

## **Supplemental Material for**

### **Fault Locking, Block Rotation and Crustal Deformation in the Pacific Northwest**

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**Geophysical Journal International, 2007.**

## Appendix A

We test the ability of the available data to detect variations in locking (or creep) on the Cascadia thrust and block angular velocities by performing a hybrid of the so-called checkerboard test, that we call the ‘zebra’ test (Figs. A1 and A2). In the simulation, we generate a forward model of the distribution of  $\phi$  that has alternating bands along strike giving the locking map a ‘striped’ appearance (Fig. A1a). The forward calculation was run for this locking variation and the angular velocities of model m05G to calculate the expected GPS velocities, slip vectors and fault slip rates. Normally-distributed random noise was then added to each datum according to its assigned uncertainty. These data were then used in the inversion to estimate the distribution of  $\phi$  on the fault surface and the block angular velocities.

We performed 3 inversions each using a different parameterization of the node distributions and each with a separate realization of the data. The starting model was one-dimensional and comprised a linear decrease in  $\phi$  with depth. For the modified Wang effective transition zone (ETZ) parameterization (Fig. A1b), the resulting distribution of  $\phi$  (Fig. A1b) shows that the data can resolve along-strike spatial variations in locking at the scale of the inter-node distance (roughly 50 km). As expected,  $\phi$  values at nodes near the deformation front are not recovered well but those within about 50 km of the coast (10 km depth on the slab and deeper) and below land are recovered within about  $\phi = 0.2$  or better.

The second test (Fig A1c) uses a parameterization where  $\phi$  must decrease monotonically downdip but its functional form is not specified. This again does an acceptable job of recovering the distribution of  $\phi$  beneath land and within 50 km of the coast. The final test (Fig. A1d) does not impose any constraints on the distribution of  $\phi$  either along strike or down dip. In this case the along strike variation is recovered but the down dip variation is patchy, that is, there are spurious short-wavelength variations introduced. This result indicates that some down dip smoothing is warranted, which we have applied through use of the modified Wang function as discussed in the text.

The recoveries of the poles of rotation are shown in Fig. A2. The red ellipses and numbers (rotation rates) are those from m05G and the green, blue, and purple are those recovered from the three tests of Fig. A1b, A1c, and A1d, respectively. For most of the poles, the m05G (red) ellipse includes the test poles and the formal uncertainty in the rotation rate (in parentheses) covers the test rates. Note that the Oregon Coast Ranges (OrCR) and Portland (Port) poles are statistically indistinguishable – these blocks were separated in model m05G on the basis of geologic information only.

**Figure A1.** Tests of the recovery of a distribution of  $\phi$  on the Cascadia subduction zone. GPS velocity, fault slip rate, and slip vector azimuth data predictions for the model in (a) were calculated and then random noise was added to each. Using the perturbed data, inversions were performed using the (b) modified Wang parameterization of the node  $\phi$  values, (c) a parameterization where nodes are independent along strike but forced to decrease with depth, and (d) a parameterization where nodes are independent along strike and in depth. Black dots show node positions and black curves are slab depth contours; depths given in kms at bottom of (d). Triangles show positions of volcanic centers.

**Figure A2.** Recovery of poles of rotation (relative to North America) for the test cases of Fig. A1. Red dots, red ellipses and red numbers give the poles and rotation rates (in deg/Myr) for the test model m05G. Green ellipses and numbers are for the ETZ test (Fig. A1b), blue are for the ‘down dip decrease’ test (Fig. A1c) and purple are for the ‘unconstrained’ case (Fig. A1d). The red ellipses and rotation rates plus uncertainties encompass the test cases indicating that the formal uncertainties account for the noise in the data and the different parameterizations.

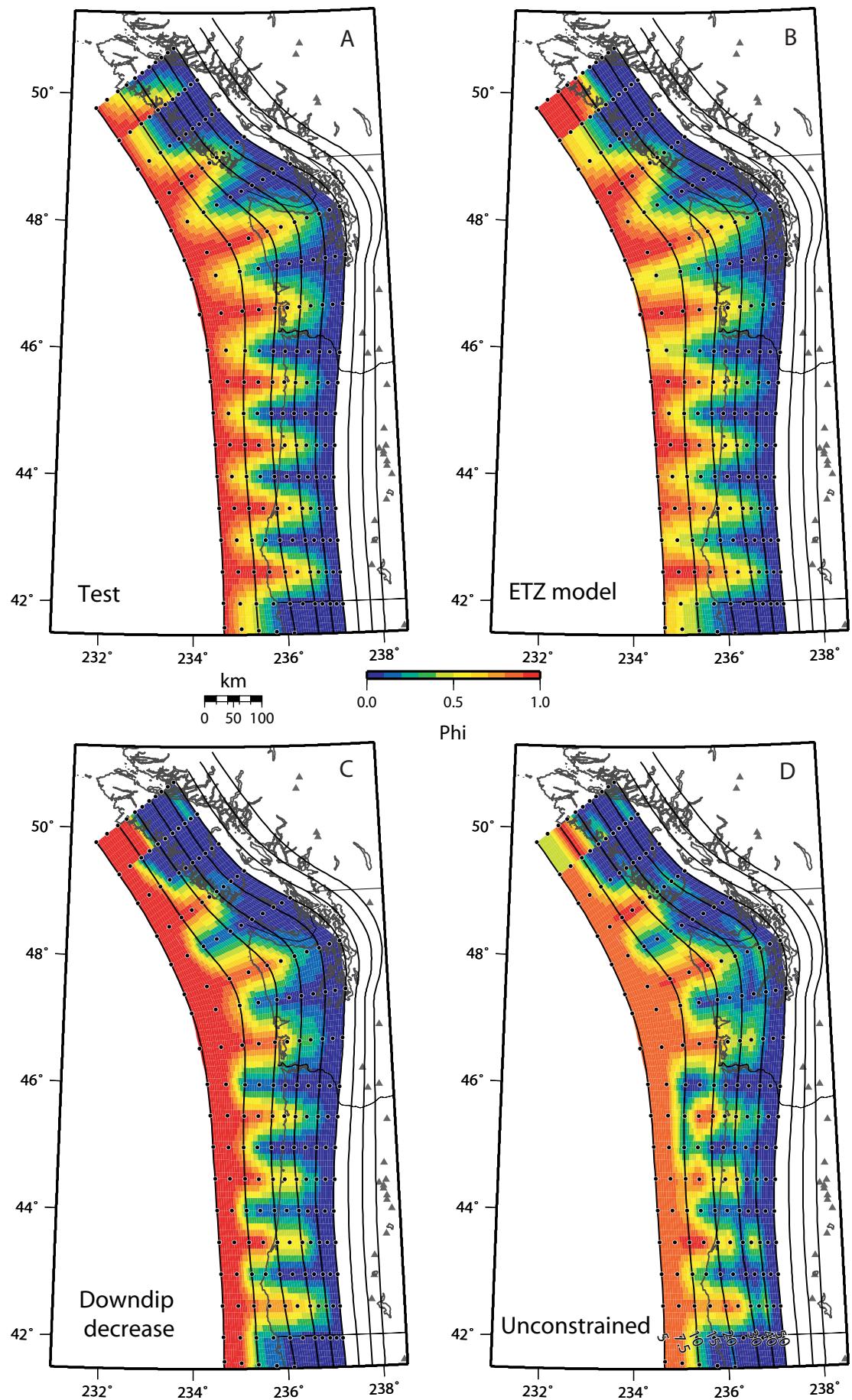


Fig A1

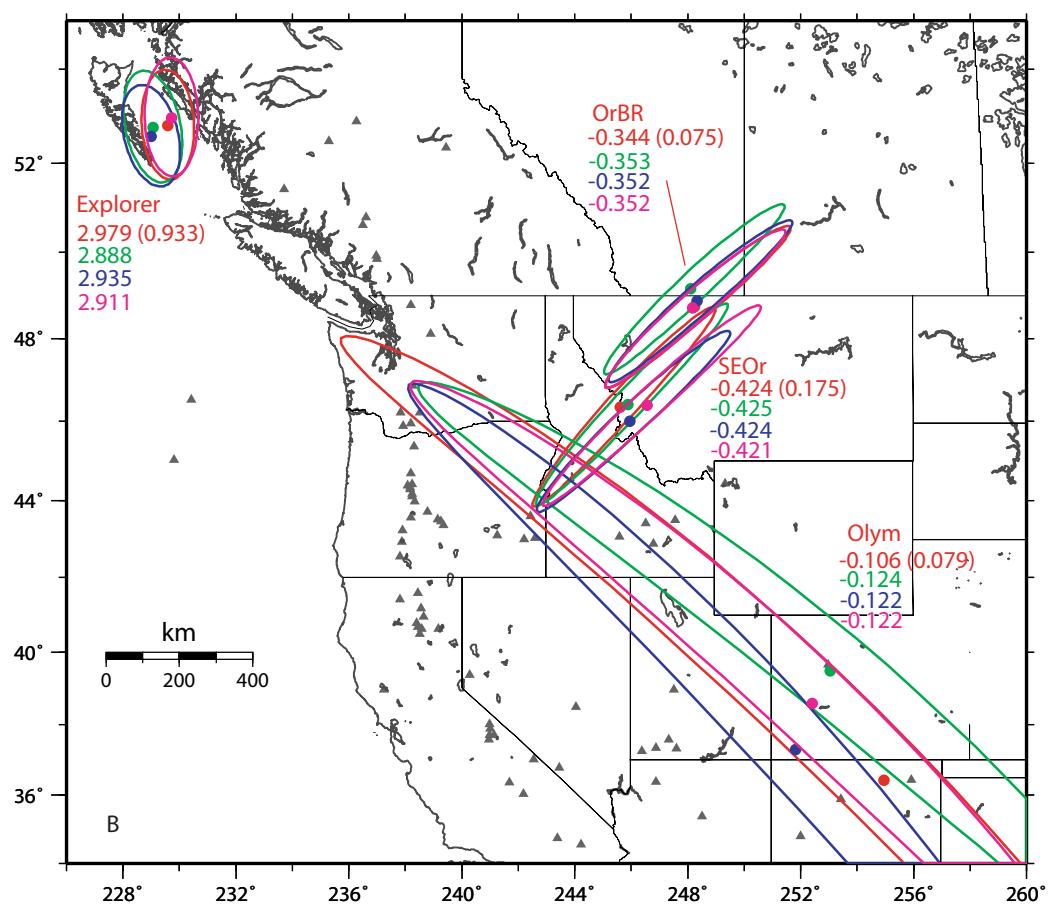
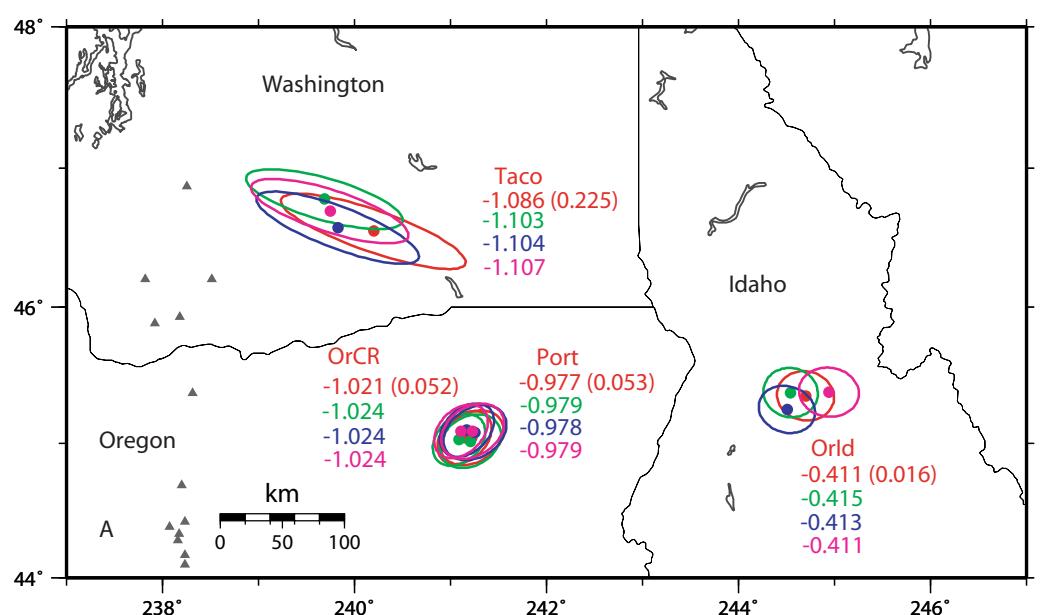


Fig A2

## Appendix B

Here we present a series of inversions using a variety of block geometries. For each test result, we show a map of the model geometry, block statistics, poles, the predicted rotational velocity field (except m00r that shows the velocity field arising from locking strain), the predicted locking and slip deficit distributions, and the surface velocities due to fault locking. In the discussions of each run, the conclusions are given.

