Chapman, J.B., and Ducea, M.N., 2019, The role of arc migration in Cordilleran orogenic cyclicity: Geology, https://doi.org/10.1130/G46117.1

Data Repository Item: Compiled Data

Data presented in Figure 1, which is the basis for the analysis in the manuscript, was compiled from numerous sources. The data and data sources plotted in panel A (map) and panel G (εNd vs. distance from the range crest) are reproduced for the reader on the following pages. Data in panel B (probability density plot of zircon U-Pb ages vs. time) and panel C (εNd(t) vs. time) are adopted from Kirsch et al. (2016). Data in panel D (cumulative shortening % vs. time) is adopted form Cao et al. (2015). Data in panel E (Sr/Y and La/Yb values vs. time) is adopted from Karlstrom et al. (2014), Profeta et al. (2015), and Kirsch et al. (2016). Data in panel F (U-Pb rock ages vs. distance) is adopted from Cecil et al. (2012). Data in panel H (K_2O and SiO_2 wt. % vs. distance) is adopted from Bateman (1992). Data in panel I (Sr/Y and Dy/Yb vs. distance) is adopted form Ardill et al. (2018). Data in panel J (the ferrous-ferric (oxidation) ratio vs. distance) is adopted form Dodge (1972).

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Compiled Data

Sample	Age (Ma)	LATITUDE	LONGITUDE	Ep_Nd(t)	Source
0102-11C	83.4	36.2297	-118.3567	-6.82	Kylander-Clark_etal_2005
0102-13M	83.4	36.7212	-118.3519	-5.96	Kylander-Clark_etal_2005
020517-1C	83.4	36.1822	-117.6326	-7.36	Kylander-Clark_etal_2005
020517-2C	83.4	36.1682	-117.6958	-8.75	Kylander-Clark_etal_2005
020518-2C	83.4	36.2181	-117.9020	-7.79	Kylander-Clark_etal_2005
020518-2M	83.4	36.2181	-117.9018	-6.70	Kylander-Clark_etal_2005
Z-63	86.0	37.8683	-119.4383	-6.71	Kistler_etal_1986
Z-18	87.0	37.8733	-119.3683	-8.83	Kistler_etal_1986
Z-53	88.0	37.8550	-119.4850	-4.18	Kistler_etal_1986
HD02-110	88.1	37.7519	-119.3877	-5.84	Gray_2003
HD02-94	88.1	37.7956	-119.4252	-6.18	Gray_2003
HD01-77A	88.8	37.8411	-119.4481	-7.16	Gray_2003
HD01-80	88.8	37.8388	-119.4509	-5.55	Gray_2003
HD01-84	88.8	37.7427	-119.4039	-4.70	Gray_2003
HD02-109	88.8	37.7049	-119.3560	-5.46	Gray_2003
HD02-111	88.8	37.7451	-119.3859	-4.95	Gray_2003
Z-58	90.0	37.8517	-119.4733	-5.22	Kistler_etal_1986
G22	90.2	38.7760	-119.8968	-5.40	Cecil_etal_2012
HD01-10	90.8	37.7452	-119.4659	-6.00	Gray_2003
HD01-21	90.8	37.8056	-119.4700	-6.83	Gray_2003
HD01-30	90.8	37.8211	-119.4692	-5.09	Gray_2003
HD01-39	90.8	37.8116	-119.4855	-4.73	Gray_2003
HD01-40	90.8	37.7354	-119.5147	-4.38	Gray_2003
HD01-48	90.8	37.7486	-119.5713	-3.33	Gray_2003
HD01-6	90.8	37.7612	-119.5394	-4.09	Gray_2003
HD02-107	90.8	37.8810	-119.4142	-6.40	Gray_2003
HD02-112	90.8	38.0514	-119.5157	-5.34	Gray_2003
HD02-119	90.8	37.7215	-119.5689	-3.59	Gray_2003
HD02-97	90.8	37.9728	-119.2963	-4.78	Gray_2003
HD01-43	91.1	37.7460	-119.5324	-3.74	Gray_2003
15A	91.6	37.2336	-118.6589	-6.53	Coleman_etal_1992
20A	91.6	37.1719	-118.5642	-4.60	Coleman_etal_1992
6A	91.6	37.2103	-118.6442	-3.81	Coleman_etal_1992
76A	91.6	37.1478	-118.5808	-4.32	Coleman_etal_1992
80C	91.6	37.1428	-118.5833	-4.70	Coleman_etal_1992
80fG	91.6	37.1461	-118.5833	-4.18	Coleman_etal_1992
80F-L	91.6	37.1461	-118.5833	-3.84	Coleman_etal_1992
83C	91.6	37.1439	-118.5886	-4.32	Coleman_etal_1992
87A	91.6	37.2306	-118.6519	-4.31	Coleman_etal_1992
SAB-1b	91.6	37.1867	-118.6208	-4.73	Coleman_etal_1992
UB-1a	91.6	36.0686	-118.4069	-2.88	Coleman_etal_1992
UB-1b	91.6	36.1039	-118.4214	-4.92	Coleman_etal_1992
AD15-93	92.0	36.9561	-118.3433	-6.38	Bradford_1995

