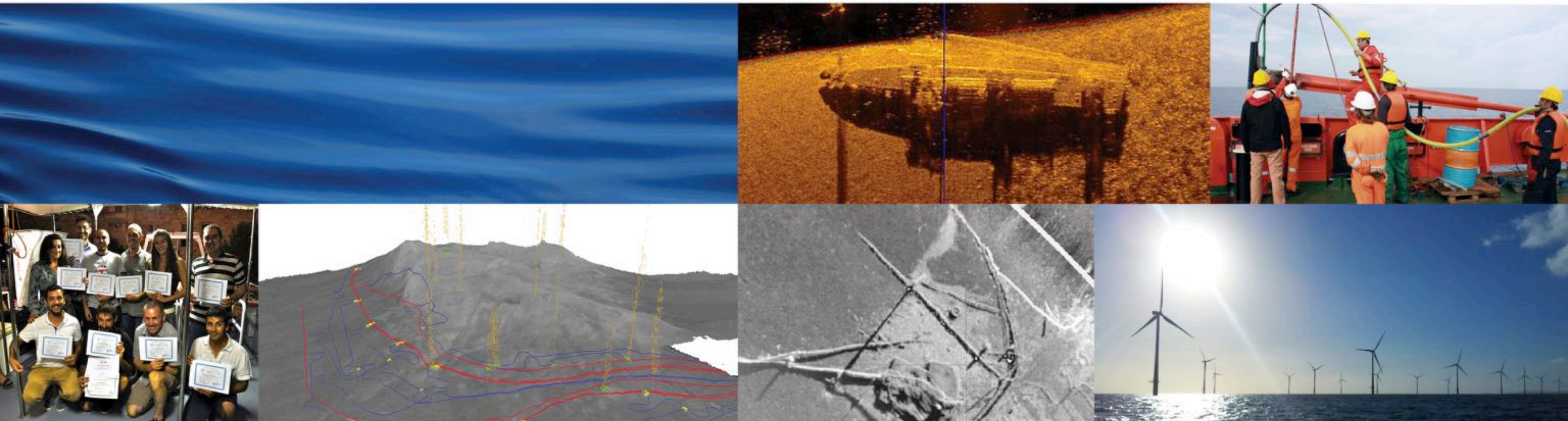




# NORBIT – HYPACK Training iWBMS & iLIDAR



**Male, Maldives  
October 2017**

**Chiara Tessarolo, PhD, Senior Marine Geologist**  
**Alessandro Nemola, Senior Surveyor & Data Processor**

**Geological & Biological Team**  
*Your Offshore Solution Partner*

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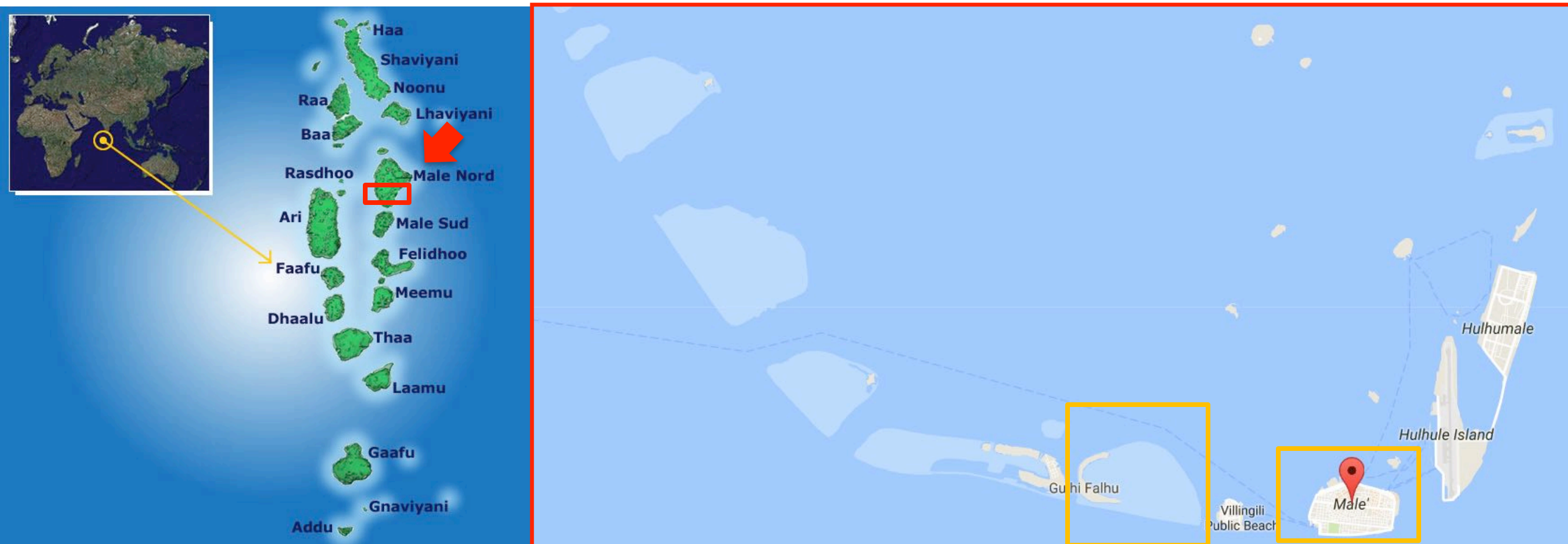


**NORBIT**  
*- explore more -*





In October 2017, GBT Ltd carried out a training with the NORBIT iWBMS system (0.9°x 1.9° Tx, 400 kHz) and the NORBIT iLIDAR, for MTCC Company (Male, Maldives). The Systems were interfaced with HYPACK – HYSWEEP Software for data acquisition, processing and charting. The Survey test were realized around Male and Ghuli Falhu Islands.



