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"Rummaging in the government's attic"

Description of document: National Oceanic and Atmospheric Administration

(NOAA) Emails to or from Ishrat Jabin regarding NOAA

Science Council Meeting Minutes, March 26, 2022 through April 24, 2022

Requested date: 25-April-2022

Release date: 19-September-2022

Posted date: 15-September-2025

Source of document: Freedom of Information Request

NOAA FOIA Officer

National Oceanic and Atmospheric Administration

Public Reference Facility (SOU1000) 1315 East-West Highway (SSMC3)

Room 9713

Silver Spring, Maryland 20910 DOC FOIA Public Access link

FOIA.gov

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Re: FOIA Request DOC-NOAA-2022-001431

This letter is in response to your Freedom of Information Act (FOIA) appeal for DOC-NOAA-2022-001431 dated 04/25/2022, in which you requested:

"I would like emails to or from Ishrat Jabin in regards to NOAA Science Council Meeting Minutes and/or requests for those Minutes and/or retrieval of those Minutes, or which mention those topics within the email. I agree to limit my request to emails during the time frame March 26, 2022 through April 24, 2022.

We have identified 18 responsive records to your request. Seven of the records are being released in full. Eight records are being partially withheld under Exemption 5 of U.S.C.552 (b) (5) which prohibits disclosure of records related solely to the deliberative process privilege concerning communications within or between agencies and are protected by legal privileges. Three records are being partially withheld under Exemption 6 of U.S.C.552 (b) (6) which prohibits disclosure of records related solely to information that, if disclosed, would invade another individual's personal privacy. Your request is now complete.

You have the right to file an administrative appeal if you are not satisfied with our response to your FOIA request. You may appeal by mail or electronically.

If you would like to submit an appeal by mail, please send it to the following address:

Assistant General Counsel for Litigation, Employment, and Oversight U.S. Department of Commerce Office of General Counsel Room 5875 14<sup>th</sup> and Constitution Avenue, N.W. Washington, DC 20230

If you submit an appeal by mail, you must include the words "Freedom of Information Act Appeal" on both the envelope and the appeal letter.



If you would like to submit an appeal electronically, you may either send an e-mail to FOIAAppeals@doc.gov or use FOIAonline, our request tracking database, at https://www.foiaonline.gov/. If you submit an appeal by e-mail, you must include the words "Freedom of Information Act Appeal" in the subject line and text of your e-mail.

To be complete, a FOIA appeal must include

- a copy of the original request;
- our response to your request; and
- a statement explaining why the withheld records should be made available, and why the denial of the records was in error.

FOIA appeals must be received within 90 calendar days of the date of this response letter. We receive correspondence only on business days, from 8:30 am to 5:00 p.m. Eastern Time. FOIA appeals received after normal business hours will be deemed received on the next business day. If the 90<sup>th</sup> calendar day for submitting an appeal falls on a Saturday, Sunday, or legal public holiday, then an appeal received by 5:00 p.m. Eastern Time on the next business day will be deemed timely.

FOIA grants requesters the right to challenge an agency's final action in federal court. Before doing so, an adjudication of an administrative appeal is ordinarily required.

The Office of Government Information Services (OGIS), an office within the National Archives and Records Administration, offers free mediation services to FOIA requesters. OGIS may be contacted in the following ways:

Office of Government Information Services National Archives and Records Administration Room 2510 8601 Adelphi Road College Park, MD 20740-6001

Email: ogis@nara.gov Phone: 301-837-1996 Fax: 301-837-0348

Toll-free: 1-877-684-6448

If you have questions regarding this correspondence, please contact Bruce Pate at Bruce.Pate@noaa.gov or at (301) 734-1191. Alternatively, you may contact the NOAA FOIA Public Liaison, Tony LaVoi, at (843) 740-1274. When contacting us, please refer to your FOIA request tracking number DOC-NOAA-2022-001431.

Sincerely,

Deputy Assistant Administrator for Programs and Administration



From: <u>Cynthia Decker on behalf of Cynthia Decker < cynthia.decker@noaagov></u>

To: Anita Harrington - NOAA Affiliate
Cc: science.council.execsec@noaa.gov

Subject: Re: Science Council Meeting Reminder and Materials

Date: Monday, April 11, 2022 4:35:12 PM

Attachments: (6)

(b) (5)

Nita and team,

Please find attached the draft NAO on scientific integrity and the final PPT presentation.

Also, could you please add the NOAA scientific integrity officers to the Science Council calendar invitation? They can be added as noaa.sio@noaa.gov.

Thank you, Cynthia

On 4/11/2022 9:40 AM, Anita Harrington - NOAA Affiliate wrote:

Good morning Cynthia,

Sounds good, thank you for the update! Would you prefer to share your own slides or would you like me to share them while you present tomorrow? Whichever you prefer works for us.

Best, Anita

On Mon, Apr 11, 2022 at 9:03 AM Cynthia Decker <cvnthia.decker@noaa.gov>wrote:

Anita,

Good morning! Just providing an update on the SI materials. The SI Committee is giving the draft NAO one more quick look and then I'll send it and the PPT presentation to you. Should be able to do that by noon. Sorry to be so late but the group was revising up until Friday afternoon.

Cynthia

On 4/6/2022 1:01 PM, Anita Harrington - NOAA Affiliate wrote:

NOAA Science Council,

The materials for the upcoming monthly NOAA Science Council meeting are available here. Please note that TAB 5 is forthcoming. We will be meeting from 10:30pm to 12:30pm ET

#### on Tuesday, April 12th via Google Meet.

For those principal members who cannot attend, please identify a proxy to serve in your place.

If you plan to attend this meeting, but have not yet been added to the Google Calendar entry, please send an email to science.council.execsec@noaa.gov.

Thank you, NSC Exec Sec

--

Anita Harrington (she/her) NOAA Science Council Exec Sec CollabraLink Technologies, Inc.

NOAA, OAR, Office of Science Support anita.harrington@noaa.gov

(b) (6)

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Anita Harrington (she/her) NOAA Science Council Exec Sec CollabraLink Technologies, Inc.

NOAA, OAR, Office of Science Support anita.harrington@noaa.gov

(b) (6)

NOAA FORM 58-5 (4-04)

National Oceanic and Atmospheric Administration

NOAA Administrative Order 202-735D.3

NOAA ADMINISTRATIVE ORDER SERIES DATE OF ISSUANCE EFFECTIVE DATE TBD TBD

SUBJECT: SCIENTIFIC INTEGRITY

<sup>&</sup>lt;sup>36</sup> *Note*: DAO 219-1, "Public Communications," at https://www.osec.doc.gov/opog/dmp/daos/dao219\_1.html, does not apply to employees in bargaining units represented by the National Weather Service Employees Organization.

<sup>37</sup> Department of Commerce. Office of Privacy and Open Government. Legislative Activities. DAO 218-1. https://www.osec.doc.gov/opog/dmp/daos/dao218\_1 html

#### NAO 202-735D.2: Discussion of Revisions



(b) (5)

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### Questions?

#### Administratively Confidential & Pre-Decisional

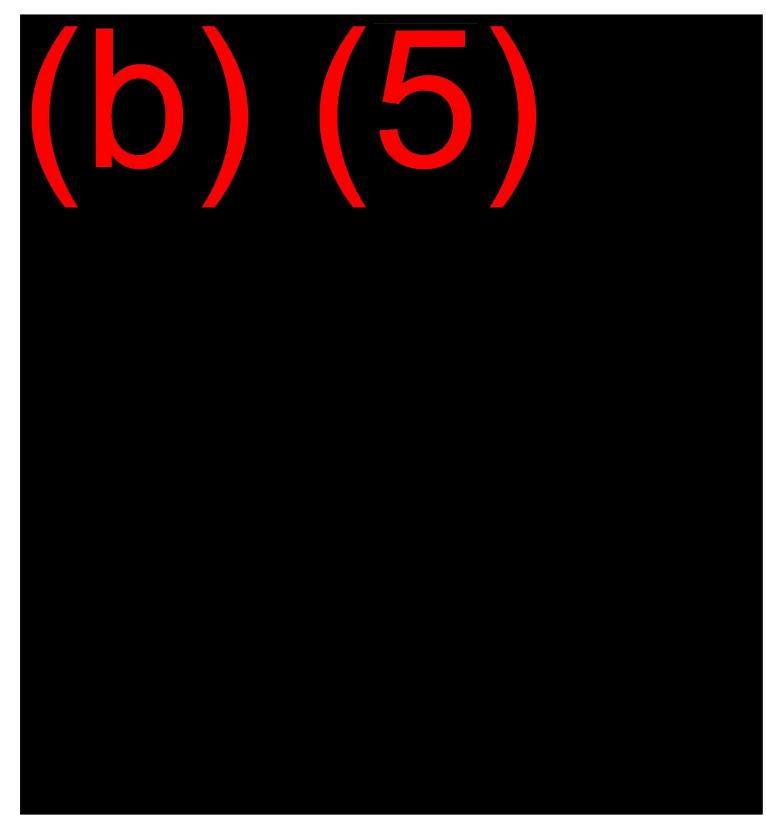
#### LOTMC Response on the NRDD Transition Plan Clean-Up

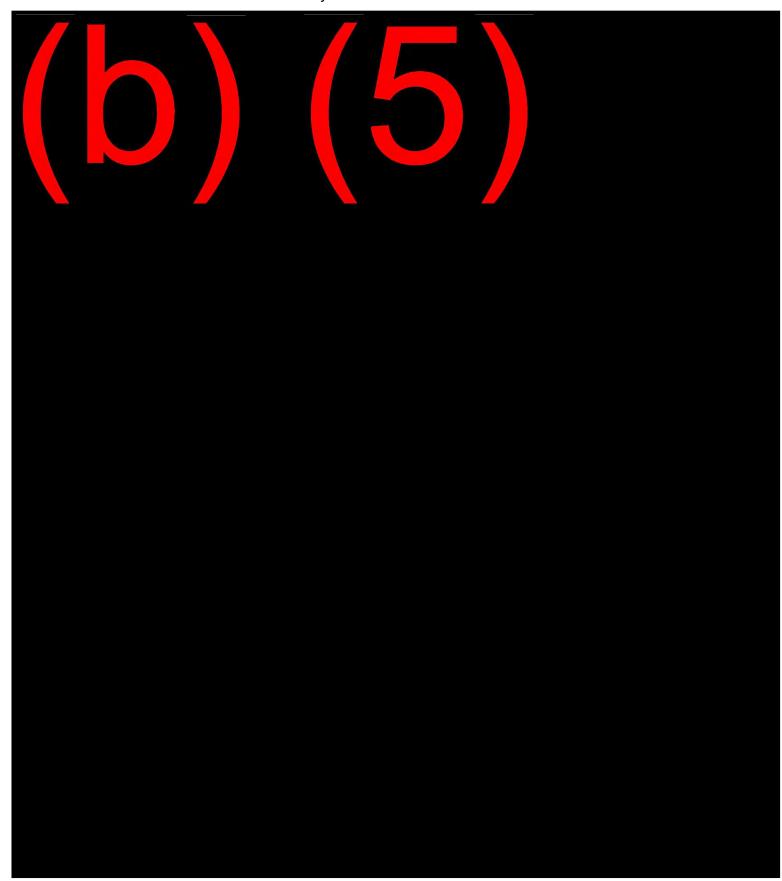
TO: The NOAA Science Council

FROM: Nicole P. Kurkowski, Jeff Weinrich, & Stephan Smith (Chair of the LOTMC) on

behalf of the Line Office Transition Managers Committee (LOTMC)

**DATE:** 04/12/22







#### **LOTMC - NRDD Transition Plan Update**

**April 12, 2022 NOAA Science Council Meeting** 









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### Unifying Disparate Trusted Data in Real-Time to Improve Decision Making



From space to oceans, NOAA's observing systems, forecasts and models can be unified collaboratively

"You never know who you are going to be sharing your information with during a crisis...you need a flexible way to share information with current and new trusted partners, on the fly, in a secure and collaborative way."

Tom Moran, Executive Director, All Hazards Consortium

In today's interconnected world, every second can make a difference in either preventing an incident or responding to an event that affects the Nation's critical infrastructure. The ability of federal, state, local, tribal, territorial, and private sector partners to share accurate information quickly is essential to the Nation's security and resilience. <sup>1</sup>

The Federal SBIR program, a powerful Federal streamlined innovation and acquisition program that can be used across all agencies, has facilitated the development of a unique geospatial collaboration technology that rapidly

and more effectively puts trusted disparate data to work across platforms and on any device to improve situational awareness, inform decision makers, advance science and communications, and help to engage the public.

GeoCollaborate (GC) provides a patented solution to rapidly stand up an 'on/off' information sharing environment internally within your agency or externally to a broader trusted partner base that can deliver critical

USE CASE: GC CAN UNIFY AND SHARE DISPARATE TRUSTED
DATASETS FROM NOAA TO SUPPORT MARINE OPERATIONS
INCLUDING NOAA CHARTS, NWS MARINE FORECASTS (SIG WAVE
HEIGHT, TROPICAL CYCLONE FORECASTS, WINDS), GOMO OCEAN
OBSERVATIONS, MODEL OUTPUT FOR OIL TRANSPORT, PORT STATUS
AND EVEN CLOSE AREAS OF THE OCEAN TO MARINE TRAFFIC IN
COORDINATION WITH USCG AND OTHER AGENCIES IF NEEDED.

data products (i.e. operational products, prototype products), when you need it most, for as long as you want...as a crisis is developing, while **preserving the security of your data**. It doesn't replace websites, portals, or hubs, it turbocharges them for better access and use.



Figure 1: GeoCollaborate enables trusted data from disparate locations (i.e. websites, hubs, portals) to be shared across any platform in a real-time synchronous collaborative environment to improve situational awareness and decision making. Data analytics, machine learning or model output can be shared and validated by comparing to actual observations in a collaborative environment.

<sup>1</sup> INFORMATION SHARING: A VITAL RESOURCE FOR CRITICAL INFRASTRUCTURE SECURITY AND RESILIENCE, DEC 2019 https://www.cisa.gov/information-sharing\_vital-resource

#### GEOCOLLABORATE® - UNIFYING NOAA DATA TO ACCELERATE SITUATIONAL AWARENESS

GC enables a leader such as subject matter expert to identify relevant data and temporarily share it across any platform to improve efficiencies, such as to use or validate observations from multiple sources. When you need rapid access and to scale the sharing of your information to tens, hundreds or thousands of trusted partners, GC delivers.

Through years of development and by leveraging SBIR investment, GeoCollaborate is now operational and allows sharing of data without local downloading or storage, on an easy-to-use interface, implementing log-on credentials as needed, and customization as desired.

#### **How GeoCollaborate Works**

A designated set of credentialed LEADERS are connected to FOLLOWERS by joining a simple secure web link then turning **GeoCollaborate** ON. Within seconds, all participants are looking at the same map and data across platforms and on any device. The LEADER has control over the movement of all followers' maps in real-time for an interactive, dynamic, and synchronous collaboration experience that allows and empowers each follower to interact with the data and later zoom in on their area of interest. Each collaborator can turn their session off and move around the information shared without taking possession of the data or losing additional shared information. Geospatial messaging can be used highlight specific areas and provide information in real-time, and a wide range of OGC-compliant and other dataset formats can be integrated (web services, KML, feature, dynamic, images and even documents). After the active leader-follower collaboration session a dashboard with the layers presented becomes available 24/7.

**GeoCollaborate**'s approach has no specific bandwidth requirements to operate successfully. Data from the provider is shared into each of the followers' devices but **CANNOT** be downloaded or saved. The LEADER has ON/OFF sharing authority, which can also result in a superior briefing and interactive experience. **GeoCollaborate** does **NOT** allow the data to be stored locally which has beneficial FOIA results.

In addition to the All-Hazards Consortium, **GeoCollaborate** is being used to improve data sharing and collaboration between DHS and the Sensitive Information Sharing Environment (SISE), the US Census Bureau, and various agencies within NOAA including the National Weather Service (NWS) National Water Center (NWC), the Hurricane Research Division (HRD) and NOAA's Global Ocean Monitoring & Observing (GOMO) office to help monitor ocean observation platforms and assist in identifying gaps in ocean observations that could be filled to improve hurricane forecasting. As the need for trusted information sharing between private sector businesses grows, particularly in Climate Services and the new Blue Economy, **GeoCollaborate** offers a secure, efficient, rapid, and innovative means to connect decision makers with trusted data. As an SBIR Phase III technology, the pathway has been established for a rapid and simple acquisition process at the Federal level.

For additional information contact: Dave Jones, CEO (dave@stormcenter.com) 410-203-1316 (410-271-4413 m)
GeoCollaborate® was developed under the Federal SBIR program (Small Business Innovation Research) and has been awarded Phase III status, meaning sole-source justification for every US Federal Agency. White House/SBA Tibbetts Award Winner for innovation.











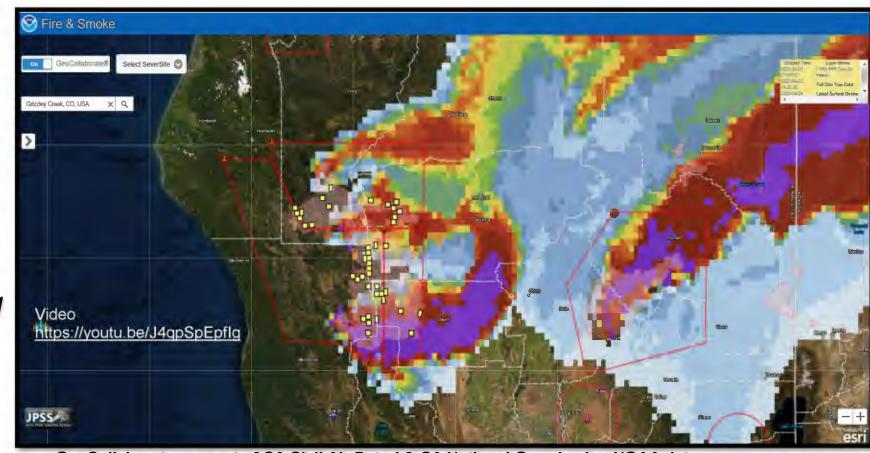


### GeoCollaborate, an SBIR Phase III technology

Enabling active collaboration and unification of NOAA data in realtime across platforms and devices to improve science, situational awareness, training and decision-making.

April 12, 2022





GeoCollaborate support of CA Civil Air Patrol & CA National Guard using NOAA data (JPSS Fire & Smoke Initiative)

Dave Jones, CEO
StormCenter Communications, Inc
dave@stormcenter.com
Co-Chair ESIP Disaster Lifecycle Cluster

Dr. Ellen Prager, Chief Scientist StormCenter Communications, Inc ellen@stormcenter.com

### Development of the GeoCollaborate Technology

### Millions Invested Through Federal Small Business Innovative Research Program (SBIR)



- (2011) Phase 1: NASA Grand Challenge Sharing Data
- (2013) Phase II: Develop Technology
- (2015) Phase IIe: Extend to all mobile devices
- (2015) Phase III: NOAA Contract





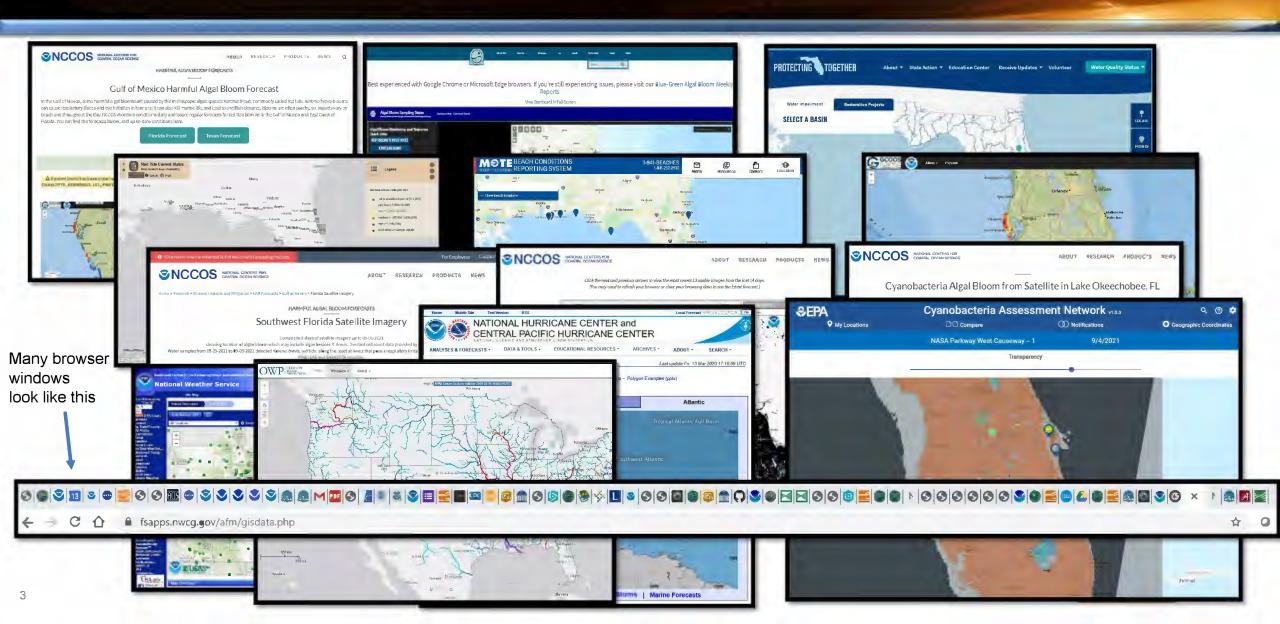
#### Phase III status:

Sole source contracting with any federal agency, no ceiling, no time limit Initial contracts include NOAA (4), DHS CISA, US Census Bureau All Hazards Consortium (private sector), State of Florida





### Multitude of Portals | Hubs | Websites



### Unifies Relevant Disparate Trusted Data





Simple Display controlled by ON/OFF switch

Many websites offering pieces of trusted information

Unification of Trusted Data from Disparate Sources, in real-time, onto any map



### GeoCollaborate | Putting Data to Work

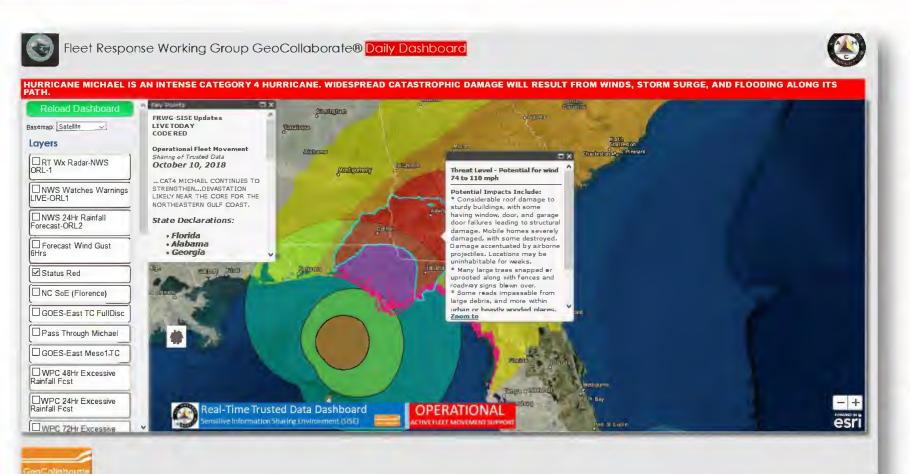


#### **ACTIVE COLLABORATIVE SESSION**

Subject matter expert (SME) identifies relevant datasets, interprets them & provides impact-based decision support services



### GeoCollaborate | Collaborative Dashboard



- After COLLABORATIVE session is over – all data presented is available
- Geographic location (Area of Interest) can be selected by individual user
- Data updates automatically
- Leader/expert can add relevant data
- Available 24/7/365



### Potentially Powerful NOAA Asset

#### Recent quotes from NOAA on current priorities

- "We serve a vast array of communities. We want to know; What do THEY need?"
- "...transforming how people receive and use our information."
- "Data needs to be findable, accessible and 'sharable'."
- "...until decision makers understand our products we will not be satisfied."
- "...provide support for underserved communities."
- "...equitable delivery of NOAA data across all sectors."
- "We need to improve information sharing across agencies and core partners."
- "Our investments in SBIR must not stop at Phase II."