In each inversion, the motions of the blocks in northern California, Nevada, and Utah are taken from McCaffrey (2005) and are fixed. Locking on the Cascadia thrust and all other active faults was estimated.

Within each domain the nrms of the GPS velocities and the  $Q$  value are given below the domain name. For m00r these are preceded by the number of GPS sites within the domain.

The map label gives the inversion name below which is C2/NP/DF corresponding to chi-squared/#Parameters/Degrees\_of\_freedom.

**m00r:** ( $\chi_n^2 = 11.09$ ) The region north of 41.5N was assumed to be fixed relative to North America. The surface velocities shown result from the locking on the Cascadia thrust to the west and crustal faults to the south. The inversion is trying to match the rotational nature of the velocity field by severely changing the JdFa pole and the locking distribution. None of the data are fit well. (1) CIMB fits well as part of NoAm; (2) AlbH fits well but is not sensitive.

**m01r:** ( $\chi_n^2 = 1.80$ ) The region is assumed to comprise two large blocks that rotate relative to North America. (1) The northern domains SoVI, WhdI and Wena fit much better but NoVI does not; (2) NoVI should be separate from the others; (3) SnRP, SWId and SEOr rotate together.

**m03a:** ( $\chi_n^2 = 5.86$ ) In this run, the 5 domains west of the arc (the forearc) move together relative to NoAm. None are fit very well suggesting that they do not move together. This is not a Sumatra-style forearc migration situation.

**m03b:** ( $\chi_n^2 = 1.52$ ) Here we see that (1) EWAs is moving relative to NoAm; its Q is about 20x higher than when it is fixed to NoAm; (2) EOre (Q = 19%) is consistent with the motion of the 3 domains to the east; (3) OrBR does not move with the forearc; (4) the 5 domains in W Washington do not move together; (5) NoVI moves relative to SoVI and relative to NoAm; (6) Wena is not part of EWAs..

**m03c:** ( $\chi_n^2 = 1.45$ ) (1) OrBR does not move with the blocks to the east; (2) Wena fits with SoVI.

**m03d:** ( $\chi_n^2 = 1.26$ ) (1) OrBR is independent of other domains; (2) Port is not moving with the Oregon Coast ranges.

**m03e:** ( $\chi_n^2 = 1.26$ ) (1) Wena's Q is doubled when moving alone compared to moving with SoVI; (2) YFTB's Q is similar moving with EOre as with Olym.

**m03f:** ( $\chi_n^2 = 1.32$ ) (1) Adding Taco to NoCR and Port degrades the fit to the Coast Ranges; (2) making Seat independent has marginal improvement; (3) YFTB is now compatible with EOre blocks.

**m03g:** ( $\chi_n^2 = 1.23$ ) (1) YFTB and Seat together gives good results but YFTB and Seat separate (m03f) was fine too; (2) Olym and Taco still not fitting while moving together.

**m03h:** ( $\chi_n^2 = 1.14$ ) (1) Olym much better on its own; (2) Taco somewhat better ( $Q = 5\%$ ) on its own.

**m03i:** ( $\chi_n^2 = 1.22$ ) (1) Olym and Seat work well together; (2) Taco, Port and YFTB not moving together; (3) NoCR and SoCR probably not separate blocks.

**m03j:** ( $\chi_n^2 = 1.23$ ) (1) Taco and Port together not a good fit.

**m03k:** ( $\chi_n^2 = 1.19$ ) (1) WhdI and Seat together, not much difference when WhdI stuck to SoVI and Seat stuck to Olym.

**m03l:** ( $\chi_n^2 = 1.10$ ) Final geodetic model based on previous tests.

**m03m:** ( $\chi_n^2 = 0.98$ ) This is model m03l with estimates of uniform strain rates within each composite block. The resulting principal strain rate tensors are shown by the green arrows. The fits are improved in Taco, Port and YFTB suggesting there is yet unmodeled strain rates there.

**m05G:** ( $\chi_n^2 = 1.13$ ) This model starts with m03l and some changes are applied to accommodate additional geologic data. The modifications to the block model m03l for model m05G are specifically to (a) separate the SE Oregon (SEOr) block from the others to allow 0.5 to 1.0 mm/yr fault-normal slip across the Santa Rosa – Quinn – Owyhee fault system (Pezzopane & Weldon 1993), (b) separate the Portland (Port) block from the NoCR/SoCR block across Portland, and (c) separate the Whidbey Island block (WhdI) from SoVI to allow a small amount of slip on the Devil's Mountain fault.

Some ‘hard constraints’ are applied to force the model to satisfy some geologic constraints. These are applied by using a penalty function.

#### Hard constraints for m05G

Type	Long.	Lat.	FIXD	MOVG	Min.	Max.	Calc.	Penalty
Rate	240.9000	42.4000	SEOr	OrBR	0.00	2.50	1.36	0.0000E+00
Rate	235.5000	47.0000	Olym	NoCR	0.00	4.50	4.48	0.0000E+00
Rate	237.5000	47.6000	Taco	Seat	0.00	4.00	0.95	0.0000E+00
Rate	240.0000	43.5000	OrBR	EOre	0.00	4.00	2.37	0.0000E+00
Rate	238.0000	42.0000	SoCR	OrBR	0.00	3.50	1.80	0.0000E+00
Rate	236.0000	48.2000	AlbH	Olym	0.60	3.00	0.63	0.0000E+00

Rate	233.0000	51.0000	SoVI	NoVI	0.00	2.80	2.78	0.0000E+00
Rate	239.5000	47.8000	EWas	Wena	0.00	1.50	1.49	0.0000E+00
Rate	237.9900	49.1500	CIMB	SoVI	0.00	10.00	3.16	0.0000E+00
Rate	237.0800	50.1300	CIMB	SoVI	0.00	10.00	3.22	0.0000E+00
Azim	238.0000	47.9000	WhdI	Seat	-45.00	135.00	-20.40	0.0000E+00
Azim	237.0000	48.0500	AlbH	Olym	10.00	80.00	10.68	0.0000E+00
Spin	236.0000	50.0000	NoAm	SoVI	-0.20	0.20	-0.03	0.0000E+00
Spin	236.5000	46.0000	NoAm	NoCR	-1.40	-0.90	-1.02	0.0000E+00
Spin	236.3000	47.5000	NoAm	Olym	-0.30	0.00	-0.11	0.0000E+00

Type = type of constraint (Rate is slip rate in mm/yr; Azim is azimuth in degrees; Spin is spin rate in deg/Ma)

Long., Lat. = where constraint is applied

FIXD = fixed block

MOVG = moving block

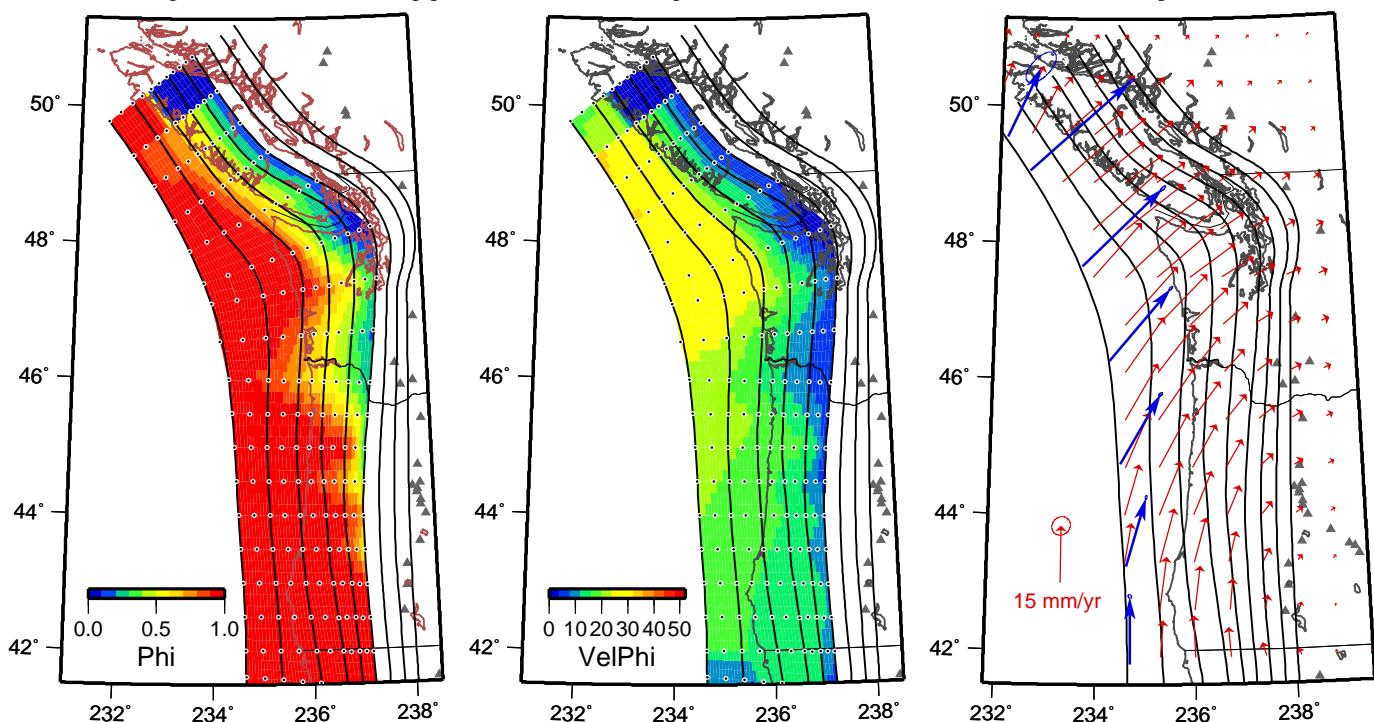
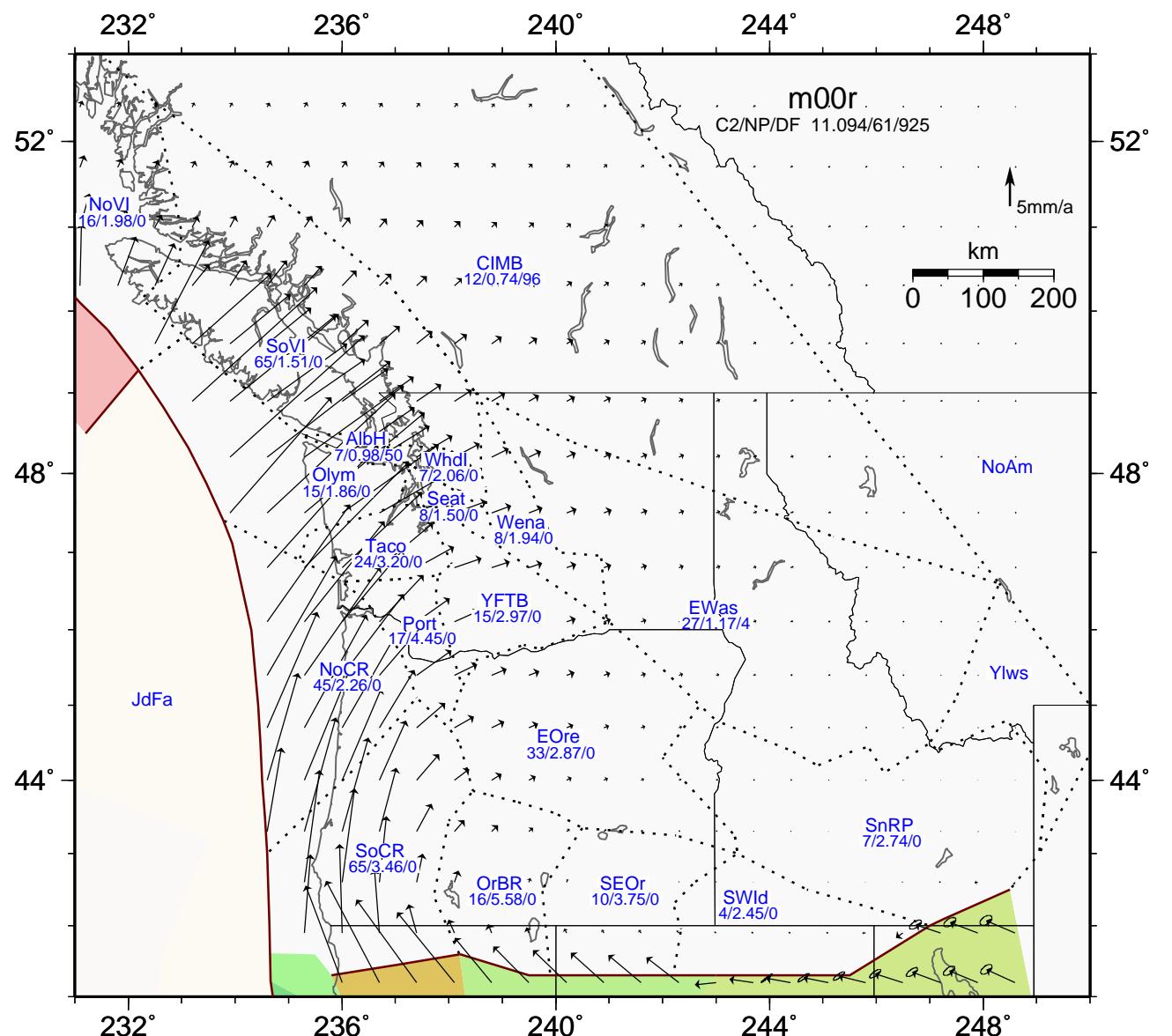
Min. = minimum value allowed

