

# CHC-NSC 2018

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26 au 29 mars 2018



Land and Sea Shaping the World  
Terre et Mer Façonnant le Monde

## THE RAPID HARBOR SEARCH AND RESCUE BY MAPPING AND DETECTING THE SEAFLOOR WITH ACOUSTIC INSTRUMENTS

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# BACKGROUND





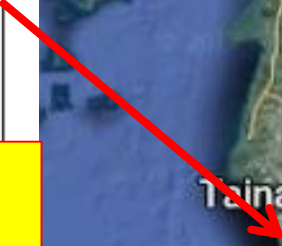
# REVIEWS



- Shallow water
- Narrow harbor boundary
- Wrong procedure
- Unsuitable equipment
- Unstable sea state
- Low visibility of underwater







## Equipments

- Easy delivered boat
- GPS Compass
- Pole mount Sidescan
- Acquisition and processing Software
- ROV & Acoustic Scanner

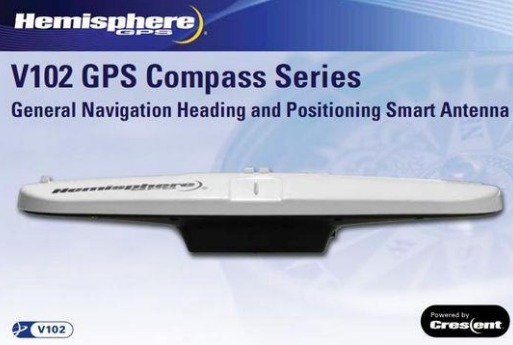


# The Rapid Harbor Assessment Procedure (I)



Large Area  
Survey

- Aluminum boat 320CT
- Sidescan
  - Tritech Starfish 452F- Pole Mount

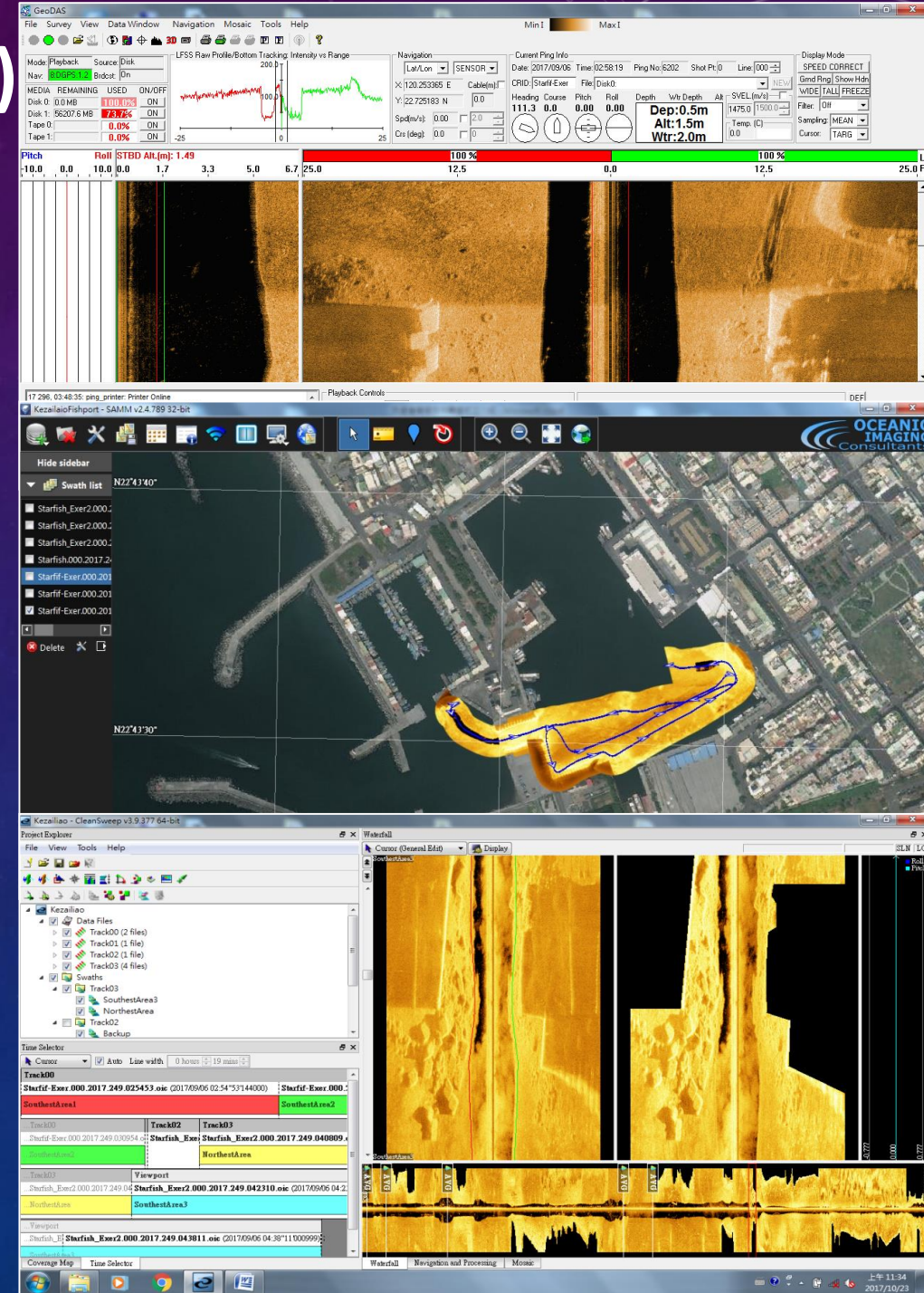
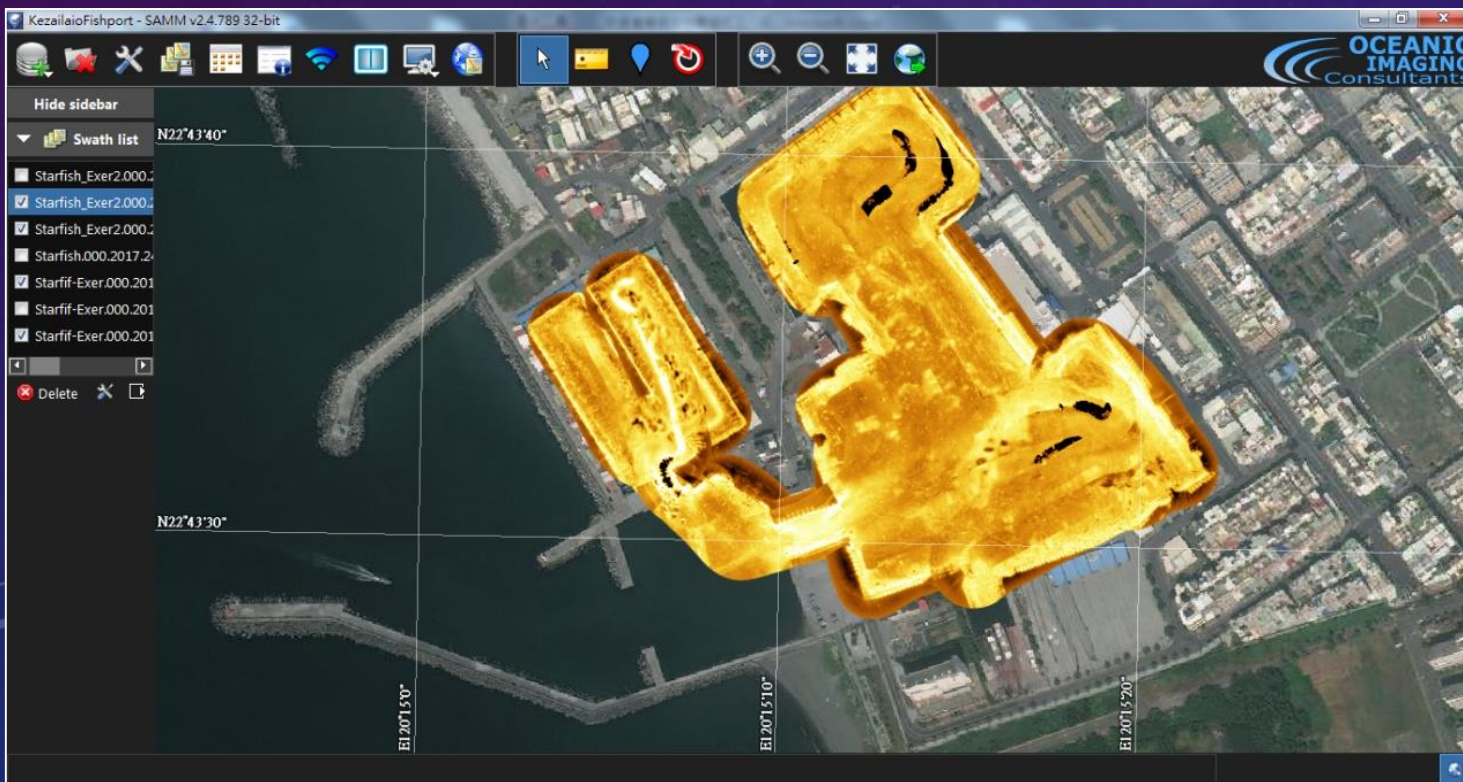




