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Title of article Blueschists of the Kodiak Islands, Alaska: An  
Extension of the Seldovia schist terrane

Author(s) Carden et al.

see Geology v. 5, p. 529 - 533

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Appendix Table 1

Analytical Data for K-Ar Age Determinations

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Map No.	Sample No.	Rock Type	Mineral Dated	K <sub>2</sub> O (weight percent)	Sample Weight (grams)	<sup>40</sup> Ar <sub>rad</sub> (moles/gm) × 10 <sup>-11</sup>	<sup>40</sup> Ar <sub>rad</sub> / <sup>40</sup> Ar total	Age ± 1 σ (m.y.)	References
<u>SELDOVIA</u>									
(1)	74AF4B.1 (76027)	Blueschist	crossite	0.128 0.131 0.131	1.9651	3.270	0.580	162 ± 4.9	2
(2)	74AF23-9 (75107)	Qtz-mica schist	muscovite	8.880 8.891	0.2641	263.05	0.947	190 ± 5.7	2
(3)	74AF23-10 (75128)	Amphibole-mica schist	amphibole	0.503 0.513 0.511 0.512	1.294	14.594	0.729	184 ± 5.5	2
(3)	74AF23-10 (75125) replicate	Amphibole-mica schist	amphibole	0.503 0.513 0.511 0.512	1.2561	14.571	0.830	184 ± 5.5 $\bar{x} = 184 \pm 5.5$	2
(3)	74AF23-10 (75109)	Amphibole-mica schist	muscovite	8.840 8.926	0.3032	265.68	0.863	192 ± 5.8	2
(4)	SD3-3	Greenschist	actinolite					191 ± 11	1
(4)	SD3-3	Greenschist	white mica					188 ± 10	1
(4)	SD3-3	Greenschist	chlorite					181 ± 8.3	1
(5)	SD9-3	Blueschist	white mica					189 ± 5.7	1
(5)	SD9-3	Blueschist	crossite					154 ± 4.8	1
<u>PORT GRAHAM</u>									
(6)	74PG79 (75114)	Qtz-mica schist	muscovite	8.890	0.3103	265.09	0.958	192 ± 5.8	2
<u>KODIAK ISLANDS</u>									
(7)	UK-23 (75108)	Blueschist	crossite	0.104 0.110 0.128 0.104	2.8118	2.777	0.636	161 ± 19	2

Map No.	Sample No.	Rock Type	Mineral Dated	K <sub>2</sub> O (weight percent)	Sample Weight (grams)	<sup>40</sup> Ar <sub>rad</sub> (moles/gm) x 10 <sup>-11</sup>	<sup>40</sup> Ar <sub>rad</sub> <sup>40</sup> Ar total	Age <sup>+</sup> 1 σ (m.y.)	References
(8)	M1D (76051)	White mica- crossite schist	white mica	6.580 6.680 6.665 6.655	0.1058	193.72	0.958	187 ± 5.6	2
(8)	M1D (76105)	White mica- crossite schist	crossite	0.161	0.8246	4.203	0.565	170 ± 5.1	2
(9)	R2Y (75127)	Dioritic migmatite	hornblende	0.178 0.181	0.8534	5.154	0.606	184 ± 5.5	2
(9)	R2Y (75130) replicate	Dioritic migmatite	hornblende	0.178 0.181	0.6558	5.087	0.413	182 ± 5.5 x = 183 ± 5.5	2
(10)	R4A (75093)	Hornblende diorite	hornblende	0.224 0.222	1.2344	6.531	0.377	188 ± 5.7	2
(11)	B10-9Z (76112)	Hornblende diorite	hornblende	0.292 0.295 0.290 0.290 x = 0.292	1.0667	8.749	0.818	192 ± 5.8	2
(12)	VSC (76166)	Qtz-mica schist	muscovite	9.480 9.500 z = 9.490	0.0836	283.553	0.934	192 ± 5.8	2

Note: 1. Forbes and Lanphere, 1973.  
2. New Analysis.

Note: Potassium analyzed using an IL 343 digital flame photometer using LiBO<sub>2</sub> flux fusion technique and mineral calibration standards (Suhr and Ingamells, 1966; Ingamells, 1970; Engles and Ingamells, 1970). Argon determined by isotope dilution using <sup>38</sup>Ar tracers and 6-in. radius Nuclide mass spectrometer equipped with automated peak stepping and digital data acquisition systems. Argon extractions and potassium analyses by Diane Duvall. K-Ar dating was done at the Geophysical Institute, University of Alaska. Constants used in age calculations:

$$\lambda_e = 0.585 \times 10^{-10}/\text{yr}, \lambda_\beta = 4.72 \times 10^{-10}/\text{yr}, {}^{40}\text{K}/K_{\text{tot}} = 1.19 \times 10^{-4} \text{ mol/mol.}$$