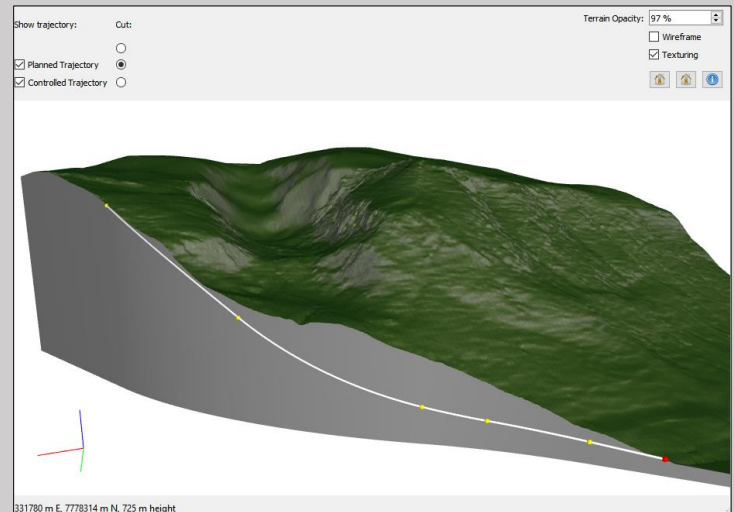
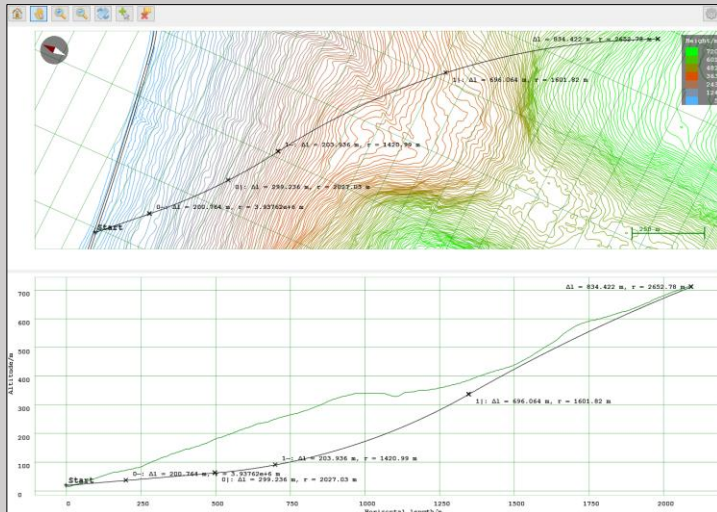


## Trajectory Planning & Operation Monitoring & Analysis for Horizontal Drilling Applications

iMAR's Drill Control (iDRILL-CTRL) – Your Tool for the Entire Drill Process



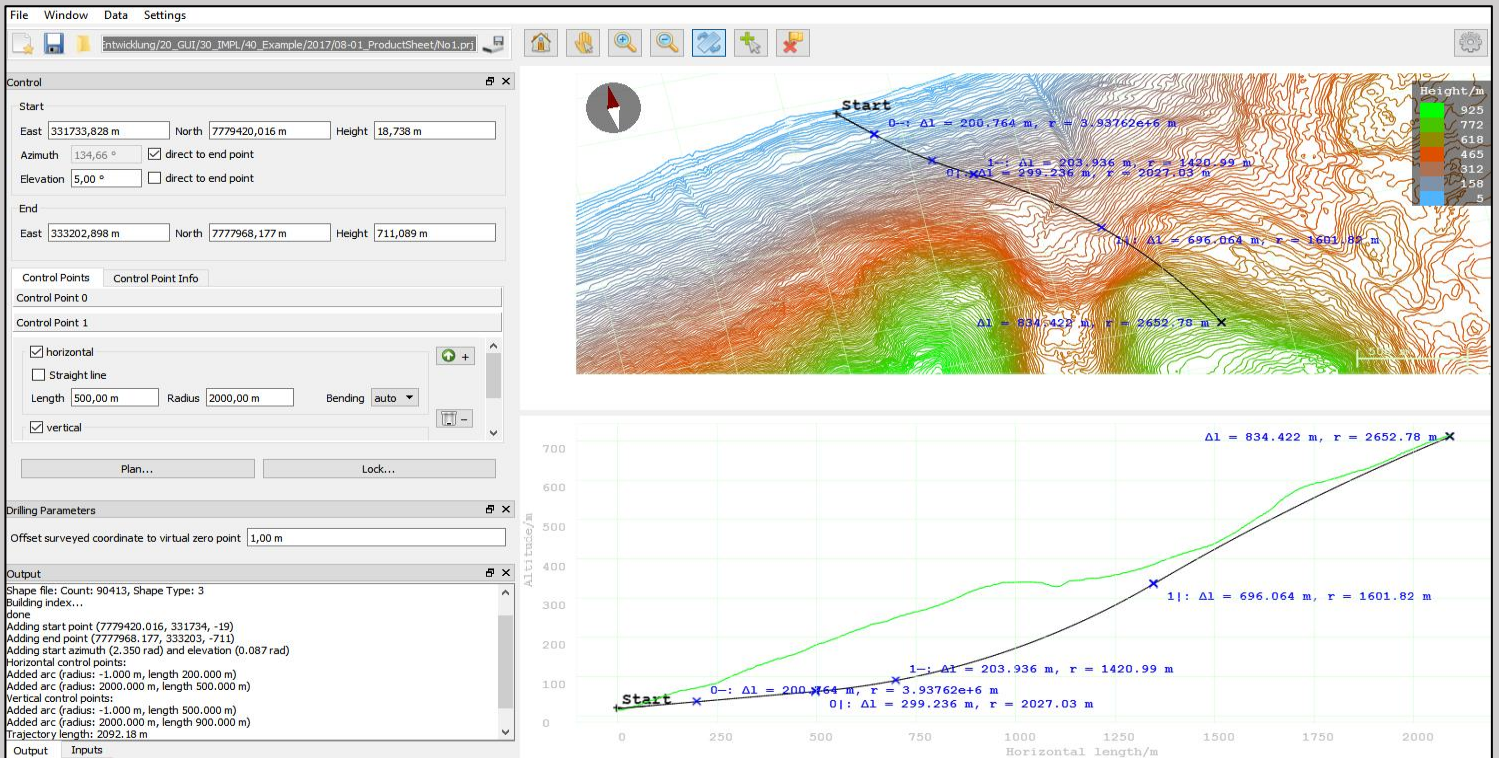
iDRILL-CTRL is a iMAR Navigation software, especially developed for *high-precision long duration as well as short time drill operations* for **adaptive trajectory planning**, drill head **real-time location visualization** (using iMAR's iPST gyro based drill head localization systems) and **borehole forecasting** - with further **capabilities** that go far **beyond trajectory planning**.

