Short report on STSM application COST-STSM-ES1404-36399

Period: 2017-02-10 to 2017-02-19
COST Action: ES1404
STSM type: Regular

STSM Applicant: Dr Marie Dumont, Météo-France, Saint martin d'hères (FR), marie.dumont@meteo.fr

STSM Topic: Snow physics education
Host: Juha Lemmetyinen, FMI, 99600 SODANKYLÄ (FI), Juha.Lemmetyinen@fmi.fi

Purpose of the STSM :

This STSM serves to support the applicants participation at the 3rd edition of the Snow Science Winter School held in February 2017 in Sodankylä, Finland. The Winter School educates students from all over the world in state-of-the-art snow characterization methods as a contribution to harmonize snow monitoring activities.

(see here http://www.slf.ch/dienstleistungen/events/snowschool/index_EN for more details).

Description of the work carried out during the STSM and of the main results obtained:

The STSM comprises theoretical and practical teaching units to i) understand how to use conducted measurements on input for common simulation tools and ii) teach students to how to plan and carry out a small field campaign in Saariselkä, which was the main result/achievement of course.

Individual contributions during the week comprise:

Monday 13rd February: lecture on “physical snow modeling“ (1h), introduction to SWE and density measurements to the students and hands-on exercises.

Tuesday 14th February: supervision of field measurements at FMI’s main measurement site (IOA)

Wednesday 15th February: lecture on optical remote sensing of snow (45 min), participation to field measurements on FMI bog site, Sodankylä

Thursday 16th February: participation to the interactive session on snow optical properties modeling with the students

Illustration 1: Busy snow measurements site on Tuesday

Friday 17th February:
Class teacher for one measurement group during the field measurements in Saariselkä

Illustration 2: A deep snow pit in a snow accumulation area in Saariselkä

Future collaboration with the host institution (if applicable);
Co-Organization of the 4th snow school edition in 2018 in France.
Snow modeling work for the interpretation of SMOS data.