Max. = maximum value allowed

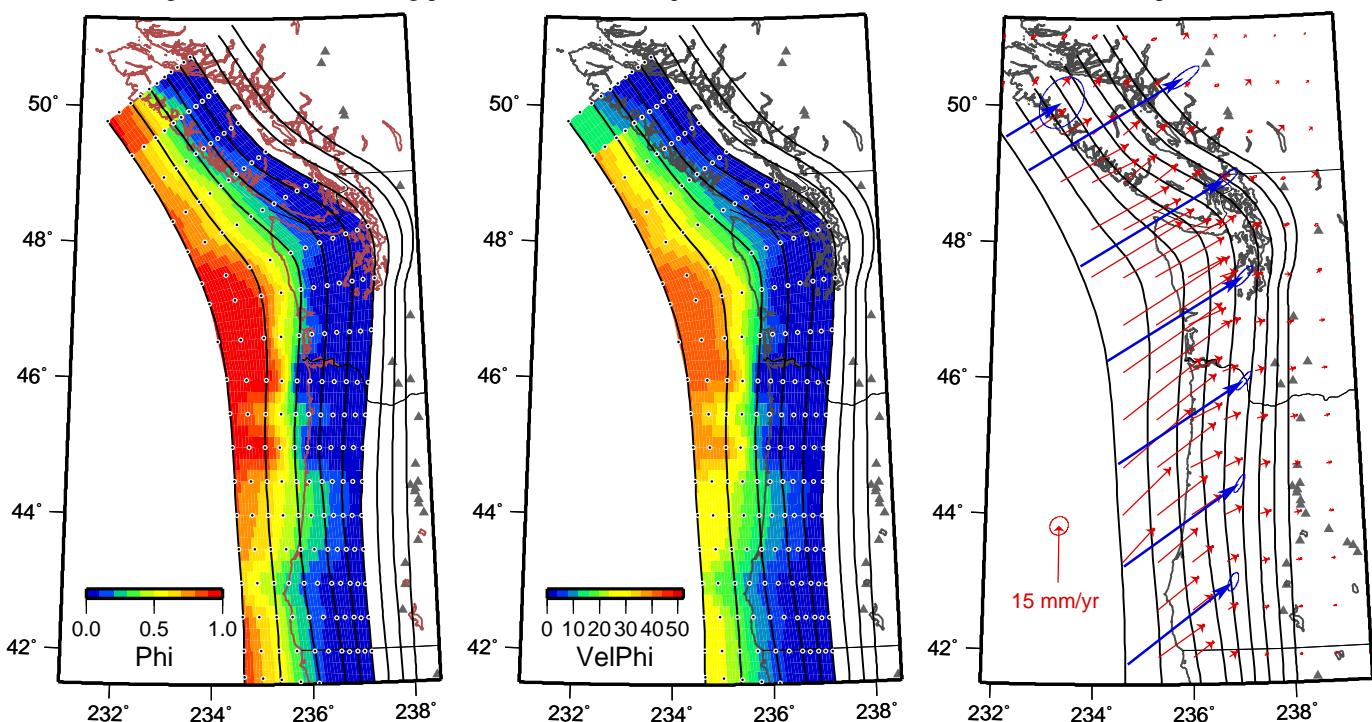
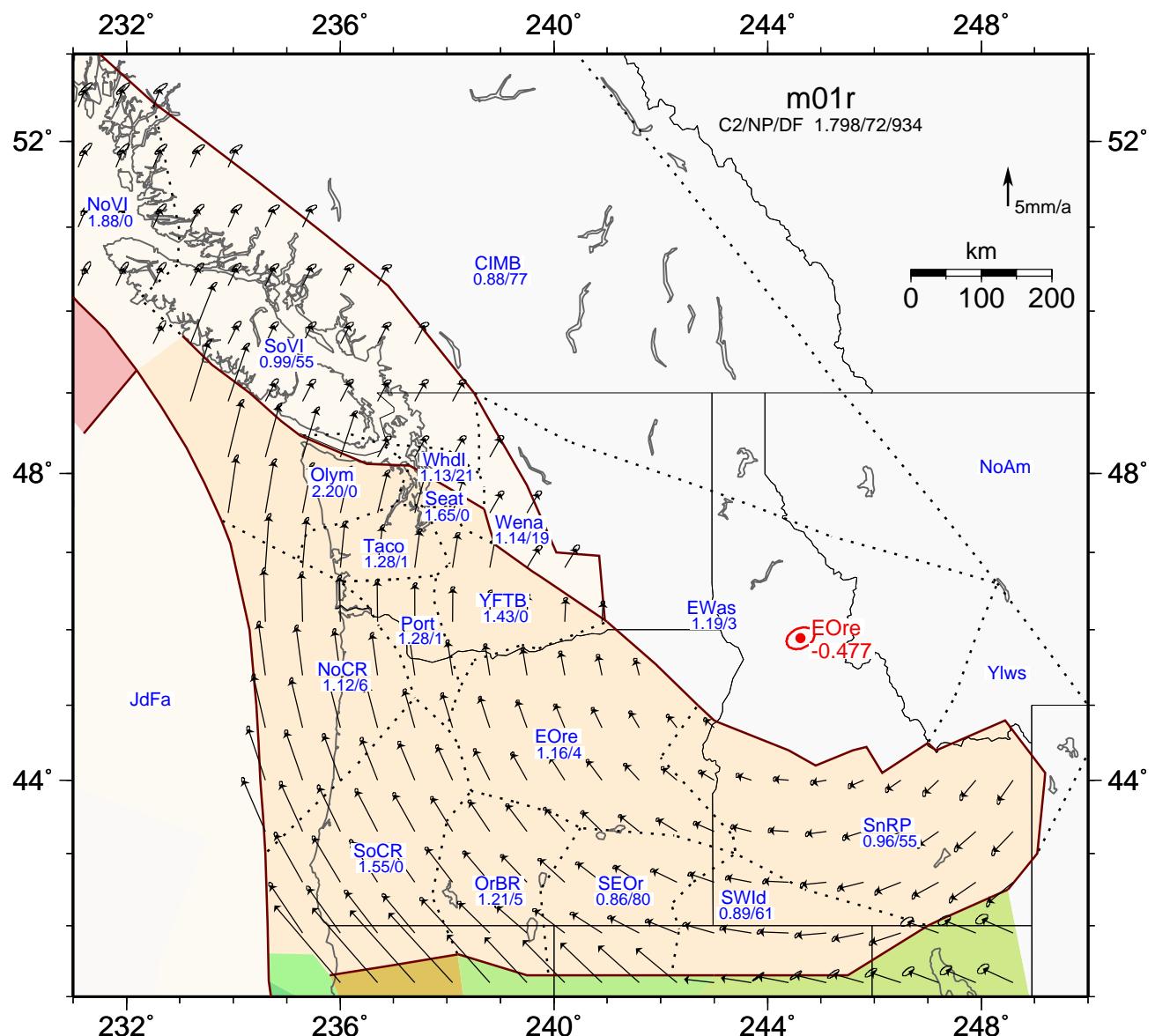
Calc. = calculated value

