

## ISO 1989 3D (KTB) (Near-vertical reflection profiling)

<p><b>General information</b></p>	<p>Recorded by for Area Survey area / azimuth Orientation of area (in-/ crossline direction) Total data amount</p>	<p>August – November 1989 Prakla-Seismos AG Geological Survey of Lower Saxony, Germany North-eastern Bavaria 19.2 km × 17.8 km / 53.2 ° SW – NE / SE – NW 32.19 GB</p>
<p><b>Recording</b></p>	<p>Recording system Sample interval No. of channels (theor. / real) Field filter Noise reduction Correlation Recording format Sweep + listening time / recording time Recording configuration Single spread set-up area (sources and receivers)</p>	<p>Sercel SN 368 / LXU / CS 260 4 ms 480 / 478 Lo 8.0 Hz / 18 dB Hi 88.8 Hz / 72 dB Automatic noise-mute before correlation with filtered sweep SEG-D (demultiplexed) 20 s + 12 s = 32 s (uncorrelated) / 12 s (correlated) Cross array (receiver lines SW-NE, source lines SE-NW) 2.4 km × 5.8 km</p>
<p><b>Receivers</b></p>	<p>Geophone type Geophones per group No. of geophone lines per spread or swath No. of geophone groups per line and spread / per swath Geophone group spacing (x- / y-direction) No. of swaths No. of spread shifts per swath Spread shift (x- / y-direction) Total no. of receiver lines Total no. of geophone points</p>	<p>SM 4 B (10 Hz) 18 (3-vane fan, ø 30.25 m, spacing 3.75 m) 10 48 (first line 46) / 208 (first line 206) 100 / 400 m 4 (separation of swath centres 4 km) 21 800 / 4000 m 40 8320</p>
<p><b>Sources</b></p>	<p>Source type No. of vibrators Sweep length / range Pattern length Vertical stacking rate No. of source point lines per spread / per swath Source spacing (x- / y-direction) No. of source points per source point line and per spread or swath Total no. of source points per source point line Total no. of source locations (theor. / real) Total no. of source points (theor. / real)</p>	<p>Vibroseis (p-waves) 5*VVEA (each 19.4 tons, 125 kN peak-force) 20 s / 12 – 48 Hz (up-sweep), 250 ms taper 48.75 m 5 – 8-fold 1 / 21 800 m / odd lines 100 – 200 – 300 – 200 – 100 m, even lines 200 – 300 – 200 – 100 m 40 100 2100 / 2084 3360 / 3327</p>

<b>CDPs</b>	<b>Bin-size</b>	50 m × 50 m
	<b>Coverage (theor. / real)</b>	Average: 12.3 / 11.5-fold, max.: 15 / 19-fold
	<b>One-fold covered area (theor. / real)</b>	17.8 km × 18.4 km / 17.9 km × 19.1 km
	<b>15-fold covered area (theor.)</b>	15.2 km × 14.4 km
	<b>Total no. of CDPs</b>	136374
	<b>No. of CDPs per inline</b>	382
	<b>No. of CDPs per crossline</b>	357
	<b>Source-receiver offsets (theor. / real)</b>	71 – 6258 m / 2 – 6580 m
	<b>Total no. of bins (theor. / real)</b>	356 × 368 = 131008 / 357 × 382 = 136374
	<b>Total no. of traces (theor. / real)</b>	1612800 / 1562678
<b>Final datum</b>	500 m a.s.l.	

### Geometry dimensions

		Record	Location	X coord.	Y coord.	Lon.	Lat.
				Gauss-Krueger (Bessel, Pdm)		Decimal degree (WGS84)	
<b>Source</b>	<i>First line</i>	2509	1601	4507911.00	5507092.00	12.10818768	49.70043958
		40	1800	4496384.00	5523328.00	11.94824849	49.84645408
	<i>Last line</i>	3286	21601	4520920.00	5516839.00	12.28903646	49.78776244
		835	21800	4509449.00	5533115.00	12.13013620	49.93438282
<b>Receiver</b>	<i>First line</i>	1	1101	4455049.00	5507644.00	11.37537656	49.70377284
		208	1308	4452731.00	5511904.00	11.34272826	49.74189390
	<i>Last line</i>	8113	40101	4445702.00	5520139.00	11.24406819	49.81533291
		8320	40308	4462302.00	5532559.00	11.47349720	49.92826562
<b>CDP</b>	<i>First Line</i>	1	-	4495649.50	5521505.50	11.93805703	49.83006358
		382	-	4510902.50	5532917.50	12.15037620	49.93258260
	<i>Last Line</i>	135993	-	4506313.00	5507253.00	12.08603901	49.70190581
		136374	-	4521566.00	5518665.00	12.29810818	49.80415659