

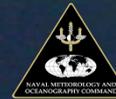
# USACE NCMP Update

Chris Macon

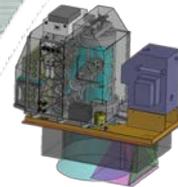
17<sup>th</sup> Annual JALBTCX Workshop

Silver Spring, MD

21 July 2016



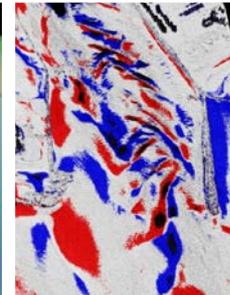
Joint Airborne Lidar Bathymetry Technical Center of Expertise



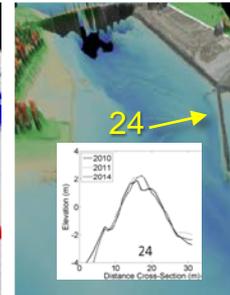
RESEARCH & DEVELOPMENT



OPERATIONS & MAINTENANCE



REGIONAL SEDIMENT MANAGEMENT



ASSET MANAGEMENT

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U.S. ARMY



US Army Corps of Engineers  
**BUILDING STRONG**





U.S. ARMY

# RCD30 Integration



ING STRONG



/alue

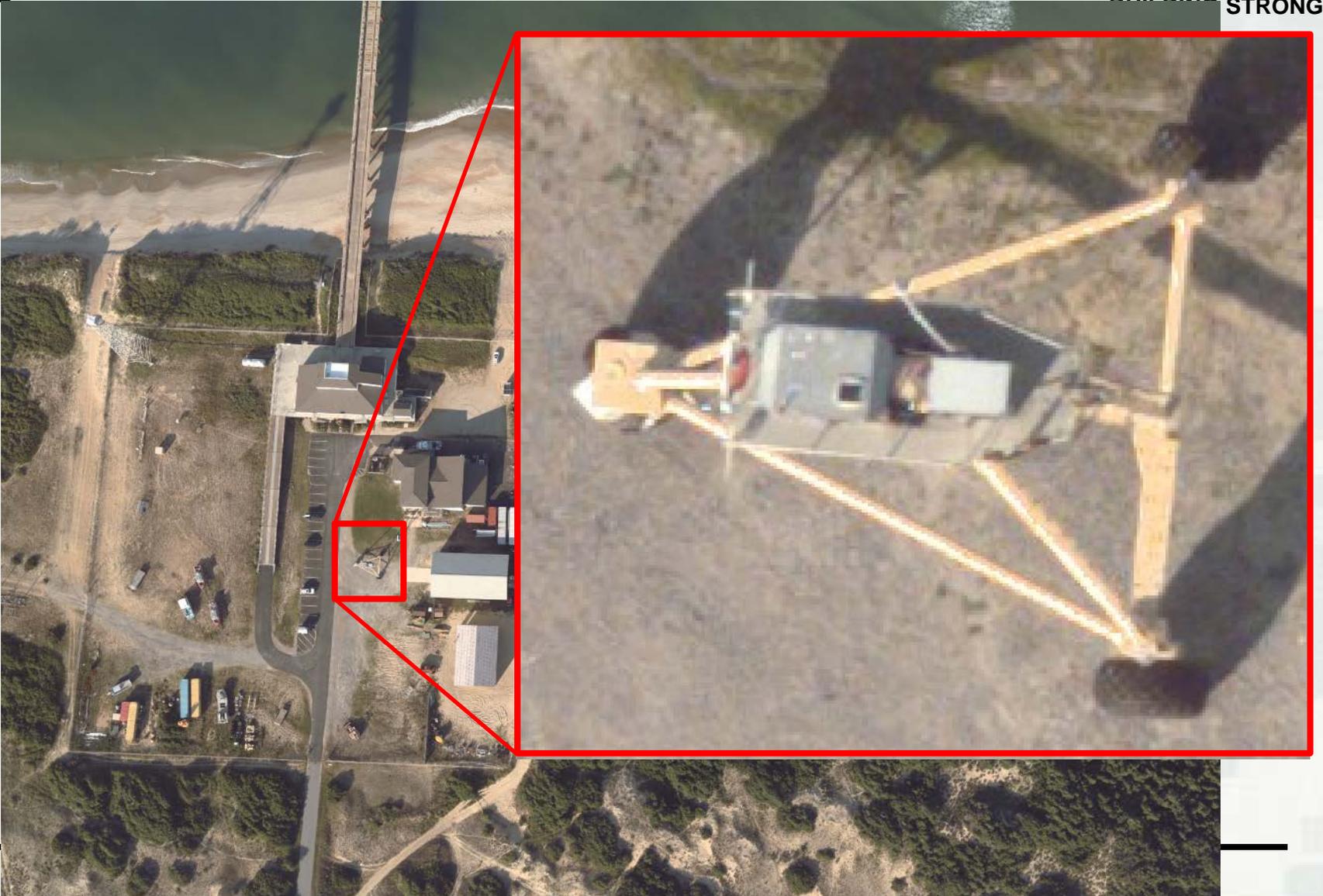


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# RCD30 Integration