Penalty = penalty assessed

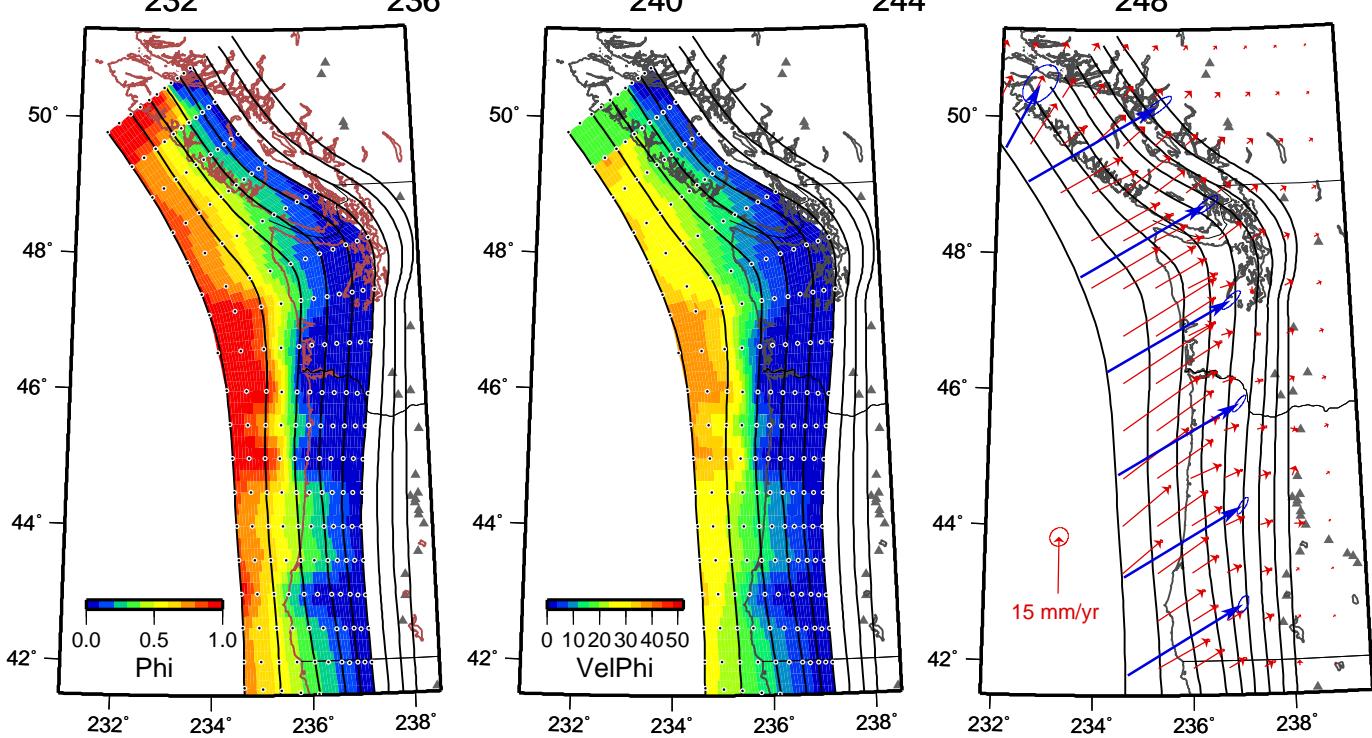
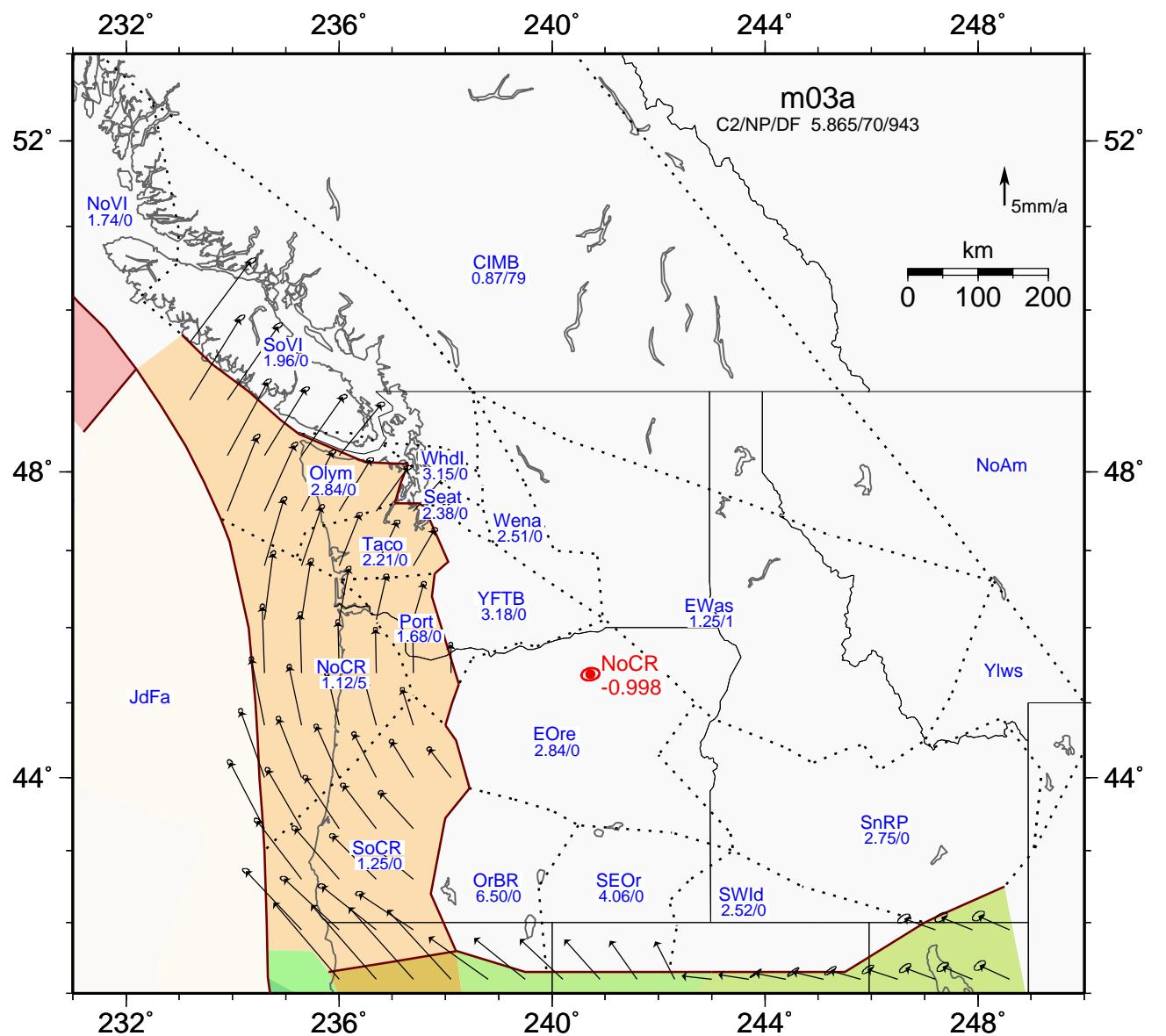
**m05A:** ( $\chi_n^2 = 1.10$ ) This model is the same as m05G but additional data have been used. The result is similar to m05G as discussed in the text. The fits of all the data are given in the Supplemental files.



