DIANE BURKO

Climate
Literacy +
Energy
Awareness
Network

From Landscape Artist to Explorer Activist

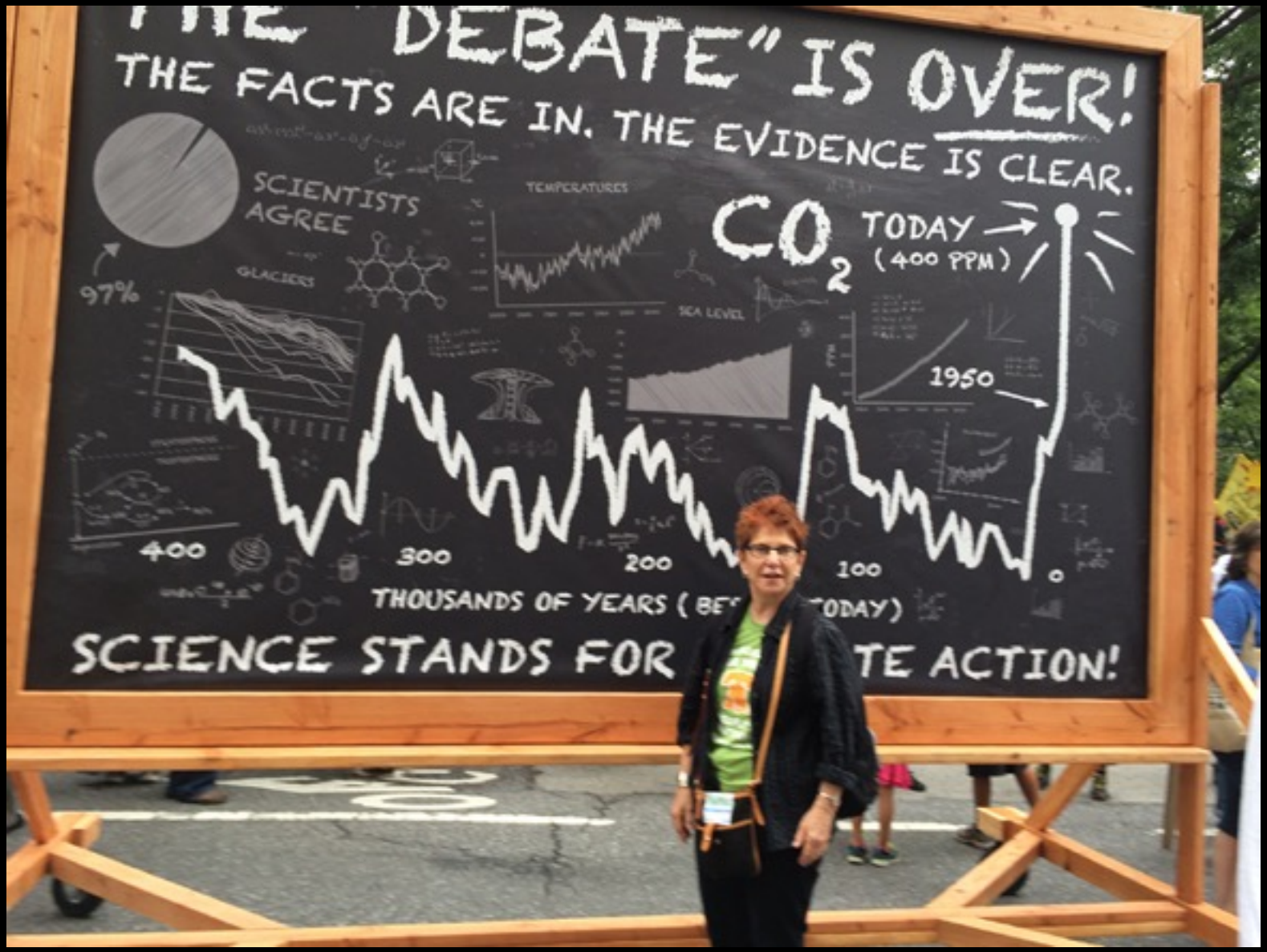
May 4, 2016

CLEAN – NETWORK TELECONFERENCE

Antarctica Peninsula,
January 2013

Svalbard, Arctic Circle
September 2013

Ilulissat, Greenland
August 2014



ACTIVIST: PEOPLE'S CLIMATE MARCH September 21, 2014

WILLIAM HENRY JACK, YELLOWSTONE
Photograph 1878

THOMAS DORAN, YELLOWSTONE
Painting 1872

FIRST FLIGHT WITH JIM TURRELL 1977 48 x 80 inches

VOLCAN POAS #4a + 4b 1998 84 x 120 inches

PALAMI PALI #5 2001 60 x 96 inches

GODAFOSS #6 2004 60 x 96 inches

SPERRY 1 2011 40 x 60 inches

Installation of FLOW exhibition at MICHENER MUSEUM 2006

GRAND JORASSES – POINT MARGUERITE 1976 64 x 108 inches

Matterhorn Series, 2007-2009, 20”x20” each

April 2016 – current book shelf

catalog cover for POLITICS OF SNOW exhibition 2010

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science for a changing world

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Climate Change in Mountain Ecosystems

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View Repeat Photos

NOTE: Repeat Photo pages are best viewed on monitors set to at least 1280 pixels wide.

Glaciers

Agassiz (Boulder Pass)
Agassiz - terminus
Blackfoot-Jackson
Boulder
Boulder - Ice Cave
Boulder - Chapman Peak

USGS Repeat Photography Project Documents Retreating Glaciers in Glacier National Park

SHARE

Global Climate Change Background

Glacier National Park's namesake glaciers have receded rapidly since the Park's establishment in 1910, primarily due to long-term changes in regional and global climate. In the last century, the five warmest years have occurred in the last 8 years - in this order: 2005, 1998, 2002, 2003, 2004 (NASA). These changes include warming, particularly of daily minimum temperatures, and persistent droughts. This warming is ongoing and the loss of the Park's glaciers continues, with the park's glaciers predicted to disappear by 2030.

Repeat Photography Project Overview

Climate change research in Glacier National Park, Montana entails many methods of documenting the landscape change, including the decline of the park's namesake glaciers. While less quantitative than other high-tech methods of recording glacial mass, depth, and rate of retreat, repeat photography has become a valuable tool for communicating effects of global warming. With evidence of worldwide glacial recession and modeled predictions that all of the park's glaciers will melt by the year 2030, USGS scientists have begun the task of documenting glacial decline through photography. The striking images created by pairing historic images with contemporary photos has given "global warming" a face and made "climate change" a relevant issue to viewers. The images are an effective visual means to help viewers understand that climate change contributes to the dynamic landscape changes so evident in Glacier National Park.

The Repeat Photography Project began in 1997 with a systematic search of the archives at Glacier National Park. We began searching for historic photographs of glaciers in the vast collection that spans over a century. Many high quality photographs exist from the parks' early photographers such as Morton Elrod, T.J. Hileman, Ted Marble, F.E. Matthes, and others who scoured the park to publicize it's beauty and earn their livings. Copies of the historic photos were taken in the field to help determine the exact location of the original photograph. Photographing the glaciers cannot occur until the previous winter's snow has melted on the glacial ice and when air quality conditions are considered at least good. This creates a narrow window in the northern clime of Glacier National Park where smoke from forest fires prevented photography on many occasions in the past few years.

Since 1997 over sixty photographs have been repeated of seventeen different glaciers. Thirteen of those glaciers have shown marked recession and some of the more intensely studied glaciers have proved to be just 1/3 of their estimated maximum size that occurred at the end of the Little Ice Age (circa 1850). In fact, only 26 named glaciers presently exist of the 150 glaciers present in 1850.

USGS: Glacier National Park Repeat Photography Project

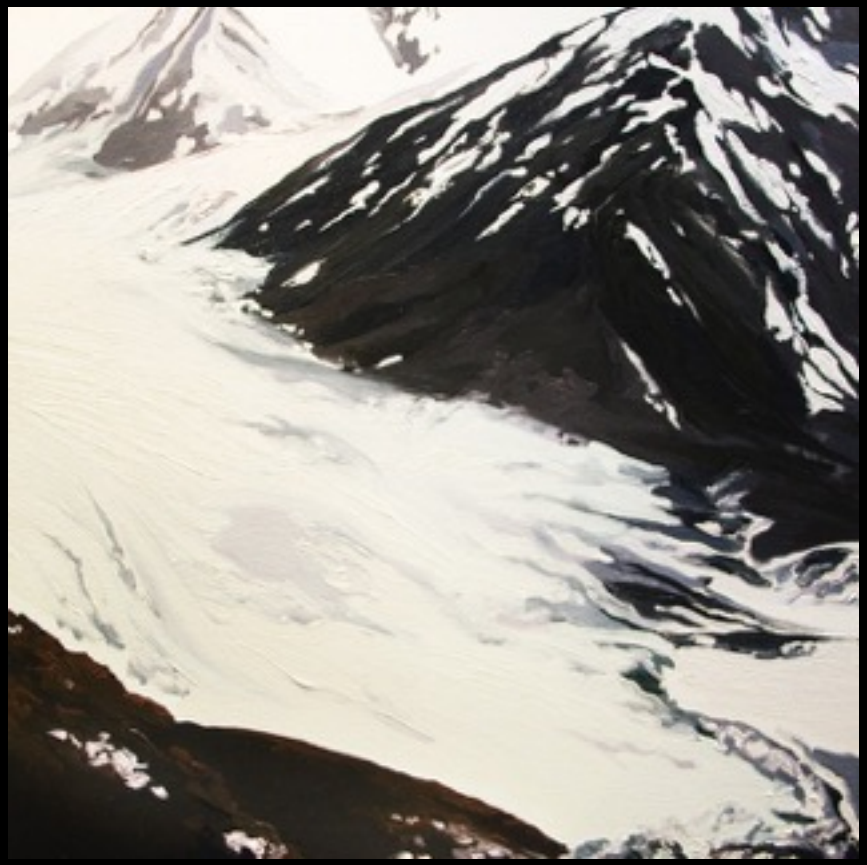
GRINNELL OVERLOOK #1, 1940 (GNP Archives);
GRINNELL OVERLOOK #2, 2006 (after Karen Holzer) 2009 50 x 162” overall

Grinnell Mt. Gould #1; 1938 after T.J. Hileman GNP, 2009, 50”x80”

Grinnell Mt. Gould #2; 1981 after Carl Key USGS, 2009, 50”x80”

Grinnell Mt. Gould #3; 1998 after Dan Fagre USGS, 2009, 50”x80”

Grinnell Mt. Gould #4; 2009, 50”x80”

