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TABLE DR-1. ESCARPMENT SINUOSITY

Name	Scale	Begin point	End point	Base of escarpment (cm)*	Chord (cm)†	Sinuosity§	Age (Ma)#	Contour (a.m.s.l)**	Structure (margin type) ††	Stage§§	Source##
SW Australia											
	1:2500000	121°45'E 33°45'S	116°15'E 34°30'S	44.56	22.90	1.95	40	150	Arch	Passive	Fairbridge and Finkel, 1978
	RM			42.86	23.10	1.85	40		Arch	Passive	
	1:2500000	116°05'E 34°28'S	114°08'E 27°35'S	75.94	33.09	2.30	160	150		Passive	
	RM			76.09	32.52	2.34	160		Arch	Passive	
	1:6400000			10.50	7.10	1.48	40	200	Arch	Passive	
Somalia											
	1:5000000	49°45'E 11°30'N	42°25'E 11°30'N	30.16	17.39	1.73	20	500	N.D.	Transition	Cochran, 1981
	RM			29.28	16.38	1.79	20		N.D.	Transition	
	1:6400000	49°45'E 11°30'N	42°25'E 11°30'N	16.19	11.59	1.40	20	500	N.D.	Transition	
Yemen											
	1:5000000	50°50'E 15°15'N	43°40'E 13°00'N	29.05	16.28	1.78	20	500	N.D.	Transition	Cochran, 1981
	RM			29.22	16.29	1.79	20		N.D.	Transition	
	1:6400000	50°50'E 15°15'N	43°40'E 13°00'N	17.12	12.49	1.37	20	500	N.D.	Transition	
Saudi Arabia											
	1:5000000	43°40'E 13°00'N	35°00'E 28°30'N	81.96	39.40	2.08	20	500	N.D.	Transition	Omar and Steckler, 1995
	RM			79.37	38.81	2.05	20		N.D.	Transition	
	1:2000000	40°20'E 21°35'N	43°45'E 13°35'N	78.11	48.67	1.60	20	500	N.D.	Transition	
	1:4000000	43°40'E 13°00'N	35°00'E 28°30'N	99.03	47.69	2.08	20	500	N.D.	Transition	
	1:6400000	43°40'E 13°00'N	35°00'E 28°30'N	15.80	10.60	1.49	25	500	N.D.	Transition	

TABLE DR-1 (CONT.)

Name	Scale	Begin point	End point	Base of escarpment (cm)*	Chord (cm)†	Sinuosity§	Age (Ma)#	Contour (a.m.s.l)**	Structure (margin type) ††	Stage§§	Source##
Egypt and Sudan											
	1:5000000	40°15'E 12°10'N	37°35'E 18°00'N	20.86	13.70	1.52	20	500	N.D.	Transition	Omar and Steckler, 1995 Bohannon et al., 1989
	RM			20.57	14.23	1.44	20		N.D.	Transition	
		37°10'E 18°25'N	35°10'E 23°00'N	29.27	10.38	2.82	20	500	N.D.	Transition	
	RM			28.30	10.91	2.59	20		N.D.	Transition	
		35°00'E 23°30'N	32°50'E 28°50'N	17.04	12.41	1.37	20	500	N.D.	Transition	
	RM			16.66	12.42	1.34	20		N.D.	Transition	
	1:5600000	40°15'E 12°10'N	32°50'E 28°50'N	8.20	8.10	1.01	20	500	N.D.	Transition	
Israel											
	1:5000000	35°00'E 29°30'N	35°30'E 33°20'N	9.34	7.84	1.19	5	200	Arch	Rift	Wdowinski and Zilberman, 1997; Garfunkel, 1981; Ginat et al., 1998; Nir, 1970
	RM			9.40	7.84	1.20	5		Arch	Rift	
	1:6400000	35°00'E 29°30'N	35°30'E 33°20'N	11.30	10.90	1.04	5	200	Arch	Rift	
Jordan											
	1:5000000	35°00'E 29°30'N	35°30'E 33°20'N	8.38	7.86	1.07	5	200	Shoulder	Rift	Wdowinski and Zilberman, 1997
	1:5000000	35°00'E 29°30'N	35°30'E 33°20'N	8.25	7.94	1.04	5		Shoulder	Rift	
	1:6400000	35°00'E 29°30'N	35°30'E 33°20'N	10.20	9.90	1.03	5	200	Shoulder	Rift	
Namibia											
	1:5000000	12°30'E 17°10'S	17°00'E 27°52'S	68.10	26.60	2.56	125	1000	Shoulder	Passive	Brown et al., 2000
	RM			63.62	26.32	2.42	125		Shoulder	Passive	
	1:6400000	12°30'E 17°10'S	17°00'E 27°52'S	28.60	13.80	2.07	125	1000	Shoulder	Passive	

TABLE DR-1 (CONT.)