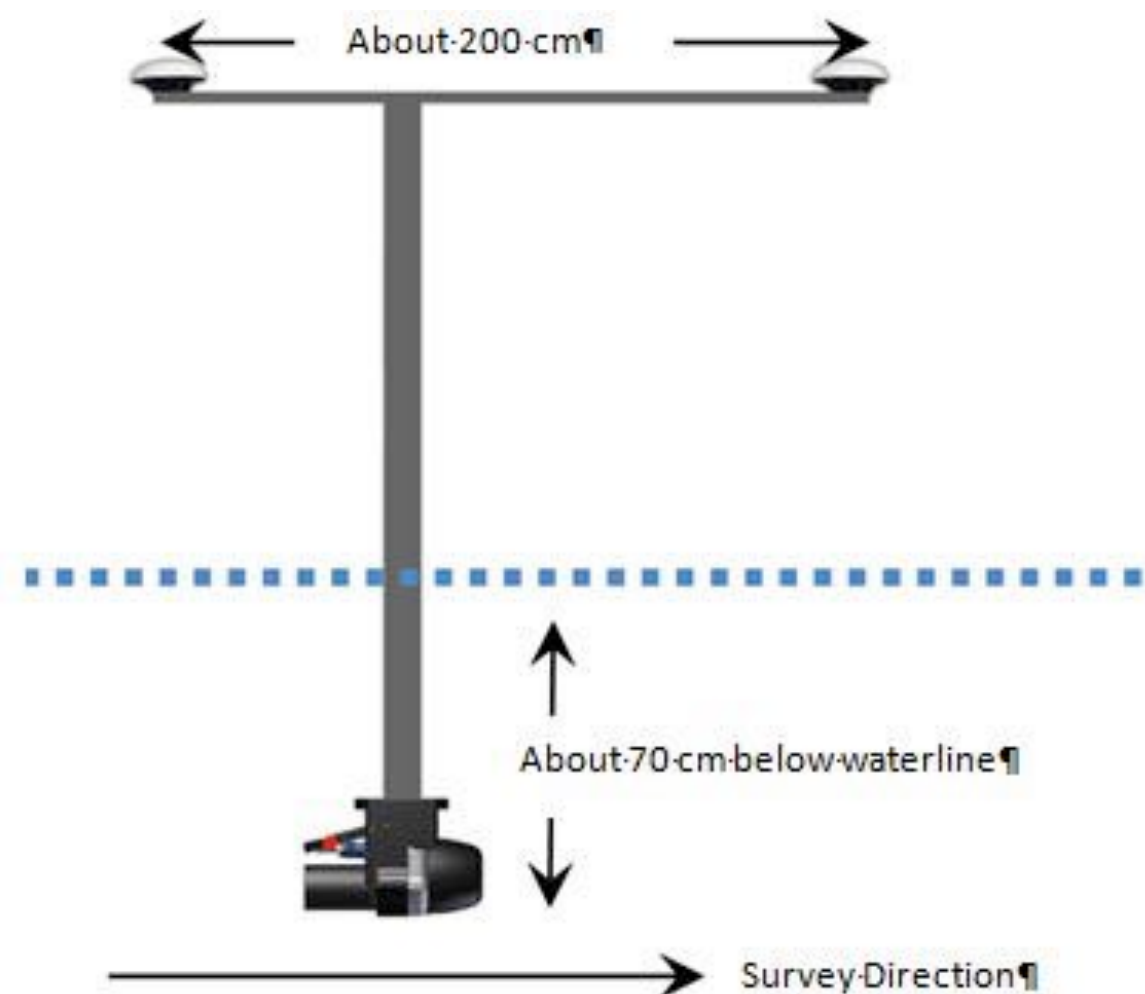


The NORBIT iWBMS System was installed on a T-Bar pole, on Port side of client Cutter (Crew) Boat “Express1”. Once the mounting flange was ready, the mobilization of the whole system took about 1 hour (Pole, NORBIT iWBMS Applanix integrated, Primary and Secondary GPS antenna, NORBIT iLIDAR).