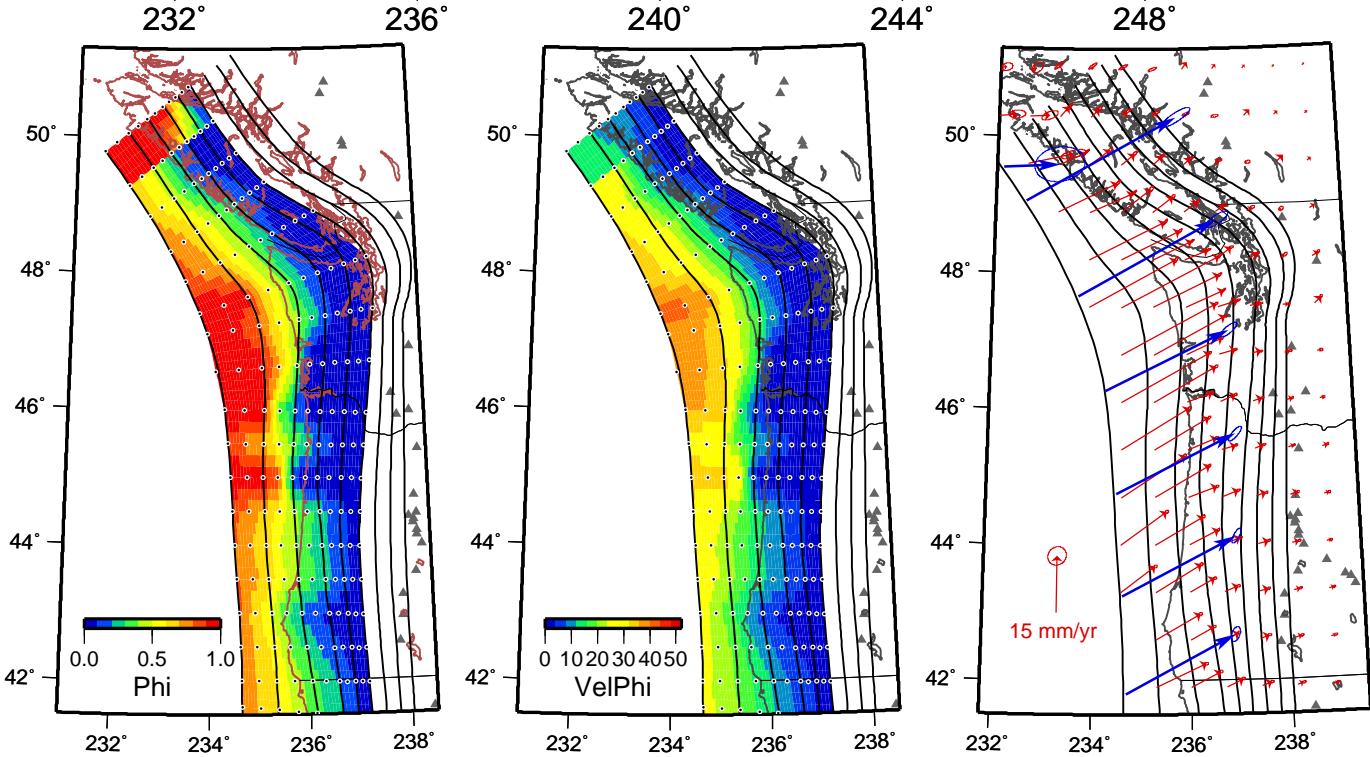
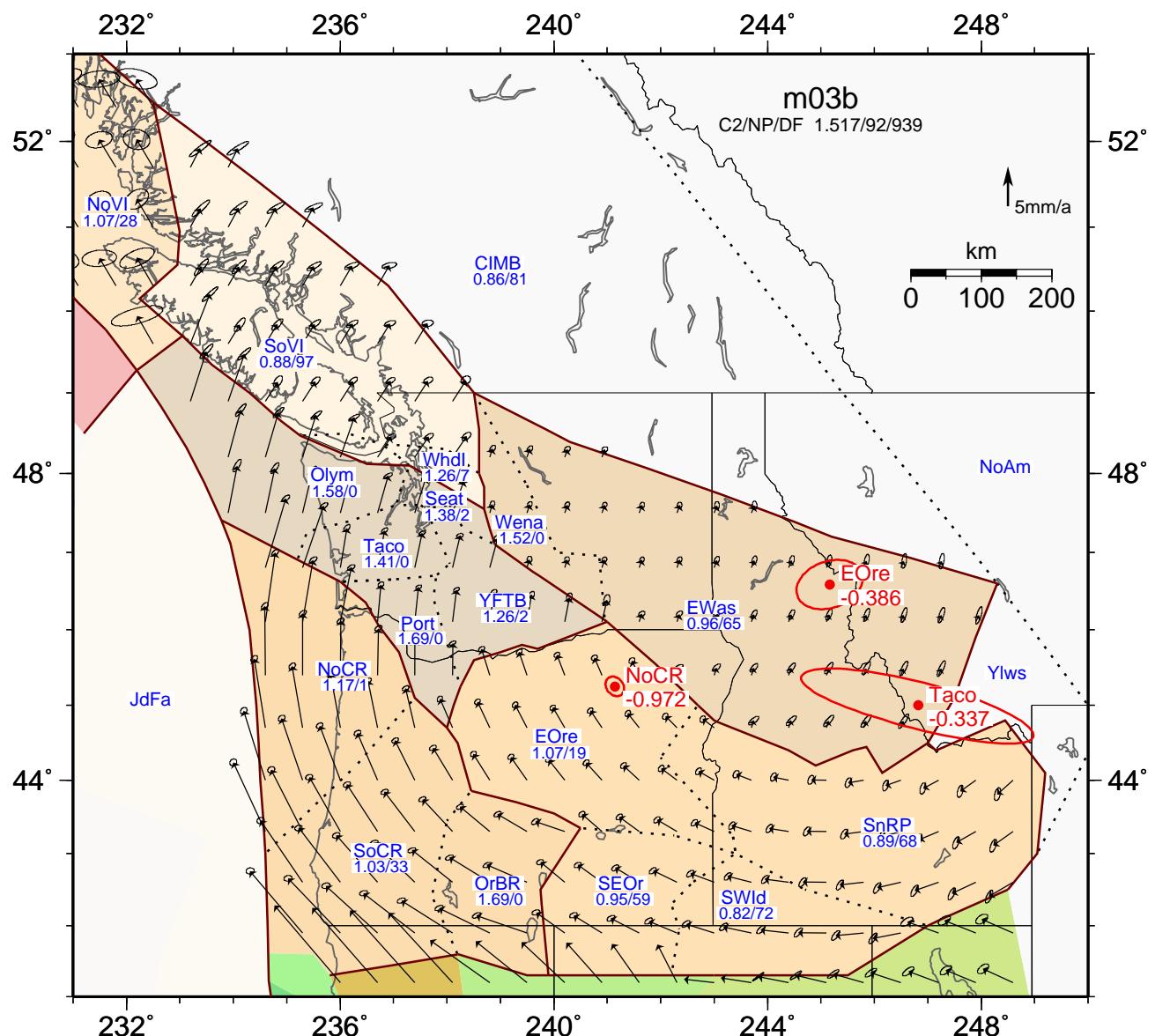
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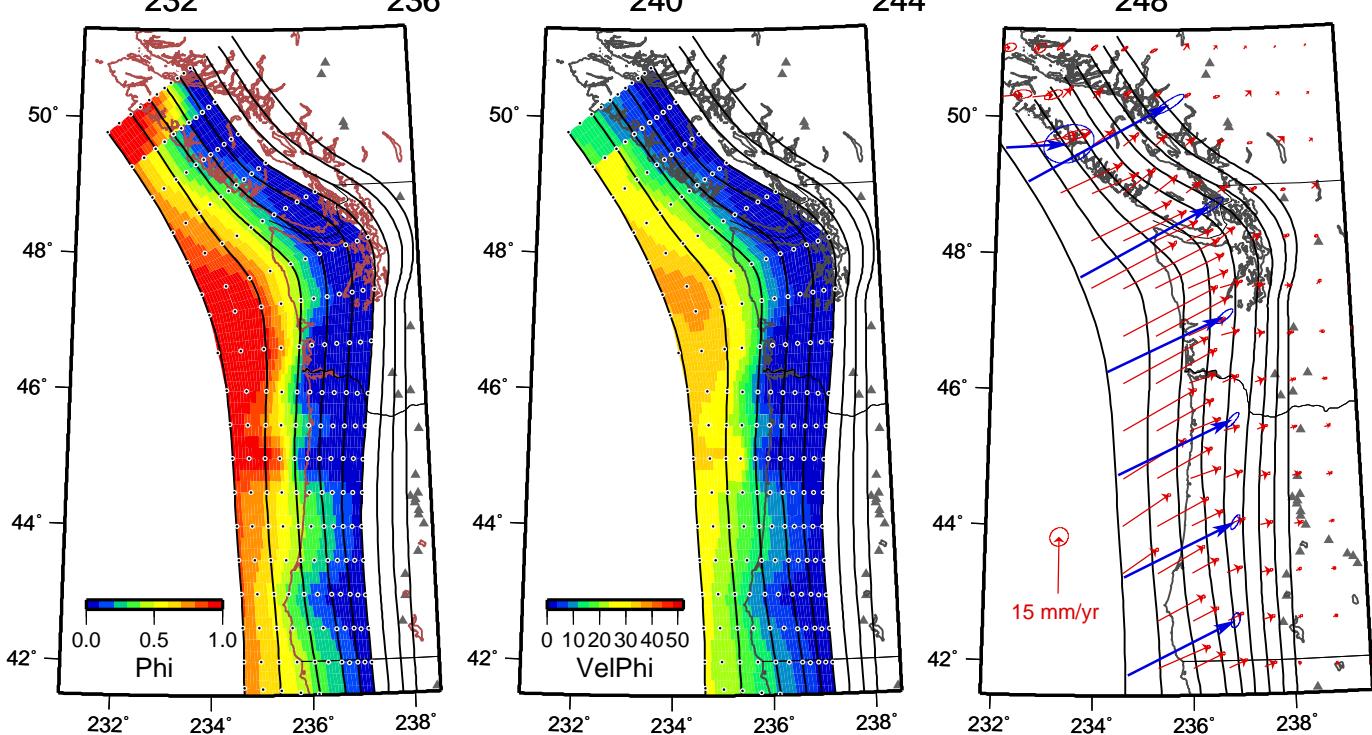
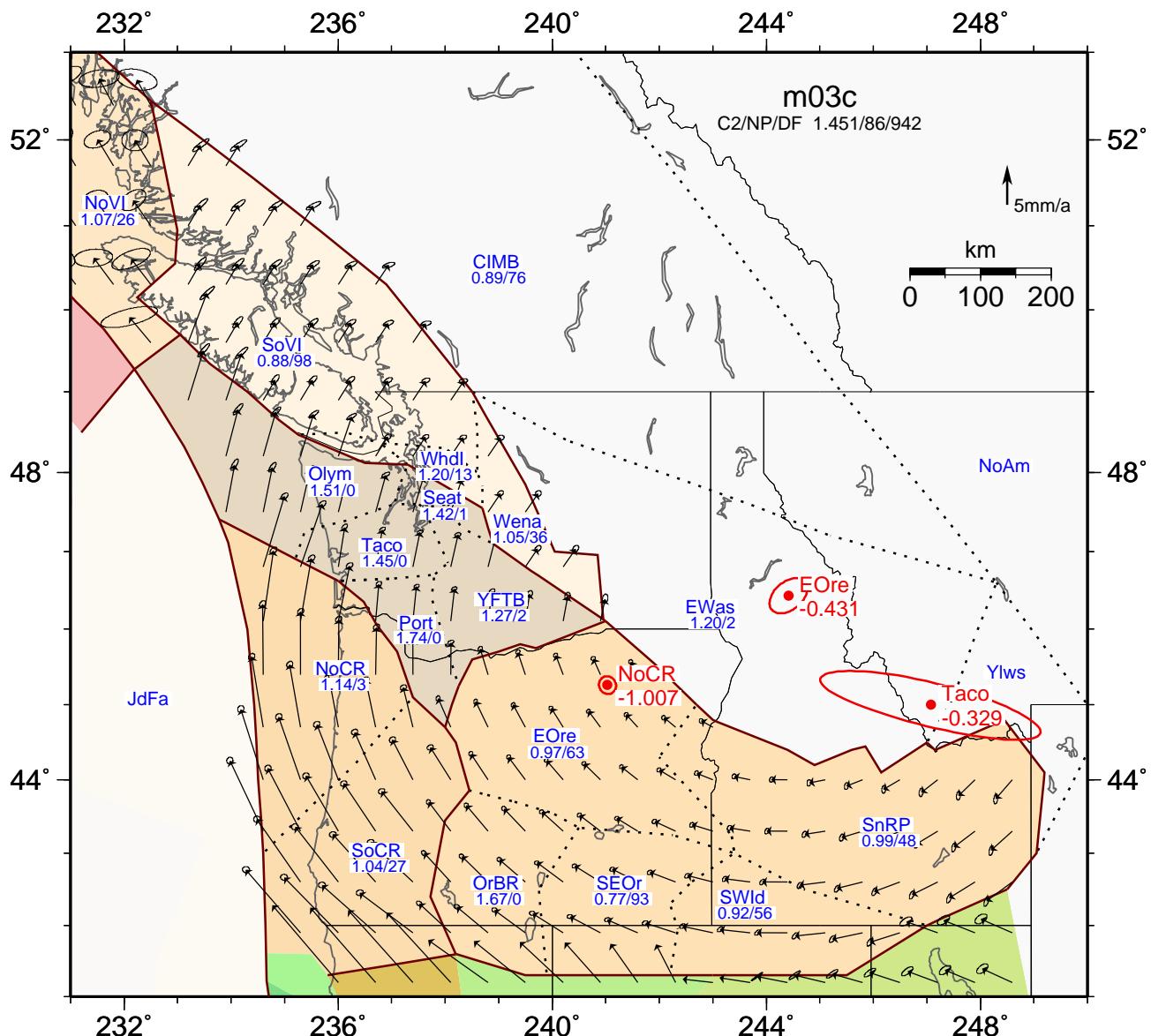
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