Sample	Age (Ma)	LATITUDE	LONGITUDE	Ep_Nd(t)	Source
AD18-93	92.0	36.9678	-118.3422	-8.12	Bradford_1995
AD1a-93	92.0	36.9581	-118.3417	-5.91	Bradford_1995
AD21-93	92.0	36.9619	-118.3456	-5.70	Bradford_1995
AD22-93	92.0	36.9650	-118.3500	-6.04	Bradford_1995
AG2-93	92.0	36.9547	-118.3450	-6.85	Bradford_1995
AQMI-93	92.0	36.9464	-118.3486	-6.65	Bradford_1995
BS1-93	92.0	36.9475	-118.3542	-2.88	Bradford_1995
LS4-93	92.0	36.9581	-118.3417	-7.60	Bradford_1995
TQM2-93	92.0	36.9836	-118.3281	-5.95	Bradford_1995
86S40a	92.1	36.7767	-118.3600	-4.54	Sisson_etal_1996
86S45	92.1	36.7833	-118.3833	-4.40	Sisson_etal_1996
86S49	92.1	36.7850	-118.3683	-4.41	Sisson_etal_1996
HD01-55	93.0	37.8625	-119.2674	-3.35	Gray_2003
HD01-71	93.0	37.8469	-119.4878	-3.28	Gray_2003
HD01-35	93.5	37.9074	-119.2653	-2.91	Gray_2003
15	94.8	34.9857	-118.7291	0.96	Saleeby_etal_2007
K-37-67 K37-64	95.0	37.8300	-119.7417	-5.85	Kistler_etal_1986
K-5-64	95.0	37.8767	-119.6717	-4.48	Kistler_etal_1986
5	95.9	34.9266	-118.8651	5.15	Saleeby_etal_2007
1	96.8	34.9043	-118.9178	0.92	Saleeby_etal_2007
TC-42	98.0	35.2283	-118.4961	-1.91	Saleeby_etal_1987
2	99.0	34.9256	-118.9279	3.97	Saleeby_etal_2007
CM-9	100.0	35.0408	-118.5683	-3.16	Saleeby_etal_1987
IP0203	101.6	36.7603	-118.2618	-4.03	Kylander-Clark_etal_2005
G20	101.7	38.7048	-120.0899	-7.20	Cecil_etal_2012
6b	102.2	34.9204	-118.8269	3.04	Saleeby_etal_2007
Rs-3	103.0	37.7284	-119.6300	-3.20	Nelson_etal_2013
RS-6	103.0	37.7284	-119.6300	-3.30	Nelson_etal_2013
YOS-1	103.0	37.7258	-119.6244	-4.55	Ratajeski_etal_2001
YOS-1	103.0	37.7258	-119.6244	-4.55	Ratajeski_etal_2001
YOS-103a	103.0	37.7284	-119.6300	-6.15	Ratajeski_etal_2001
YOS-103a	103.0	37.7284	-119.6300	-6.15	Ratajeski_etal_2001
YOS-103b	103.0	37.7284	-119.6300	-5.03	Ratajeski_etal_2001
YOS-103b	103.0	37.7284	-119.6300	-5.03	Ratajeski_etal_2001
YOS-104	103.0	37.7284	-119.6300	-4.94	Ratajeski_etal_2001
YOS-104	103.0	37.7284	-119.6300	-4.94	Ratajeski_etal_2001
YOS-105b	103.0	37.7248	-119.6675	-4.42	Ratajeski_etal_2001
YOS-105b	103.0	37.7248	-119.6675	-4.42	Ratajeski_etal_2001
YOS-18a	103.0	37.7283	-119.6274	-4.57	Ratajeski_etal_2001
YOS-18a	103.0	37.7283	-119.6274	-4.57	Ratajeski_etal_2001
YOS-18c	103.0	37.7283	-119.6274	-5.30	Ratajeski_etal_2001
YOS-18c	103.0	37.7283	-119.6274	-5.30	Ratajeski_etal_2001
YOS-55a	103.0	37.7230	-119.6663	-5.39	Ratajeski_etal_2001
YOS-55a	103.0	37.7230	-119.6663	-5.39	Ratajeski_etal_2001
YOS-61	103.0	37.7127	-119.6863	-4.58	Ratajeski_etal_2001
YOS-61	103.0	37.7127	-119.6863	-4.58	Ratajeski_etal_2001

