



**GSGY**

**GSGY\_SCRIPT\_TEXTURALHEADER –  
TEXTURAL HEADER CORRECTION FOR  
FOLDER WITH SGY-FILES**

**VOL.02-04A**

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**GEOMLIB**

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## 1. Overview and requirements

There is the follow task:

-- Correct Textural Headers for folder with SGY-files.

The **gSgy\_Script\_TexturalHeader.m** script is described below for tasks decision.

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 follow Sgy-files are used as a survey data for gSgy\_Script\_TexturalHeader.m:

[http://ge0mlib.com/g/example/ET3200SX512i\\_sgy.zip](http://ge0mlib.com/g/example/ET3200SX512i_sgy.zip)

Start script gSgy\_Script\_TexturalHeader.m with command same to

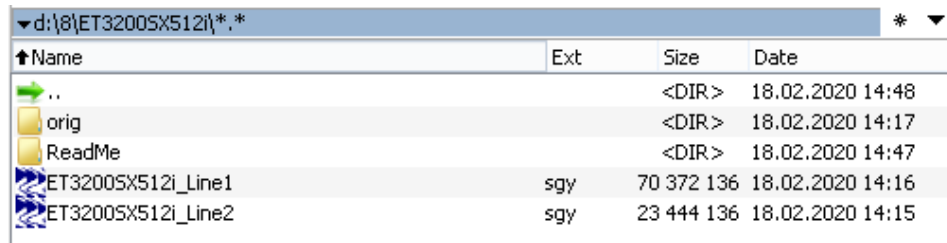
```
>> {'d:\3200SX\'}; gSgy_Script_TexturalHeader.m;
```

The functions were tested in MatLab R2015b.

## 2. SGY-files textural header correction

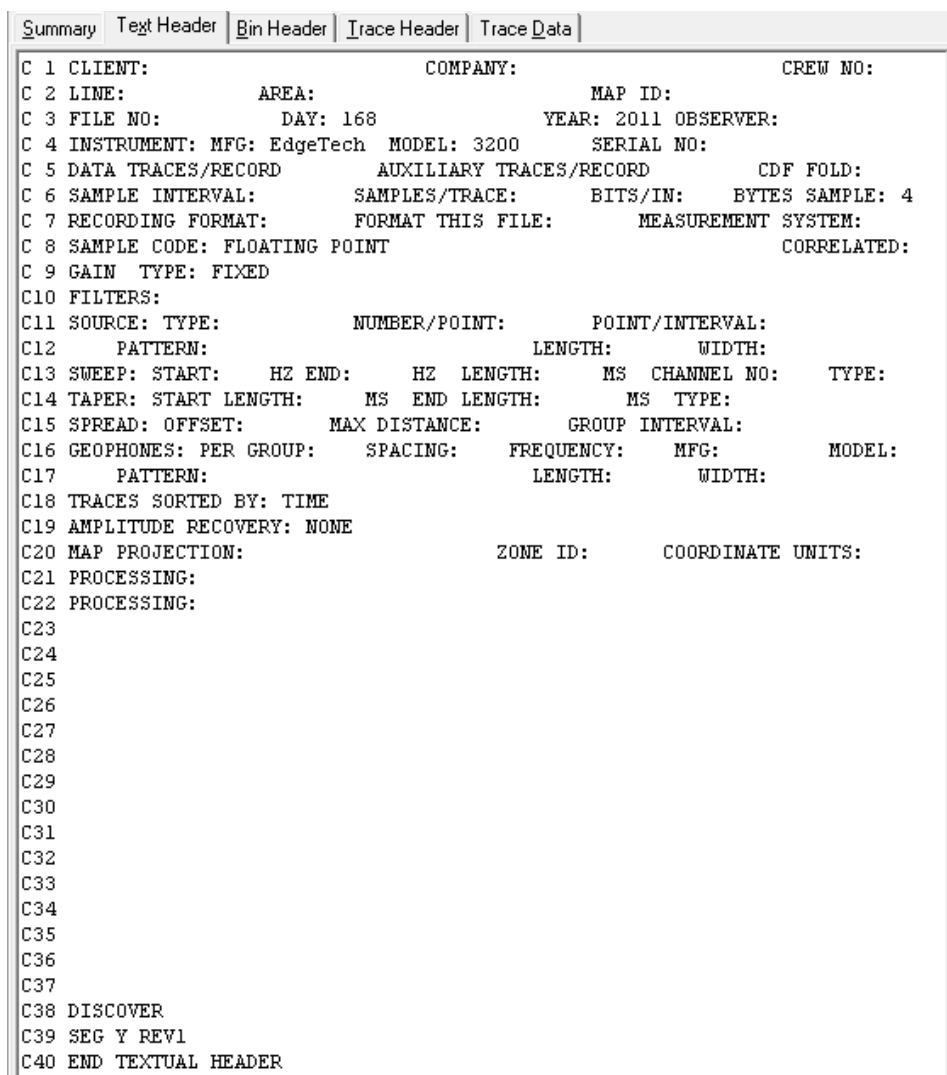
0) =====

There is the folder with SGY-files (*Figure 2.1*):