## Survey Configuration





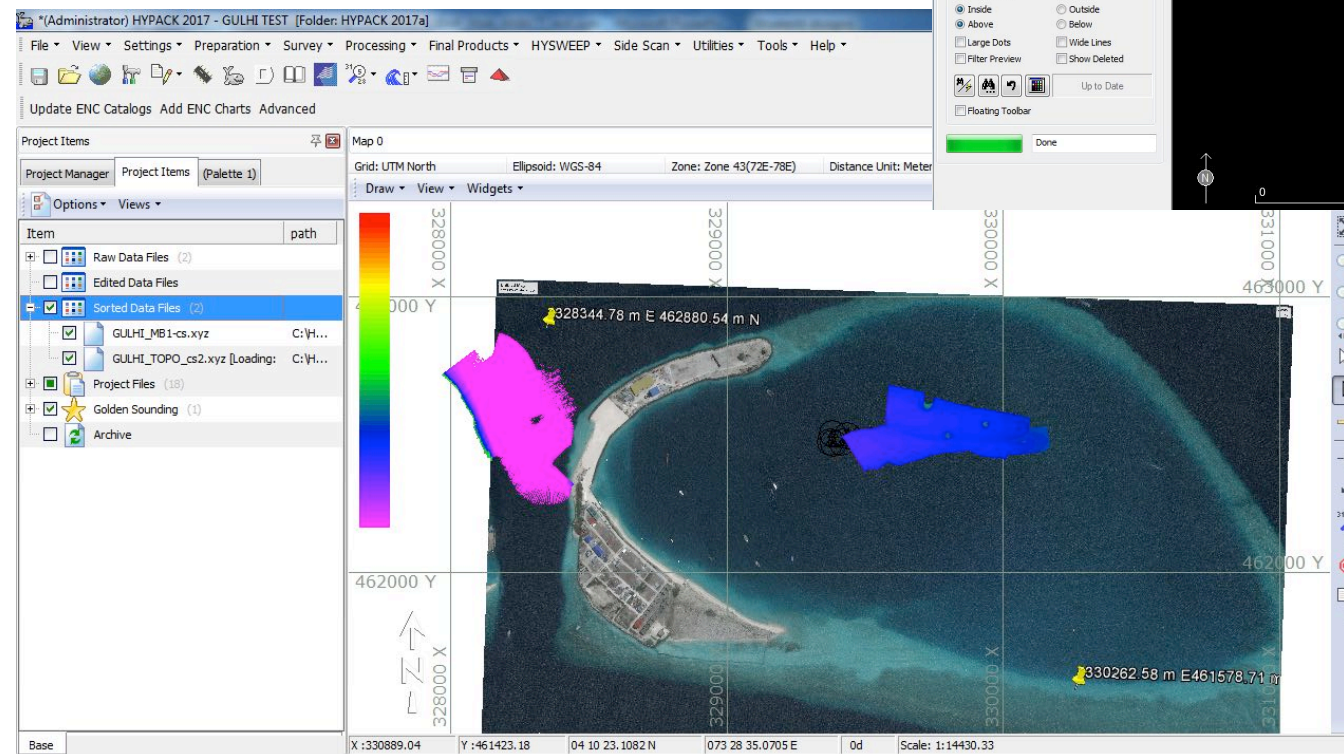
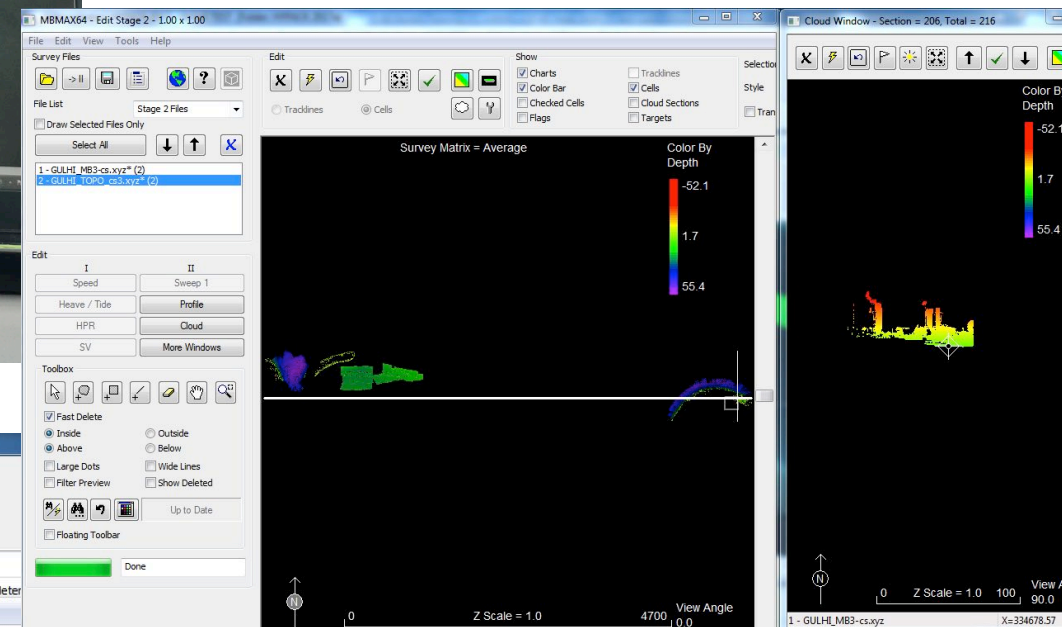
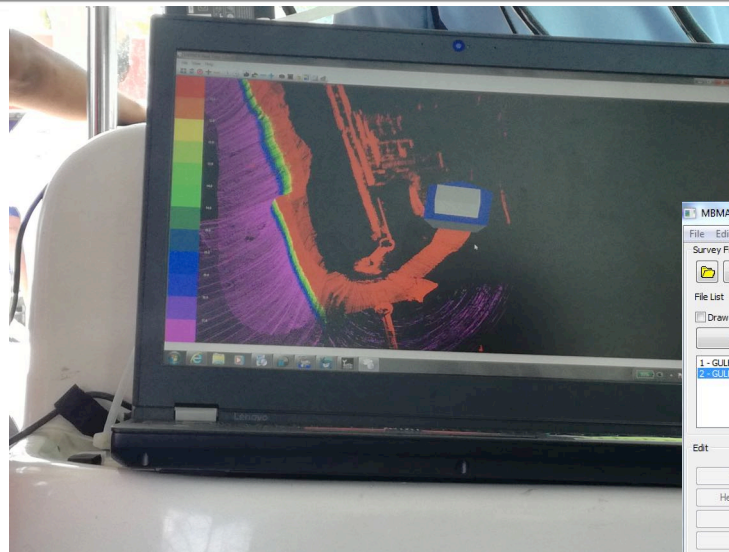
## Data Acquisition Software:

- HYPACK 2017
- NORBIT GUI 10.2

## Data Processing Software:

- HYPACK - HYSWEEP

## MODULE





The correct acoustic  
signal recording has  
been assured by  
employing the AML  
Sound Velocity profiler.

