

# Leena presented the table of progress of the Tasks in WG2 and briefly in WG1

**Task 1:** A review of existing space-borne and ground-based sensors/instrumentation applied for measurement of different snow characteristic, estimation of their uncertainties.

Grant period 3	
Done	Questionnaire
On-going	Analyze output from the questionnaire
Undone	Publish a paper in review journal about results of questionnaire

Grant period 4	
Undone	Review of ground-based instrumentation based on results of questionnaire
Undone	Review of space-borne instrumentation
Undone	Estimation of the uncertainties

Leena presented **Questionnaire results.**

- Good amount of answer, more from Denmark, Norway, and Sweden.
- Close it as soon as possible (max end of 2016)
- 40% from operational services, 60% from research.

Main result: Macrostructural properties are the most measured: snow depth, SWE, snow presence.

**Working Group to analyze and draft a paper is identified. Expect a draft to circulate in 2017**

Roberta presented Helsinki workshop on **snow albedo** measurements.

Measurement artifacts and recommendation have been discussed.

**Report is in progress.**

- Preparation of an intercomparison of instruments in two steps:

1- In lab characterization of the instruments and inter-calibration. Different possible labs but FMI development of a calibration facility dedicated to snow seems an appropriate option. Approximate date: ~ Summer 2017. A few groups have notified their interest. Short questionnaire to be circulated among the participant of the workshop to express interest.

2- In situ measurements. Where, when, tbd.

**Decision on the COST tool to use (STSM or others) is needed.**

## Wolfgang presented **Global Cryosphere Watch and CryoNet**

- WMO initiative
- Concept of CryoNet STATIONS and CryoNet SITES to address the complexity of cryospheric environment/ site.
- Submissions for STATIONS are welcome. See the criteria on the web-site.
- GCW Guide and Manual for snow observations to be written (coordinator for snow is [charles.fiertz@slf.ch](mailto:charles.fiertz@slf.ch))

**Because of the common objectives with COST Harnosnow, it is proposed that 1 person from GCW and 1 person from Harnosnow interact on the recommendation guide / snow book.**

## Christoph presented ICSSG, CAAML, SnopViz

- International classification for seasonal snow on the ground: back to 1954 + 2 revisions

**No action.**

**Open questions: need another revision ? Is "seasonal snow enough" (e.g. perenial snow on ice-sheet, snow on road/structure, ...) ?**

- CAAML: standard to exchange snow observations, especially "CAAML Profile" → exchange of snow profiles: <http://caaml.org>

