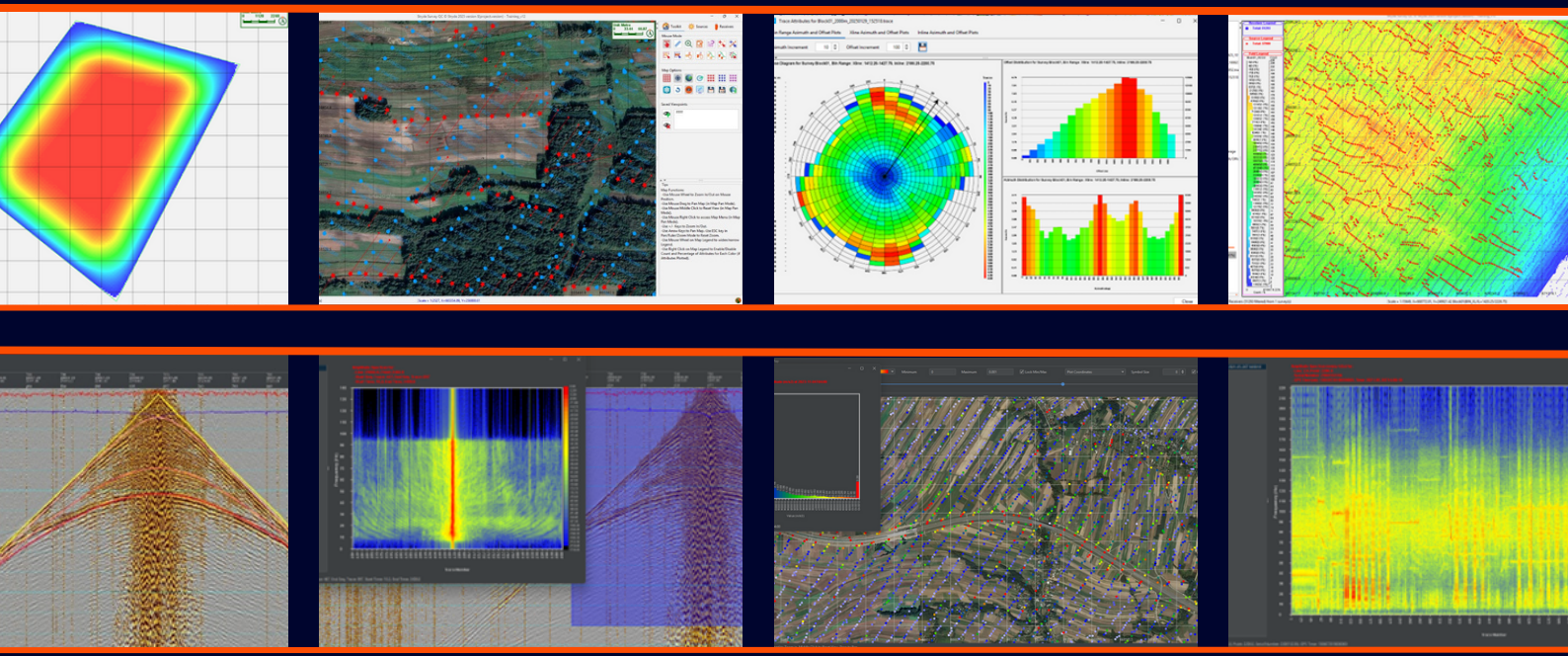
STRYDE

QC Software

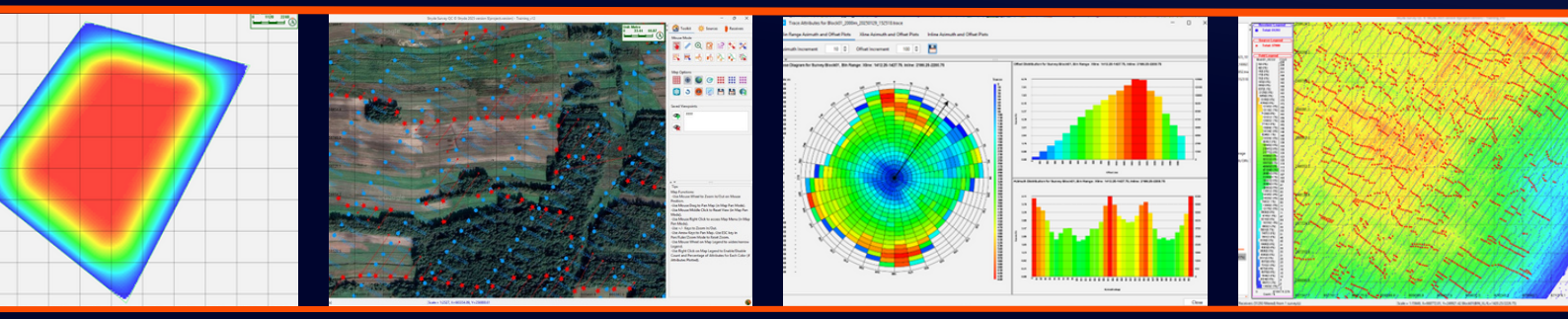
Software built *by* seismic field-experts *for* seismic field-experts.



SurveyQC and SeismicQC are industry-leading software solutions designed for seamless planning, efficient management, and rigorous quality control of onshore 2D and 3D nodal seismic surveys.

KEY FACTS

STRYDE
SurveyQC Software



SurveyQC is the industry-leading software for planning and management of onshore 2D and 3D nodal seismic surveys.

