
MGL-ctd.*

The SeaBird SBE 9+ CTD unit outputs various channels through TCP that are used for monitoring. This stream is recorded as serial data to files *MGL-ctd.yYYYYdjjj* in the following format, which doesn't follow the NMEA standard. The sampling rate for these data is much lower than in the actual data files saved under raw/ctd.

n	x.xxxxxxx	x.xxxxx	x.xxxx	x.xxx	x.xxxxx	x.xxx	x.xxx
Item	Definition			Units / options			
n	Scan count			n/a			
x.xxxxxxx	Conductivity			S/m (Siemens/meter)			
x.xxxxx	Temperature			°C			
x.xxxx	Pressure, digiquartz			db			
x.xxx	Elapsed time			s			
x.xxxx	Salinity			PSU			
x.xxx	Depth (salt water)			m			
x.xxx	Oxygen, SBE 43			µmol/kg			

MGL-dgsdata.*

The DGS gravimeter initial processing results are output as serial data and captured by the LDS system for monitoring purposes. These data are recorded to files *MGL-dgsdata.yYYYYdjjj* in the following format, which doesn't follow the NMEA standard, and is similar to format of the files stored in the gravity folder, with the addition of the LDS tag and time stamp. All floating point values have 12 digits, but only a 9 digit precision.

x.xxxx,x.xxxx,x.xxxx,x.xxxx,x.xxxx,x.xxxx,n,n,x.xxxx,x.xxxx,x.xxxx,x.xxxx,x.xxxx,x.xxxx,x.xxxx,x.xxxx,x.xxxx,x.xxxx,x.xxxx,yyyy,mm,dd,HH,MM,SS

Item	Definition	Units / Options
x.xxxx	QC_Gravity: Cross coupling corrected gravity	mGal
x.xxxx	Uncorrected gravity	mGal
x.xxxx	Long accelerometer	Gal
x.xxxx	Cross accelerometer	mGal
x.xxxx	Beam position	V
x.xxxx	Sensor temperature	°C
n	Binary codified status	n/a
n	Checksum	n/a
x.xxxx	Internal sensor pressure	inHg
x.xxxx	Electronics temperature	°C
x.xxxx	Ve Cross coupling monitor	cm/s
x.xxxx	Vcc Cross coupling monitor	cm/s
x.xxxx	AI Cross coupling monitor	
x.xxxx	Ax Cross coupling monitor	
x.xxxx	GPS Latitude	Decimal °
x.xxxx	GPS Longitude	Decimal °
x.xxxx	Vessel speed	m/s
x.xxxx	Course over ground	°
x.xxxx	Mean vertical velocity	cm/s
yyyy,mm,dd,hh,mm,ss.ss	Year,month,day,hour,minute,seconds	n/a
n	Number of lines/seconds since last reset	n/a