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# HAIC/HIWC Science Team Meeting

HAIC/HIWC International Field Campaign – Data sharing principals

# HAIC/HIWC Science Team Meeting

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# HAIC/HIWC Science Team Meeting

## Introduction

- An **international HAIC/HIWC field campaigns** - Darwin in Q1 2014 and Cayenne in Q2 2015 funded by several funding bodies (FP7, EASA, FAA, NASA, TC)
- A **single HAIC/HIWC dataset** shared within HAIC/HIWC community for analysis and completion of industry/rulemaking and science objectives.
- Engineering Unit Data will be made available after processing of raw data by SAFIRE and instrument principal investigators (CNRS, NASA, ...)
- A **data sharing protocol** to be agreed upon and signed by all the parties
  - ▶ to ensure rapid dissemination of data and results within HAIC/HIWC,
  - ▶ to protect the data ownership of the contributing scientists, and
  - ▶ to ensure that project data are preserved and made available after the end of the project.

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## Data sharing protocol

- General Principles

- ▶ The data collected during the HAIC and HIWC F20 campaign will be gathered on a **common database** for secured, facilitated and enhanced availability.
- ▶ The HAIC and HIWC data and publication policy defines the **access rules** to the data in order to best accommodate the data provider and user expectations.
- ▶ HAIC and HIWC non public data are delivered to registered users only, for the sole purpose of **scientific/regulatory studies** designed to meet HAIC and HIWC objectives and educational activities related to the dissemination of HAIC and HIWC science.
- ▶ Commercial use and exploitation of HAIC and HIWC data are prohibited unless explicitly allowed by the data owner.
- ▶ Prior to the public release date, data received under the HAIC and HIWC policy shall **never be redistributed to a third party** without written permission by the data owner.
- ▶ If data user makes use of a dataset retrieved, he/she shall establish direct contacts with the principal investigator(s) of the data in order to offer collaboration. **Co-authorship of HAIC and HIWC dataset users and principal investigator(s) should be the rule for papers making use of HAIC and HIWC data.**

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## Data sharing protocol

- **Data access** is limited to undersigned of the data exchange protocol.
  - ▶ During the duration of 3 years after data deposit deadline on the database access is limited to core users being part of the HAIC & HIWC consortium.
    - Data deposit date was reset to July 15, 2016 during 2016 Toronto Science Mtg
      - Data deposit date was previously January 1, 2015 based on 2015 Melbourne Science Mtg
      - Data deposit will include:
        - ▶ Falcon-20 SAFIRE, CNRS, LaMP processed data sets from Darwin 2014 and Cayenne 2015: PSD and mass distribution (Deq), IKP, hot-wire TWC/LWC, state parameters, RASTA
        - ▶ Convair 580 ECCC/NRC processed data sets from Cayenne 2015: IKP, PSD from 2D probes (Ly), state parameters, auxiliary data that is necessary to support the work, other data sets will be evaluated on a case by case basis.
  - ▶ 3 years after data delivery, data access is granted to every individual signing the data exchange protocol.
    - July 15, 2019
  - ▶ 6 years after data delivery the data are fully public
    - July 15, 2022

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## Conclusion & Way Forward

- Draft Data Sharing Protocol defined by CNRS
- Validation process to be launched soon before release within HAIC/HIWC
- It is expected Data Sharing Protocol signature process to be completed by Nov 2013.

# BACK-UP



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## Introduction

- **Engineering Unit Data Analysis:**

- ▶ The analysis of the Falcon 20 data will be done based on analysis method(s) that will be cooperatively agreed upon by Alfons Schwarzenboeck, and potentially other of the HAIC science team members, and Walter Strapp & Alexei Korolev (representing the HIWC partnership). All Falcon 20 raw data (except the iso-kinetic probe (IKP)) will be collected and analyzed by CNRS and HAIC community.
- ▶ The IKP data will be analyzed by Walter Strapp and Science Engineering Associates (SEA).
- ▶ All 150F/H of data will be analyzed together and converted from raw data to engineering unit data by the above parties using the agreed upon analysis methods.



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## Introduction

- **Regulatory Data Analysis:**

- ▶ All the engineering unit data will be analyzed by Walter Strapp for comparative evaluation with the Appendix D/P current engineering standards. This analysis will be reviewed by selected peers in HAIC and/or HIWC to critique the method and provide a confidence check.

- **Data Availability:**

- ▶ The full database will be combined together and used by the HAIC project.
- ▶ The database will be made available for the regulatory evaluation with full access to FAA and EASA
- ▶ The database will be made available to the HAIC/HIWC partners subject to data sharing protocol

## High Altitude Ice Crystals (HAIC, 314314)

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Project co-funded by the European Commission within the  
Seventh Framework Programme (2012-2016)

