

NEW · KINDLE EDITION 2026

GEOMETRY FIRST

*The Hidden Discipline That Decides
Seismic Data Quality*

A practical guide to 2D & 3D land seismic acquisition
geometry QC — binning, fold, offset, azimuth, headers

INSIDE THE BOOK

- 13 chapters, field-tested QC discipline
- Signed offset, crooked-line CMP binning
- 3D fold, offset & azimuth illumination
- Real field figures from JeoPulse software
- QC checklist, glossary & SPS reference

WHO IT'S FOR

Processing geophysicists · Acquisition QC specialists
Geophysics students · Seismic software developers

Müfit Er Köktan

Koktan Seismic Software · jeopulse.com



New book: **GEOMETRY FIRST** — The Hidden Discipline That Decides Seismic Data Quality

A trace can be mathematically perfect and still be spatially wrong. Most expensive processing mistakes aren't dramatic failures — they're quiet geometry errors that travel silently through the flow and only surface at the final stack, when the original cause is buried under many correct-looking steps.

This is a practical, no-fluff guide to 2D & 3D land seismic acquisition geometry QC: SPS column reading, signed offset, crooked-line CMP binning, receiver-station integrity, 3D bin grids, fold of coverage, offset distribution and azimuth illumination — through to writing geometry to headers.

Why read it

- ✓ 13 focused chapters built around real field datasets, not toy examples
- ✓ Every figure is real output — SPS mapping, .kmz overlays, fold maps, rose diagrams, LMO gathers
- ✓ A repeatable QC workflow + checklist, glossary and SPS quick reference you can use on the next project

Who it's for

- Processing geophysicists who suspect velocities or statics when the real fault is geometry
- Acquisition QC specialists who want processing to inherit reliable spatial data
- Geophysics students learning where the image actually comes from
- Seismic software developers building tools that respect field-data reality

What readers take away

- **For the processor:** a mental model that puts geometry on the suspect list before over-tuning a velocity field.
- **For the QC engineer:** a reconciliation habit (observer's log vs SPS) that catches skipped shots, duplicate FFIDs and source substitutions early.
- **For the developer:** a clear case that a good QC tool's job is to make wrong geometry uncomfortable to ignore.

When in doubt, return to geometry. Check the files. Check the map. Check the offsets. Check the bins. Check the fold. Check the azimuth. Check the headers.

 Available now on Amazon Kindle.

 <https://www.amazon.com/dp/B0H461V2QY>