#### GeoCollaborate SBIR Design Drivers & Evolution

- Not tied to your office to provide services/briefings
- Deliver right data to the right people at the right time
- Reaching & connecting with user communities
- Gathering feedback from users
- Web-based, easy to use interface
- Cross-Platform / Any Device
- Works in low bandwidth
- Multiple data formats
- Real-time collaboration environment
- Phase III paves the way for widespread adoption



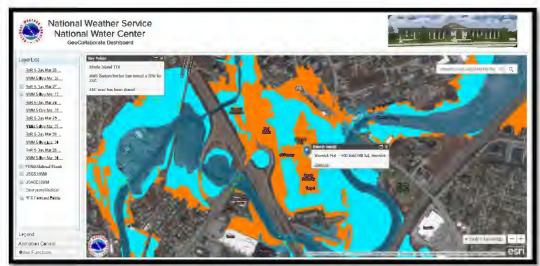
### Proving GC Through Small Projects



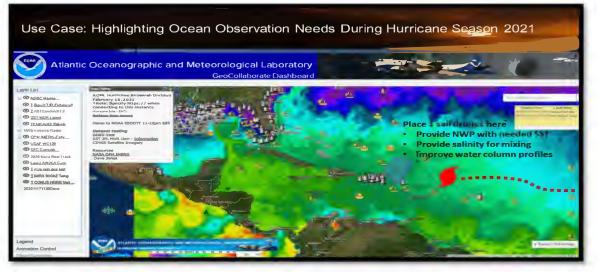
#### **NOAA AOML HRD**



#### **NWS NWC Exercises – Flood Inundation**

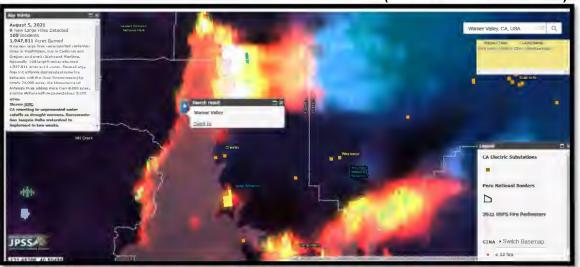


#### **NOAA GOMO EEOOTT**



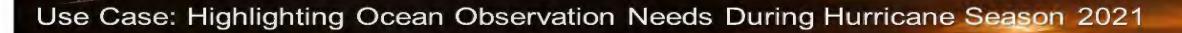
#### **NOAA JPSS**

Fire & Smoke, River Ice & Flooding Initiatives (TS & Hurricane Added 2022)



#### NOAA GOMO EEOOTT

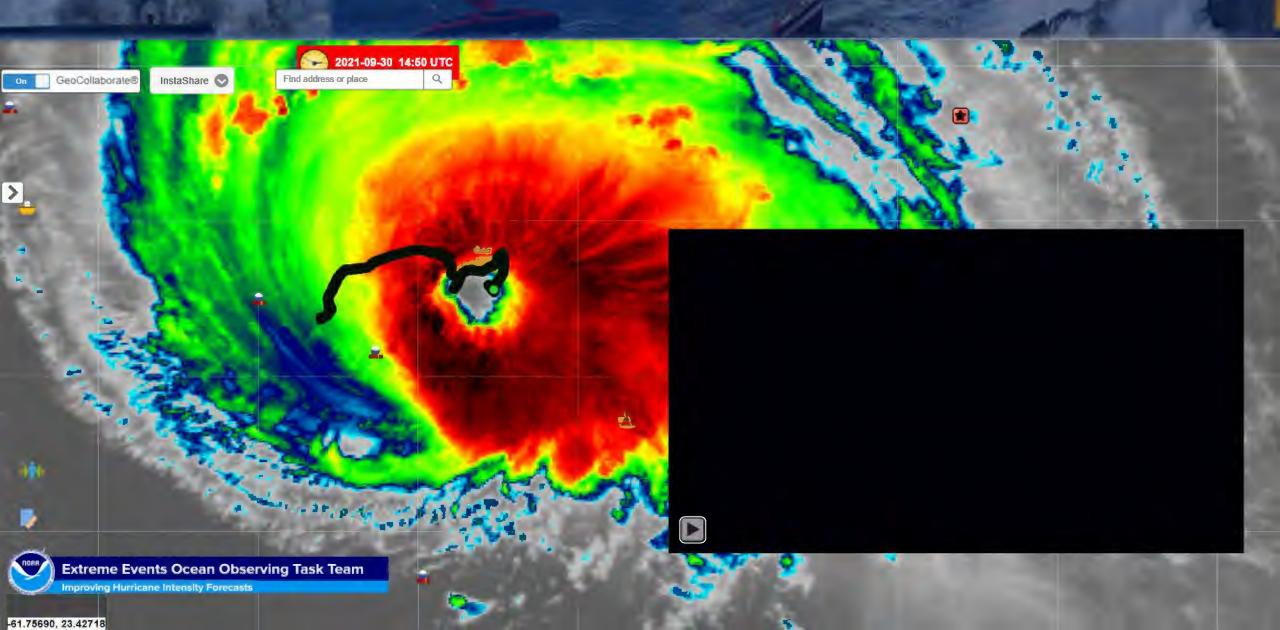








### Saildrone Intercepts Hurricane Sam – Sept 30, 2021



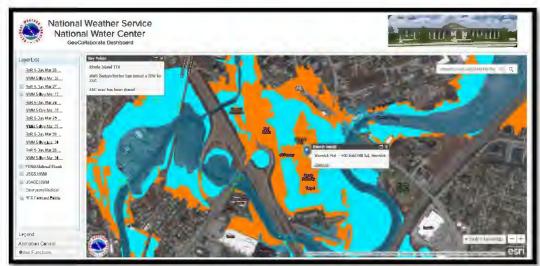
### Proving GC Through Small Projects



#### **NOAA AOML HRD**



#### **NWS NWC Exercises – Flood Inundation**

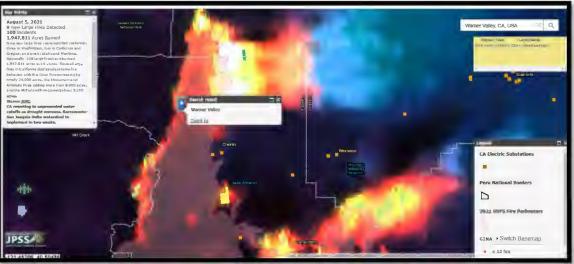


#### **NOAA GOMO EEOOTT**



#### **NOAA JPSS**

Fire & Smoke, River Ice & Flooding Initiatives (TS & Hurricane Added 2022)



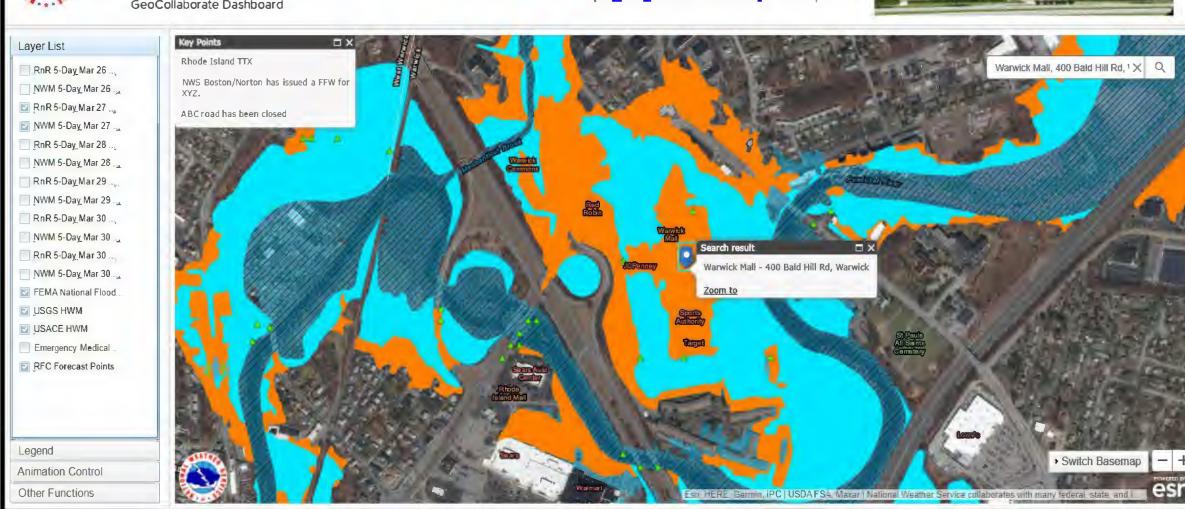
#### NWS NWC Exercises – Flood Inundation





AMS NWS NWC Briefing – IDSS to States https://youtu.be/O3s9PiMOTUs





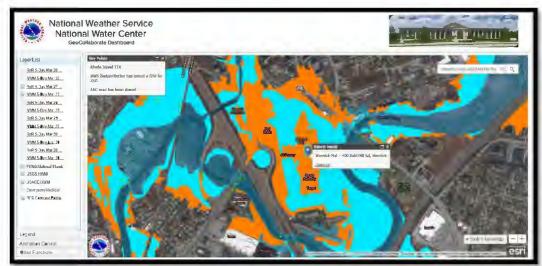
#### Current GC Use in NOAA

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#### **NOAA AOML HRD**



#### **NWS NWC Exercises – Flood Inundation**

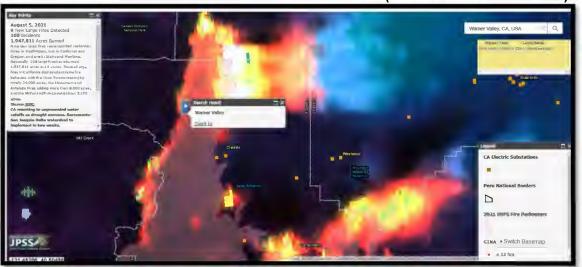


#### **NOAA GOMO EEOOTT**



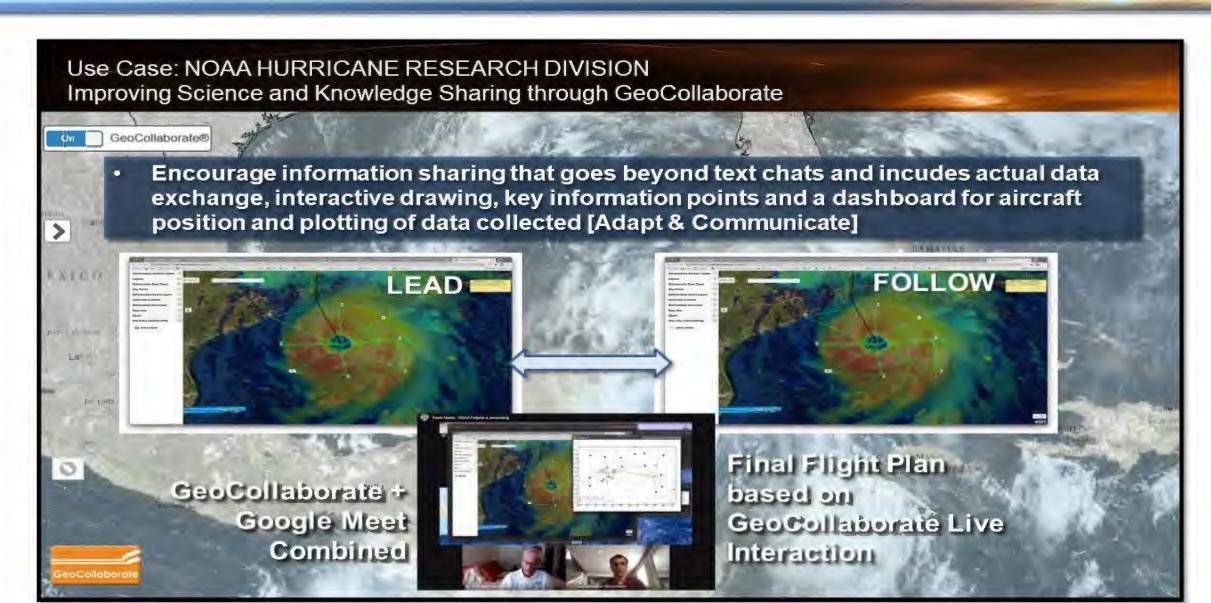
#### **NOAA JPSS**

Fire & Smoke, River Ice & Flooding Initiatives (TS & Hurricane Added 2022)

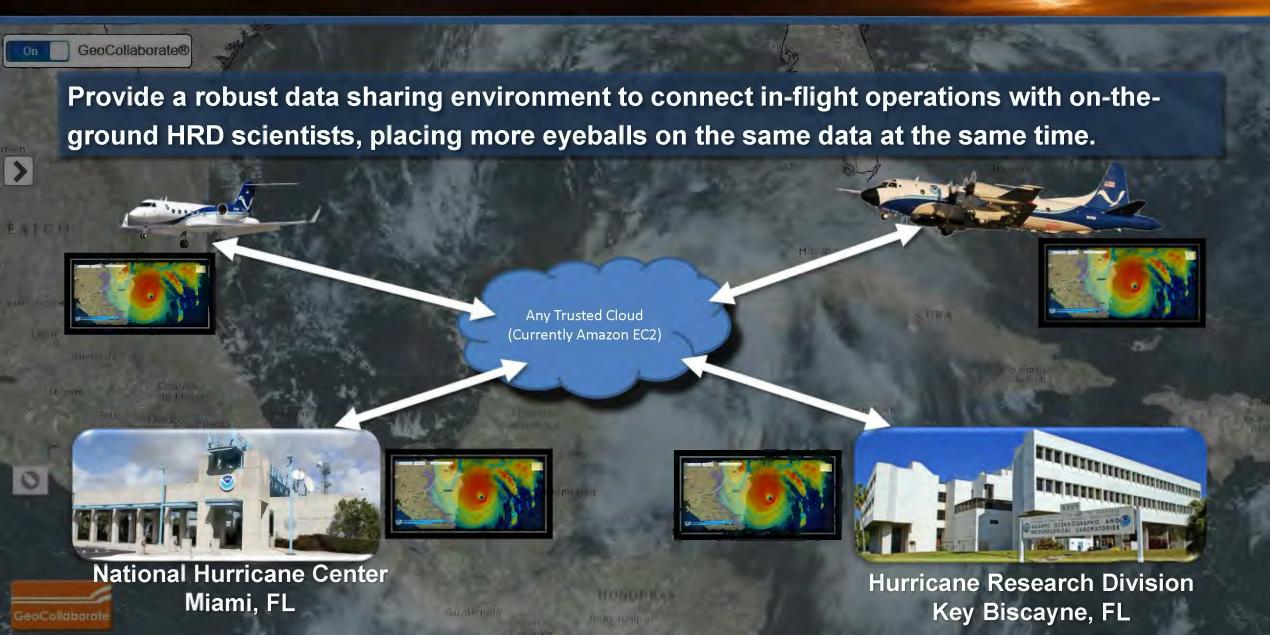


#### NOAA AOML HRD





#### Connecting NHC with EEOOTT, JPSS and HRD



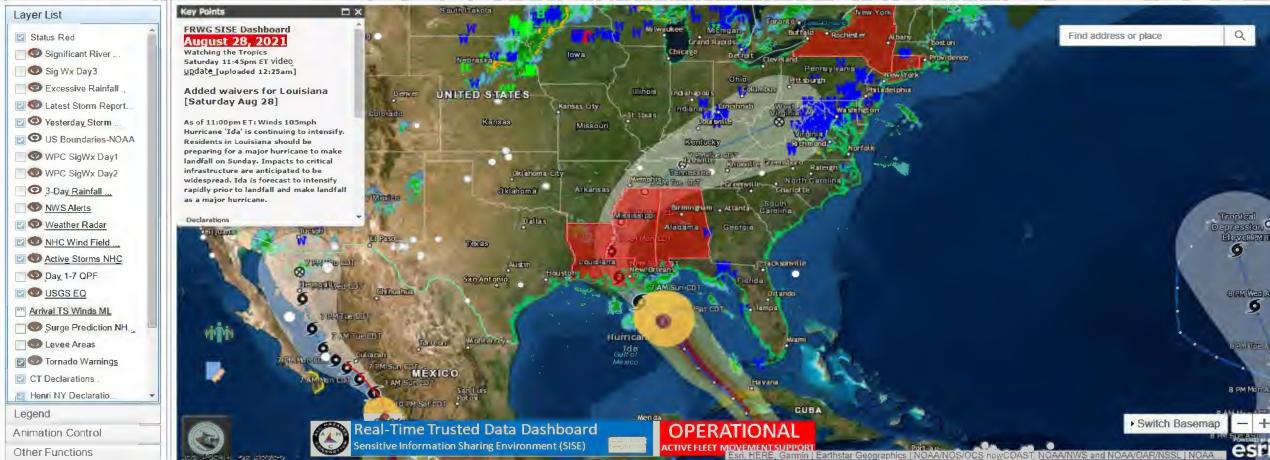
### Florida DEP / Indian River Lagoon NEP / HABs



### All-Hazards Consortium - Operational Use

All Hazards Consortium (AHC, 45,000+ members) – Sensitive Information Sharing Environment (SISE)

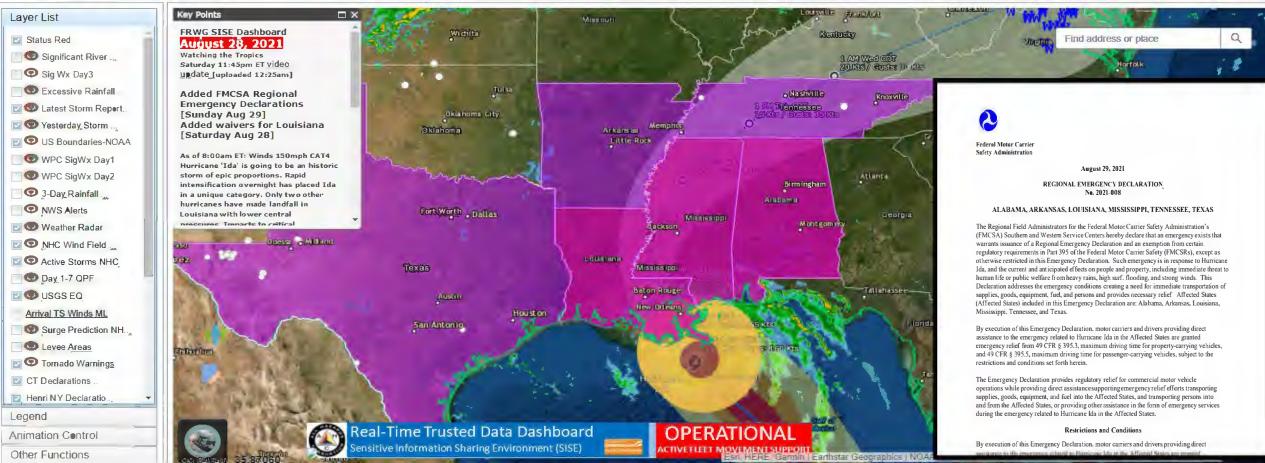




### All-Hazards Consortium - Operational Use

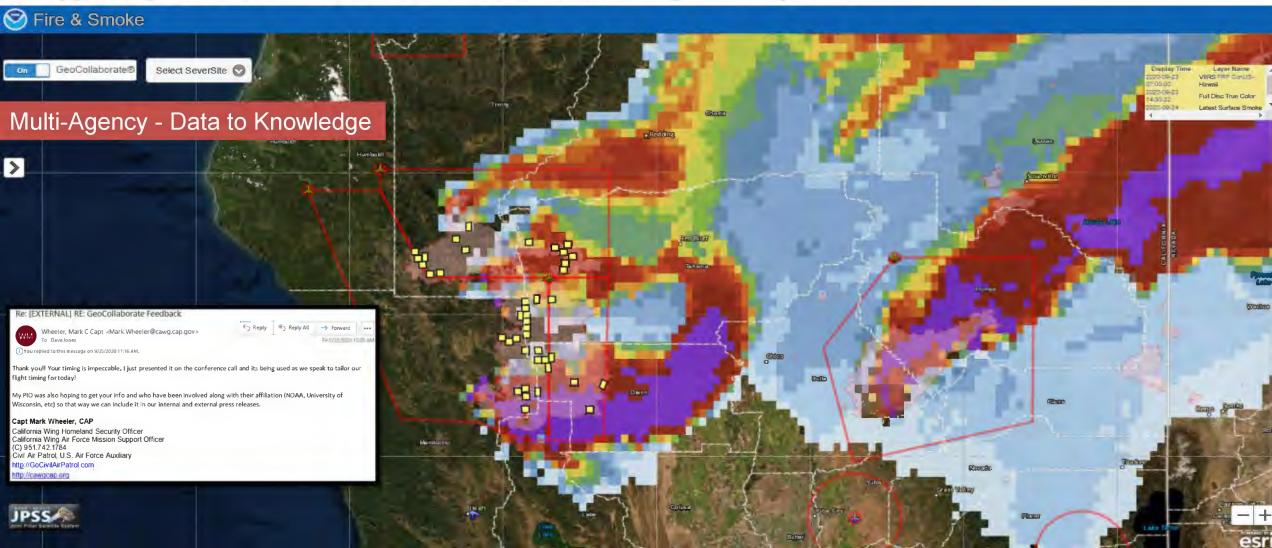
All Hazards Consortium (AHC) – Sensitive Information Sharing Environment (SISE)





