

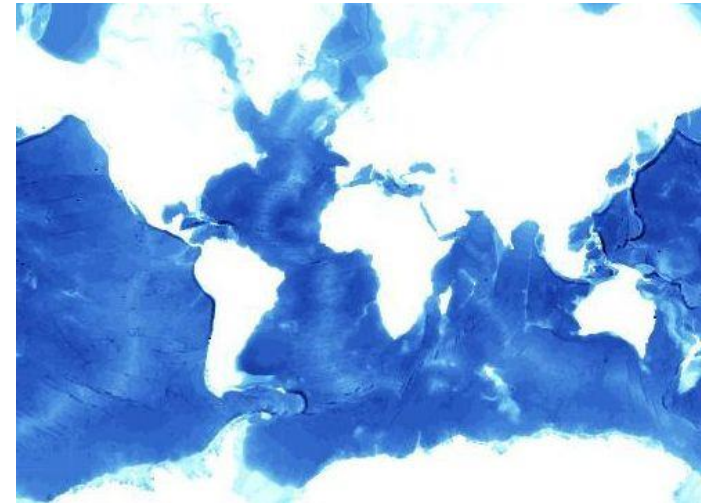
# Cadcorp SIS - Handling Big Data. Analysing unlimited Bathymetry and Lidar data in a GIS

Zack Abraham + Simon Parker

20<sup>th</sup> May

# Data is Getting Bigger

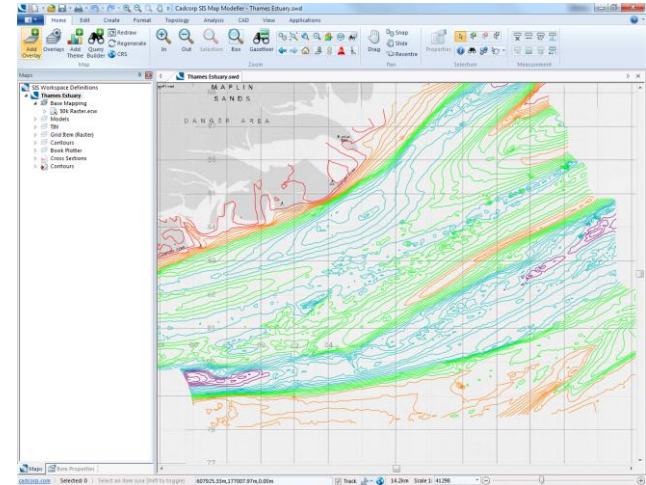
- Remote Sensing, Coastal Lidar, Multi Beam, Side Scan Sonar, Satellite Bathymetry data is more prevalent
- Downloading and analysing large volumes of data is more time consuming
- Existing workflows may not be fit for purpose and getting complicated with disjointed workflows
- Limitations of partner or customer hardware and software causes issues and bottlenecks



