Iwona Wróbel

PhD student

IOPAS-Centre for Polar Studies KNOW

European Geosciences Union -

General Assembly 2015

Since April 12 till April 17th 2015 in Vienna, Austria took place the biggest one conference-EGU General Assembly 2015-in which I participated with my PICO presentation: "Coinstraining the climatology of CO₂ ocean surface flux for North Atlantic and the Arctic" (<u>http://meetingorganizer.copernicus.org/EGU2015/pico/17674</u>). In this conference were took part approximately 10 000 scientists from more than 100 countries, of which 23% were students. There were held more than 5 000 oral, 9 000 posters and 700 PICO presentations.

EGU, the European Geosciences Union, is Europe's premier geosciences union, dedicated to the pursuit of excellence in the geosciences and the planetary and space sciences for the benefit of humanity, worldwide. It was established in September 2002 as a merger of European Geophysical Society (EGS) and the European Union of Geosciences (EUG), and has headquarters in Munich, Germany.

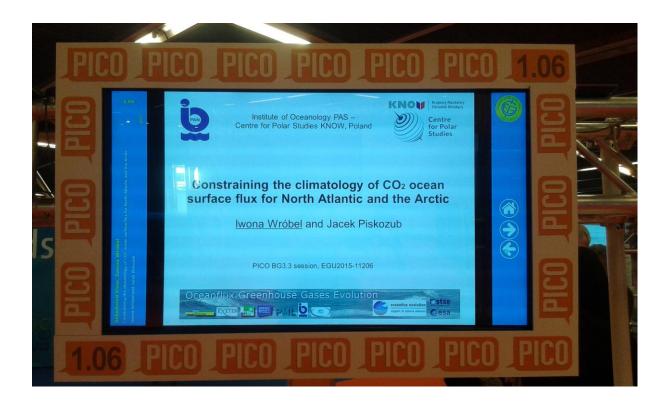
PICO presentations, which I participated was from Marine Biogeosciences/Ocean Interfaces session. At first it was 2-minutes-madness, where I presented the essence of my work and after that every authors were stood next to their scheduled screen where showed their PICO presentation. In my group was 7 people so every PICO authors had 15 minutes next to their PICO screen to oral about their study.

In Marine Biogeosciences/Ocean Interfaces session the presentations mostly was about large scale changes in the ocean. This session brought together experimentalists and modelers from chemistry, biology, geochemistry and physical oceanography to discuss the latest developments of the investigation of the accumulation, transformation and transport of climate-relevant substances at and across the different ocean interfaces.

My presentation was about climatology of CO₂ in North Atlantic and Arctic seas. I was talking about my preliminary results in compare monthly and annually net air-sea CO₂ flux in regional scale measured in FluxEngine program, created within the ESA funded (European Space Agency; SOLAS related) OceanFlux Greenhouse Gases project (http://meetingorganizer.copernicus.org/EGU2015/EGU2015-11206-1.pdf) in which IOPAS is part of and as a part of my PhD thesis funded by Centre for Polar Studies KNOW. Air-sea fluxes are expressed as a function of gas transfer velocity parameter which is parametrized as a function of wind speed. I computed gas transfer velocity parameter in FluxEngine program used 5 various algorithms. The most important differences in these algorithms are in relationships between air-sea exchange and wind speed. Two of them used cubic relationship, three quadratic. The recent literature agrees that cubic parametrization fit available date worse than quadratic ones.

EGU organizers took care not only about the sciences part but also about integration parts. There was receptions for Young Scientist and Medalists as well as for every session separate thanks which we can met other scientist and talked about us and our study. Everybody can took part in short courses, visit Geo cinema. There was a Young Scientists lounge where we can used a net, drink juice, tea, coffee, eat fruits, cookies.

The conferences was very big, it took part at the whole Vienna International Centre, every day from 8:30 am till 7 pm took place oral and poster part, we met people from whole world, we can talk with them and exchange our experience, problem in our study. There was also more than 100 exhibition from various country and discipline (eg. Picarro, Inc; University of Kiel; Elsevier; Cambridge University Press; Esri)



Participation in this conference significantly expanded my knowledge about exploration in North Atlantic and Arctic as well as in the rest of the world I met there a lot of people what was very important for me and for my future study.