BUILDING STRONG

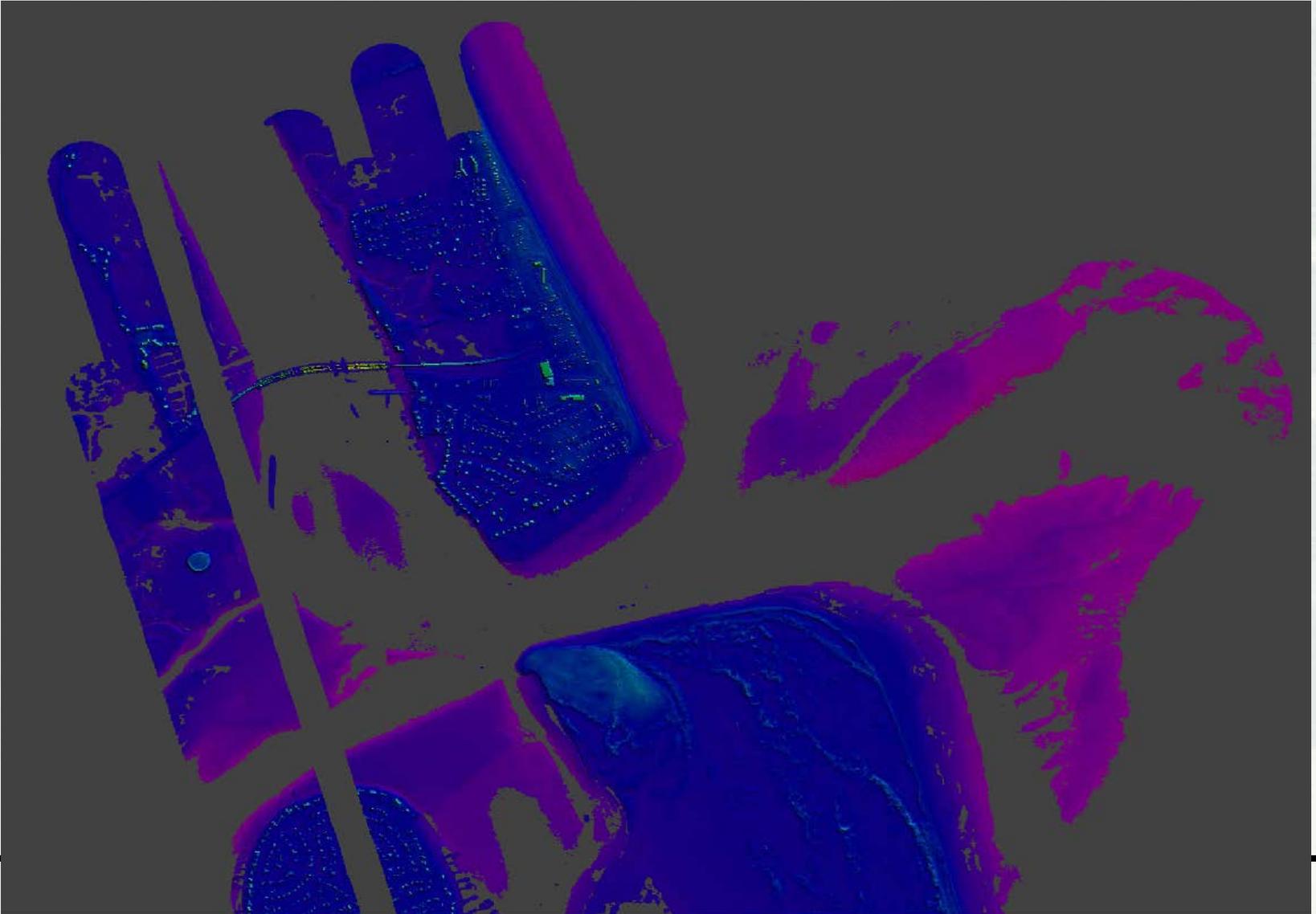




# Turbid Water Module



**BUILDING STRONG**

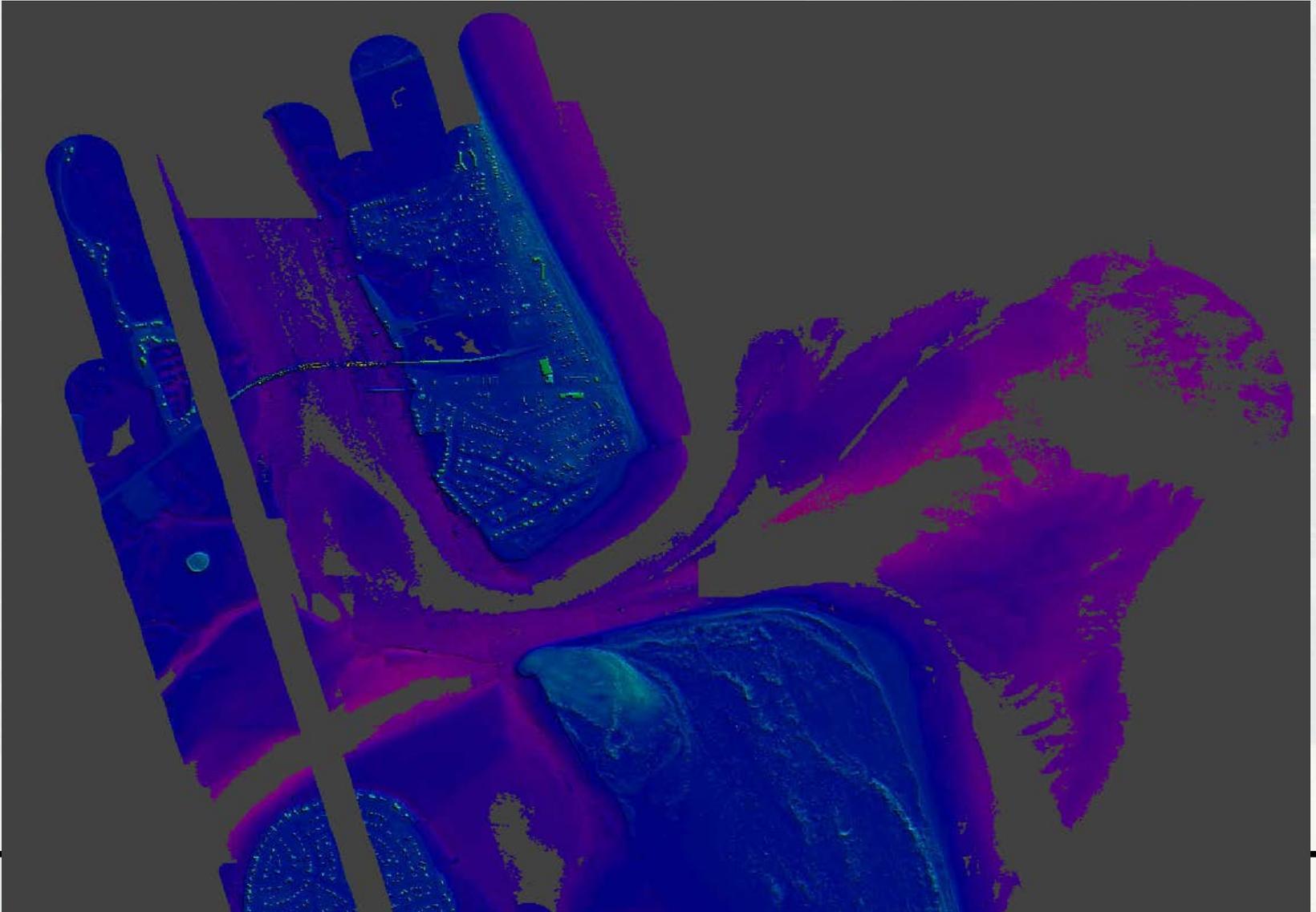




# Turbid Water Module



BUILDING STRONG



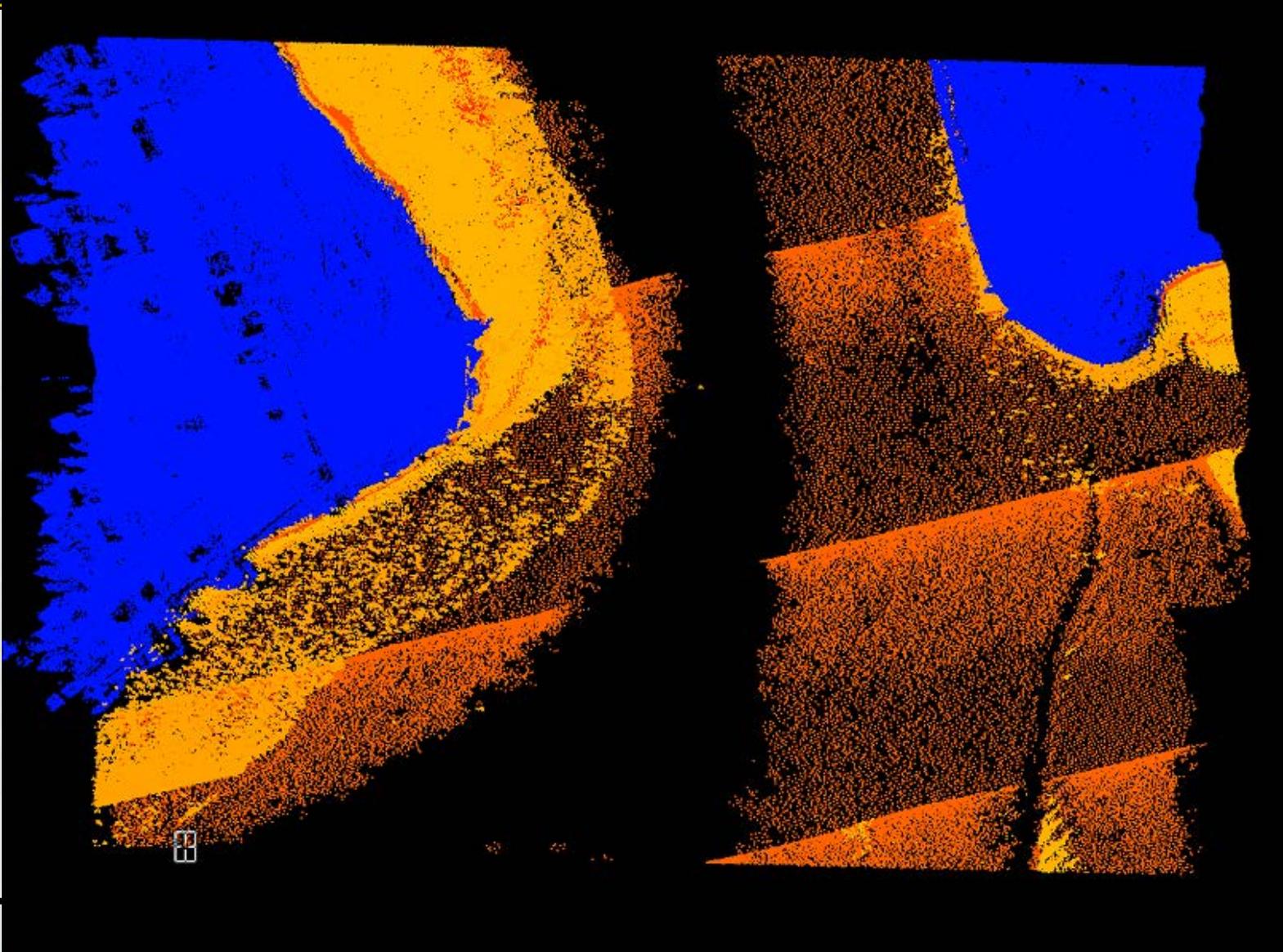


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# Turbid Water Module



STRONG

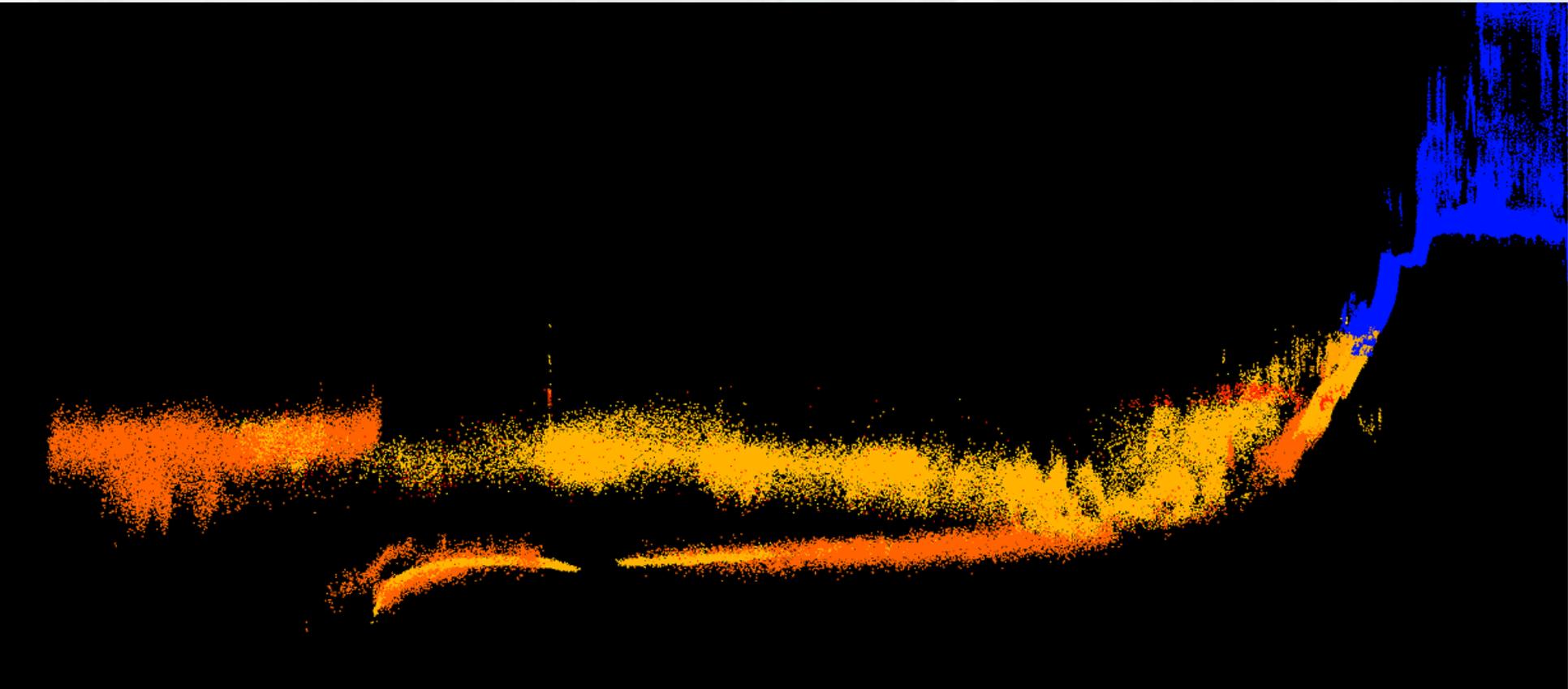