**Proposition: Identify a COST member to correspond with CAAML group.**

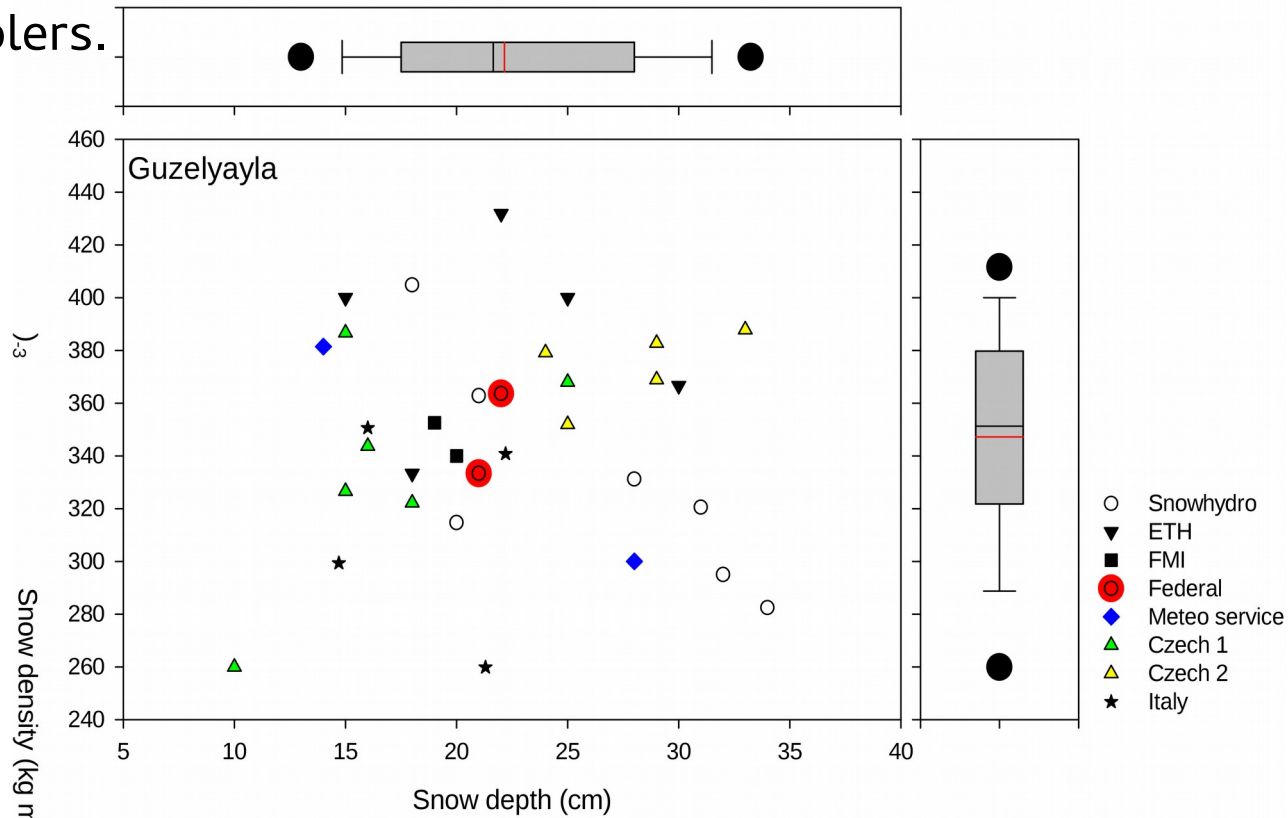
- SnopViz: visualization tool for snow profiles. <http://snopviz.org>

**Information: call from SLF for "crowed" funding campaign.**

**Proposition/question: COST contributes to this community effort.**

# Nacho presented results of the Turkey 1st field campaign

- Table of instruments of samplers.



- Many discussion about the sources of errors but the dataset is limited → what's next ?

- Even more discussion about the conclusion "electronic scales are more accurate than mechanical scale"

**Working Group to briefly analyze the results is identified → feed the preparation of the guidelines to be tested during the 2<sup>nd</sup> field campaign.**

Pavla presented possibilities for the 2<sup>nd</sup> field campaign in Iceland and working group meeting

2 propositions for the field trip:

P1- excursion on a glacier, 2h drive. Albedo& impurities measurements by Icelandic colleagues → demonstration. Other measurements such as density and SWE are possible but little time can be allocated.

P2- strict follow-up of the 1<sup>st</sup> field campaign (site closer to Reykjavik) → focus on snow depth and/or SWE and COST deliverable.

Need to define precisely the objective → choose the site after depending on the objective.

A solution is to mix two propositions. A few people can do P1 using STSM, then most people do only P2.

**Need to take decision rapidly. Proposition: identification of a working group to prepare guidelines and prepare the field experiment accordingly (leader: Nacho ?).**

## Undone tasks:

- snow stability and mechanical properties for avalanches

## Identified coordinators: Carles Garcia Selles, Pavel Nejedlik

- methods to measure snow grain size

Intercomparison done in winter 2014 (Davos, Switzerland). First analysis presented in a dedicated meeting in summer 2014 (Reading, UK). Working group for a series of papers identified but no activity since then (special issue in The Cryosphere is open). Recent discussion to reactivate the activity within the IACS workgroup "quantitative methods...".

## Proposition: wait



## Undone tasks (cont.) :

- review of remote sensing product (ground and satellite)

**Proposition: COST members who get support from COST for EARsel in Bern provide a report on new/emerging products.**

Reviewing existing/old products should be easier. **Does ESA report on snow remote sensing exist and could be used as a starting point ?**

**What about ground remote sensing ? Someone from the UAV community ?**

- snow network optimization

**Decision: David is designated to do something about this. Thanks!**