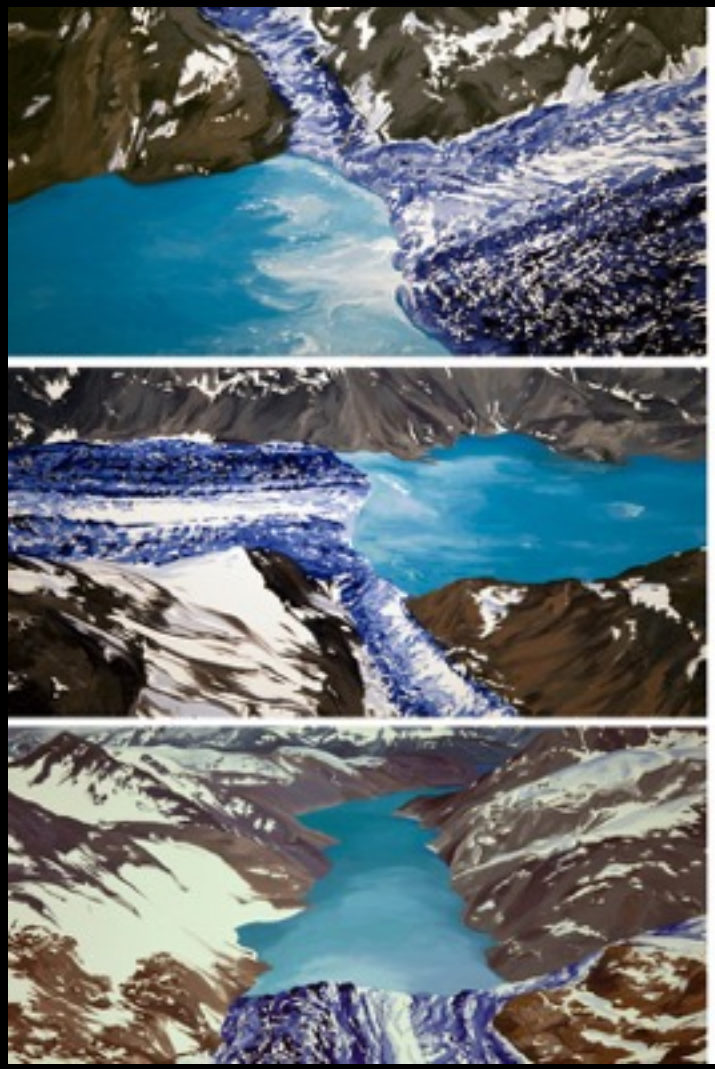


Portage Glacier, #1, 1914 (from NOAA)

Portage Glacier, #2, 2009 (after Gary Braasch)

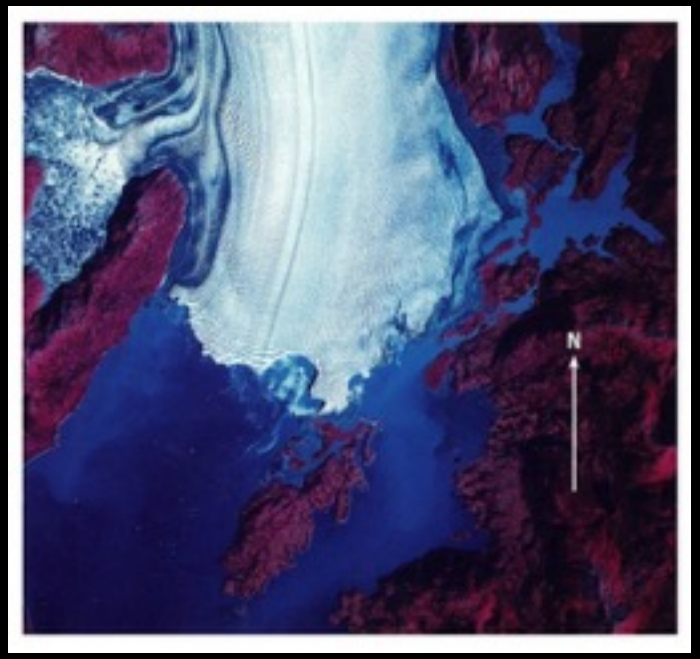
Nunatak Glacier 1938, after Bradford Washburn, 2010, 60”x84”
Nunatak Glacier 2005, after David Arnold, 2010, 60”x50”

BRUCE MOLNIA visiting at Locks Gallery at POLITICS OF SNOW SHOW 2010

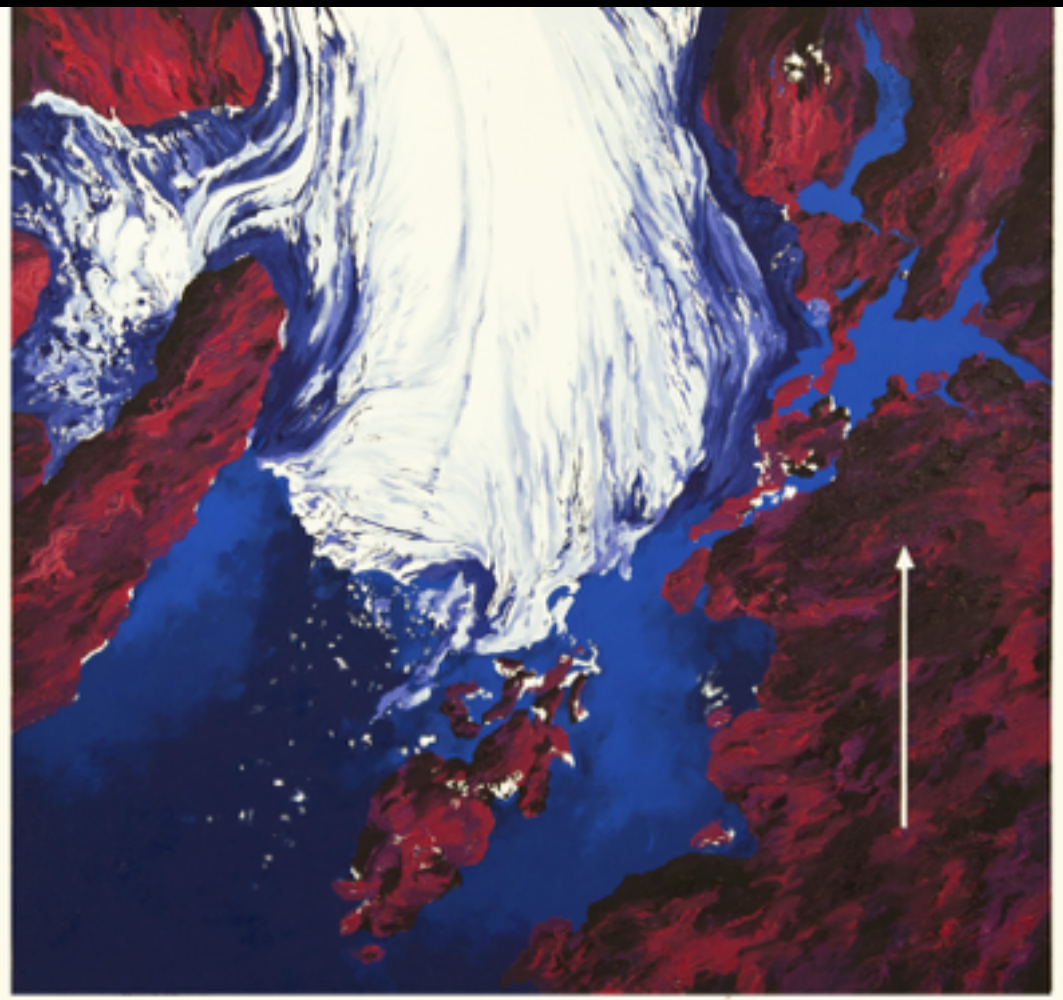


Johns Hopkins, Gilman Glacier, 2010 (after Bruce Molnia) 1, 2012, 24”x48”
Johns Hopkins, Gilman Glacier, 2010 (after Bruce Molnia) 2, 2012, 24”x48”
Johns Hopkins, Gilman Glacier, 2010 (after Bruce Molnia) 3, 2012, 24”x48”

Johns Hopkins, Gilman Glacier, 1978 (USGS), 2012, 60”x78”



Landsat map of Columbia Glacier



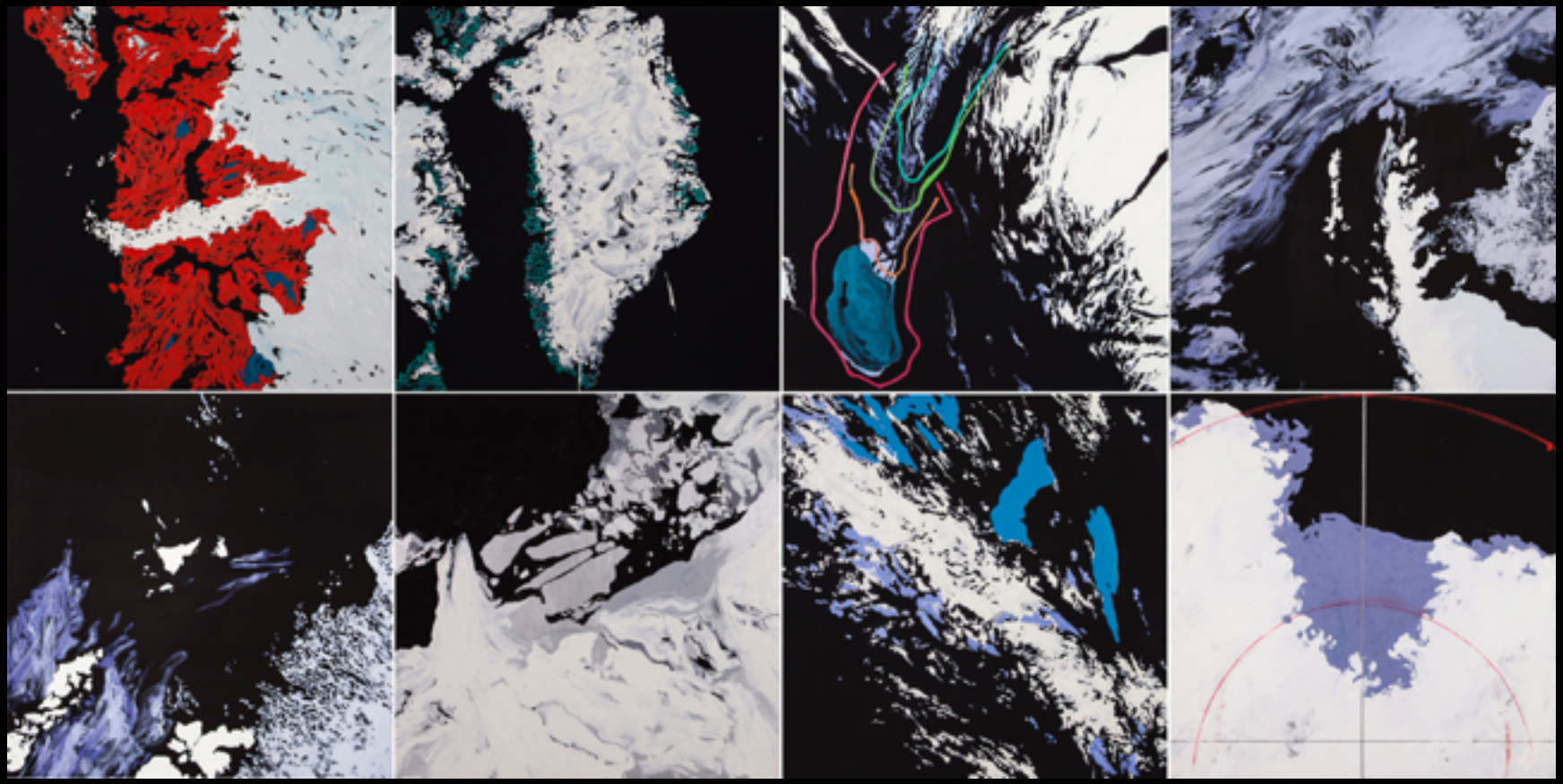
COLUMBIA GLACIER #2, 1978
(AHAP Aerial USGS)
2012 50 x 60 inches

Columbia Glacier 1, 1938 (after Bradford Washburn)