# Turbid Water Module



BUILDING STRONG



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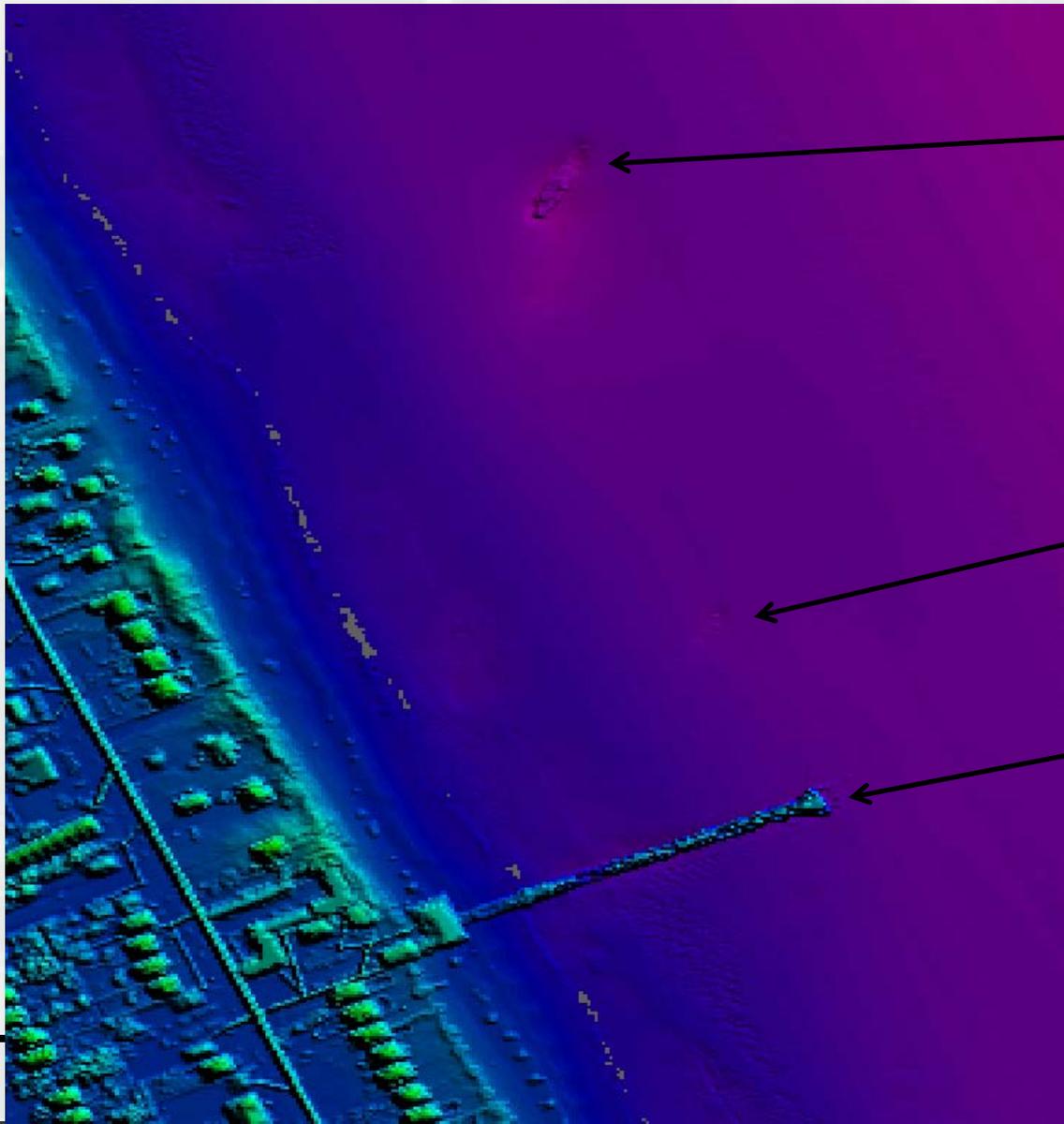
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# 2016 Duck



BUILDING STRONG



USS Huron  
~5m water depth

Tugboat - Explorer

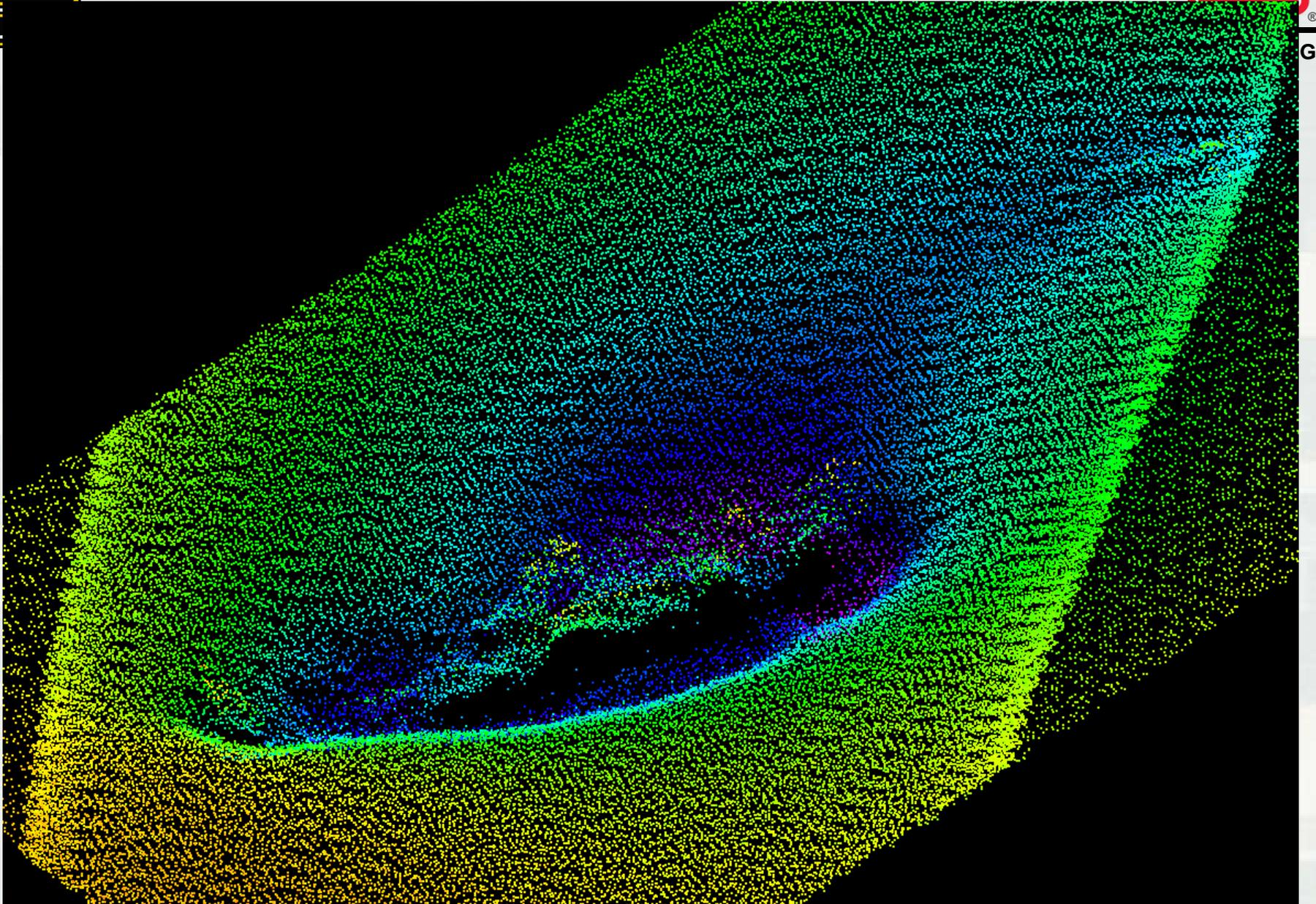
Nags Head Fishing  
Pier  
North Carolina