# The Rapid Harbor Assessment Procedure(II)

## Rapid Target Identify

- OIC GeoDAS- Waterfall Images
- OIC SAMM- Mosaic Images
- OIC CLEANSWEEP- Post-Processing



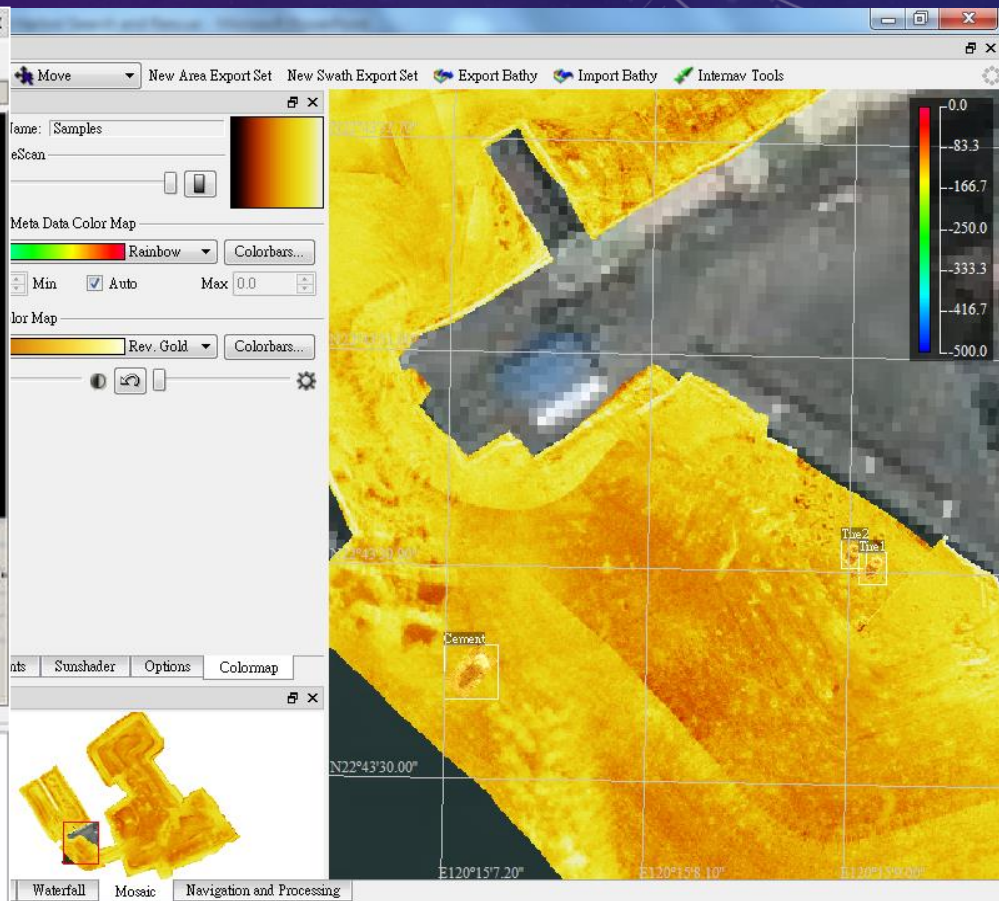
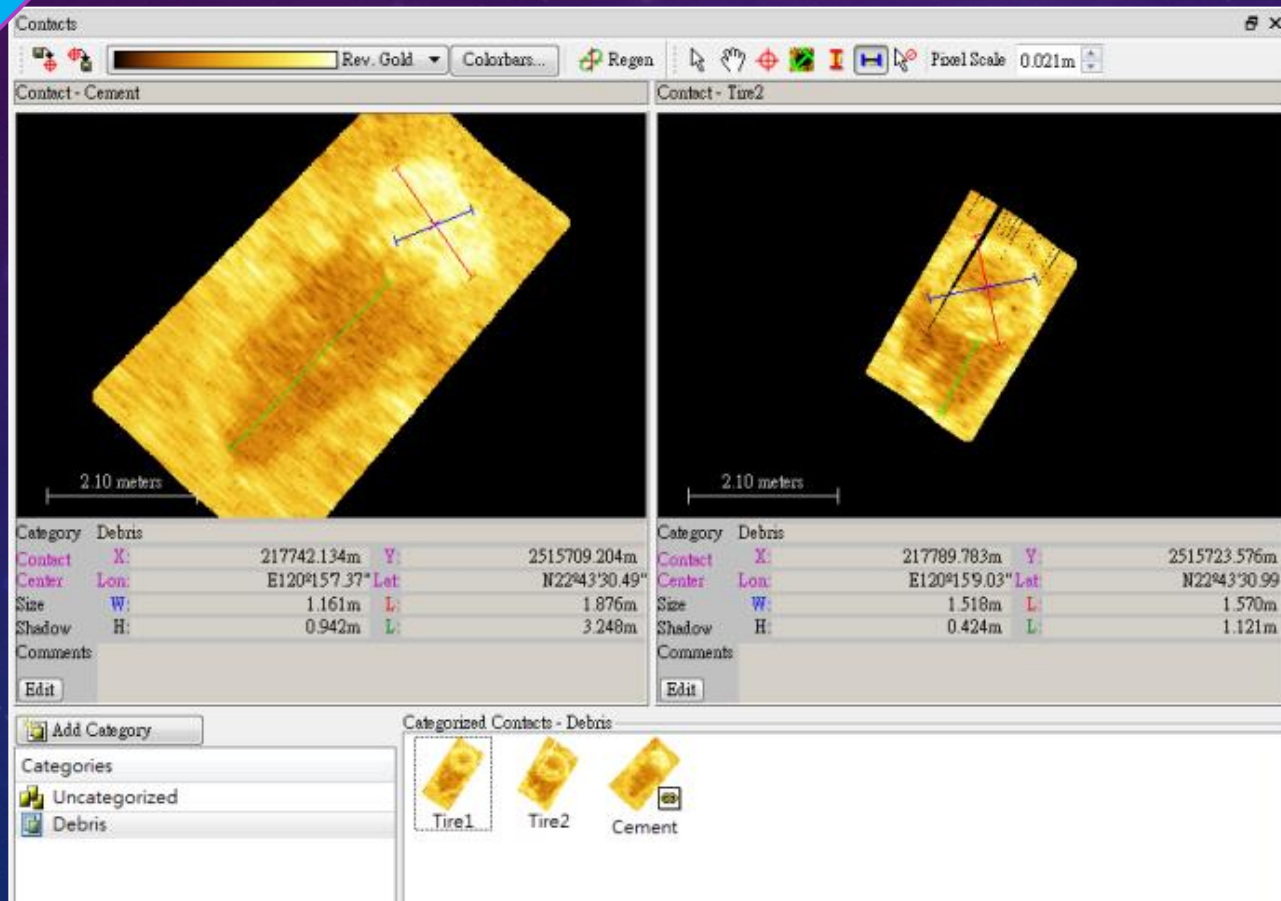