Sample	Age (Ma)	LATITUDE	LONGITUDE	Ep_Nd(t)	Source
DPKg	104.0	37.6200	-119.0900	-6.64	Cousens_1996
RCKg	104.0	37.5933	-119.0600	-5.55	Cousens_1996
G19	105.2	38.6457	-120.1343	-5.40	Cecil_etal_2012
G23	106.8	38.7648	-119.8484	-2.90	Cecil_etal_2012
G06	109.0	39.3334	-120.2906	-4.60	Cecil_etal_2012
G21	109.8	38.6945	-119.9956	-6.80	Cecil_etal_2012
PC-35 PC35-P	110.0	34.9194	-118.7961	1.03	Saleeby_etal_1987
G10	111.6	39.3276	-120.3901	-5.30	Cecil_etal_2012
FG 01	114.0	37.0505	-119.7738	1.39	Truschel_1996
FG 06	114.0	37.1472	-119.7318	1.74	Truschel_1996
FG 14	114.0	37.3187	-119.6612	-1.46	Truschel_1996
FG 15	114.0	37.3647	-119.6330	-2.86	Truschel_1996
FG 28	114.0	37.2062	-119.8767	1.66	Truschel_1996
FG 32	114.0	37.1918	-119.7223	1.17	Truschel_1996
WKB 65	115.0	35.9489	-118.8806	3.31	Clemens-Knott_1992
CM-630 GC-1	115.0	35.1250	-118.7228	1.28	Saleeby_etal_1987
WKB 23	116.0	36.4783	-119.0194	4.51	Clemens-Knott_1992
G09	116.4	39.3436	-120.3385	-6.30	Cecil_etal_2012
WKB 53	117.0	36.4524	-119.1518	5.01	Clemens-Knott_1992
WKB 85	117.0	36.4393	-119.1469	5.73	Clemens-Knott_1992
WKB 90	117.0	36.4283	-119.2034	5.22	Clemens-Knott_1992
WKB 91	117.0	36.4518	-119.1879	4.62	Clemens-Knott_1992
WR-643 GC-14	117.0	35.0244	-118.7067	0.19	Saleeby_etal_1987
G11	120.8	39.3123	-120.4946	-7.50	Cecil_etal_2012
G18	121.5	38.5610	-120.2663	-7.90	Cecil_etal_2012
WKB 105	130.0	36.4977	-119.1066	5.70	Clemens-Knott_1992
WKB 107	130.0	36.5244	-119.0998	5.93	Clemens-Knott_1992
WKB 109	130.0	36.5108	-119.0908	5.74	Clemens-Knott_1992
WKB 127	130.0	36.5438	-119.0605	4.80	Clemens-Knott_1992
WKB 79	130.0	36.4575	-119.0770	4.28	Clemens-Knott_1992
WKB 80	130.0	36.4490	-119.1084	4.80	Clemens-Knott_1992
WKB 86	130.0	36.4790	-119.1419	4.34	Clemens-Knott_1992
WKB 87	130.0	36.4926	-119.1462	5.02	Clemens-Knott_1992
WKB 92	130.0	36.5023	-119.1446	4.62	Clemens-Knott_1992
WKB 94	130.0	36.4921	-119.1264	6.16	Clemens-Knott_1992
G04	145.3	32.3247	-120.5981	-5.10	Cecil_etal_2012
BP918B	148.0	37.0663	-118.3536	-2.79	Glazner_etal_2008
BP918B	148.0	37.0663	-118.3536	-2.79	Glazner_etal_2008
BP918C	148.0	37.0663	-118.3536	-1.93	Glazner_etal_2008
BP918C	148.0	37.0663	-118.3536	-1.93	Glazner_etal_2008
ID93-37	148.0	36.9796	-118.4013	-4.25	Glazner_etal_2008
ID93-37	148.0	36.9796	-118.4013	-4.25	Glazner_etal_2008
ID93-39	148.0	36.9797	-118.4039	-3.28	Glazner_etal_2008
ID93-39	148.0	36.9797	-118.4039	-3.28	Glazner_etal_2008
ID95-10	148.0	36.6488	-118.1175	-5.29	Glazner_etal_2008
ID95-10	148.0	36.6488	-118.1175	-5.29	Glazner_etal_2008