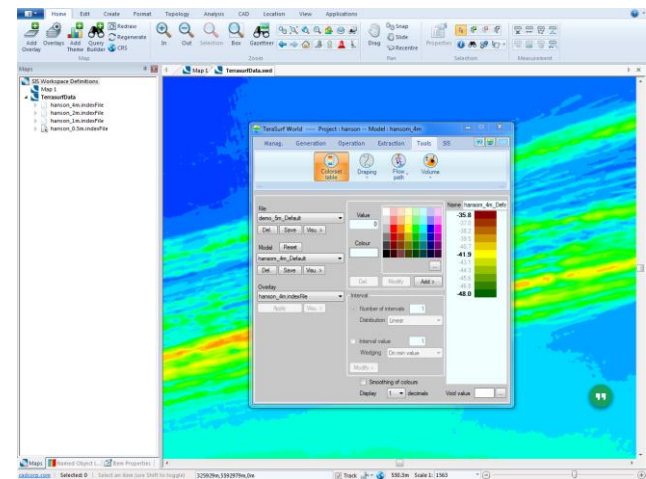
# Cadcorp Workflow



1. Desktop GIS  
(Map Modeller)



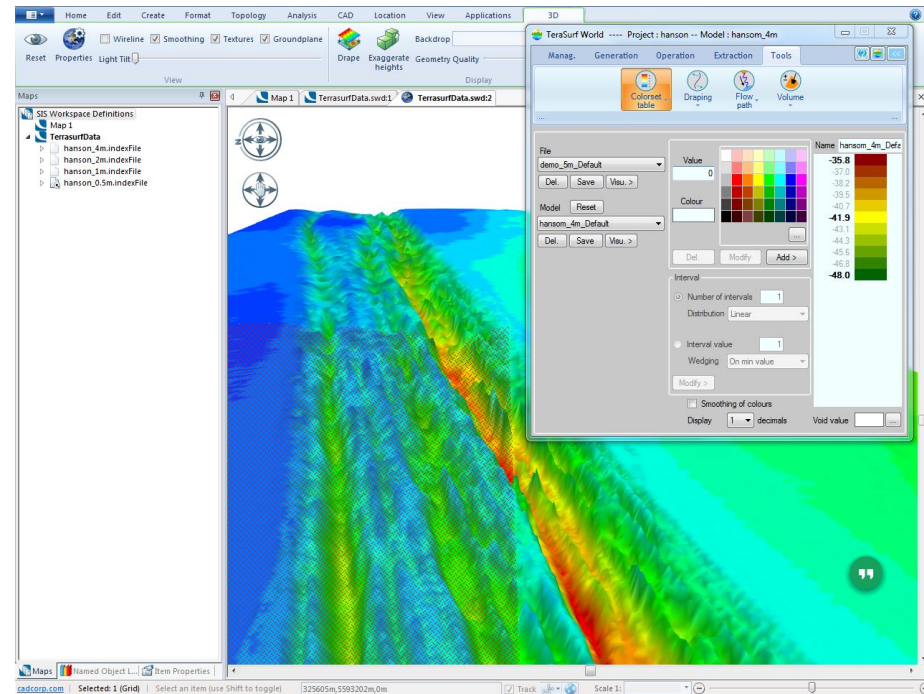
2. Specialist Applications  
(TeraSurf)





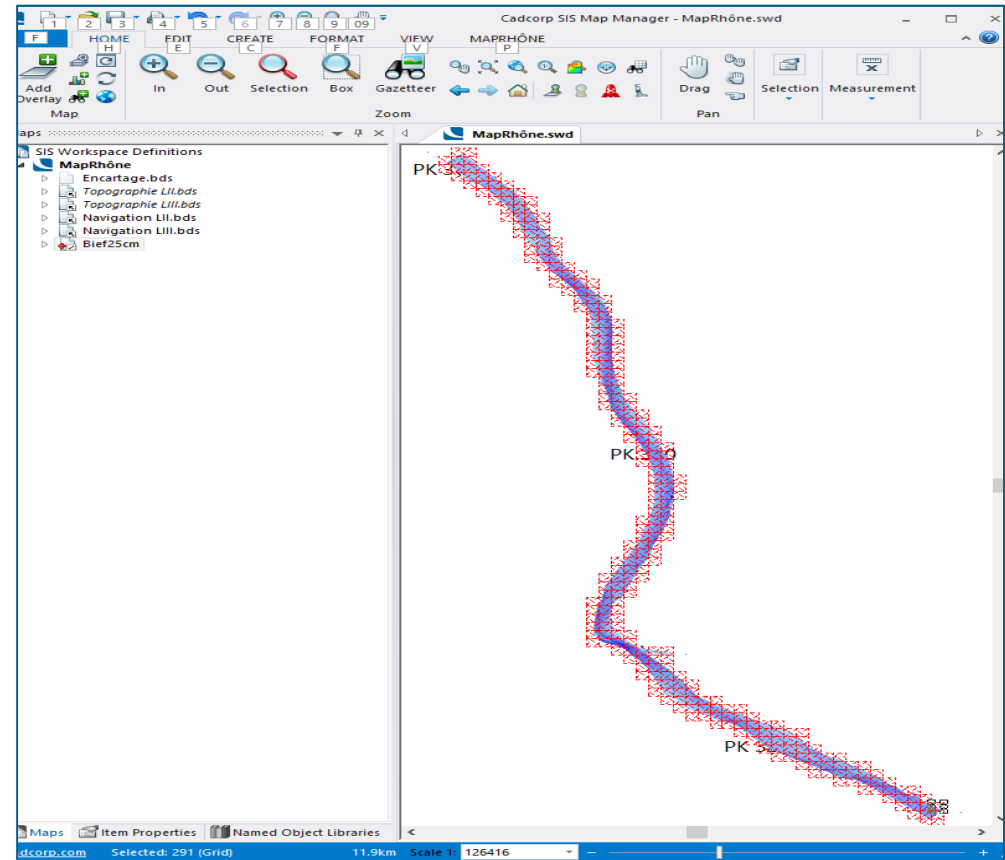
# TeraSurf

- Works alongside Map Modeller
- Supports unlimited sized Bathymetry or Lidar surveys
- Memory efficient way of handling large models
- Creates seamless digital models that can easily be updated
- Models can contain holes and be delineated (fitted)



# TeraSurf Case Study (CNR International)

- 25km of the River Rhone
- Surveyed at 25cm resolution
- Many millions of points
- Processed in 291 grids to best match available RAM





# Demonstration

- Map Modeller
- TeraSurf

# Key Strengths

- Extensive core GIS functionality complimented with specialist applications
- Direct connections to databases to support dynamic chart and data output
- Create and analyse models from large/ unlimited Bathymetry and Lidar Surveys
- Simple workflow for processing, analysing and visualisation
- Outputs can easily be provided to partners, customers and stakeholders