CATCH -The Cryosphere and ATmospheric Chemistry

http://igacproject.org/activities/CATCH
Emerging IGAC Activity on Chemistry, Biology and Physics in Cold Region
First Work Shop – Paris, France April 19-20 Science Workshop
Programmatic Workshop April 21
Summary from IASOA Perspective
The Cryosphere and ATMospheric Chemistry

**Presenter** | **Topic** | **NOTES**
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Murphy | CO2 and SO2 | Alert Observations, IASOA Station
Murray | Ice Nucleation | Satellite Lidar Observations, Model – Mobile Facility, Validation and Process Understanding Support
Skaggs | IAGOS (+ CALIPSO and PEXTRA) – Observations on Buoyes???? | Buoye CALIPSO misses everything above 92 degrees North, should use Zepplin Station.
Rain | BC High Himalayas | Aerosol chemical composition – Could compare to Tiksi, Barrow, Alert?

Cold Climate comparisons to Arctic – Template research for composition to AOD to Radiation, Events

**Griffiths** | BiO release from Blowing snow | Antarctica
**Dall’Osto** | Mixed Phase Clouds | Modeling compared to ASCC
**Dietz** | Calendula | Petrochemical sources some biogenic – organic pollution in ice
**Megan Willis** | Cloud Aerosol – IASOA cloud groups? | AMF Plane – Resistive flow area – did not go as far North as Eureka
**Johnsen** | Mass Spectrometry – Antarctica | Nice precursor vapors to aerosols to CO2 figure
**Lees** | NETCARE | System Science – Ocean Ice
**Dall’Osto** | BIOLOGY | Great SOLAS figure
**Larose** | Mercury Cycling |

35 Presentations - 10 operating near or at IASOA stations and using IASOA station data
4-5 additional presentations with potential for expanding scope with IASOA station data
IF SEAFIRE GOES AWAY WILL MERCURY GO AWAY?
WHAT NEXT FOR CATCH AND IASOA?

• Solicit contributions to Aerosol WG Chemistry Inventory (different kind of chemistry?)
• Capture CATCH elements in the IASOA System Science Figure – identification of small particle production impacts on cloud microphysics for instance, BIOGEOCHEMISTRY)
• Discuss if a CATCH group would want to start a separate activity line in the Trace Gases WG or perhaps CATCH is an example of an IASOA WG partner?
Most Interesting New Fact for Taneil

• Frost flowers are no longer considered to be a source of bromine