# 2016 Duck – USS Huron



U. G



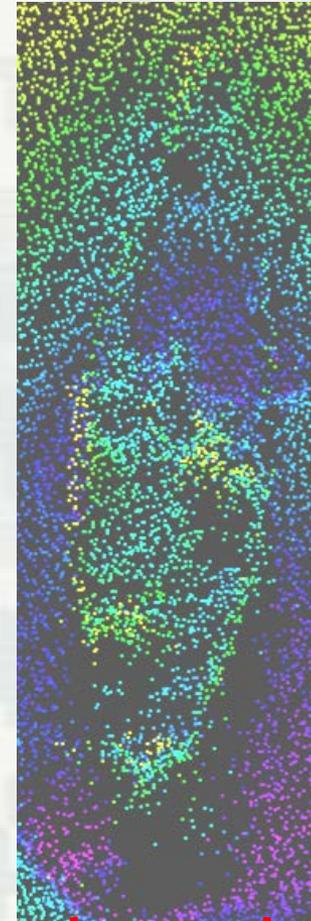
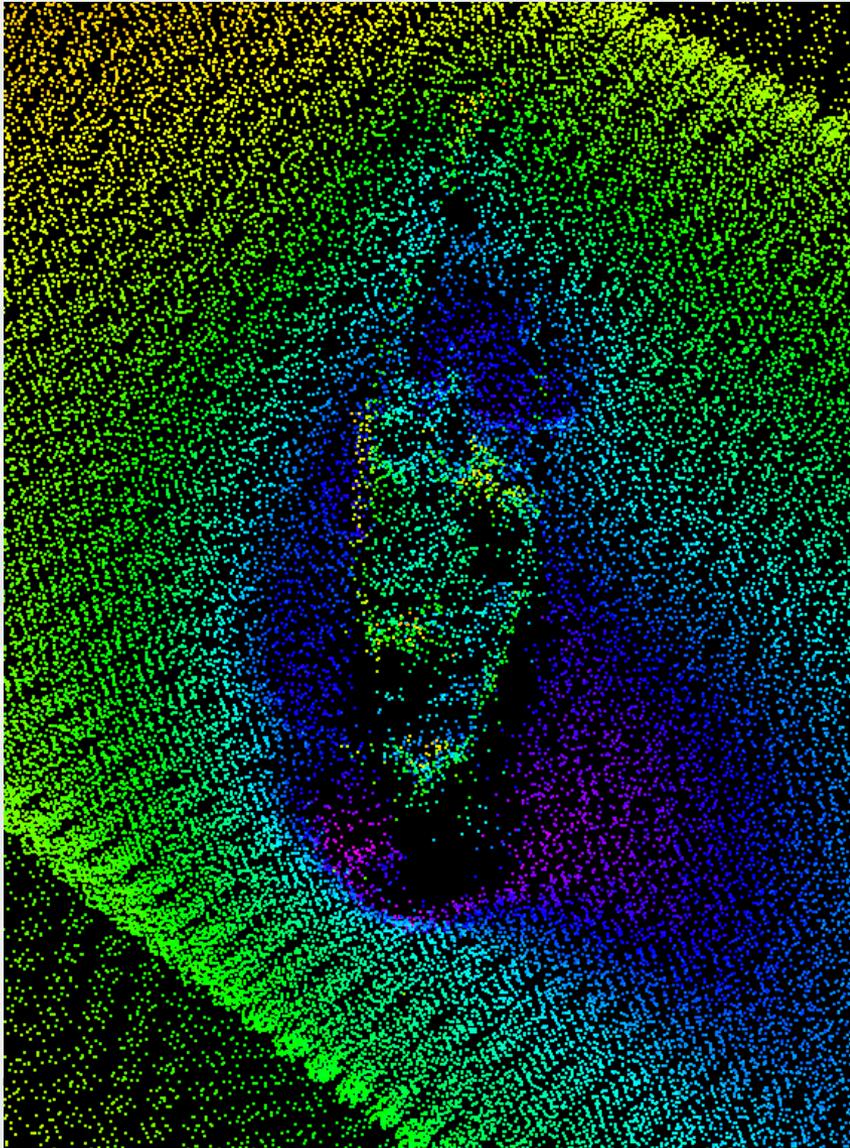


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# 2016 Duck – USS Huron



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55 m

10m



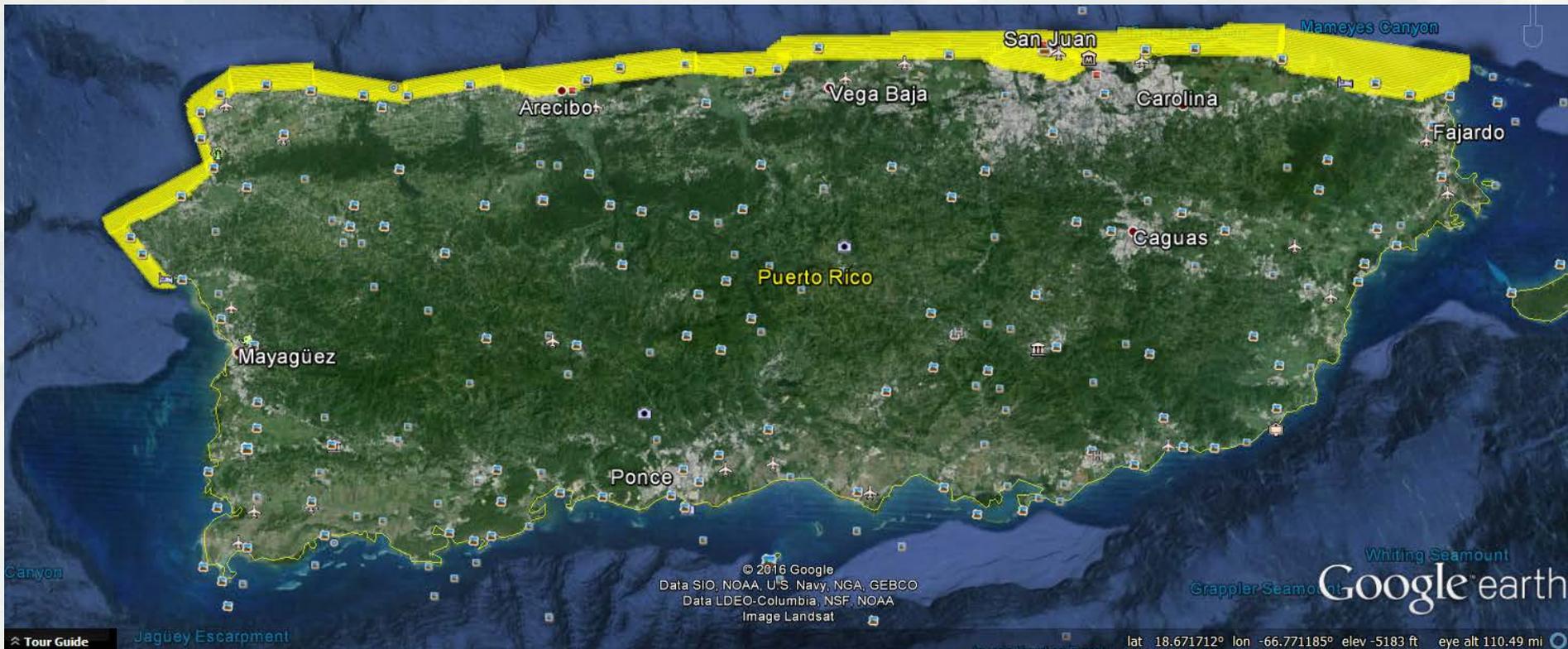
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# 2016 Puerto Rico