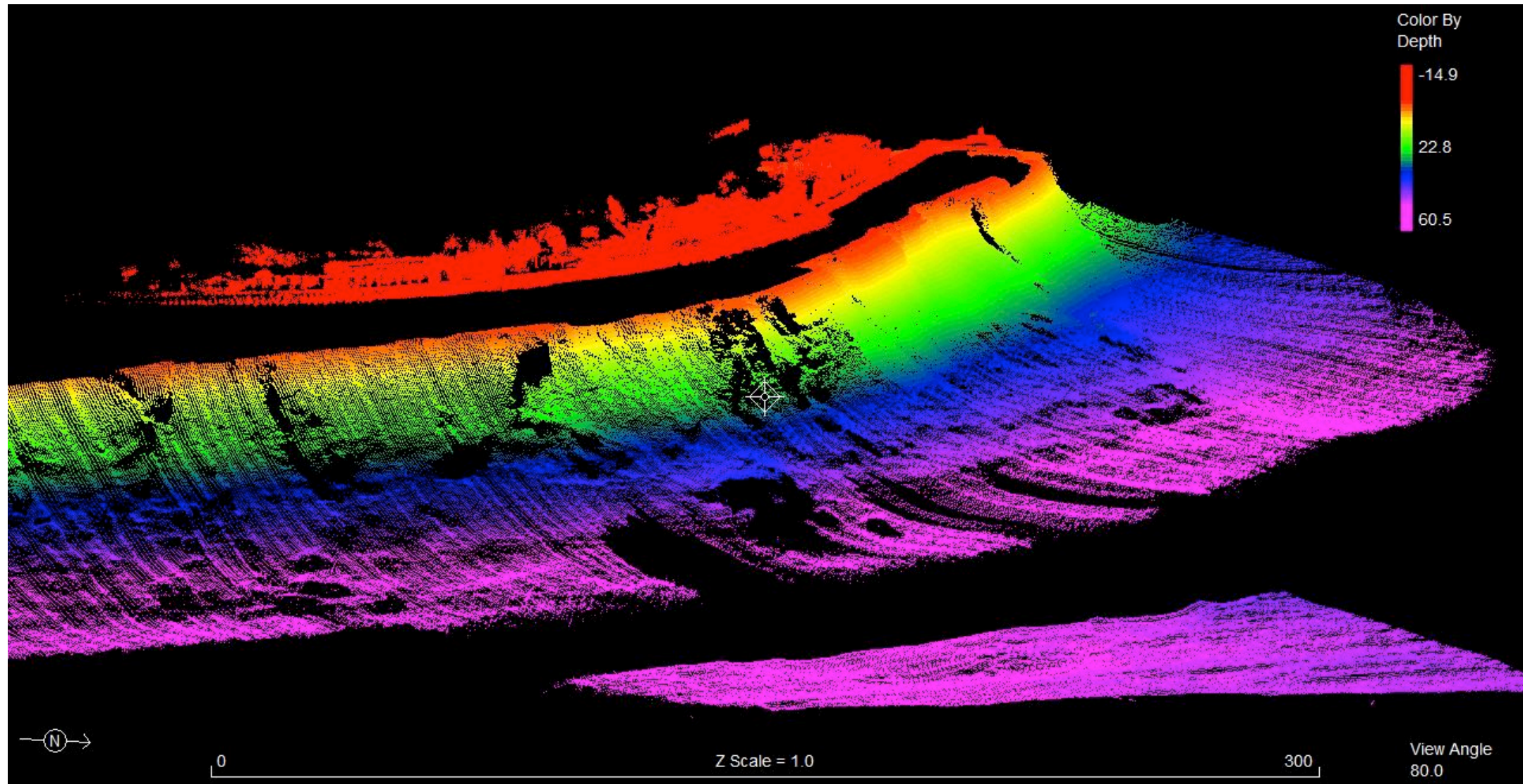




# Multibeam & Laser Scan Data HYPACK Cloud View

Frequency 400 kHz  
FM 80kHz BW  
Swath angle 160°

Vertical  
Exaggeration 1.00

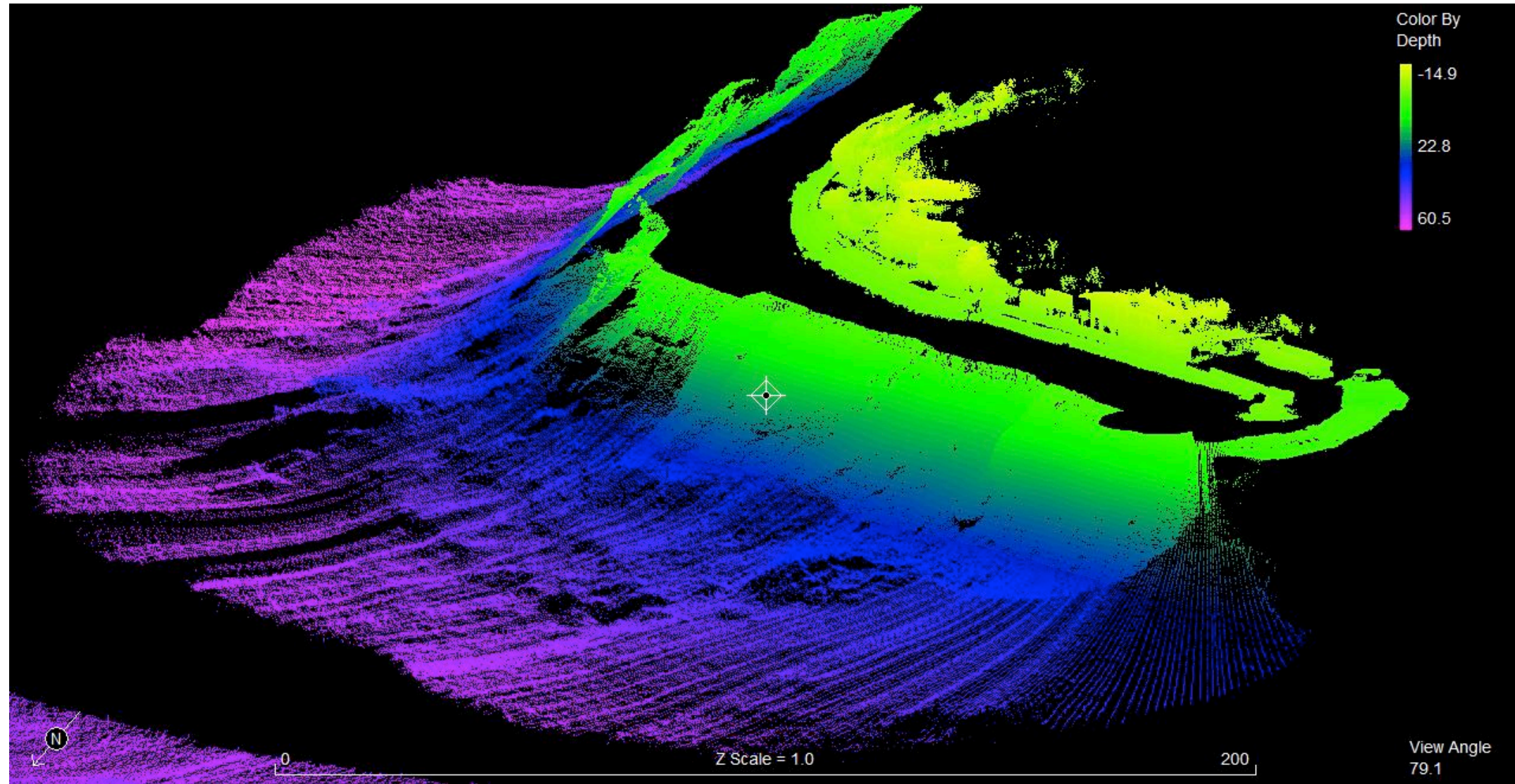




# Multibeam & Laser Scan Data HYPACK Cloud View

Frequency 400 kHz  
FM 80kHz BW  
Swath angle 160°

Vertical  
