



STEP-FREQUENCY 3D GPR TECHNOLOGY  
ULTRA-WIDEBAND ANTENNA ARRAYS  
GPR DATA PROCESSING SOFTWARE

The Ground is No Limit

[WWW.3D-RADAR.COM](http://WWW.3D-RADAR.COM)

## 3D GPR INSPECTION & ANALYSIS FOR:

Road Pavement

Airport Runway

Bridge Deck

Railroad Ballast

Utility Mapping

Archaeology

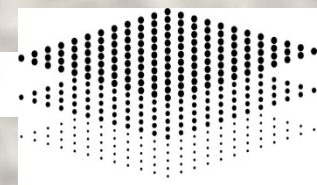


# FINAL EXAM

Areas affected by delamination

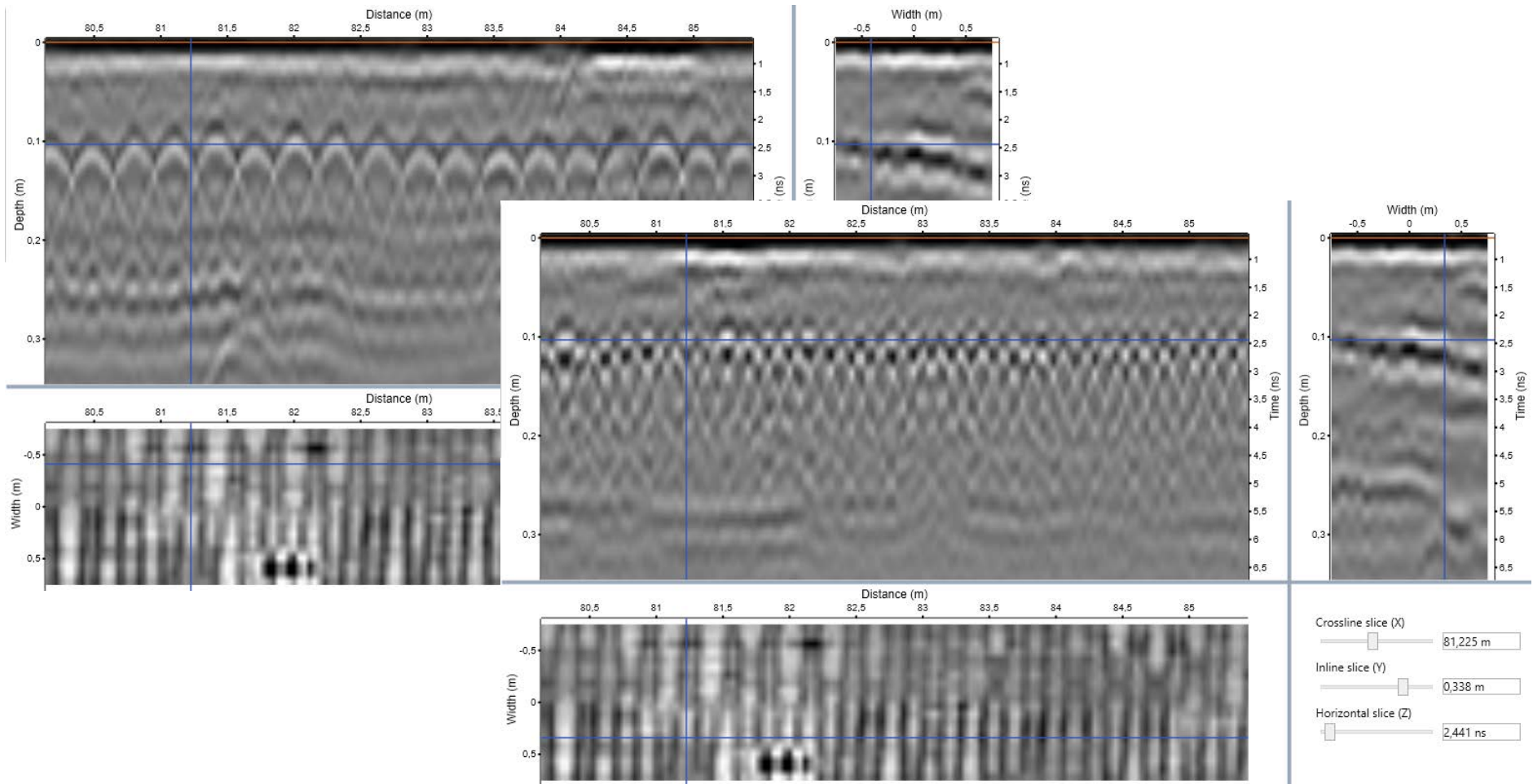


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# Delamination



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# Delicious Delamination



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# In the beginning...