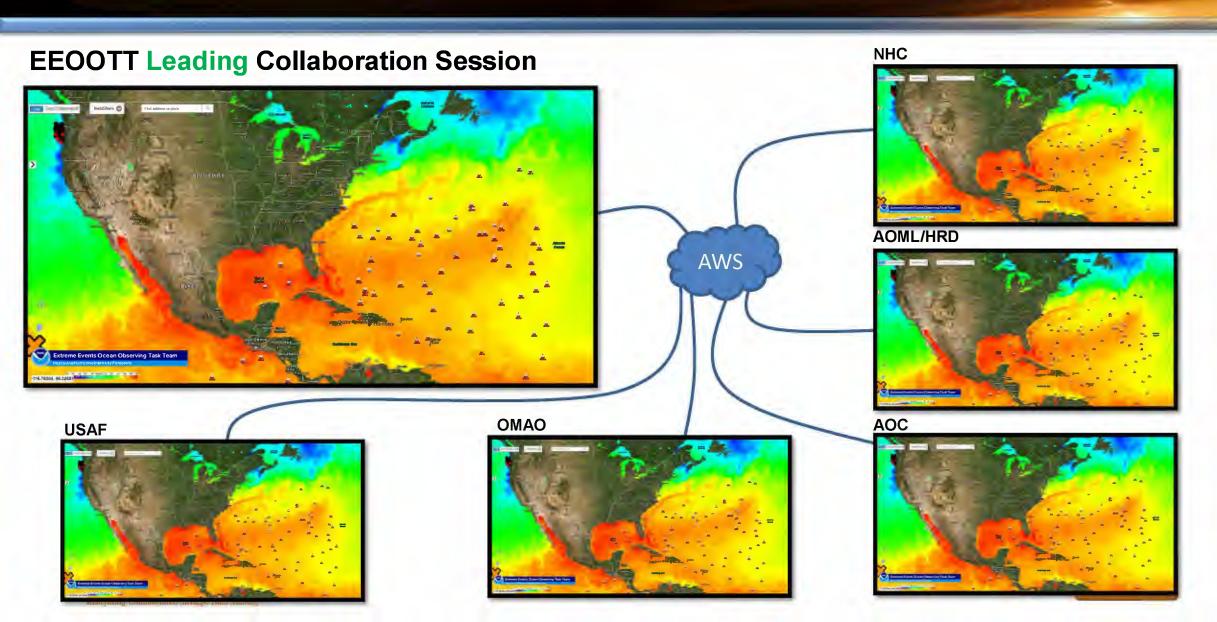
### External Examples of Engaging Users

#### Supporting CA Civil Air Patrol & CA National Guard – August Complex Wildfire



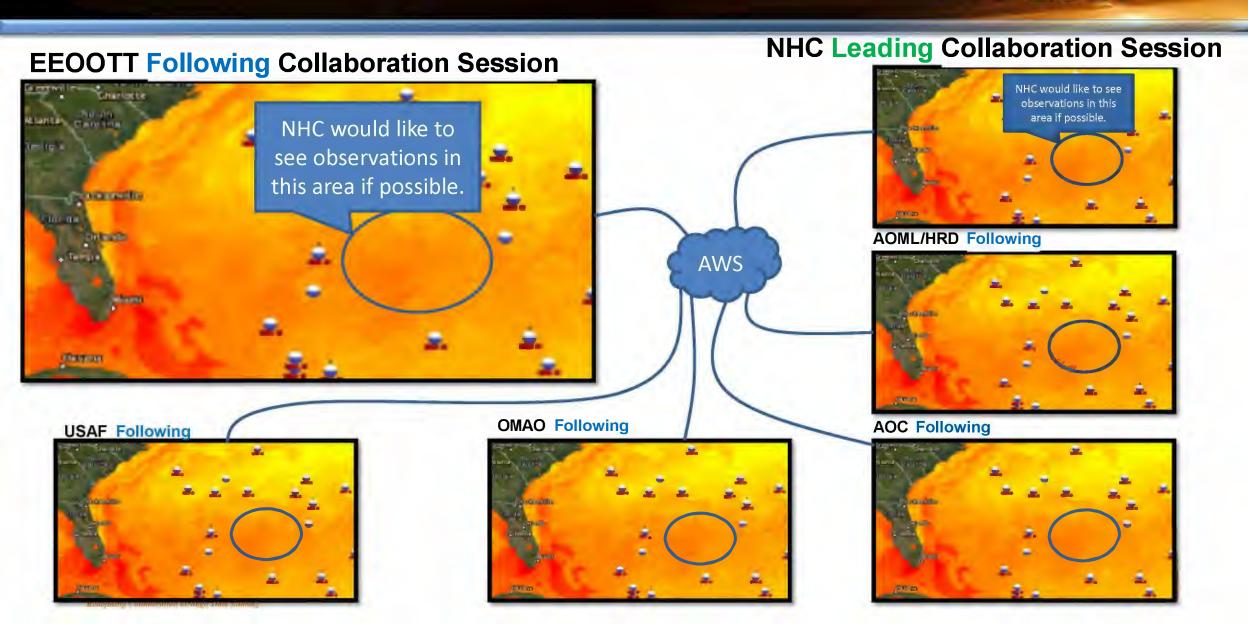
### Simplified Use Case Example

### **EEOOTT-Lead**

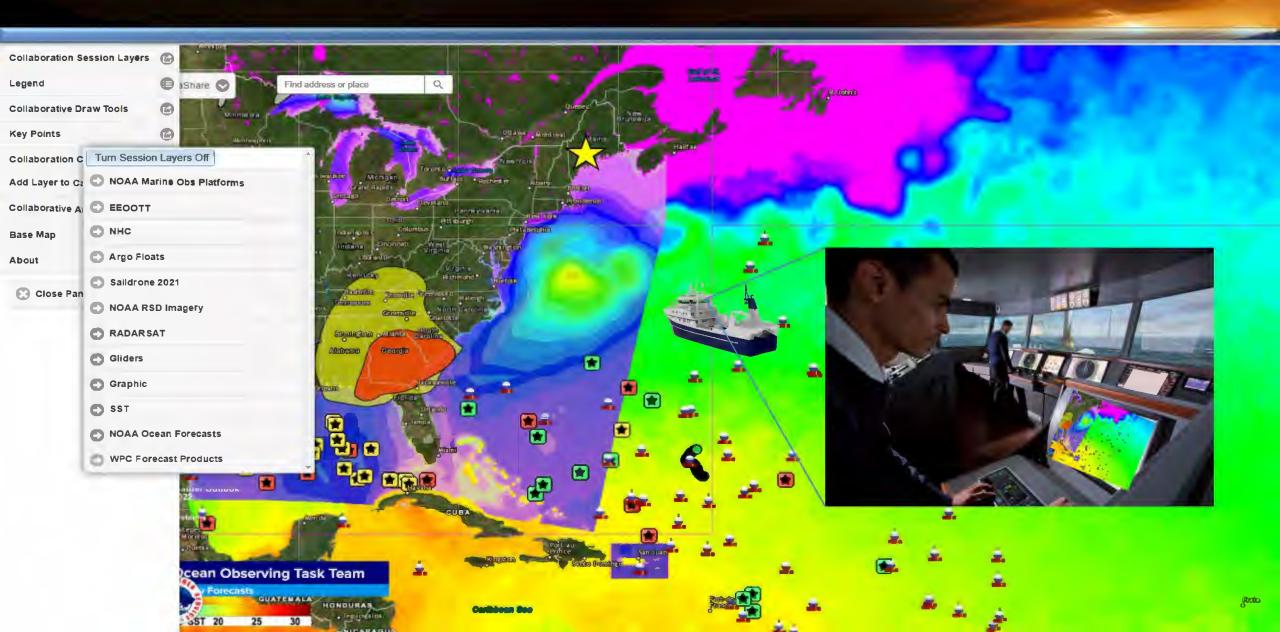


### Use Case Example

### NHC Lead



### CONOPS - Maritime Operator



## Feedback from NOAA

"As I mentioned in my previous email, this effort needs to seriously consider putting a transition plan together, one with AOC and one with NHC for starters. If we can get GeoCollaborate running at AOC and OMAO, it could also benefit the NOAA ship research/operational collaborations. The NHC collaboration environment would be a model for WFOs to interact with national centers as well."

Frank Marks, NOAA HRD Director

"Why doesn't NOAA just make this a corporate purchase so we all can use it?"

NOAA AOC Chief of Programs





# **Immediate NOAA Opportunities**

- Tsunami Warning & Alerting Work with NOAA to produce and deliver tsunami alerts (advisories, warnings, estimated time of arrival of waves and height expected) in geospatial data formats while larger system-wide architecture is being developed.
- Wildfires Engaging communities, home-owner's associations and individuals in the urban wildland interface to understand their risks, improving response and advancing resilience using NOAA and other federal, state and private sector data (partnership with 501(c)3 already engaged in community engagement) – Builds upon existing work with JPSS Fire & Smoke Initiative
- Hurricane Forecast Improvements Accelerate delivery of ocean observations into NHC, HRD, AOC through GeoCollaborate to advance flight planning, coincident observations near existing ocean monitoring platforms. "A collaborative environment will make everything so much easier."
- **Data Exploitation** Exposing more NOAA data to Food, Fuel, Transportation, Energy, Emergency Management, Communications sectors through partnership with the All-Hazards Consortium (AHC) (45,000 members)
- Underserved Communities We can build capacity, inform those in need by delivering NOAA information
  equitably, inspire the next generation of scientists, rapidly deploy and put more NOAA data to work

GeoCollabor

# Opportunities

### Additional applications across NOAA:

- Climate Services Advancing actionable information on climate change across the nation including underserved communities and strengthen our efforts to confront the climate crisis
- Addressing and building the new Blue Economy Engaging new users of NOAA data, development of new ocean constituencies, supporting enforcement, engaging insurance & re-insurance, development and real-estate with climate risk services
- Communication Expose new users to existing or evolving products, improved briefings and mediaready graphics, provide easy-to-use curated interfaces for specific topics, data-driven decision making and situational awareness, Enhance and improve consistent messaging
- Scientific Collaboration Sharing data across disciplines, agencies, private sector, academia accelerating research to operations with R2O and O2R feedback
- Warning & Coordination IDSS, Oil Spills, Marine Protected Areas, Enforcement, Fisheries, Sea Grant



# Demo of GeoCollaborate

### **Questions?**

We would be happy to demonstrate GeoCollaborate at any time

Dave Jones, CEO StormCenter Communications, Inc dave@stormcenter.com

Dr. Ellen Prager, Chief Scientist StormCenter Communications, Inc ellen@stormcenter.com



Science Council: This spreadsheet lists all current open action items currently assigned to the Council. Additional information for each entry can be found in the original email assigning this task. If you have any questions, please email oar.rc.execsec@noaa.gov.

Date Assigned or Action Number	Subject Line	Assigned To	Due Date	Status
20181009 - 7	State of the Science Fact Sheet - Oceanic Extreme Events: Marine Heatwaves	NMFS	12/18/2018	Approved by the Chair and posted to Science Council Website
	State of the Science Fact Sheet - Air Quality	OAR	Dec 23rd	Approved by the Chair and posted to Science Council Website
20200211 - 7	Update to SoS fact sheet on stock assessment	NSC	End of 2020	Sent through CCU for approval
20210713 - 01	New State of the Science fact sheet on methane for climate change	OAR	End of 2021	Review concluded April 8th
	State of the Science Fact Sheet - SLR and Coastal Inundation	NOS	03/09/2022	Showstopper comments will be compiled and addressed.
20210921 - 01	Transition Reports	LOTMC	March 2022	Science Council will recieve updates in April
20211109 - 01a	Hiring Managers Seminar	NSC & OEd	March 2022	NOAA Science Council co-sponsor a seminar with the Office of Education. The first seminar was successful. Planning for the next seminar has begun.
20211109 - 02	UxS Transition Plan on Stalled Transitions	OAR & OMAO	February 2022	OAR and OMAO to develop a draft UxS transition plan to push the issue of stalled transitions forward

From: Anita Harrington - NOAA Affiliate on behalf of Anita Harrington - NOAA Affiliate <anita.harrington@noaa.gov> To: **Dave Jones** Cc: Kelly Wright - NOAA Federal; Fiona Horsfall - NOAA Federal; NOAA Science Council Executive Secretariat; Ellen Subject: Re: Request for Materials for Upcoming Science Council Meeting Date: Wednesday, April 6, 2022 12:57:49 PM Perfect, thank you! Best, Anita On Wed, Apr 6, 2022 at 12:56 PM Dave Jones (6) wrote: Haha! Oops. https://drive.google.com/drive/folders/1XEyP8Du99o6ic L1-2uAEOknyP1pG9M?usp=sharing This should help. Apologies. Regards, Dave **Dave** Jones He Him His CEO, StormCenter Communications, Inc. AMS Fellow, Applications Futurist, ESIP 2020 Partner of the Year COMMUNICATIONS, INC. 2016-2022 co-chair ESIP Disaster Lifecycle Cluster 2012-2022 co-chair AMS Weather Ready Nation Symposium Member: All Hazards Consortium, Sensitive Information Sharing Environment (SISE)

UMBC Research & Technology Park South,

Corporate Address:

1450 S. Rolling Road, Suite 4.029
Halethorpe, MD 21227
O:410-203-1316, (b) (6)
(b) (6)
NOAA JPSS contractor under contract: 1332KP-19-CNEE-J0009
NOAA NWS   AOML-HRD contractor
GeoCollaborate● is an SBIR Phase III technology for synchronous cross-platform data sharing and collaboration to improve situational awareness and decision making. (SBIR Contract: NNX12CA85C) Sole source justifiction
From: Anita Harrington - NOAA Affiliate <anita_harrington@noaa.gov> Sent: Wednesday, April 6, 2022 12:52 PM To: Dave Jones &lt;</anita_harrington@noaa.gov>
Hi Dave,
I don't see anything in my drive shared from your email account yet. Would you be able to try again and include the shared link in your email response?
Thank you!
Anita
On Wed, Apr 6, 2022 at 11:10 AM Dave Jones (b) (6) wrote:
Hi Anita,
I just shared a folder with you from my google drive that contains my PPT/PDF. I will also place two other documents in there as read ahead for anyone who would like to

review. Thanks and please confirm that you are able to access and download.

Regards,

Dave

Dave Jones

HelHimiHis

CEO, StormCenter Communications, Inc.

AMS Fellow, Applications Futurist, ESIP 2020 Partner of the Year

StormCenter

Communication S. Inc.

Redefining Collaboration through Data Sharing

2016-2022 co-chair ESIP Disaster Lifecycle Cluster

2012-2022 co-chair AMS Weather Ready Nation Symposium

Member: All Hazards Consortium, Sensitive Information Sharing Environment (SISE)

Corporate Address:

UMBC Research & Technology Park South,

1450 S. Rolling Road, Suite 4.029

Halethorpe, MD 21227

O:410-203-1316, (b) (6)



NOAA JPSS contractor under contract: 1332KP-19-CNEE-J0009

NOAA NWS | AOML-HRD contractor

GeoCollaborate● is an SBIR Phase III technology for synchronous cross-platform data sharing and collaboration to improve situational awareness and decision making. (SBIR Contract: NNX12CA85C) Sole source justifiction

From: Anita Harrington - NOAA Affiliate <anita harrington@noaa.gov=""> Sent: Wednesday, March 30, 2022 10:39 AM To: Dave Jones</anita>
Cc: Kelly Wright - NOAA Federal <kelly.wright@noaa.gov>; Fiona Horsfall - NOAA Federal <fiona horsfall@noaa.gov="">; _NOAA Science Council Executive Secretariat <science.council.execsec@noaa.gov>; Ellen Prager (b) (6) Subject: Re: Request for Materials for Upcoming Science Council Meeting</science.council.execsec@noaa.gov></fiona></kelly.wright@noaa.gov>
Hi Dave,
If you want to share a google drive link on your end that would work. I cannot share a google drive location on my end because our drives are restricted to NOAA email accounts. Dropbox can also work.
Thank you!
Anita
On Tue, Mar 29, 2022 at 4:13 PM Dave Jones (b) (6) wrote:
Thank you Anita. We will provide the slides and some background information as a read-ahead. Some of the files are too large to e-mail. Do you have a google drive where I can drop the files? If not, no worries, I can send a Hightail link so you can download them. Many thanks for your help.
Regards,
Dave
Dave Jones
He Him His
CEO, StormCenter Communications, Inc.
AMS Fellow, Applications Futurist, ESIP 2020 Partner of the Year



2016-2022 co-chair ESIP Disaster Lifecycle Cluster

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GeoCollaborate is an SBIR Phase III technology for synchronous cross-platform data sharing and collaboration to improve situational awareness and decision making. (SBIR Contract: NNX12CA85C) Sole source justification

From: Anita Harrington - NOAA Affiliate < anita, harrington noaa gov>

**Sent:** Tuesday, March 29, 2022 12:26 PM

To: >; Kelly Wright -

NOAA Federal < kelly wright@noaa gov>

Cc: Fiona Horsfall - NOAA Federal < fiona horsfall@noaa gov >; NOAA Science

Council Executive Secretariat < science council execsec@noaa gov>

Subject: Request for Materials for Upcoming Science Council Meeting

Hi all,

We have you tentatively scheduled to deliver a presentation on GeoCollaborate to the NOAA Science Council at the next meeting scheduled on **Tuesday**, **April 12th** 

from 10:30am to 12:30pm ET via Google Meet. We have your 25-min brief tentatively scheduled to begin at 10:35 am ET. We recommend joining the meeting 5 minutes before your briefing.

Please send your presentation/report and any background documents to science.council.execsec@noaa.gov by COB on April 5th.

Here is the Google Meeting information: NOAA Science Council Meeting

Tuesday, April 12 · 10:30am – 12:30pm

Google Meet joining info

Video call link: (b) (6) Or dial: (US) +1 (b) (6

More phone numbers (b) (6

Thank you and please let me know if you have any questions!

**NSC Exec Sec** 

### Anita Harrington (she/her)

NOAA Science Council Exec Sec CollabraLink Technologies, Inc.

NOAA, OAR, Office of Science Support anita.harrington@noaa.gov

(b) (6)

NOAA Science Council Exec Sec CollabraLink Technologies, Inc.

NOAA, OAR, Office of Science Support anita.harrington@noaa.gov

(b) (6)

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Anita Harrington (she/her) NOAA Science Council Exec Sec CollabraLink Technologies, Inc.

NOAA, OAR, Office of Science Support anita.harrington@noaa.gov

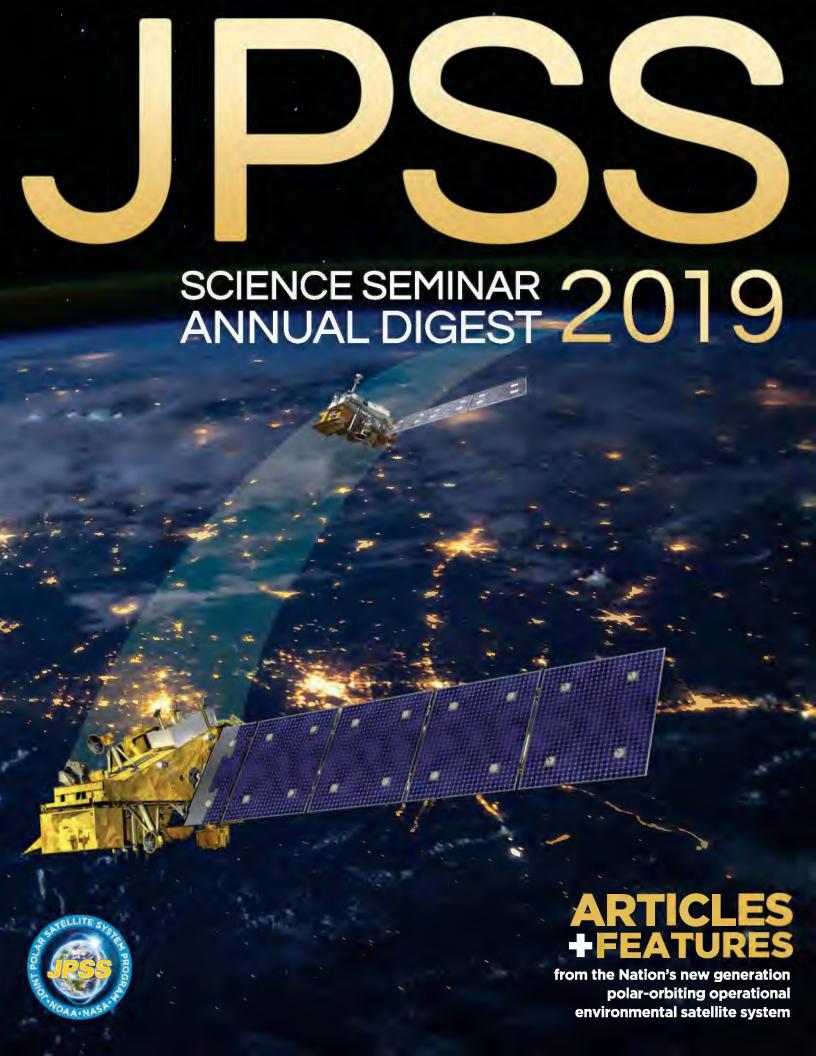


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Anita Harrington (she/her) NOAA Science Council Exec Sec CollabraLink Technologies, Inc.