BUILDING STRONG

- 11 of 13 Blocks Flown from Feb 11 to 21
- Remaining 2 blocks will be flown from ~ May 11 to 16 (Fajardo to San Juan)



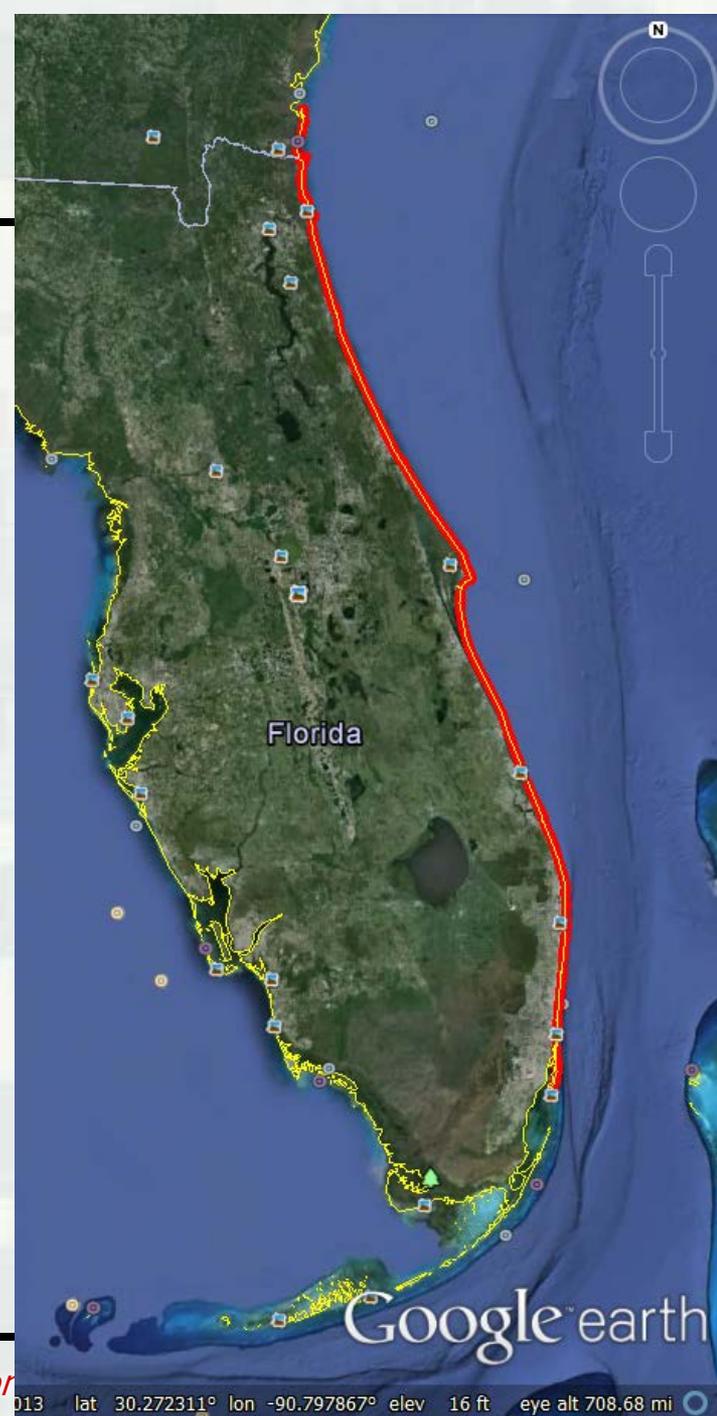
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# 2016 NCMP FL

- Will be collected using in-house CZMIL
- Targeted start date of May 21  
(immediately after finishing Puerto Rico)
- Key Biscayne to Florida/Georgia Border





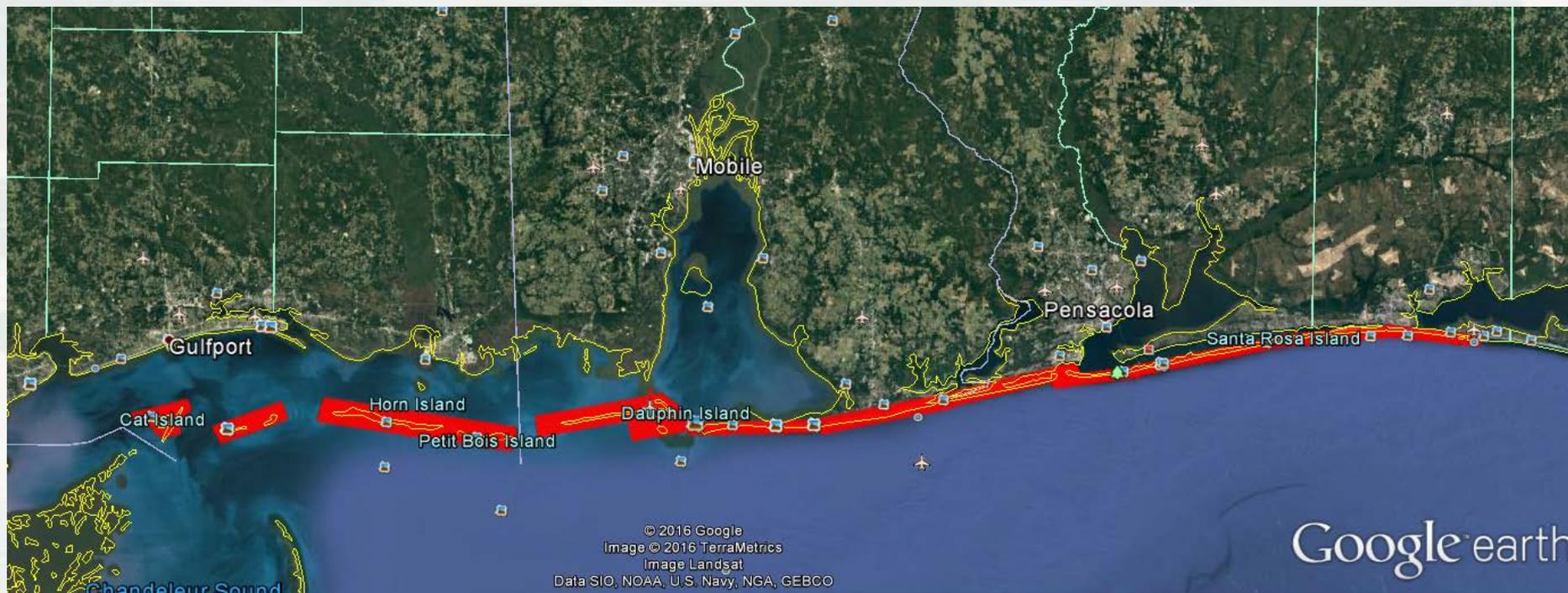
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# 2016 NCMP FL/AL/MS