Exaggeration 1.00

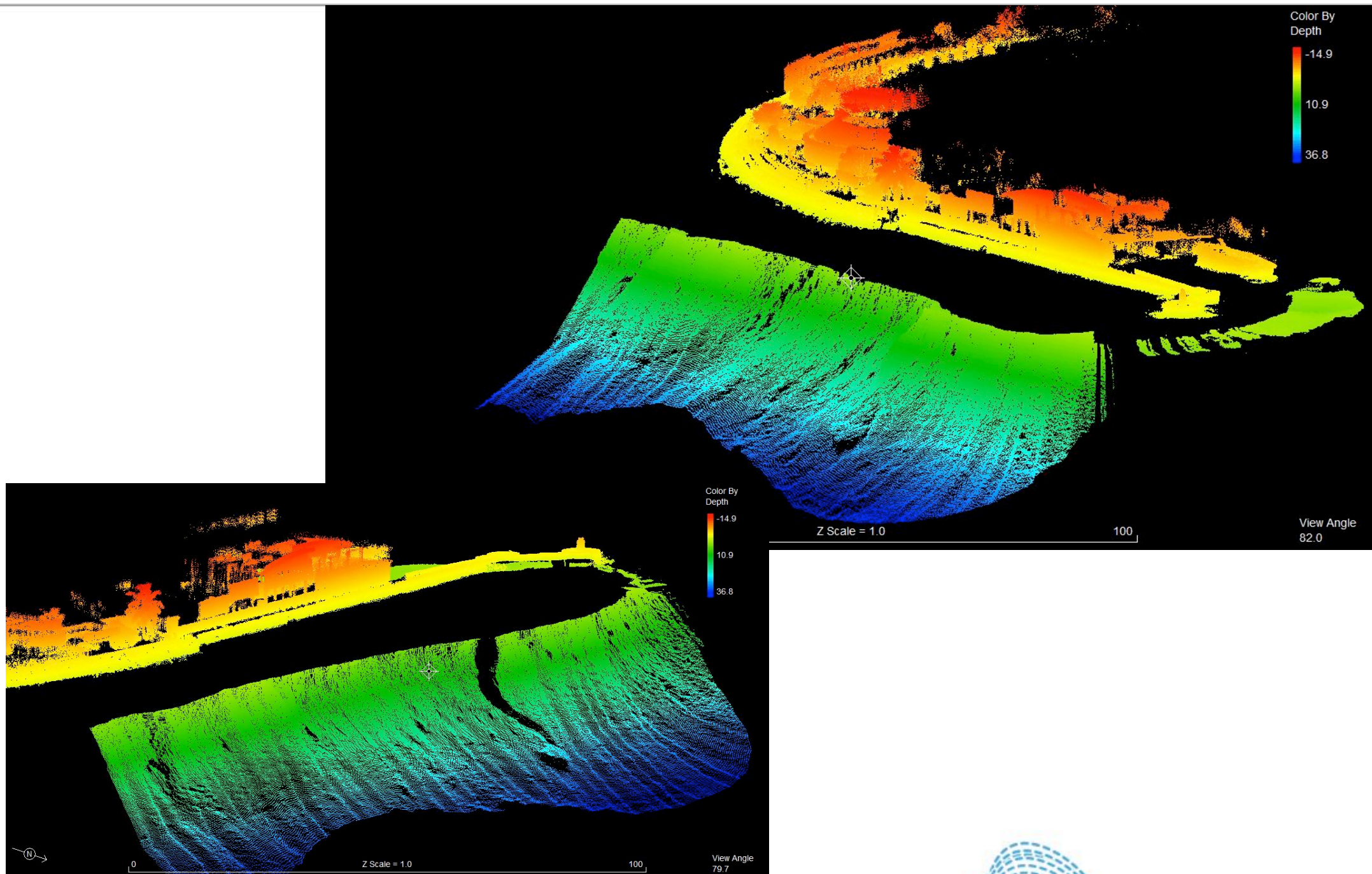




# Multibeam & Laser Scan Data Head Tilted 35° HYPACK Cloud View

Frequency 400 kHz  
FM 80kHz BW  
Swath angle 120°

Vertical  
Exaggeration 1.00  
The collapsed  
seafloor portion is  
well visible

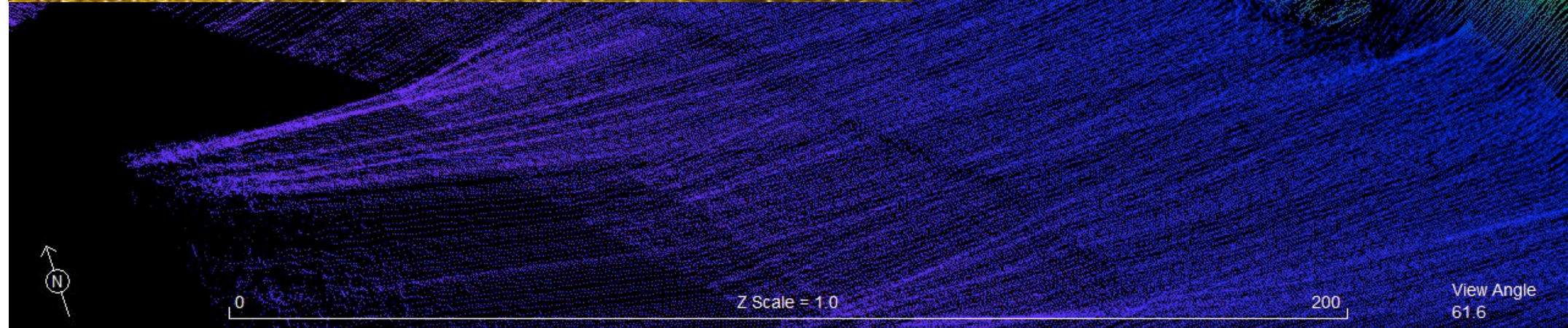
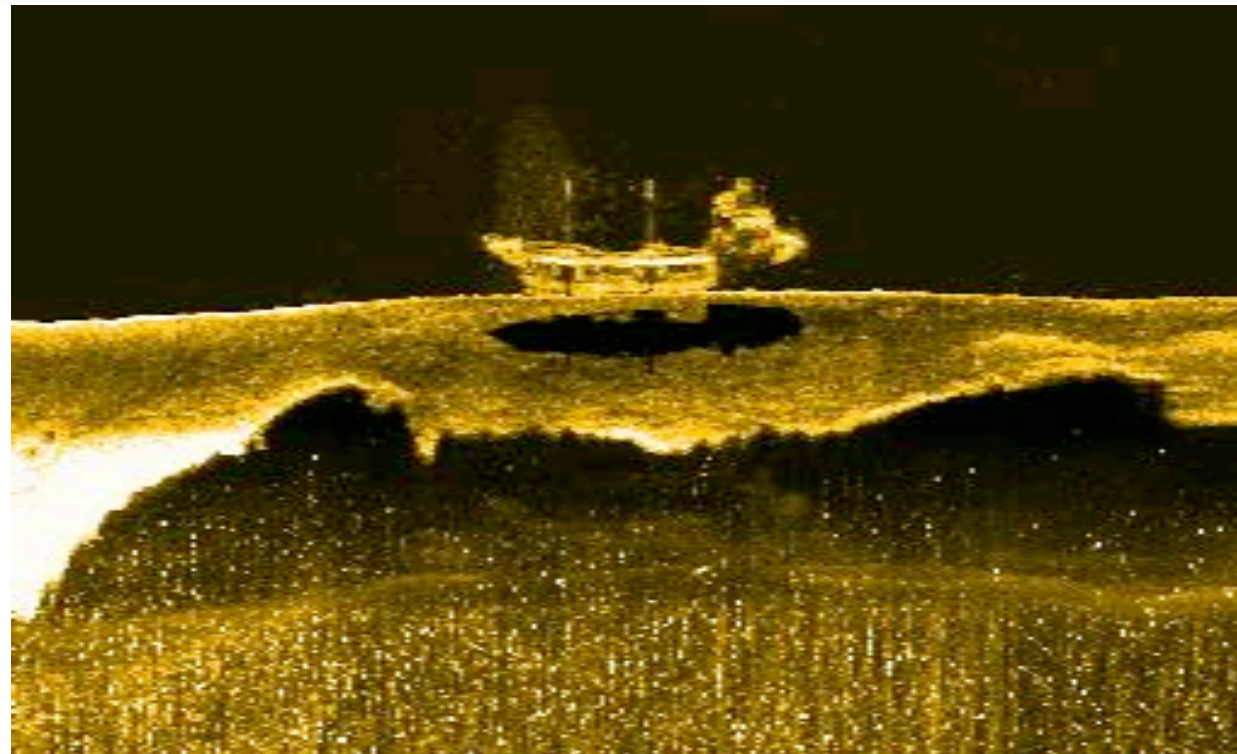