Name	Scale	Begin point	End point	Base of escarpment (cm)*	Chord (cm)†	Sinuosity§	Age (Ma)#	Contour (a.m.s.l)**	Structure (margin type) ††	Stage§§	Source##
South Africa											
	1:5000000	17°10'E 28°05'S	20°05'E 33°45'S	113.23	30.65	3.69	130	500	Shoulder	Passive	Brown et al., 2000; Fleming et al., 1999
		31°15'E 27°30'S	20°11'E 33°50'S	39.87	14.90	2.68	150	500	Shoulder	Passive	
East Africa											
	1:5000000	33°50'E 09°30'S	34°30'E 15°30'S	24.74	12.85	1.92	20	1000	Shoulder	Rift	Bloom, 1998
		29°00'E 02°45'S	31°00'E 08°50'S	21.61	13.94	1.55	20	1000	Shoulder	Rift	
		29°05'E 02°45'S	31°05'E 08°40'S	19.99	13.49	1.48	20	1000	Arch	Rift	
		31°15'E 03°45'N	29°15'E 00°23'S	12.44	10.22	1.22	20	1000	Shoulder	Rift	
		32°15'E 03°40'N	29°30'E 00°45'S	21.17	11.17	1.90	20	1000	Arch	Rift	
	1:6400000	29°00'E 02°45'S	31°00'E 08°50S	12.60	9.50	1.33	20	1000	Shoulder	Rift	
		29°05'E 02°45'S	31°05'E 08°40'S	10.70	10.00	1.07	20	1000	Arch	Rift	
		31°15'E 03°45'N	29°15'E 00°23'S	7.30	6.50	1.12	20	1000	Shoulder	Rift	
		32°15'E 03°40'N	29°30'E 00°45'S	17.40	9.40	1.85	20	1000	Arch	Rift	
SE Australia											
	1:2500000	145°30'E 37°45'S	149°30'E 37°30'S	43.36	14.76	2.94	150	305	Arch	Passive	Ollier and Pain, 1997; Young, 1983
		149°30'E 37°30'S	152°25'E 27°35'S	137.88	49.00	2.81	90	305	Arch	Passive	
	1:5000000	145°30'E 37°45'S	149°30'E 37°30'S	26.20	8.05	3.25	150	200	Arch	Passive	
		149°30'E 37°30'S	152°25'E 27°35	87.83	23.13	3.80	90	200	Arch	Passive	
	1:5000000	145°30'E 37 °45'S	149°30'E 37°30'S	25.69	8.34	3.08	150	200	Arch	Passive	
		149°30'E 37°30'S	152°25'E 27°35'S	84.09	23.01	3.65	90	200	Arch	Passive	
	1:6400000	145°30'E 37°45'S	149°30'E 37°30'S	21.00	12.80	1.64	90	200	Arch	Passive	

TABLE DR-1 (CONT.)