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- Targeted start date of July 22
- Estimated at 2-3 weeks of collection
- East Pass to Cat Island



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# 2016 NCMP Texas



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© 2016 INEGI  
Image Landsat  
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Google earth



# 2015 Survey Season



RIIIIING STRONG

2015\_DashBoard



**Mobile District Operations Team**  
**Chris Macon**  
**Charlene Sylvester**  
**Nick Johnson**  
**Heath Harwood**



**New England (R)**  
473 flight lines  
23 May – 14 June  
23 days, 18 flight days  
31 flights  
43 navigation projects

**California**  
1113 flight lines  
18 June – 3 October  
93 days  
104 flights  
800+ sq miles

**Florida**  
270+ sq miles

**Bahamas (R)**  
591 flight lines  
8 October – 7 November  
29 days, 18 flight days  
33 flights



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**GEOMATICS**  
DATA SOLUTIONS *er Tomorrow*



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# Compilation Methods – Pre 2012



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2011 NCMP									
Date	Flts Plan	Act Flts	Flights Behind	Planned Hours	Actual Hours	Total Hours	Avg per Flt	Running Avg	Condition
5/26/11	2	0	3	12	0.00	3.55	0.00	3.55	WD
5/27/11	0	-1	3	12	0.00	3.55	0.00	0.00	O
5/28/11	1	1	3	15	0.92	4.47	0.92	4.47	O
5/29/11	2	2	3	21	4.38	8.85	2.19	2.95	O
5/30/11	1	2	2	24	1.53	10.38	0.77	2.08	WP
5/31/11	2	2	2	6	2.18	2.18	1.09	1.09	FF
6/1/11	1	2	1	9	3.87	6.05	1.94	1.51	FF
6/2/11	2	1	2	15	0.17	6.22	0.17	1.24	WP
6/3/11	1	2	1	18	2.62	8.84	1.31	1.26	FF



7225 Stennis Airport Drive Suite 100  
Kiln, MS 39556  
PH. 985.661.3001 - FX. 228.252.1133

Shoals Flight Log										Start Engine
Pre/Post Flight Checklist				Calibration Lines		On Station	Off Station			Stop Engine
RGB	Checked			Topo (pre)						Total=
Scanner				Topo (post)		Transit 1	Transit 2			
CASI	Checked			Hydro (pre)		NA	NA			Take Off
Dessicant	Checked			Hydro (post)		NA	NA			
LPTT						Julian Date =		235		Landing
Flight Date (UTC)	Pilot	Co-Pilot	Operator	ccf File	DSS HD	Shoals HD	Casi HD	Sensor		Total=
8/23/2011	Jeff Duffy	Wayne Waldner	Kyle Manderson	spec36.ccf	1	1	1	002		
LINE	TYPE	Heading	START	STOP	Altitude (m)	IT (ms)	Aperature	Speed Kts	Atmospheric	
19-1	H	89	12:31:47	12:39:00	442			145	BKN	Water Recon
31-1	H	301	12:55:40	12:59:17	444			125		Water Recon

Flight Summary:		Production			Total	Rerun			Other (Cal lines)		Waste	Engine Time		% Complete	
Flight	Job No.	Lines	Type	Time	Time	Lines	Type	Time	Lines	Time	Time	Flight	Running	Day	Total
110610_1	11030	27	Hydro	3:22:13	3:22:13							4:58:00	4:58:00	10.23%	10.23%

## SURVEYS

**Production:** There was one afternoon flight today with the collection of 27 hydro lines for LS\_01.

**Processing:** All flights were downloaded to standalone. The field computer's localwks directories were cleaned. The DSS mission plans were created for LS\_01 topo. The lidar, DSS, and Casi raw were downloaded to their pogos and backed up to tape.

Trust



# Compilation Methods – Post 2012



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NCMP\_Flightlog\_20120523

Submittal Forms

Flight Information | Flight Attempt

Available Lines: Catsland\_full\_1 #1

Type: Production

Hours: Minutes: Seconds:

Submittal Forms

Flight Information | Flight Attempt

Date: 11/ 7/2012

Operator: Alfred Aranas

Captain: Trent Scarborough

Co-pilot: Aubrey Price

Serial Numbers

Lidar: CZ01 HSI: SP2522 RGB: T4800

Hard Drive Numbers:

Lidar: 1 HSI: 1 RGB: 1

Departure Airport: KHSA

Arrival Airport: KHSA

Hours: Minutes:

Engine Start Time: 12:00 Engine started

Take Off Time: 12:00 Plane took off

Landing Time: 12:00 Plane landed

Engine Stop Time: 12:00 Engine stopped

Visibility: 10

Comments:

Save Flight Info Enter new flight information

ArcGIS Explorer Online - Windows Internet Explorer

http://www.arcgis.com/explorer/?open=8795fcdeb7544774af28a

2012 NCMP Field Coverage

Mapping | Presentation

Home | Details | Share

Map Legend

- 2012\_NCMP\_FieldCollection
- Daily Flight Information
- Flight Lines
  - <all other values>
  - Accepted
  - Flown
  - Not Flown
  - Partial
  - Rejected
- Area

Dashboard

Survey Days: No Response

Survey Cost: No Response

Daily Status: No Response

Partners Deliver

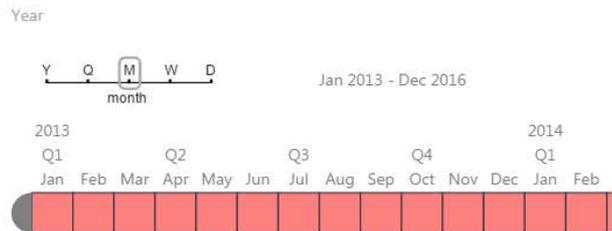
esri



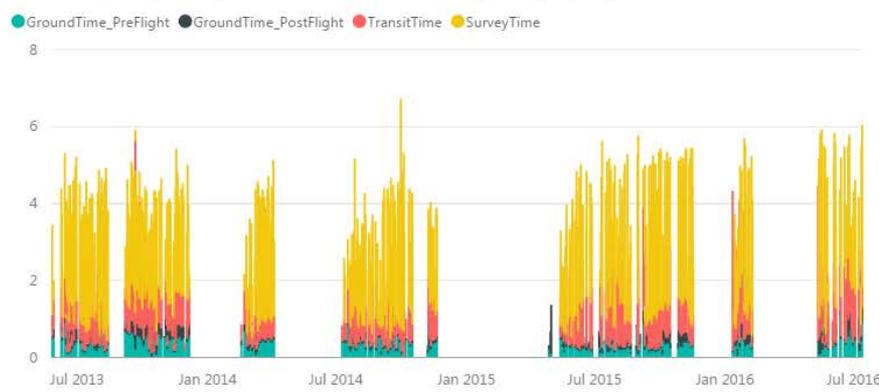
# Compilation Methods – Current?