# Multibeam & Side Scan Mode Data HYPACK

Frequency 400 kHz  
FM 80kHz BW  
Swath angle 160°

Vertical  
Exaggeration 1.00

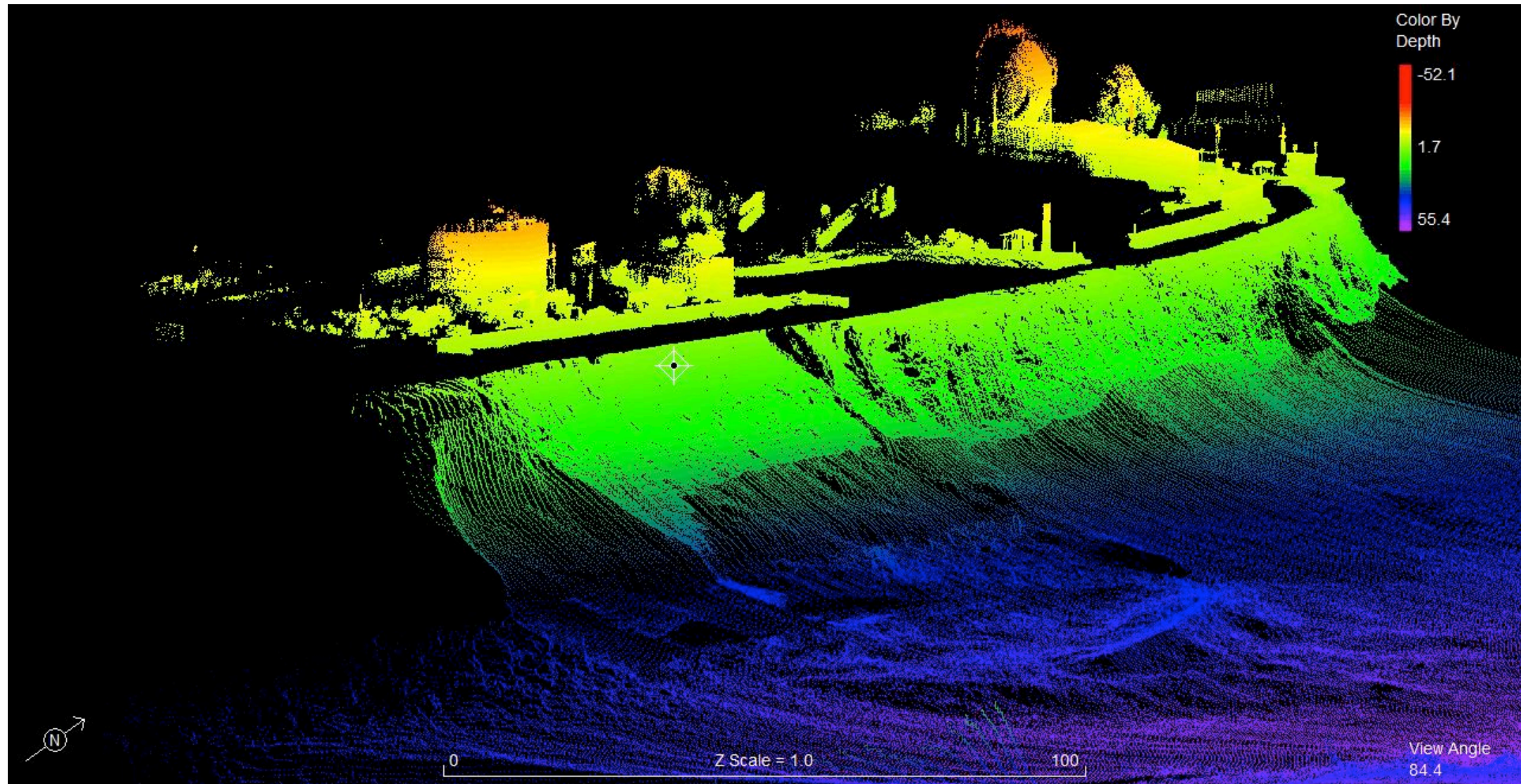




# Multibeam & Laser Scan Data HYPACK Cloud View

Frequency 400 kHz  
FM 80kHz BW  
Swath angle 160°

Vertical  
Exaggeration 1.00

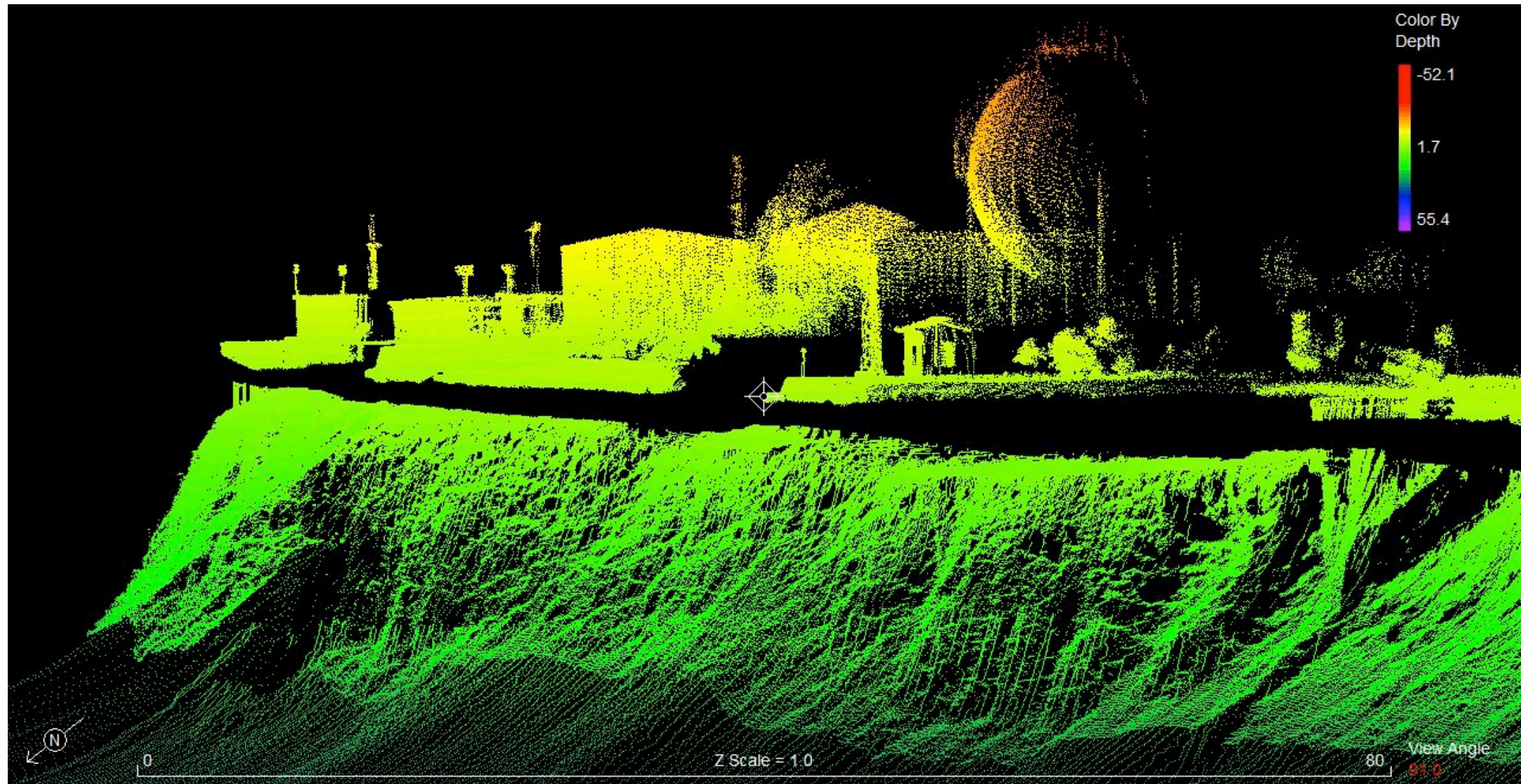