It allows for easy interoperability with other GIS and surveying software and tools, bringing together all the technical and cultural data required to plan and execute an effective and efficient land seismic campaign.

SurveyQC features extensive receiver and source QC functionality tailored for the needs of seismic field observers, surveyors and geophysicists using the STRYDE nodal receiver system.

The software is modern and built to be performant and scalable, even for the largest nodal surveys requiring one million or more channels.

The software has been built *by* seismic field-experts *for* seismic field-experts.

SurveyQC's core focus

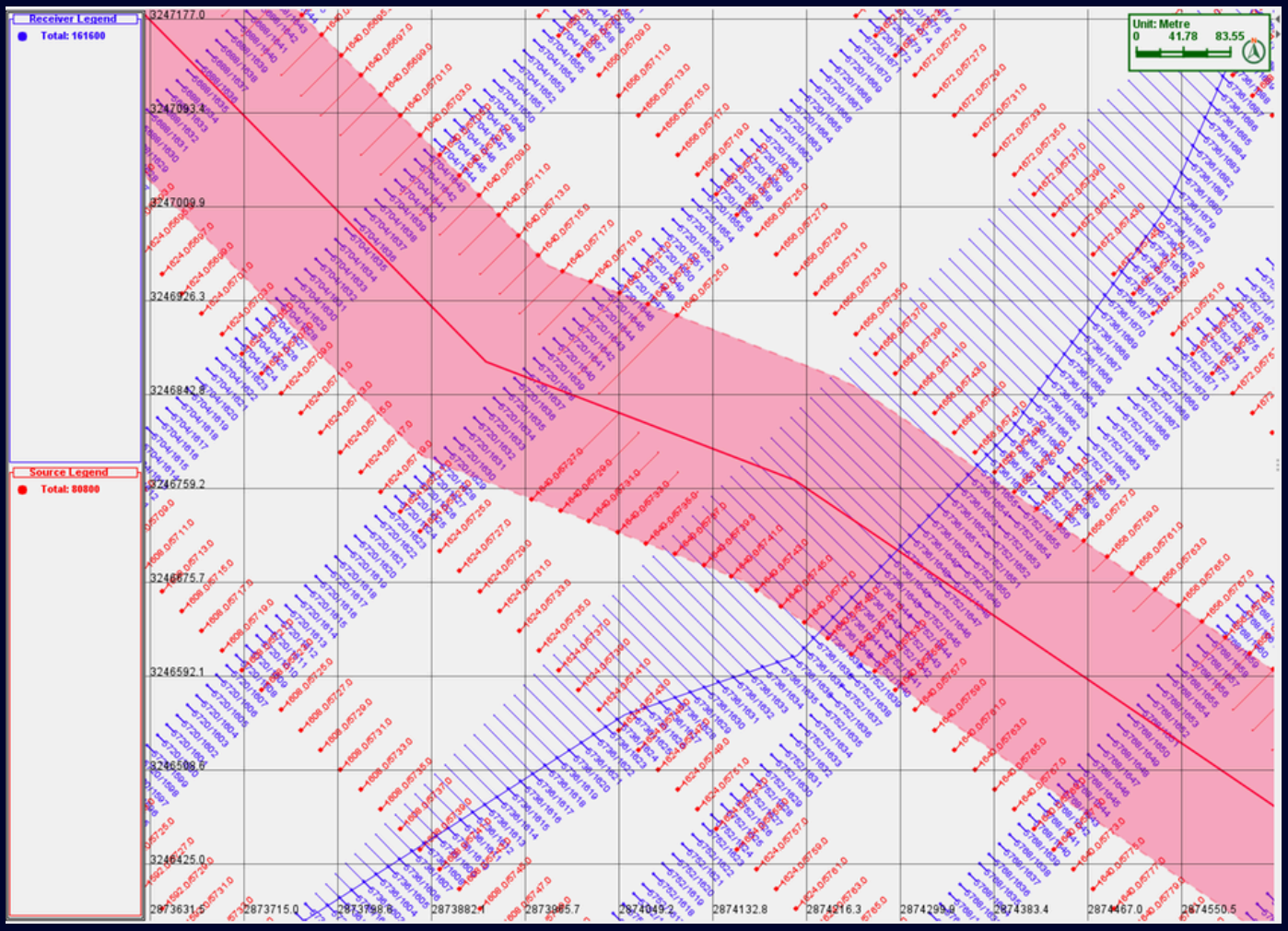
SurveyQC has been built from the ground up with a central focus on usability, scalability and integration to become your trusted software for seismic survey planning:

- **Usability** — new users can quickly get started with 2D and 3D nodal survey planning.
- **Scalability and performance** — seamless support for projects of all shapes and sizes, ranging from hundreds to millions of source and receiver points.
- **Workflow integration and collaboration** — support for all common seismic geometry and GIS data exchange formats allows effortless integration of SurveyQC with your existing planning, QC and reporting procedures.

Case Study: Offset planning for a large-scale survey in a congested environment

Whether you are operating in urban environments with land access issues, or close to sensitive oilfield infrastructure with large exclusion zones, SurveyQC's emphasis on user-friendly, efficient and collaborative survey planning makes offset planning simple.

With just a few mouse clicks, you can offset source positions (red points) around a pipeline exclusion zone (red area), and snap receivers (blue points) to an access route (blue line).



