

**GTRAINING02_
SGYTEXTURAL
HEADER
GEOMLIB (β)**

**MARINE ENGINEERING GEOPHYSICAL
DATA PROCESSING TOOLBOX**

**TEXTURAL HEADER CORRECTION FOR
FOLDER WITH SGY-FILES**

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1 Overview and requirements

The Training02 document described script for Textural Header correction for folder with SGY-files. The functions were tested in MatLab R2015b.

There will be need gSgy functions set. The training based on gSgyTextCorrectScript.m

The textural headers template is formed in accordance with the requirements of the State Bank of Digital Geological Information (Russia) for 2DHR:

<http://www.rfgf.ru/4.htm>;

<http://www.rfgf.ru/instrukziy/seismika.pdf> (page 11-13).

The gTraining02_SgyTexturalHeader.m script can be used as example:

http://ge0mlib.com/g/gTraining02_SgyTexturalHeader.zip

The follow Sgy-files are used as a survey data for gTraining02_SgyTexturalHeader.m:

http://ge0mlib.com/g/example/ET3200SX512i_sgy.zip

Start script gTraining02_SgyTexturalHeader.m with command same to

```
>> {'d:\3200SX\'};gTraining02_SgyTexturalHeader;
```

2 SGY-files textural header correction

0) =====

There is the folder with SGY-files (*Figure 1*):

Name	Ext	Size	Date
..		<DIR>	18.02.2020 14:48
orig		<DIR>	18.02.2020 14:17
ReadMe		<DIR>	18.02.2020 14:47
ET3200SX512i_Line1	sgy	70 372 136	18.02.2020 14:16
ET3200SX512i_Line2	sgy	23 444 136	18.02.2020 14:15

Figure 1 SGY-files list

Summary	Text Header	Bin Header	Trace Header	Trace Data
C 1	CLIENT:	COMPANY:	CREW NO:	
C 2	LINE:	AREA:	MAP ID:	
C 3	FILE NO:	DAY: 168	YEAR: 2011	OBSERVER:
C 4	INSTRUMENT:	MFG: EdgeTech	MODEL: 3200	SERIAL NO:
C 5	DATA TRACES/RECORD	AUXILIARY TRACES/RECORD	CDF FOLD:	
C 6	SAMPLE INTERVAL:	SAMPLES/TRACE:	BITS/IN:	BYTES SAMPLE: 4
C 7	RECORDING FORMAT:	FORMAT THIS FILE:	MEASUREMENT SYSTEM:	
C 8	SAMPLE CODE: FLOATING POINT		CORRELATED:	
C 9	GAIN TYPE: FIXED			
C10	FILTERS:			
C11	SOURCE: TYPE:	NUMBER/POINT:	POINT/INTERVAL:	
C12	PATTERN:	LENGTH:	WIDTH:	
C13	SWEEP: START:	HZ END:	HZ LENGTH:	MS CHANNEL NO: TYPE:
C14	TAPER: START LENGTH:	MS END LENGTH:	MS TYPE:	
C15	SPREAD: OFFSET:	MAX DISTANCE:	GROUP INTERVAL:	
C16	GEOPHONES: PER GROUP:	SPACING:	FREQUENCY:	MFG: MODEL:
C17	PATTERN:	LENGTH:	WIDTH:	
C18	TRACES SORTED BY: TIME			
C19	AMPLITUDE RECOVERY: NONE			
C20	MAP PROJECTION:	ZONE ID:	COORDINATE UNITS:	
C21	PROCESSING:			
C22	PROCESSING:			
C23				
C24				
C25				
C26				
C27				
C28				
C29				
C30				
C31				
C32				
C33				
C34				
C35				
C36				
C37				
C38	DISCOVER			
C39	SEG Y REV1			
C40	END TEXTUAL HEADER			

Figure 2 Textural Header

1) =====

Start script with folder name:

```
>> {'d:\8\ET3200SX512i\'};gTraining02_SgyTexturalHeader;
```

The follow parameters are update for each file:

StHead(08) – DAY-START OF REEL/LINE;

StHead(18) – SAMPLES/TRACE;

StHead(78) – LINE NAME (the name of file is used).

The Textural header convert to EBCDIC-code using gSgyTextAscii2EbcDic function.

2) =====

The Convert-folder was created (*Figure 3*).

