

DIGITAL SEISMIC DISPLAYS

CGGVeritas (Data Services division) utilises transcription software that can provide Seismic QC displays in either hardcopy or digital format. The displays will always represent a subset of the data, typically 2 to 10% and are only generated for some transcription jobs. The amount of data displayed is user specified, however for field formats, typically a Near Trace Gather plus occasional shot records is generated. Alternatively, a “sliding” display with 4-6 traces from each record may be displayed.

When Are Displays Generated

Typically QC Displays will only be generated when transcribing field formats and read errors have been encountered. This is because the read errors (hard errors) of multiplexed data tend to manifest themselves across all traces within a single shot. Therefore plotting several traces from each shot is as effective as plotting the entire shot when trying to visually determine the degree of data corruption that may have occurred. This does not apply to demultiplexed formats where the displays represent a small proportion of the entire data set and hence are an ineffective QC tool.

Of course if requested the Seismic QC Displays will be generated.

Using the Displays In Conjunction with the Transcription Listings

For jobs where transcription listings and QC displays have been provided, it is recommended that the listings are used to identify those shot records that may have been corrupted. This can be done by viewing the appropriate listing to determine the record numbers logged with hard errors and then by viewing the display (2-6 traces) for those records. The user can then make a judgement as to which records (shots) they want used in subsequent processing.

Naming Convention for Display Files

The name adopted for the QC displays will vary depending upon the data type (post stack versus field) and the condition of the tapes. In general the following conventions are used:

- Typically a single display file is created for each output tape, with the filename being the name of the tape.
- There is typically a separate image for each SEG Y file on the tape, or a separate image for each SEG D line.

Display files are usually in TIFF format (extension .tif) although GIF format is an option (extension .gif).