Columbia Glacier 2, 1978 AHAP Aerial USGS

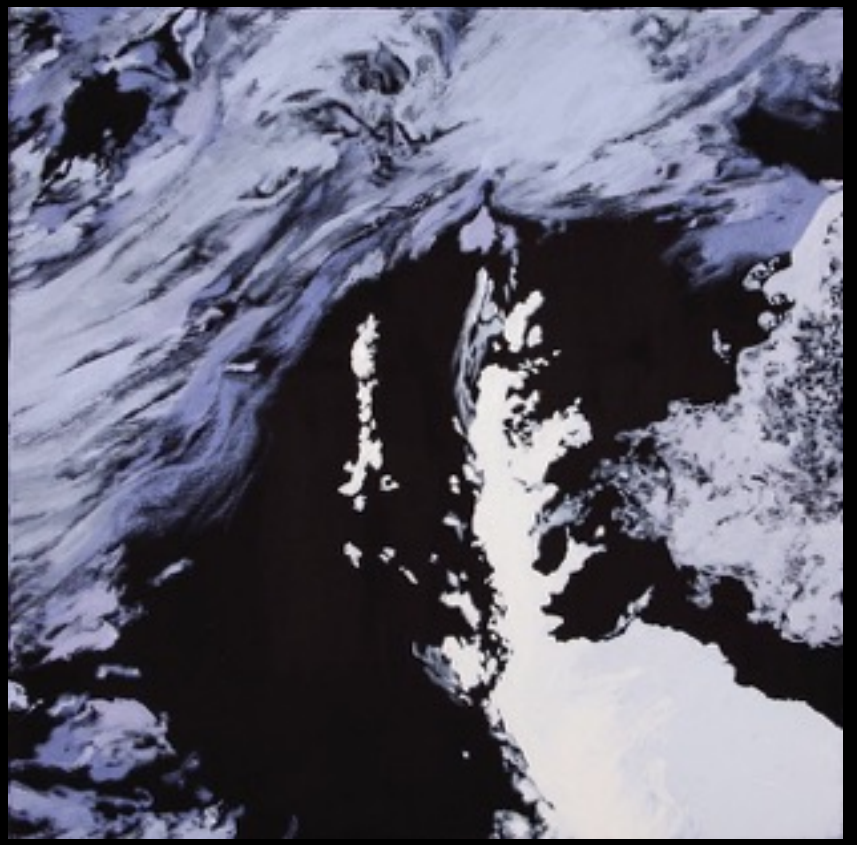
Columbia Glacier 3, 2010 (after Bruce Molnia)

Columbia Glacier 4, 1990 USGS



Landsat Series, 2015, Oil on Canvas, 40”x80” overall

ILULISSAT



ANTARCTICA

Landsat Series 20”x20”, 2015

Qori Kalis Glacier, Peru #3 (after Henry Brecher) 2009, 60”x84”

Qori Kalis Glacier, Peru #4 (after Henry Brecher) 2009, 60”x84”

Lonnie Thompson and Ellen Mosley Thompson

With DAVID BREASHEARS in August 2010 at “Rivers of Ice: Vanishing Glaciers in the Greater Himalaya” at the Asia Society of New York

MAIN RONGBUK GLACIER SERIES, 1-3 2010 48 x 208 inches overall

#3, Main Rongbuk Glacier, Future, after Diane Burko, 2010, Oil on Canvas, 48”x60”

Re: AN ARTIST INTERESTED IN YOUR PHOTOGRAPHS.....

wtpfeffer@gmail.com on behalf of Pfeffer W. Tad <pfeffer@tintin.colorado.edu>

You replied to this message on 3/13/2008 11:38 AM.

Sent: Sat 3/8/2008 9:03 AM

To: burko@bellatlantic.net

Message CG_AerialOblique_1979-1993-2004.ppt (463 KB)

Dear Diane,

I'm back from my travels now and have had a chance to look over you email further, and check your website. You project obviously addresses issues that I'm interested in too, and that I've been working toward for a while.

Can you tell me more about what you would like to do with my photographs? You mentioned the Arapaho Glacier pair - that (other than Columbia) is the only glacier where I have collected comparison photographs over long times (and Bruce Molnia is indeed your best source for this kind of thing at present). I have other photographs of Arapaho, but none that really add anything substantial to what can be seen from pair on my web site.

Most of my glacier photography in the past 6 or 7 years has been of Columbia Glacier (where Ice Cliff 2 was taken). I have a lot of other glacier photography, but no comparisons. The collection on my web site is a small selection from a book I've just published titled 'Columbia Glacier at Mid-Retreat: The Opening of a New Landscape' (ISBN 978-0-87590-729-1, available from American Geophysical Union www.agu.org). There are a few before/after comparisons available for Columbia (it was photographed in 1899, the 1930s, and extensively starting the late 1960s), but my photography concentrates on showing the glacier and the landscape in its 'present' (ca. 2002-2006) state of transition during the glacier's retreat. I've attached one triplet of aerials of Columbia's retreat, showing the glacier in 1979, 1003, and 2004. The terminus retreated about 15 km during this time.

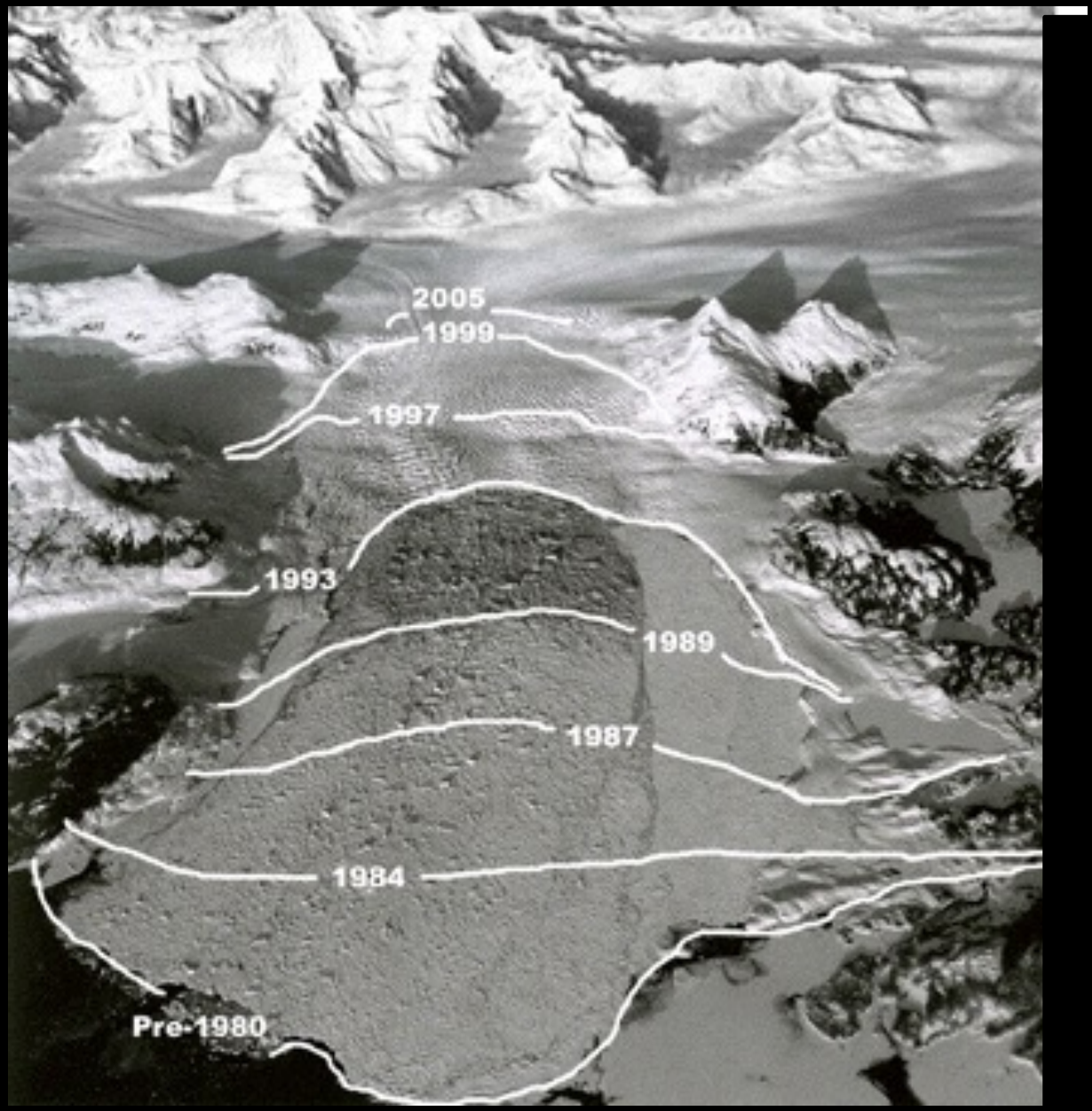
I've also been working with the photographer Jim Balog at Columbia Glacier and other locations over the past ca. 2 years, mostly doing time lapse sequences showing glacier change. Jim's photographed Columbia extensively, but mostly for media (National Geographic, etc) uses, so far.

I'd be happy to discuss your plans and interests further - my time is bit limited this winter (I'm in New Hampshire on sabbatical, finishing a book of architectural photography), but I do have time to discuss this, and will be back full-time on glaciers by the end of the summer.

Best regards,
Tad

W.T. Pfeffer
(November 2007 - August 2008: Randolph NH)
Professor, Institute of Arctic and Alpine Research