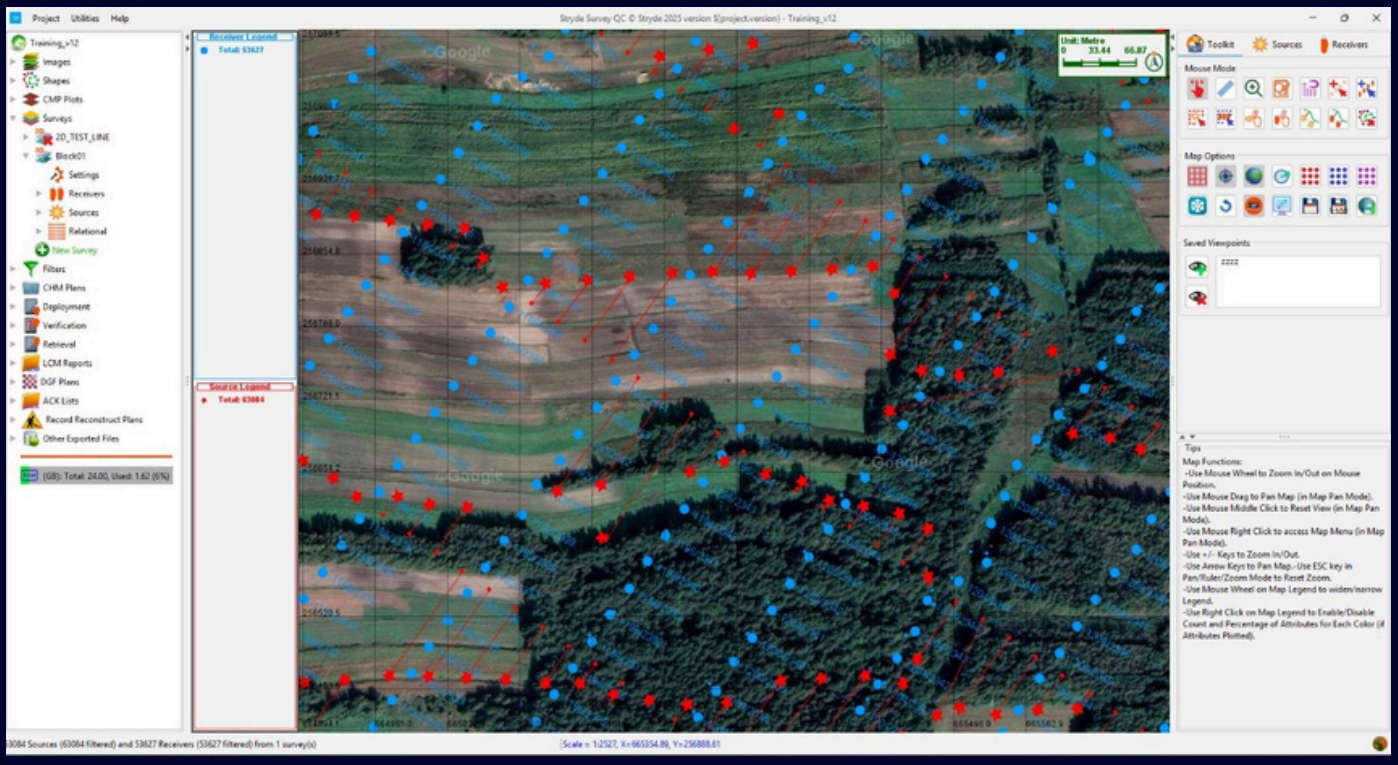
Survey planning

Seismic survey planning is a collaborative and iterative process that requires integration of data from multiple sources in various formats. SurveyQC provides all the functionality needed to modify existing survey geometries, or create entirely new 2D, pseudo-3D and 3D surveys, using online or offline georeferenced imagery to identify obstructions and terrain challenges at the earliest opportunity:

- **Import existing layouts** — import and modify survey geometries created in other software for easy workflow integration.
- **Create new layouts** — powerful and intuitive tools for quickly creating new surveys from scratch.
- **Coordinate conversion** — simple one-time set-up of project geodetic settings, and optional validation using test transformations, to ensure integrity of all coordinate conversions.

Case Study: Vibroseis source planning in agricultural areas

Permitting, ground conditions and remediation expenses often restrict vibroseis source operations in agricultural areas to existing roadways and tracks. SurveyQC makes it easy to plan source position offsets onto available access paths. After importing georeferenced satellite or drone imagery, access routes can be digitized and source positions (red stars) offset from theoretical positions (red circles). While access is rarely an issue when deployment is performed on foot, receivers stations (blue circles) can also be offset, if needed.

