

IRIS - Navigation Processing

NAVIGATION PROCESSING SOLUTION FOR TOWED STREAMER

ION has provided market leading navigation processing software for over 20 years, previously with the Sprint processing system. We now offer the IRIS Navigation Processing system, which is fully integrated with the Orca® command and control system, and can be used as a compatible offline processing system. The software provides improved visualization to help quickly identify and solve problems. ION's unique Near Real Time (NRT) processing engine provides fast, reliable, and automatic processing. The integration with the Orca provides further automated functions that save time and promote consistency.

IRIS offers an office based (or offline) solution for the import and analysis of data from both P2/94 and P2/11 files, and produces high quality P1/90 or P1/11 files for client delivery.

KEY FEATURES

→ Data Import

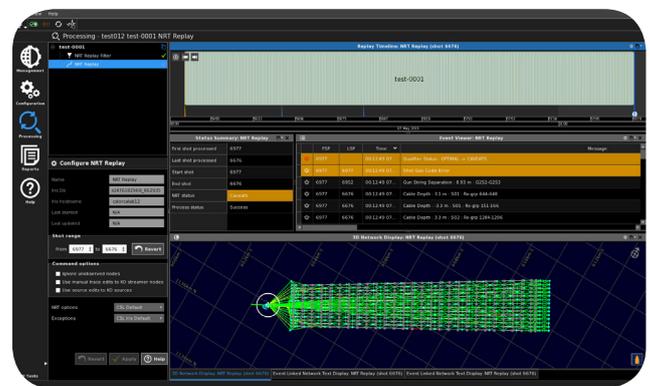
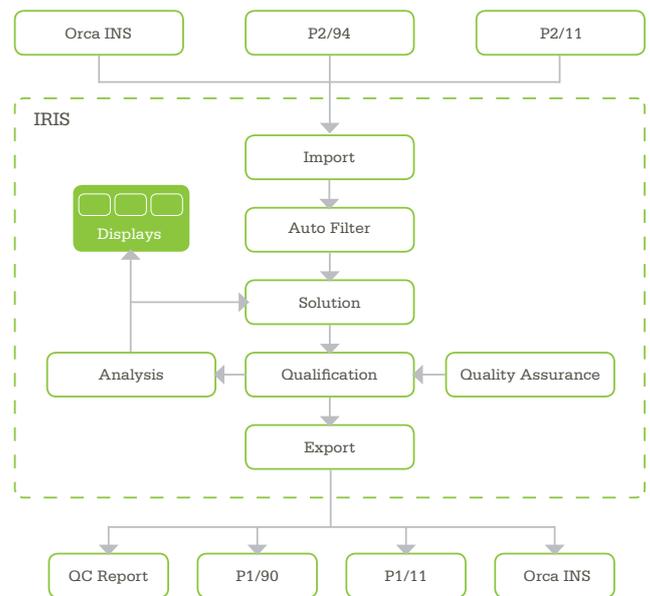
When used with the Orca Integrated Navigation System, raw/ filtered observation and positioning data are automatically imported into IRIS from the Orca Near Real Time (NRT) processing engine, enabling visualization of the solution as the line is acquired. This is effectively a real-time automatic import of the P2 file and is available immediately for analysis. For standalone reprocessing, the module is able to import raw data from both P2/94 and P2/11 formatted data files.

→ AutoFilter

IRIS features a powerful two-stage auto-filter which intelligently de-spikes/gates observations before filtering the imported raw data. This functionality delivers consistency and saves time. If the processing module is integrated with the Orca system, the observation data is already filtered by the NRT engine. The option to re-filter the data and make manual adjustments, if required, is available.

→ Solution

Using the common algorithms from the Orca NRT Engine, IRIS provides a fully integrated adjustment of the survey spread. A position with associated QC is provided for each node in the spread. The option is provided to solve and produce a solution over a specific shot range when more detailed analysis is required, or to check specific problematic areas.



Dynamic Interface

→ **Qualification**

The IRIS qualifier provides Quality Assurance that the solution is acceptable.

The quality of the solution is provided via the following status:

- **Optimal** – all of the positional quality tests have passed; the line will not benefit from further navigation reprocessing.
- **Optimal with some caveats** – some positional quality tests have failed; however navigation reprocessing will not improve the solution.
- **Reprocess** – some positional quality tests have failed and navigation reprocessing may improve the quality of the solution.

→ **Export**

After a line has been processed, the resulting solution can be exported into either a P1/90 or a P1/11 file. If used with Orca, the solution and statistical QC data are already automatically exported to the Orca databases for reporting purposes. A comprehensive quality report is also produced as a standard deliverable.

→ **Analysis**

Any exceptions raised when the solution is processed are immediately available within a dynamic event viewer. The events will be updated for a given shot range and can be queried using the time-sliding shot calendar. The dynamic interface is a key feature of IRIS; it facilitates focused problem solving and reduces the time it takes to locate any problems in the data.

ADDED BENEFITS

→ **Quality Assurance**

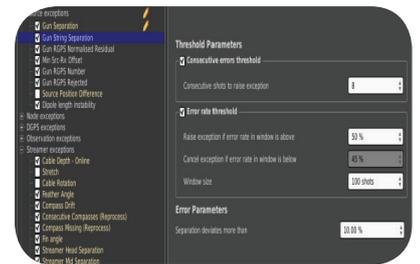
As IRIS is equipped and ready to process any streamer seismic navigation data, it is possible to adjust the exception parameters, as required, to fit the needs of a client specification. The quality criteria are used by the qualification process and provide quality assurance for the deliverables. Each line that is processed must pass the same quality exceptions.

→ **Training**

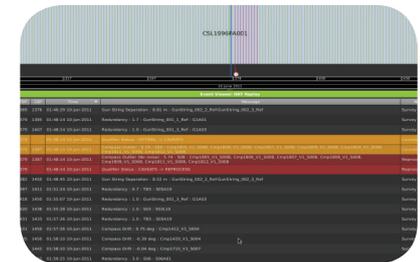
A five day, instructor-led Data Processor course is available, primarily held at the training facility in Edinburgh, but other locations are available on request.



Powerful Visualization Tools



Simplified Editing of Custom Exceptions



Easy Identification of Events

ION has been delivering solutions to the oil and gas industry for over 40 years, and is the leading provider of real-time, multi-vessel positioning and control systems. For further information contact cs1-sales@iongeo.com.

About ION

ION is a leading provider of technology-driven solutions to the global oil and gas industry. ION's offerings are designed to help companies reduce risk and optimize assets throughout the E&P lifecycle.