

## FK190726 Gravity Survey

The FK190726 gravity survey is divided in 8 transits and 10 sites.

The corresponding data files are Excel csv files and have the following channels:

LINE: line name

UTCDate: UTC date in dd/mm/yyyy

TIME: UTC time in hh:mm:ss

ST: Spring Tension in counter unit (~ mGal)

CC: Cross-coupling corrections in counter unit (~ mGal)

RAW\_BEAM: Beam position (mV)

BEAMP: Beam derivative (mV/s)

STILL\_READING: relative gravity reading in port

GRAV\_BASE: value of absolute gravity in port

RAW\_GRAV\_REL: relative calculated gravity (mGal)

LATITUDE: Latitude in deg.dddddd

LONGITUDE: Longitude in deg.ddddddd

HEIGHT: Height(m)

X: projected X(m), World Mercator

Y: projected Y(m), World Mercator

PHI: Latitude in rads

LAMBDA: Longitude in rads

PHIP: Phi derivative

LAMBDA\_P: Lambda derivative

CM: radius of curvature for prime meridian (m)

CN: radius of curvature for equatorial meridian (m)

VN: north velocity(m/s)

VEH: east velocity(m/s)

VU: vertical velocity(m/s)

ABS\_GRAV: absolute gravity(mGal)

LATCOR: Latitude correction(mGal) using IGF - Moritz 1980

FACOR: Free-air correction(mGal) using 0.3086 gradient

EOTVOSCOR: Eotvos correction (mGal)

FA\_RAW: raw free-air(mGal)

FA\_SP: b-spline free-air(mGal)

FA\_SP\_RA: b-spline free-air+60 sec gaussian filter(mGal)

FA\_clean: b-spline free-air+60 sec gaussian filter(mGal) excluding data during turns or change of directions

Using these channels gravity can be re-calculated or filtered using different methods/techniques. A corresponding PDF file contains the equations to use to re-calculate gravity.

The free-air line-data (FA\_clean) at the 9 sites have been gridded at ~500 m resolution using a minimum-curvature algorithm, and exported as GMT grids.