

REDEFINING IMAGE CLARITY

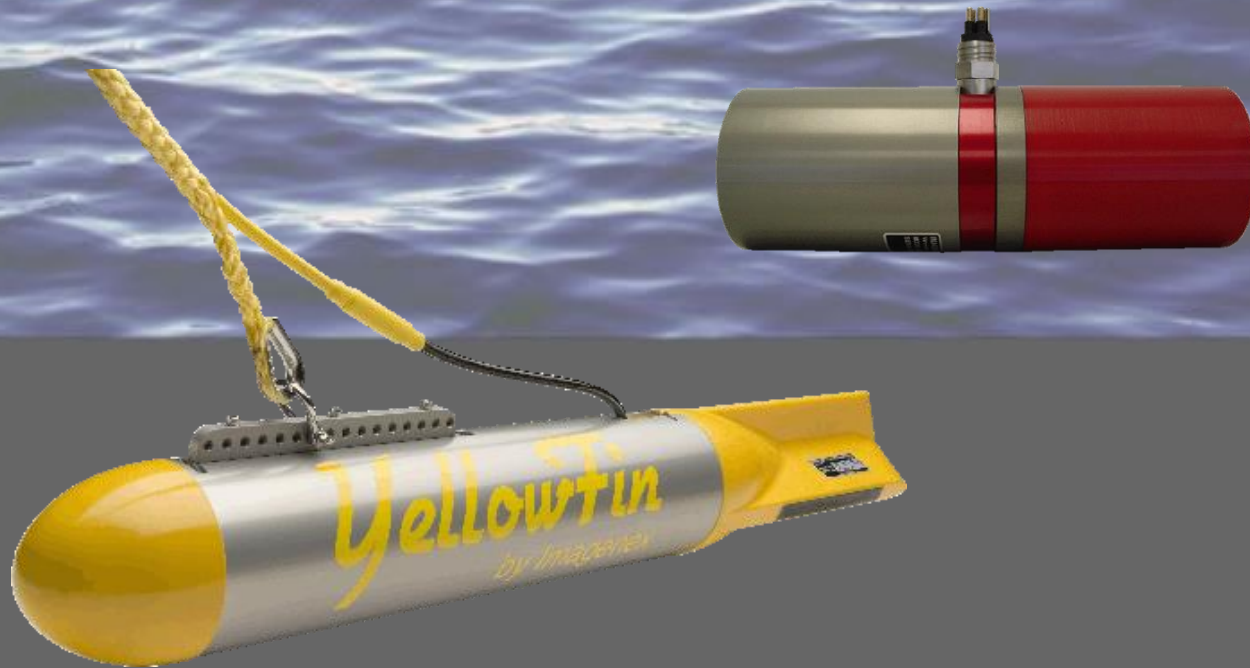
INTRODUCTION

- IMAGENEX TECHNOLOGY CORP. WAS FOUNDED IN 1988 BY PIONEERS IN THE DEVELOPMENT OF HIGH RESOLUTION SONAR
- AN INNOVATIVE COMPANY SPECIALIZING IN ADVANCED ACOUSTIC UNDERWATER SENSORS TOGETHER WITH GRAPHIC VISUALIZATION TOOLS AND INTERFACING OPTIONS
- INCLUDES COST-EFFECTIVE MULTIBEAM, SINGLE-BEAM MECHANICAL SCANNING, SIDE SCAN SONAR AND A NUMBER OF OEM KIT SENSOR PACKAGES FOR VEHICLE AND PLATFORM INTEGRATION

IMAGENEX REPRESENTATION

- IMAGENEX TECHNOLOGY CORP. MARKETS ITS PRODUCTS THROUGH 20 WORLDWIDE REPRESENTATIVES AND DISTRIBUTORS

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- SIDE SCAN
- IMAGING AND PROFILING
- SPECIAL TECHNOLOGY APPLICATIONS

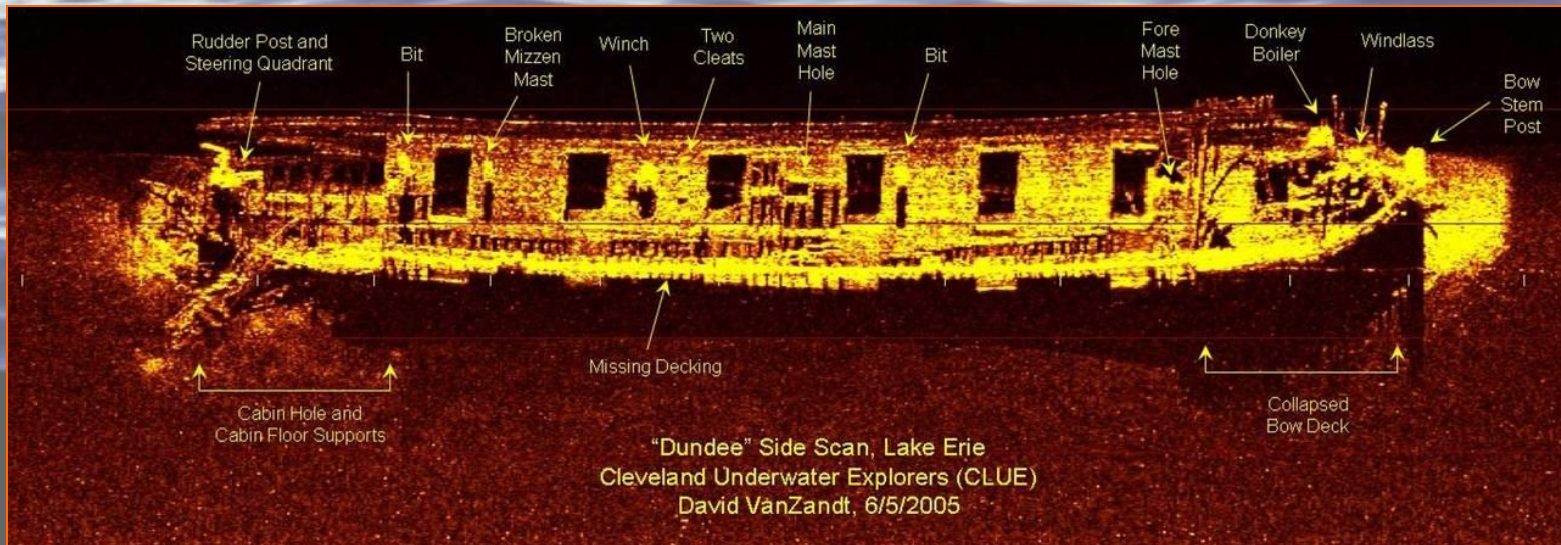
SONAR PRODUCT RANGE



SIDE SCAN SONAR

- SEARCH
- IDENTIFICATION
- SURVEY
- MAPPING

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SIDE SCAN SONAR

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IMAGENEX



SIDE SCAN SONAR

YELLOWFIN SIDESCAN SONAR



INSTALLED ON:

- ROV
- AUV
- TRENCHER, ETC.

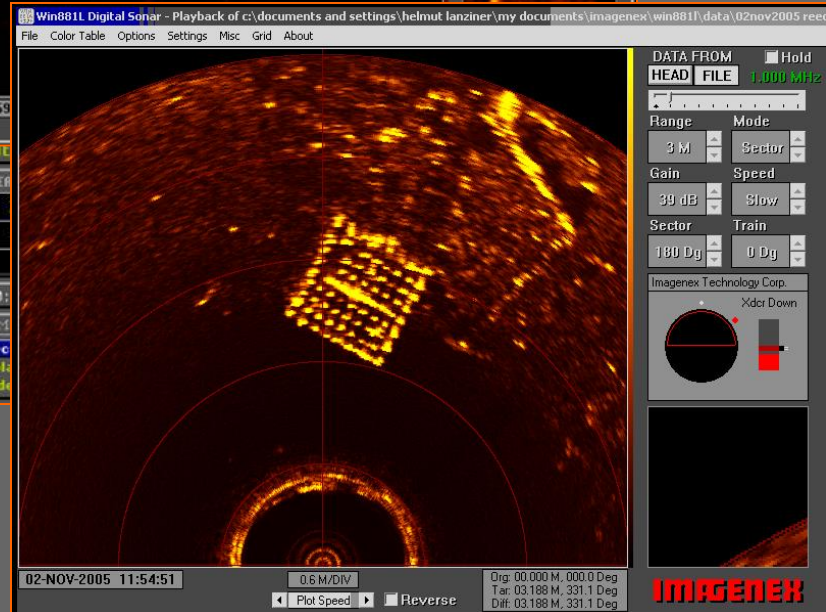
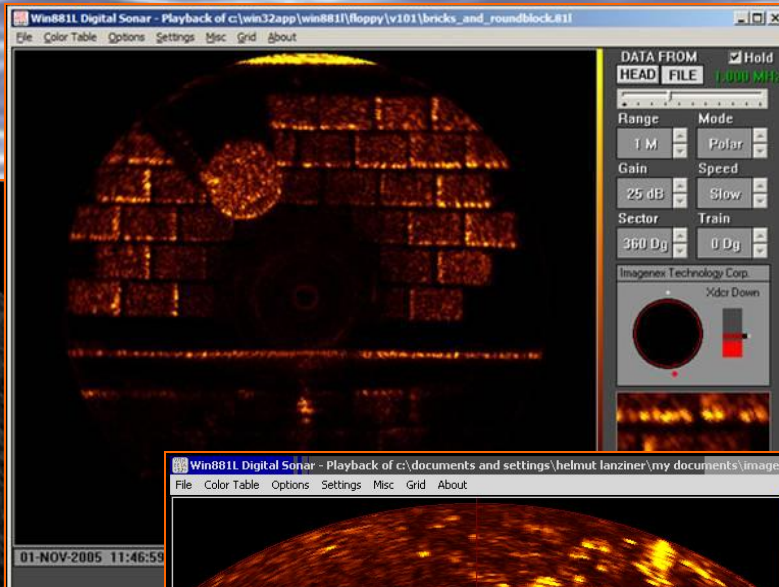
FOR A RANGE OF SMALL, MEDIUM AND
WORK CLASS UNDERWATER VEHICLES



• ALTIMETERS & OTHER SENSORS

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IMAGENEX

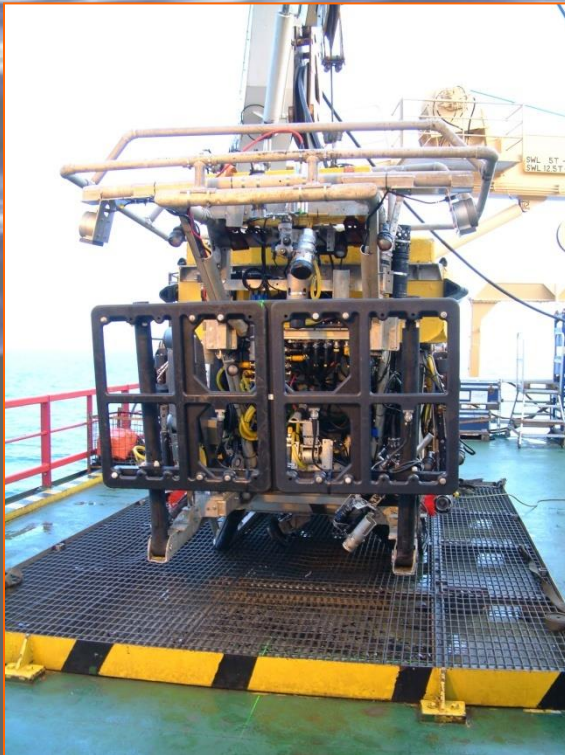


- SECTOR SCANNING IMAGING SONAR

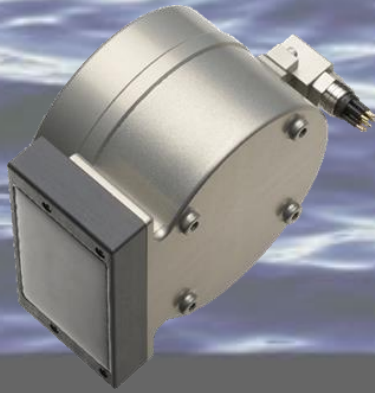
881A SONAR PRODUCT RANGE

EXPERIENCE WITH PIPELINE INSPECTION WORK

- INTRODUCED TO THE NORTH SEA - 2006
- CONSIDERABLE DATA OF PIPELINE AND TRENCHING OPERATIONS COLLECTED
- HAS LEAD TO UPGRADES IN S/W THROUGH OFFSHORE EXPERIENCES
- IS NOW A MATURE PRODUCT



DELTA-T MULTIBEAM IN PIPELINE SURVEY

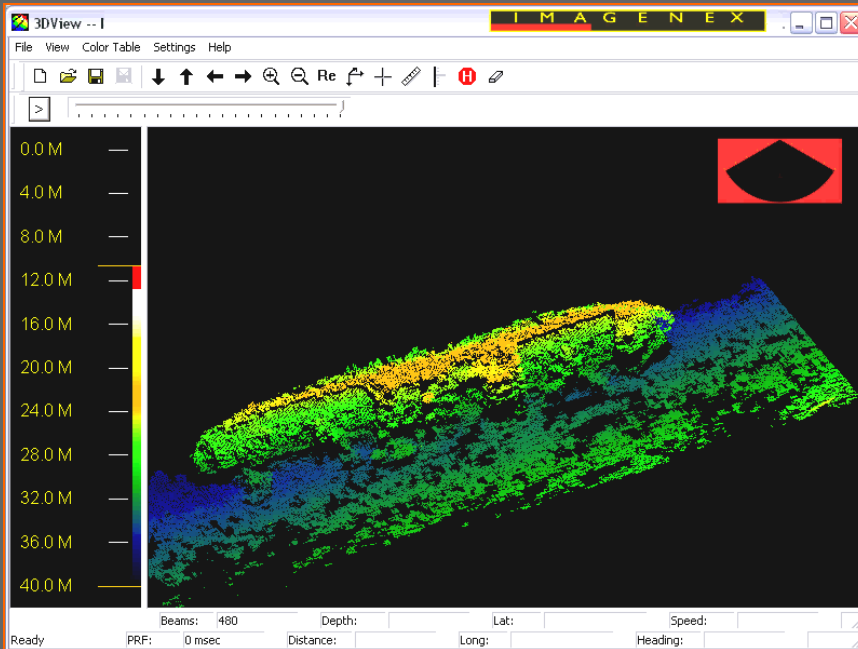
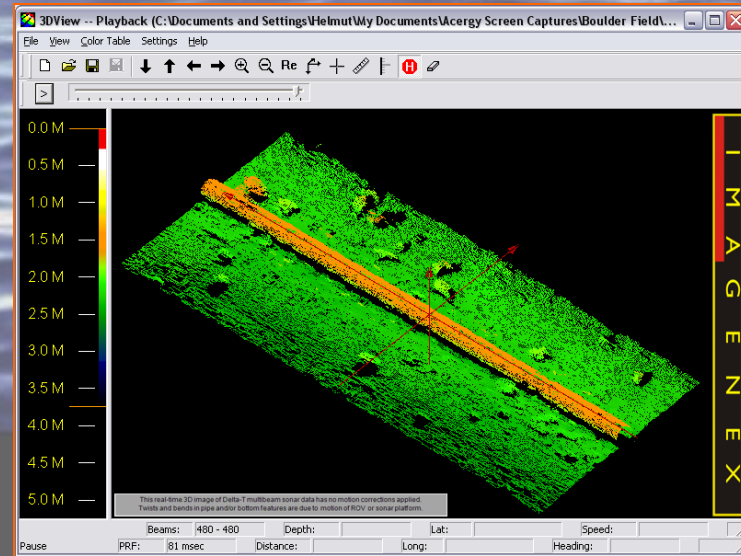
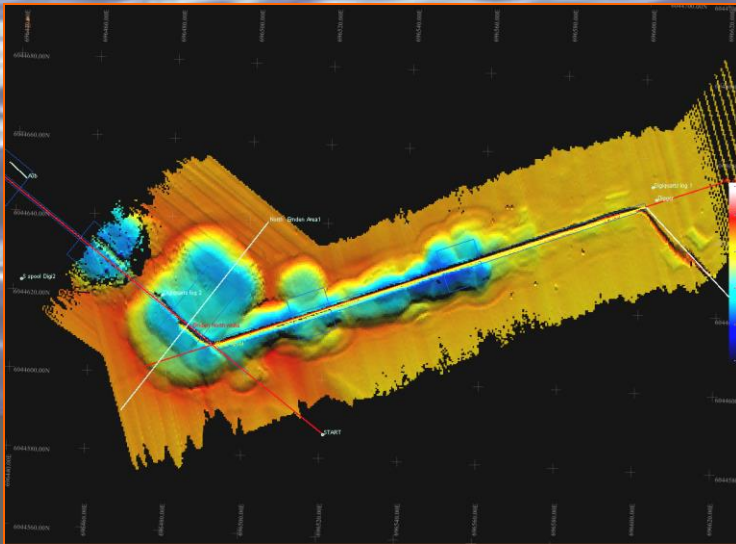


