

ITC CONFERENCE GRANT SCIENTIFIC REPORT

This report is submitted for approval by the grantee to the MC Chair.

Action number: CA16202

Conference title: European Geophysical Union General Assembly 2018

Conference start and end date: 08/04/2018 to 13/04/2018

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Grantee name: Kimmo Neitola

ACTIVITIES DURING YOUR ATTENDANCE AT THIS CONFERENCE:

I presented my poster with the title "Shipborne vertical profiles of dust aerosols obtained with UAVs in the Mediterranean and the Middle East: First results of the AQABA campaign" on the session AS3.12: "Radiative effects and global aerosol forcing estimates of natural and anthropogenic aerosols" and one poster from my colleague. My poster did draw some attention and approximately 10 to 15 people wanted to hear more about it. I attended several sessions that had something related to my own research and those that I found interesting otherwise. To mention a few of these sessions: AS3.1 Aerosol Chemistry and Microphysics, AS3.12 "Radiative effects and global aerosol forcing estimates of natural and anthropogenic aerosols" and AS3.27 "Mediterranean atmospheric composition, Aerosols & Air Pollution under changing climate". AS EGU is a very massive conference, it is very hard to find a perfectly suitable session, let alone recommend any particular session. These sessions had something for my interest but not the whole sessions, as it is very diverse even within a session.

IMPACT ON YOUR RESEARCH AND FUTURE COLLABORATIONS (if applicable)

(max.500 words)

I made some new contacts (too early to name them) from Finland that might result in a cooperation in the future on the field of UAV measurements. The plan is to have the Cyprus Institute UAV group to build 3 UAVs and train me to use them on my future work in northern Finland (Värriö station, run by the University of Helsinki). I would fly daily at the pristine environment of northern Finland, providing profiles of particle size distributions to improve the data sets provided by the ground measurements. If this plan works out, there will definitely be more collaboration between the University of Helsinki and the Cyprus Institute, regarding UAV measurements and expanding the ground measurements here in Cyprus.

The work that I presented was groundbreaking, as it was the first time when an autopilot was used with a moving home (i.e. the start point, the ship, was moving for the whole duration of the flight) was used in a scientific purpose. Also, the data set obtained is unique, as the atmospheric data of dust and particle characteristics of the region have been lacking.

Generally the work on UAVs here in the Cyprus Institute was a matter of interest, as it provides a cheap and easy-to-operate system to obtain data within and above the boundary layer, compared to the classical airplane measurements. Many of the people visiting the poster were interested what is possible and what

is not, providing them the idea of using UAVs in their own studies.