iDRILL-CTRL allows a monitoring of the entire operation through its direct connection to our iMAR iANARO drill head navigation system. This enables a computation of the location and direction of the drillhead in real-time. Based on current and past measurements, the *drill head direction can be predicted* and *trajectories can be adaptive re-planned* automatically or by user-interaction during the drilling operation.

### CAPABILITIES AT A GLANCE

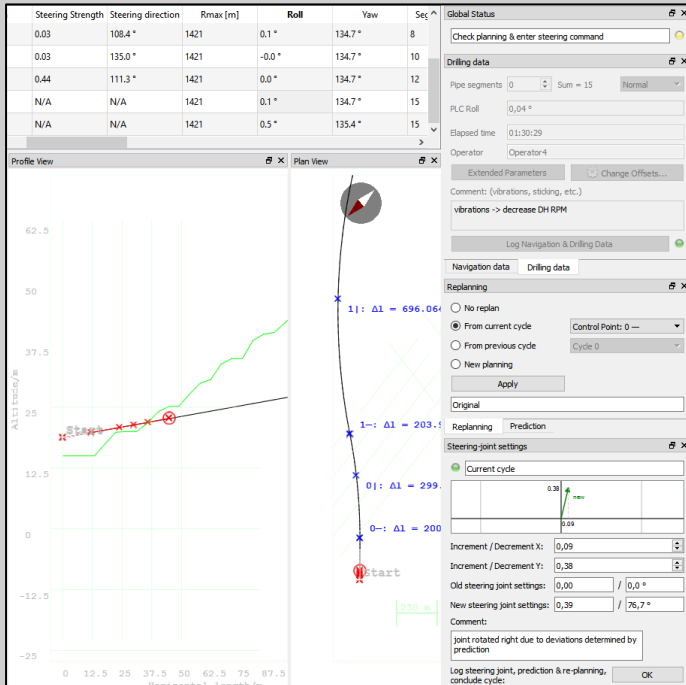
- Intuitive interface for precise trajectory planning, separate for horizontal and vertical plane.
- Re-planning of the trajectory during the operation, if needed.
- Indication of position and trajectory length from measurements of the iANARO navigation system.
- Borehole forecast (prediction of trajectory) from a set of measurement points.
- Logging and printing of all relevant information of the drill operation via intuitive user interface.
- 3D visualization of terrain and trajectory; supports the definition of “no-go” areas by the operator for very easy trajectory generation under given natural or artificial constraints.
- User customizable to your drill system (automatic log of parameters such as RPM, steering actuator, etc.).

**easy to use – simplifies 3D borehole trajectory planning – generates best fit results**



## Drill Trajectory Planning:

- Intuitive interface enables planning in plane and height view.
- Automatic height profile generation from map data.



## Drill Operation Control:

- Navigation system measurements.
- Advance monitoring.
- Logging & re-planning.

## LOG AND REPORT OUTPUT

iDRILL-CTRL provides a *customizable logging and report interface* to simplify the tracking of important parameters by the operator and produce reports of every step of the operation, also for **Quality Assurance** requests.

## ANALYZE AND OPTIMIZE YOUR PROJECT

Past operations can be loaded into the software and analysed in replay mode to *optimize future drill operations*. Furthermore, the *3D plot visualizes planned as well as executed trajectories* to be utilized for customer presentations and marketing purposes.

## CUSTOMIZED SOLUTIONS

For more details or customized solutions to fit your drill operation requirements for detailed information about our ruggedized gyro based drillhead navigation systems equipment please contact our sales department.