DELTA-T RANGE

- PROFILER TYPE 837, 837A, 837B
- IMAGER TYPE 837, 837A / TILT-HEAD
- AZIMUTH-DRIVE SONAR



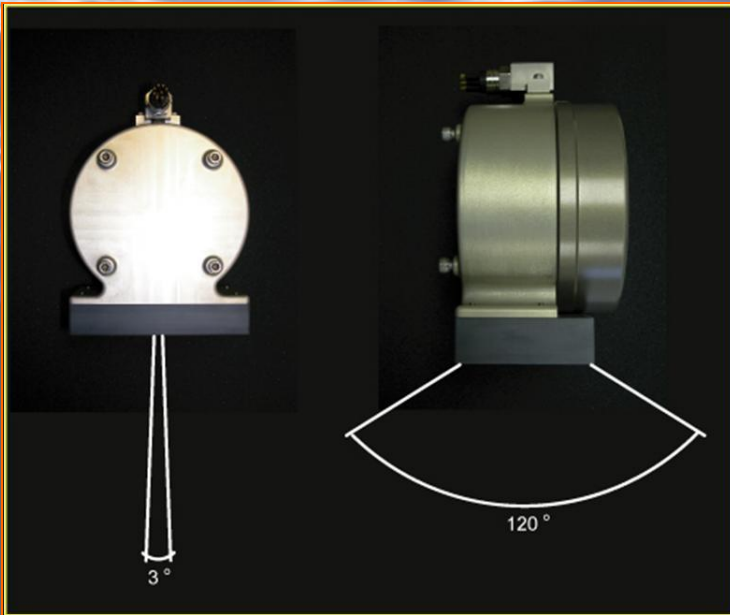
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DELTA-T MBES

- OFFSHORE PIPELINE
- SURVEY
- MAPPING
- WRECKS AND SALVAGE
- TRENCHING

IMAGENEX



INTRODUCTION OF 837A

- MULTIBEAM PROFILER
- 300m and 3,000m OPERATIONAL DEPTH



INTRODUCTION OF 837B

- PROFILER VERSION FOR 1,000m RATING
- SUITED TO LIMITED SPACE INTEGRATIONS, SUCH AS SMALL CLASS ROVs



TRIALS / DEMOS AND OPERATIONAL EXPERIENCE
OFFSHORE WITH SELECTED USERS



DELTA-T PROFILERS FOR PIPELINE SURVEY

- SMALL CLASS AUV
- ROV INSTALLATION WITH DUAL PROFILERS
- SMALL BOAT POLE DEPLOYMENTS



- SINGLE-BEAM RESOLUTION TOGETHER WITH MULTIBEAM-LIKE UPDATE RATES
- IDEAL FOR CURRENT WORK CLASS ROV PLATFORMS

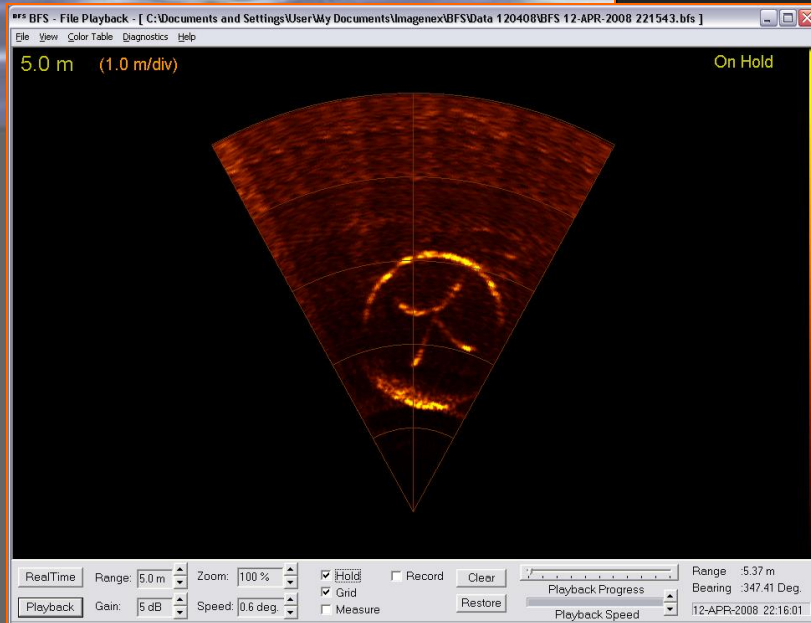
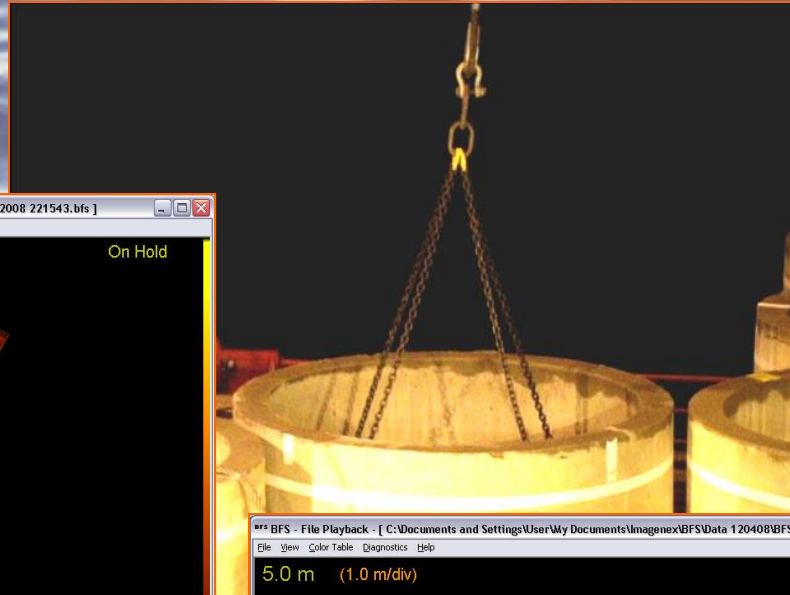


INTRODUCTION OF BFS IMAGER

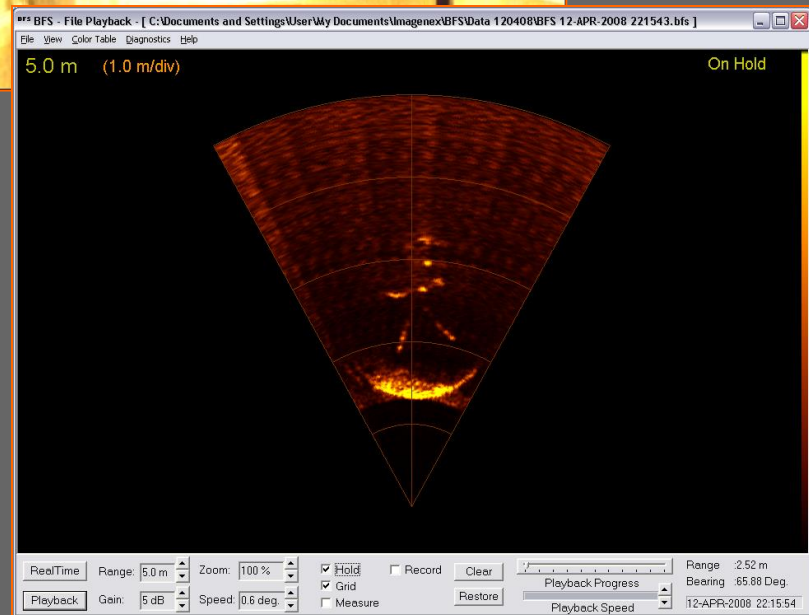
- UNIQUE DESIGN FOR ROV INSTALLATIONS - TO DEAL WITH COMMON TARGET-LOSS PROBLEMS

REDEFINING IMAGE CLARITY

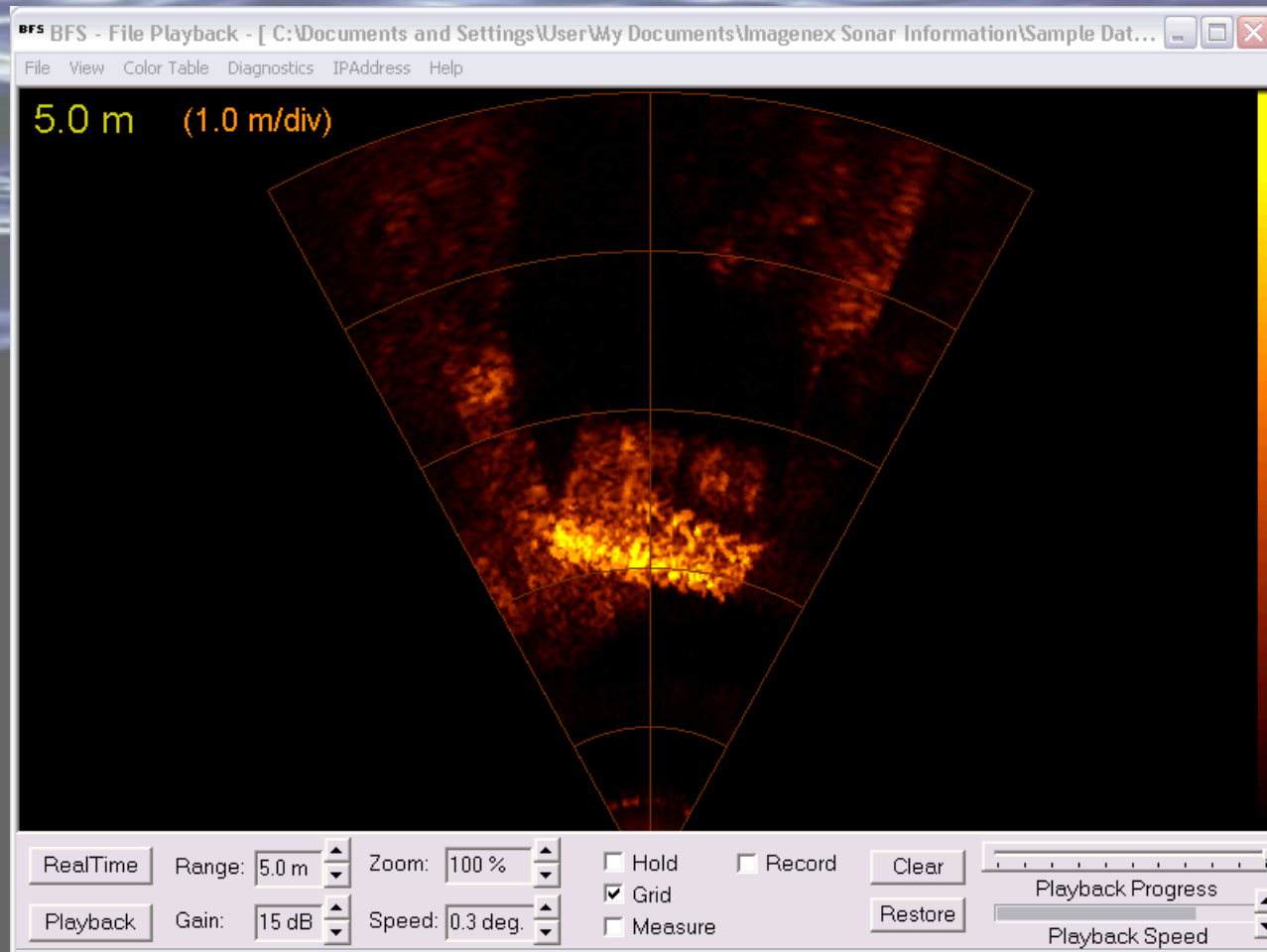
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BFS IMAGER



