

Announcements

SEG releases clarification to SEG-Y_r2.1 seismic data-exchange format

The Society of Exploration Geophysicists has released a clarification document to accompany SEG-Y Revision 2.1 (SEG-Y_r2.1), the Society's most recent update to its widely adopted data-exchange standard.

Published as a supplement, the clarification focuses on the structure and handling of Extended Textual Headers, a key component of the SEG-Y_r2.1 format. Extended Textual Header blocks support machine readability and automated trace layout mapping using XML, making SEG-Y files more accessible to modern workflows, including machine learning and AI applications.

The document provides detailed guidance on how to identify, format, and parse Extended Textual Header blocks, including best practices for using the SEG:Layout and SEG:EndText stanzas. It clarifies that a variety of formats—such as ASCII text, XML, JSON, and PNG—can be embedded within these blocks. Although this expands the headers to include non-textual content, the name “Extended Textual Header” has been retained for consistency with the original SEG-Y_r2.1 exchange format definition.

Additional clarifications address edge cases including undefined Extended Textual Header counts, mixed encodings, and legacy data with nonstandard trace header byte locations.

This supplemental guidance was developed in response to community feedback. A dedicated subcommittee of the SEG Technical Standards Committee led the effort, with final review and approval provided by the full committee.

Members of the SEG Technical Standards Committee are currently exploring industry-specific examples of Extended Textual Header use and welcome broader community contributions. Input from practitioners is welcome and will help ensure that SEG-Y_r2.1 continues to serve as a reliable, cross-disciplinary data exchange format. Interested contributors are encouraged to reach out via publications@seg.org.

The original SEG-Y_r2.1 standard and the SEG-Y_r2.1 clarification are available on the SEG Technical Standards web page at <https://library.seg.org/seg-technical-standards>. The full PDF of the clarification document can be viewed at https://library.seg.org/seg-y_rev2-1_clarification. ■■■