Early CORRESPONDENCE with TAD PFEFFER

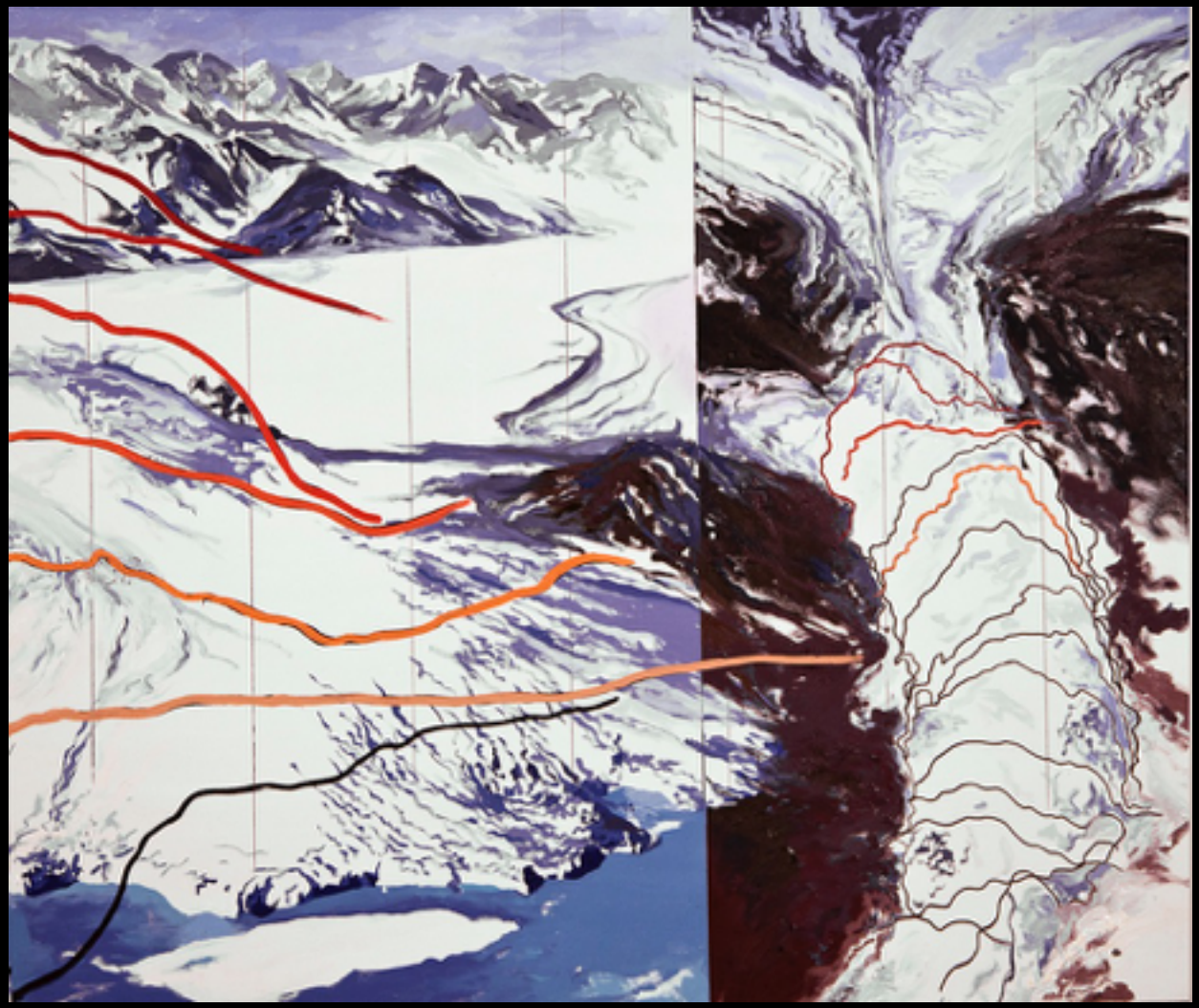


GLACIAL RECESSIONAL MAP combining images from Tad Pfeffer and Austin Post

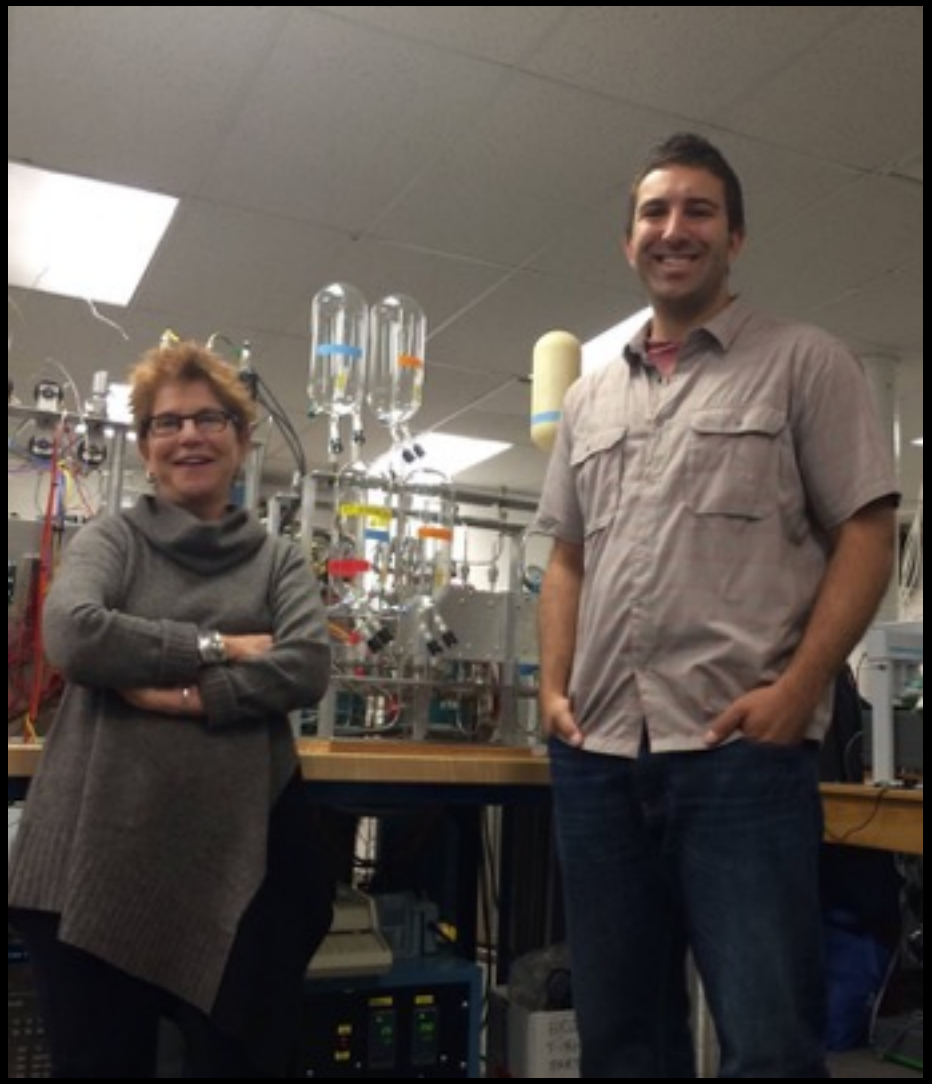
Communications of Science Through Art: A RAISON D'ETRE FOR INTERDISCIPLINARY COLLABORATION

DIANE BURKO
Politics of Snow

DECEMBER 4, 2014
AGU



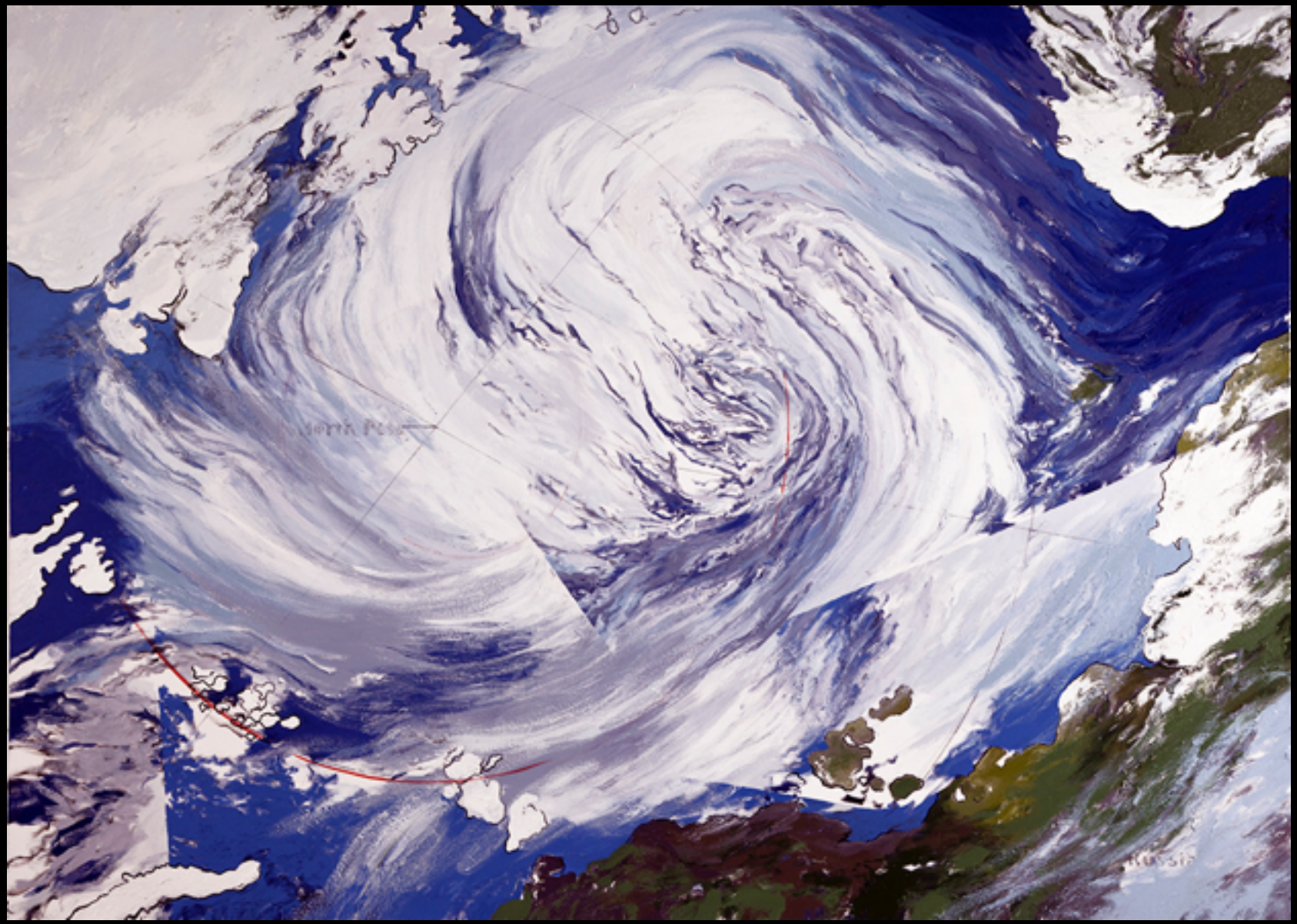
Meeting Tad Pfeffer at AGU meetings, SF, 2012



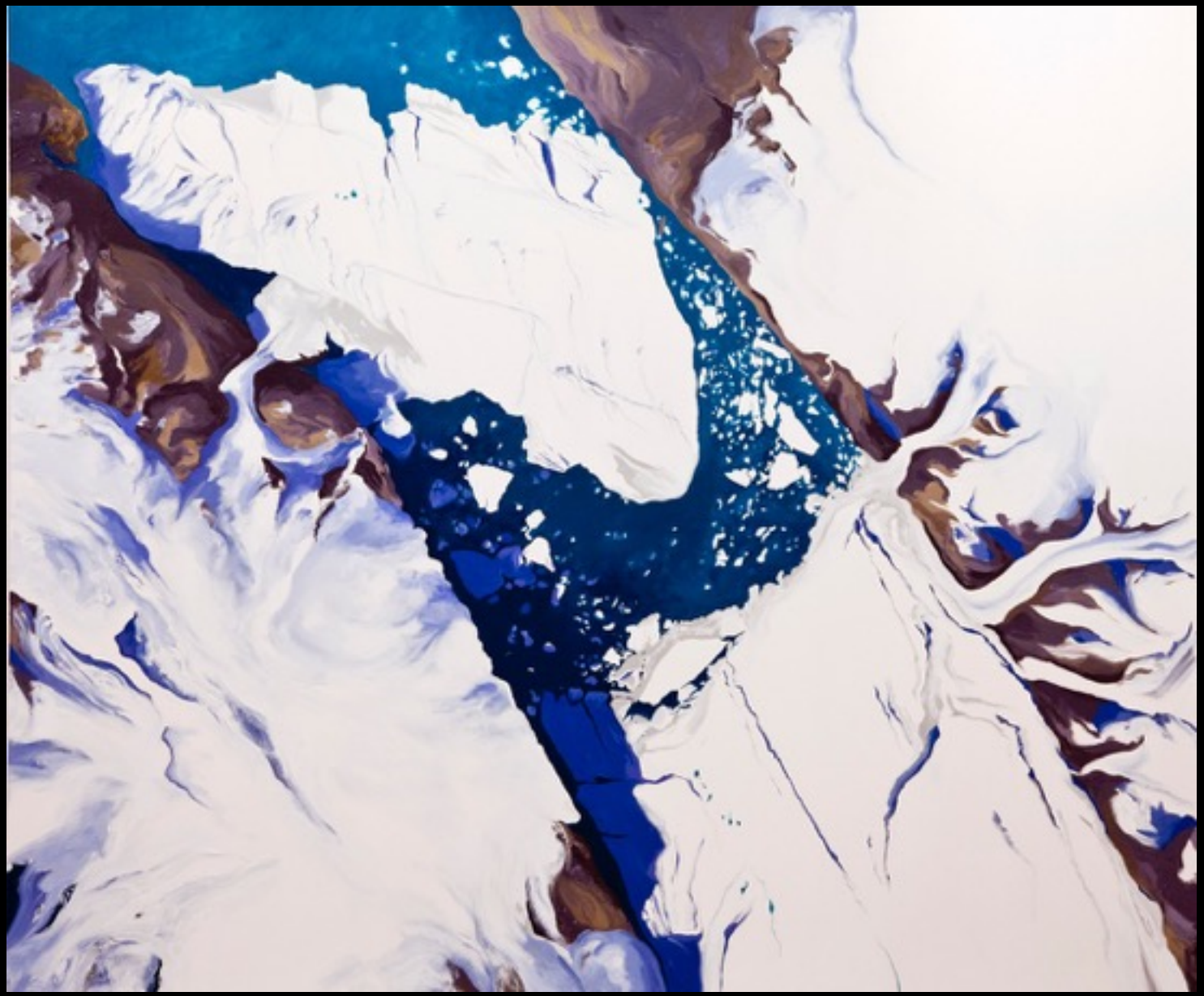
October 27, 2014 visit to INSTAAR, University of Colorado, Boulder

