

## **Benefits of Rotational Ground Motion Measurements** for On-Site Inspection (OSI) Activities



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- OSI as the final component of the CTBT verification regime goals for an effective inspection under time pressure. It is a major operation requiring a huge effort in preparation and implementation.
- Recording the full, 6-component wavefield (instead of only 3-components of translation) can help to reduce the effort in terms of hardware, maintenance, human power, time, and money.
- Rotational seismology is on the verge to revolutionise seismology in almost all subfields:
  - determining shallow sub-surface structural models
  - (single station) event localisation
  - dynamic tilt correction of horizontal translations
  - wave field decomposition (polarisation analysis)
  - inversion for seismic moment tensor
  - coherent-noise suppression in active seismic experiments