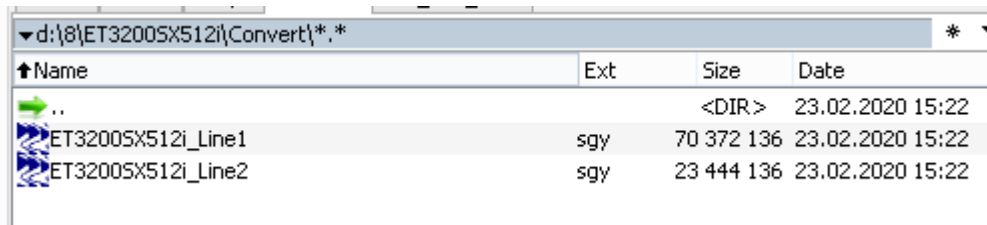


Figure 3 SGY-files list with Textural Header was formed

The Textural Headers were changed for all files (*Figure 4*):

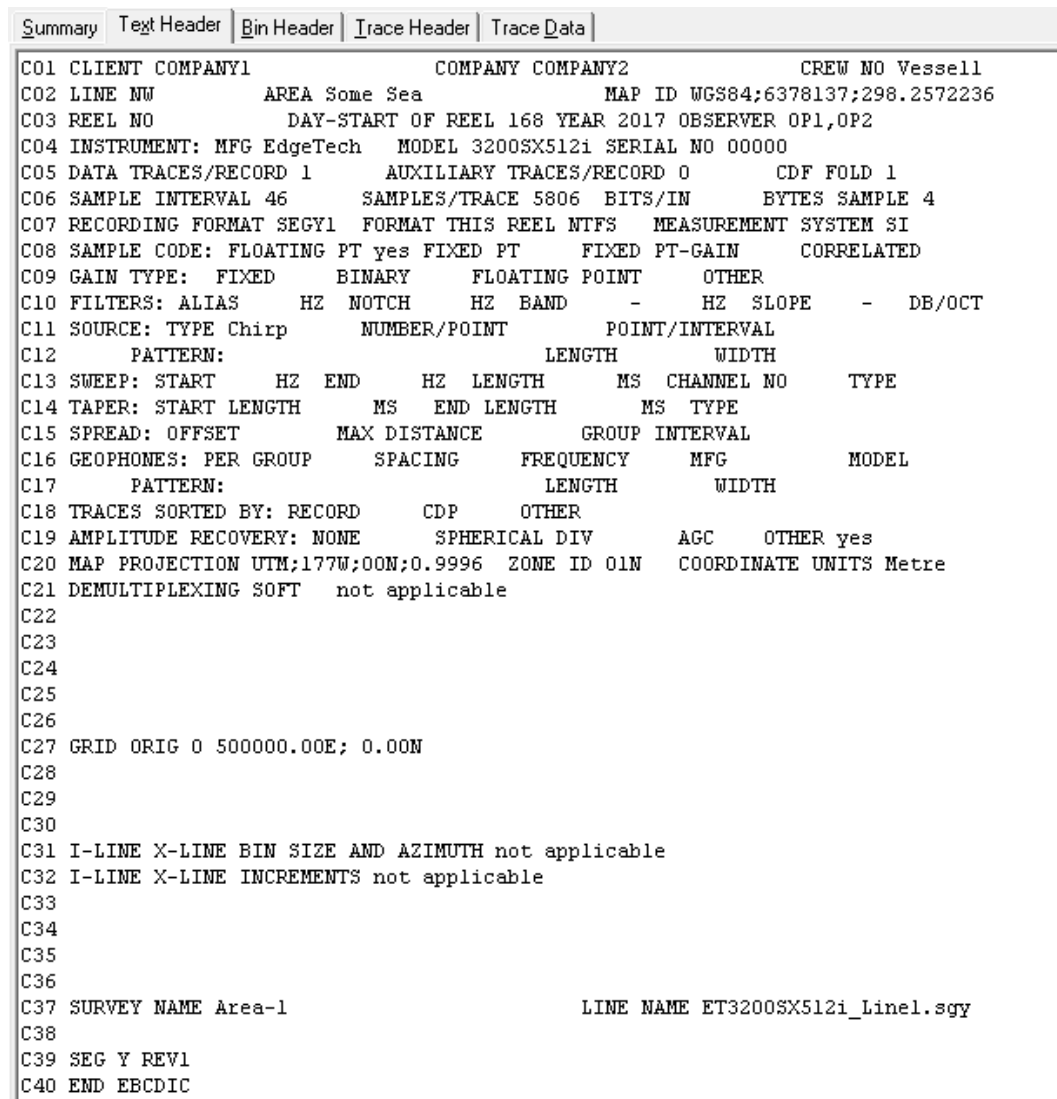


Figure 4 Textural Header was corrected

Citation

- 1) gSgy // Ge0MLib (β) – Marine engineering geophysical data processing toolbox // 21.02.2020.