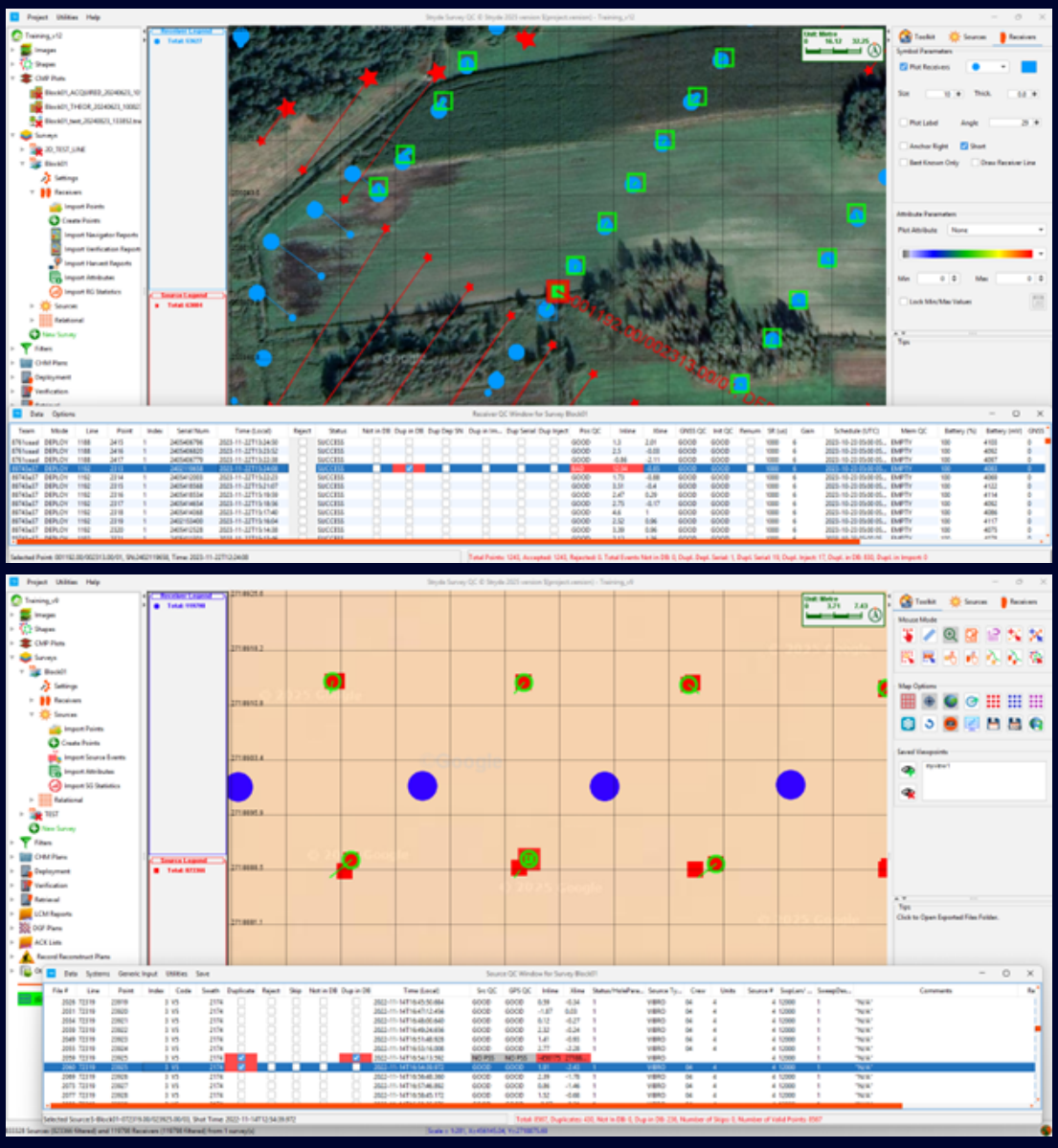


Source and receiver QC

SurveyQC plays a central role in day-to-day operation of the STRYDE nodal seismic system, providing functionality for:

- **Node deployment and retrieval operations activity planning** — task allocation and export to the STRYDE Navigator App for use in the field.
- **Streamlined QC of STRYDE node deployment and retrieval data** — automatic anomaly flagging to ensure operational issues are quickly identified and that survey parameters meet client requirements.
- **Source data QC** — import and QC source timing, positioning and performance data from all commonly used source controllers, with automatic anomaly flagging.
- **QC reporting** — generate daily client QC reports at the click of a button.

Node deployment (top) and source metadata QC (bottom) using SurveyQC's tabular and map displays and automatic anomaly flagging enables operational issues to be easily identified and quickly rectified.

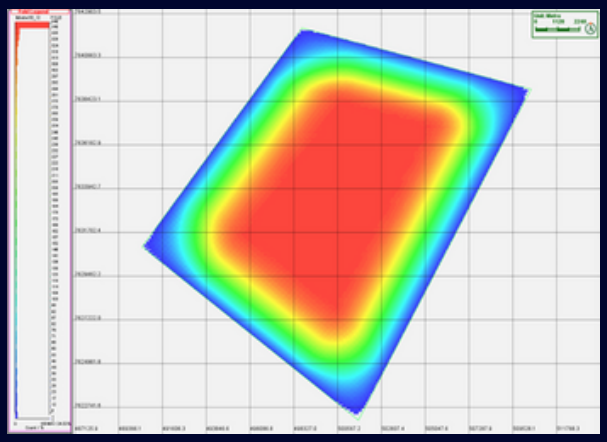


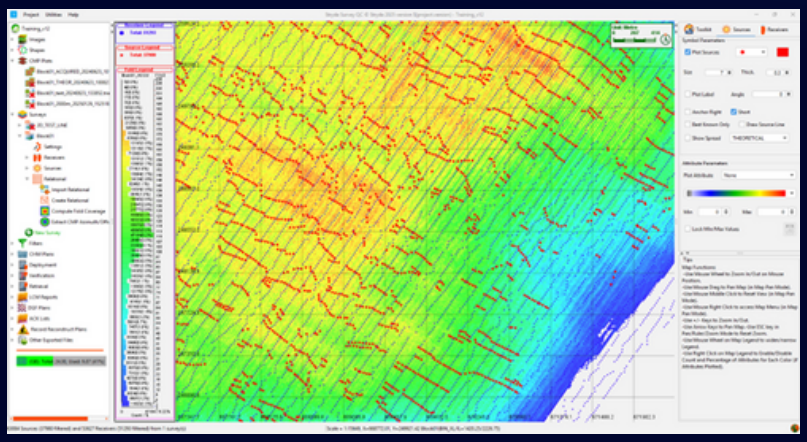
CMP attributes calculation

SurveyQC provides functionality for calculation of CMP attributes such as fold maps, minimum and maximum offset plots, and offset and azimuth distribution plots for any geometry: 2D (including crooked lines), pseudo 3D and 3D.