# The Rapid Harbor Assessment Procedure(III)



Hot Spots  
Mark

- Size
- Shape
- Location



# The Rapid Harbor Assessment Procedure(IV)



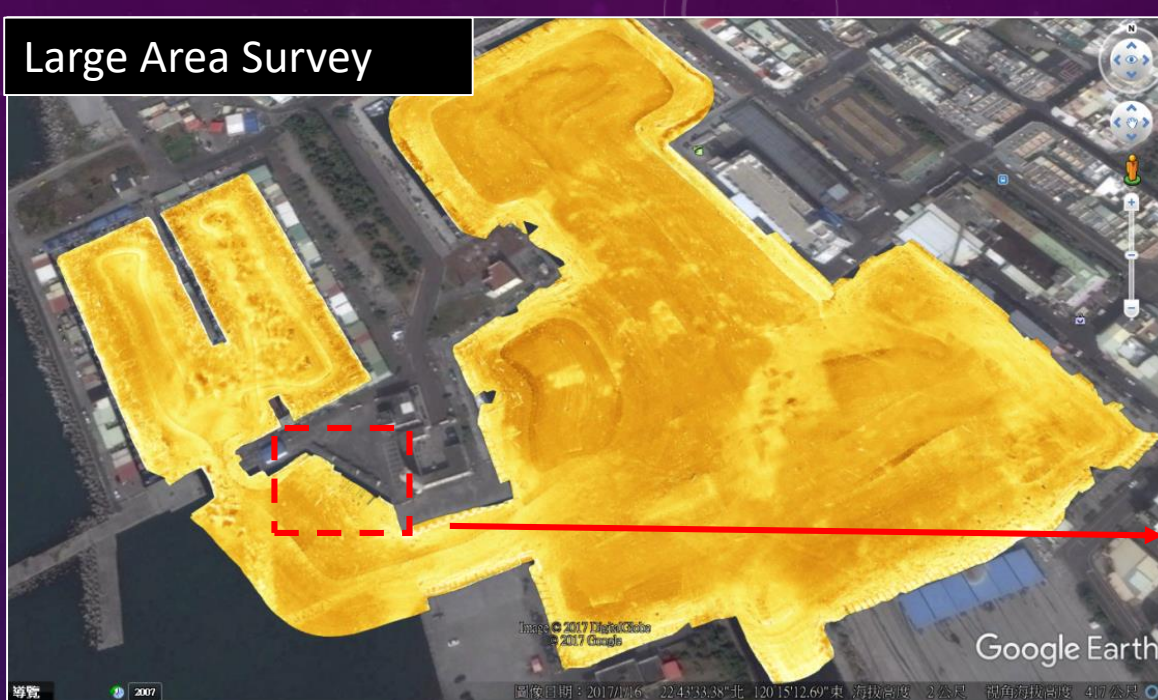
Fixed-point  
Search

- **Visual**
  - VideoRay Scout ROV
- **Acoustic Scanner**
  - Teledyne Blueview BV5000

