



GSGY

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

REV. 202012

Ivan V. Dmitriev
01.04.2020

Contents

1. Overview and requirements3

2. SGY-files textural header correction.....4

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

Start script gSgy_Script_TexturalHeader.m with command same to

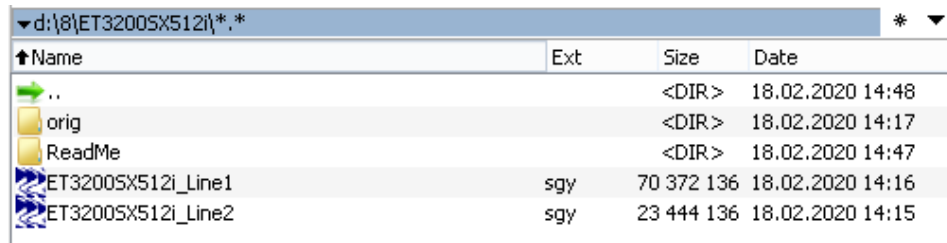
```
>> {'d:\3200SX\'}; gSgy_Script_TexturalHeader.m;
```

The functions were tested in MatLab R2015b.

2. SGY-files textural header correction

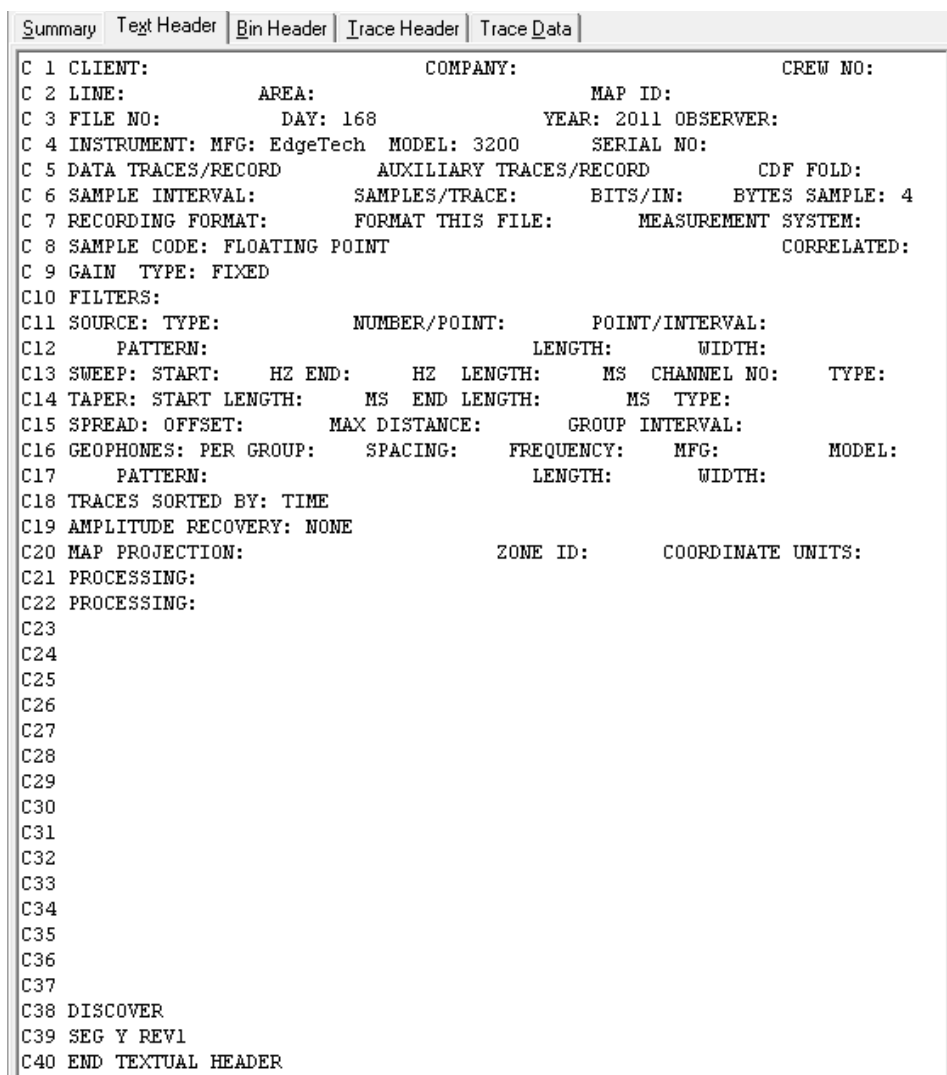
0) =====

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*).