NOAA, OAR, Office of Science Support anita.harrington@noaa.gov

(b) (6)





# EXPANDING ACCESS TO AND USE OF SATELLITE DATA THROUGH GEOCOLLABORATE®

IMPROVING SITUATIONAL AWARENESS AND DECISION MAKING IN DIVERSE, MULTI-SECTOR ENVIRONMENTS

The information in this article is based, in part, on the February 25, 2019 JPSS science seminar presented by Dave Jones, Founder & CEO StormCenter Communications, Inc. It features work being done by StormCenter with support from the JPSS Fire & Smoke and River, Ice & Flooding Initiatives. It also features work being performed in partnership with the All Hazards Consortium (AHC) to leverage trusted data sources from federal, state and private sector organizations.



Category 4 (CAT 5 at landfall) Hurricane Michael approaches the Florida Panhandle with its destructive winds, devastating storm surge and intense rainfall, NOAA GOES-East data channels are combined in a 'sandwich' product from CIMSS RealEarth combined with NOAA Recon reports from the NOAA P-3 hurricane hunter aircraft, accessed and shared across multiple platforms to decision makers for improved situational awareness via GeoCollaborate. More NOAA data is now available for GeoCollaborate to share putting more NOAA data in the hands of real users who can begin to assess threats, response, damage assessments and recovery.

We are exposed to a wide variety of extreme weather events, such as wildfires, floods, earthquakes, severe storms, and volcanic eruptions. Natural hazards turn into disasters when lives are lost and livelihoods are damaged or destroyed. Some hazards, whether manmade or natural, become catastrophic disasters or large scale mass casualty events, which bring entire regions to a standstill. When these incidents occur, all those involved in responding and making decisions need to collaborate on the same map at the same time with accurate geospatial data in real time across multiple platforms. Personnel on the ground need critical information to assist in responding and making damage assessments, whether it's wildfires spreading in shifting winds, intense flooding that requires evacuations and rescue, or a hazardous chemical spill, while those in other support capacities provide resources and information, while keeping the big picture in mind.

In 2017, a trifecta of storms—Hurricanes Harvey, Irma and Maria—rolled ashore bringing storm surge, heavy rainfall, and violent wind to portions of the United States, Puerto Rico, and the Caribbean Islands. Harvey made landfall along the Texas coast on August 25, 2017. Its slow movement and record-setting rainfall over the Houston metro area led to widespread flooding over multiple days. Irma crossed over the Caribbean Islands and Florida, and moved into the southeastern United States. Hurricane Irma's landfall on the U.S. coastline roughly two weeks after Harvey marked the first time in a century that two storms rated Category 4 or stronger struck the U.S. mainland in the same year. These storms left significant trails of damage and destruction in their wake, including coastal and inland flooding, extensive wind damage, and numerous power outages. The long-lasting impacts to the electrical infrastructure of Puerto Rico from Maria resulted in thousands of residents being without power for months.

As with any disaster, communities came together, and in their various capacities assisted those impacted. Federal, state and local agencies deployed units including first responders who navigated various conditions to perform operations on the ground. Without communications, many of the ongoing efforts would be extremely risky or futile.

### COLLABORATIVE DECISION-MAKING

Sharing of real-time geospatial data in a collaborative environment is not only useful in emergency situations. Activities such as monitoring ports and dams, coordinating mass transit activities on roads, rails, air and waterways, and large-scale outdoor events such as concerts and football games, are examples where shared geospatial and other data help facilitate operations. It is referred to as disparate system interoperability or crossplatform communication.

Many organizations including federal, state and local agencies as well as those in the private sector employ a Common Operating Picture (COP) to share information. The term, which is widely used in armed forces and law enforcement, refers to displays of identical information—from a single unit—to multiple parties to achieve situational awareness or facilitate decision making. The idea behind a COP is to have many people sharing the same information at the same time, for example at meeting or conference events where many participants congregating at the same physical location can view data in

real time from one screen, and/or enable other participants to view the same data remotely through web screen-sharing services.

Some organizations employ screen-sharing technologies that enable them to reach multiple parties outside the constraints of being in the same physical location. The National Weather Service (NWS) uses PowerPoint and screen sharing technology to provide briefings to emergency managers.

Constraints, such as inadequate system resources, bandwidth or administrative privileges needed to share screens can serve as barriers to critical information dissemination when most needed.



Moreover, screen-sharing technologies do not necessarily provide collaborative environments that allow the participants to incorporate the information shown in the presenter's desktop video stream. Remote participants can only view the information being broadcast on the presenter's desktop, and when the screensharing session ends, so does the remote user's access to the information.

Superstorm Sandy was one of the worst storms to ever hit the U.S. East Coast. The storm, which impacted a wide swath of the nation's Atlantic coastline in late October 2012, completely decimated some of the neighborhoods in its path. Unlike typical coastal storms that move north along the east coast, Sandy made an extremely rare hard left (westward) turn that put it in on a direct collision course with heavily populated regions along the Atlantic coastline. According to an information pamphlet detailing lessons learned from the Federal Emergency Management Agency's (FEMA) Hurricane Sandy response deployment procedures (www.hadlong/viewadd=784025), one of the biggest challenges for agencies was the inability to gather accurate, real-time information to match resources and capabilities to these needs and requirements. Superstorm Sandy demonstrated firsthand the challenges of not having access to critical data in time to inform their situational awareness. The pamphlet further states that a "lack of clear information" was an impediment to decision making as well as to reducing the severity of impacts or making improvements.

### **TRUSTED INFORMATION (TI)**

TI is information that is from a reputable/reliable source. It can be combined with disparate TI sources from multi-agencies and private sector.

Each trusted data source is a separate data layer.

### **EXAMPLES**

State Datasets

Municipality Datasets

Weather Observations NOAA satellite data **Pictures** Soil conditions in burn scars Remote Sensing Declarations, Waivers, Guidance Critical Infrastructure Drone Data Cameras Federal Open Datasets

Taken as a whole, COPs enable data integration from multiple sources into one spatial data platform, and therefore help create a unified approach to situational awareness and decision making. Most COPs, however, are characterized as 'cylinders of excellence' as they typically operate in their own domain, and the information they provide is often restricted to authorized users. No other technology can perform cross-function operations or share their data in real-time into disparate platforms. During events where multiple parties need to respond and coordinate, as is in the case of disaster response, it can be a challenge for all those providing support to be on the same

map. Many federal, state and local agencies use their own mapping environment to access data, but their systems cannot share those trusted data sources with each other. In some cases. they do not even have access to the same type of information.

Having a capability that allows for the different players in the field to access and share information in real time, including base layers and data from remote sites, is vital. And a system that improves situational awareness and enables data-driven decision-making through the sharing of trusted information among all stakeholders can save lives and protect property.

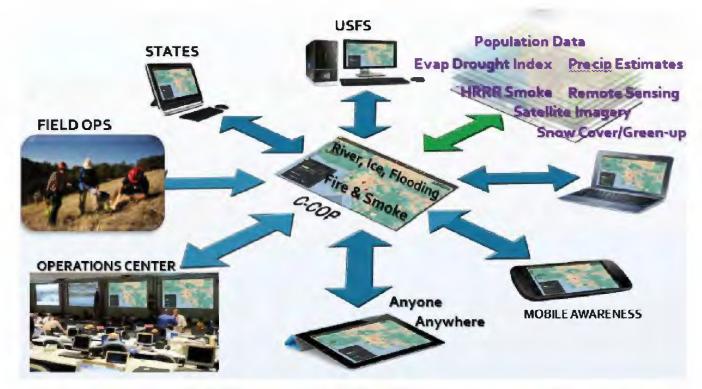
### STORMCENTER COMMUNICATIONS

StormCenter Communications was launched in 2001 to help expand access to and use of science data to improve situational awareness and decision making. It has been working to access and deliver high resolution data from NOAA's polar orbiting satellites for broadcast use and improved situational awareness and decision making.

The company created GeoCollaborate®, a technology that allows for real-time sharing of data, such as weather, critical infrastructure and emergency management information, across multiple platforms.

### **GEOCOLLABORATE**

GeoCollaborate is a patented multi-platform and device data sharing cloud-based service, developed through the Small Business Innovation Research (SBIR) program under a NASA grand challenge. It enables data to be accessed and shared in real time simply through a web browser or integrated into multiple disparate web maps to create a collaborative environment. After years of development, GeoCollaborate has now obtained the highlysought, and rare, SBIR Phase III status, and is the U.S. Federal Government's 'preferred provider' for geospatial data sharing and collaboration.



Data sharing and collaboration use case for fighting wildfires. GeoCollaborate can introduce a cross-agency coordination capability that leverages low bandwidth environments and open government data such as NOAA JPSS and GOES satellite imagery to any device in the field or operations center enabling decision makers to see NOAA data in combination with their own.

This means that as a "sole source" provider of this technology, StormCenter Communications, Inc. can easily and quickly be contracted for licensing, customizing, training, professional services and workshops on the topics of data sharing, collaboration, cross-platform interoperability, collaborative decision making, virtual globe data sharing, training and more.

The concept behind GeoCollaborate is simple: allow anyone to author the content of a lead web map, share that content, and collaborate with others in real time on follower web maps. GeoCollaborate is available on the cloud as a hosted web map and a data sharing and collaborative service that meshes data feeds from various sources including satellites, insitu observations, crowdsourced information, critical infrastructure and even socio-economic analytics to create map displays, imagery, critical infrastructure, real-time vehicle location visualizations and more. Datasets can be easily downloaded through low-bandwidth cell phone and wireless networks and combined with other geospatial information on-site, to ease collaboration across all stakeholders including

those who interpret the data (authors, analysts, and subject matter experts) and those who make decisions based on that data (managers and team leaders), which can lead to effective and valuable decision support services.

Besides sharing and visualizing data on the go, GeoCollaborate can also accelerate the ability for the delivery of Impact-based Decision Support Services (IDSS) to a wide variety of NOAA partners. Any product visualized within the Advanced Weather Interactive Processing System (AWIPS) can be exported for rapid inclusion into the data-sharing environment. GeoCollaborate also leverages the expanding GIS services offered by NWS. As more and more products produced by NOAA are offered via the NWS' Information Dissemination Portal (IDP) and NOAA nowCOAST, GeoCollaborate can access and share these services across multiple platforms so everyone can be on the same map at the same time. This significantly improves situational awareness and accelerates decision making that can save millions of dollars in wasted efforts.



Disparate system interoperability is demonstrated here with two different instances of GeoCollaborate sharing data between them. This powerful capability can enable existing mapping environments to become collaborative and lower the training curve because no-one has to change their existing mapping system or switch to another vendor. This opens the doors to enabling each agency, organization or nation to accelerate their situational awareness and approach to decision making and is a breakthrough for placing more NOAA data to work serving decision makers.

### APPLICATION EXAMPLES

Task orders under two JPSS initiatives—Fire and Smoke, and River, Ice and Flooding-have helped demonstrate how various datasets can be accessed and incorporated into decision-making environments. Flooding and power restoration after a severe weather event have been popular use-cases for GeoCollaborate with many others beginning to surface as more utilities and emergency managers realize the powerful benefits that real-time data sharing offers.

### Wildfires

Wildfires can pose serious hazards to the environment. Meanwhile, long range transport of smoke emissions can adversely impact air quality, and exposure can lead to health complications for sensitive members of the population. Some population groups, particularly those living in the urban-wildland interface, are at considerably higher risk of the dangers wildfires pose to life and property. The following is an example of how a GeoCollaborate Dashboard delivers critical information for data driven decision making (3DM) during a wildfire event in Northern CA. This example from 2018

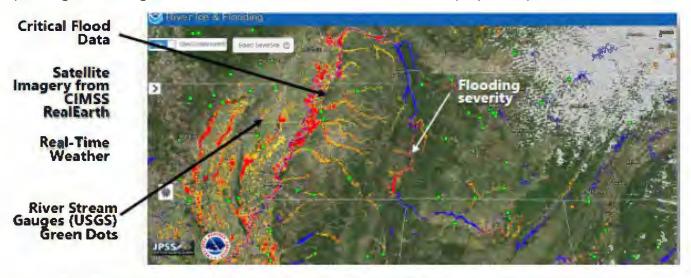
shows several data layers including satellite imagery marked with fire perimeters of the Camp fire in Butte County, California. All of the data layers originate from trusted sources such as NOAA, USGS GeoMAC (a multiagency coordination information source), USGS Landsat imagery and critical infrastructure datasets from utilities and the private sector. This information is useful for immediate situational awareness and coordination because all decision makers can be on the same map looking at the same data at any moment providing local, state or federal partners with access to unique datasets.



The JPSS Fire & Smoke Initiative GeoCollaborate session depicts the latest fire perimeter data layer from USGS GeoMAC overlaid onto a timely Landsat image during the Camp Fire in Northern CA. Introducing this capability can enable a unified multi-agency approach to situational awareness and decision making

### Floods

Flooding along rivers causes billions of dollars of damage every year. Extreme rainfall, snowmelt and jams caused by the breakup of river ice happens frequently, putting lives and livelihoods at risk. The following is an example of a dashboard for data-driven decision making (3DM) during a flooding event. A product like the one below can help officials on the ground and at FEMA determine the extent of the flooding and think about who else may be at risk. These steps can aid evacuations, planning and closing of businesses so inventories can be saved and properties protected.



This example shows flooding along the Mississippi River as a combination of snow melt and heavy rains from severe thunderstorms and heavy downpours impacted Missouri, Arkansas and Tennessee. Rapid response algorithms from the JPSS River, Ice and Flooding Initiative. Can identify where flooding is occurring and provide decision makers such as local officials and FEMA with a broad understanding of the flooding extent. This helps plan the extent of evacuations and in preparing businesses with information so they can save their inventory before the flood arrives.

### **Hurricanes and Power Restoration**

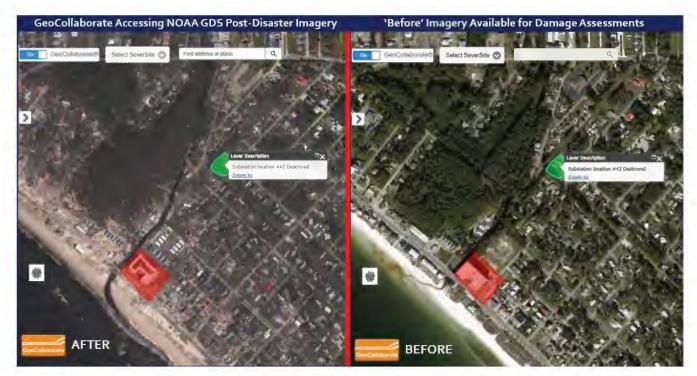
When hurricanes hit, power often goes out. Lives are threatened and those who rely on power to sustain life-support functions need assistance right away. The All Hazards Consortium's (AHC) Fleet Response Working Group (FRWG) Sensitive Information Sharing Environment (SISE) GeoCollaborate® Dashboard was used to provide sensitive information to fleet utility vehicles responding to requests for mutual assistance in the Carolinas and Virginia as a result of the impacts from Hurricane Florence.

The All Hazard Consortium (AHC) Fleet Response Working Group includes both private and public sector individuals from energy companies, state emergency management agencies and logistics coordinators to engage in the important operational efforts to expedite the restoration of power, supply chains and other critical infrastructures that businesses and communities rely upon such as power, fuel, water, food, shelter, communications, transportation, etc.



The GeoCollaborate Dashboard is being used to coordinate the movement of fleet utility vehicles across state lines to get to disaster areas so power can be restored as quickly as possible. The green states represent 'pass-through' states for utility vehicles while purple states are states covered by transportation waivers from the Federal Motor Carriers Services Administration (FMCSA) and the red states are where declarations of emergency have been issued by the governors NWS data layers are visible such as NHC hurricane wind field prediction, best track and time of arrival for tropical storm force winds. Key points point out specific information to support decision makers.

Critical to the process of moving utility vehicles into the right locations at the right times is accurate damage assessments after a disaster. GeoCollaborate brings together disparate data sources across all decision-making lines of authority to save money by improving



GeoCollaborate enables collaborative damage assessment activities, such as rapid labeling and drawing, across platforms so decision makers can determine how many power poles are down, destroyed or damaged. Critical infrastructure can be overlaid to provide an assessment of how much pipeline needs to be ordered to get communities back up and running with water, sewer and other services. By collecting imagery right after disasters, NOAA is enabling decisions to be made rapidly, saving millions of dollars.

efficiencies and leveraging data sources such as NOAA's rapid response Office of Marine and Aviation Operations (OMAO) high resolution imagery collections when tasked by FEMA.

The FRWG supports joint public/private 'integrated' planning, education and training, joint information sharing, and annual exercises to improve power restoration efforts and supply chain resiliency. GeoCollaborate has become a critical capability to enable improved efficiencies.

### **FUTURE PLANS**

As more agencies and organizations at the state and federal levels as well as the private sector learn about the unique capabilities that GeoCollaborate brings to situational awareness and decision making, many doors will open for how NOAA data can support these efforts. For years, producers of science-based datasets and information sources have struggled to understand how research results can transition to operational implementation. GeoCollaborate can bridge that gap and place research products in front of decision makers rapidly and

provide the capability to deliver feedback to those researchers.

GeoCollaborate can also improve efficiencies for quality-controlling datasets against in-situ measurements by bringing those disparate observations together. It is the hope of Dave Jones, Founder and CEO of StormCenter Communications, Inc. that GeoCollaborate can transform how researchers and operational decision makers work together to accelerate R2O and O2R and enable the sharing of research findings that can benefit innovation, decision makers and the private sector. Training can be accelerated and the connection between training center and operations can be maintained indefinitely. This has direct economic impacts and benefits to be gained as more people understand the power of real-time data sharing across platforms.

For NOAA, the invention of GeoCollaborate means that there is now a vehicle available to deliver trusted NOAA and other open government data sources into decision making environments efficiently and effectively, saving time and money. This means a host of new users is just around the corner with every use case that gets identified. As weather events become more intense and climate change impacts more and more people around the world, GeoCollaborate can provide the environment for domestic and international collaboration from any computer, tablet or mobile device.

### **SUMMARY AND CONCLUSIONS**

GeoCollaborate allows many users including federal, state and local agencies as well as private sector organizations to share trusted data in real time across any platform or device to enable

collaboration and sharing of data when it's most needed. This is a capability that has been needed for decades and is still being identified as a need within agencies and the private sector to accelerate data access and sharing. Now that a data sharing and collaboration platform exists, more attention can be applied toward applications and applied benefits of NOAA data in both operational and research environments. This will benefit other agencies at the federal, state and local levels as well as the private sector and NGOs. 💠

### **Story Source**

Materials obtained from JPSS February Science Seminar titled "Delivering JPSS Data to Improve Situational Awareness and Decision Making."

#### Additional Resources

How GeoCollaborate® works: https://www.youtube.com/watch?v=O20gjnti4Qk&index=3&list=PLEXjtR48sZXE881KLsXlcOr OX-LhpS-3u&t=Os

Member Highlight: StormCenter Communications, Inc. https://www.esipfed.org/member-highlights/member-hi stormcenter-communications-inc

The Promise of JPSS, Storm Center Communications. https://youtu.be/euIPPfwexaE



# Unifying Disparate Trusted Data in Real-Time to Improve Decision Making



From space to oceans, NOAA's observing systems, forecasts and models can be unified collaboratively

"You never know who you are going to be sharing your information with during a crisis...you need a flexible way to share information with current and new trusted partners, on the fly, in a secure and collaborative way."

Tom Moran, Executive Director, All Hazards Consortium

In today's interconnected world, every second can make a difference in either preventing an incident or responding to an event that affects the Nation's critical infrastructure. The ability of federal, state, local, tribal, territorial, and private sector partners to share accurate information quickly is essential to the Nation's security and resilience. <sup>1</sup>

The Federal SBIR program, a powerful Federal streamlined innovation and acquisition program that can be used across all agencies, has facilitated the development of a unique geospatial collaboration technology that rapidly

and more effectively puts trusted disparate data to work across platforms and on any device to improve situational awareness, inform decision makers, advance science and communications, and help to engage the public.

