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Mantle flow through the Northern Cordilleran slab window revealed by volcanic geochemistry

Geology

Supplemental Information

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APPENDIX DR2  Average values and standard deviations of geochemical ratios from Miocene-Holocene volcanoes, northwestern North America

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The table below summarizes the average values and standard deviations of geochemical ratios for volcanic rocks from various areas in the Northern Cordilleran slab window. The data is filtered for SiO$_2$ < 60%.

| Group | Location | No. | MgO (weight %) | Ni | Ti/V | La/Lu | Gd/Yb | Total n | SiO$_2$ (weight %) | Al$_2$O$_3$ (weight %) | Na$_2$O (weight %) | K$_2$O (weight %) | CaO (weight %) | Mg (weight %) | Mn (weight %) | FeO (weight %) | Fe$_{total}$ (weight %) | Al (weight %) | Ca (weight %) |
|-------|----------|-----|----------------|----|------|-------|-------|--------|------------------|-------------------|-----------------|----------------|----------------|-------------|-------------|-------------|---------------|------------------|-------------|-------------|
| NCVP  | W.Dawson | 2395 | 64.27          | 43.7 | 0.7  | 17    | 10.3  | 0.9    | 17               | 264.6             | 97               | 17              | 244.4         | 60           | 17           | 0.24        | 0.02           | 17               | 19.19        | 3.48         |
| NCVP  | Caribou Tuya | 1674 | 59.38          | 49.8  | 0.3  | 21    | 7.4   | 0.5    | 21               | 282.3             | 23               | 21              | 108.1         | 20           | 21           | 0.15        | 0.01           | 21               | 11.20        | 1.01         |
| NCVP  | Table Hill, Tuya Butte, Metah | 1707 | 59.22          | 48.5  | 2.4  | 246   | 6.7   | 1.9    | 246               | 274.1             | 51               | 100             | 167.2         | 83           | 100          | 0.14        | 0.01           | 246              | 14.01        | 2.30         |
| NCVP  | Kawdy Mtn, Level Mtn | 1627 | 58.50          | 48.7  | 3.2  | 125   | 6.3   | 3.0    | 125               | 187.5             | 58              | 58              | 114.2         | 70           | 58           | 0.13        | 0.06           | 125              | 16.19        | 7.82         |
| NCVP  | Hoodoo | 1372 | 56.78          | 56.8  | 4.9  | 68    | 1.3   | 2.1    | 68               | 0                 | 0                | 0               | 0.03          | 0.05         | 0               | 0.19        | 6.20         |
| NCVP  | Iskut River | 1421 | 56.54          | 48.0  | 1.2  | 47    | 6.1   | 1.4    | 47               | 57.1              | 19               | 9               | 34.7          | 5            | 9             | 0.13        | 0.03           | 47               | 13.14        | 2.06         |
| Cascade Arc | Mt Baker | 374  | 48.73          | 57.3  | 2.4  | 248   | 4.3   | 1.2    | 248               | 105.8             | 28               | 6               | 38.0          | 12           | 6             | 0.08        | 0.02           | 248              | 8.40         | 1.08         |

**Notes:**
- | Multiple analyses of chemical component in volcanic group.
- NCVP: Northern Cordilleran Volcanic Province
- Cascade Arc: Cascade Volcanic Province
- Aleut-Wrang Arc: Aleutian Islands and Wrangell Range
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