# Multibeam & Laser Scan Data HYPACK Cloud View

Frequency 400 kHz  
FM 80kHz BW  
Swath angle 160°

Vertical  
Exaggeration 1.00

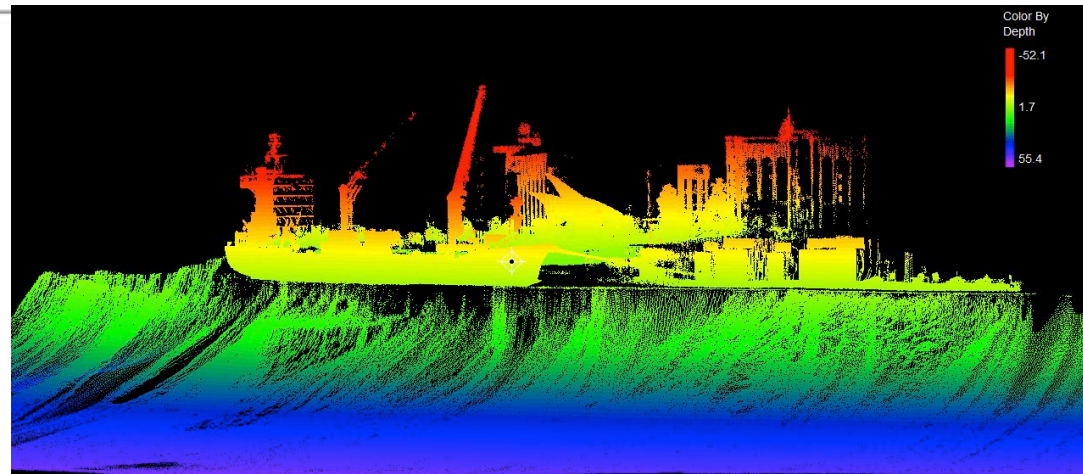




# Multibeam & Laser Scan Data HYPACK Cloud View

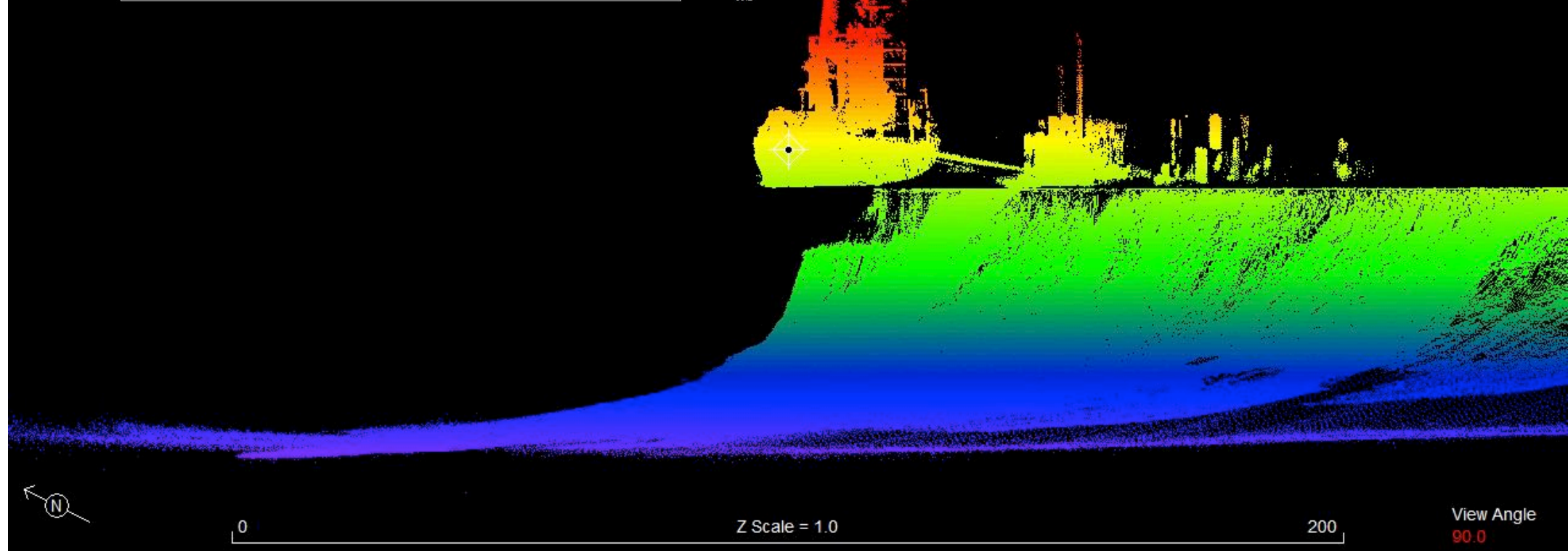
Frequency 400 kHz  
FM 80kHz BW  
