DATA REPOSITORY:

Submit data as in excel file, all sample ODP codes, depths, assigned ages and Sr/Ba molar ratios.

Caption: Numerical ages used in figure 2. Numerical ages are as used in the compilation of Zachos et al., 2001, which used the time scale of Berggren et al., (1995), with modification of the age of the base of the carbon isotope excursion (the Paleocene/Eocene boundary) to 55.0 Ma. Ages within the interval of the high-resolution figure were derived following Zachos et al., 2005, who correlate stages in the carbon isotope excursion between Site 690 and Site 1263, using the averaged value of the duration of the CIE as estimated by Roehl et al. (2000) and Farley and Eltgroth (2003)

Tie Points	690 mbsf	Age from base CIE (Myr)	Numerical Age Ma	1263 mcd	1221 mbsf
H	166.13	-0.206500	54.793500	333.14	153.40
G	167.12	-0.168300	54.831700	333.73	
F	169.05	-0.104075	54.895925	334.56	
E	169.39	-0.090800	54.909200	334.75	
D	169.56	-0.083100	54.916900	335.10	153.90
C	170.02	-0.057100	54.942900	335.22	154.00
B	170.33	-0.032940	54.967060	335.39	154.10
A	170.63	-0.001000	54.999000	335.68	154.30
P/E	170.64	0.000000	55.000000	335.69	
A-	171.24	0.048000	55.048000	336.00	154.40
B-	172.81			337.82	

SAMPLE NAME	depth (mbsf)	Age (Ma)	Sr/Ba Ratio (mmol/mol)	Source
1221C 11-3 5-8	153.45	54.8058	32.1	Zachos et al., 2005
1221C 11-3 20-23	153.60	54.8429	33.5	Zachos et al., 2005
1221C 11-3 25-28	153.65	54.8552	37.9	Zachos et al., 2005
1221C 11-3 30-33	153.70	54.8675	33.2	Zachos et al., 2005
1221C 11-3 35-38	153.75	54.8799	35.5	Zachos et al., 2005
1221C 11-3 40-43	153.80	54.8922	33.5	Zachos et al., 2005
1221C 11-3 45-48	153.85	54.9046	34.4	Zachos et al., 2005
1221C 11-3 50-54	153.92	54.9221	37.4	Zachos et al., 2005
1221C 11-3 54-58	153.96	54.9325	36.7	Zachos et al., 2005
1221C 11-3 58-62	154.00	54.9429	32.8	Zachos et al., 2005
1221C 11-3 62-66	154.04	54.9566	38.4	Zachos et al., 2005
1221C 11-3 66-70	154.08	54.9702	33.6	Zachos et al., 2005
1221C 11-3 70-72	154.10	54.9771	41.2	Zachos et al., 2005
1221C 11-3 72-74	154.12	54.9794	38.8	Zachos et al., 2005
1221C 11-3 74-76	154.14	54.9817	33.8	Zachos et al., 2005
1221C 11-3 76-78	154.16	54.9840	34.6	Zachos et al., 2005
1221C 11-3 78-80	154.18	54.9863	38.8	Zachos et al., 2005
1221C 11-3 80-82	154.20	54.9886	36.1	Zachos et al., 2005
1221C 11-3 82-84	154.22	54.9909	37.8	Zachos et al., 2005
1221C 11-3 84-86	154.24	54.9932	27.3	Zachos et al., 2005
1221C 11-3 86-88	154.26	54.9955	37.4	Zachos et al., 2005
1221C 11-3 88-90	154.28	54.9977	37.4	Zachos et al., 2005
1221C 11-3 90-92	154.30	55.0000	39.5	Zachos et al., 2005
1221C 11-3 92-94	154.32	55.0096	37.6	Zachos et al., 2005
1221C 11-3 94-96	154.34	55.0192	39.4	Zachos et al., 2005
1221C 11-3 96-98	154.36	55.0288	34.3	Zachos et al., 2005
1221C 11-3 98-100	154.38	55.0384	37.0	Zachos et al., 2005
1221C 11-3 105-108	154.45	55.0720	39.3	Zachos et al., 2005
1221C 11-3 110-113	154.50	55.0960	40.0	Zachos et al., 2005
1221C 11-3 115-118	154.55	55.1200	38.5	Zachos et al., 2005
1221C 11-3 120-123	154.60	55.1440	37.1	Zachos et al., 2005
1221C 11-3 125-128	154.65	55.1680	35.0	Zachos et al., 2005
1221C 11-3 130-133	154.70	55.1920	38.9	Zachos et al., 2005
1221C 11-3 135-138	154.75	55.2160	35.4	Zachos et al., 2005
1221C 11-3 140-142	154.80	55.2400	37.3	Zachos et al., 2005
1221C 11-CC 0-3	154.82	55.2496	38.6	Zachos et al., 2005
1221C 11-CC 5-8	154.87	55.2736	39.0	Zachos et al., 2005
1221C 11-CC 9-12	154.91	55.2928	37.9	Zachos et al., 2005
1221C 11-CC 16-19	154.98	55.3264	40.8	Zachos et al., 2005