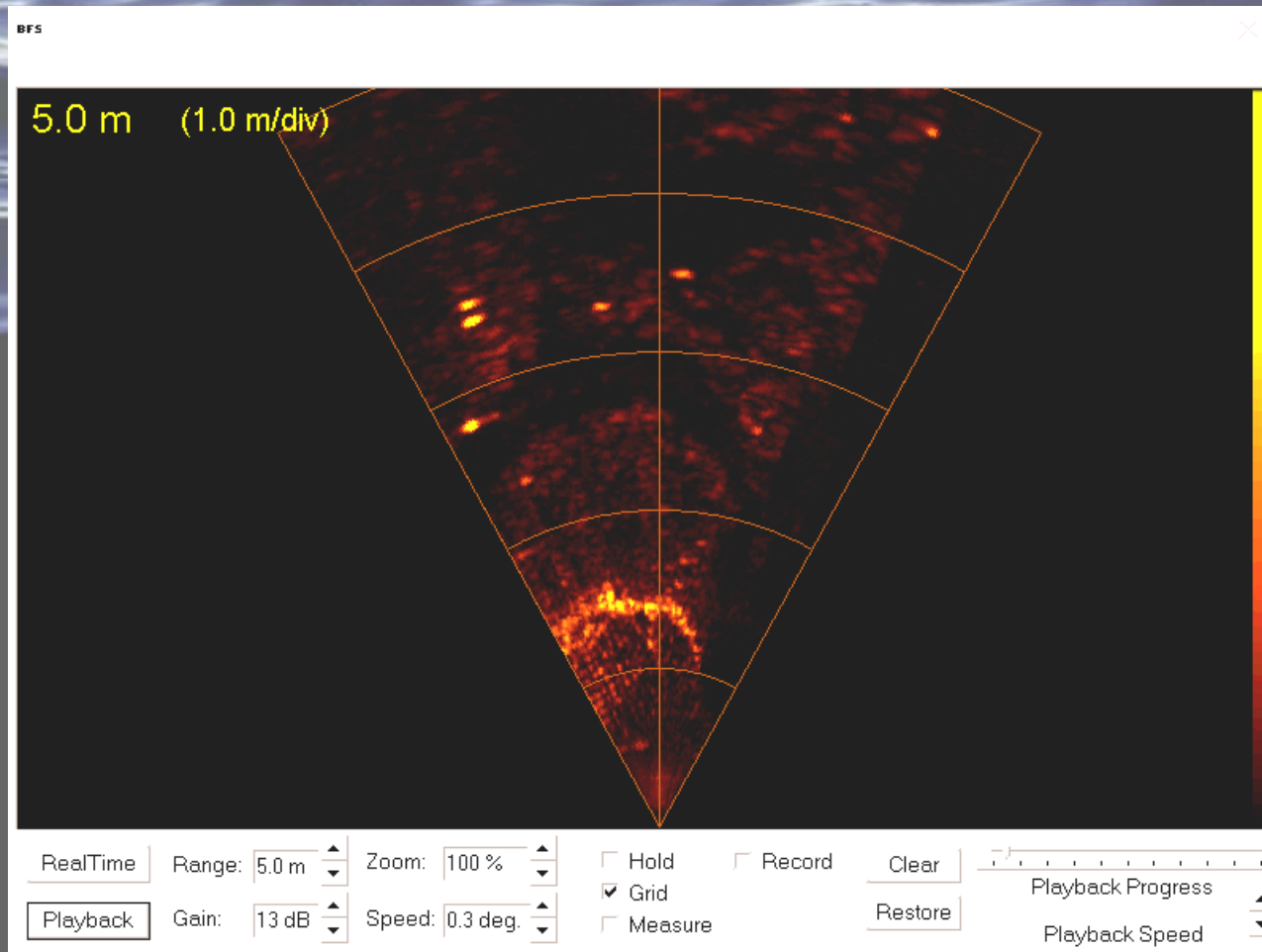
REDEFINING IMAGE CLARITY



BFS ANCHOR BLOCK

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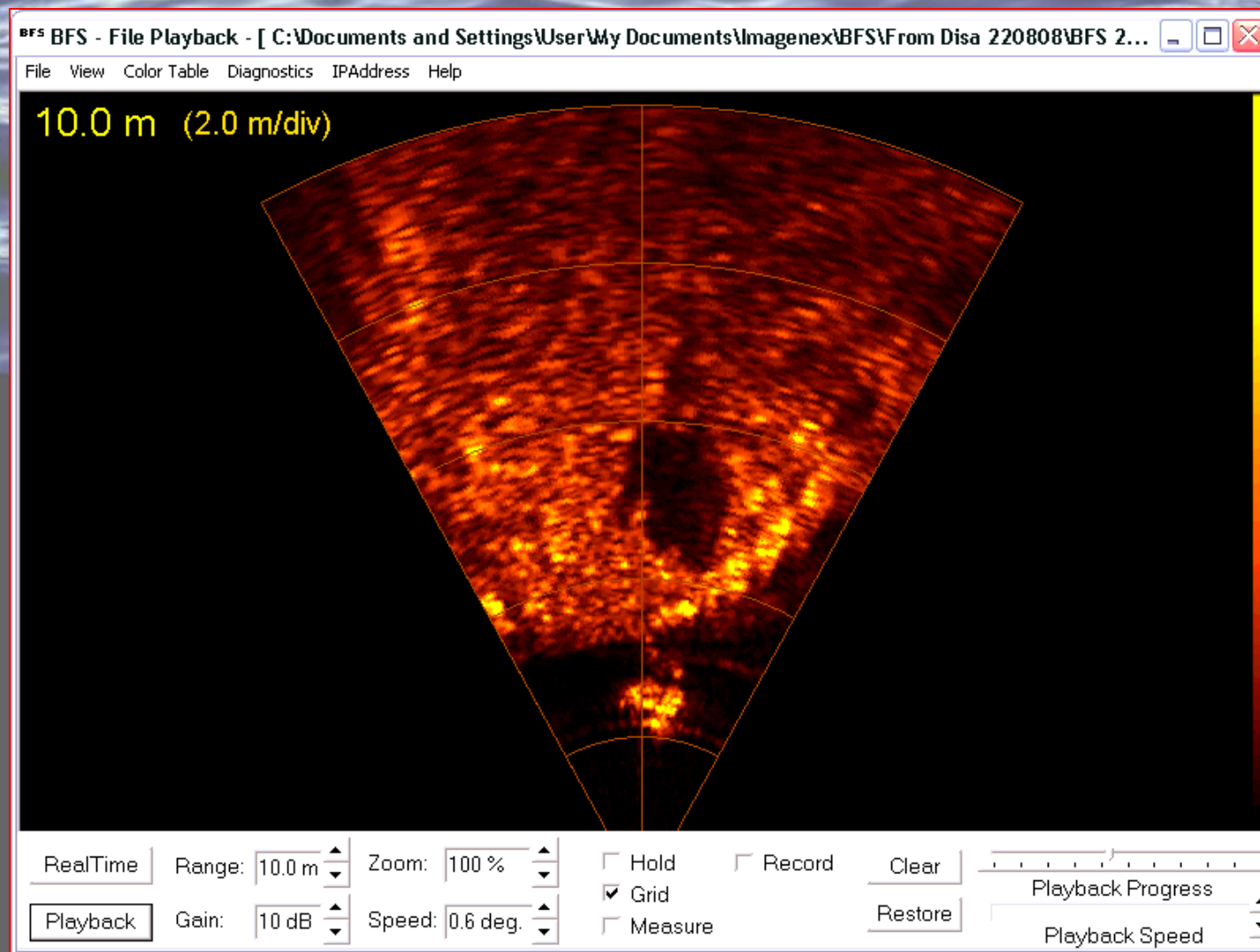
REDEFINING IMAGE CLARITY



BFS FISH ENTERING
CRABTRAP

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BFS DIVER

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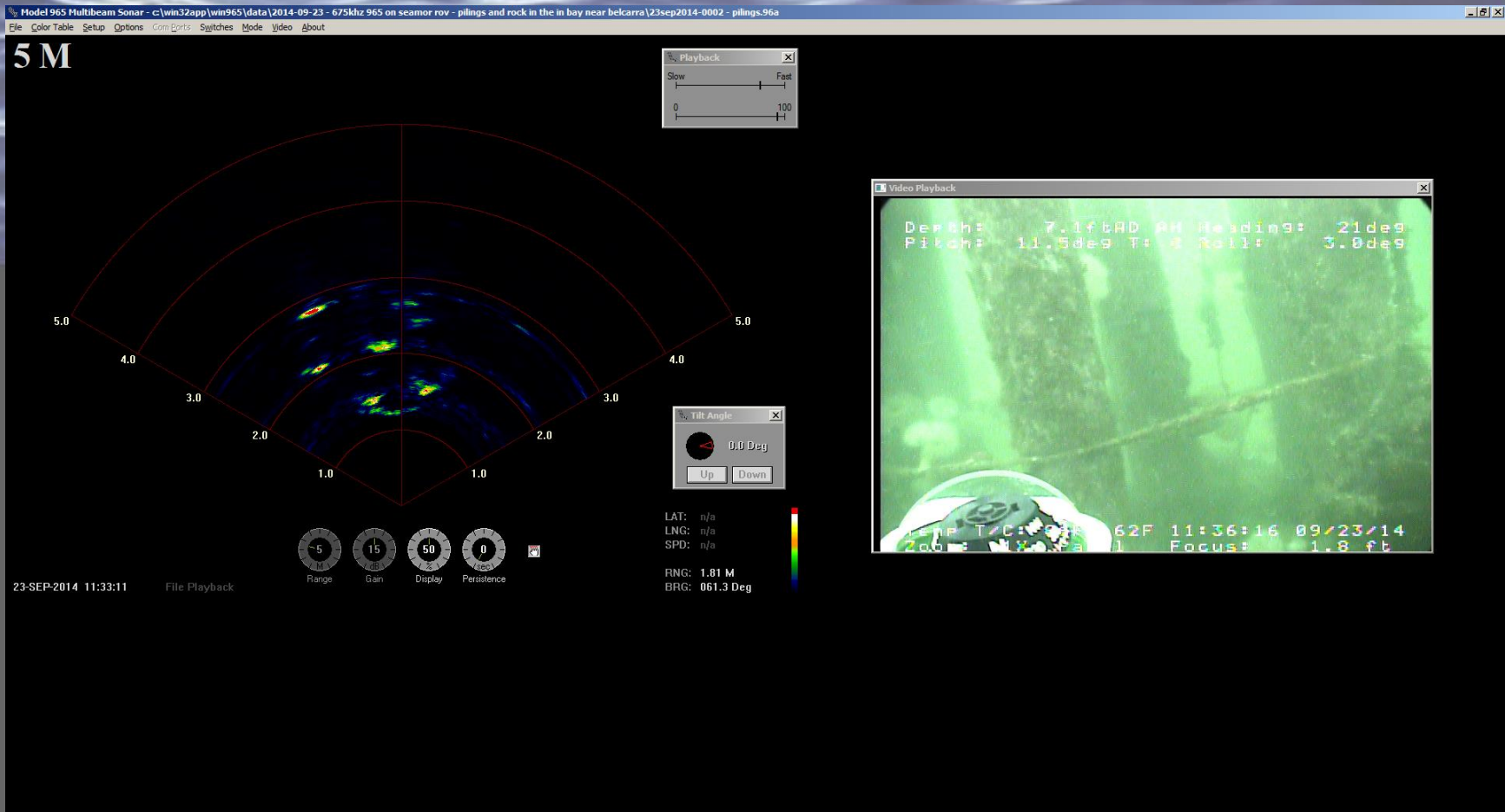
INTRODUCTION OF DELTA-T MODEL 965

- 64 CHANNEL IMPLEMENTATION



DELTA-T MODEL 965

- 64 CHANNEL IMPLEMENTATION

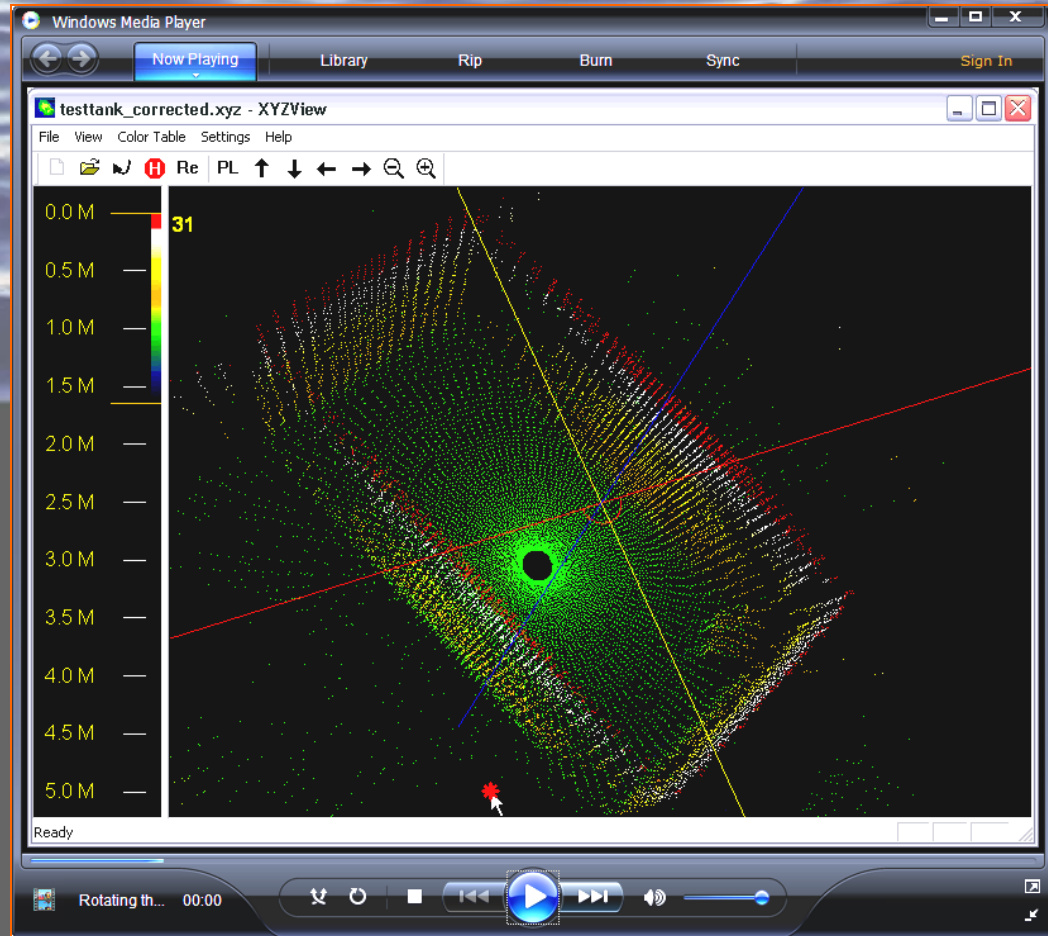


965 MULTIBEAM IMAGING SONAR



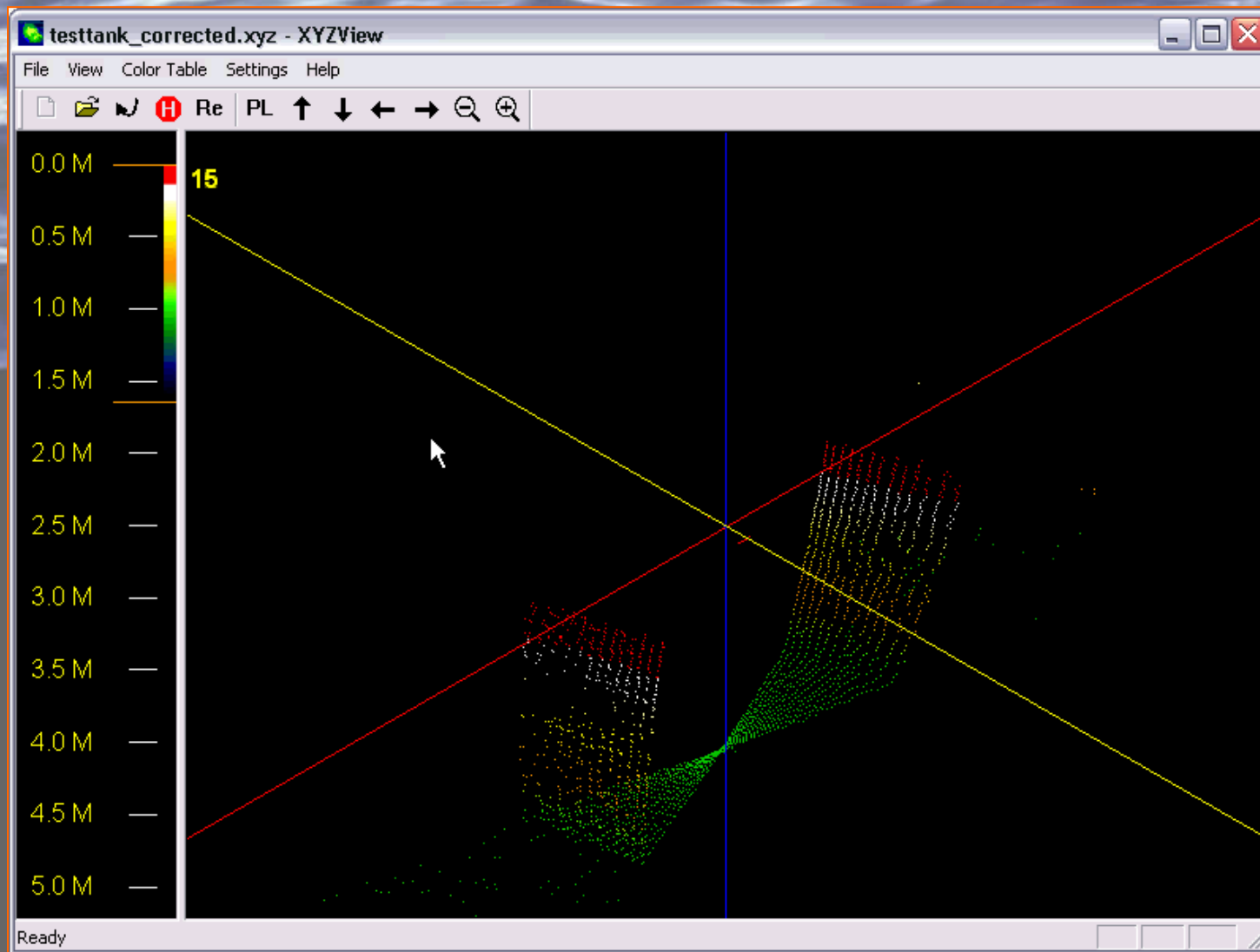
IMAGER FOR ROV PILOTING

- USED AS OAS AND FOR GENERAL PILOTING OF ROV
- USED AS OAS ON AUVs WITH SPECIAL MINIATURE DESIGN TRANSDUCER



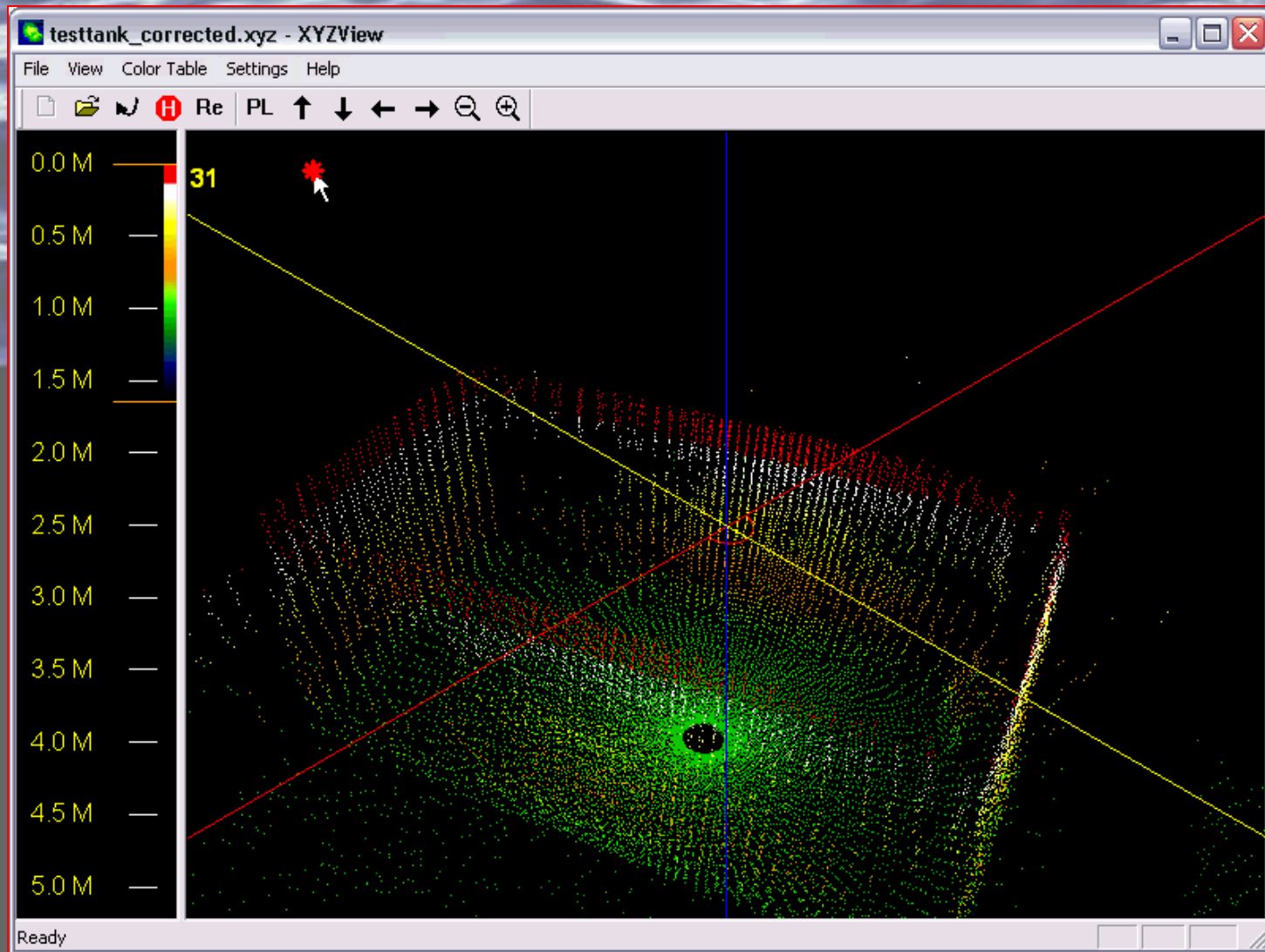
AZIMUTH DRIVE (881A) – (837B)

