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# ***Update on SMAP-Canada and Agenda of the Workshop***



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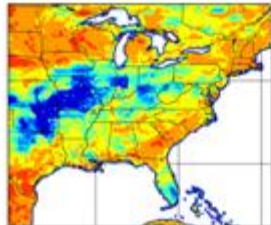
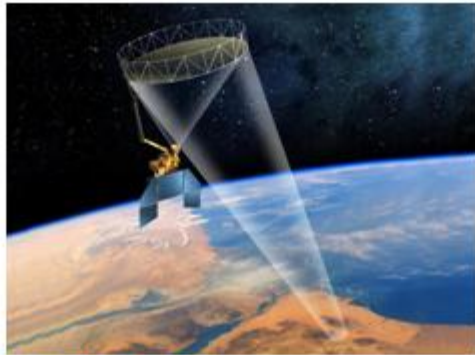
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# SUMMARY of the CANADIAN SMAP PLAN... OBJECTIVES

## Canadian Science and Applications Plan for the Soil Moisture Active and Passive Mission



November 2010

 Environnement Canada Environment Canada



***Contribute to the calibration / validation of SMAP soil moisture and freeze/thaw products by acquiring and processing experimental data over Canada.***

***Improve the representation of the energy, water, and carbon cycles in Canadian environmental analysis and prediction systems, using SMAP soil moisture and freeze/thaw data.***



# **The PEOPLE INVOLVED**

## **Cal-val soil moisture**

Networks, reference sites

(EC, AAFC, Guelph)

Field campaigns

(EC, AAFC, Guelph,  
Sherbrooke, Manitoba)

## **Cal-val freeze/thaw and carbon fluxes**

(INRS-ETE)

## **Soil moisture and FT retrievals**

(AAFC, Sherbrooke, INRS-ETE)

## **Soil moisture and FT data assimilation**

(EC, AAFC, Guelph, Toronto)

## **Carbon cycle analysis**

(EC, Toronto)

## **Impact studies, products generation, and transfer to Operations**

(EC, AAFC)

## The SITUATION...

**SMAP Project:** *Launch date has not changed, hardware and software development on schedule, mission on budget.*

**Message from CSA:** *Agreement in place between CSA and NASA, funding available for both government departments and universities, objective is to have SMAP used to improve products and services to Canadians*

*Government departments ready for operational implementations (EC, AAFC)*

*Research ongoing in universities*

*What's next...?*

## OBJECTIVES of the WORKSHOP

*Report on progress achieved in the last year*

*Preparation for phase 2 of the project (from 2014 to early 2017)*

*Plans for post-launch cal-val contributions from Canada*

*Extend collaborations and links*

*Settle some organizational matters, i.e., follow-up of projects to ensure coherence and transfers in both directions*

# **STRUCTURE / AGENDA of the WORKSHOP**

*A) Introductions*

*B) Soil moisture cal-val*

*C) Applications, freeze / thaw, and carbon cycle*

*D) Outreach and products*

*E) Organization and conclusions*

## SOIL MOISTURE CAL-VAL: ISSUES

*Participation to Cal-Val rehearsals (core sites)*

*Ready for another field campaign in Manitoba?*

*2015 vs 2016*

## APPLICATIONS, F/T, and CARBON: ISSUES

*Operationalization of soil moisture and F/T products in Canadian Government*

*Two-way transfer process between academia and Government (data, algorithms, systems)*

*US-Canada alignment or coordination*

*Real-time (latency) issues?*

*Sharing of ancillary data*

*Cal-Val for F/T and carbon component*



## OTHER ISSUES

*Outreach: how much effort?*

*SMAP data centre at EC*

*Enhanced participation / collaboration with  
SMAP Applications program*

*Documentation / reporting*

*Links with other missions*

*Budget for the rest of the project*

*Risk related to launch delay and other*

*Media stuff...*