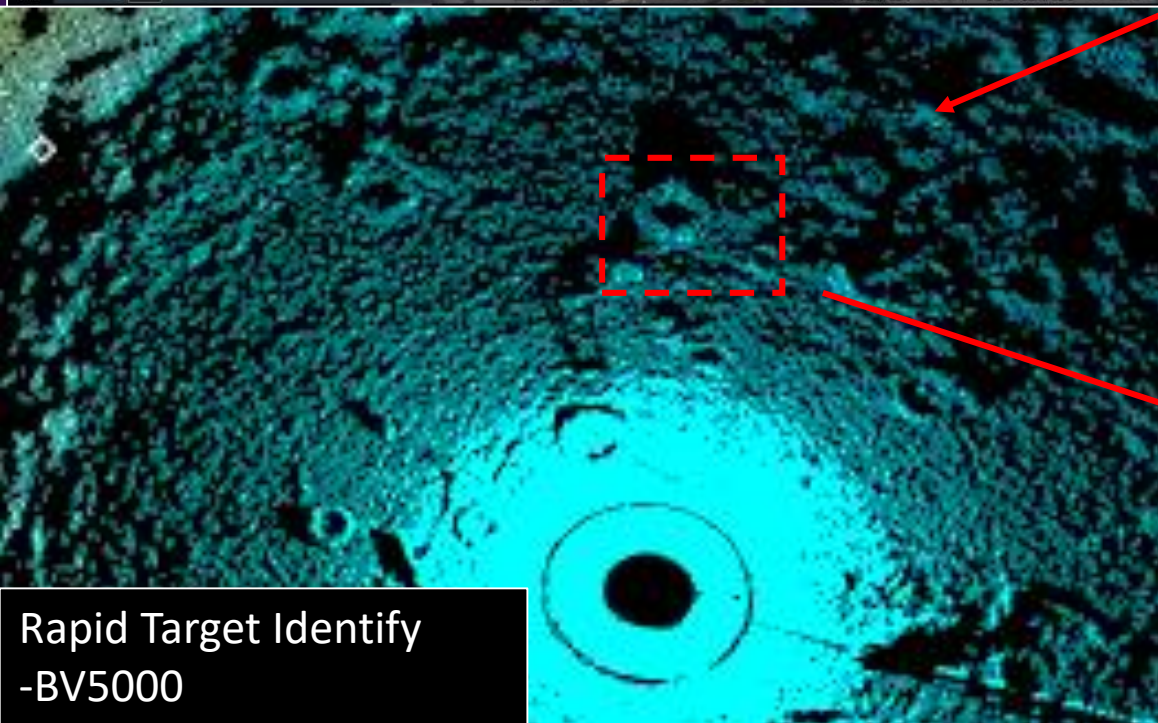
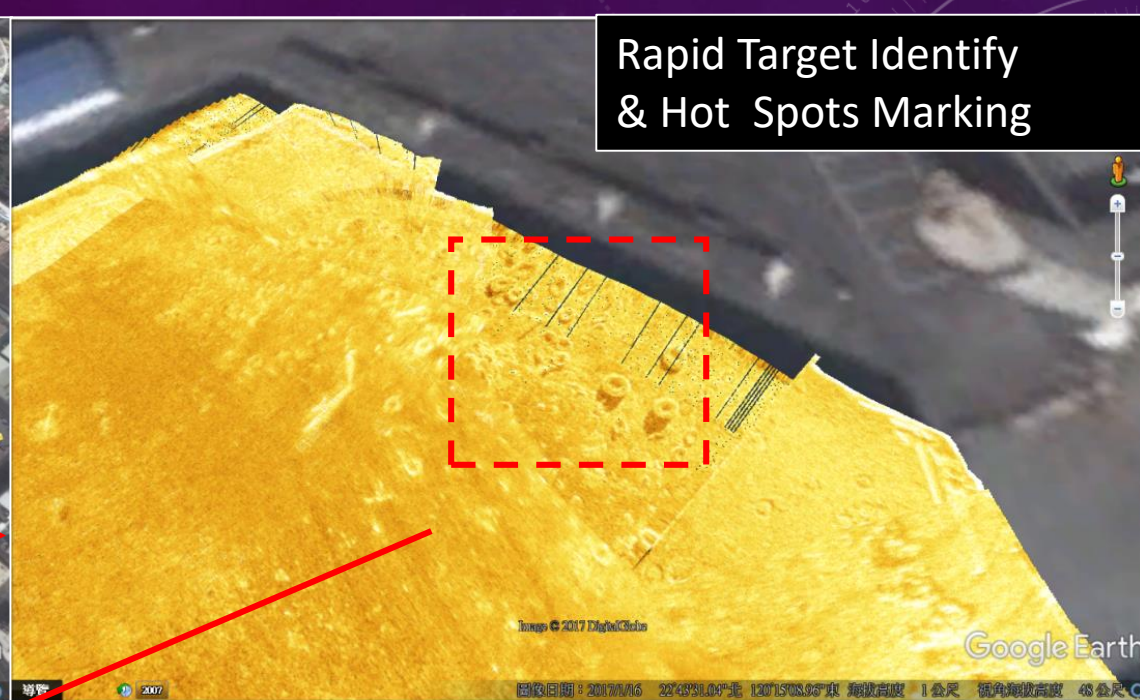




Large Area Survey



Rapid Target Identify  
& Hot Spots Marking



Rapid Target Identify  
-BV5000

Rapid Target Identify  
-ROV

:10:46:25 LLat:2d41'44.700" N :2  
:17/03/28 LonLon:d16'22.848" E

W Dir:4Temp:Temp:0  
W Vel:ar:1.0Bar:ea

W Di



# SUMMARY

The rapid harbor search and rescue mode of NMOO offers an efficient searching solution in the shallow water and narrow boundary. Most underwater Search and Rescue units have well-experienced of diving rescue but with unprofessional on searching. By using rapid harbor search and rescue mode with the right equipment, the whole search area will be narrowed down to few targets.

- Real-Time decisions during Acquisition
- Allows Integration with Satellite Images and ENCs
- Precise location and size of the seabed targets
- Easy Manage Seabed targets





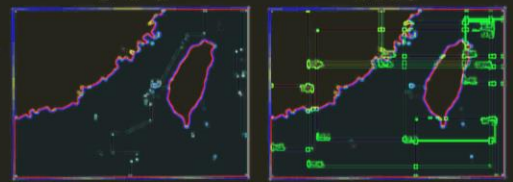
閩江口至香港  
臺灣  
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Thanks for your attention!!

MOUTH OF MIN-CHIANG-HONG KONG  
INCLUDING TAIWAN

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