THE 881A HAS BEEN AVAILABLE IN MECHANICAL-SCAN VERSION FOR SOME YEARS - NOW REDESIGNED TO USE THE DELTA-T 837B, WITH HIGH SPEED PROFILING PERFORMANCE, EXCELLENT FOR STATIONARY OPERATION RESULTING IN 3D PROFILING IMAGERY



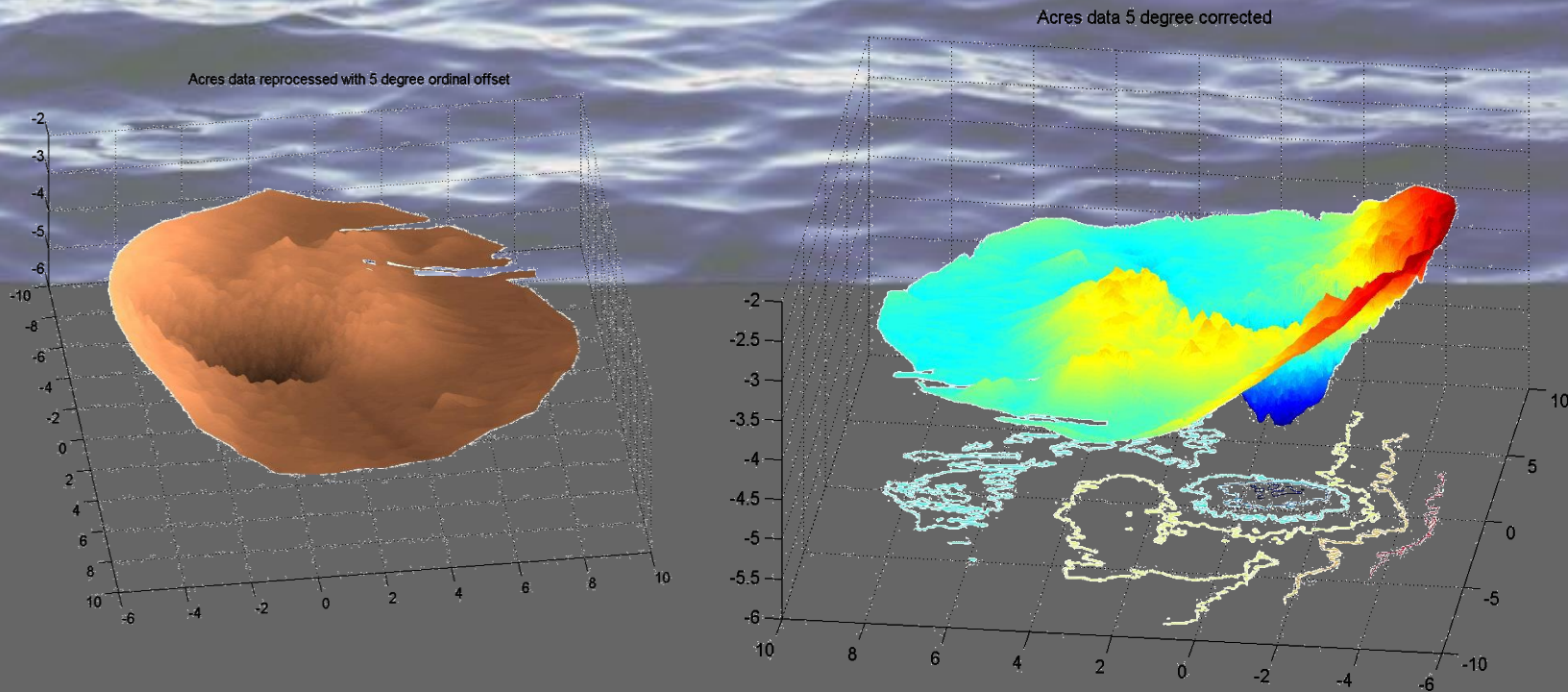
AZIMUTH DRIVE (881A)

3D SAMPLE PROFILES OF TEST TANK
WITH USE OF MECHANICAL SCANNING



AZIMUTH DRIVE (881A)

3D-MANIPULATION OF SET OF TEST TANK
PROFILES FROM MECHANICAL SCANNING



3D IMAGES

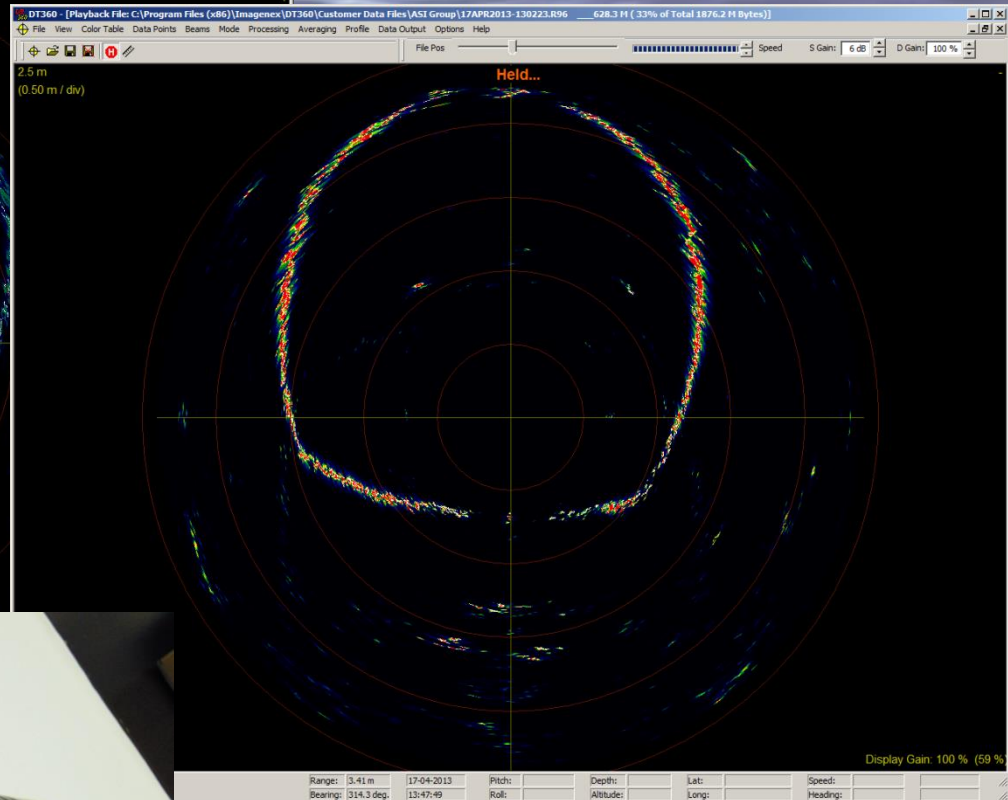
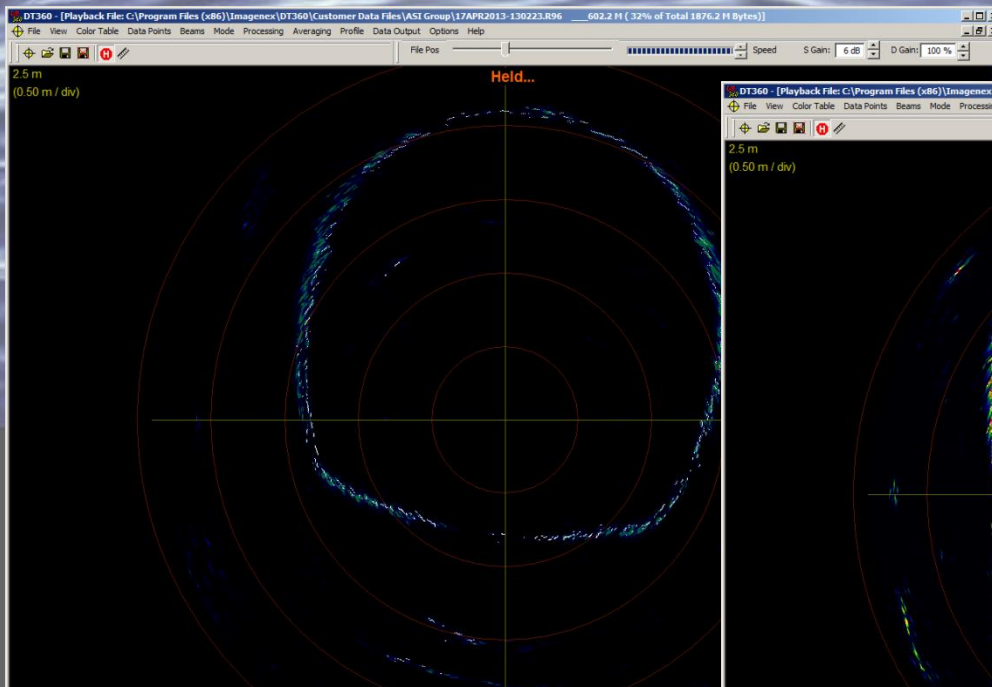
- 3D IMAGES FROM IMAGENEX PROFILING DATA
- DTM GENERATION WITH STANDARD SOFTWARE



INTRODUCTION OF 831A PIPE PROFILER

- DESIGNED FOR USE INSIDE PIPE
- HIGH UPDATE RATE AT 1m RANGE (360° < 1 SECOND, APPROX.)
- AVAILABLE WITH SERIAL OR ETHERNET COMMUNICATIONS

