



Figure DR1. Kinematic data for west-central Europe and the Atlas mountains of North Africa, interpreted to represent the Late Cretaceous to Paleogene interval. Locations are shown approximately. Two symbols adjacent to a single reference number indicate variation in direction, not different locations. Reference numbers refer to Table DR1.

TABLE DR1. KINEMATIC DATA FOR LATE CRETACEOUS/PALEOGENE DEFORMATION IN WEST-CENTRAL EUROPE

Number ¹	Area	Data	Tectonic regime	Shortening direction	Stratigraphic age of rocks	Interpreted age of deformation ²	Reference
1	England	Fault populations	Strike slip	NNE to NNW	Paleozoic to Cretaceous	Post-Paleocene	Hibsch et al., 1995
2	Bristol Channel	Fault populations	Thrust/strike-slip	NNE	Jurassic	Late Cretaceous-Tertiary	Kelly et al., 1999
3	Sussex-Isle of Wight	Fault populations	Strike slip	N	L. Turonian to E. Maastrichtian	Late Cretaceous-Tertiary	Vandycke, 2002
4	Boulonnais	Fault populations	Strike slip	N	Late Cretaceous	Late Paleocene to ?Eocene	Vandycke, 2002; Mansy et al., 2003
5	Lorraine, eastern France	Fault populations, calcite twins	Strike slip	NNE to NNW	Jurassic to Cretaceous	Eocene	Rocher et al., 2004
6	SE Poland	Fault population	Strike slip	NE	Permian to Jurassic	Maastrichtian to Paleocene	Lamarche et al., 2002
7	Germany, easternmost France, Switzerland	Horizontal stylolites ³	--	NE and NW	Triassic/Jurassic	Post-Jurassic	Kurze & Necke, 1979
8	Central Germany	Fault population	Thrust	NNE	Permian/Triassic	Late Cretaceous to ?Oligocene	Rauche & Franzke, 1990; Stackebrandt & Franzke, 1989
9	Harz Mts, Germany	Fault population, syntectonic basin geometry, unconformities, Apatite fission tracks	Thrust	NE	Paleozoic to Cretaceous	Santonian to Campanian	Franzke et al., 2004; Voigt et al., 2006; Franzke et al., 2007 ; Thomson et al., 1997
10	Southern France to SE Germany	Fault population	Strike slip	N to NNE	Jurassic	Eocene	Bergerat, 1987
11	Surroundings of KTB well	Fault population	Thrust/strike-slip	NNE	Variscan basement to Jurassic	Late Cretaceous	Peterek et al., 1997

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TABLE DR1 (continued from previous page)

Number ¹	Area	Data	Tectonic regime	Shortening direction	Stratigraphic age of rocks	Interpreted age of deformation ²	Reference
12	KTB well and pilot well	Fault population	Thrust	N to NNE	Variscan metamorphic rocks	Late Cretaceous to Early Paleogene	Zulauf, 1992; Wagner et al., 1997
13	Massif Central	Fault populations	Thrust/strike slip	N to NNE	Variscan basement to Early Cretaceous	Eocene	Blès et al., 1989
14	Zone Subalpine (Devoluy)	Fold axes, thrust traces, unconformity	Thrust	N to NNW	Jurassic-Cretaceous	Pre-Early Turonian/Early Campanian	Huyghe & Mugnier, 1995
15	Alpes Maritimes	Fold axes, thrust traces, unconformity	Thrust	NE	Jurassic-Cretaceous	Post-Cenomanian, pre-Eocene	De Graciansky et al., 1989
16	Western Provence (La Baume-Ste. Victoire)	Fold axes, Syntectonic strata	Thrust	N	Jurassic-Cretaceous	Santonian-Early Campanian	Leleu et al., 2005
17	Southern Pyrenees	Fold axes, thrust traces, unconformity	Thrust	NE		Late Santonian to Maastrichtian	McClay et al., 2004
18	Spain (mostly Iberian Ranges)	Fault populations	Thrust/strike-slip	NE and WNW	? (Mostly Mesozoic)	Paleocene to Late Oligocene	Capote et al., 2002; Jabaloy et al., 2002
19	Moroccan High Atlas (al Medinat fault)	Fold axes, thrust trace, progressive unconformity	Thrust	N to NE	Jurassic-Eocene	Coniacian to Maastrichtian	Froitzheim et al., 1988
20	Moroccan High Atlas (Toundout nappe)	Fold axes, thrust traces, unconformity	Thrust	N	Jurassic-Eocene	Late Cretaceous	Laville & Piqué, 1992

Note: ¹Numbers are keyed to Figure DR1. ²Well-constrained timing is marked **bold**. ³Stylolite locations are shown in Fig.1.

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