BUILDING STRONG

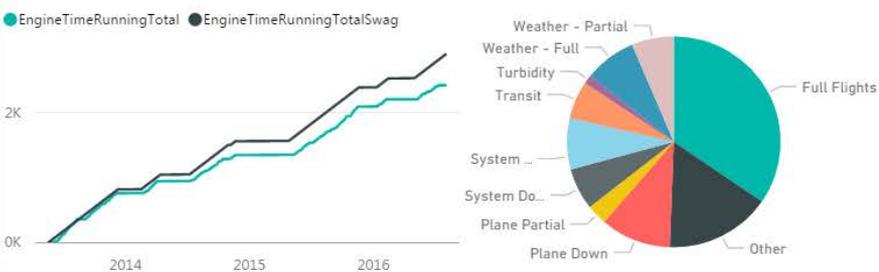


GroundTime\_PreFlight, SurveyTime, TransitTime and GroundTime\_PostFlight by EngineStartTime

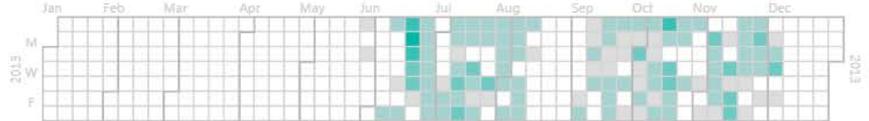


2,427.47
EngineTime
3.26
Average of EngineTime
0.72
Average of TransitTime
24.78
WasteTimeAVG
3.60
TurnTimeAVG
725
Count of DailyInfo_ID
745
Count of Flight_ID
9369
Count of Attempt_ID
9031
Count of FlightLine_ID
146,952,289.98
Length
31,301.15
TimeOnLine
72,163.40
TOLandTurns
48,465.30
EstTime
72,036.14
FuelGallons

EngineTimeRunningTotal and EngineTimeRunningTotalSwag ... Count of Condition by Condition



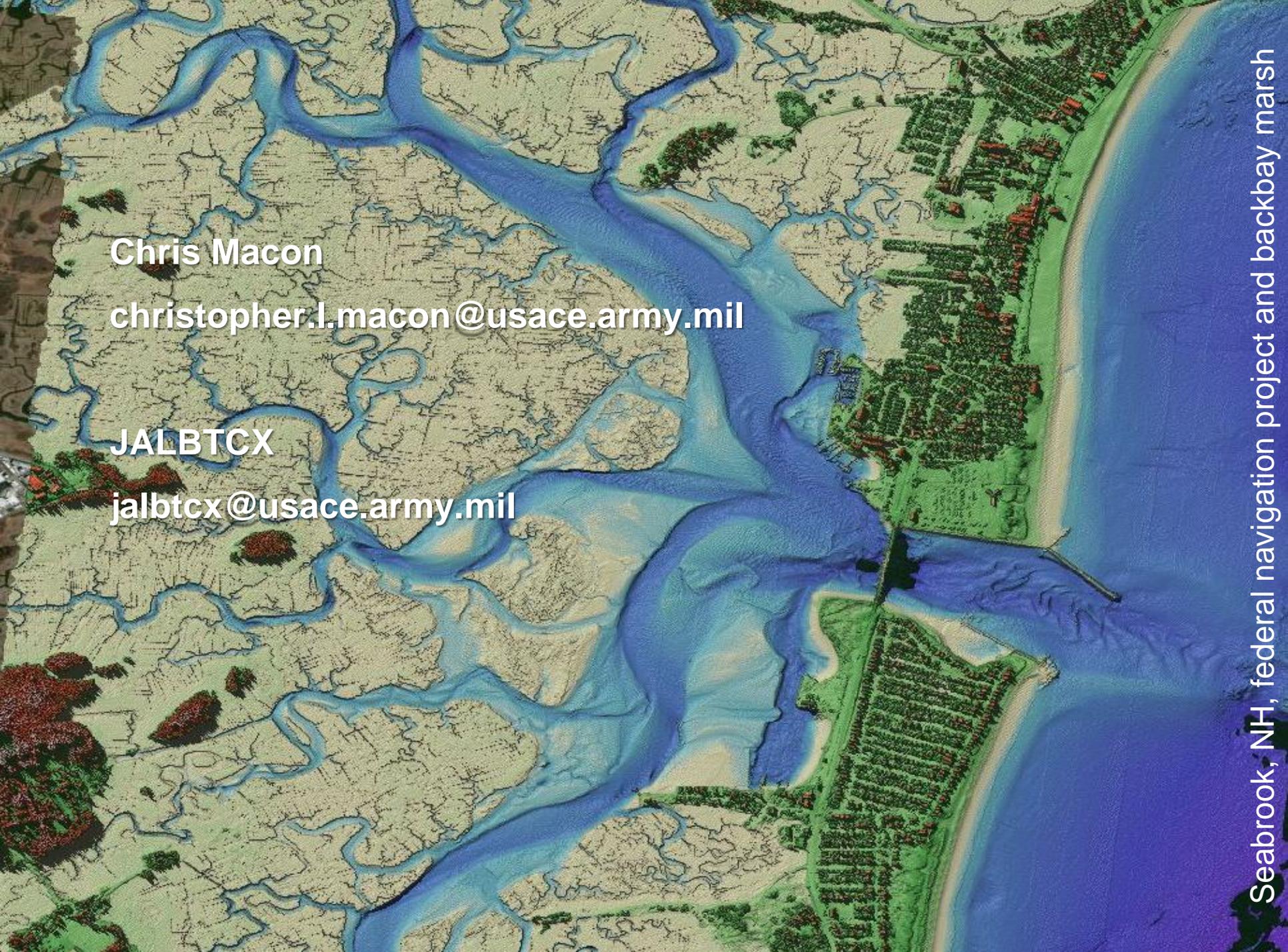
Count of Flight\_ID by Date





# Compilation Methods – Current?





**Chris Macon**

**[christopher.l.macon@usace.army.mil](mailto:christopher.l.macon@usace.army.mil)**

**JALBTCX**

**[jalbtcx@usace.army.mil](mailto:jalbtcx@usace.army.mil)**