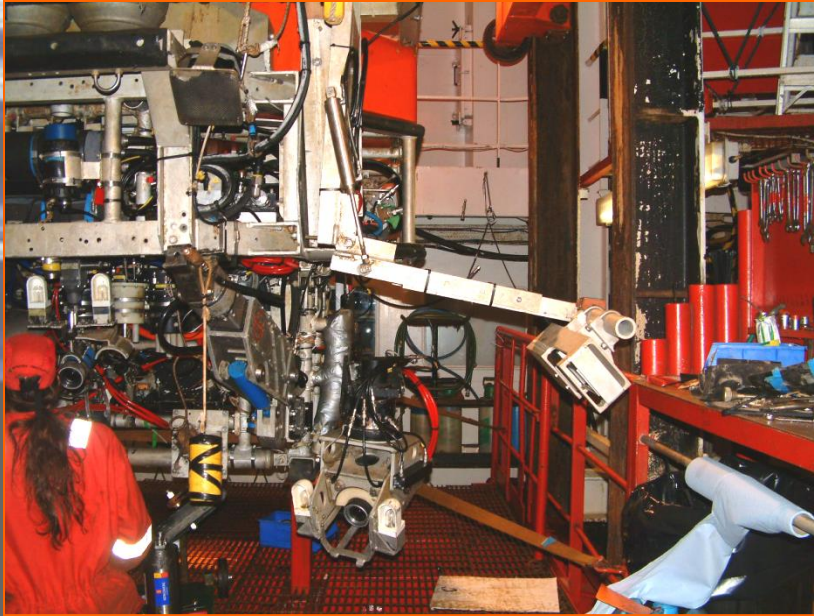
831A PIPE PROFILER



965 360 DEGREE MBES

FIELD OPERATIONS IN OFFSHORE SECTOR

EXAMPLES OF SOME TYPICAL OPERATIONS



EQUIPMENT SETUP ON ROVS

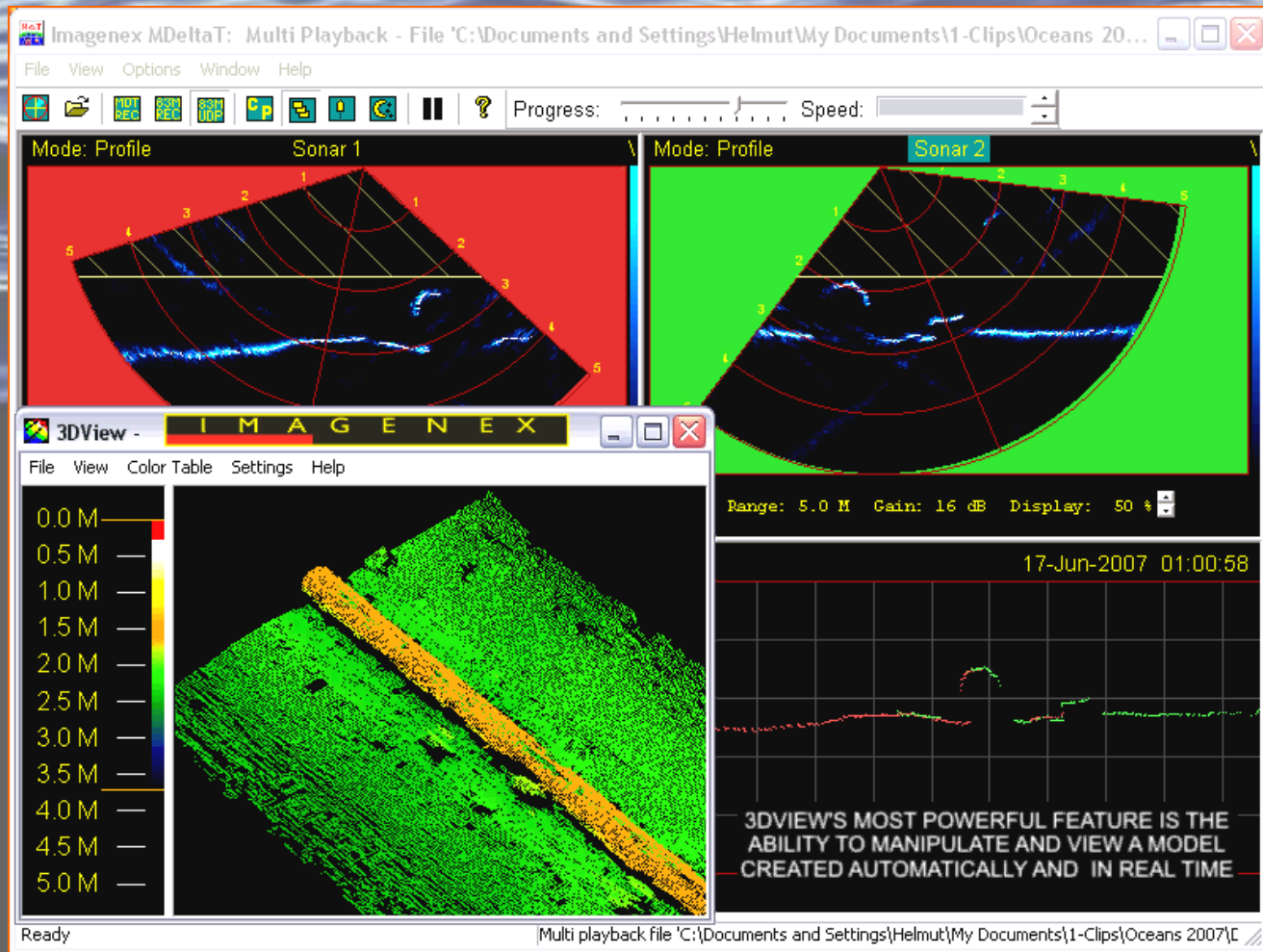
EXAMPLES OF WORK - ROV INSTALLATIONS OF DELTA-T
PROFILERS



EQUIPMENT SETUP ON TRENCHING PLATFORMS

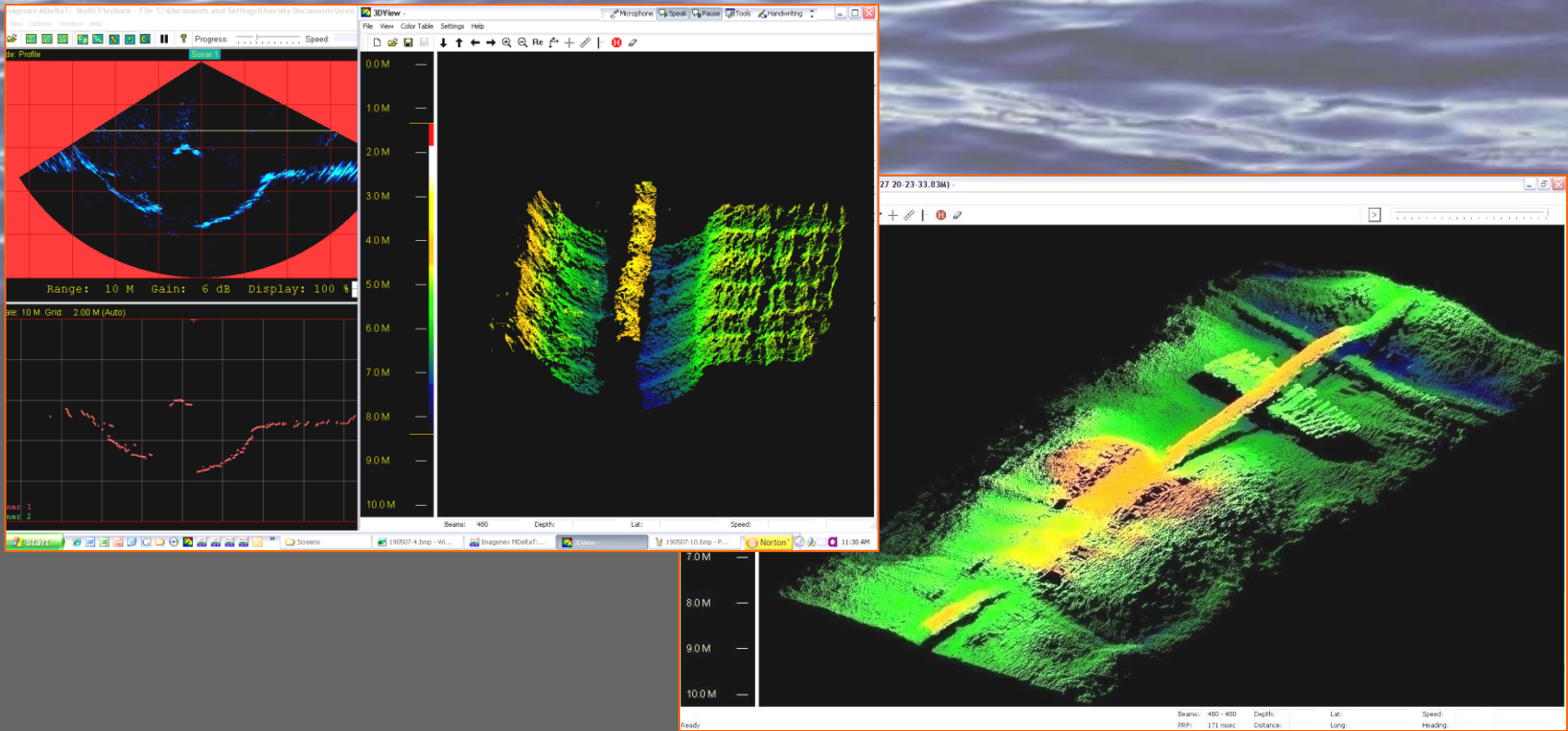
TYPICAL EXAMPLES

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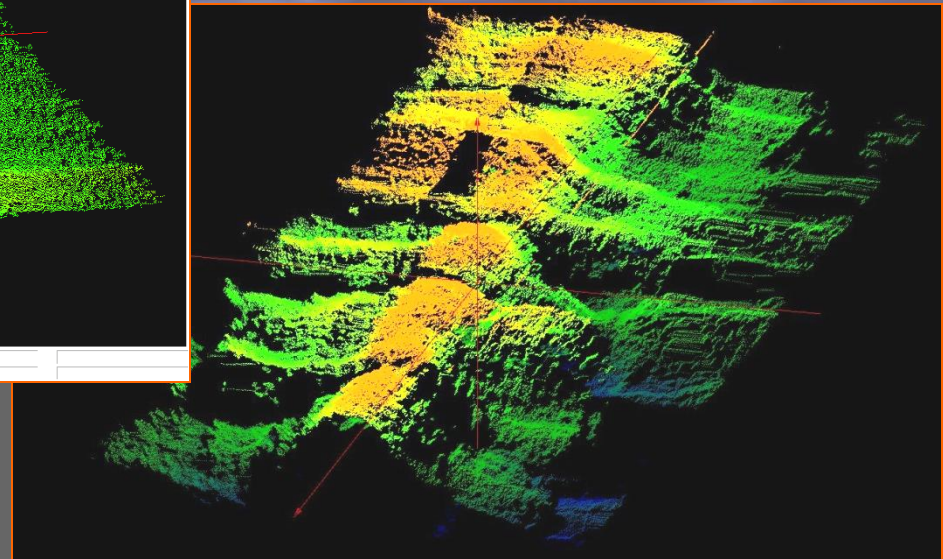
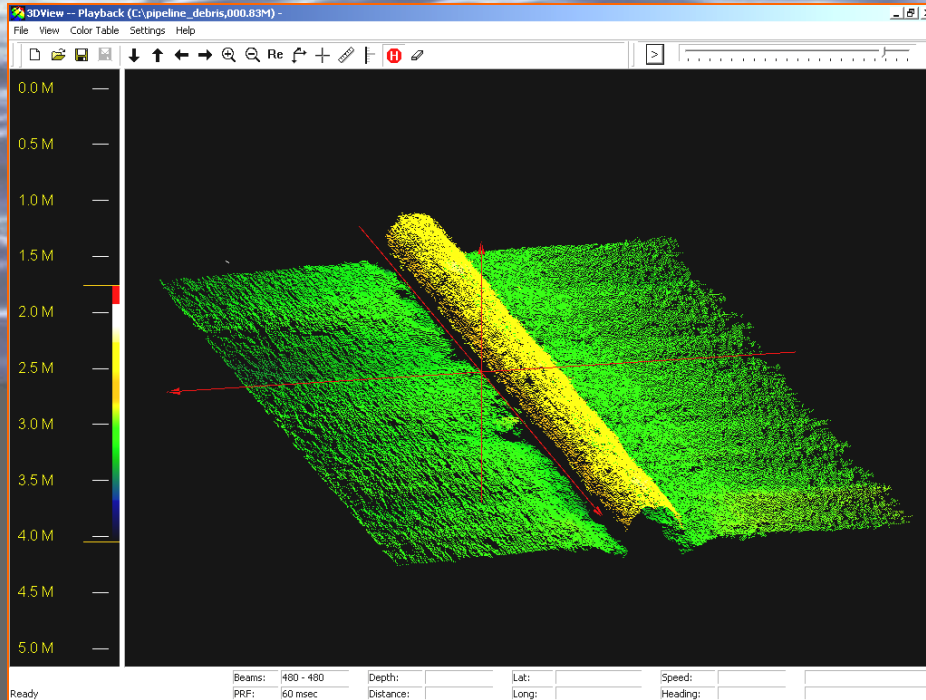
SURFACE CONTROL & PORT / STBD DISPLAY

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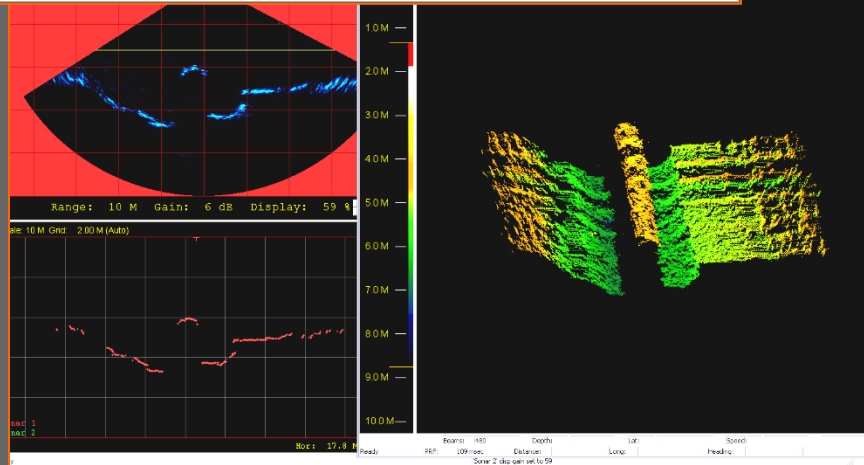
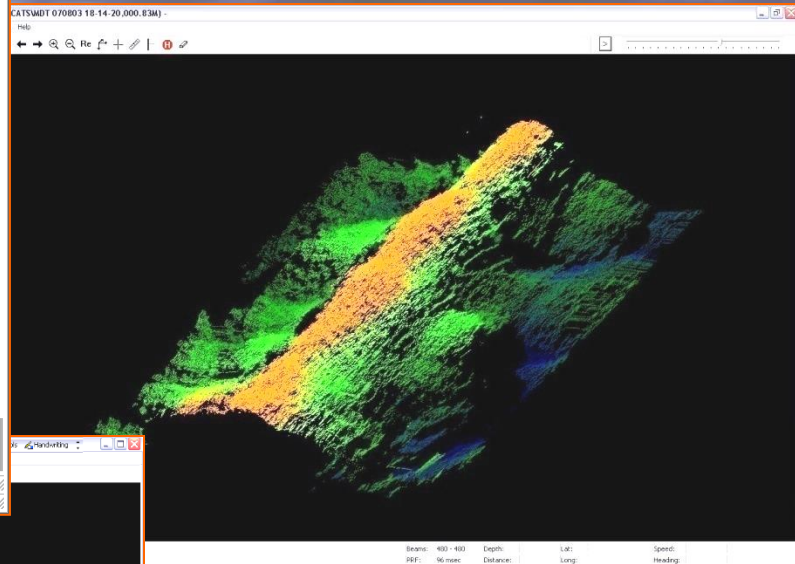
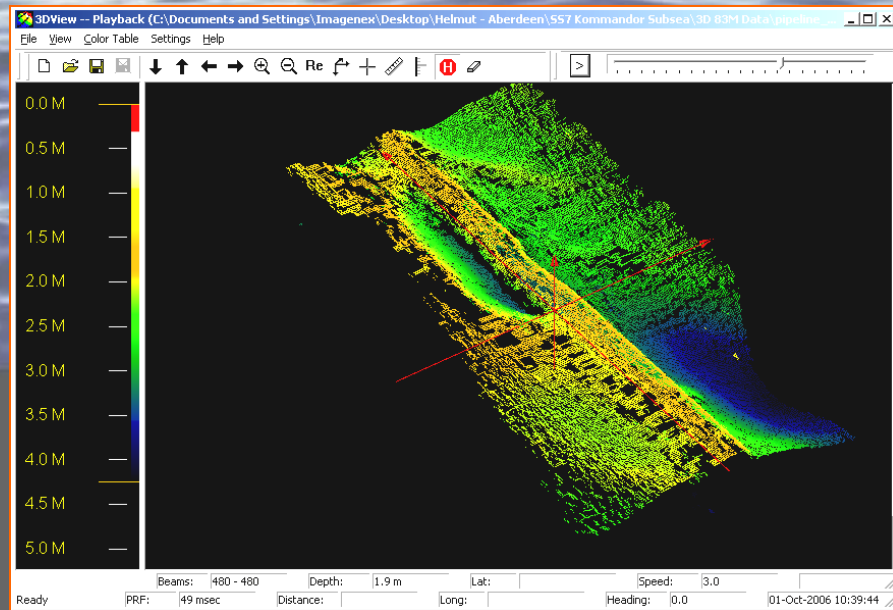
3DVIEW DISPLAY

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EXAMPLES OF PIPELINE ANOMALIES

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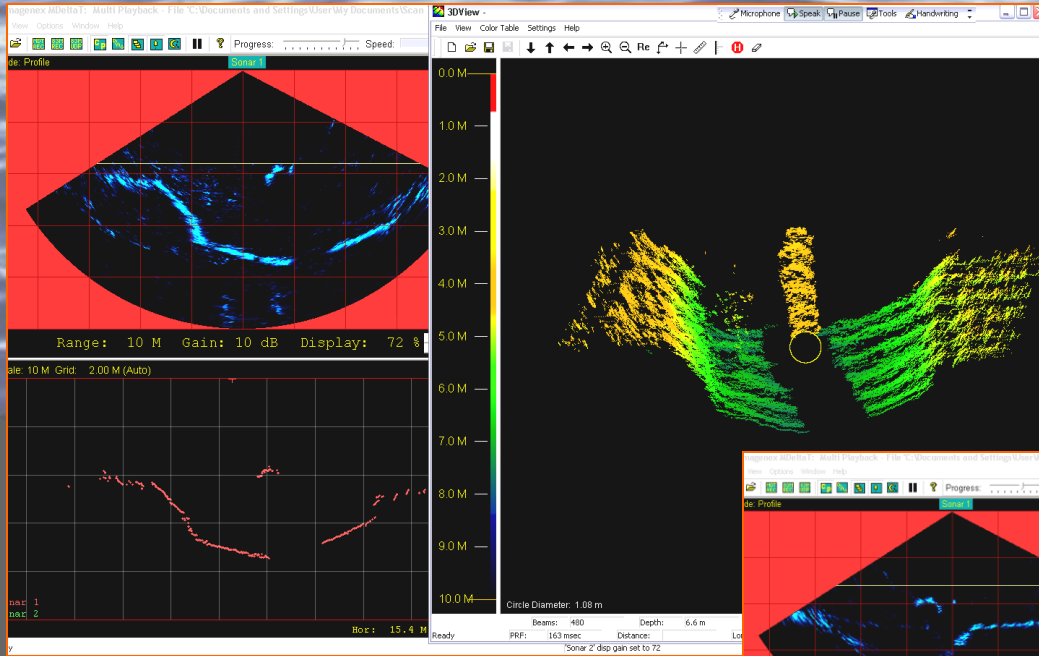


- SUSPENSION
- MATTRESS
- TRENCH

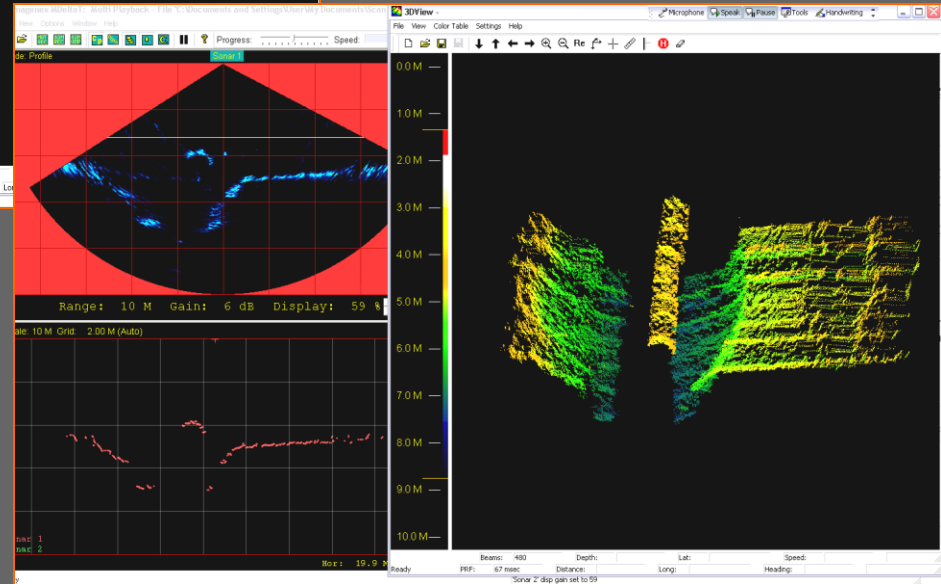
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IMAGENEX