# In the beginning...



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# In the beginning...



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**Thank you for the opportunity**





# Business Cases

## Pavement / Bridge decks / Utility Mapping

- Pre-bid survey
- Post work QC
- Pre-warranty expiration
- Forensic diagnostics
- Maintenance planning
- Maintenance budgeting
- Accurate coring

# Evolution



# Evolution



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# Future Plans





# Customer Support

## Now:

- ✓ Examiner User Group Forum
- ✓ LinkedIn Group
- ✓ Quarterly Webex

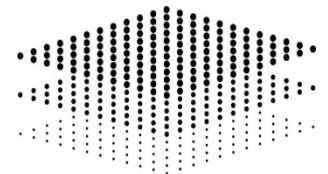
## Mid term:

- ✓ Video 'How-to's
- ✓ US support team
- ✓ US repair facility



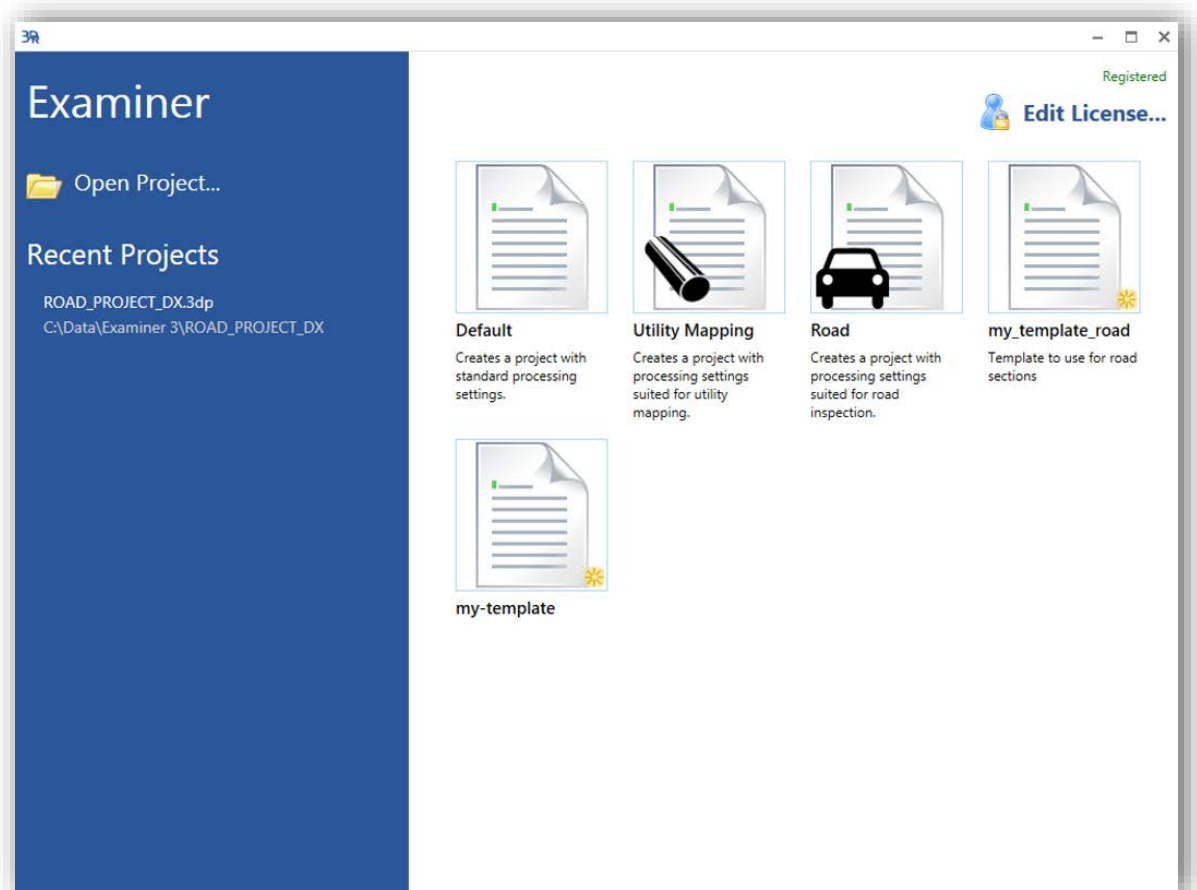
**Your success is our success**

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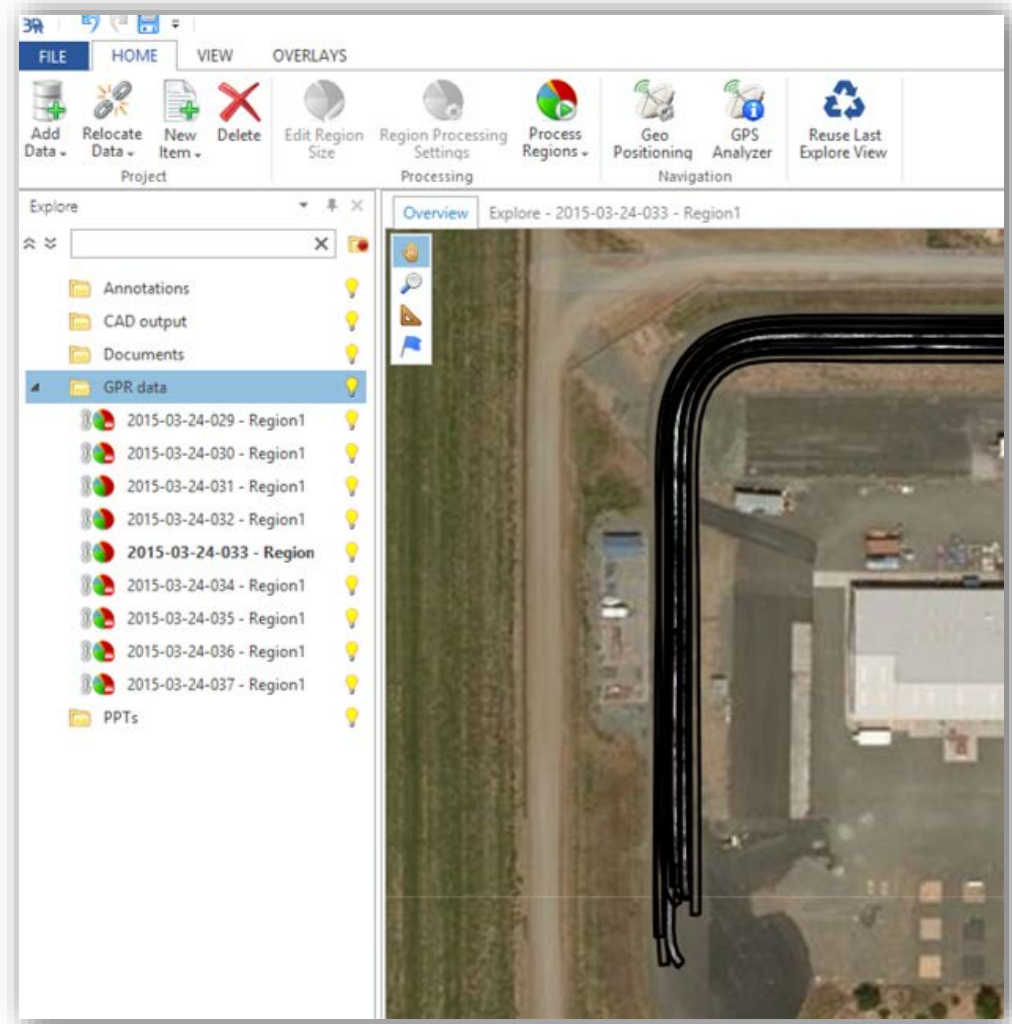
## Project templates

- Use predefined project templates or create and apply custom ones
- Templates can be used to re-utilize/share processing settings
- Custom templates can be created directly from the Region Processing Settings window or as simple XML files
- Possibility to use easy conditional programming in the XML files to vary processing settings, e.g. depending on type of array