GeoCollaborate (GC) provides a patented solution to rapidly stand up an 'on/off' information sharing environment internally within your agency or externally to a broader trusted partner base that can deliver critical

USE CASE: GC CAN UNIFY AND SHARE DISPARATE TRUSTED
DATASETS FROM NOAA TO SUPPORT MARINE OPERATIONS
INCLUDING NOAA CHARTS, NWS MARINE FORECASTS (SIG WAVE
HEIGHT, TROPICAL CYCLONE FORECASTS, WINDS), GOMO OCEAN
OBSERVATIONS, MODEL OUTPUT FOR OIL TRANSPORT, PORT STATUS
AND EVEN CLOSE AREAS OF THE OCEAN TO MARINE TRAFFIC IN
COORDINATION WITH USCG AND OTHER AGENCIES IF NEEDED.

data products (i.e. operational products, prototype products), when you need it most, for as long as you want...as a crisis is developing, while **preserving the security of your data**. It doesn't replace websites, portals, or hubs, it turbocharges them for better access and use.



Figure 1: GeoCollaborate enables trusted data from disparate locations (i.e. websites, hubs, portals) to be shared across any platform in a real-time synchronous collaborative environment to improve situational awareness and decision making. Data analytics, machine learning or model output can be shared and validated by comparing to actual observations in a collaborative environment.

<sup>1</sup> INFORMATION SHARING: A VITAL RESOURCE FOR CRITICAL INFRASTRUCTURE SECURITY AND RESILIENCE, DEC 2019 https://www.cisa.gov/information-sharing\_vital-resource

### GEOCOLLABORATE® - UNIFYING NOAA DATA TO ACCELERATE SITUATIONAL AWARENESS

GC enables a leader such as subject matter expert to identify relevant data and temporarily share it across any platform to improve efficiencies, such as to use or validate observations from multiple sources. When you need rapid access and to scale the sharing of your information to tens, hundreds or thousands of trusted partners, GC delivers.

Through years of development and by leveraging SBIR investment, GeoCollaborate is now operational and allows sharing of data without local downloading or storage, on an easy-to-use interface, implementing log-on credentials as needed, and customization as desired.

### **How GeoCollaborate Works**

A designated set of credentialed LEADERS are connected to FOLLOWERS by joining a simple secure web link then turning **GeoCollaborate** ON. Within seconds, all participants are looking at the same map and data across platforms and on any device. The LEADER has control over the movement of all followers' maps in real-time for an interactive, dynamic, and synchronous collaboration experience that allows and empowers each follower to interact with the data and later zoom in on their area of interest. Each collaborator can turn their session off and move around the information shared without taking possession of the data or losing additional shared information. Geospatial messaging can be used highlight specific areas and provide information in real-time, and a wide range of OGC-compliant and other dataset formats can be integrated (web services, KML, feature, dynamic, images and even documents). After the active leader-follower collaboration session a dashboard with the layers presented becomes available 24/7.

**GeoCollaborate**'s approach has no specific bandwidth requirements to operate successfully. Data from the provider is shared into each of the followers' devices but **CANNOT** be downloaded or saved. The LEADER has ON/OFF sharing authority, which can also result in a superior briefing and interactive experience. **GeoCollaborate** does **NOT** allow the data to be stored locally which has beneficial FOIA results.

In addition to the All-Hazards Consortium, **GeoCollaborate** is being used to improve data sharing and collaboration between DHS and the Sensitive Information Sharing Environment (SISE), the US Census Bureau, and various agencies within NOAA including the National Weather Service (NWS) National Water Center (NWC), the Hurricane Research Division (HRD) and NOAA's Global Ocean Monitoring & Observing (GOMO) office to help monitor ocean observation platforms and assist in identifying gaps in ocean observations that could be filled to improve hurricane forecasting. As the need for trusted information sharing between private sector businesses grows, particularly in Climate Services and the new Blue Economy, **GeoCollaborate** offers a secure, efficient, rapid, and innovative means to connect decision makers with trusted data. As an SBIR Phase III technology, the pathway has been established for a rapid and simple acquisition process at the Federal level.

For additional information contact: Dave Jones, CEO (dave@stormcenter.com) 410-203-1316 (410-271-4413 m)
GeoCollaborate® was developed under the Federal SBIR program (Small Business Innovation Research) and has been awarded Phase III status, meaning sole-source justification for every US Federal Agency. White House/SBA Tibbetts Award Winner for innovation.











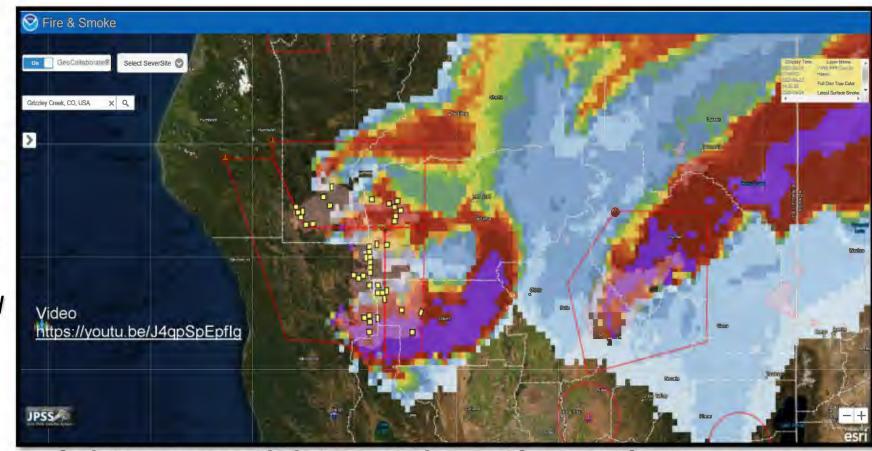


# GeoCollaborate, an SBIR Phase III technology

Enabling active collaboration and unification of NOAA data in realtime across platforms and devices to improve science, situational awareness, training and decision-making.

April 12, 2022





GeoCollaborate support of CA Civil Air Patrol & CA National Guard using NOAA data (JPSS Fire & Smoke Initiative)

Dave Jones, CEO
StormCenter Communications, Inc
dave@stormcenter.com
Co-Chair ESIP Disaster Lifecycle Cluster

Dr. Ellen Prager, Chief Scientist StormCenter Communications, Inc ellen@stormcenter.com

# Development of the GeoCollaborate Technology

# Millions Invested Through Federal Small Business Innovative Research Program (SBIR)



- (2011) Phase 1: NASA Grand Challenge Sharing Data
- (2013) Phase II: Develop Technology
- (2015) Phase IIe: Extend to all mobile devices
- (2015) Phase III: NOAA Contract





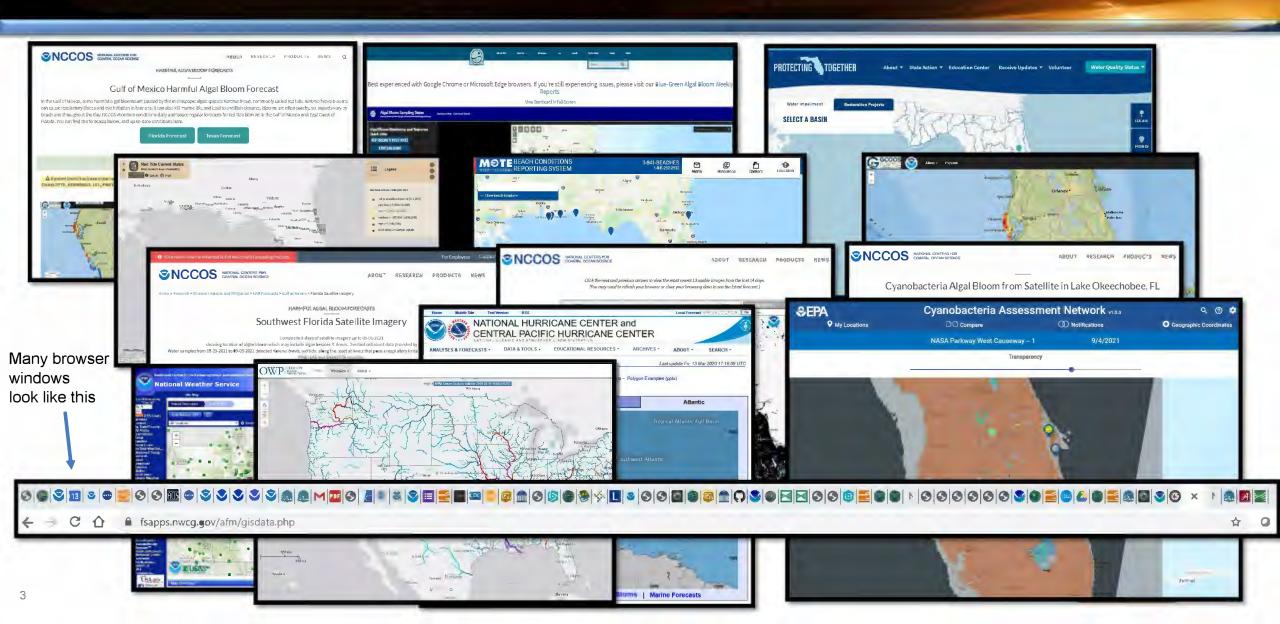
### Phase III status:

Sole source contracting with any federal agency, no ceiling, no time limit Initial contracts include NOAA (4), DHS CISA, US Census Bureau All Hazards Consortium (private sector), State of Florida





# Multitude of Portals | Hubs | Websites



# Unifies Relevant Disparate Trusted Data





Simple Display controlled by ON/OFF switch

Many websites offering pieces of trusted information

Unification of Trusted Data from Disparate Sources, in real-time, onto any map



# GeoCollaborate | Putting Data to Work

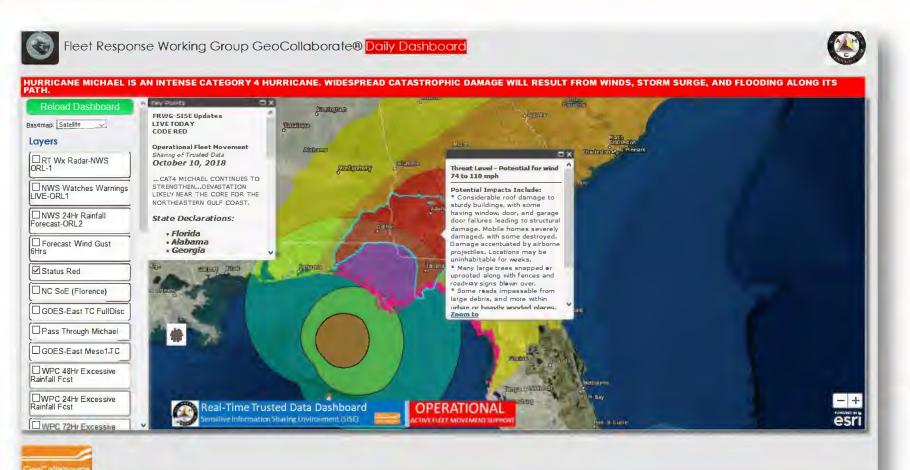


### **ACTIVE COLLABORATIVE SESSION**

Subject matter expert (SME) identifies relevant datasets, interprets them & provides impact-based decision support services



# GeoCollaborate | Collaborative Dashboard



- After COLLABORATIVE session is over – all data presented is available
- Geographic location (Area of Interest) can be selected by individual user
- Data updates automatically
- Leader/expert can add relevant data
- Available 24/7/365



# Potentially Powerful NOAA Asset

### Recent quotes from NOAA on current priorities

- "We serve a vast array of communities. We want to know; What do THEY need?"
- "...transforming how people receive and use our information."
- "Data needs to be findable, accessible and 'sharable'."
- "...until decision makers understand our products we will not be satisfied."
- "...provide support for underserved communities."
- "...equitable delivery of NOAA data across all sectors."
- "We need to improve information sharing across agencies and core partners."
- "Our investments in SBIR must not stop at Phase II."

### GeoCollaborate SBIR Design Drivers & Evolution

- Not tied to your office to provide services/briefings
- Deliver right data to the right people at the right time
- Reaching & connecting with user communities
- Gathering feedback from users
- Web-based, easy to use interface
- Cross-Platform / Any Device
- Works in low bandwidth
- Multiple data formats
- Real-time collaboration environment
- Phase III paves the way for widespread adoption



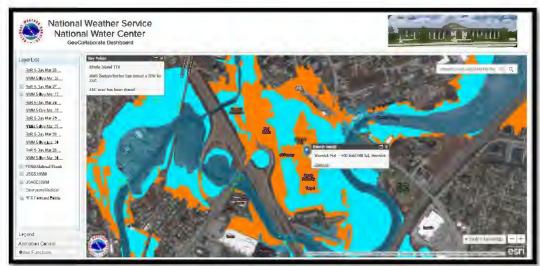
# Proving GC Through Small Projects



### **NOAA AOML HRD**



### **NWS NWC Exercises – Flood Inundation**

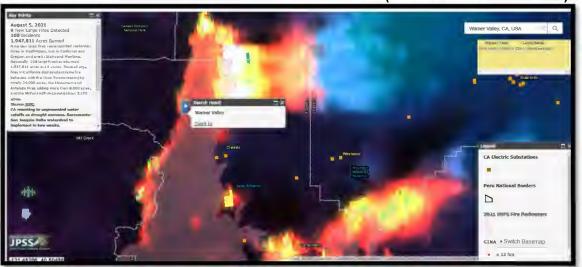


### **NOAA GOMO EEOOTT**



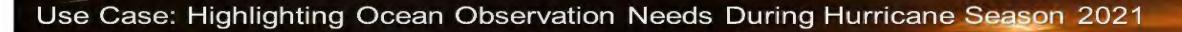
### **NOAA JPSS**

Fire & Smoke, River Ice & Flooding Initiatives (TS & Hurricane Added 2022)



# NOAA GOMO EEOOTT

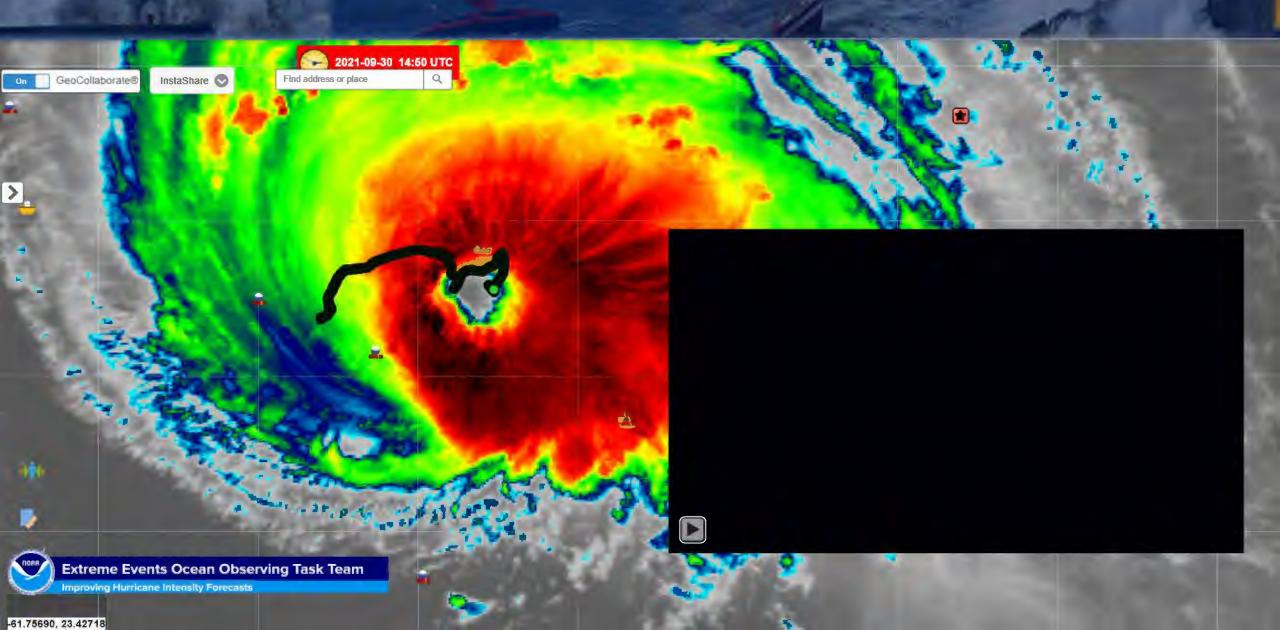








# Saildrone Intercepts Hurricane Sam – Sept 30, 2021



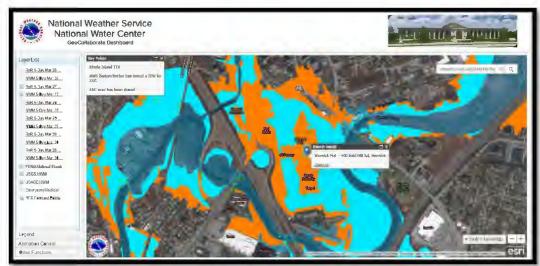
# Proving GC Through Small Projects



### **NOAA AOML HRD**



### **NWS NWC Exercises – Flood Inundation**

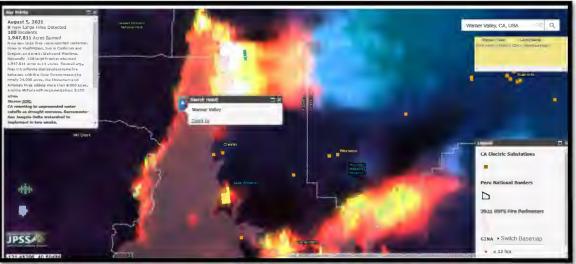


### **NOAA GOMO EEOOTT**



### **NOAA JPSS**

Fire & Smoke, River Ice & Flooding Initiatives (TS & Hurricane Added 2022)



#### NWS NWC Exercises - Flood Inundation





AMS NWS NWC Briefing – IDSS to States https://youtu.be/O3s9PiMOTUs





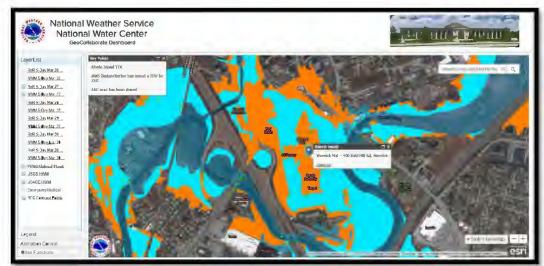
#### Current GC Use in NOAA

## Šit.

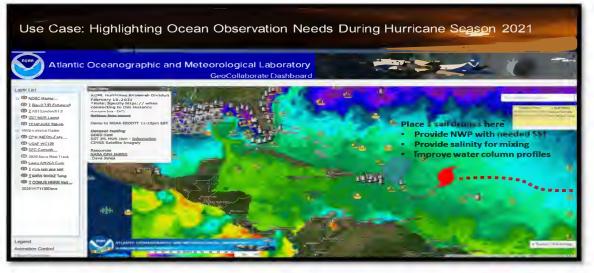
#### **NOAA AOML HRD**



#### **NWS NWC Exercises – Flood Inundation**

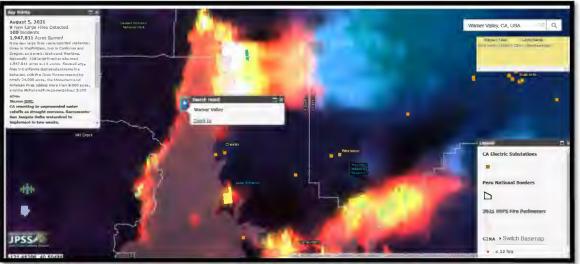


#### **NOAA GOMO EEOOTT**



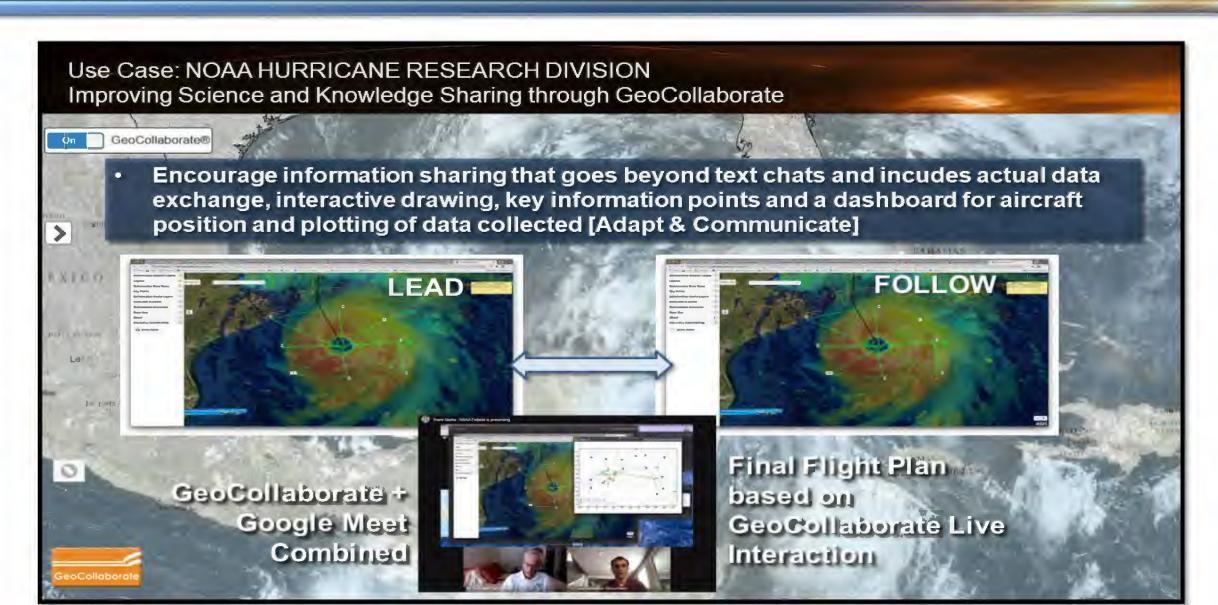
#### NOAA JPSS

Fire & Smoke, River Ice & Flooding Initiatives (TS & Hurricane Added 2022)