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 2.1* 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 2.2* Textural Header

1) =====

Start script with folder name:

```
>> {d:\8\ET3200SX512i\};gSgy_Script_TexturalHeader.m;
```

The follow parameters are update for each file:

StHead(08) – DAY-START OF REEL/LINE;

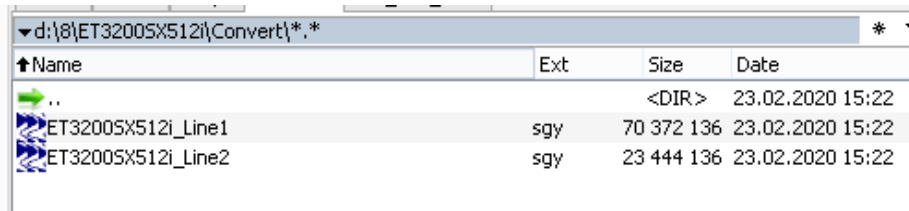
StHead(18) – SAMPLES/TRACE;

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

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

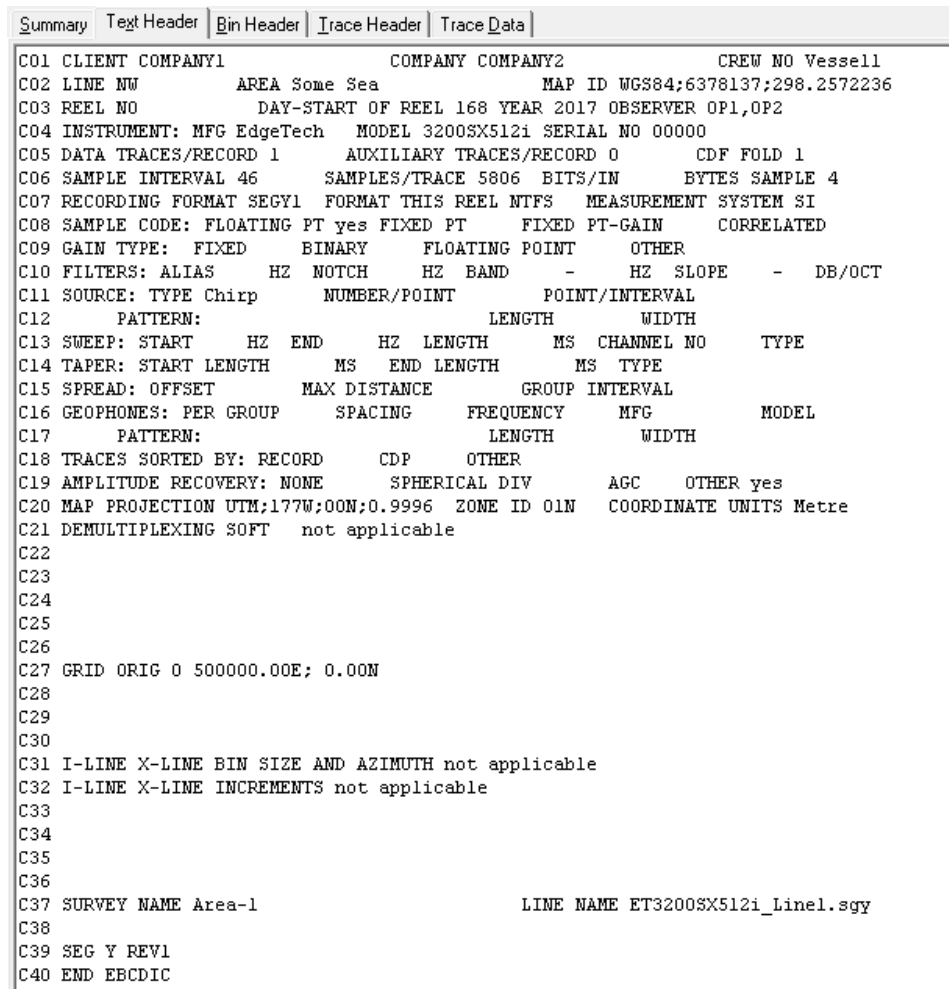
2) =====

The Convert-folder was created (*Figure 2.3*).



*Figure 2.3* SGY-files list with Textural Header was formed

The Textural Headers were changed for all files (*Figure 2.4*):



*Figure 2.4* Textural Header was corrected