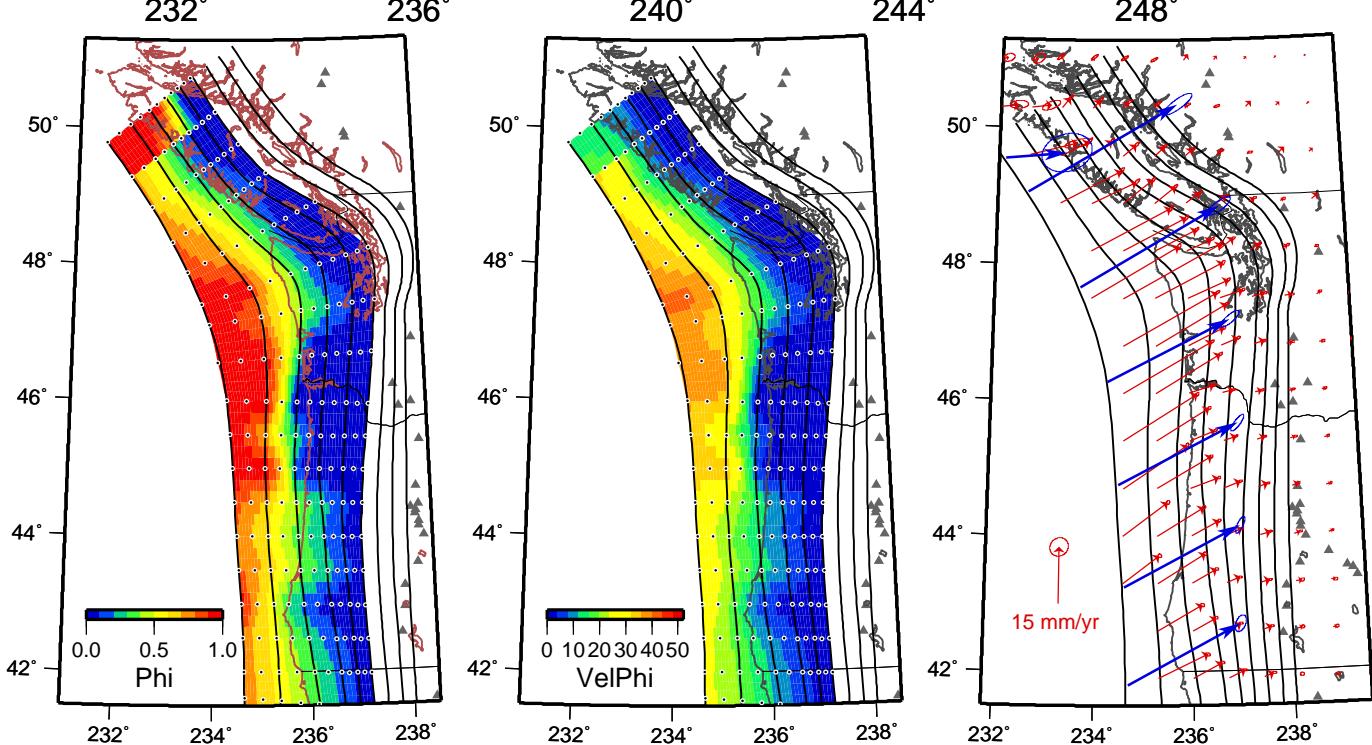
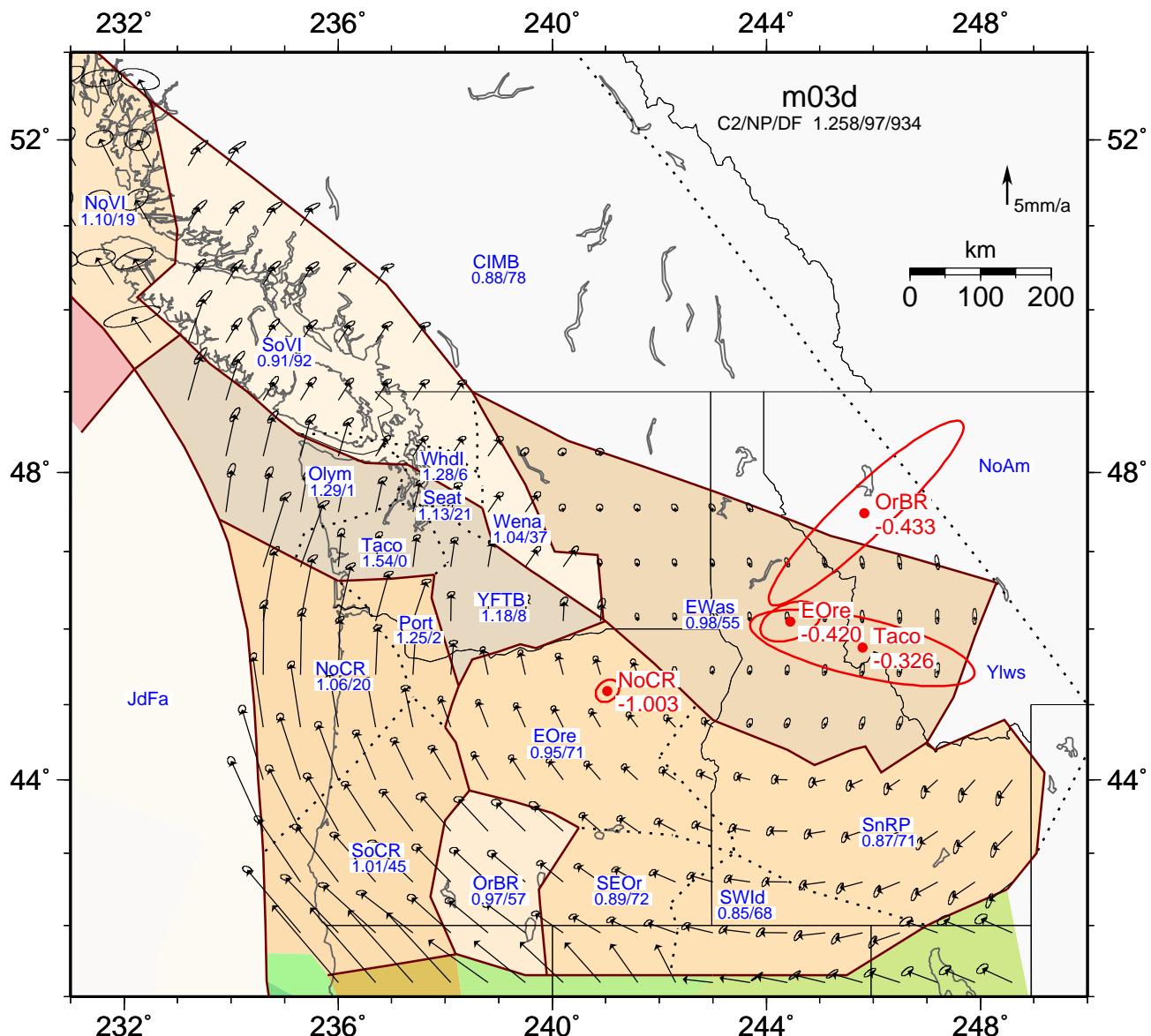
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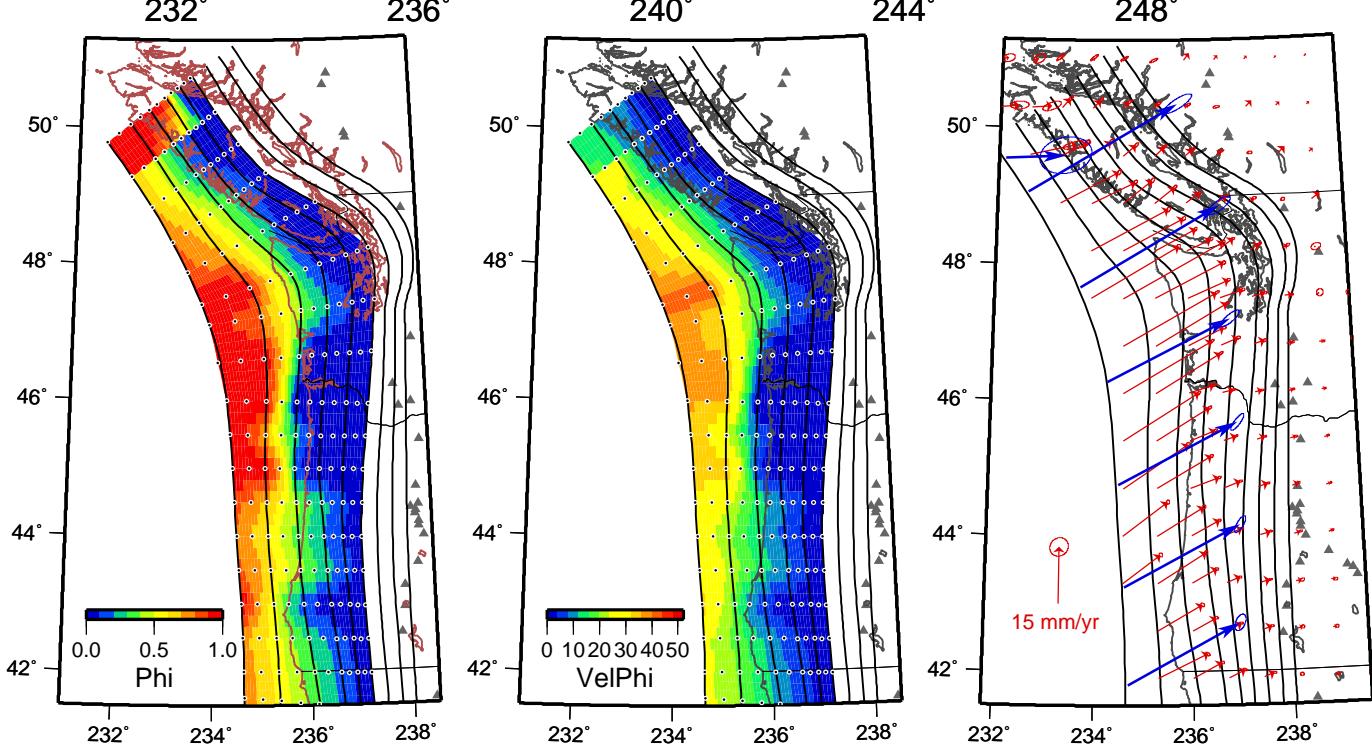
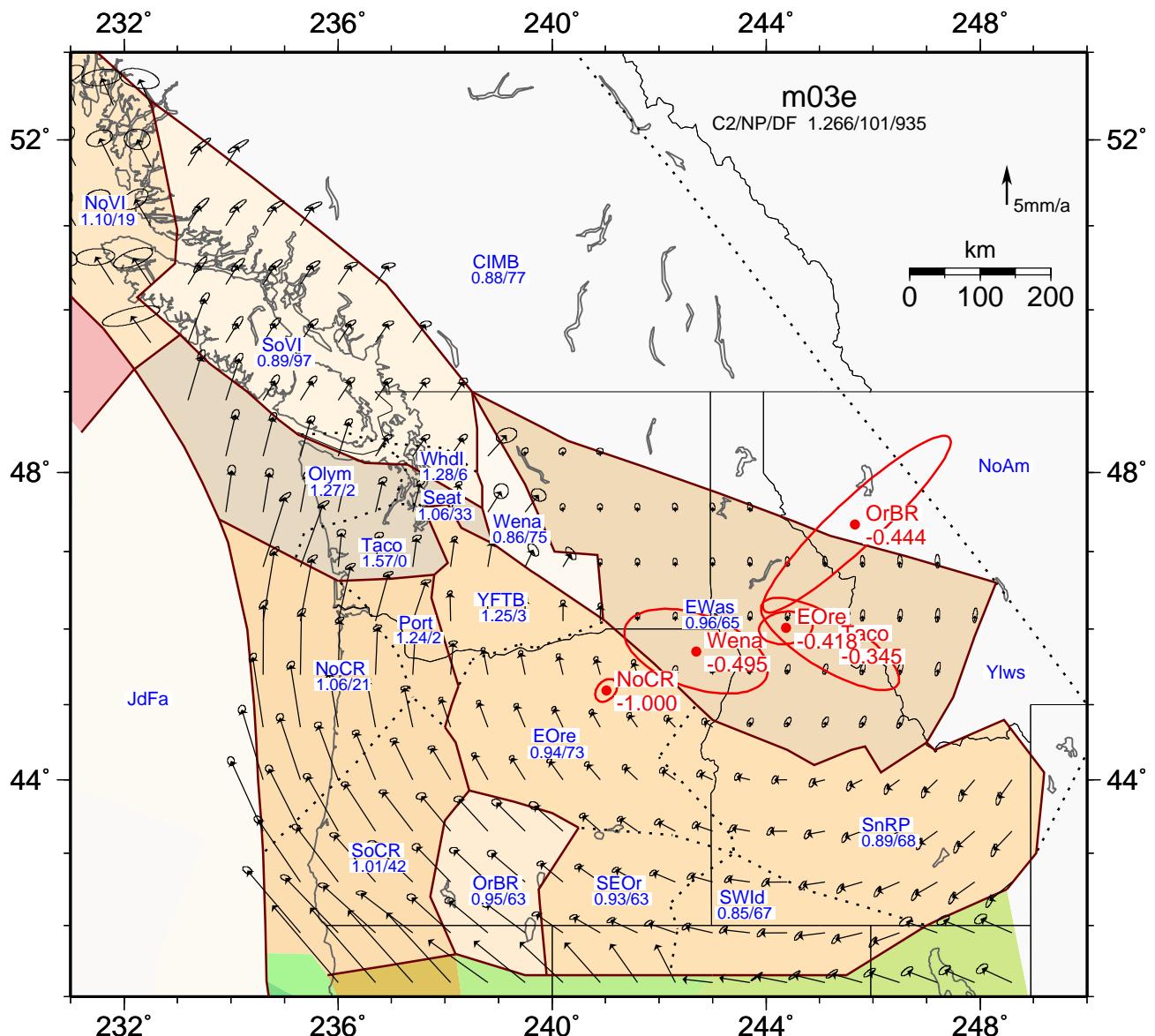