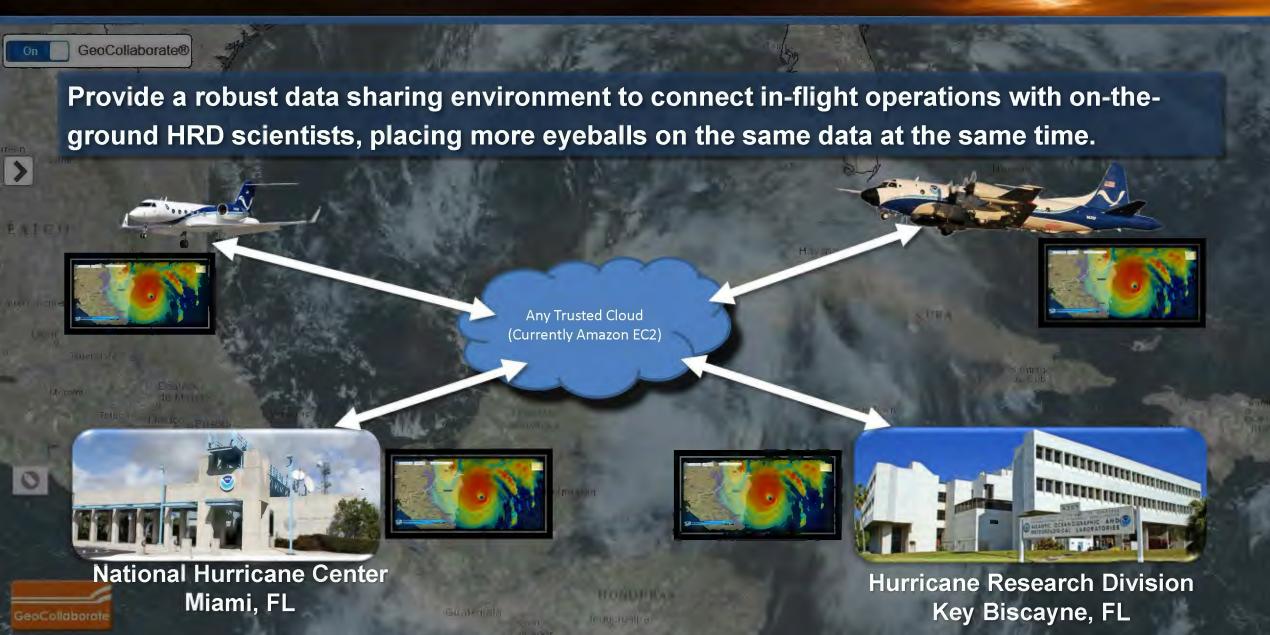


#### NOAA AOML HRD





#### Connecting NHC with EEOOTT, JPSS and HRD



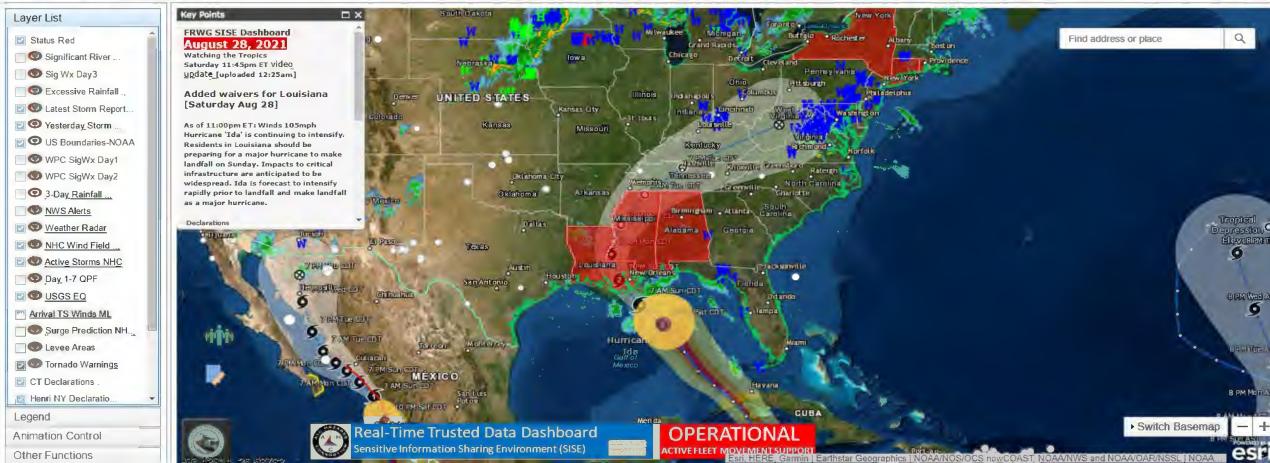
## Florida DEP / Indian River Lagoon NEP / HABs



## All-Hazards Consortium - Operational Use

All Hazards Consortium (AHC, 45,000+ members) – Sensitive Information Sharing Environment (SISE)

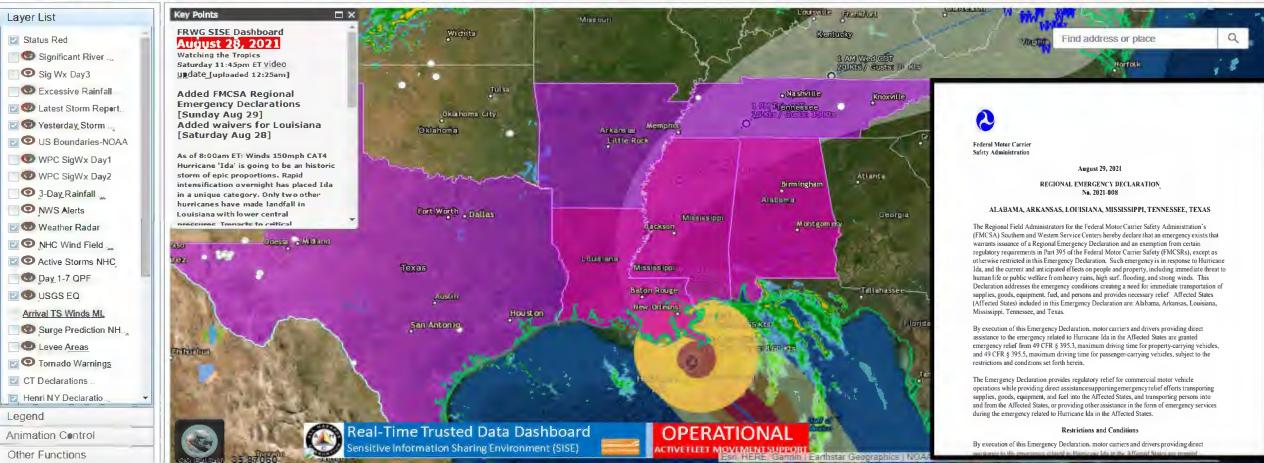




## All-Hazards Consortium - Operational Use

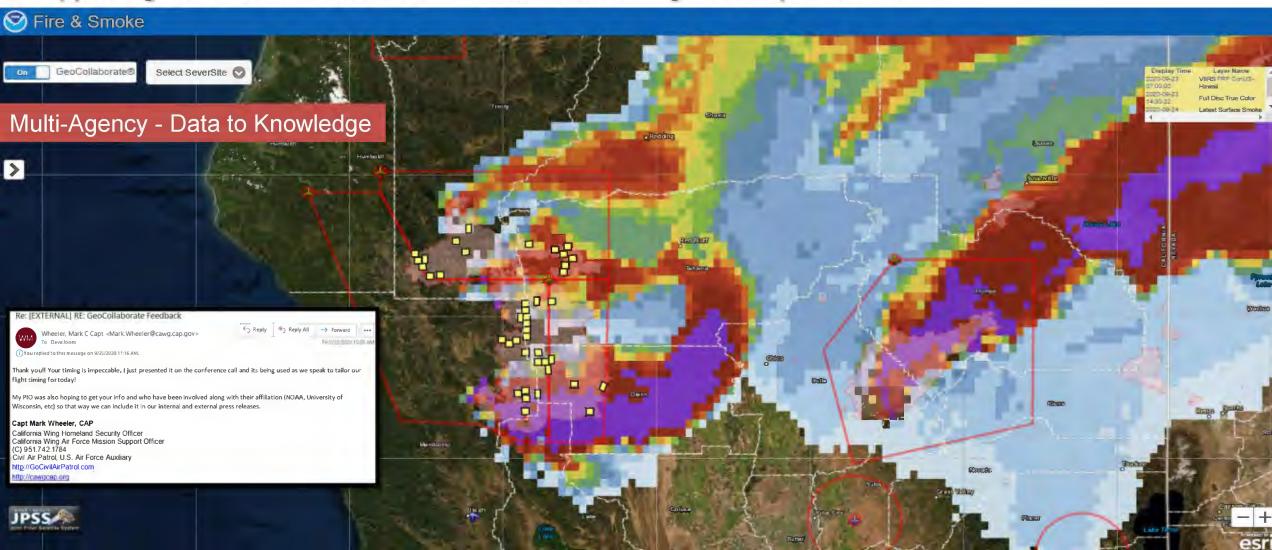
All Hazards Consortium (AHC) – Sensitive Information Sharing Environment (SISE)





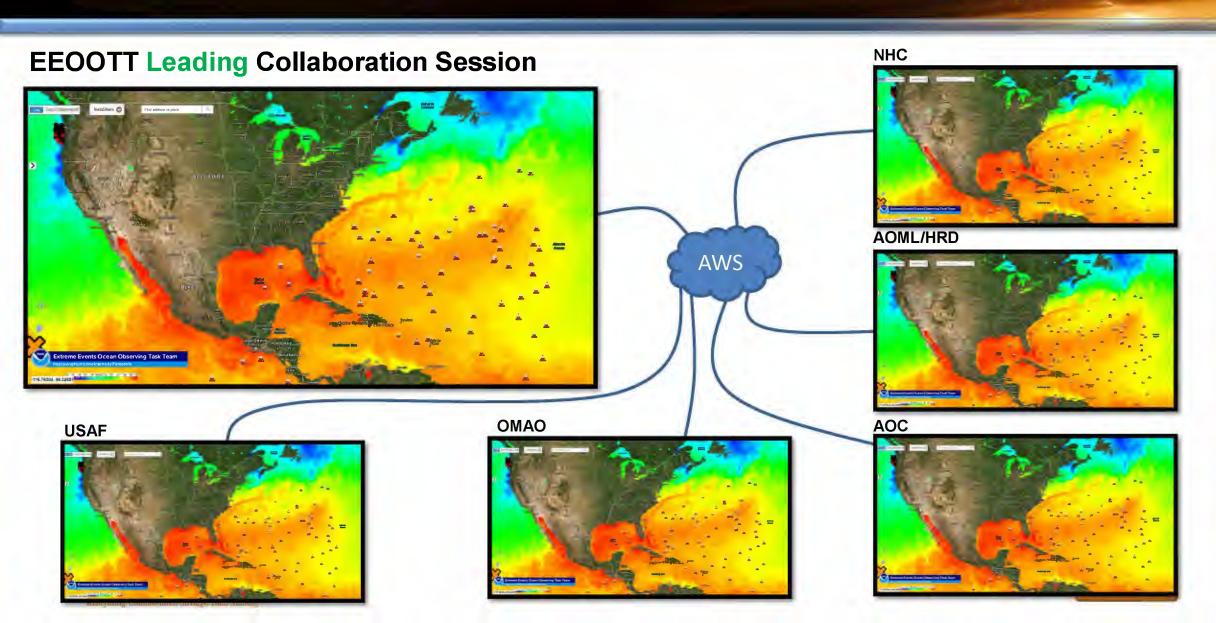
## External Examples of Engaging Users

#### Supporting CA Civil Air Patrol & CA National Guard – August Complex Wildfire



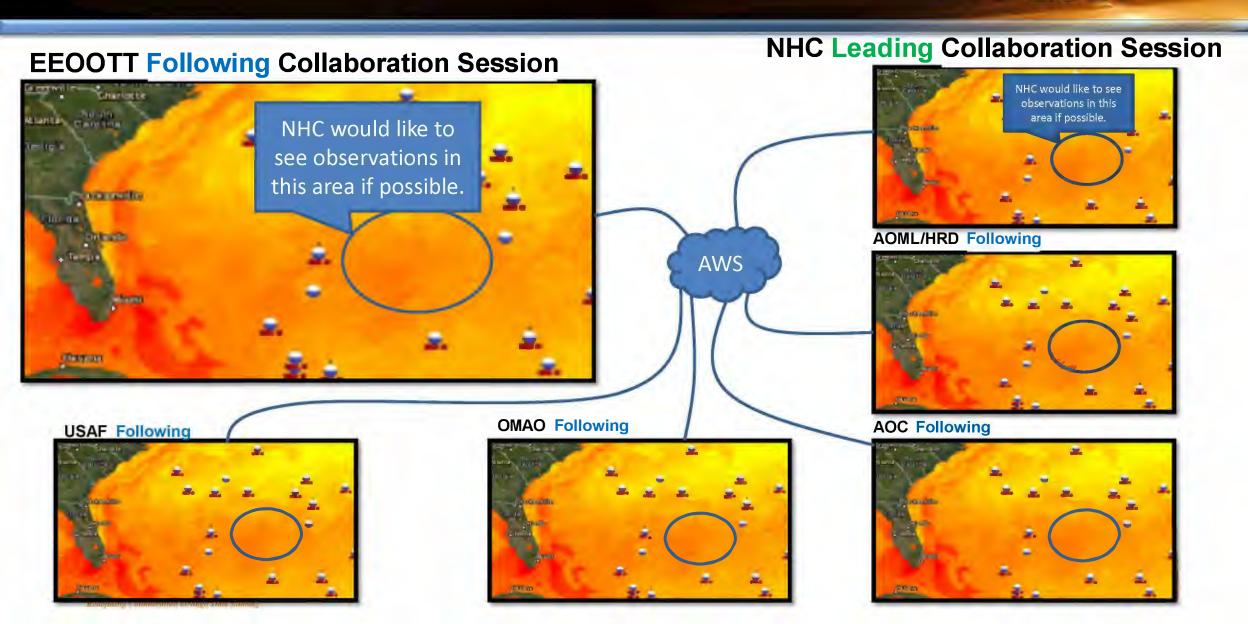
## Simplified Use Case Example

## **EEOOTT Lead**

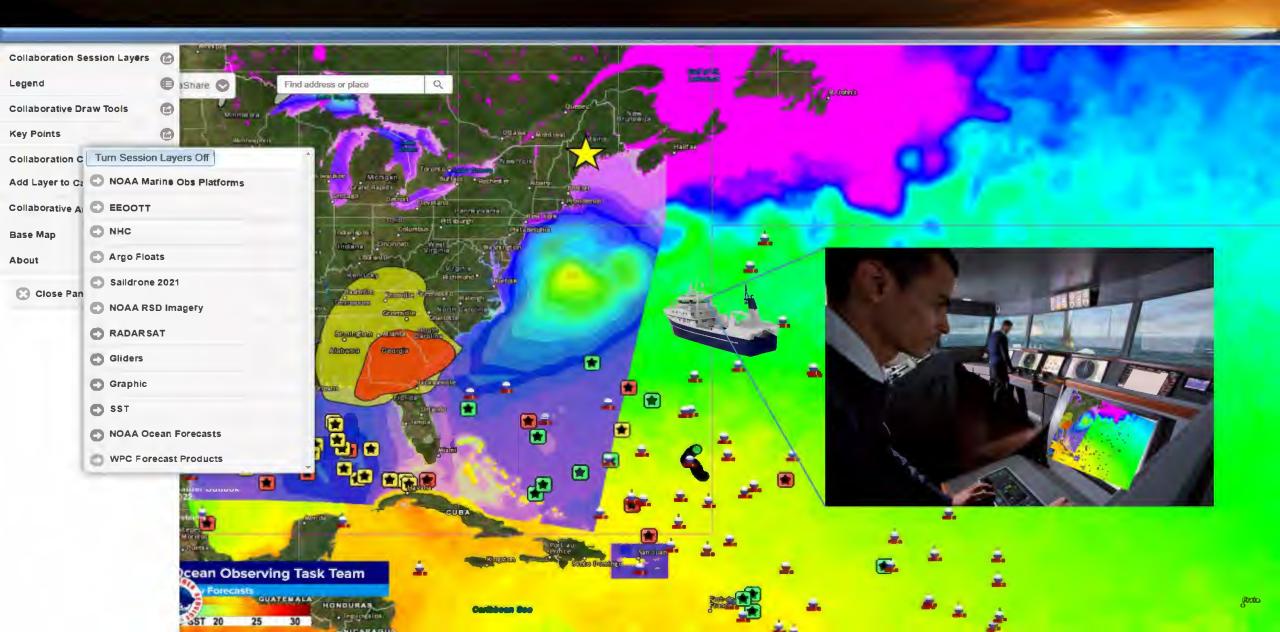


## Use Case Example

## NHC Lead



## CONOPS - Maritime Operator



#### Feedback from NOAA

"As I mentioned in my previous email, this effort needs to seriously consider putting a transition plan together, one with AOC and one with NHC for starters. If we can get GeoCollaborate running at AOC and OMAO, it could also benefit the NOAA ship research/operational collaborations. The NHC collaboration environment would be a model for WFOs to interact with national centers as well."

Frank Marks, NOAA HRD Director

"Why doesn't NOAA just make this a corporate purchase so we all can use it?"

NOAA AOC Chief of Programs





## **Immediate NOAA Opportunities**

- **Tsunami Warning & Alerting** Work with NOAA to produce and deliver tsunami alerts (advisories, warnings, estimated time of arrival of waves and height expected) in geospatial data formats while larger system-wide architecture is being developed.
- Wildfires Engaging communities, home-owner's associations and individuals in the urban wildland interface to understand their risks, improving response and advancing resilience using NOAA and other federal, state and private sector data (partnership with 501(c)3 already engaged in community engagement) – Builds upon existing work with JPSS Fire & Smoke Initiative
- Hurricane Forecast Improvements Accelerate delivery of ocean observations into NHC, HRD, AOC through GeoCollaborate to advance flight planning, coincident observations near existing ocean monitoring platforms. "A collaborative environment will make everything so much easier."
- **Data Exploitation** Exposing more NOAA data to Food, Fuel, Transportation, Energy, Emergency Management, Communications sectors through partnership with the All-Hazards Consortium (AHC) (45,000 members)
- Underserved Communities We can build capacity, inform those in need by delivering NOAA information
  equitably, inspire the next generation of scientists, rapidly deploy and put more NOAA data to work

GeoCollabora

## Opportunities

#### Additional applications across NOAA:

- Climate Services Advancing actionable information on climate change across the nation including underserved communities and strengthen our efforts to confront the climate crisis
- Addressing and building the new Blue Economy Engaging new users of NOAA data, development of new ocean constituencies, supporting enforcement, engaging insurance & re-insurance, development and real-estate with climate risk services
- Communication Expose new users to existing or evolving products, improved briefings and mediaready graphics, provide easy-to-use curated interfaces for specific topics, data-driven decision making and situational awareness, Enhance and improve consistent messaging
- Scientific Collaboration Sharing data across disciplines, agencies, private sector, academia accelerating research to operations with R2O and O2R feedback
- Warning & Coordination IDSS, Oil Spills, Marine Protected Areas, Enforcement, Fisheries, Sea Grant



#### Demo of GeoCollaborate

#### **Questions?**

We would be happy to demonstrate GeoCollaborate at any time

Dave Jones, CEO
StormCenter Communications, Inc
dave@stormcenter.com

Dr. Ellen Prager, Chief Scientist StormCenter Communications, Inc ellen@stormcenter.com



From: Anita Harrington - NOAA Affiliate on behalf of Anita Harrington - NOAA Affiliate <anita.harrington@noaa.gov>

To: Nicole Kurkowski - NOAA Federal

Cc: NOAA Science Council Executive Secretariat

Subject: Re: Request for Materials for Upcoming Science Council Briefing

**Date:** Tuesday, April 5, 2022 10:36:28 AM

Great, thank you Nicole!

Best, Anita

On Tue, Apr 5, 2022 at 9:20 AM Nicole Kurkowski - NOAA Federal <nicole.kurkowski@noaa.gov> wrote:

Anita,

In preparation for the April 12 Science Council Briefings, please see the following:

(1) For the 'LOTMC Quarterly Transition Update for FY21Q4 and FY22Q1' update, please utilize the following materials:

FY21 Q4 Transition Plan Summary and spreadsheet

FY22 Q1 transition update summary and spreadsheet

(2) And for the 'LOTMC - Transition Plan Cleanup - Update" briefing, the materials are as follows: slides and 3TM.

Please let me know if you have any questions.

Regards,

Nicole Kurkowski

On Tue, Mar 29, 2022 at 12:38 PM Anita Harrington - NOAA Affiliate <anita.harrington@noaa.gov> wrote:

Hi Nicole,

We have you tentatively scheduled to deliver 2 briefings on the 'LOTMC Quarterly Transition Update for FY21Q4 and FY22Q1' and 'LOTMC - Transition Plan Cleanup - Update' to the NOAA Science Council at the next meeting scheduled on **Tuesday**, **April 12th from 10:30am to 12:30pm ET via Google Meet.** We have your first 25-min brief tentatively scheduled to begin at **11:25 am** and your second to begin at **11:50 am**. We recommend joining the meeting 15 minutes before your briefing.

Please send your presentations/reports and any background documents to science council execsec@noaa.gov by COB on April 5th.

We already have the NRDD transition plan update presentation and the 3TM for Transition Plan Cleanup we requested last month. Please feel free to update them if needed.

Please let us know if you have any questions!

Thank you, NSC Exec Sec

\_\_

#### Anita Harrington (she/her)

NOAA Science Council Exec Sec CollabraLink Technologies, Inc.

NOAA, OAR, Office of Science Support anita.harrington@noaa.gov



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Nicole P. Kurkowski
OSTI R2O Lead
NOAA/NWS/Office of Science and Technology Integration (OSTI)
Room 15334
1325 East West Highway
Silver Spring, MD 20910
nicole kurkowski@noaa.gov
301.427.9104

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#### Anita Harrington (she/her)

NOAA Science Council Exec Sec CollabraLink Technologies, Inc.