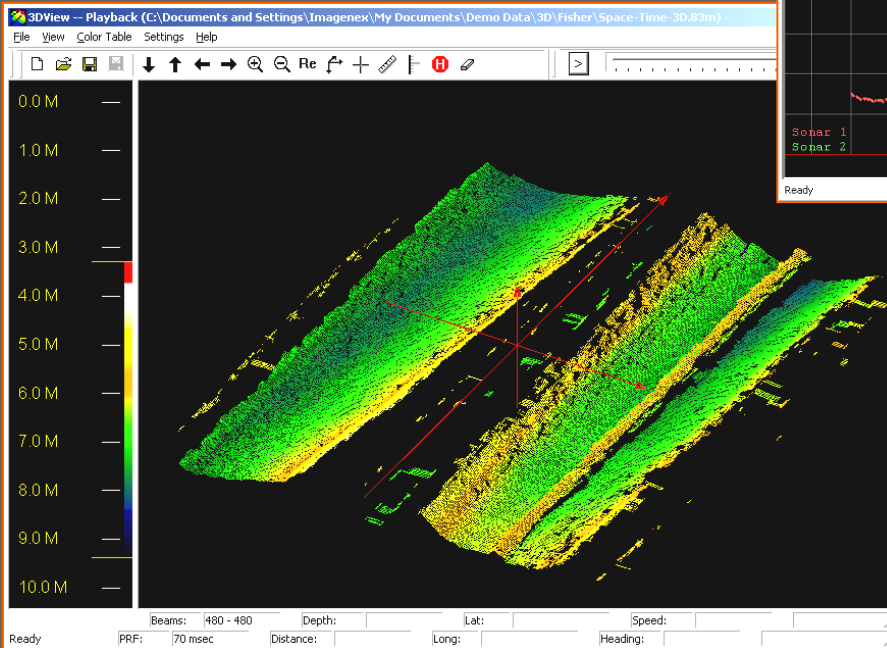
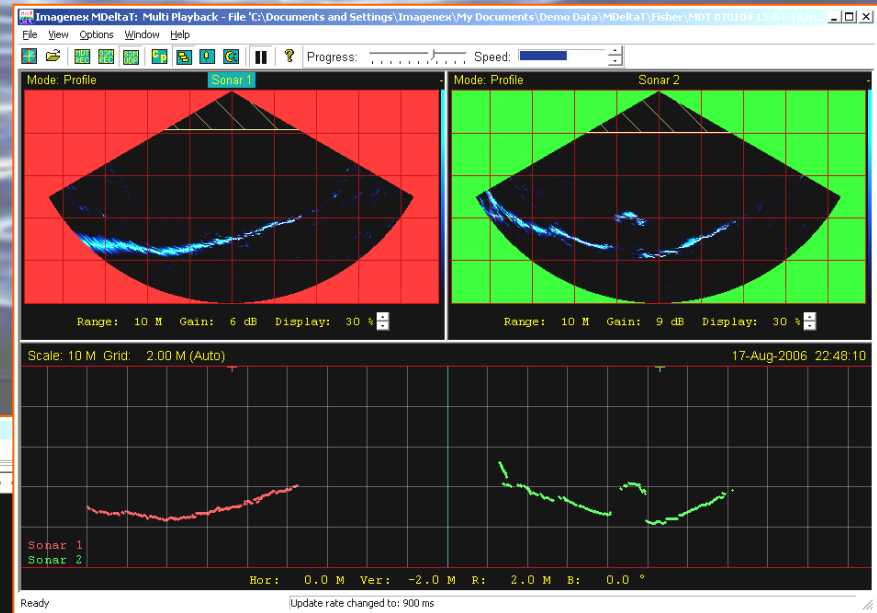


TRENCHING PROFILES



EXAMPLES

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DATA RECORDS

PROFILER COMPARISON

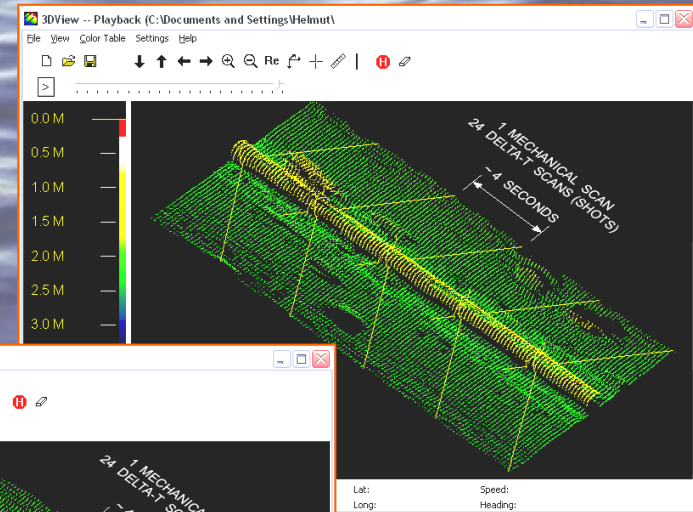
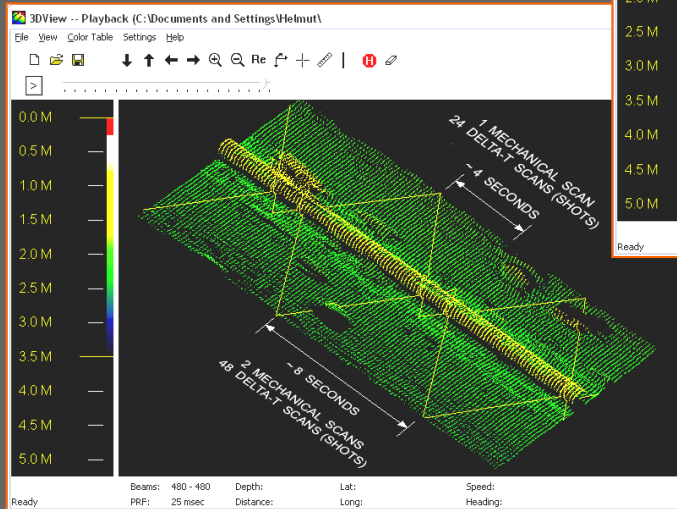
SINGLE BEAM (MECHANICAL SCANNING)

VS.

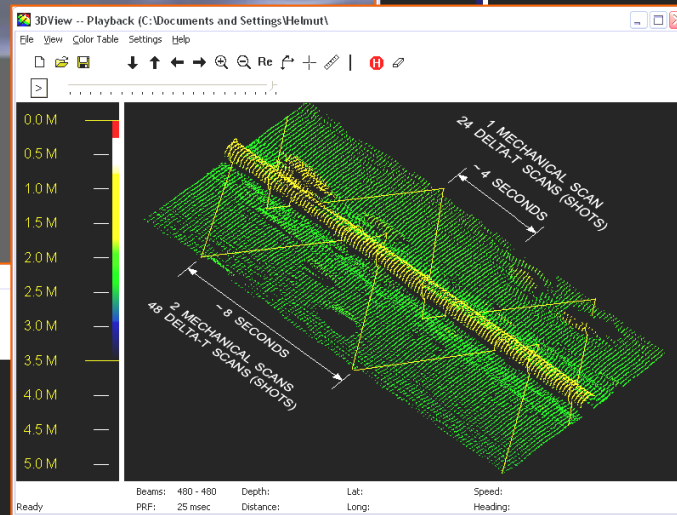
ELECTRONIC SCANNING (DELTA-T)

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COMMON MODE



RESET MODE



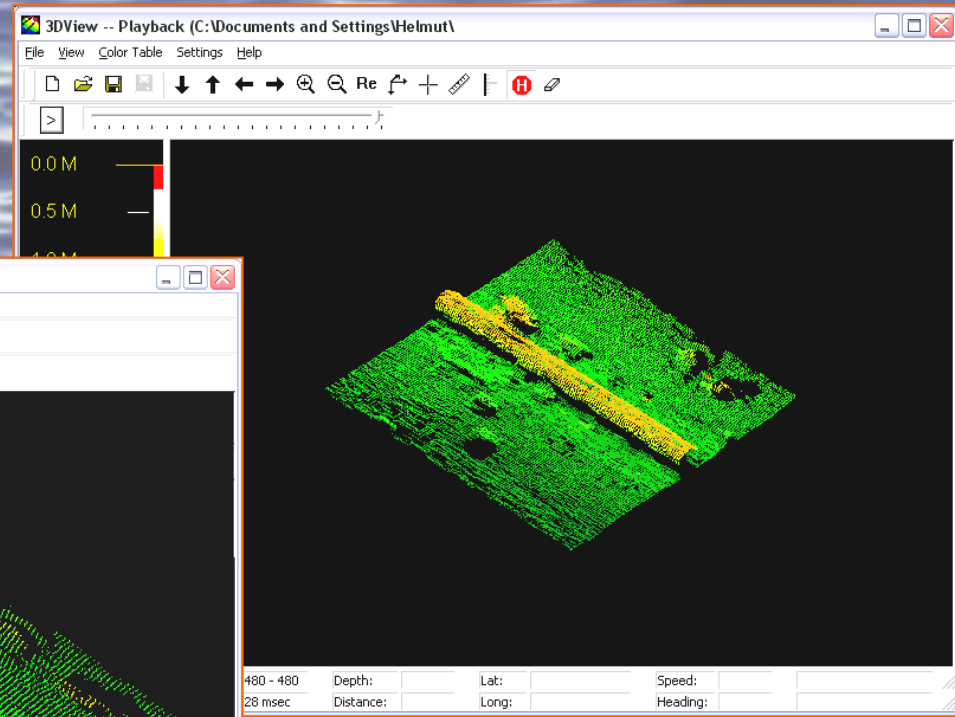
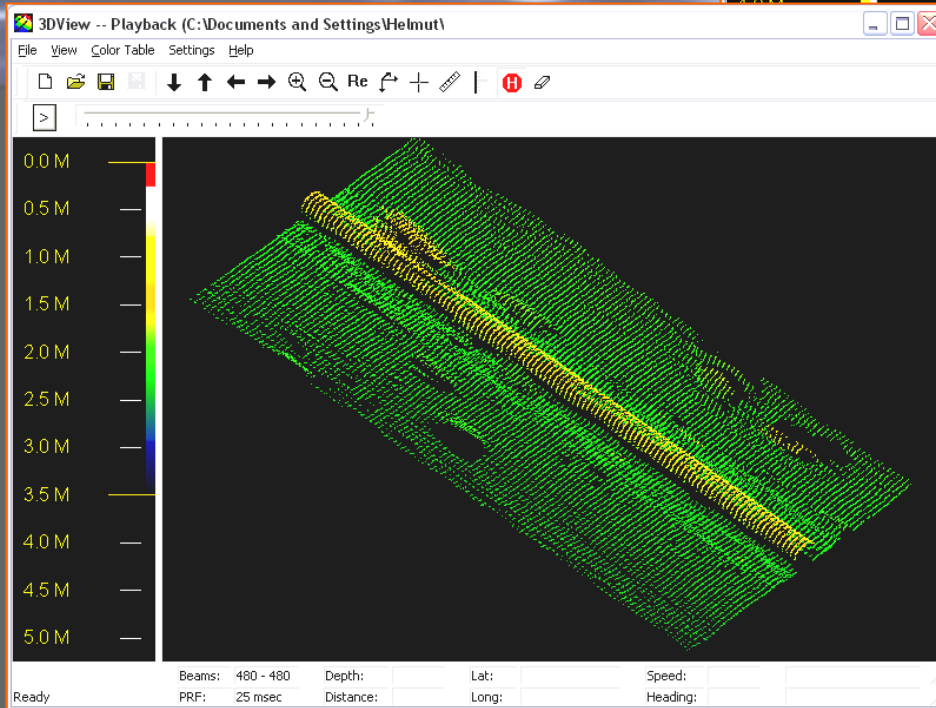
OFFSET MODE