Dr. Asa Rennermalm, with her Rutgers University students, November 2013

DIANE BURKO: GLACIAL PERSPECTIVES, Zimmerli Art Museum, 2013-2014

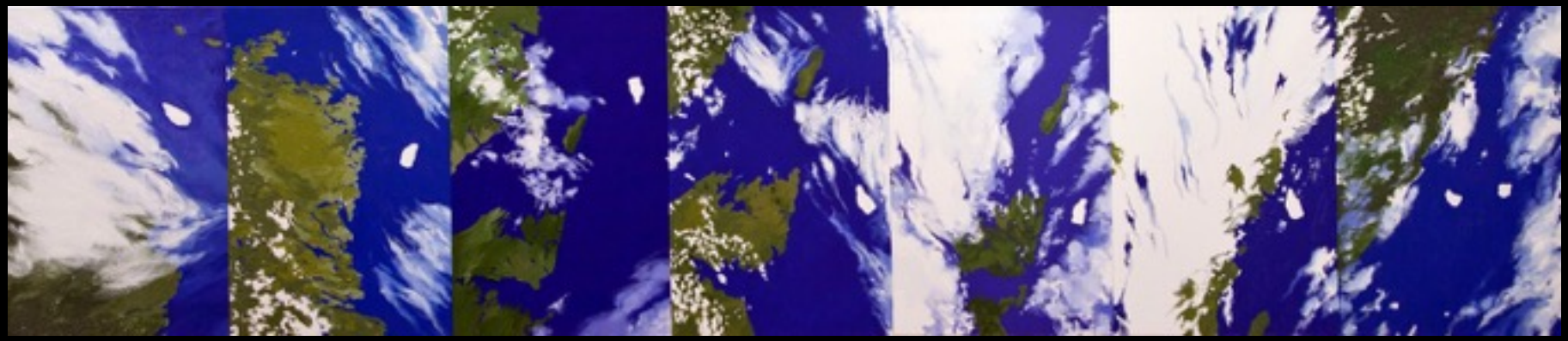


Arctic Cyclone, August 2012 (after NASA), 2012-2013, Oil on Canvas, 60”x84”



Petermann Calving, August 16, 2010 (after NASA), 2012, Oil on Canvas, 60”x72”

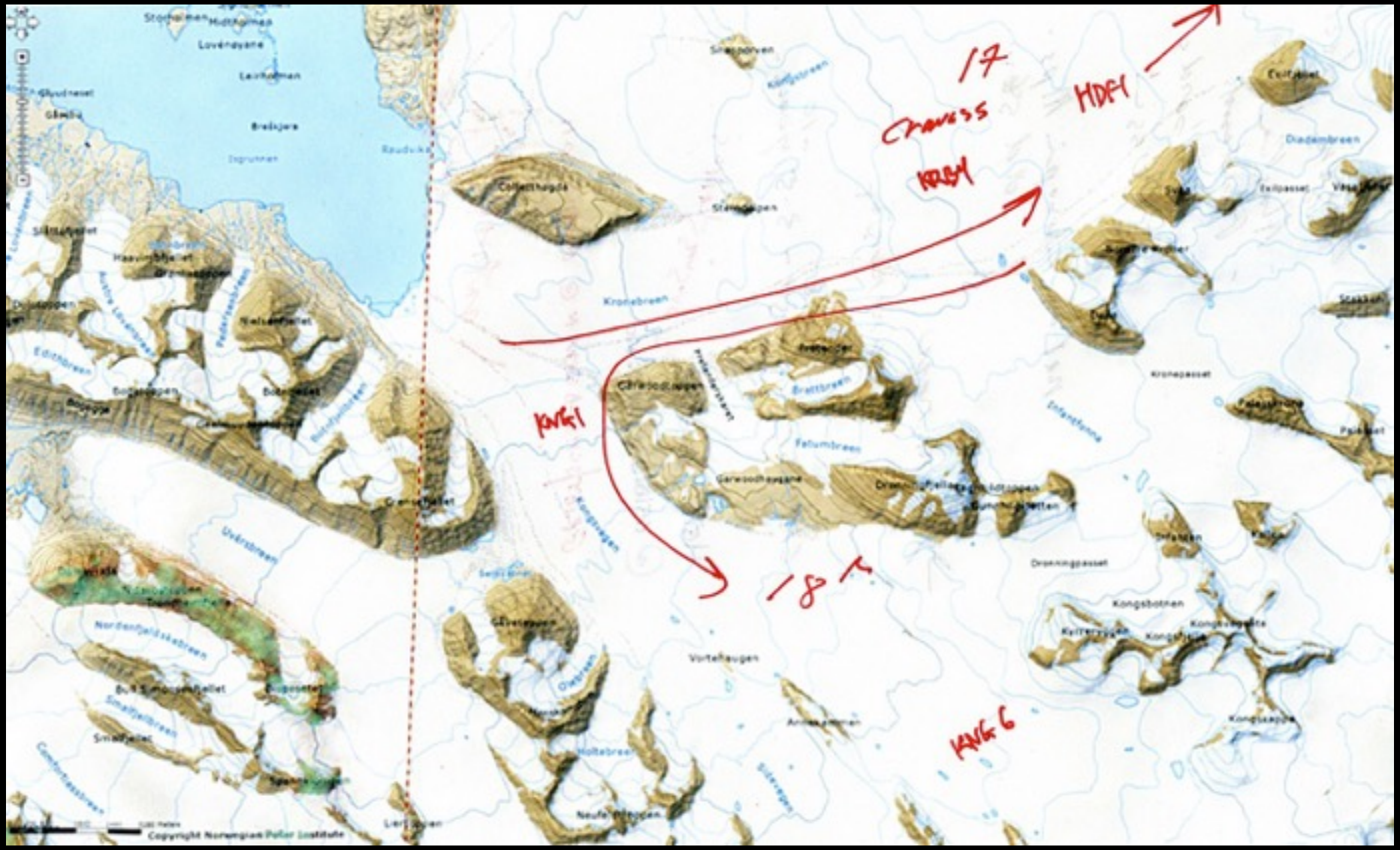
PETERMANN COMPOSITE (after NASA – June 25 – August 22, 2011)



NASA TRACKING PETERMANN 1-7 2012 24” x 114”

ON KRONEBREEN GLACIER September 17, 2013

On top of Kronebreen Glacier, Svalbard with Dr. Jack Kohler, Norwegian Polar Institute, September, 2013

