

TABLE 1: SAMPLE DETAILS AND ANALYTICAL DATA FOR SAMPLES FROM THE SOA BASIN

Sample Number (# grains)	Lat (°S) Long (°E)	Unit name	Standard track density ($\times 10^5 \text{ cm}^{-2}$)	Fossil track density ($\times 10^5 \text{ cm}^{-2}$)	Induced track density ($\times 10^6 \text{ cm}^{-2}$)	Chi squared probability (%)	Uranium (ppm)	Fission track age (Ma $\pm 1\sigma$)
ZFT-1 (60)	8.689° 121.088°	Ola Bula	4.065 (1586)	1.925 (208)	6.560 (7090)	6.6	629.4	0.75±0.06
ZFT-2 (31)	8.689° 121.088°	Ola Bula	4.065 (1586)	1.579 (119)	5.787 (4362)	13.1	555.2	0.70±0.07
ZFT-3 (56)	8.689° 121.088°	Ola Bula	4.065 (1586)	0.633 (142)	2.027 (4545)	39.4	194.4	0.80±0.09
ZFT-4 (57)	8.693° 121.096°	Ola Bula	4.065 (1586)	0.803 (125)	2.745 (4275)	7.6	263.3	0.75±0.07
ZFT-5 (59)	8.693° 121.096°	Ola Bula	4.065 (1586)	1.181 (319)	3.201 (8647)	12.9	307.1	0.94±0.06
ZFT-6 (42)	8.696° 121.101°	Ola Bula	6.982 (2724)	2.185 (162)	8.020 (5945)	74.1	597.3	0.84±0.07
ZFT-7 (23)	8.700° 121.154°	Ola Bula	4.065 (1586)	1.672 (107)	5.036 (3222)	6.1	483.1	0.85±0.09
ZFT-8 (47)	8.700° 121.154°	Ola Bula	4.065 (1586)	2.031 (174)	5.637 (4830)	80.3	540.9	0.92±0.08
ZFT-9 (60)	8.695° 121.159°	Ola Bula	6.982 (2724)	2.019 (178)	7.316 (6451)	99.1	544.9	0.85±0.07
ZFT-10 (58)	8.695° 121.159°	Ola Kile	6.982 (2724)	4.188 (384)	6.913 (6338)	40.6	514.8	1.86±0.12
ZFT-11 (44)	8.692° 121.156°	Ola Bula	4.065 (1586)	0.666 (131)	2.314 (4550)	8.1	222.0	0.73±0.07
ZFT-12 (57)	8.692° 121.156°	Ola Bula	4.065 (1586)	1.240 (132)	3.281 (3492)	39.2	314.8	0.96±0.09
ZFT-13 (53)	8.692° 121.156°	Ola Bula	6.982 (2724)	1.496 (129)	6.758 (5827)	75.2	503.3	0.68±0.07
ZFT-14 (55)	8.692° 121.156°	Ola Bula	5.332 (2541)	1.332 (107)	5.659 (4785)	65.8	309.8	0.65±0.06
ZFT-A (44)	8.693° 121.096°	Ola Bula	4.060 (1631)	1.139 (199)	3.311 (5784)	33.1	318.0	0.88±0.07
ZFT-B (53)	8.693° 121.096°	Ola Bula	4.087 (1631)	1.040 (189)	3.340 (6067)	15.1	318.7	0.80±0.07
ZFT-C (56)	8.698° 121.136°	Ola Bula	4.114 (1631)	1.195 (184)	3.441 (5297)	100.0	326.2	0.90±0.07

Note: Brackets show number of tracks counted. Standard and induced track densities measured on mica external detectors ($g = 0.5$), and fossil track densities on internal mineral surfaces. Zircon ages calculated using $\zeta = 125.5 \pm 3$ for dosimeter glass CN1 or $\zeta = 87.8 \pm 3$ for dosimeter glass U3 (analyst P. O'Sullivan). Data for samples A, B, and C were published by Morwood et al. (1998).