PROFILER COMPARISON

SINGLE BEAM SCANNING PATTERNS
SHOW MISSING INFORMATION

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EXPANDED VIEW SHOWING INDIVIDUAL
LINE-SCANS SIDE BY SIDE

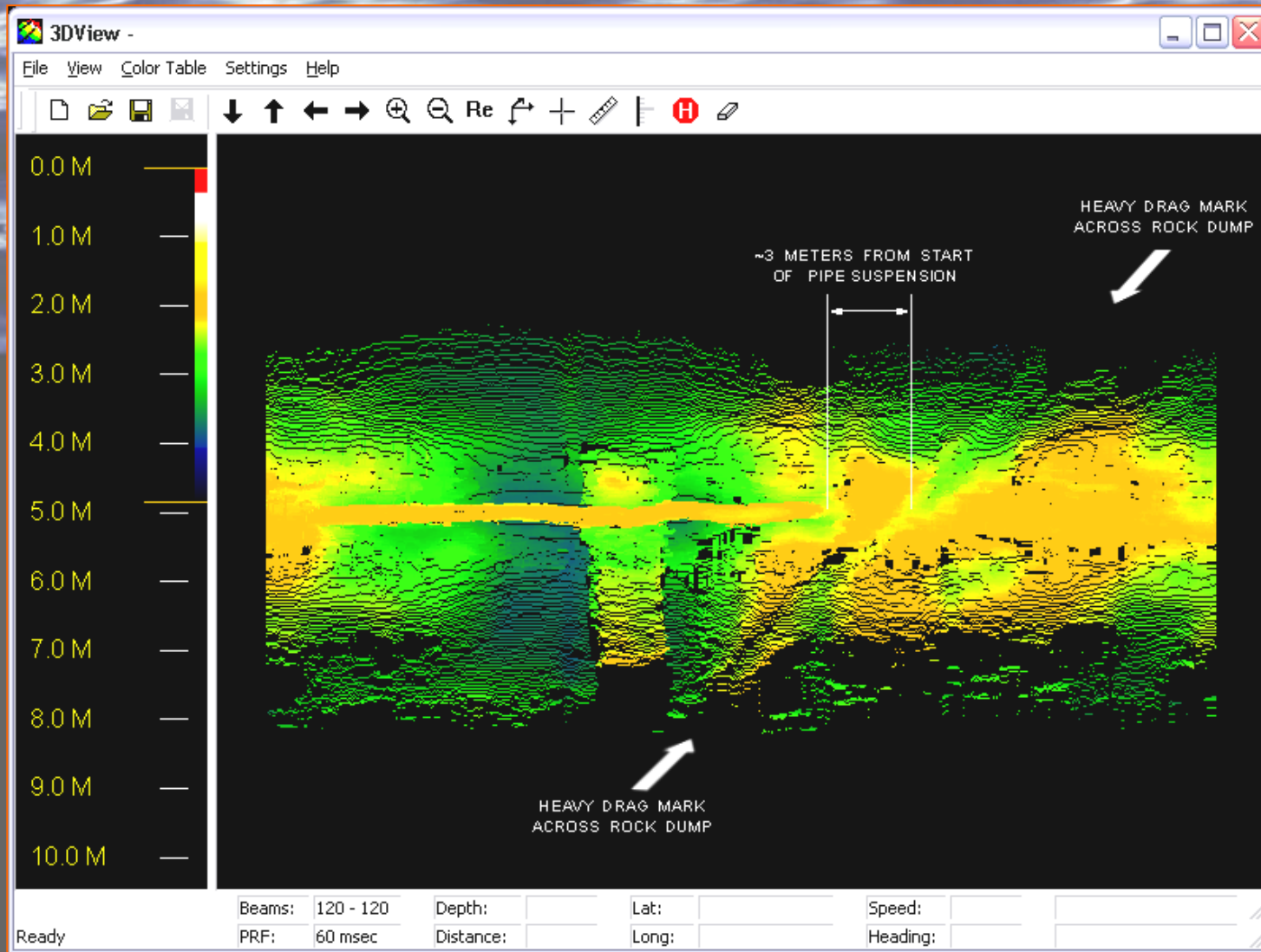


1 TO 1 ASPECT SHOWS TRUE
BOTTOM CONFIGURATION

PROFILER COMPARISON

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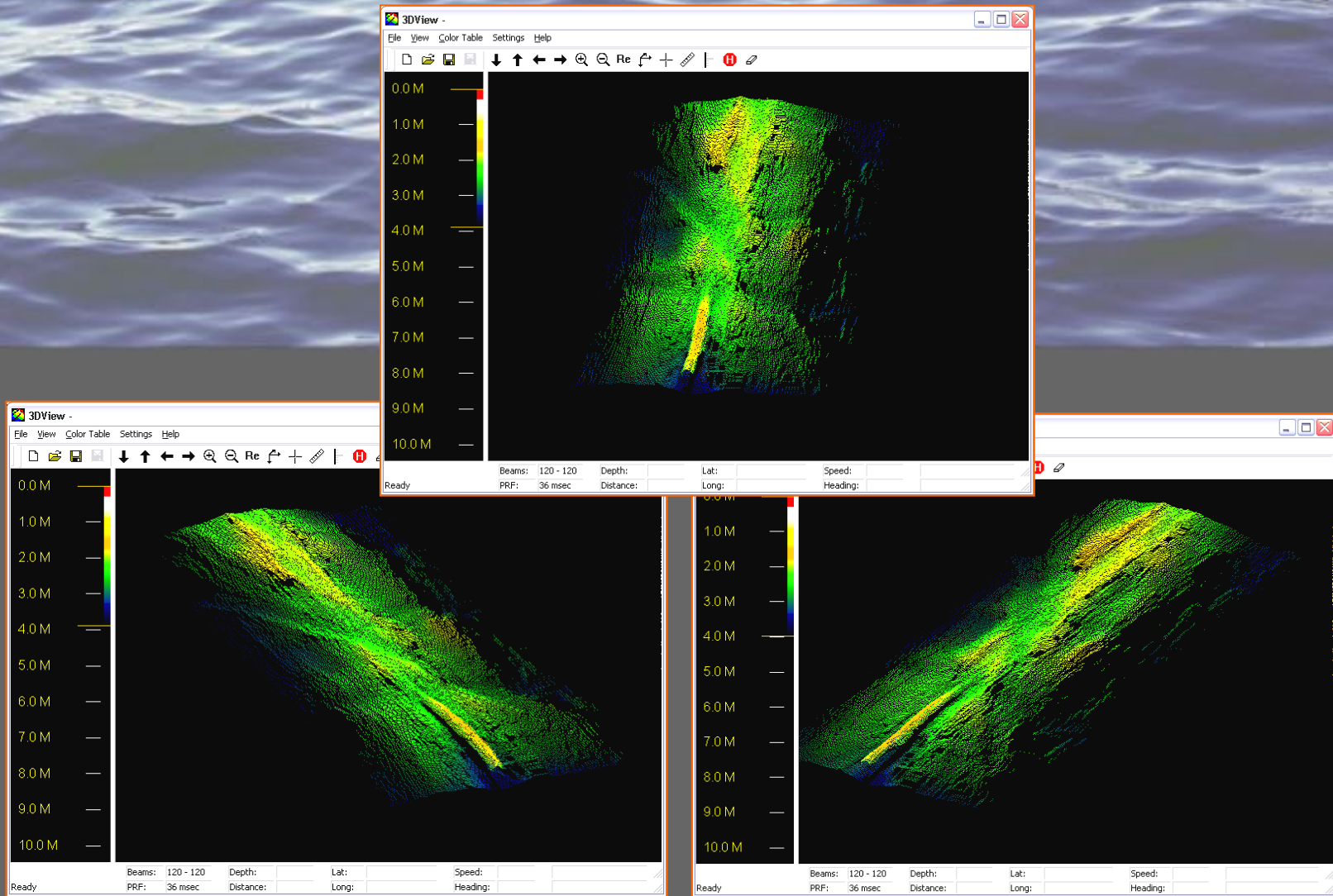
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PROFILER COMPARISON

3DVIEW SHOWS RECOGNIZABLE FEATURES

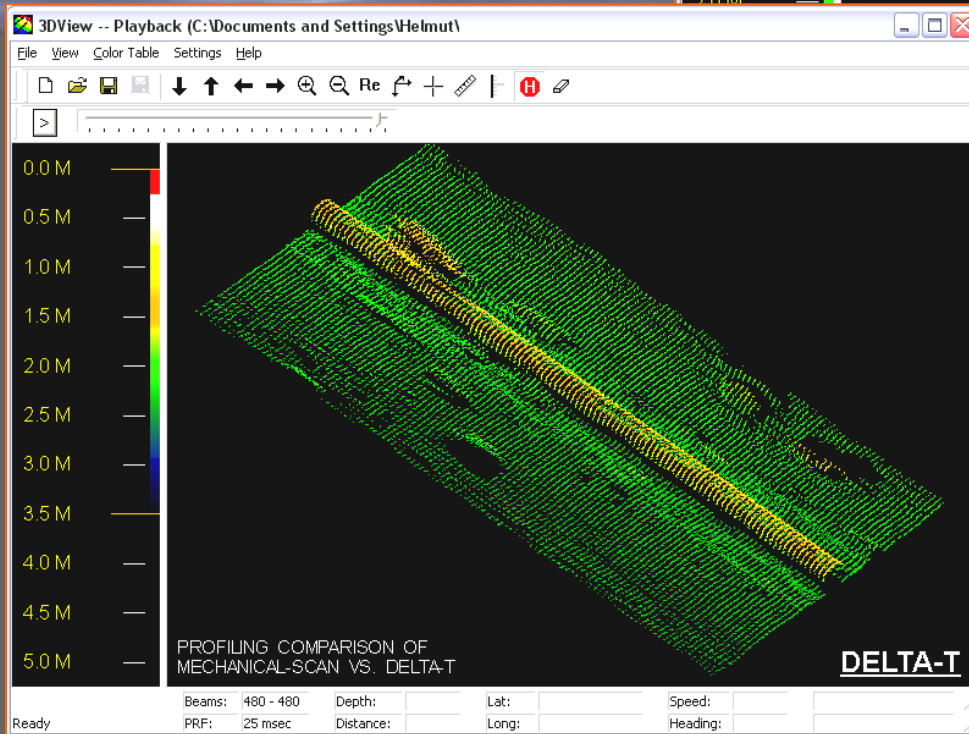
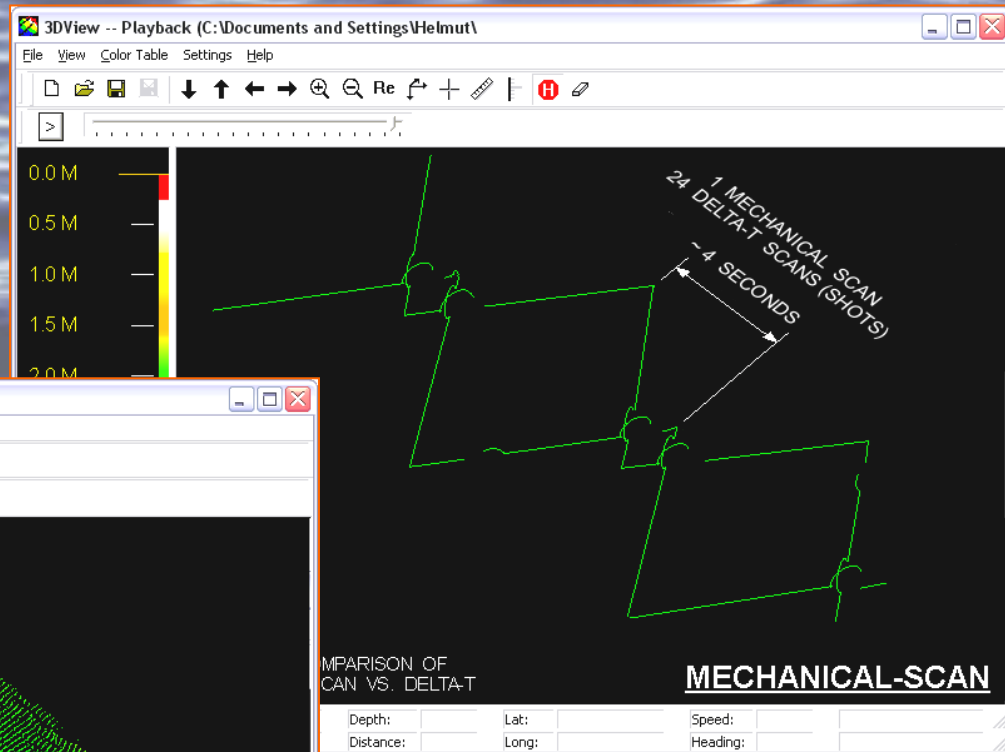
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PROFILER COMPARISON