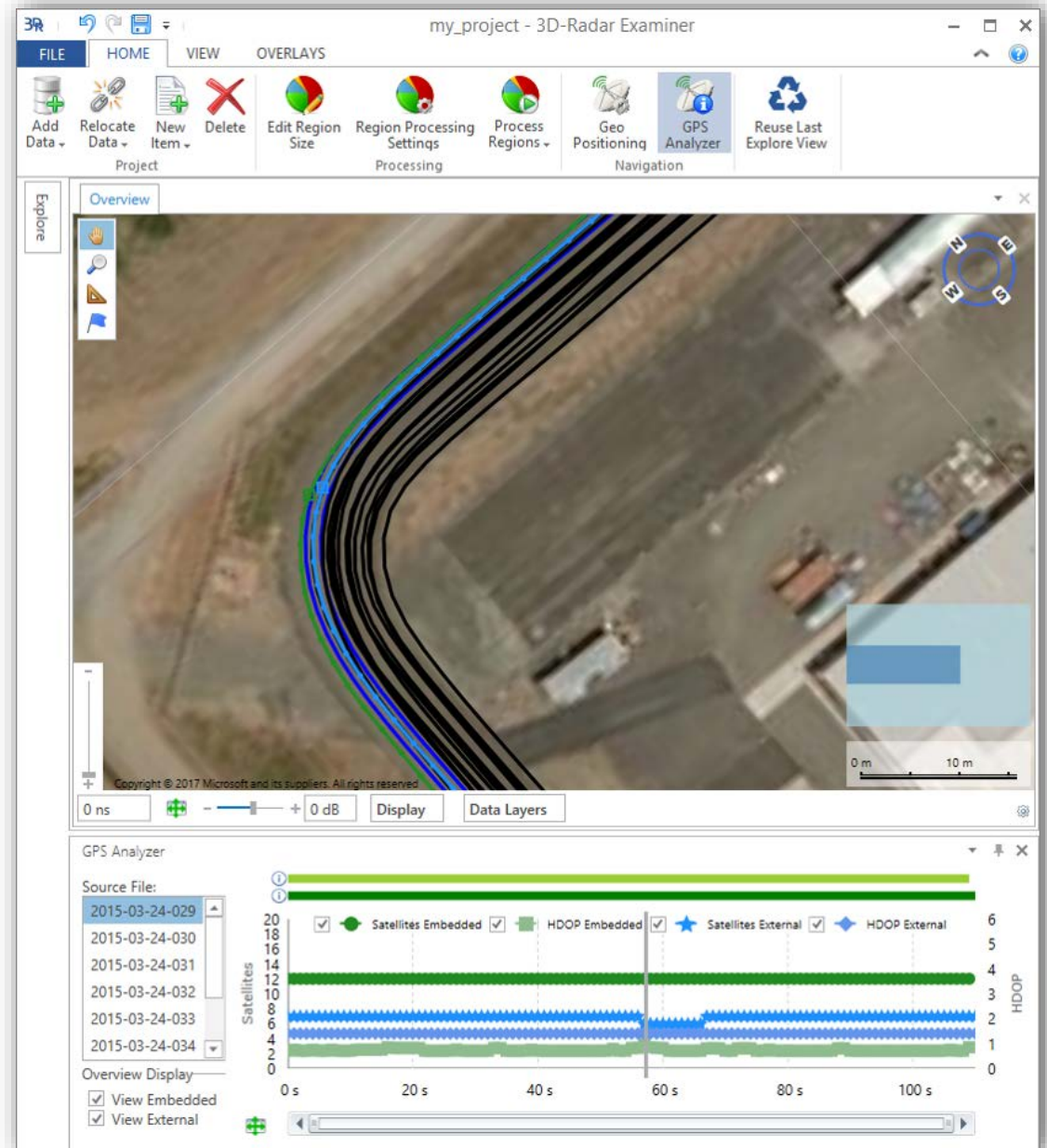
## Data management

- Import any kind of file in the Examiner project
- External files will be opened using the dedicated default application as in Windows
- Add files as local copies or as link
- Organize data regions and files in folders directly in the project tree