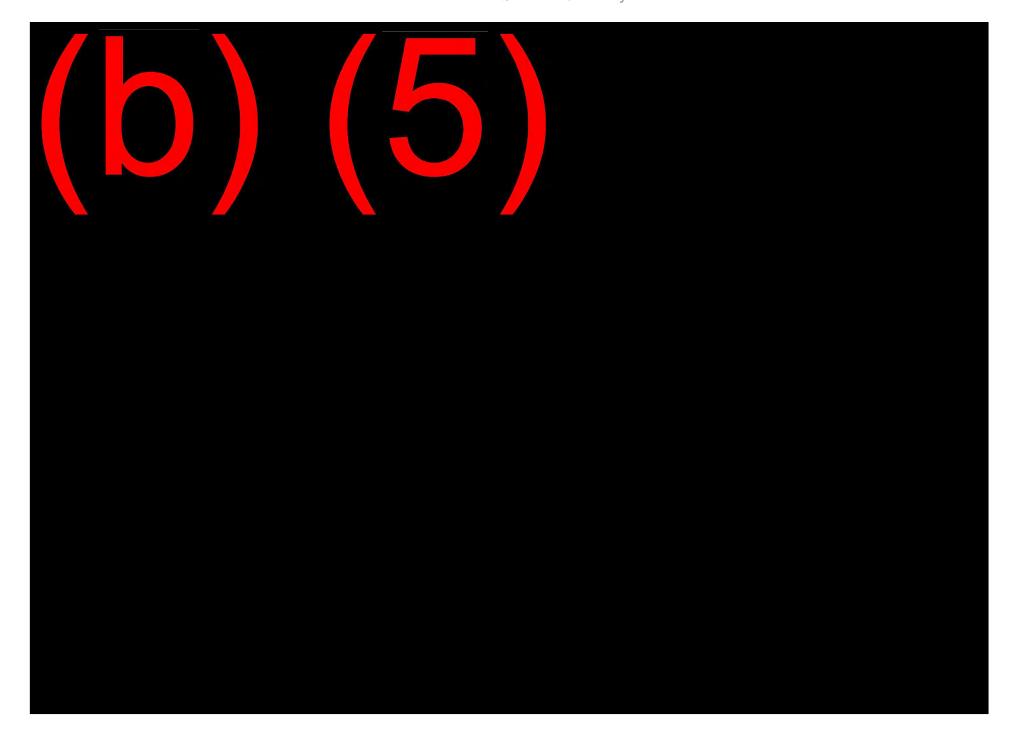
NOAA, OAR, Office of Science Support anita.harrington@noaa.gov





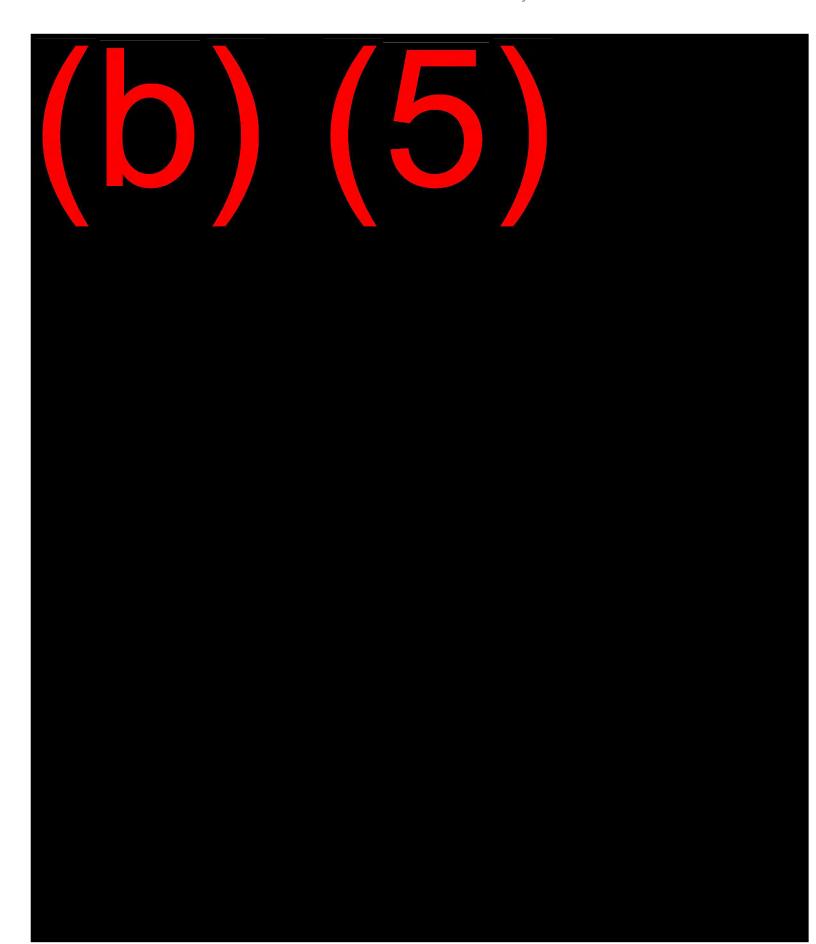








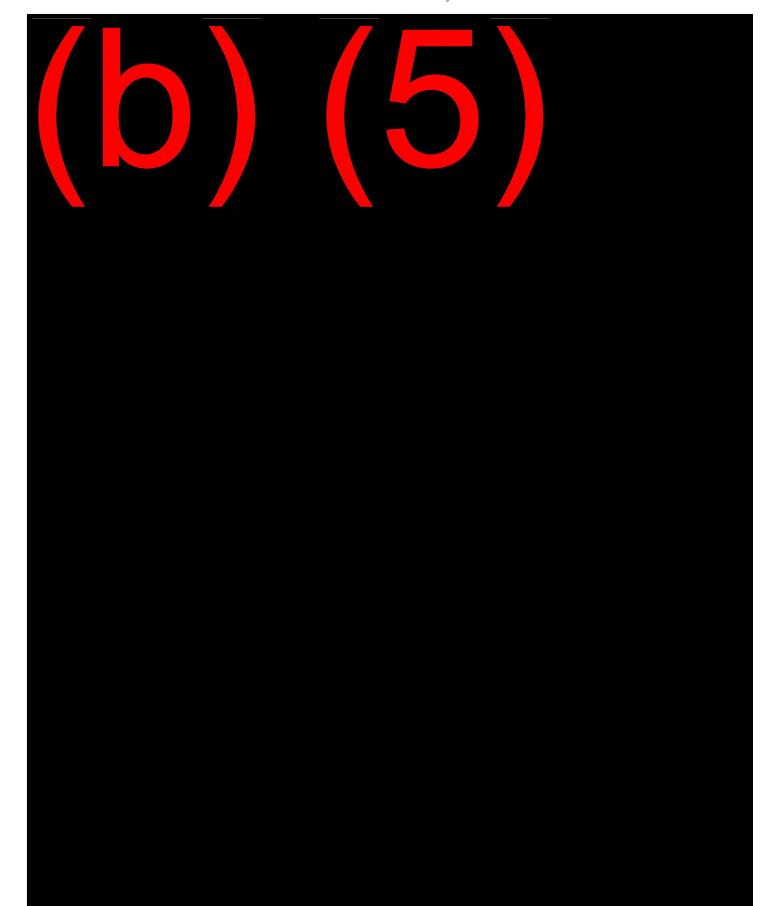




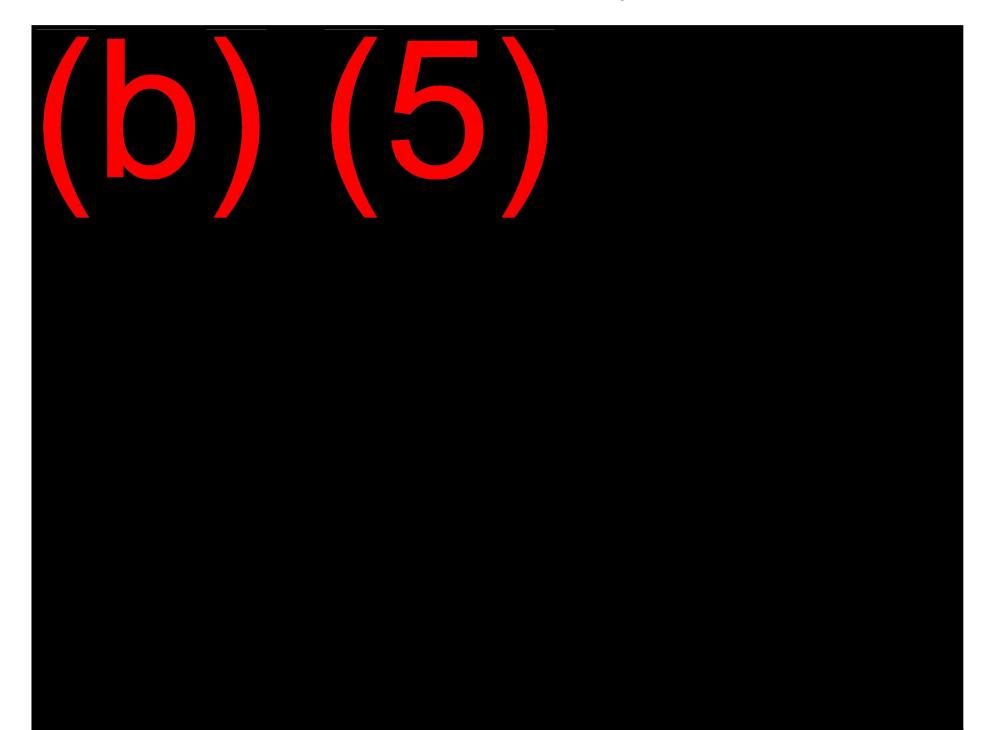
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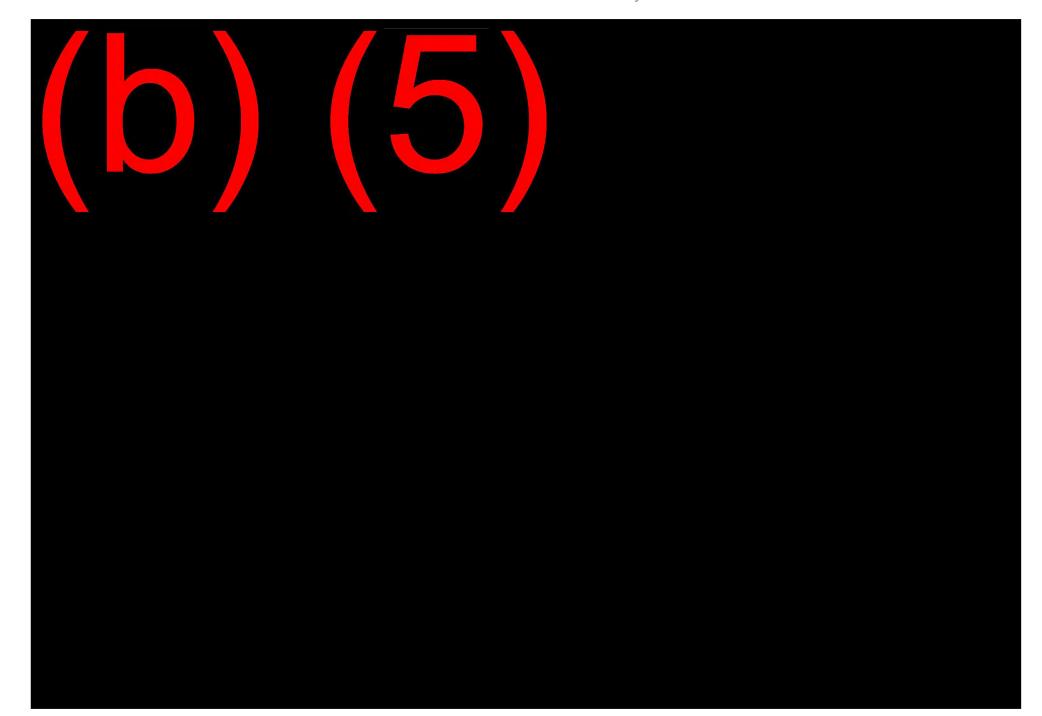
(b) (5)

#### NOAA Quarterly Transition Updates Year 2022 Quarter 1 Summary

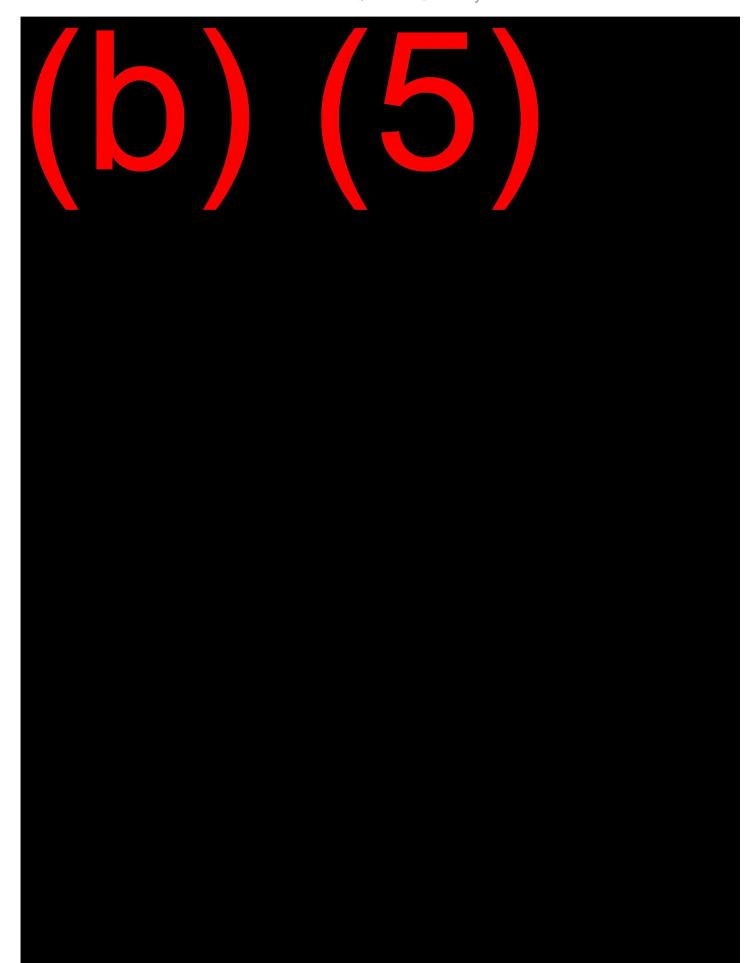


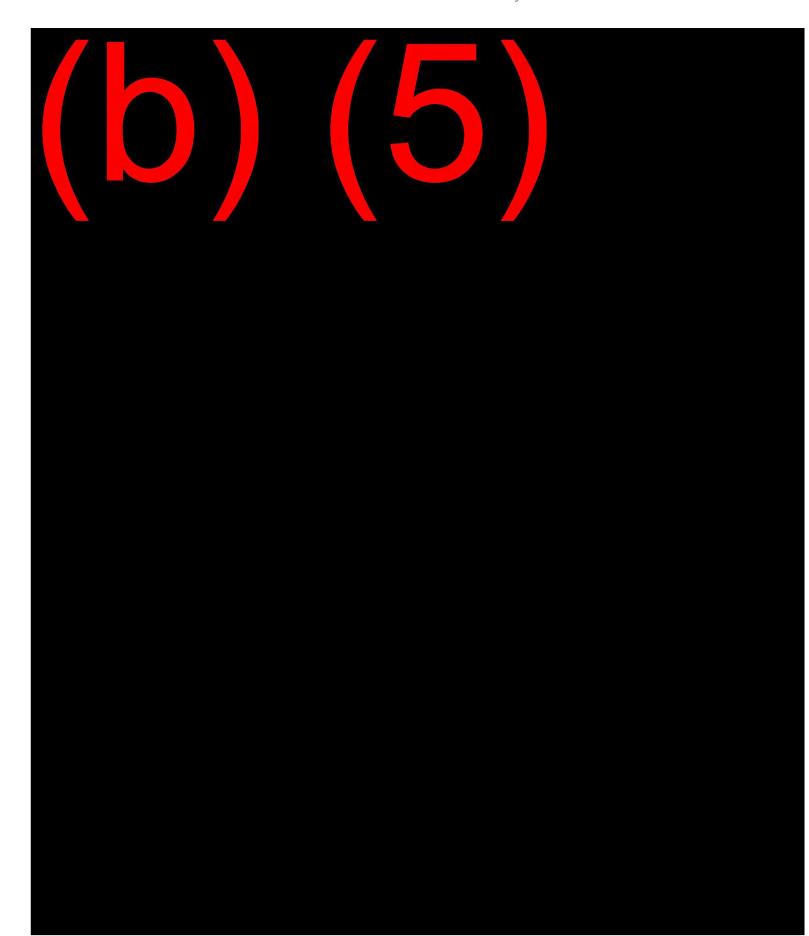












(b) (5)

From: Sabrina Tucker - NOAA Federal on behalf of Sabrina Tucker - NOAA Federal <sabrina.tucker@noaa.gov>

To: Isha Renta - NOAA Federal

Cc: Bruce Pate - NOAA Federal; OAR Science Council Executive Secretariat

 Subject:
 Re: DOC-NOAA-2022-001130

 Date:
 Monday, April 11, 2022 2:57:17 PM

Thank you!

On Thu, Apr 7, 2022 at 4:16 PM Isha Renta - NOAA Federal < isha renta@noaa.gov > wrote: Hi Sabrina,

The files a meeting minutes from the Science or Research Council. The council changed its name to Science Council in early 2021.

The search time would be about 10 hours.

Isha

On Thu, Apr 7, 2022 at 10:57 AM Sabrina Tucker - NOAA Federal <sabrina.tucker@noaa.gov> wrote:

Isha

For more clarification we will need the **Search time** excluding the following:

"reading, revising and redaction, and team meetings"

Thanks in advance

On Thu, Apr 7, 2022 at 8:09 AM Sabrina Tucker - NOAA Federal <sabrina.tucker@noaa.gov> wrote:

HI Isha

I hope this email finds you well

Please provide how the files were named for the NOAA Science Council meeting.

We would like to conduct a vault search as well.

Thanks in advance

On Tue, Apr 5, 2022 at 4:02 PM Isha Renta - NOAA Federal <i sha.renta@noaa.gov> wrote:

Hi Bruce,

Thanks for this information.

1. The estimated hours needed to conduct a search for potentially responsive records. About 45 hours (including looking for documents, reading, revising and redaction, and team meetings on this). These are about 5 page documents, for monthly meetings, for 5.3 years, it ends up being over 50 documents.

2. The GS grade of the person conducting the search.

#### **GS-13**

3. Method of Search and or Locations searched:

(e.g., emails, search term used, shared drive, hard drive, database, file cabinets)

#### **Emails, Google Drive and shared drive**

Hope this answers your questions. Isha

On Tue, Apr 5, 2022 at 11:39 AM Bruce Pate - NOAA Federal <a href="mailto:bruce.pate@noaa.gov">bruce.pate@noaa.gov</a> wrote:

Isha, before pulling any documents we need you to answer the questions Sabrina sent in her email to determine the fee. After our determination we will let you know if the requester must pay a fee. If so, the requester has 30 days from notification to send the money to NOAA FOIA Office. We will let you know that NOAA has received payment and we need you to provide the documents by a date (**TBD**).

If we determine that there is no fee involved we will need you to provide the documentation by **April 15**.

thanks in advance

v/r Bruce P

On Tue, Apr 5, 2022 at 10:15 AM Sabrina Tucker - NOAA Federal <<u>sabrina\_tucker@noaa\_gov</u>> wrote:

HI Isha

In the meantime, please provide the following information

In your response you must include the following information:

- 1. The estimated hours needed to conduct a search for potentially responsive records.
- 2. he GS grade of the person conducting the search.
- 3. Method of Search and or Locations searched:

(e.g., emails, search term used, shared drive, hard drive, database, file cabinets)

Thanks in advance

On Tue, Apr 5, 2022 at 10:09 AM Isha Renta - NOAA Federal <isha.renta@noaa.gov> wrote:

Thanks for the clarification! We'll be in touch soon with the documents.

On Tue, Apr 5, 2022 at 9:37 AM Sabrina Tucker - NOAA Federal <sabrina.tucker@noaa.gov> wrote:

Hi Isha

My apologies.

Once you provide the potential records with recommended redactions we will review them.

Upon our completion these records are then reviewed by General Counsel.

On Tue, Apr 5, 2022 at 9:33 AM Isha Renta - NOAA Federal <isha.renta@noaa.gov> wrote:

Hi Sabrina,

Thanks. Maybe my question was not clear. I would like to know what the process is after we send the documents to you and Bruce. Are the documents going to be read by someone? For example the General Counsel?

Thanks for clarifying, Isha

On Tue, Apr 5, 2022 at 9:05 AM Sabrina Tucker - NOAA Federal <sabrina tucker@noaa.gov> wrote:

Hi Isha

The guidance is as follows:

OAR received the following FOIA Request:

"A copy of the meeting minutes for each meeting of the NOAA Science Council, maintained within the Science Council Meetings folders on Google Drive, maintained by the NOAA Science Council Executive Secretary. I limit my request to the timeframe January 1, 2017 to present."

If you believe your office has responsive records. please respond by COB 04/6/2022 (No responsive records are due at this time).

If your office has no responsive records a negative response is still required.

If you believe we need to ask clarifying questions of the requester, please let me know.

In your response you must include the following information:

1. The estimated hours needed to conduct a search for potentially

responsive records.

- 2. The GS grade of the person conducting the search.
- 3. Method of Search and or Locations searched: (e.g., emails, search term used, shared drive, hard drive, database

(e.g., emails, search term used, shared drive, hard drive, database, file cabinets)

Attached is the original FOIA request

If you have any questions please let me know.