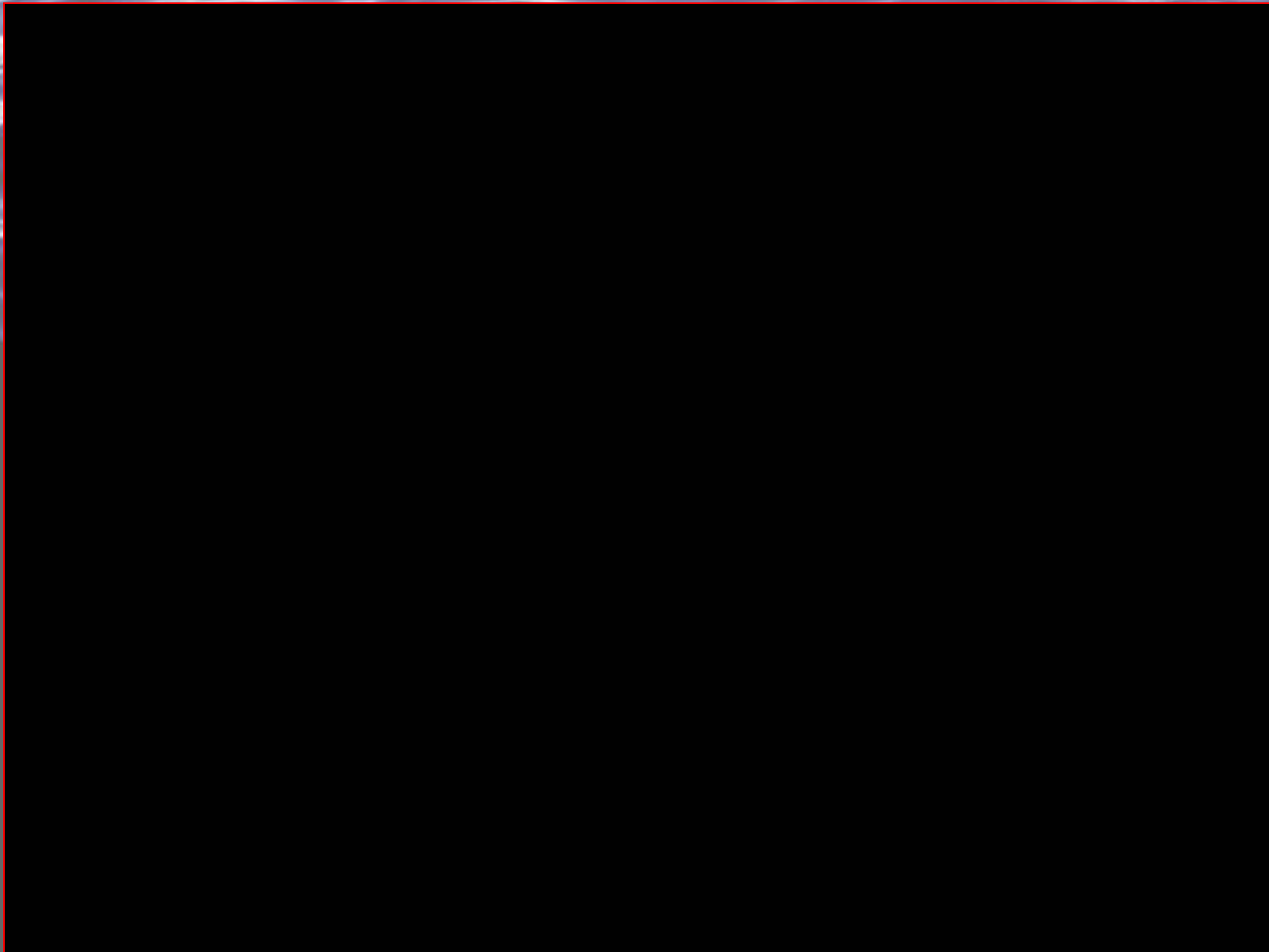
3DVIEW SHOWS RECOGNIZABLE FEATURES

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PROFILER COMPARISON

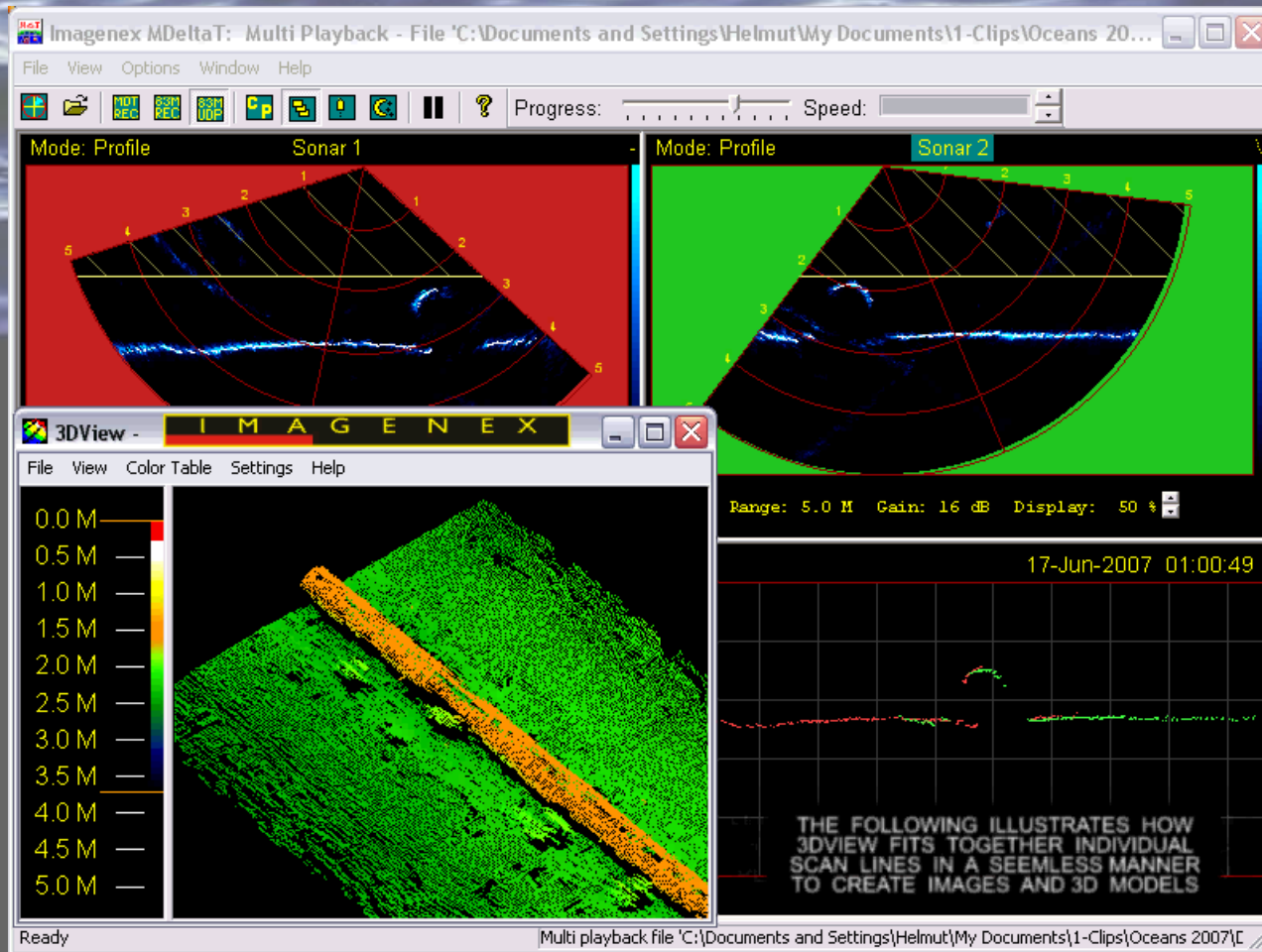
3DVIEW SHOWS RECOGNIZABLE FEATURES



SINGLE BEAM (MECHANICAL SCANNING) VS. DELTA-T

**3DVIEW SHOWS
RECOGNIZABLE FEATURES**

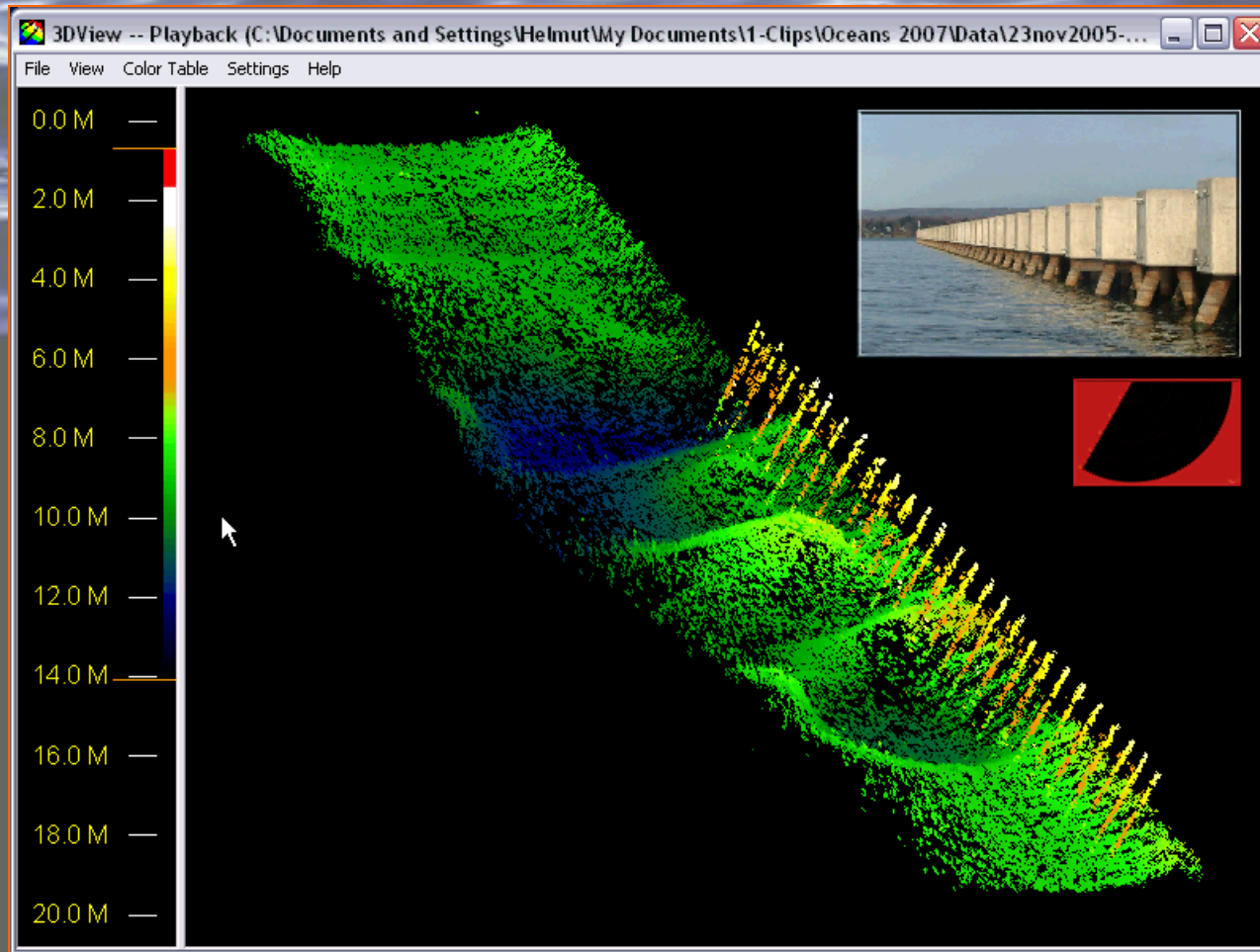
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BOULDER FIELD

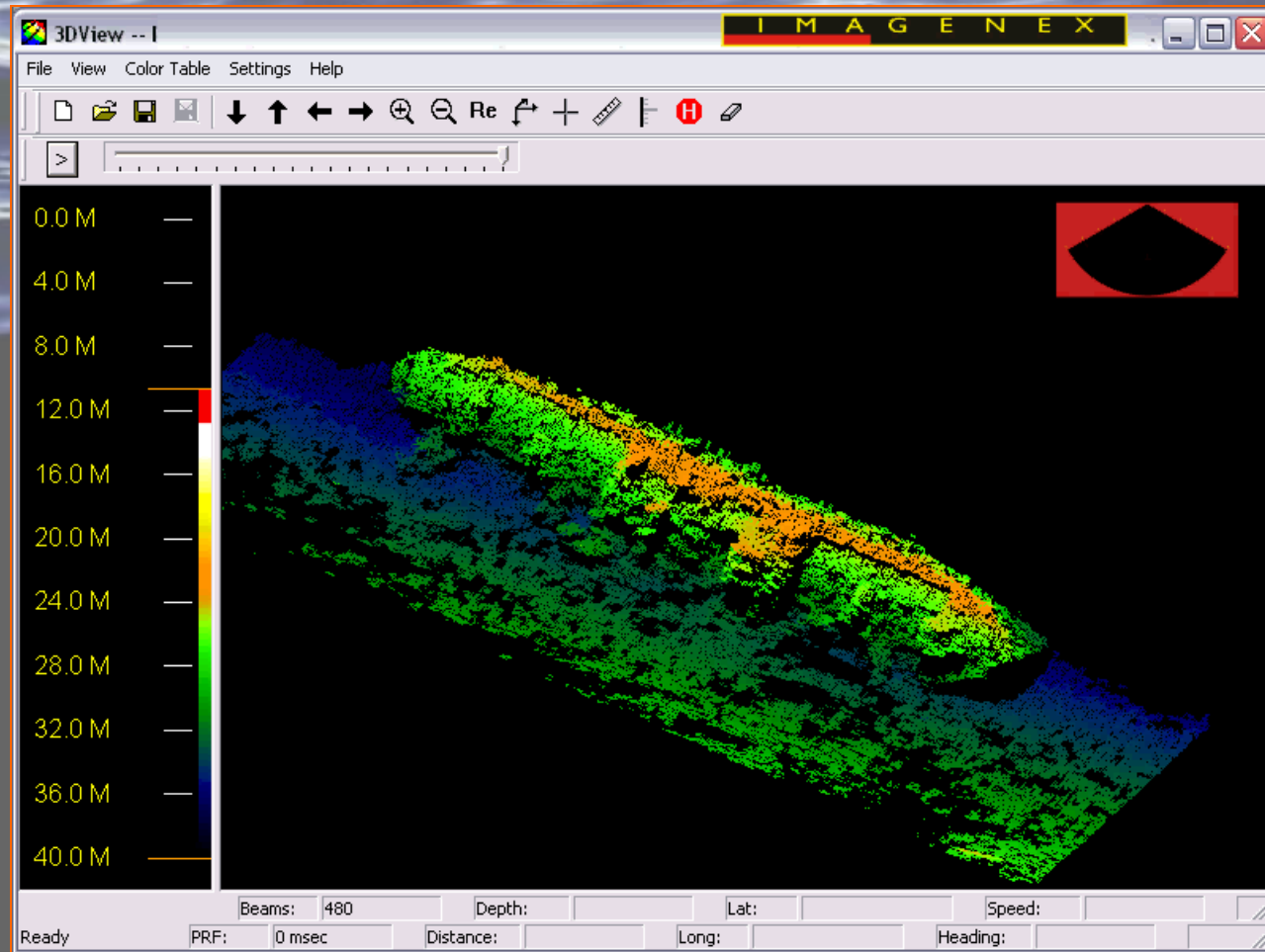
IMAGENEX

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BREAKWATER

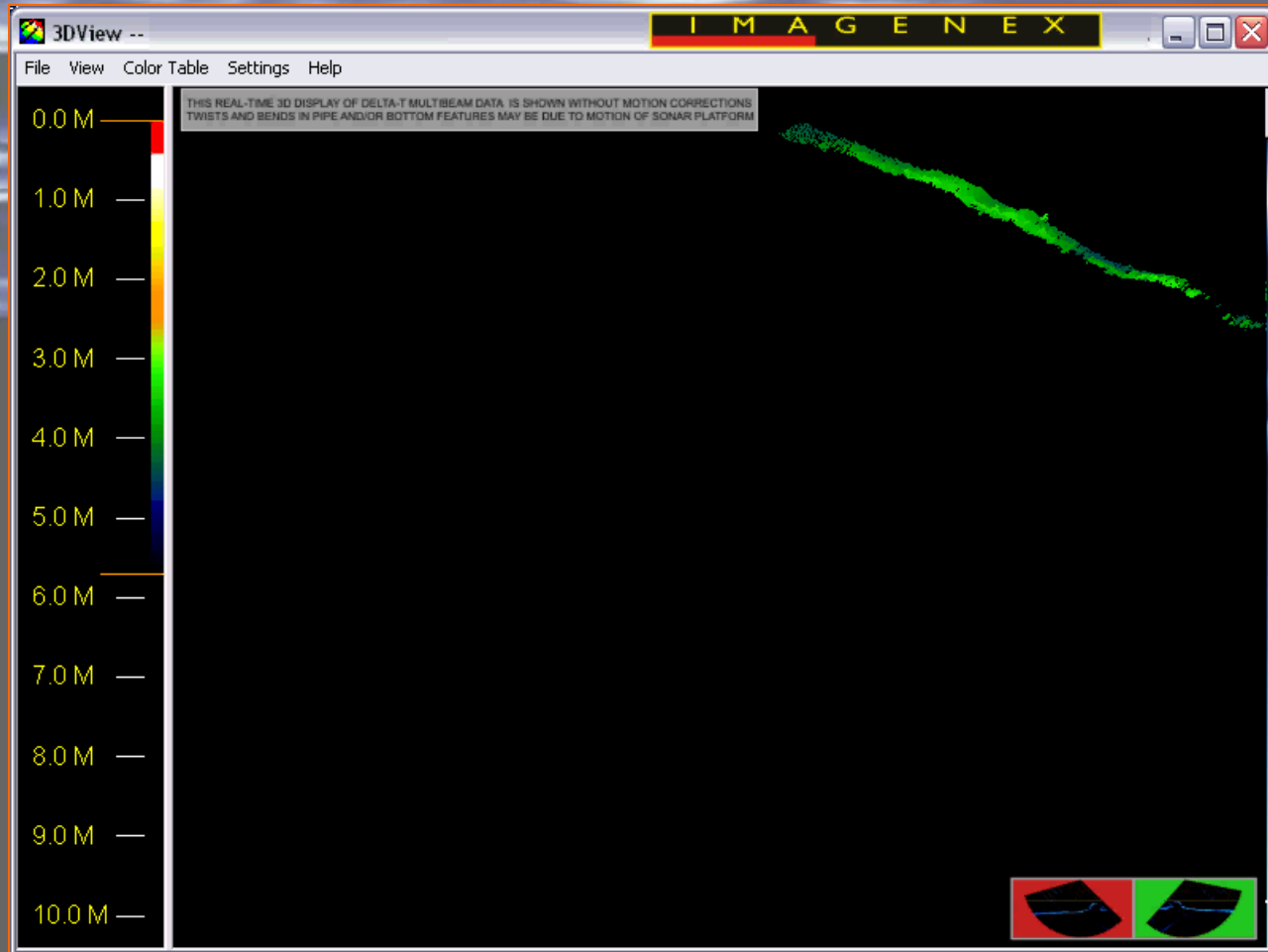
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SHIPWRECK

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PIPE SUSPENSION / CROSSING

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Office of the Secretary of Defence (OSD)
Naval Oceanographic Office (NAVOCEANO)
Naval Oceanography Operations Command (NOOC)
Secretaría de Marina (SEMAR, Mexico)

3rd PARTY PROCESSING / MEXICO

REDEFINING IMAGE CLARITY



Office of Naval Research Global for the Americas (ONR-G)
Office of the Secretary of Defence (OSD)
Naval Oceanographic Office (NAVOCEANO)
Naval Oceanography Operations Command (NOOC)
Servicio Hidrografico y Oceanografico de la Armada (SHOA, Chile)

3rd PARTY PROCESSING / CHILE

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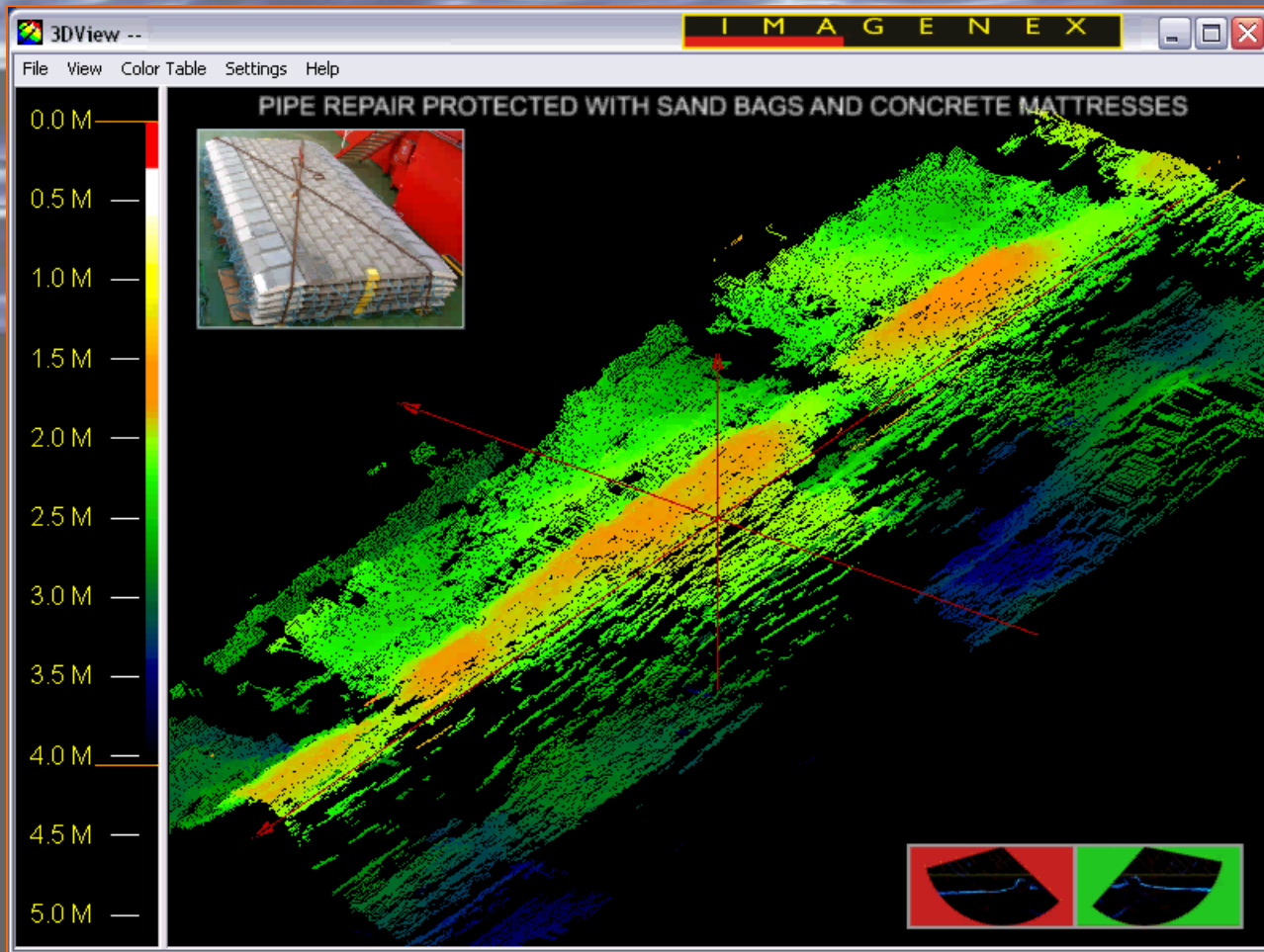
REDEFINING IMAGE CLARITY

Office of Naval Research Global for the Americas (ONR-G)
Office of the Secretary of Defence (OSD)
Naval Oceanographic Office (NAVOCEANO)
Naval Oceanography Operations Command (NOOC)



3rd PARTY PROCESSING / VANCOUVER

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CONCRETE MATTRESSES

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