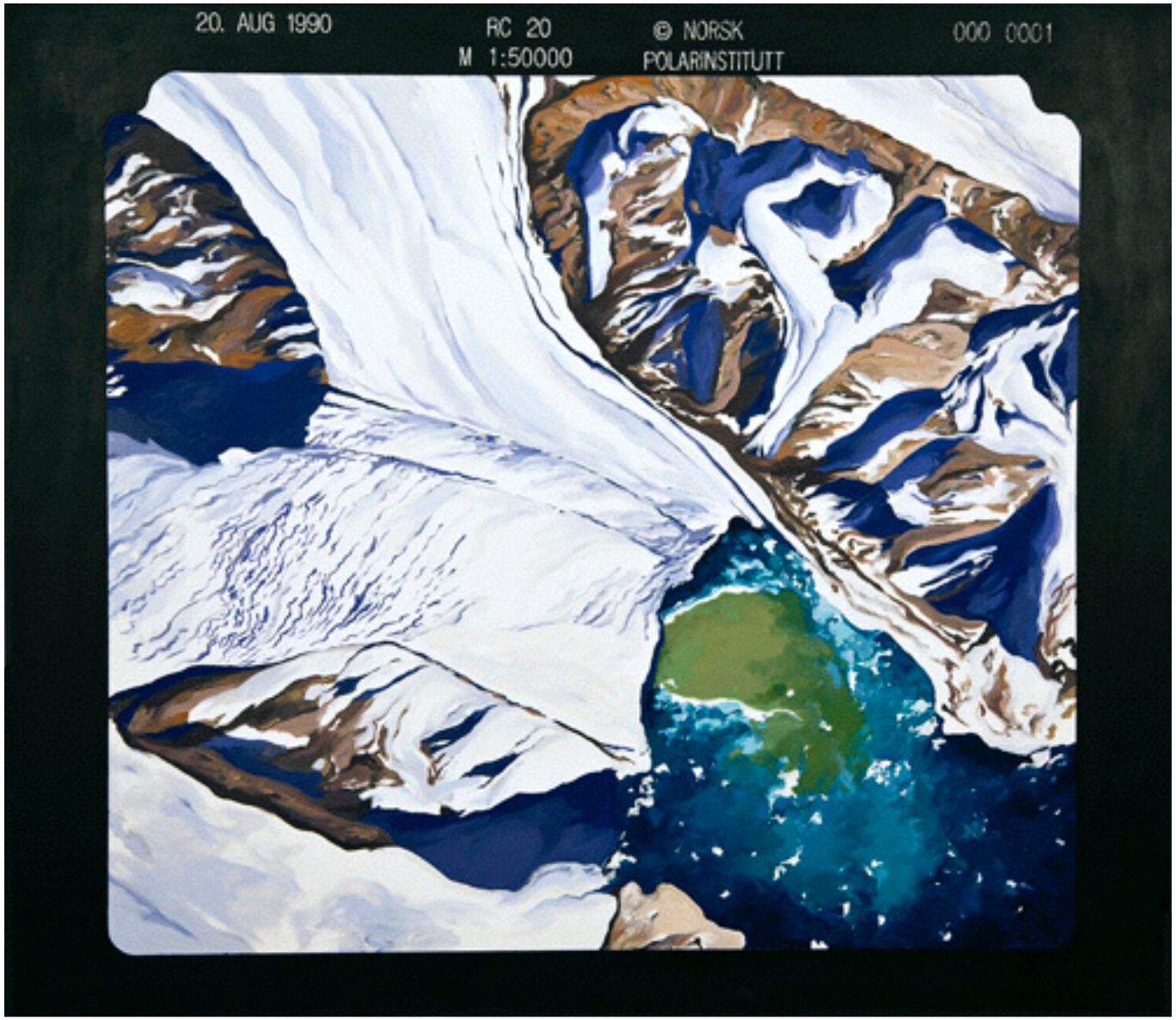


TOPOGRAPHICAL MAP
with notes of Kohler's flights on September 17th and 18th

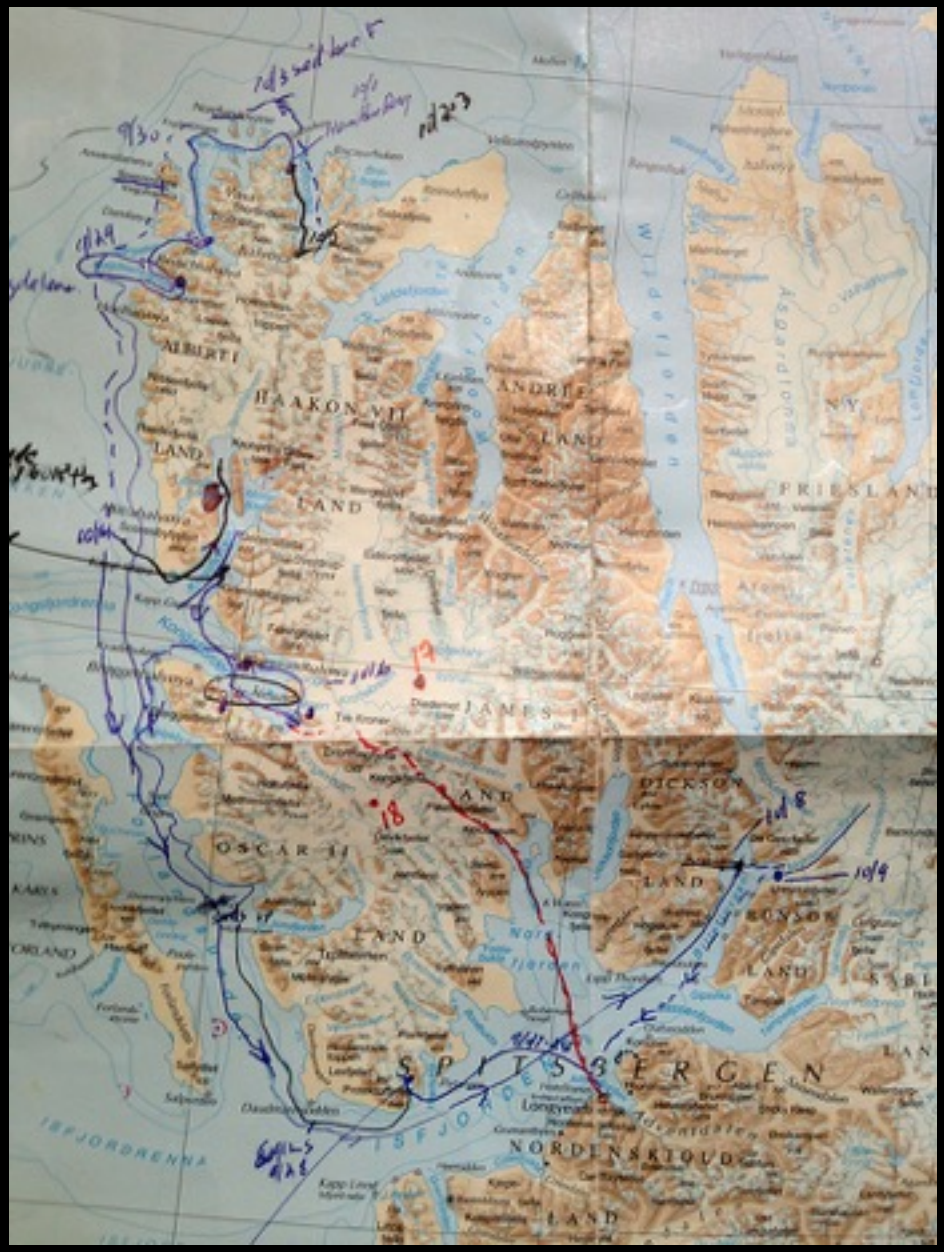
On the Crevasse, Archival Inkjet Print, 2014, 40”x60”

ARCHIVES AT NORWEGIAN POLAR INSTITUTE, SEPTEMBER 2013

AT INSTAAR, BOULDER CO, OCTOBER 2014



Kronebreen 1990 (after NPI), 2014, Oil on Canvas, 52”x’60”

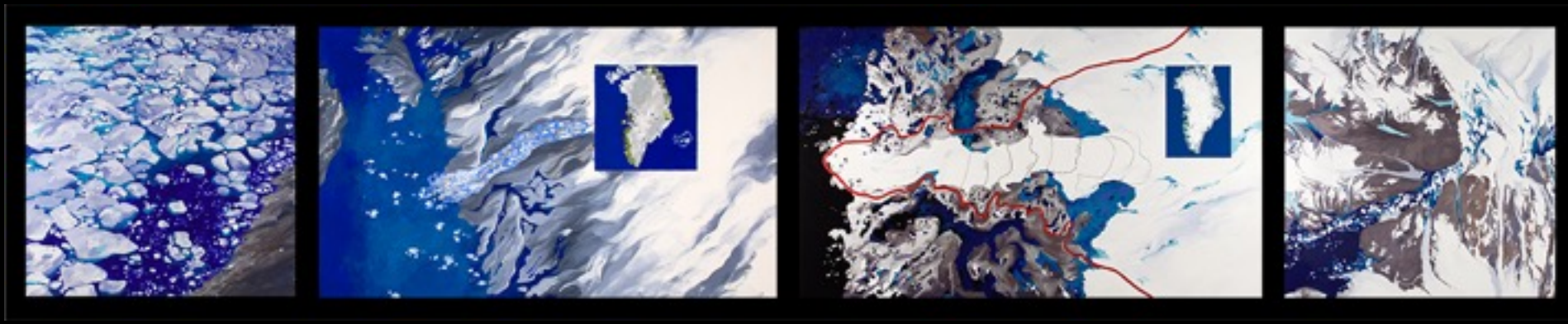


The Arctic Circle Residency September - October 2013

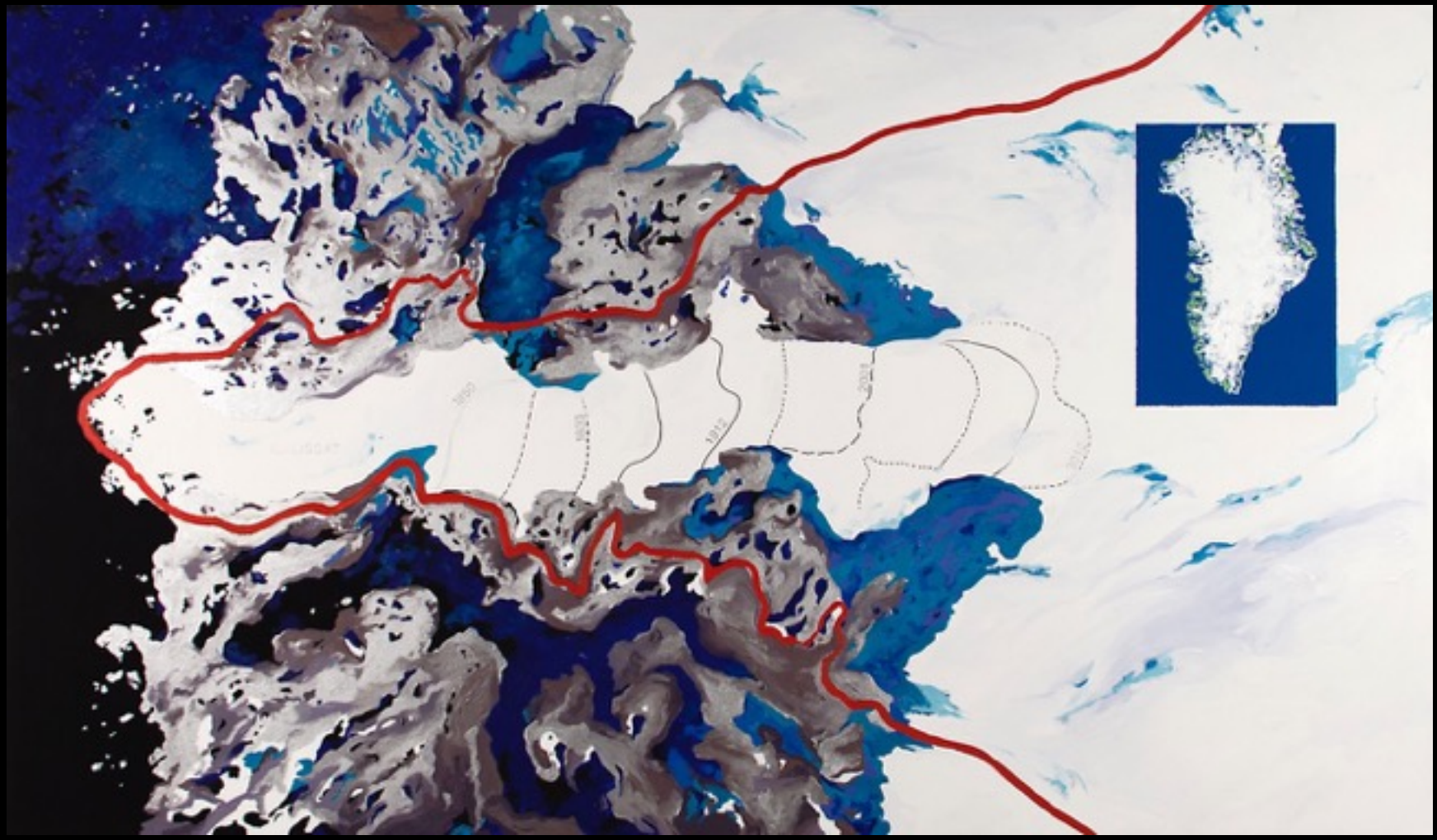
With Dr. Marco Tedesco, at CUNY exhibition 2014

At Climate March 2015

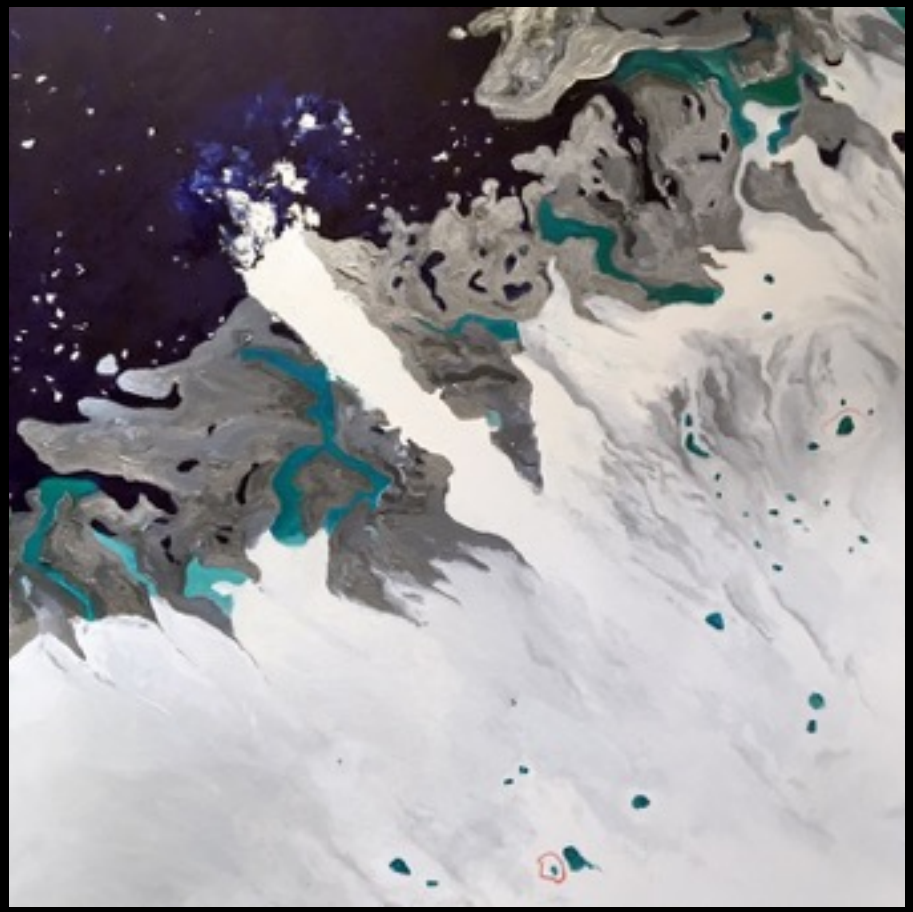
OVER ILULISSAT 1, AUGUST 6, 2014 2014 40 x 60 inches