Thanks in advance

On Tue, Apr 5, 2022 at 8:53 AM Isha Renta - NOAA Federal <isha.renta@noaa.gov> wrote:

Hi Sabrina,

We can try to find the documents. What is the process once these are sent to you?

Thanks, Isha

On Tue, Apr 5, 2022 at 8:07 AM Sabrina Tucker - NOAA Federal < sabrina tucker noaa gov > wrote:

Hi Isha

Per your request for clarification see below the Requesters response.

Attached for your reference is the scope clarification letter as well.

Please let me know if you have any questions.

Thanks in advance

Dear Ms. Tucker:

I did not understand your letter seeing clarification.

My Freedom of Information Act request asked for the meeting minutes of the NOAA Science Council. I limited my request to the minutes of the meetings since January 1, 2017. I said that the meeting minutes were maintained by the NOAA Science Council Executive Secretary.

This seems very clear and very specific. The person who is most

familiar with these meeting minutes records is Ms. Ishrat Jabin, the Management and Program Analyst in the Office of Science Support, NOAA OAR, who works to support the NOAA Science Council.

If you are still uncertain about what NOAA Science Council meeting minutes are, you can either give me a call to discuss (301-592-8808 or 240-353-0602) or else you can contact Ms. Jabin and check with her.

Sincerely,

Michael Ravnitzky 1905 August Drive Silver Spring, MD 20902 mikerav@verizon.net 301-592-8808

Hi Michael,

Yes you would need to do a FOIA request to obtain Science Council meeting minutes, as they are internal NOAA information.

On Thu, Mar 24, 2022 at 4:07 PM 'Michael Ravnitzky' via NOAA Science Council Executive Secretariat <science council execsec@noaa.gov> wrote:

Do I need to do a FOIA request to get copies of Science Council meeting.

Do I need to do a FOIA request to get copies of Science Council meeting minutes?

Sincerely,

Michael Ravnitzky mikerav@verizon.net

Ishrat Jabin (she/her)
Management and Program Analyst
Office of Science Support, NOAA OAR
ishrat jabin@noaa.gov

On Mon, Apr 4, 2022 at 3:50 PM Sabrina Tucker - NOAA Federal <<u>sabrina.tucker@noaa.gov</u>> wrote:

Bruce

Thanks for your email.

Isha: I will send a note to the requester for Scope Clarification and keep you posted

Thanks in advance

On Mon, Apr 4, 2022 at 3:29 PM Bruce Pate - NOAA Federal

< bruce\_pate@noaa\_gov> wrote:

Isha, I missed reading your request for an extension. Our deadline is April 27. We will need your response by 15 April.

v/r Bruce P

On Thu, Mar 31, 2022 at 2:40 PM Isha Renta - NOAA Federal <isha.renta@noaa.gov> wrote:

Great, thanks!

On Thu, Mar 31, 2022 at 11:24 AM Bruce Pate - NOAA Federal < bruce pate noaa gov wrote:

Isha, yes that will be fine.

v/r Bruce P

On Thu, Mar 31, 2022 at 10:54 AM Isha Renta - NOAA Federal <isha.renta@noaa.gov> wrote:
Hi Sabrina,

Thanks for reaching out. Could we get an extension on this request until around May 27th? We are short staffed and don't have the bandwidth at the moment to have this ready by next week. Also, it would be easier if the requestors know what exactly they need so that we can narrow it down. Is that something that you could ask them? If there is a specific topic, we could share those minutes only instead of having to go over 50+ documents.

Please let me know how you would like to proceed.

Thanks, Isha

On Wed, Mar 30, 2022 at 5:10 PM Sabrina Tucker - NOAA Federal < sabrina tucker noaa gov wrote:

HI Isha

OAR received the following FOIA Request:

"A copy of the meeting minutes for each meeting of the NOAA Science Council, maintained within the Science Council Meetings folders on Google Drive, maintained by the NOAA Science Council Executive Secretary. I limit my request to the timeframe January 1, 2017 to present."

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Attached is the original FOIA request

If you have any questions please let me know.

Thanks in advance

Isha M. Renta López
NOAA/OAR/Office of Science Support
Silver Spring, MD
302.715.1027
@NOAAResearch

Bruce Pate

OAR/Management & Organizational Development Division

National Oceanic & Atmospheric Administration

Phone: (301) 734-1191

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NOAA/OAR/Office of Science Support
Silver Spring, MD
302.715.1027
@NOAAResearch

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Bruce Pate

OAR/Management & Organizational Development Division

National Oceanic & Atmospheric Administration

Phone: (301) 734-1191

v/r
Sabrina Tucker
(202) 594-7525
Support Specialist
OAR/Management & Organizational Development Division
National Oceanic & Atmospheric Research

v/r
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(202) 594-7525
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OAR/Management & Organizational Development Division
National Oceanic & Atmospheric Research

**Bruce Pate** 

OAR/Management & Organizational Development Division

National Oceanic & Atmospheric Administration

Phone: (301) 734-1191

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National Oceanic & Atmospheric Research

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v/r
Sabrina Tucker
(202) 594-7525
Support Specialist
OAR/Management & Organizational Development Division
National Oceanic & Atmospheric Research



NOAA SCIENCE COUNCIL MEETING March 15, 2022 10:30 AM to 12:30 PM EST Google Meet

## **MEETING MINUTES**

#### **ATTENDEES**

Executive
Craig McLean, Chair
Cisco Werner, Vice Chair
Ishrat Jabin, Exec Sec
Anita Harrington, Exec Sec

Principal
Mitch Goldberg, NESDIS
Gary Matlock, OAR
Evan Howell, NMFS
Steve Thur, NOS

Jamese Sims, S&T Synergy Committee representing NWS

Advisory

Deirdre Clarkin, NOAA Libraries Advisory Committee
Cynthia Decker, Scientific Integrity Committee and NOAA
Science Advisory Board
Shannon Louie, Cooperative Research Committee
Kelly Wright, Technology Partnerships Office
Hendrik Tolman, Council of NOAA Fellows

Other Attendees Eric Allen, NWS Fiona Horsfall, OAR Joan Segal, OAR Kelly Wright, OAR Melissa Yencho, NMFS Neil Christerson, OAR Joseph Fillingham, OAR Julie Price, NESDIS Eric Bayler, NESDIS Frank Indiviglo, SO Jennifer Fagan-Fry, OAR Susan Roberts, NAS Terrence Lynch, OAR Victoria Moreno, OAR Sarah Davis, OAR

#### APPROVAL OF MINUTES AND REVIEW OF ACTION ITEMS

Notify Exec Sec at <a href="science.coucil.execsec@noaa.gov">science.coucil.execsec@noaa.gov</a>, within two weeks of the following meeting if any changes to the minutes are needed. Minutes from the February 8th NOAA Science Council meeting were approved. The Exec Sec reviewed all current action items.

## **CHAIR ANNOUNCEMENTS:**

- The Science Report is very close to being released
- The Office of Human Capital is getting close to finalizing a science career track report whoever is chairing the science council should take on that responsibility. This report will have a very positive impact on diversity and inclusion

• Cisco Werner has been asked to serve as the Acting OAR AA and the chair of the Science Council ('performing the duties' of the Chief Scientist, not acting)

**BRIEFINGS**: Briefing materials are available in the Science Council Meetings 2022 folder on Google Drive.

## National Academy of Sciences - Ocean Studies Board - Susan Roberts, NAS

The OSB board meetings provide a forum to discuss ocean research, infrastructure, technology and policy. If there is anything that NOAA wants to discuss at OSB's next meeting please bring it to Susan's attention so she can bring it to the meeting. With OSB transitioning to virtual meetings, there was funding left over which allowed them to do more dissemination than in the past. OSB had a congressionally mandated study 'Global Ocean Plastic Waste', there were a lot of requests for briefings on this study and a lot of press interest. A full list of OSB Reports and Workshops was provided. Susan is happy to follow up with anyone on any of these studies. Susan went over OSB activities in progress and reviewed a list of topics the board would like to pursue, the highest being increasing diversity, equity, inclusivity, justice and belonging in the U.S. Ocean Studies Community. OSB is also interested in getting more involved in ocean deoxygenation, ocean acoustics; they want to educate and train acousticians. They have seen a huge amount of interest in ocean plastics and are considering how to move forward with that. The next edition of the OSB Biennial report will be coming out at the end of month. Plug for the Roger Revelle Commemorative Lecture. The lecture will be published in the next issue of oceanography. The 2022 Lecture on April 28th will be John Dabiri from CalTech and there will be a watch party in DC.

### Discussion

The Vice Chair asked Susan if the board has an update on DEIJA and if there is some way NOAA can help. Is offshore wind being called for to establish a standing subcommittee? What is a digital twin? The OSB recognizes this is an issue and an effort for all of the community and have talked to NASA, NSF, BOEM, foundations; they are working on trying to put together a whole community effort. The standing committee just started talking to BOEM regarding offshore wind and fisheries. It is a tricky topic and BOEM is looking for help connecting with the fishing community. Regarding digital twins: it is a very dynamic modeling tool in which a physical system is fed comprehensive data so that it provides a virtual representation of the system. The Chair acknowledges that the EU is fond of promoting the digital twin of the ocean and strives to do this by 2024 but there are a lot of obstacles since there is a lack of data. NSC principal asks OSB to speak a bit more about the deoxygenation work and mentions that there is a congressional mandate on HAB and hypoxia but there is not much interest in this research besides in the Gulf. There is a lot of interest from OSB on the topics and how changes in circulation will impact oxygenation. The Vice Chair states that Bluefin tuna and tuna in general are finely tuned to oxygen levels so any changes will have a significant impact on these populations. The oxygen issue is a huge theme on the fisheries side. There is agreement that there is an opportunity to highlight hypoxia in the strategic plan. Over the last 6 months, an increasing amount of legislative activity is causing duplication of effort and there is a failing understanding of the existing responsibilities of agencies. OSB does outreach to congressional staff and there's a possibility to discuss these overlaps and inefficiencies - This topic will be discussed at the next OSB meeting. The Chair suggests having a liaison at the academy who can encourage agencies to expand studies beyond

their self interest studies to get better use of a given product. The Chair invites any members of the NSC to join academies committees.

Library IR Annual Briefing - Jennifer Fagan-Fry, NOAA Library (FY21 Annual Operating Report)
Last year, the NSC tasked the library and RDEC to address and improve PARR compliance. A list of recommendations was transmitted to the NSC in June 2021 that included an increase in communication from leadership about PARR, including PARR requirements in performance plans, incorporating PARR in trainings, and establishing RPTS reminders to submit manuscripts. RDEC identified groups responsible for these recommendations. After a NOAA-wide email about PARR compliance, there was a sharp spike in submissions. The total number of submissions (any publication sent to IR through email, sub form, PTS, the fisheries tracking system, or through pub med central) was 7056 for 2021. In FY 21, there was a 40% increase in submissions. The compliance rate for 2021 was 34.7%. In 2021, the building metrics team worked on determining PARR compliance by line office. The library goals for 2022 include an integrated submission system to improve efficiency and reduce duplicates. The library is working on integrating the national Sea Grant library. The library joined the ORCID integration so there could be a digital persistent identifier for each individual researcher.

Recommendations library identified: Implement all RDEC recommendations to improve compliance rate to 50% by end of FY2022.

A standardization of the publishing process for NOAA is needed. This may look like an official style guide, a central procedure for publication, a NOAA- wide adoption of RPTS, or policy development for open access publishing

### Discussion

NOAA as a whole is lacking commitment. RPTS is not yet used throughout the entire agency. Instead, 15 different systems are used and each does the same thing. There is concern among the Council that a 50% compliance rate target is not aggressive enough. Anything NOAA can do to ensure science is visible and accessible and well known should be the top priority. Is there a policy for publishing in predatory journals? The SAB policy prohibits NOAA scientists from publishing in predatory journals. This policy may need to be socialized better. Through the library, employees have access to a predatory list guide. The Chair suggests the Council of Fellows should make sure they are aware of these materials and asks Hendrick Tolman to take the lead to ensure they are educated on this. The Chair states they are aggressively seeking a full-time scientific integrity officer. The library is working to provide more specifics to the line offices detailing which publications are missing, however, that is very time consuming. The Library states that it would be most helpful to get employees to start using RTPS. The Library should work with the RDEC to assist in increasing PARR compliance. A few ideas were shared for how to do this including capturing quarterly statistics within RPTS or a quarterly report that shows publications that have not hit the IR.

**ACTION:** The Chair concludes that the RDEC and the Library can work together on this and recommends a response for the next NSC meeting.

**Review of Science Council's Achievements and Next Steps** - Cisco Werner, Vice Chair

The Science Council provided thanks to Craig for his leadership during his time as NSC chair. Members thanked Craig for putting NOAA on the map, keeping the conversations fresh and relevant, remaining inclusive and communicative, elevating the importance of Scientific integrity, and for his humor and

wit. Craig provided thanks to the Science Council Exec Sec for their assistance running the SC meetings, the members for bringing their best thoughts and concerns, and to Dr. Spinrad for his leadership

# **ANNOUNCEMENTS**

• The next NOAA Science Council meeting is on April 12th at 10:30am - 12:30pm ET via Google Meet.

# **ACTION ITEMS**

Date Assigned or Action Number	Subject Line	Assigned To	Due Date	Status
20181009 - 7	State of the Science Fact Sheet - Oceanic Extreme Events: Marine Heatwaves	NMFS	12/18/2018	Approved by the Chair and posted to Science Council Website
	State of the Science Fact Sheet - Air Quality	OAR	Dec 23rd	Point paper and memo transmitted to CCU.
20200211 - 7	Update to SoS fact sheet on stock assessment	NSC	End of 2020	Point paper and approval memo being developed.
20210713 - D1	New State of the Science fact sheet on methane for climate change	OAR	End of 2021	In progress
	State of the Science Fact Sheet - SLR and Coastal Inundation	NOS	03/09/2022	Showstopper comments will be compiled and addressed.
20210921 - D1	Transition Reports	LOTMC	Marich 2022	Science Council will recieve updates in March
20211109 - 01a	Hiring Managers Seminar	NSC & OEd	March 2022	NOAA Science Council co-sponsor a seminar with the Office of Education
2021 <b>11 09 - 02</b>	UxS Transition Plan on Stated Transitions	OAR & OMAO	February 2022	OAR and OMAO to develop a draft UxS transition plan to push the issue of stalled transitions forward



NOAA SCIENCE COUNCIL MEETING April 12, 2022 10:30 AM to 12:30 PM EST Google Meet

## **MEETING MINUTES**

## **ATTENDEES**

Executive
Cisco Werner, Chair
Isha Renta, Exec Sec
Anita Harrington, Exec Sec

Principal
Mitch Goldberg, NESDIS
Gary Matlock, OAR
Evan Howell, NMFS
Randall TeBeest, OMAO
Steve Thur, NOS
Steve Smith, NWS

## Advisory

Deirdre Clarkin, NOAA Libraries Advisory Committee
Cynthia Decker, Scientific Integrity Committee and NOAA
Science Advisory Board
Shannon Louie, Cooperative Research Committee
Hendrik Tolman, Council of NOAA Fellows
Frank Indiviglo, Chief Information Officer
Natasha White, Office of Education Liaison

Other Attendees Fiona Horsfall, OAR Melissa Yencho, NMFS Joseph Fillingham, OAR Julie Price, NESDIS Eric Bayler, NESDIS Jennifer Fagan-Fry, OAR Terrence Lynch, OAR Victoria Moreno, OAR Ishrat Jabin, OAR Beth Norton, OFA Brooke McHansen, NESDIS Pam Heinselman, OAR Wayne Mackenzie, OAR Annette Hollingshead, OAR Genevieve Lind, OAR Nicole Kurkowski, NWS Bob Kuligowski, NESDIS Francis Choi, OAR James Jenkins, OAR Jeffrey Weirich, NWS Mackenzie Solomon, HDQ Mamoudou Ba, NWS Margo Schulze-Haugen, NOS

## **APPROVAL OF MINUTES AND REVIEW OF ACTION ITEMS**

Notify Exec Sec at science.coucil.execsec@noaa.gov within two weeks of the following meeting if any changes to the minutes are needed. Minutes from the March 15th NOAA Science Council meeting were approved. The Exec Sec reviewed all current action items.

#### **CHAIR ANNOUNCEMENTS:**

None

**BRIEFINGS**: Briefing materials are available in the Science Council Meetings 2022 folder on Google Drive.

## GeoCollaborate - Dave Jones and Ellen Prager, Storm Center

Fiona Horstall opens the meeting with an introduction to SBIR. Dave Jones from Storm Center introduces Ellen Prager. The presentation focuses on getting access to data and delivering it into a decision making environment. How can federal agencies access and share data? The GeoCollaborate site locates data and is shared across all users, unifies the disparate locations to a common place, provides a one to one synchronous environment, and identifies trusted data sources for analysts and users.

Examples for NOAA using GeoCollaborate:

- Working with AOML/HRD using it on the P3 and G-IV, and to use ocean obs, identify dropsondes with ocean observing platforms
- With GOMO ocean observing task team keep track for ocean assets on advisories for tropical storms, and getting the data to NWP
- National Water Center uses GeoCollaborate to communicate with state officials
- NOAA JPSS early adopter for fire and flood, Trop Storm, river & ice, used with partners

#### Discussion

NMFS suggests that the GeoCollab team talk with Toni Lavoi and Joe Pica from NCEI and the team informs them that they have provided the presentation to Toni and the NOSC, will check with NCEI. NESDIS has been supporting this and suggests that each LO look for the shortfalls and see how geocollaborate would improve that interaction working with other federal agencies. GeoCollab team says we have learned a lot. Simply making data available is not sufficient, but when you explain to them what the data means, it opens a world of possibilities for them. GeoCollab has already spoken with Dr. Spinrad and are investigating IDIQ possibilities. OMAO asks, what are your thoughts on the types of data available at any time... what about other platforms like NOAA vessels? Think of Geocollab as an access server - sends the commands to all followers where is the data. The data is accessed from any follower from any source. For example, Vessel tracking - Geocollab could add that, there may be a fee, but it can be available. Datasets are not downloaded or saved. If the ship is providing data and as long as it is in the right format, GeoCollaborate can use it.

## Review of NAO Scientific Integrity— Cynthia Decker, Science Advisory Board

Cynthia presents the slides which cover the updated NAO which has not been revised in 9 years. There is a new Presidential memo on SI so this is very timely.

Discussion

The Chair asked the Council to please make the time to review this. Council member questions what the word 'dissent' means in this case? Pre-print matters? Cynthia explains dissent has not come as a question, but she is happy to do the research on the processes from other agencies.

**ACTION:** NSC to review the NAO by April 26th

# **LOTMC Quarterly Transition Update for FY21Q4 and FY22Q1**– Nicole Kurkowski, LOTMC exec sec Briefing on the Q4-FY21 and Q1-FY22 Transitions

Discussion:

The Chair asks, are you seeing a steady state in the transitions? OAR responds that the trend is upward but not a steep slope. OAR would argue that the number of projects that are getting transitions is underestimated as they are not all in NRDD. NWS points out that the Council has spoken about this before, NWS is at 100% kudos to Nicole for making that possible. The Chair points out that numbers for NMFS may be underestimating. NMFS agrees that may be possible - it may be that they need to learn how to leverage NRDD better. NESDIS agrees,

they may need to socialize NRDD better. NWS says the RLTTF is making a lot of effort on this information and how to do knowledge transfer.

# LOTMC - Transition Plan Cleanup - Update - Nicole Kurkowski, LOTMC exec sec

The Science Council tasked the LOTMC with providing a summary of current existing transition plans and identifying what needs to be updated, as well as clean up stray plans, based on feedback from Dr. Spinrad. They found out of **183 transition plans** 

- **146** were fully signed
- 25 plans were not transition plans
- 11 plans were missing signatures
- O 1 was associated with a broken NRDD link.
- The LOTMC recommends providing Dr. Spinrad with an updated "notebook" of transition plans along with the updated summary of transition plans spreadsheet, and the summary of clean-up activities.

#### Discussion

The Chair asks what timeline do you recommend to respond to Spinrad? LOTMC exec sec responds with ASAP. OAR says it is pleasing to see the engagement on this topic and we have a great story to tell. OAR has two suggestions to further the notion: 1. Quarterly report - add how many projects have transition plans? If not, should we not consider them? It would be powerful to add what difference it makes to model improvement to increase efficiency? Would generating a new model improve the hurricane prediction? Improve sustainability of turtles? Useful to know the R&D transition is helping the future. Why is the transition being done and what difference is it making? OAR would like to identify ORTA on the work they are doing about implementing these tools to make it easier and understandable.

ACTION: NSC and LOTMC respond to Dr. Spinrad with updated transition plans and activities through a memo.

### NOAA NSF Summit - Cisco Werner

The Chair provided an update on the NOAA-NSF Summit. Originally, it was planned for early Summer but the decision was made to push it until September to allow for more time to plan and prepare. Additional topics may be added.

#### **ANNOUNCEMENTS**

 The next NOAA Science Council meeting is on May 10th at 10:30am - 12:30pm ET via Google Meet.

# **ACTION ITEMS**

Science Council: This spreadsheet lists all current open action items currently assigned to the Council. Additional information for each entry can be found in the original email assigning this task. If you have any questions, please email oar.rc.execsec@noaa.gov.

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20181009 - 7	State of the Science Fact Sheet - Oceanic Extreme Events: Marine Heatwaves	NMFS	12/18/2018	Approved by the Chair and posted to Science Council Website
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	State of the Science Fad Sheet - SLR and Coastal Inundation	NOS	03/09/2022	Showstopper comments will be compiled and addressed.
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20211109 - 01a	Hiring Managers Seminar	NSC & OEd	March 2022	NOAA Science Council co-sponsor a seminar with the Office of Education. The first seminar was successful. Planning for the next seminar has begun.
20211109 - 02	UxS Transition Plan on Stalled Transitions	OAR & OMAO	February 2022	OAR and OMAO to develop a draft UxS transition plan to push the issue of stalled transitions forward