Name	Scale	Begin point	End point	Base of escarpment (cm)*	Chord (cm)†	Sinuosity§	Age (Ma)#	Contour (a.m.s.l)**	Structure (margin type) ††	Stage§§	Source##
India											
	1:2000000	77°30'E 08°10'N	76°25'E 10°25'N	40.10	14.12	2.84	65	300	Shoulder	Passive	Kalaswad, 1993
		76°47'E 10°45'N	73°50'E 16°20'N	91.13	34.38	2.65	65	300	Shoulder	Passive	
		73°40'E 21°10'N	73°55'E 16°10'N	86.14	30.42	2.83	65	300	Shoulder	Passive	
	1:5000000	77°30'E 08°10'N	76°25'E 10°25'N	11.30	6.21	1.82	65	200	Shoulder	Passive	
		76°47'E 10°45'N	73°50'E 16°20'N	30.19	13.70	2.20	65	200	Shoulder	Passive	
		73°40'E 21°10'N	73°55'E 16°10'N	30.45	11.15	2.73	65	200	Shoulder	Passive	
	1:6400000			36.00	24.80	1.45	65	200	Shoulder	Passive	
Brazil											
	1:1000000	46°45'W 24°05'S	44°25'W 22°55'S	59.02	27.32	2.16	125	200	Shoulder	Passive	Brown et al., 2000
	1:5000000	46°45'W 24°05'S	44°25'W 22°55'S	7.16	5.19	1.38	125	200	Shoulder	Passive	
		50°15'W 29°35'S	46°30'W 24°00'S	45.90	15.32	3.00	125	200	Shoulder	Passive	
	1:6400000	46°45'W 24°05'S	44°25'W 22°55'S	5.41	4.23	1.28	125	200	Shoulder	Passive	
		50°15'W 29°35'S	46°30'W 24°00'S	34.12	11.49	2.97	125	200	Shoulder	Passive	
Baikal											
	1:2500000	110°20'E 56°08'N	106°30'E 53°00'N	26.18	17.05	1.54	27	800	Shoulder	Rift	Logatchev and Zorin, 1992 Hutchinson et al., 1992
		106°25'E 52°55'N	105°50'E 51°45'N	29.50	6.50	4.54	27	800	N.D.	Rift	
		110°25'E 55°50'N	109°00'E 53°30'N	31.93	11.46	2.79	27	800	Arch	Rift	
		107°10'E 51°55'N	103°30'E 51°30'N	42.31	7.92	5.34	27	800	Arch	Rift	
	1:5000000	110°20'E 56°08'N	106°30'E 53°00'N	7.64	6.39	1.20	27	1000	Shoulder	Rift	
		106°25'E 52°55'N	105°50'E 51°45'N	7.94	3.72	2.13	27	1000	N.D.	Rift	
		110°25'E 55°50'N	109°00'E 53°30'N	11.87	3.99	2.98	27	1000	Arch	Rift	
		107°10'E 51°55'N	103°30'E 51°30'N	13.43	3.87	3.47	27	1000	Arch	Rift	

Note: All the escarpments were digitized at a scale of 1:5000000. Where maps were available, escarpments were digitized at scales between 1:1000000 to 1:6400000 to examine the importance of map scale. Calculations of average sinuosity were done considering only results from 1:5000000 maps. RM is repeated measurements. N.D. = not determined. a.m.s.l = average meters above sea level.

*Digitized distance from begin-point to end-point along contour.

†Digitized chord distance from begin-point to end-point.

§Ratio between * and †.

#Average age of rift development.

**Digitized contour between begin-point to end-point.

††Margin's overall structure.

§§Margin's development stage.

##Source of age and structure information.

TABLE DR-2. SUMMARY OF GEOLOGICAL, GEOPHYSICAL, AND CHRONOLOGICAL DATA FOR EROSION OF GREAT ESCARPMENTS

Name	Margin type (Margin stage)	Fission track and (U-Th)/He ages (Ma)	Comments and reference	Cosmogenic data (m My^{-1})	Comments and reference	Geophysical evidence	Geological evidence	Age (Ma)	Reference (structure and age)
Somalia									
	(Transition)	N.D.		N.D.		N.D.	N.D.	20	Cochran, 1981
Yeman									
	(Transition)			N.D.		N.D.	N.D.	20	Cochran, 1981
Saudi Arabia									
	Arch (Transition)	22-237 ave. 40 on the coast 13.8-568	Generally young and uniform ages on coastal plain and older on upland	N.D.	Omar and Steckler, 1995; Bohannon et al, 1989	N.D.	N.D.	20	Omar and Steckler, 1995
Egypt and Sudan									
	Shoulder (Transition)	22-237 (Average of 40 on the coast) 13.8-568 (south east part of Red Sea)	Generally young and uniform ages on coastal plain and older on upland Most ages older than rifting No correlation with elevation	N.D.	Omar and Steckler, 1995; Bohannon et al, 1989	N.D.	N.D.	20	Omar and Steckler, 1995 Bohannon et al., 1989
		9-277 (Sinai)			Kohn and Eyal, 1981				

TABLE DR-2(CONT.)