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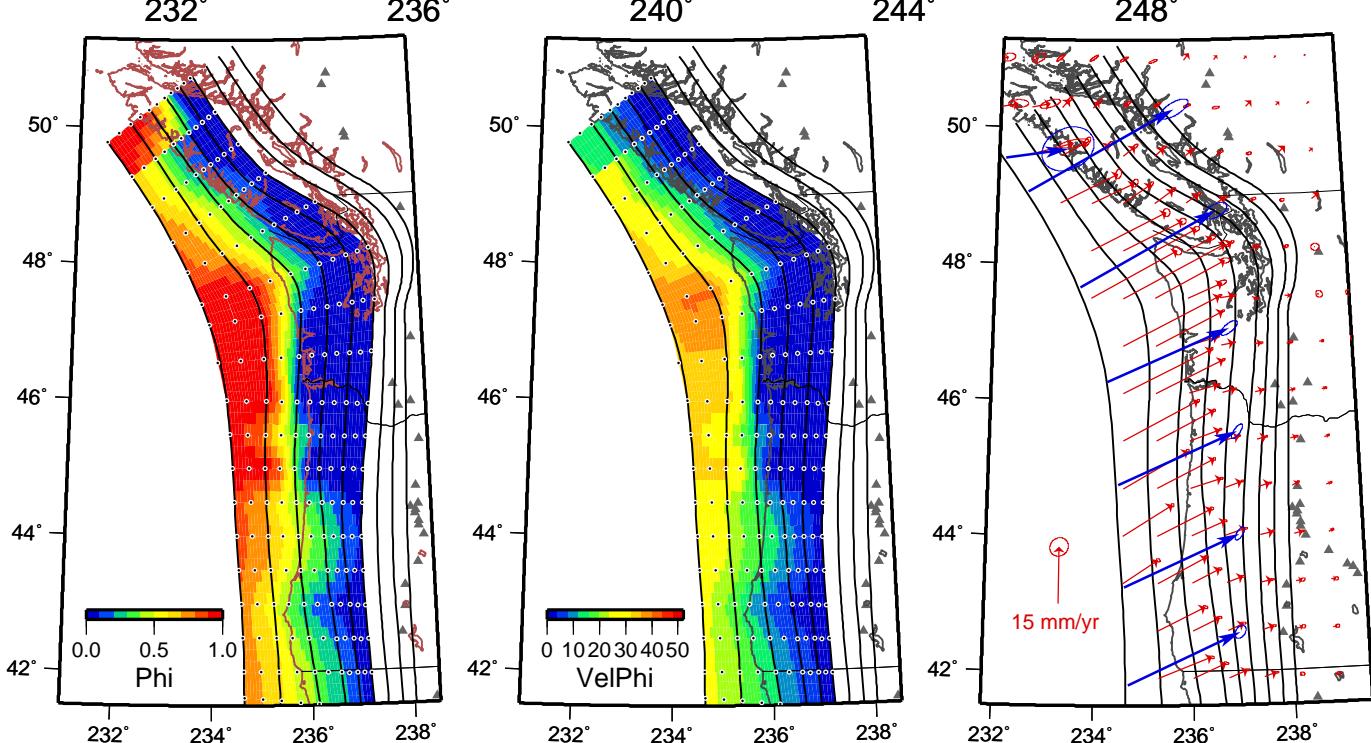
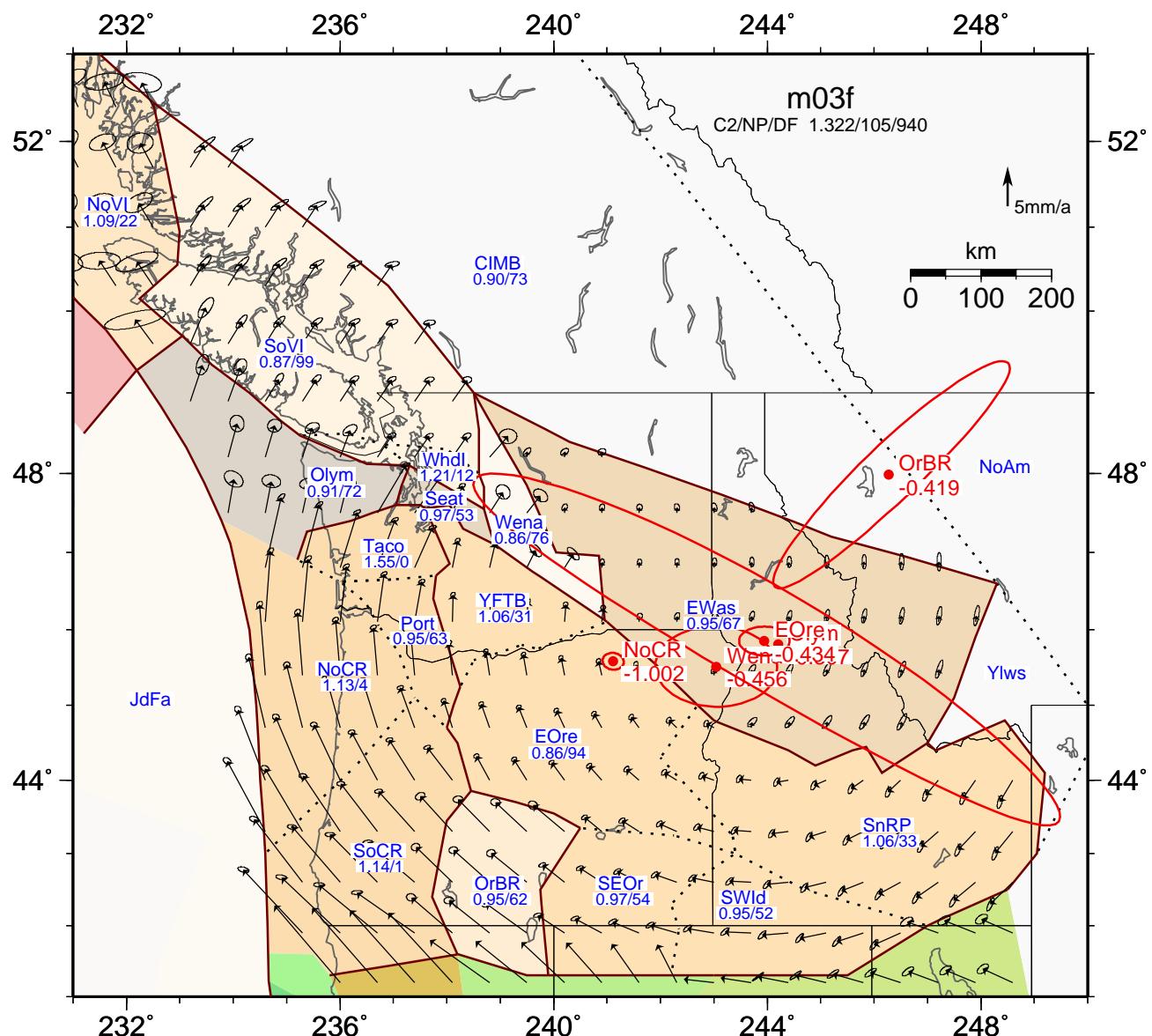
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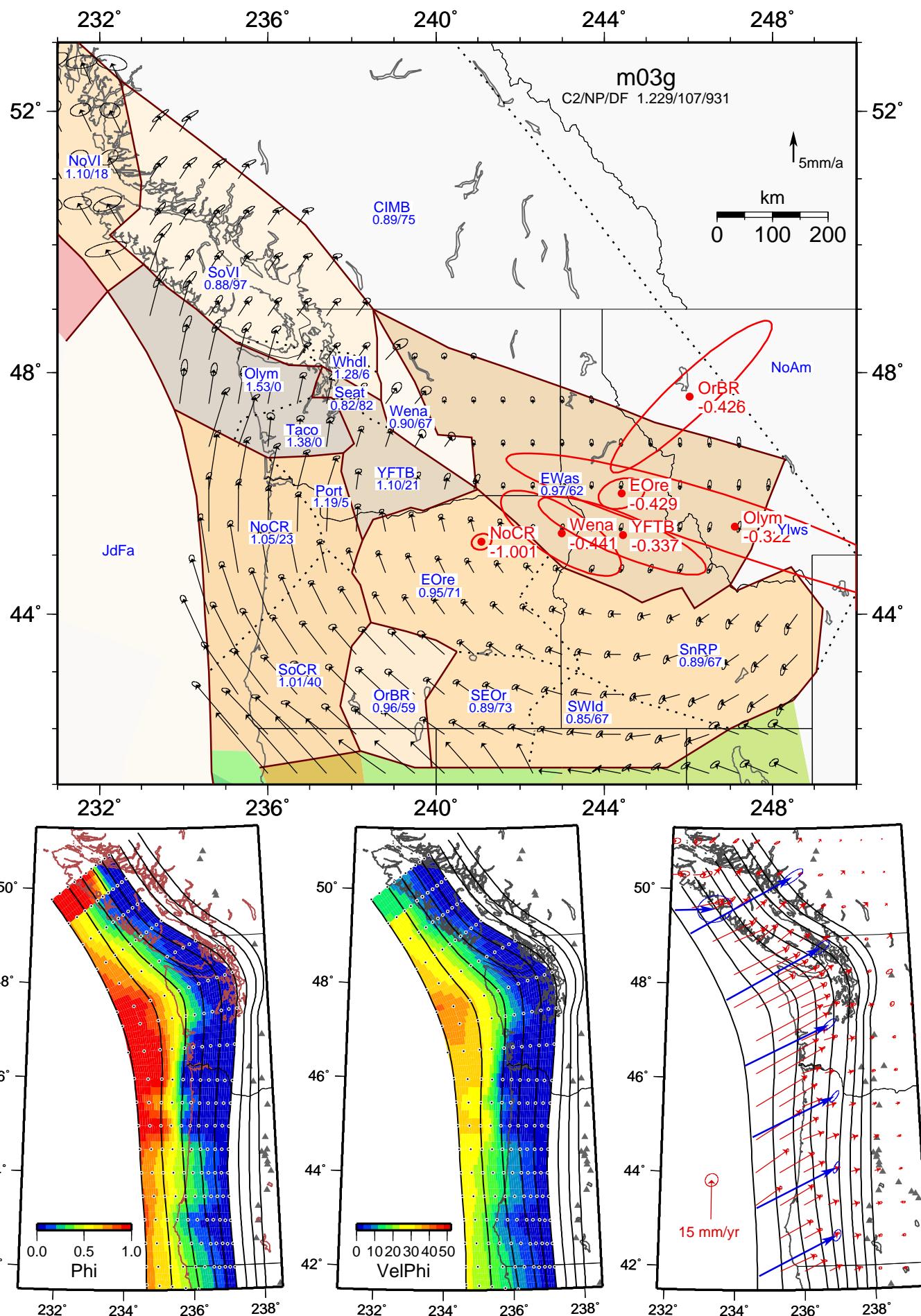
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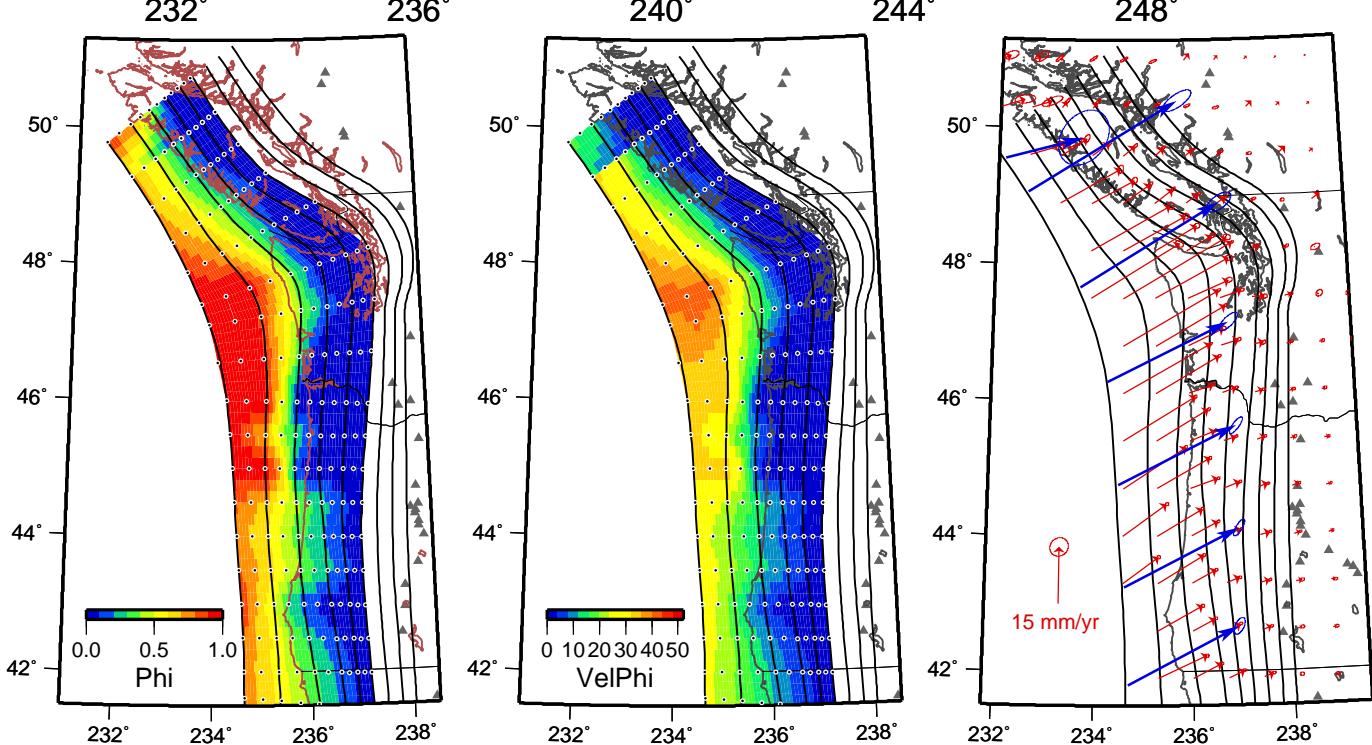
