

## Additional file 1: Information included in the stress magnitude database

Table 1 List of parameters in database

label in data file	explanation ( <i>unit/range</i> )
ID	identifier for newly presented WSM subdataset
LAT	latitude ( <i>decimal degrees, -90° - +90°, South latitude is negative</i> )
LOn	longitude ( <i>decimal degrees, -180° - +180°, West longitude is negative</i> )
UTM_ZONE	zone of the Universal Transverse Mercator coordinate system
UTM.E; UTM.N	easting and northing values in the UTM system
UTM.HORDAT	horizontal datum (e.g. WGS 84, NAD 83 or ETRS 89)
DEPTH	depth below surface, same as true vertical depth below ground level ( <i>km</i> )
DEPTH_DEV	indicated depth if reference datum is deviating from ground level ( <i>km</i> )
DEPTH_REF	height of the reference datum of DEPTH.DEV (e.g. Kelly bushing) ( <i>km</i> )
SITE	site description I: site code as e.g. given in publications and reports
LOCALITY	site description II: name of location or well
COUNTRY	country
TYPE	stress magnitude indicator ( <i>abbreviations see next page of this document</i> )
AZI	azimuthal orientation of the max. horizontal stress ( <i>degrees</i> )
AZI.SD	standard deviation of azimuth from reference or WSM ( <i>degrees</i> )
QU_AZI	quality of azimuth information (WSM quality) ( <i>A-E</i> )
REG	stress regime ( <i>abbreviations see next page of this document</i> )
Nb	number of single measurements
TOP	top of measurement interval ( <i>km</i> )
BOT	bottom of measurement interval ( <i>km</i> )
S1_MAG*	magnitude of max. principle stress ( <i>MPa</i> )
S1_MAG.EFF	magnitude of effective max. principle stress ( <i>MPa</i> )
S2_MAG*	magnitude of medium principle stress ( <i>MPa</i> )
S2_MAG.EFF	magnitude of effective medium principle stress ( <i>MPa</i> )
S3_MAG*	magnitude of min. principle stress ( <i>MPa</i> )
S3_MAG.EFF	magnitude of effective min. principle stress ( <i>MPa</i> )
Shmin*	magnitude of min. horizontal stress ( <i>MPa</i> )
Shmin_lowb	lower bound of min. horizontal stress magnitude ( <i>MPa</i> )
Shmin_upp	upper bound of min. horizontal stress magnitude ( <i>MPa</i> )
Shmin_eff	magnitude of effective min. horizontal stress ( <i>MPa</i> )
SHmax*	magnitude of max. horizontal stress ( <i>MPa</i> )
SHmax_lowb	lower bound of max. horizontal stress magnitude ( <i>MPa</i> )
SHmax_upp	upper bound of max. horizontal stress magnitude ( <i>MPa</i> )
SHmax_eff	magnitude of effective max. horizontal stress ( <i>MPa</i> )
Sv*	magnitude of vertical stress ( <i>MPa</i> )
Sv_eff	magnitude of effective vertical stress ( <i>MPa</i> )
YOUNG	Young's modulus ( <i>GPa</i> )
POISSON	Poisson ratio
ROCK	rock type
UNIT	lithostratigraphic unit
rho_rock	rock density (measured or estimated) ( <i>g/cm<sup>3</sup></i> )
TS_insitu	in-situ tensile strength ( <i>MPa</i> )
P0	pore pressure ( <i>MPa</i> )
Pb*	(formation) breakdown pressure ( <i>MPa</i> )
Pr*	reopening pressure ( <i>MPa</i> )
Psi*	(instantaneous) shut-in pressure ( <i>MPa</i> )
LOP	leak-off pressure ( <i>MPa</i> )
FPP*	formation propagation pressure ( <i>MPa</i> )
FCP*	fracture closure pressure ( <i>MPa</i> )
V_inj	injected fluid volume ( <i>litres</i> )
frac_AZ	azimuth of opened fracture ( <i>degrees</i> )
frac_DIP	dipping angle of opened fracture with respect to the horizontal ( <i>degrees</i> )

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Continuation of Table 1

label in data file	explanation ( <i>unit/range</i> )
doubt_entry	parameters of explicitly questionable reliability ( <i>parameter label</i> )
COMMENT	comments (e.g. additional information or details on the measurement, limitations of interpretation etc., reference to corresponding WSM-entry)
REF1; REF2; REF3	reference shortcuts ( <i>see Additional file 3</i> ); written-out publication information is also possible.
REF1.DOI; REF2.DOI; REF3.DOI	DOIs to references (if applicable)
QUALITY	quality assignment ( <i>A–E</i> )

Legend to Table 1

*parameter marked by asterisk	data compilation table includes column with the parameter's standard deviation or uncertainty given in reference
red	obligatory fields
magenta	obligatory fields generated according to the database record
orange	at least one piece of stress magnitude information required
blue	specifically apply to fluid injection methods
black	general fields potentially fillable for all database records.

Table 2 Abbreviation keys for stress magnitude indicators

abbreviation	indicator
BO	borehole breakouts
BS	borehole slotter
CF	centerline fractures
CM	measurements on core samples
DIF	drilling induced fractures
FIT	formation integrity test (or limit test)
FL	frictional limit considerations
HF	hydrofrac
HFG	hydrofrac with gradient information (from WSM)
HFM	hydrofrac with magnitude information (from WSM)
HFU	unspecified borehole fluid indicators
IDFPI	implicit drilling fluid pressure indicators
HTPF	hydraulic testing of pre-existing fractures
LOT	leak-off test
MF	minifrac test
OC	overcoring
WVA	wave velocity anisotropy analysis

Table 3 Abbreviation keys for stress regimes

abbreviation	stress regime	relative stress magnitudes
NF	normal faulting	$S_V > S_{Hmax} > S_{hmin}$
NS	combination of TF with SS (transpression)	
SS	strike-slip	$S_{Hmax} > S_V > S_{hmin}$
TS	combination of NF with SS (transtension)	
TF	thrust faulting	$S_{Hmax} > S_{hmin} > S_V$