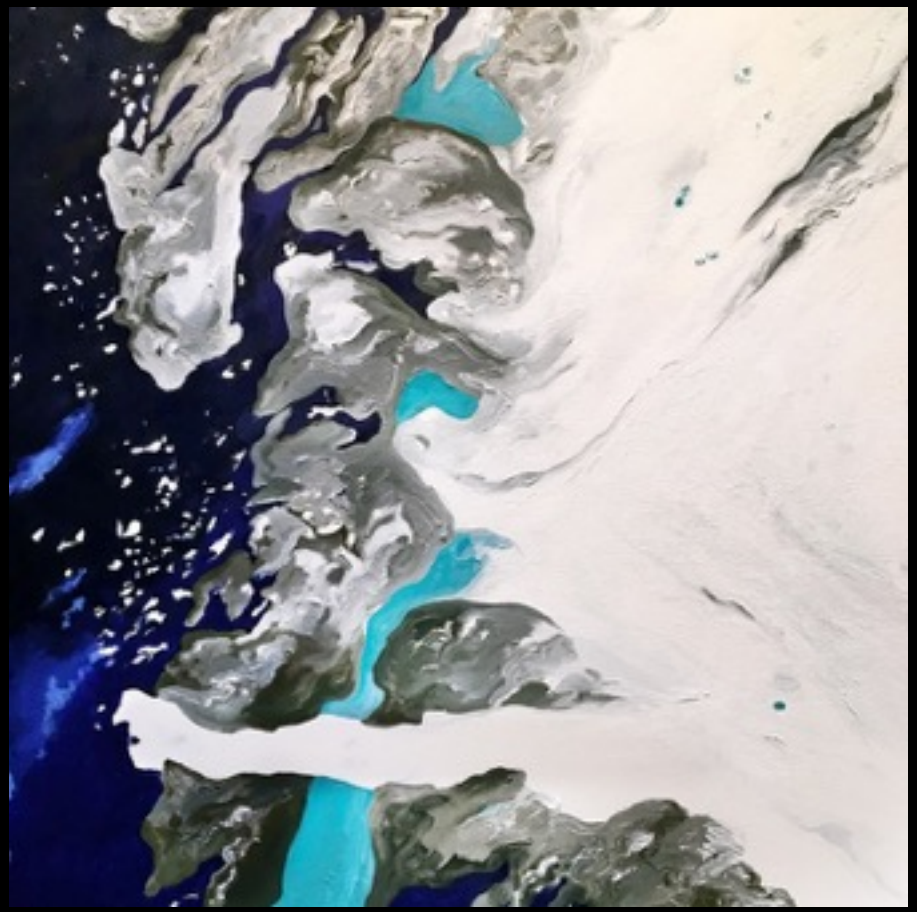


JAKOBSHAVN-ILULISSAT QUARTET 42 x 288 inches overall 2015



UNESCO NATIONAL HERITAGE C 42 x 72 inches 2015





PAINTING #1 and #2 ILULISSAT QUARTET, 2016

STUDIO in early April 2016 with DATA-ILULISSAT QUARTET and YUKATAT GLACIER

STUDENTS ON ICE before embarking to Antarctica, December 28, 2014

DESTINATION: PATAGONIAN ICEFIELD IN ARGENTINA: EL CALAFATE

PATAGONIAN ICE FIELD,

On Viedma Glacier, January 2015

Bedrock, Ilulissat Glacier II

Viedma Traverse II

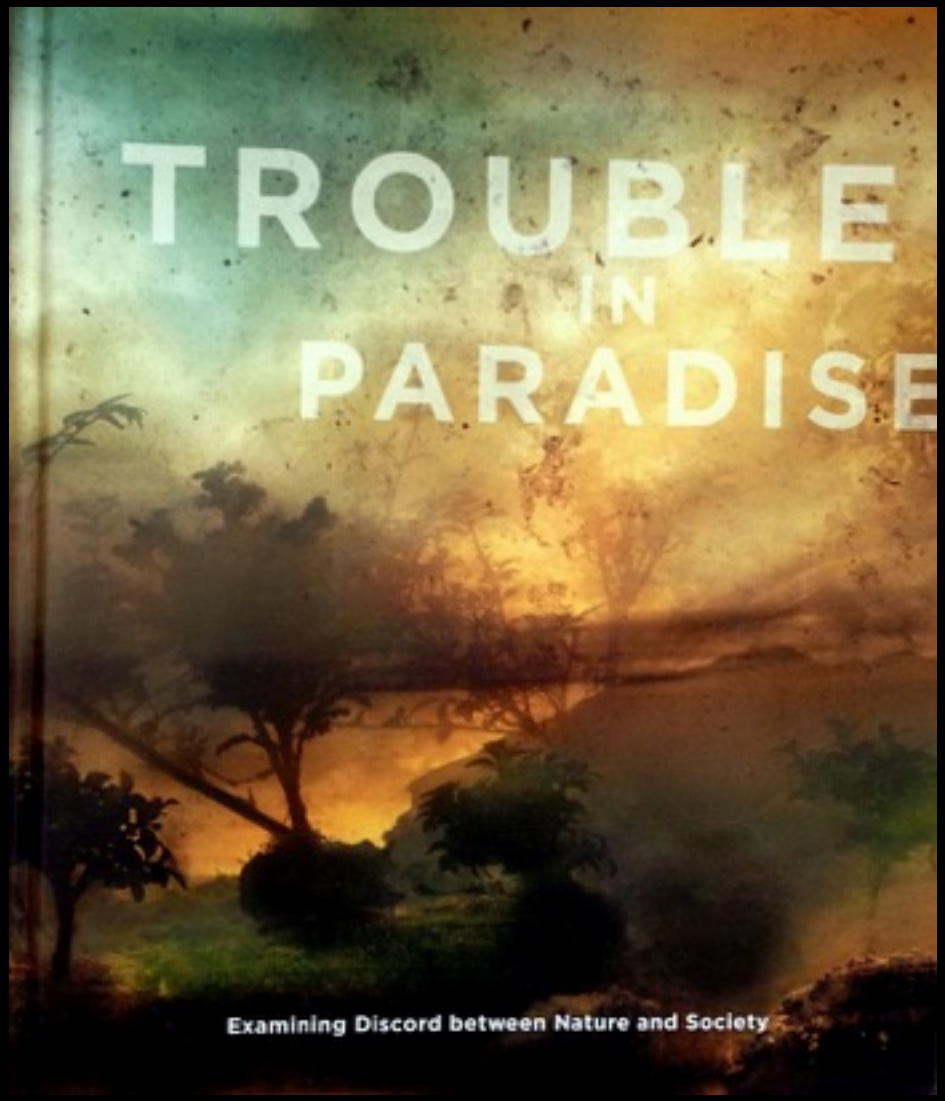
40”x60” each, from Deep Time series

Rockwall IV, Upsala

Looking Into Viedma

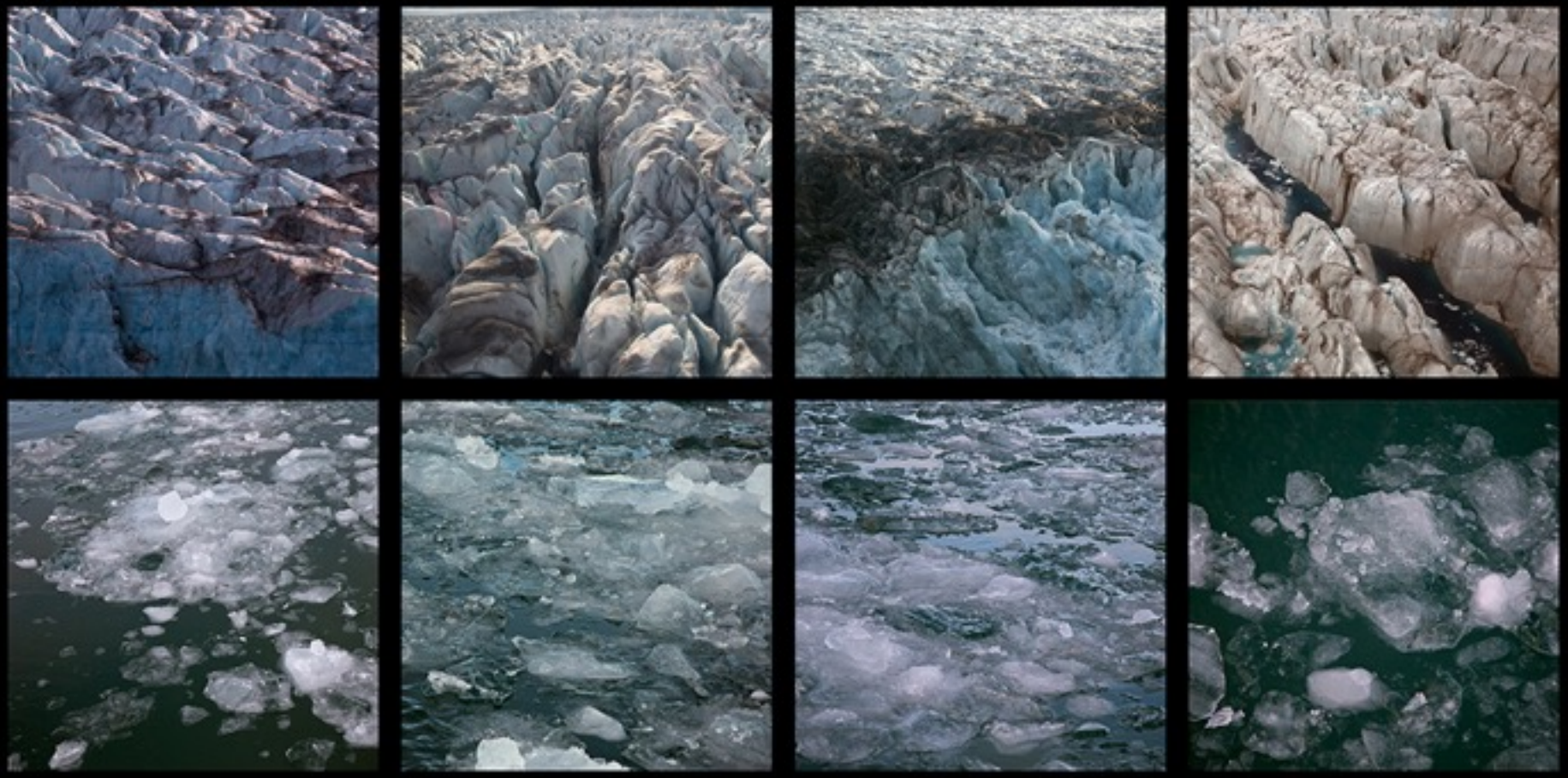
40”x60” each, from Deep Time series

Terrestrial Forces, FSU, Museum of Fine Arts, 2004



Trouble in Paradise, Examining Discord between Nature and Society, Tucson Museum of Art, Tucson, AZ