Name	Margin type (Margin stage)	Fission track and (U-Th)/He ages (Ma)	Comments and reference	Cosmogenic data (m My^{-1})	Comments and reference	Geophysical evidence	Geological evidence	Age (Ma)	Reference (structure and age)
Israel									
	Arch (Rift)	N.D.		N.D.		N.D.	Normal faults at base of escarpment suggesting insignificant retreat	5	Wdowinski and Zilberman, 1997
Jordan									
	Shoulder (Rift)	N.D.		N.D.		N.D.	Normal faults at base of escarpment suggesting insignificant retreat	5	Wdowinski and Zilberman, 1997
Namibia									
	Shoulder (Passive)	70-160	Fission track ages are not correlated with elevation but generally younger on coastal plain than on upland. (Brown et al., 2000)	5 (granite inselbergs) 5-8 (granite inselbergs) 15 (mass removal from escarpment)	(Bierman and Caffee, 2001; Cockburn et al., 1999) Measured from sediments in drainages on the escarpment	Magnetic anomalies parallel and below escarpment. Magnetic anomalies perpendicular to coast where there is no escarpment (http://www.gsn.gov.na/magnetics.htm)	Erosion around major intrusions suggests a minimum denudation rate of 7-15 m My^{-1}. Major and rapid offshore deposition in the Atlantic immediately following seafloor spreading and then decreasing to low rates until the present (Rust and Summerfield, 1990)	125	Brown et al., 2000

TABLE DR-2(CONT.)

Name	Margin type (Margin stage)	Fission track and (U-Th)/He ages (Ma)	Comments and reference	Cosmogenic data (m My^{-1})	Comments and reference	Geophysical evidence	Geological evidence	Age (Ma)	Reference (structure and age)
South Africa									
	Shoulder (Passive)	N.D.		50-95 (escarpment retreat) 6 (upland surface)	Rock samples (Fleming et al., 1999)	N.D.	N.D.	130-150	Brown et al., 2000; Fleming et al., 1999
East Africa									
	Shoulder and arch (Rift)	75-423	Fission track ages are older than rifting (van den Haute, 1984)	N.D.		N.D.	Normal faults within 3-5 km from base of escarpment	20	Bloom 1998
SE Australia									
	Arch (Passive)	Fission track ages: 230-360 upland 80-175 coast. (U-Th)/He ages: coastal plain - 80 to 90 Ma. Upland plateau > 200 Ma.	(Moore et al., 1986; Dumitru et al., 1991). Persano et al., 2002	2 km/My	Rates of knick-point retreat in channels that cross the escarpment (Weissel and Seidl, 1998)	Gravimetric and magnetic anomalies parallel and below escarpment (Young, 1989; Webb et al., 1998)	Stationary drainage divide since at least the Jurassic ((Nott and Horton, 2000). Geomorphologic evidence for Cenozoic low rates of erosion (van der Beek and Braun, 1999)	90-150	Ollier and Pain, 1994; Veevers et al., 1991

TABLE DR-2(CONT.)

Name	Margin type (Margin stage)	Fission track and (U-Th)/He ages (Ma)	Comments and reference	Cosmogenic data (m My^{-1})	Comments and reference	Geophysical evidence	Geological evidence	Age (Ma)	Reference (structure and age)
India									
	Shoulder (Passive)	165-226	Older than rifting or sea floor spreading Kalaswad, 1993	N.D.		Gravimetric and magnetic anomalies parallel and below escarpment (Kalaswad, 1993)	Lateritic soils on drainage divide indicating the stability of the drainage divide (Widdowson and Cox, 1996)	65	Kalaswad, 1993
Brazil									
	Shoulder (Passive)	60-100 (coast) 130->300 (upland)	Uniform fission track ages on coastal plain (Gallagher et al., 1994)	N.D.		N.D.	N.D.	125	Brown et al., 2000
Baikal									
	Shoulder and arch (Rift)			N.D.		N.D.	N.D.	27	Logatchev and Zorin, 1992; Hutchinson et al., 1992

Note: N.D.= no data.

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