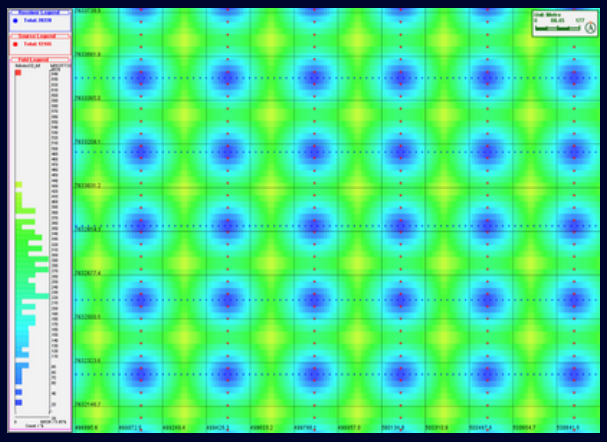
Compare attributes for both the planned and acquired spread to ensure geophysical objectives are met.

Theoretical and acquired fold plots

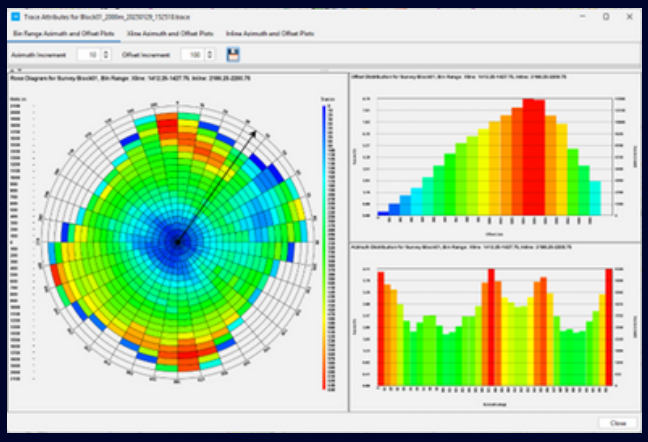




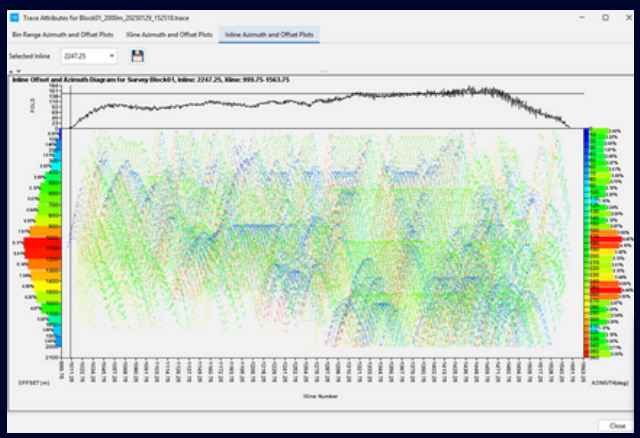
Minimum offset plot

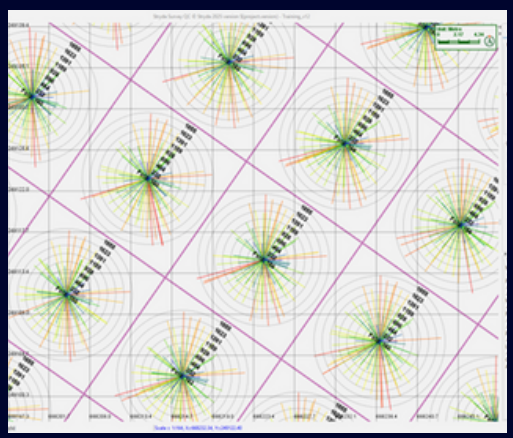


Rose diagram



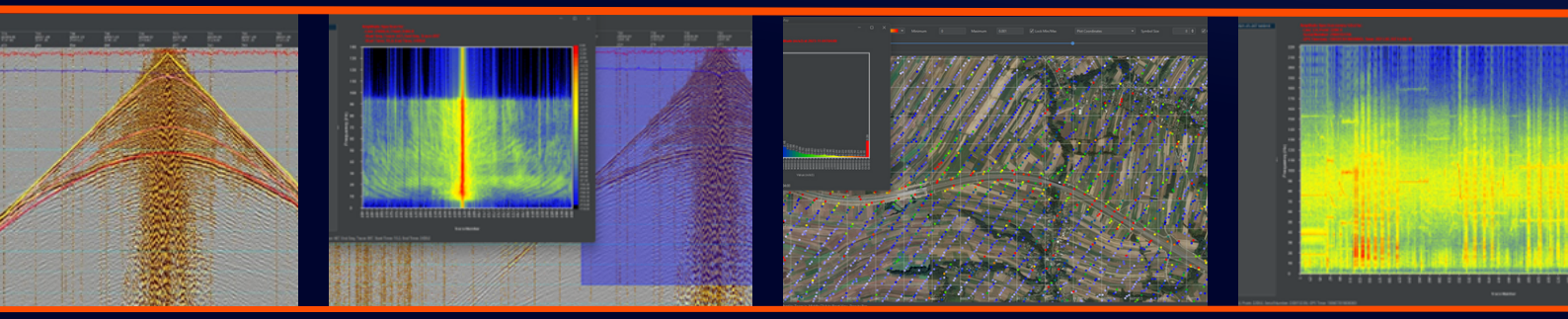
Offset and azimuth distribution plots by CMP line and bin





KEY FACTS

STRYDE SeismicQC Software



STRYDE's SeismicQC software enables fast and effective QC of nodal seismic datasets, whatever the size.

