

Magnetic surveys

Novatem COLIBRI's systems use GEM or Geometrics technologies. The system has been tested in the roughest weather conditions. All the system components have been improved to guarantee the best results even in difficult areas.



Quality Control

Before any survey Novatem always makes sure that:

- The survey specifications are adequate for the targets
- The survey specifications are safe for both the personnel and the equipments
- The spare parts and necessary instrumentation are available to perform the survey in an expeditious manner
- The aircraft maintenance facilities and spare parts are available

After each flight, the raw data are checked for quality and integrity and then securely stored. For each flight, the following controls are applied:

- Sample separation
- Flight path deviation
- Altitude deviation
- Data noise level

Data processing

Considering the high quality of the magnetic data collected with COLIBRI, it is possible to keep the processing as simple as possible.

The standard set of corrections applied to magnetic data includes:

- Diurnal corrections obtained from a GPS-synchronized base station
- Helicopter compensation using proprietary software developed by Novatem Inc.
- Tie-line levelling

Thus, no filtering is applied to the data, which enables to delineate the finest magnetic features. Nevertheless, Novatem also offers a wide range of advanced data processing tools using proprietary software, in order to meet the client needs:

- Micro-levelling
- Derivatives (calculated vertical and horizontal gradients)
- Analytical signal
- Upward and downward controlled continuations
- Reduction to the Pole or Equator
- Depth estimation by Werner or Euler deconvolution using the measured gradients
- Modeling and inversion
- Nelson levelling
- Depth slicing
- Gradient enhanced Total Field gridding
- Interpretation

