

HAIC HIWC Research Break Out Meeting – 19/05/2016

Welcome, Objectives and agenda [presentation attached]

A. Calmels [presentation attached]

Last minute modification of agenda due to shift in discussion in executive team meeting and need for more time.

- W. Strapp: There might be a need to split in a close meeting after one hour. To be confirmed later.

Objectives of the meeting are to review international actions of research launched to pursue effort on ice crystals research and to identify potential gaps and needs.

European R&D Actions of research

F. Dezitter [presentation attached]

- Future Sky Safety 2 = Focus on pursuing activities on method and tools
⇒ Proposal rejected by European Commission during week 20 2016 / mitigation plan under elaboration
- Cleansky 2 = Feedback from evaluation awaited, start expected in September 2016. Focus on detection and awareness technologies.
- SONIC = Proposal submitted on 29/02/2016 for start early 2017. Focus on nowcasting and satellite retrievals (follow-up of HAIC SP3 activities)

No flight tests planned as part of this research plan.

International collaboration is encouraged and will be promoted.

CIRA Initiative for instrumentation intercomparison

W. Strapp [presentation to be attached]

Presentation of plan for intercomparison tests in several icing wind tunnels.

Some calibration tests of CIRA for FZDZ are planned in December 2016.

Three tunnels: NRC M17, CIRA, NASA IRT.

2 main targets now defined (outcome from April 19, 2016 teleconference):

- Common studies (target #1): facility intercomparison, use of new and common technologies to assess potential differences in the community's tunnel calibrations, review of data processing methodologies
- Specialised studies (target #2): improve understanding of mixed phase measurements (ice and liquid separation), assess response in 50µm-150µm region to better characterize SLD conditions with bi-modal PSDs.

No detailed schedule available yet.

North America Research Actions

T. Ratvasky (oral status)

Funding for radar research and another flight campaign in August 2017 (DC-8 aircraft planned as a carrier initially but finally not available → will be another Langley flight tests aircraft - most probably the Falcon 20)

Objective is to compare X-band and W-band reflectivity to work on combination of two bands to enhance detection of ice crystals. Will need installation of a new radome.

NASA Ice crystals icing fundamental physics = activity will be pursued / presentation of plan should be performed at AIAA (TBC).

T. Bond (oral status)

FAA and NRC partnership on-going for rotating rig tests / Fabrication of prototype on-going / calibration tests planned in November-December 2016.

FAA is also funding NCAR for nowcasting and satellite retrievals. Third workshop with HAIC SP3 team is expected by end of the year. Teleconferences will be planned in between to discuss 4 cases studies.

Objectives:

- Comparison studies
- Verification method / more discussions on that to be conducted

Next meetings

All

HAIC Forum = 29th and 30th of September 2016 / location Toulouse [presentation attached]
HAIC-HIWC Science Team Meeting = Week 49 / location CIRA? TBC asap by W. Strapp
Satellite Workshops = under discussion / might have 2 workshops TBC
EIWG / ICC = no meetings planned