Developed specifically for use with STRYDE's nodal acquisition system, SeismicQC provides extensive functionality for visualization and analysis of continuous seismic records as well as receiver and source gathers.

The software is modern and built to be performant and scalable, even for the largest nodal surveys requiring one million or more channels using high productivity source techniques.

The software has been built *by* seismic field-experts *for* seismic field-experts.

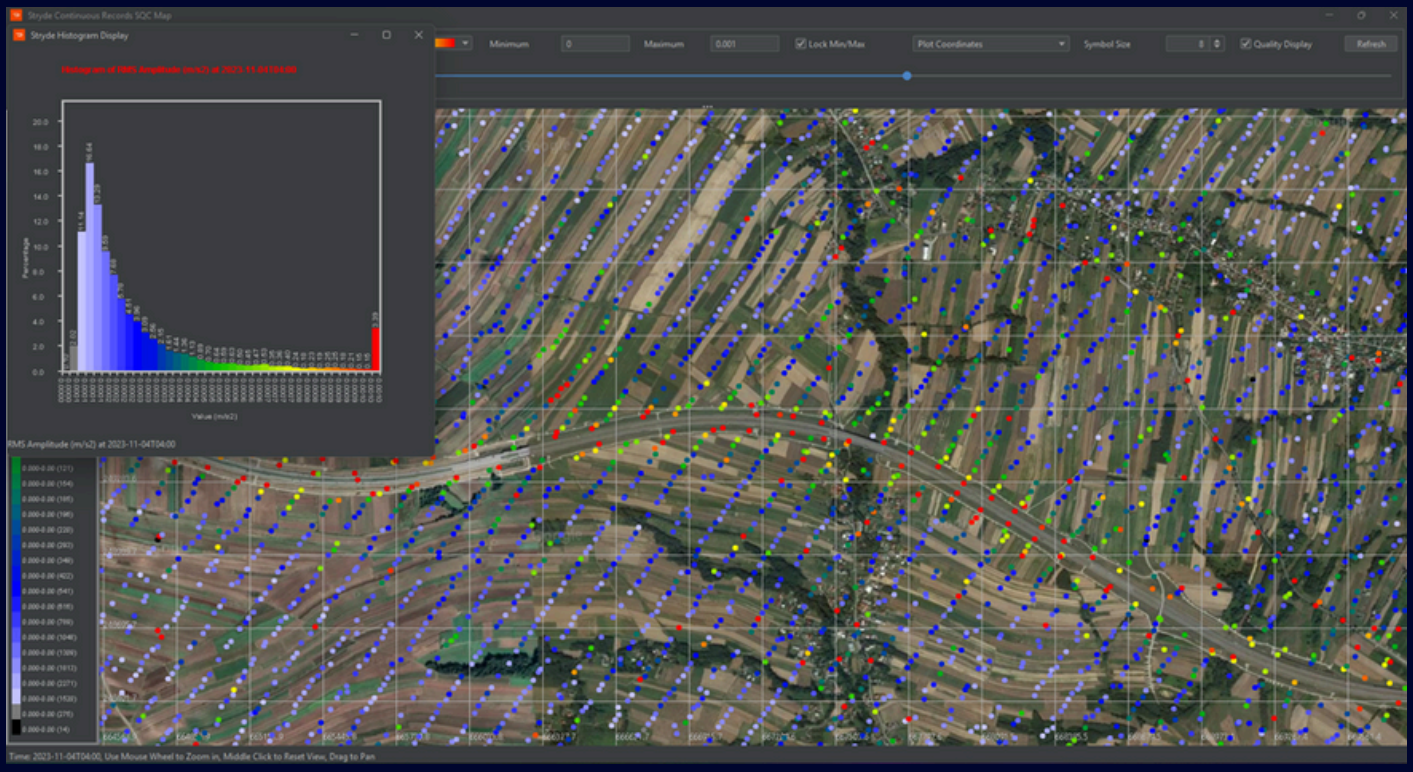
SeismicQC's core focus

SeismicQC has been built from the ground up with a central focus on usability, scalability and integration to become your trusted software for nodal seismic data QC:

- **Usability** — new users can quickly get started with seismic data visualization and attribute analysis.
- **Scalability and performance** — seamless support for projects of all shapes and sizes, ranging from hundreds to millions of source and receiver points.
- **Workflow integration and collaboration** — support for common seismic data exchange formats allows effortless integration of SeismicQC with your existing QC and reporting procedures.

Example: interactive attribute maps

Animate through data-derived attributes to QC data and hardware performance in space and time.

