



Q STANDS FOR QUALITY

Passive Seismic Data Processing

It is extremely difficult for non-seismologists to judge the quality of passive seismic data processing. Service companies usually provide only general information on their workflow. Although each individual processing step may appear correct, model assumptions are typically hidden in a black-box. And these assumptions can change the picture dramatically...

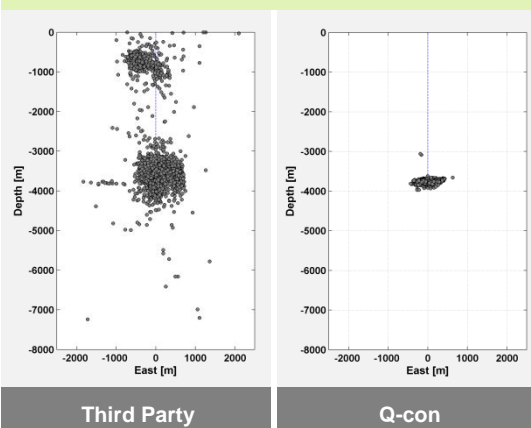
Here are two data examples, where Q-con was commissioned for data re-analysis of geothermal reservoir stimulations:

Another example of re-processing a literature show case exhibits similar differences.



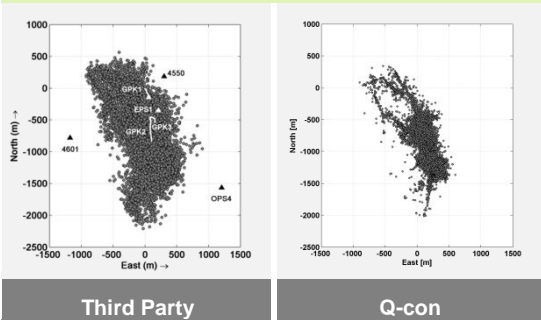
Paralana, Australia

The difference: The Third Party confused reflected phases with first onsets in the seismograms. Additionally, some of their instruments were affected by time drift.



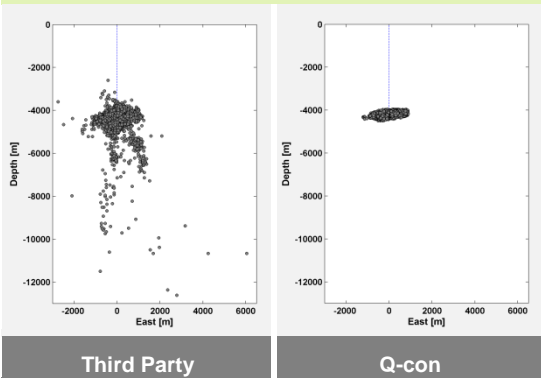
Soultz-sous-Forêts, France

The difference: The Third Party did not recognize ill-constrained data (see our peer-reviewed publication).



Cooper Basin, Australia

The difference: The Third Party has used an inappropriate algorithm for determining hypocentre locations (see our peer-reviewed publication).



Q-con's interpretations have been confirmed e.g. by image logs obtained from subsequent wells drilled into the reservoir (see our peer-reviewed publication).

Why are the Q-con seismicity images so much better?

Our seismologists have a unique expertise in processing induced seismicity data. We know the pitfalls and common sources of error. Using the extremely powerful software package QUBE for data processing, our experts apply sophisticated analysis techniques already in real-time and provide high quality, precise reservoir images.