Seeing Glacial Time, Tufts University, 2014



Kronebreen Above/Below, Archival Inkjet Prints, 2013, overall 40”x80”

Sensing Change, Chemical Heritage Foundation, 2013-2014

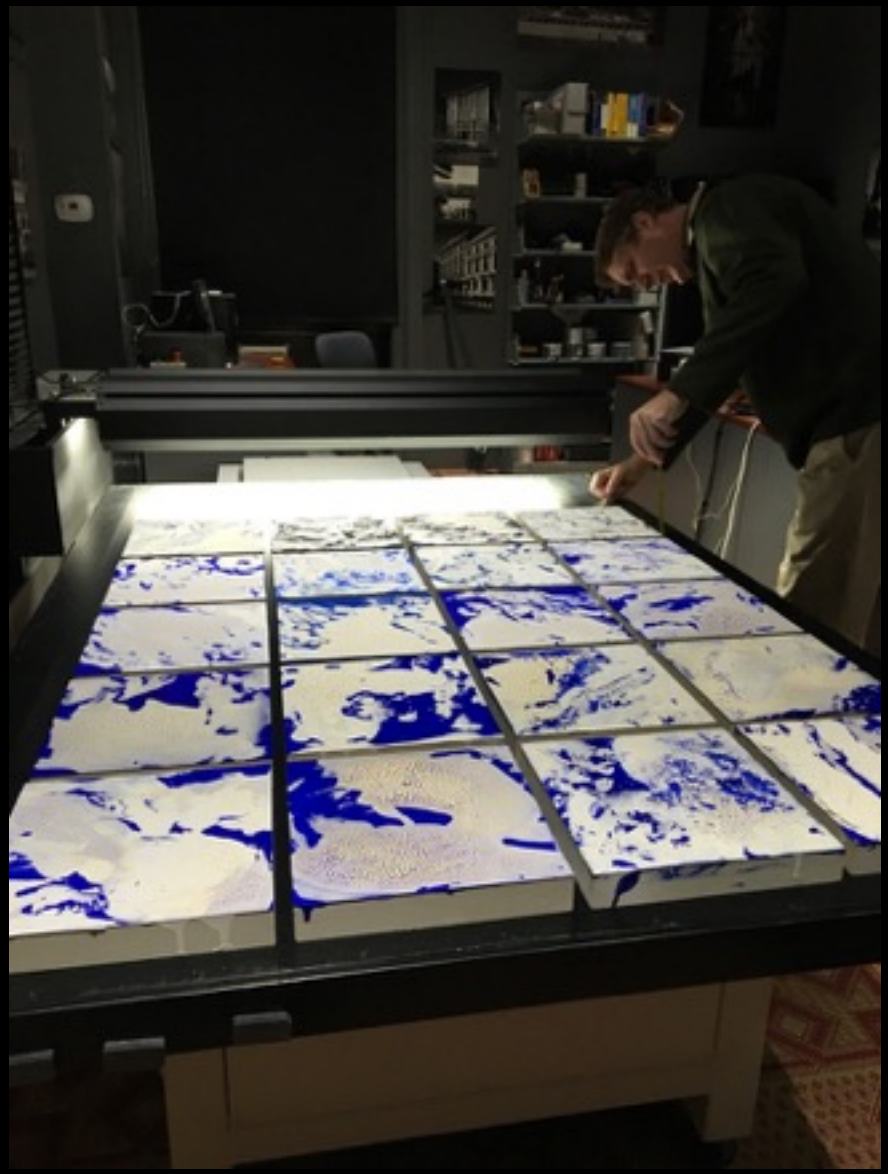
Waters, Glaciers, and Bucks at CHF, 2013, overall size: 60”x120”

TIPPING POINTS: ARTISTS ADDRESS THE CLIMATE CRISIS – COP 21,
Bergen County Community College, 2015-2016

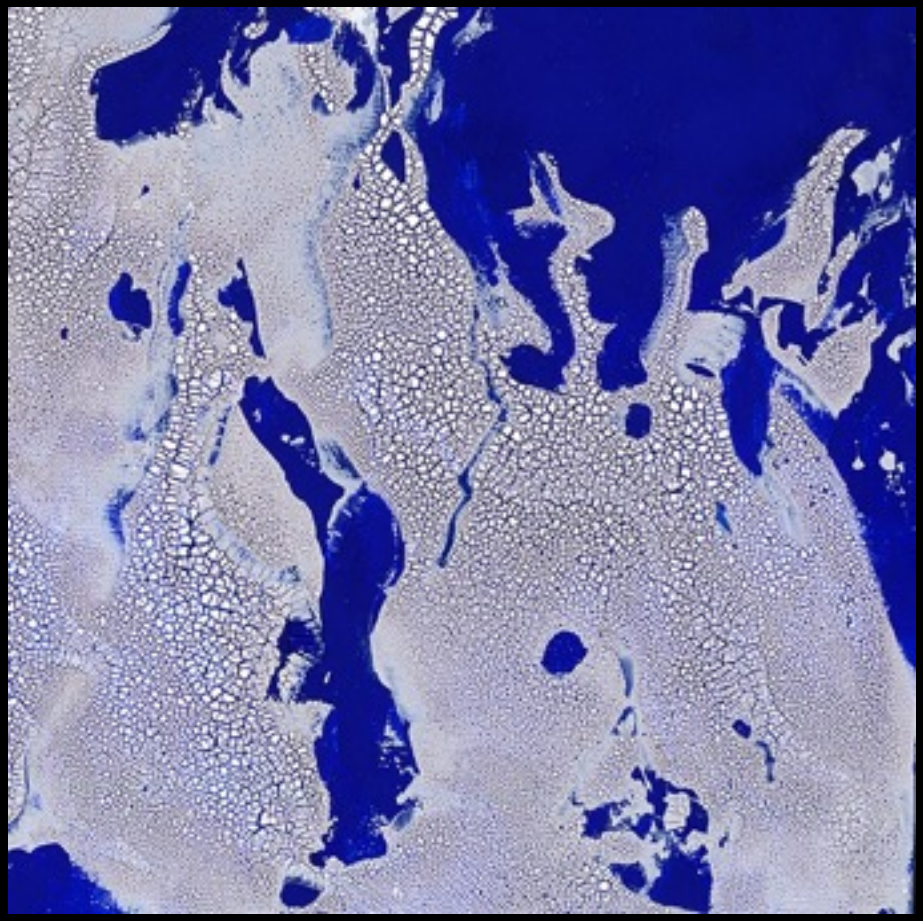
GLACIAL DIMENSIONS: Art and the Global Ice Melt, January to April 2016, Kean University

TRACES OF CHANGE, Cindy Lisica Gallery, Houston, March 16 – April 16, 2016

TRACES OF CHANGE, Cindy Lisica Gallery, Houston, March 16 – April 16, 2016

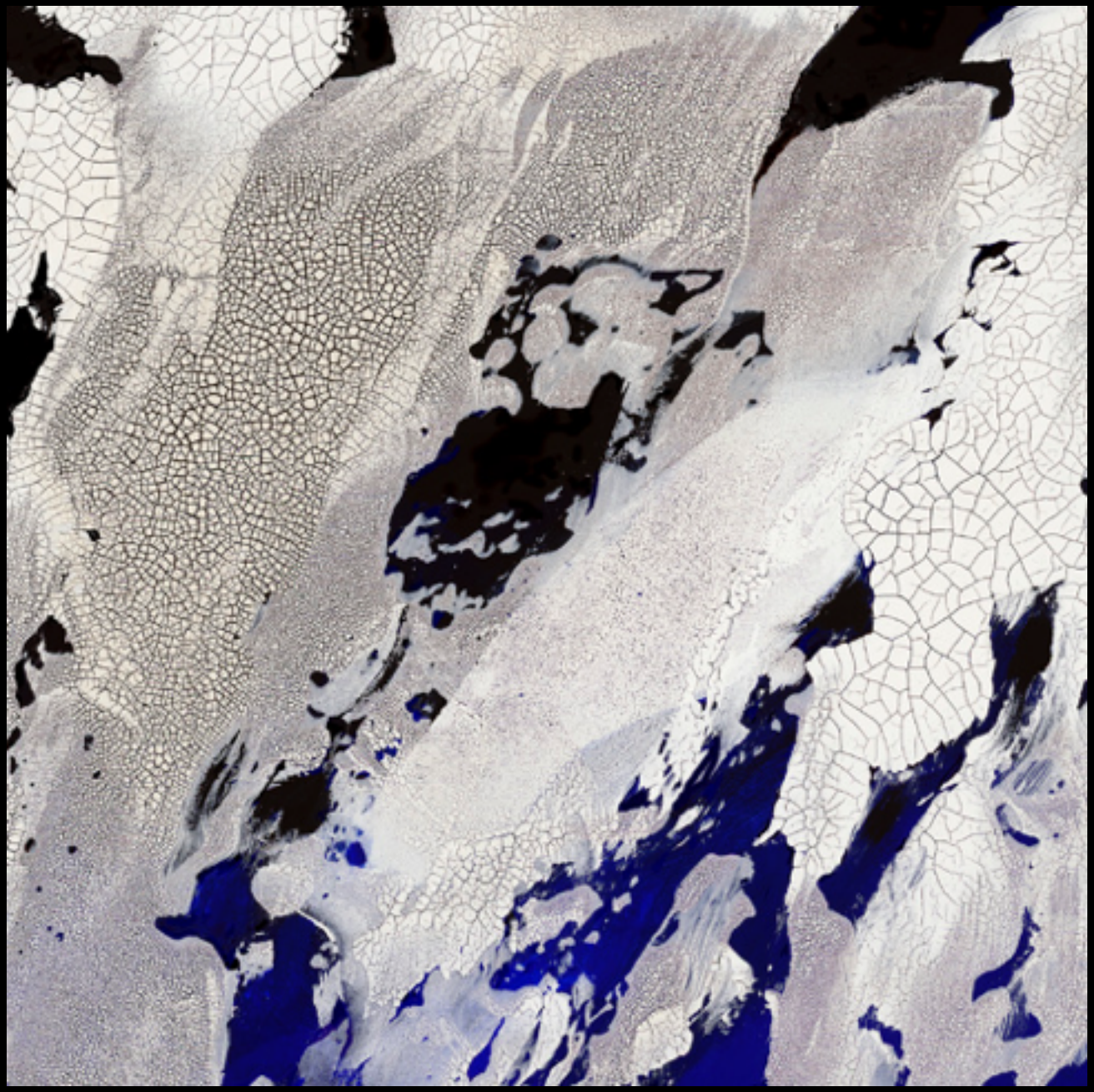


FIRST AND SECOND SCAN on Cruise Scanner – at THE ATHENEUM of PHILADELPHIA – Regional Digital Imaging Center



ELEGY FOR COLUMBIA GLACIER,
Alaska II, 30 x 30 inches,
Archival Inkjet Print

ELEGY FOR UPSALA GLACIER,
Argentina, 30 x 30 inches,
Archival Inkjet Print



ELEGY FOR GRINNELL GLACIER, Montana