

Summer School

‘Land-Ocean Aquatic Continuum Carbon cycle’

Full title: C-CASCADES Summer School ‘Land-Ocean Aquatic Continuum (LOAC) Carbon cycle’ - Integrative science of LOAC, processes, observations and modelling

Date(s): 2016/08/22 to 2016/09/02

Location: Peyresq, France

Lead institution: University of Exeter

Type: Summer School

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Local Contact: Emily Mainetti-Cloarec

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Description:

The main objective of the C-CASCADES Summer School is to achieve a better quantitative understanding of carbon transformations and fluxes during lateral transfer between land and ocean. It will provide PhD students with a broad foundation in carbon cycle science and its applications.

Training will be embedded to make a breakthrough in understanding the Land-Ocean Aquatic Continuum (LOAC) Carbon cycle at regional and global scale. A field excursion will provide wider context and impact of research.

The Summer School will have morning keynote lectures, delivered by carbon cycle experts from inside or outside the C-CASCADES network, followed by discussions led by network senior scientists. The afternoons will be dedicated to practical training where students will develop regional LOAC carbon budgets, and also to workshops on outreach and communication skills.

Cost for external applicants: € 600 (covers overnight accommodation and breakfast, lunch and dinner from 2016/08/22 to 2016/09/02). No additional fees for the event itself.

Please read [Logistic information for C-CASCADES Summer School](#) to see how to reach Peyresq.

For more updated information please [check the C-CASCADES Summer School webpage](#).

Outcome for all participants: ECTS credits certificate

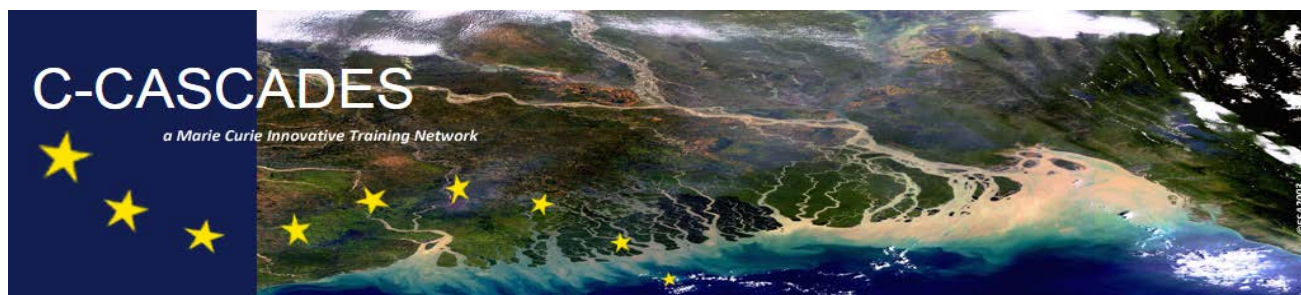
Assessment criteria

- 1 – Short review on regional LOAC fluxes (1 x A4), to be submitted electronically before the SU;
- 2 – Poster (A0 size) on up-to-date research, to be presented at the SU (you need to bring your poster);
- 3 – Short progress report oral presentation (15 minutes);
- 4 – Group collaboration towards a paper publication;
- 5 – Overall engagement and contributions during the SU.

ECTS credits awarded: 6

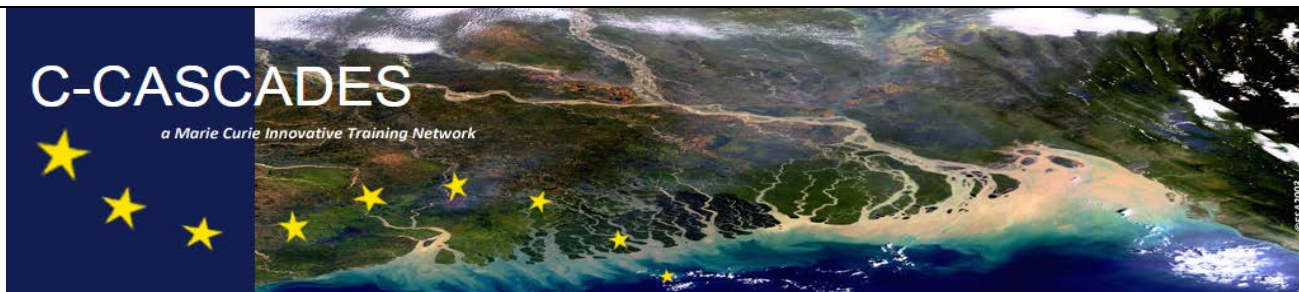
Awarding institution: ULB - Université Libre de Bruxelles

If you wish to register for this event, please send an email (including a CV and a motivation letter for external applicants), before **12th June 2016** to the “Contact email” above and add to the subject line “C-CASCADES Summer School external application”. Maximum participants: 25.