## GPS analyzer

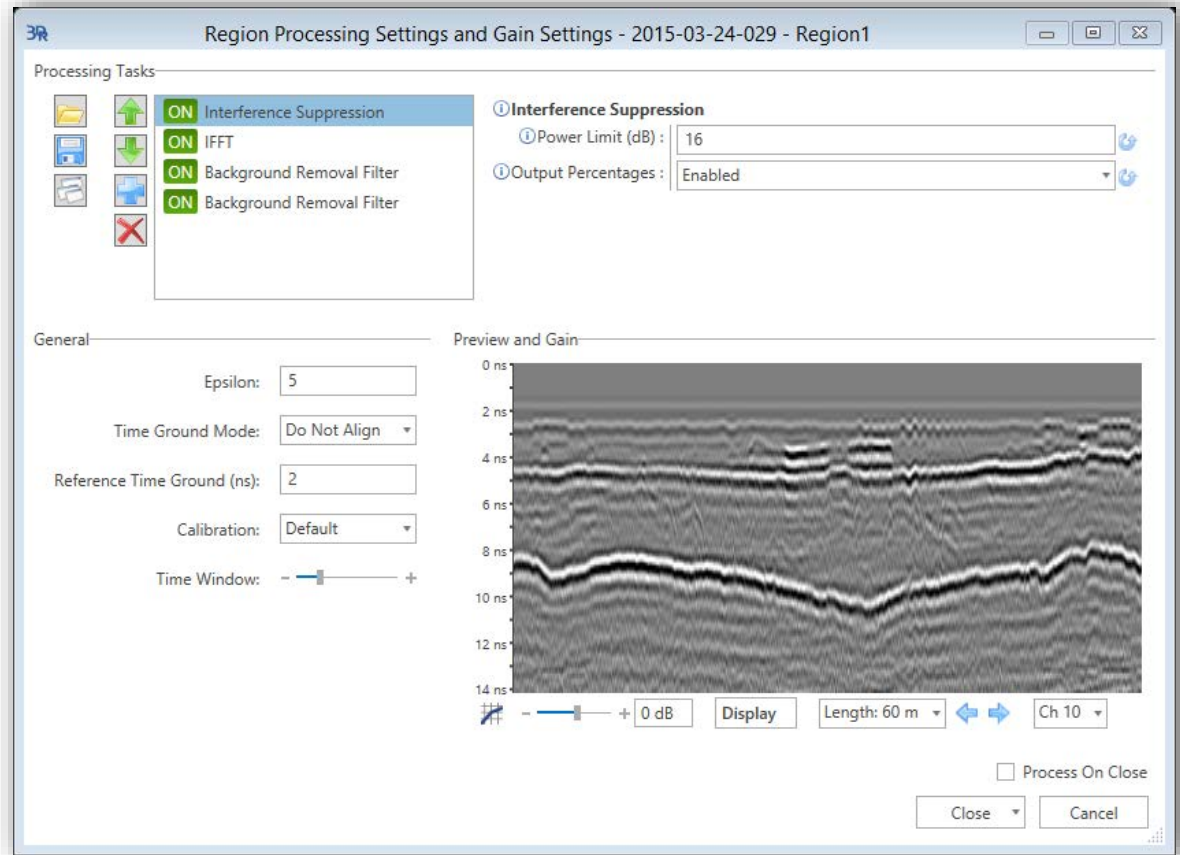
- Check quality of positioning information from embedded and external GPS
- Manually remove GPS outliers
- Edit the GPS path (*to be developed*)





