the SAMW and CDW). The largest losses tend to occur in the upper waters.

- **Paper out in Nov 2022 Kimritz et al (linked to D6.3)**

Scientific focus – Mark Hague

Run several model exp which allow us to separate out changes due to spatial and temporal variability. Preliminary findings: multi-decadal trend in surface heat flux acts to reduce SO excess heat storage, but little effect on storage patterns. Carbon storage patterns appear to be primarily driven by the uptake of anthropogenic CO₂.

WP7 – Antonio Novellino

Deployed the Infrastructure and the data portal. Next steps is to feed the system with data collected so far!

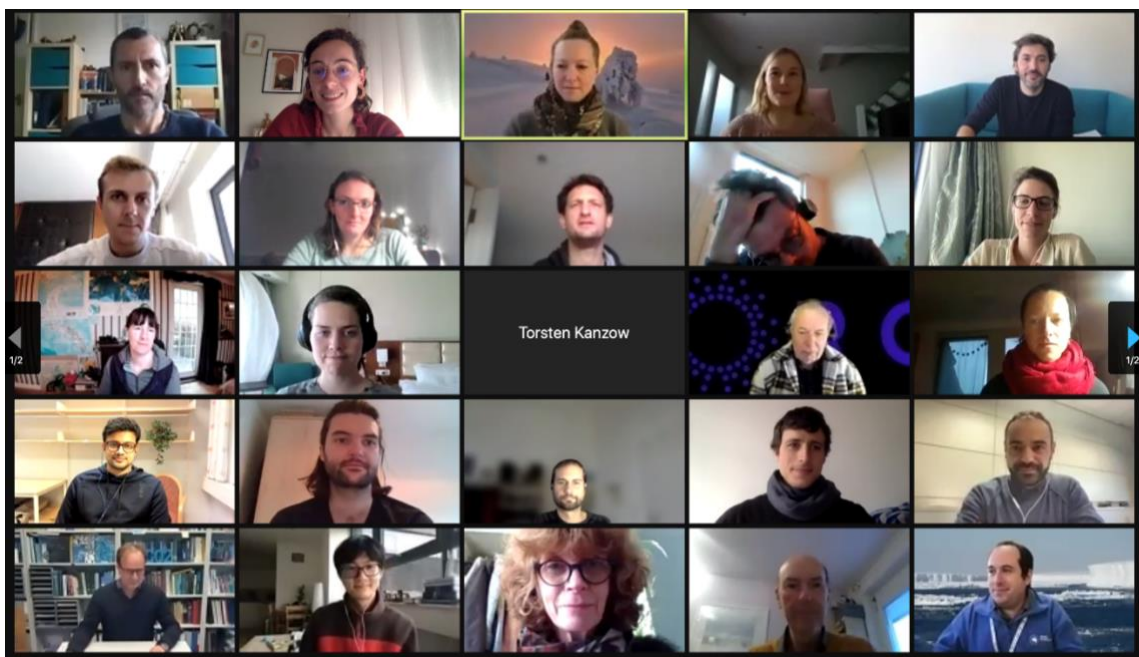
Data flow presented, there are some data already available

One single folder for each institute



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Go have a look at the mapportal !! Users will be defined to have an access to the infrastructure.



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