

**Ice Prediction Workshop
IPW-2
Town Hall Meeting**

April 4, 2023

Agenda

- IPW-2 schedule and milestones (Andy)
- Review process for submitting data (Maxime)
- Review latest test case information (Isik)
- Participant survey results (Richard)
- Participant permissions to share and archive presentations (Richard)
- Questions and Discussion

IPW-2 Schedule and Milestones

- Town Hall Meeting April 4, 2023.
- Participants submit **processed** results so that Polytechnique Montreal can begin results comparisons—April 18, 2023.
 - Results submitted after this date may or may not be included in results comparisons, depending upon individual circumstances.
- Polytechnique Montreal to provide initial results comparisons—May 16, 2023
- Organizing committee to provide initial workshop agenda—May 30, 2023
- Prepare Organizing Committee presentation for the Workshop—Draft presentation for May 30, 2023 bi-weekly meeting.
- Workshop participant submit presentations to committee—June 14, 2023.
- Conduct the workshop—June 23, 2023

IPW2 Survey Results

Summary

- 22 responses (30.03.2023)

Organisations/Institutions

- HX5, LLC
- ONERA
- Italian Aerospace Research Centre - CIRA
- Metacomp Technologies
- Japan Aerospace Exploration Agency
- Politecnico di Milano
- Honeywell Aerospace
- Polytechnique Montréal
- TU Braunschweig
- NTNU
- Politecnico di Milano
- AeroTex GmbH
- National Research Council Canada
- Ansys
- NASA Glenn Research Center (GlennICE Research Team)
- Italian Aerospace Research Centre - CIRA
- CIRA Italian Aerospace Research Centre
- ATS Aerothermal Solutions
- Kingston University London
- Gulfstream
- Seoul National University
- Boeing

Icing CFD Codes

- GlennICE 3.1
- IGLOO3D, IGLOO2D
- SIMBA_ICE
- CFD++
- in-house code
- PoliMIce
- Fensap
- Champs-ICE
- DICEPS
- FENSAP-ICE
- PoliMIce
- ITA (in-house)
- Morphogenetic
- FENSAP-ICE
- GlennICE
- SIMBA_ICE
- In-house developed
- CFD++ and in-house
- ANSYS FENSAP-ICE
- USM3D and LEWICE3D
- ICEPAC(In-house)
- CFD++ (for flowfield), LEWICE3D

Cases

- All 3 cases: 14
- Inboard + midspan: 3
- RG-15: 3
- Midspan only: 1
- Inboard only: 0

Comments to the IPW Organisers

- Not sure if I am doing gap and no gap configurations. That is TBD.
- Is the 1st of April a "strict" data submission deadline?
- Is the results do date still April 1st?
- "We hope to solve all 9 cases. However, now on a hard process to capture all properties well. So, the result submission list can be different. "

Participant permissions to share
and archive presentations

Sharing and archiving IPW2 results

- Motivation
 - The IPW generates very valuable results for the icing community. We want to ensure, that these results are archived properly and are made available to the public.
 - For this, we want to use an scientific data Repository solution, eg Zenodo or Dataverse. The data will be made public, given a DOI, and ensured to be archived for long-term.
- Scope
 - All “input” data for IPW1&2, including case descriptions, experimental data, etc.
 - Final presentations for IPW1&2. This will require a declaration from the authors, that we can archive and publish the presentations.

Timeline RG-15 experimental data

- Finished processing the 3D results.
- We will provide a 3D .STL file of the ice and a MCCS for each case.