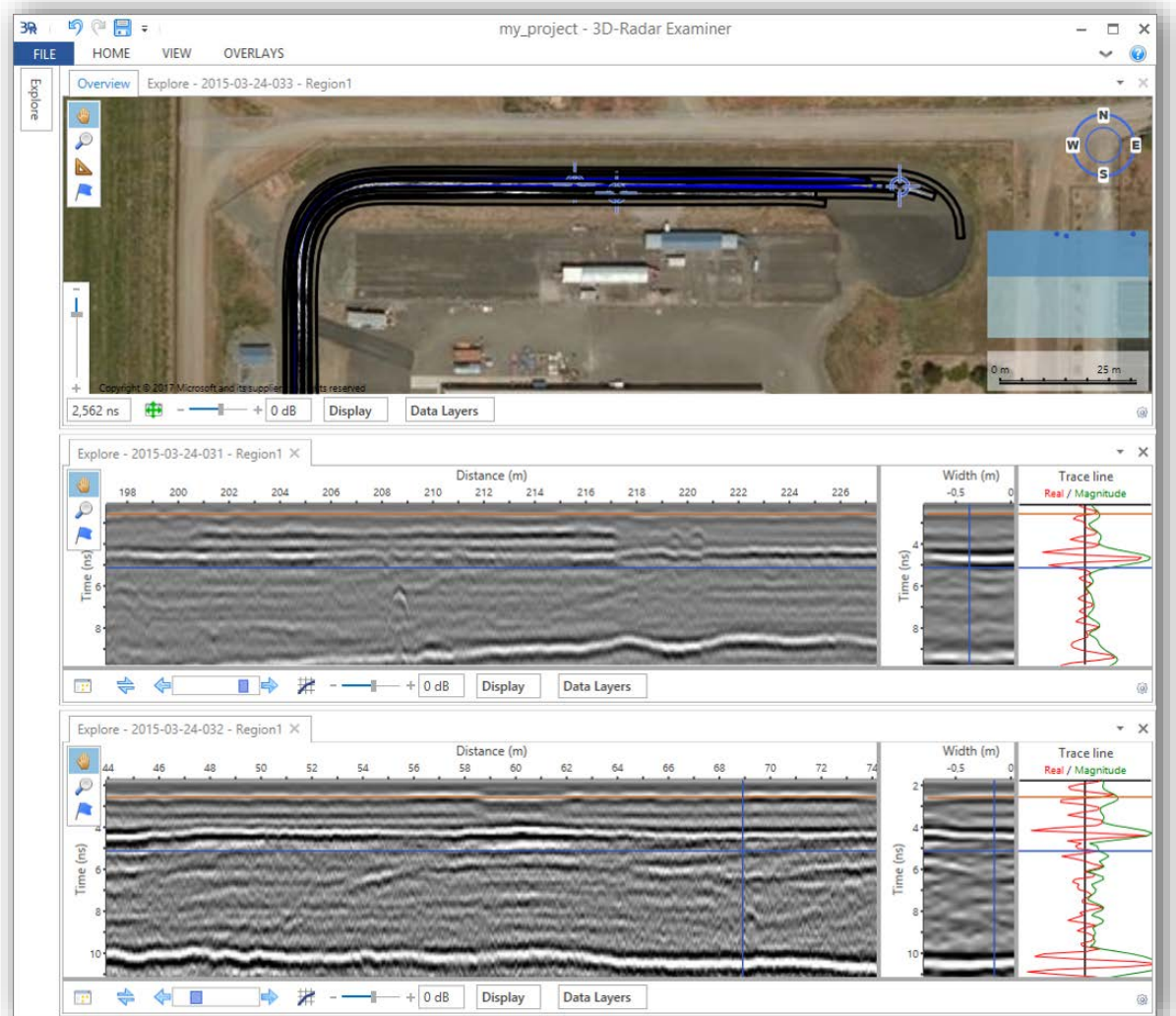
## Data Processing Preview

- Preview the processed data directly in the Region Processing Settings window
- Change task parameters and check immediately the effects on the radar image
- The preview panel allows to switch through the different channels and pan along the distance to analyse the entire data file
- Choose the best processing settings before applying the processing chain to the entire data set



## Multiple Explore tabs

- Choose between opening multiple tabs or re-use last tab
- Open in parallel data from more than one region
- Cross-analyze images from different swaths
- Individual contrast control slider and gain settings for each tab



## Also...

- Import video files and synchronize them with the GPR data
- Image generation throu 3D modeling
  - Faster and more accurate image rendering
- Folder monitoring
  - Process data as they are acquired for quasi-real-time post-processing
- Create storage check-points along the processing chain
  - Possibility to quickly switch between data «before» and «after» the checkpoint
  - No need to re-apply the entire processing chain if changes in the processing parameters are effective only after the checkpoint
- Assign a geographical position to external files
  - For example, link an image to a specific position along the data

# And more...

- Custom color palette for the GPR data
- Add annotations both in Overview tab and Explore tab
- Possibility to add custom Tile Map Service (TMS) and Web Map Tile Service (WTMS)
- Possibility to «clone» (copy) and split data regions
- Over 2000 built-in different coordinate reference systems and possibility to add custom ones
- More intuitive data export functionality



# Things to leave with you



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# Things to leave with you

- ✓ **Multiple applications**
- ✓ **Ground and Air Coupled**
- ✓ **Multiple antenna sizes & mounting options**
- ✓ **Automated reporting**
- ✓ **Dedicated to your success**

**Thank you!**