Swath angle 160°

Vertical  
Exaggeration 1.00



Color By Depth  
-52.1  
1.7  
55.4

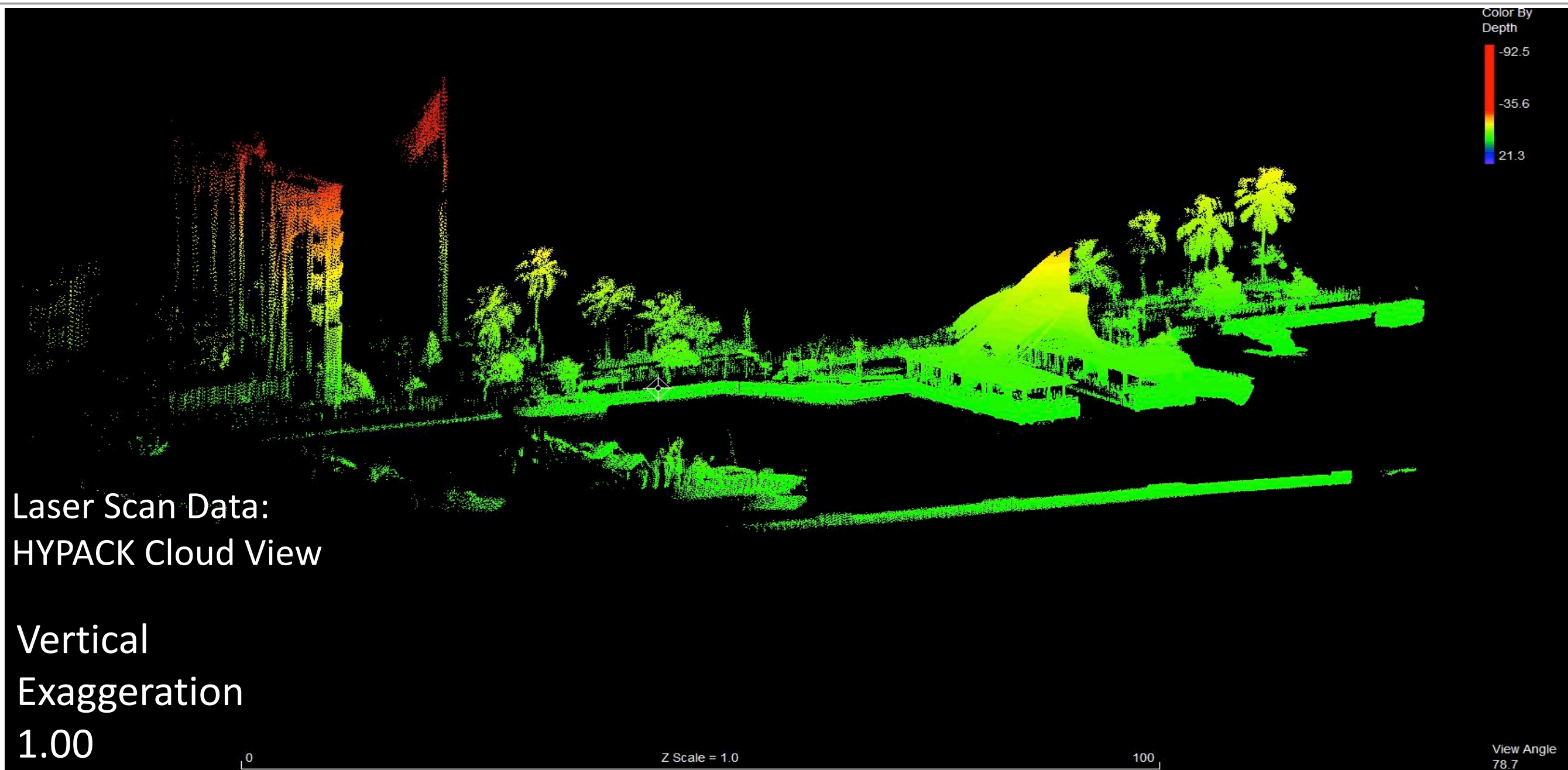
0 200  
Z Scale = 1.0  
View Angle 89.2



Color By Depth  
-52.1  
1.7  
55.4

0 200  
Z Scale = 1.0  
View Angle 90.0







Laser Scan Data:  
HYPACK Cloud View

Vertical  
Exaggeration  
1.00