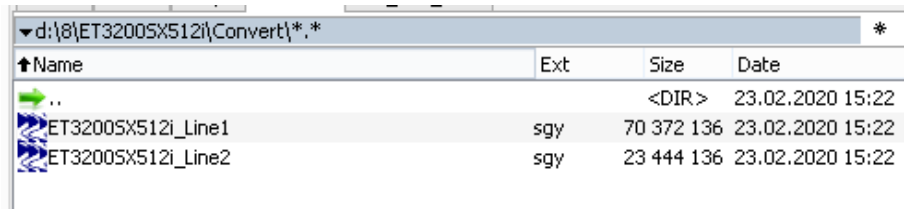


Figure 2.3 SGY-files list with Textural Header was formed

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

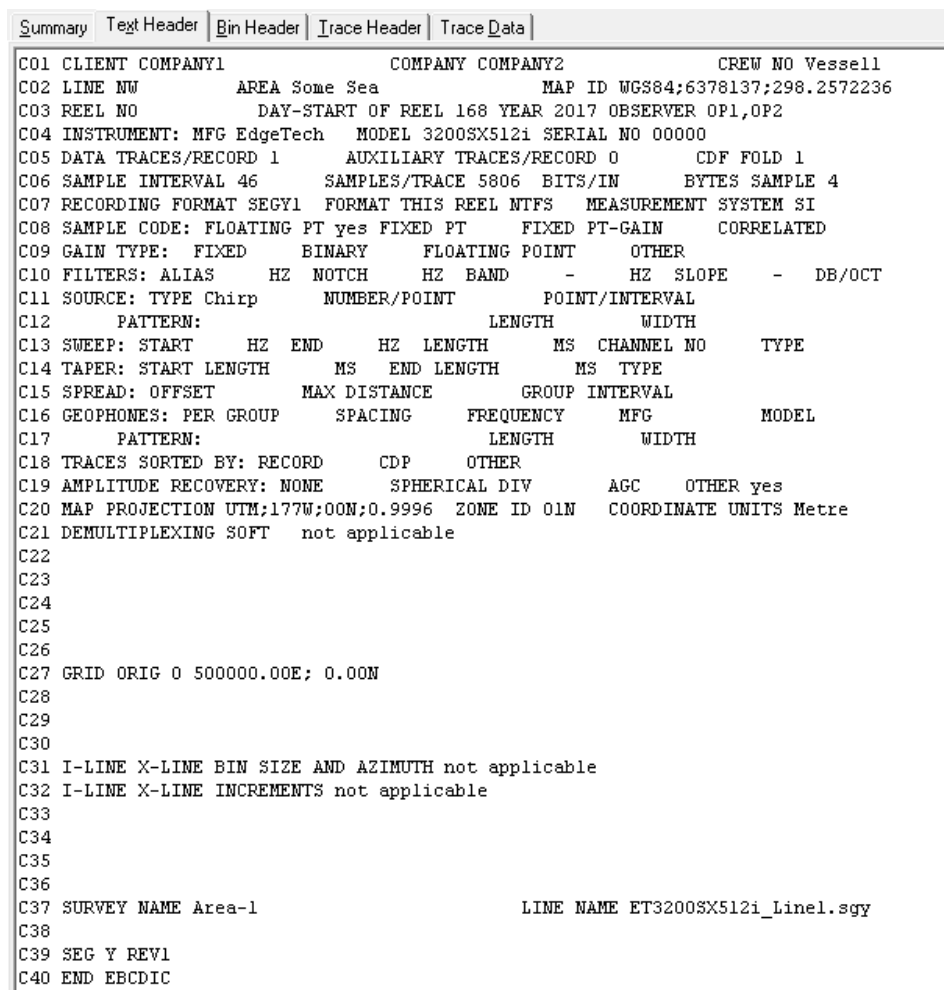


Figure 2.4 Textural Header was corrected