SAMPLE NAME	depth (mcd)	Age (Ma)	Sr/Ba Ratio (mmol/mol)	Source
1263C 14-2 62-64	331.60	54.6735	36.4	Zachos et al., 2005
1263C 14-2 82-84	331.80	54.6890	33.3	Zachos et al., 2005
1263C 14-2 101-103	332.10	54.7124	36.1	Zachos et al., 2005
1263D 4-1 20-22	334.90	54.9125	34.3	Zachos et al., 2005

SAMPLE NAME	depth (mbsf)	Age (Ma)	Sr/Ba Ratio (mmol/mol)	Source
577 8-4,12-19	68.46	50.2644	35.0	Zachos et al., 2001
577 8-4,70-80	69.05	50.4650	31.4	Zachos et al., 2001
577 8-4,70-80	69.05	50.4650	32.4	Zachos et al., 2001
577 8-5,100-108	70.84	51.0736	35.6	Zachos et al., 2001
577 8-6,10-12	71.41	51.2674	32.1	Zachos et al., 2001
577 8-6,23-30	71.57	51.3218	34.0	Zachos et al., 2001
577 9-1,60-70	73.95	52.1060	43.0	Zachos et al., 2001
577 9-2,20-22	75.01	52.2704	32.6	Zachos et al., 2001
577 9-2,130-137	77.64	52.6821	35.9	Zachos et al., 2001
577 9-4 8-15	77.92	52.7218	35.2	Zachos et al., 2001
577 9-4 8-15	77.92	52.7218	35.7	Zachos et al., 2001
577 9-6,18-23	81.00	54.0391	28.9	Zachos et al., 2001
577 9-6,18-23	81.00	54.0391	31.0	Zachos et al., 2001
577 9-5,90-98	80.24	53.6740	34.6	Zachos et al., 2001
577 10-4 17-25	87.50	56.5874	36.4	Zachos et al., 2001
577 10-6 5-13	90.40	57.6379	31.6	Zachos et al., 2001
577 11-1,130-134	93.62	58.8043	33.2	Zachos et al., 2001
577 11-1,72-76	93.04	58.5942	33.7	Zachos et al., 2001
577 11-2,102-106	94.84	59.2462	34.1	Zachos et al., 2001
577 11-3 72-80	96.06	59.6881	46.0	Zachos et al., 2001
577 11 3 96-100	96.26	59.7606	44.0	Zachos et al., 2001
577 11-5 128-132	99.60	60.9704	34.3	Zachos et al., 2001
577 11-6 101-109	100.85	61.4232	32.6	Zachos et al., 2001
577-11-6 110-11	100.93	61.4522	31.8	Zachos et al., 2001
577 12-1 101-109	102.84	62.2662	29.4	Zachos et al., 2001
577 12-1 61-69	102.44	62.0915	38.0	Zachos et al., 2001
577 12-2 45-51	103.78	62.6767	28.9	Zachos et al., 2001
577 12-3 94-101	105.78	63.5501	29.2	Zachos et al., 2001
577 12-3 125-128	106.05	63.6680	28.7	Zachos et al., 2001
577 12-5 72-79	108.56	64.7642	27.2	Zachos et al., 2001
577 12-6 60-70	109.55	65.1111	32.6	Zachos et al., 2001
577 12-6 110-125	110.42	65.3259	30.2	Zachos et al., 2001

SAMPLE NAME	depth (mbsf)	Age (Ma)	Sr/Ba Ratio (mmol/mol)	Source
305 11-2 10-15	93.11	50.0000	33.7	Zachos et al., 2001
305 12-2 25-31	102.75	52.0000	35.6	Zachos et al., 2001
305 12-3 0-5	104.05	52.5939	27.1	Zachos et al., 2001
305 12-4 0-5	105.55	52.6960	28.5	Zachos et al., 2001
305 12-5 0-6	107.06	52.7006	30.6	Zachos et al., 2001
305 13-2 15-18	112.15	56.3523	26.9	Zachos et al., 2001
305 14-2 46-51	121.99	56.5658	26.4	Zachos et al., 2001
305 14-2 60-67	122.13	60.9830	32.5	Zachos et al., 2001
305 14-4 5-10	124.57	62.1152	27.0	Zachos et al., 2001
305 14-4 52-54	125.03	62.3286	31.0	Zachos et al., 2001
305 15-2 136-140	132.30	65.4700	28.3	Zachos et al., 2001
305 15-3 45-52	132.97	65.5826	39.7	Zachos et al., 2001
305 15-4 50-57	134.54	65.8465	29.7	Zachos et al., 2001
305 18-2 134-140	160.87	70.7843	31.2	*adaptation from data in Larsen & Moberly, 1975