Indicative Timetable

Monday, 22nd August 2016	Sunday, 28th August 2016
14:00 - 17:00 Arrival 18:00 - 19:00 Welcome	Day off
Tuesday, 23rd August 2016	Monday, 29th August 2016
09:30 - 11:00 Global carbon budget and LOAC 11:00 - 12:30 Lateral carbon transfer 12:30 - 14:00 Lunch 14:00 - 17:00 LOAC model TOTEM 18:00 - 19:00 Peyresq community lecture 19:00 Dinner	09:30 - 11:00 Regional Arctic ocean 11:00 - 12:30 Regional high-latitude lands 12:30 - 14:00 Lunch 14:00 - 17:00 Training III 18:00 - 19:00 Training Q&A III 19:00 Dinner
Wednesday, 24th August 2016	Tuesday, 30th August 2016
09:30 - 11:00 Ocean carbon processes 11:00 - 12:30 Land biogeochemistry 12:30 - 14:00 Lunch 14:00 - 17:00 Training I 18:00 - 19:00 Poster Session I & Training Q&A I 19:00 Dinner	09:30 - 11:00 Regional tropical 11:00 - 12:30 Regional Europe 12:30 - 14:00 Lunch 14:00 - 17:00 Training IV 18:00 - 19:00 Progress report I 19:00 Dinner
Thursday, 25th August 2016	Wednesday, 31st August 2016
09:30 - 11:00 LOAC gas exchange 11:00 - 12:30 Glacial carbon cycles 12:30 - 14:00 Lunch 14:00 - 17:00 Training II 18:00 - 19:00 Poster Session II & Training Q&A II 19:00 Dinner	09:30 - 11:00 Regional to global modelling 11:00 - 12:30 Climate projections 12:30 - 14:00 Lunch 14:00 - 17:00 Training V 18:00 - 19:00 Progress report II 19:00 Dinner
Friday, 26th August 2016	Thursday, 1st September 2016
09:00 - 12:30 Visit to Observatoire de Villefranche 12:30 - 14:00 Lunch 14:00 - 17:00 Visit to CSM and IAEA-EL in Monaco 19:00 Dinner	09:00 - 12:30 Synthesis 12:30 - 14:00 Lunch 14:00 - 19:00 Synthesis 19:00 Dinner
Saturday, 27th August 2016	Friday, 2nd September 2016
09:30 - 11:00 Organic carbon burial 11:00 - 12:30 Ocean upwelling: a tale of 2 regions 12:30 - 14:00 Lunch 14:00 - 17:00 Paper/poster writing workshop 18:00 - 19:00 Introduction to Peyresq 19:00 Dinner	Departure



Indicative Syllabus

Block 1: Expert lectures	
Length: 21 hrs contact time + 7 hrs reading time (28 hrs)	Time slot: Various
Trainer: Various	Requirement: Yes
<p>Description: This block provides the theoretical framework to the Summer School. Participants are required to read 14 peer-reviewed key papers on the overarching expert lectures in advance – these will be provided in advance – and engage actively during question times. These lectures, associated reading and engagement provide initial theoretical opportunities towards a paper publication.</p>	
Block 2: Practical training	
Length: 18 hrs contact time + 5 hrs preparation time (23 hrs)	Time slot: Various
Trainer: Various	Requirement: Yes
<p>Description: This block includes practical exercises, tutorials and debates designed to deepen understanding, and provide the initial collaboration opportunities towards a paper publication.</p>	
Block 3: Field excursion	
Length: 1 day	Time slot: Various
Trainer: Various	Requirement: Yes
<p>Description: The field excursion to the Observatoire de Villefranche, the Centre Scientifique de Monaco and IAEA – Environment Laboratories provides wider context and impact of research.</p>	
Block 4: Oral and written communication	
Length: 11 hrs contact time + 6 hrs preparation time (17 hrs)	Time slot: Various
Trainer: Various	Requirement: Yes
<p>Description: This block is composed of 3 sub-sections: 1 – Communication skills: delivery of an up-to-date own research poster. Oral presentation of group ‘Progress Report’ during the Summer School. 2 – Peer engagement: engaging with peers during poster sessions and presentations of Progress Reports. 3 – Skills and synthesis: poster/writing skills session. Synthesis group work to provide further collaboration opportunities towards a paper publication.</p>	
Block 5: Paper publication	
Length: 10 hrs contact time + 100 hrs preparation time (110 hrs)	Time slot: Various
Trainer: Various	Requirement: Yes
<p>Description: After the Summer School, participants will continue to collaborate towards a paper publication on regional LOAC fluxes. There will be many opportunities throughout the Summer School to initiate and further this work with peers and experts.</p>	