Sample	Age (Ma)	LATITUDE	LONGITUDE	Ep_Nd(t)	Source
ID95-11	148.0	36.6478	-118.1182	-0.78	Glazner_etal_2008
ID95-11	148.0	36.6478	-118.1182	-0.78	Glazner_etal_2008
IN919D	148.0	36.7843	-118.3113	-7.02	Glazner_etal_2008
IN919D	148.0	36.7843	-118.3113	-7.02	Glazner_etal_2008
IN919E	148.0	36.7843	-118.3113	-6.36	Glazner_etal_2008
IN919E	148.0	36.7843	-118.3113	-6.36	Glazner_etal_2008
IN919F	148.0	36.7843	-118.3113	-5.27	Glazner_etal_2008
IN919F	148.0	36.7843	-118.3113	-5.27	Glazner_etal_2008
TP94-34	148.0	36.9796	-118.4004	-3.53	Glazner_etal_2008
TP94-34	148.0	36.9796	-118.4004	-3.53	Glazner_etal_2008
TP-9A	148.0	36.9873	-118.4143	-4.25	Glazner_etal_2008
TP-9A	148.0	36.9873	-118.4143	-4.25	Glazner_etal_2008
G17	148.7	38.5463	-120.3520	-3.70	Cecil_etal_2012
Mzmv	156.0	37.6650	-119.0733	-3.44	Cousens_1996
G02	162.0	39.3307	-120.1947	2.70	Cecil_etal_2012
G01	162.2	39.2978	-121.0882	-0.31	Cecil_etal_2012
G16	163.2	38.4356	-120.5509	-3.40	Cecil_etal_2012
G14	166.3	38.3721	-120.5542	-5.50	Cecil_etal_2012
G03	166.5	39.3219	-120.6330	-3.90	Cecil_etal_2012

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