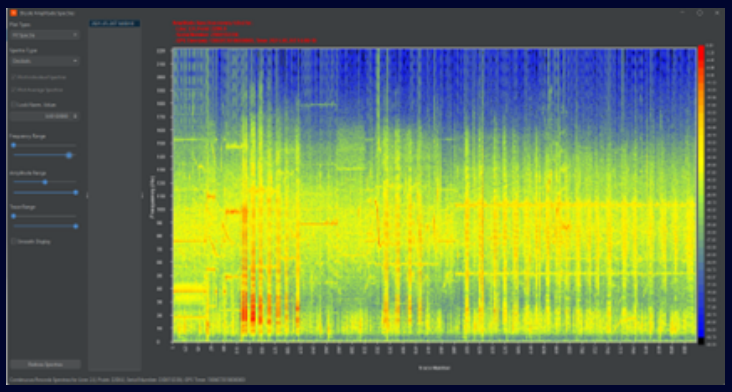


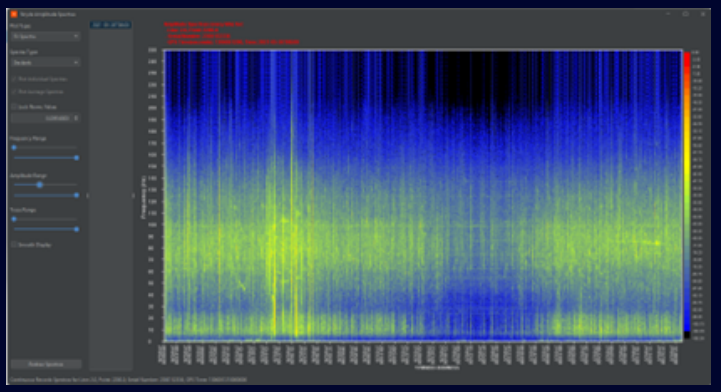
Continuous seismic records QC

Continuous seismic records are a standard deliverable from nodal acquisition systems. SeismicQC provides all the functionality needed to efficiently QC continuous seismic records output by STRYDE's receiver system to ensure data quality and hardware performance for seismic surveys of any size:

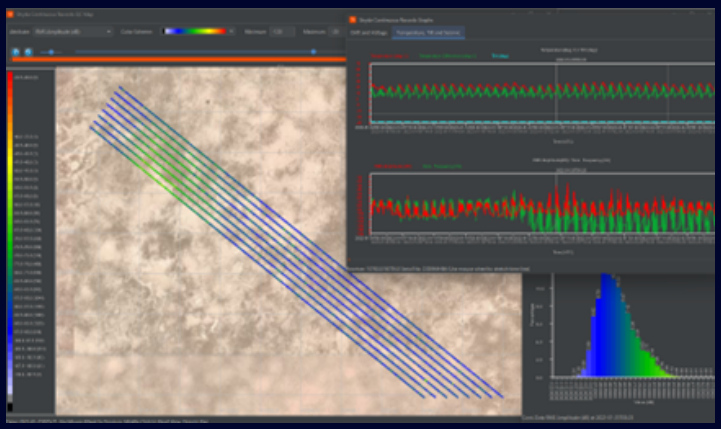
- **Data visualization** — easily create seismic trace data, headers, and attribute displays for data and instrument QC .
- **Data analysis** — assess signal quality and noise characteristics in space and time using seismic trace attribute maps and spectral analysis plots in frequency and time-frequency domains.
- **Pseudo-gather creation** — ad hoc data extraction for shot domain QC before final source timing information is available

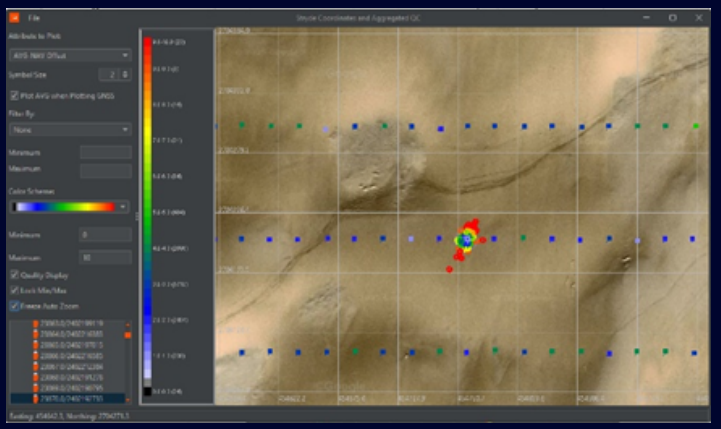
Spectral analysis: time-frequency displays





Seismic data and instrument metadata visualization and analysis



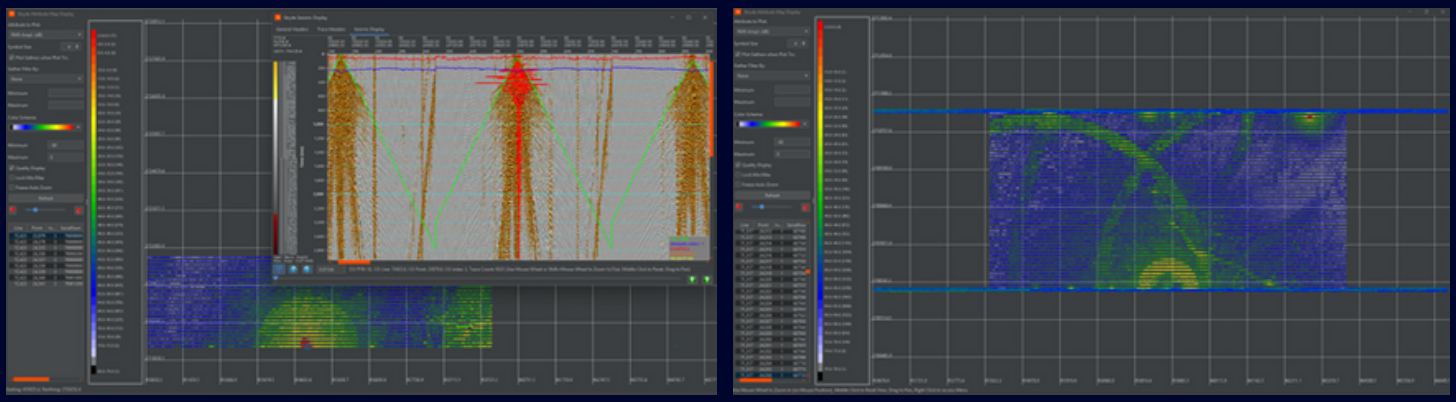


Receiver and source gather QC

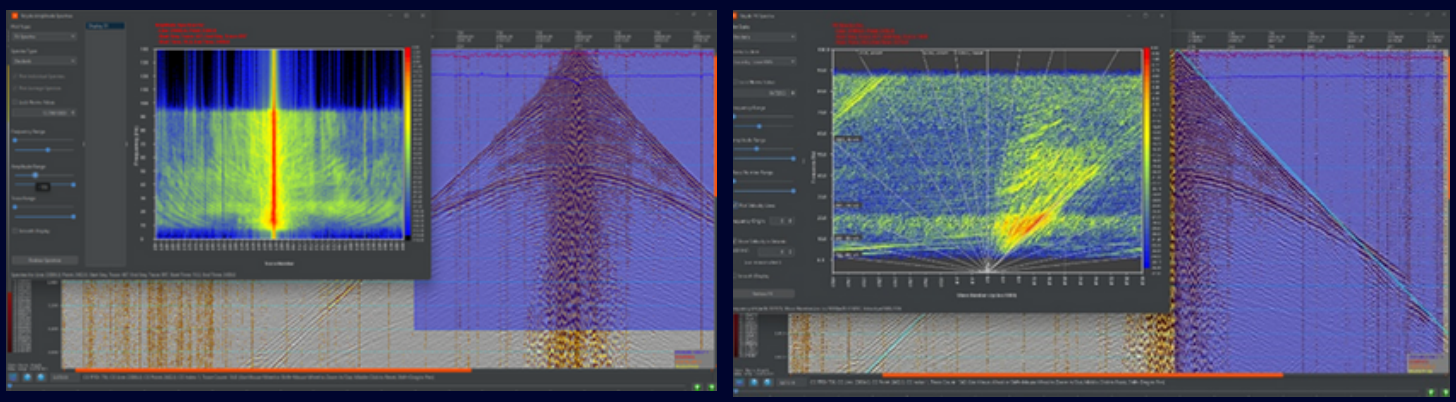
SeismicQC provides bespoke tools for analysis and quality control of receiver and source gather deliverables output from the STRYDE nodal seismic system, whatever the channel count, including:

- Interactive visualization of gather trace and attribute displays in multiple domains
- Gathers animation to visually review large amounts of data quickly
- Ad hoc data export to SEGY and other formats for further QC in other software
- Vertical stacking of source gathers for source effort assessment during source parameter tests

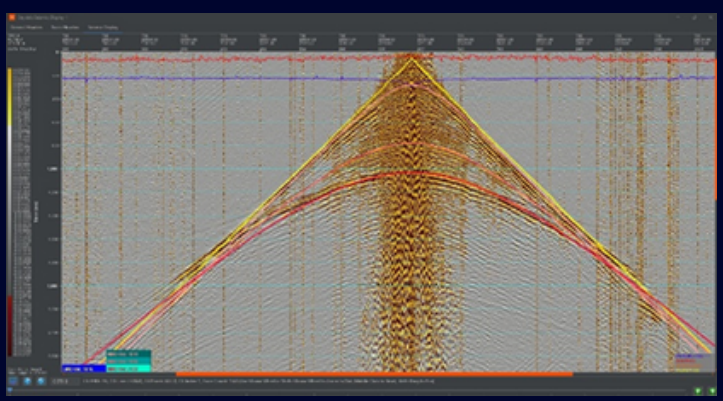
Gather trace and attribute map display



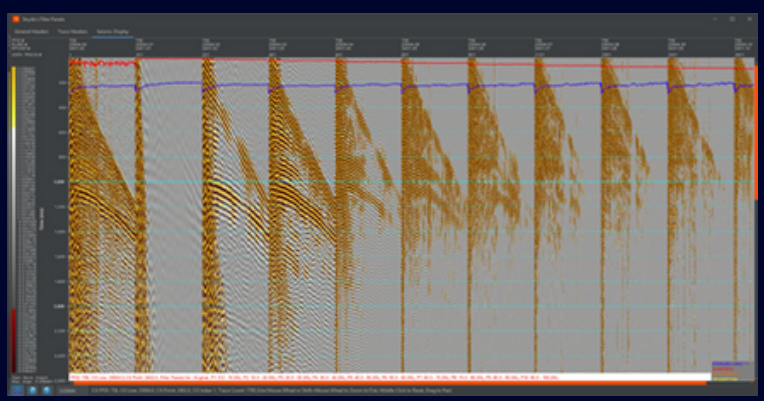
Interactive calculation of FX (left) and FK (right) spectra



LMO and NMO velocity picking



Filter panels



STRYDE

The market-leading onshore nodal seismic solutions provider

Got a question or want to book a software demo?

SCAN ME