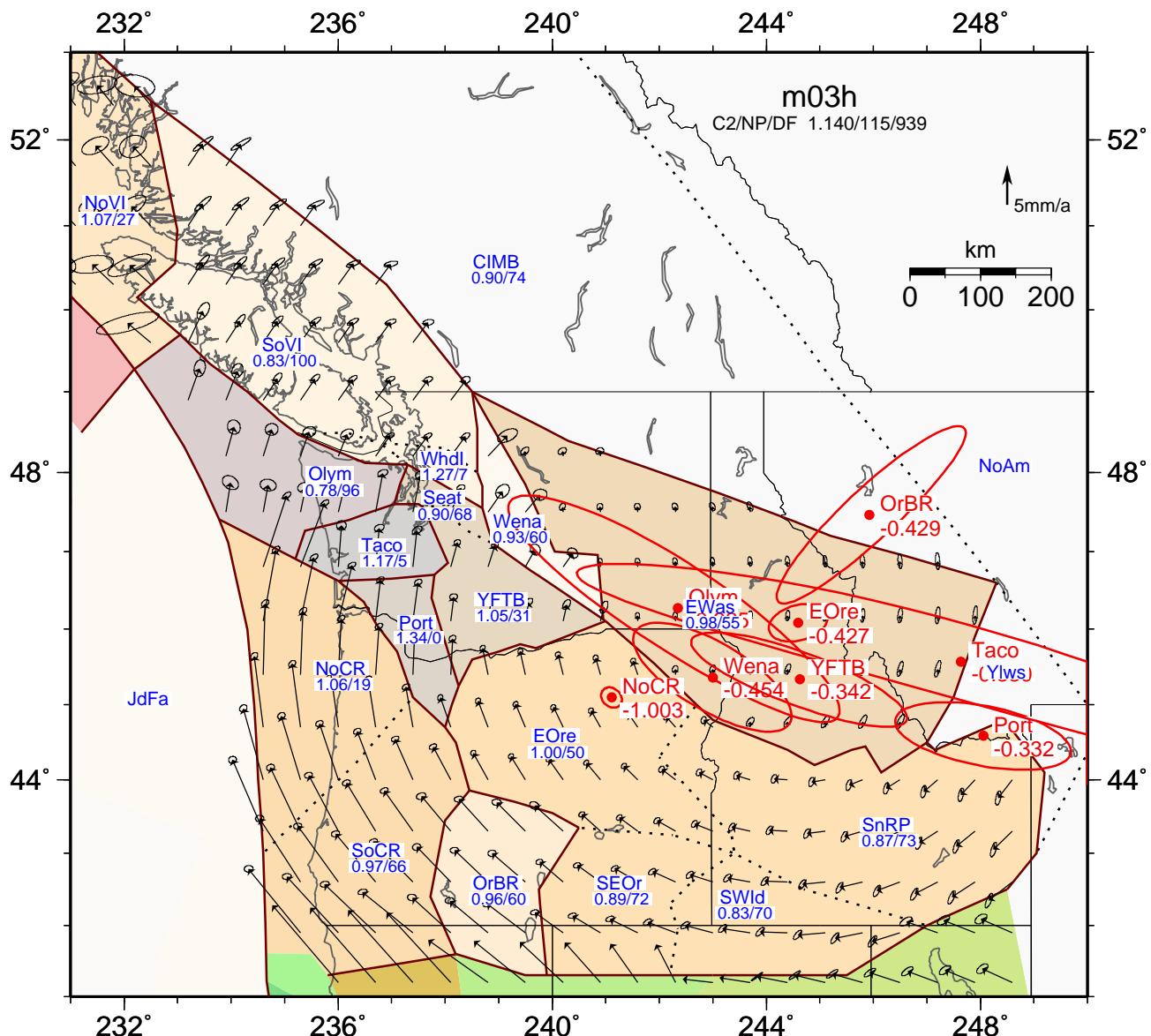
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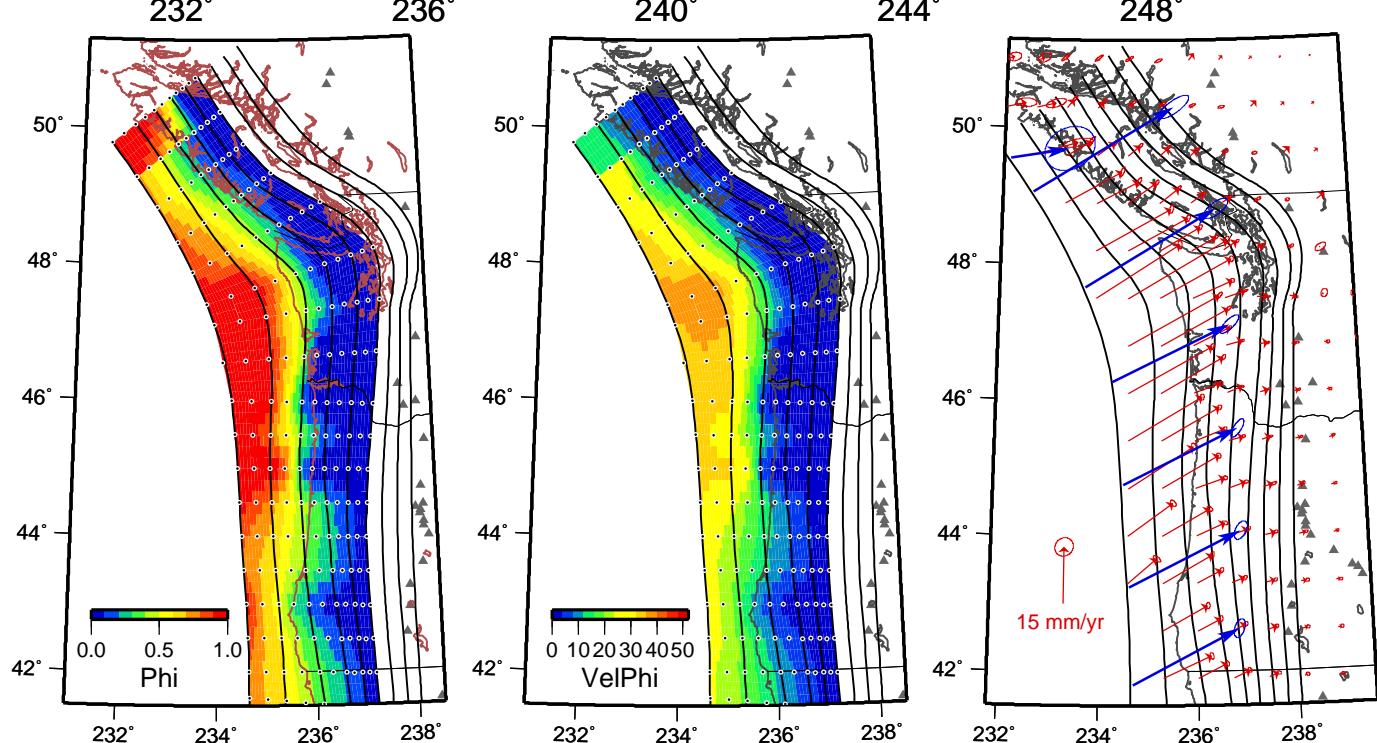
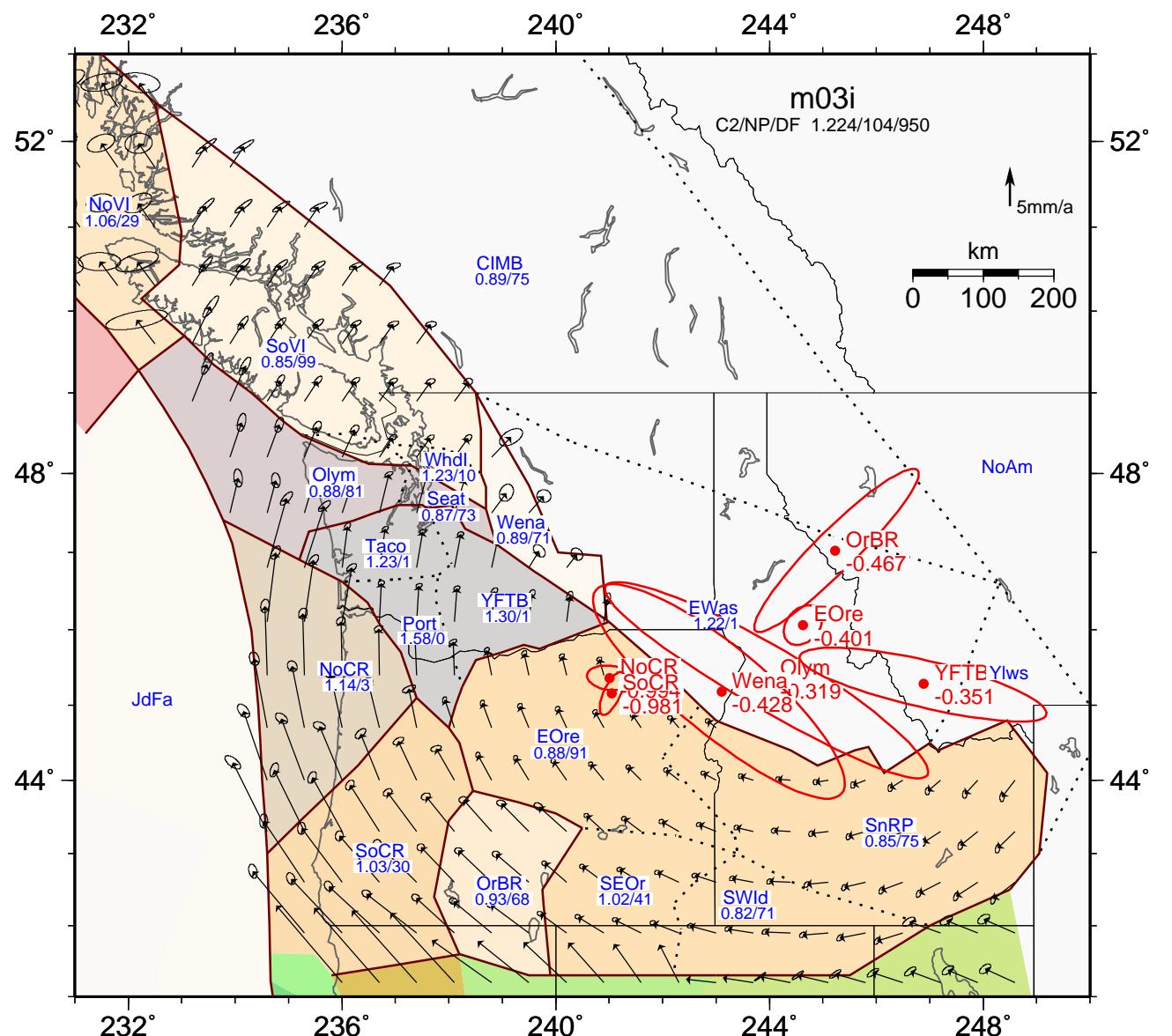
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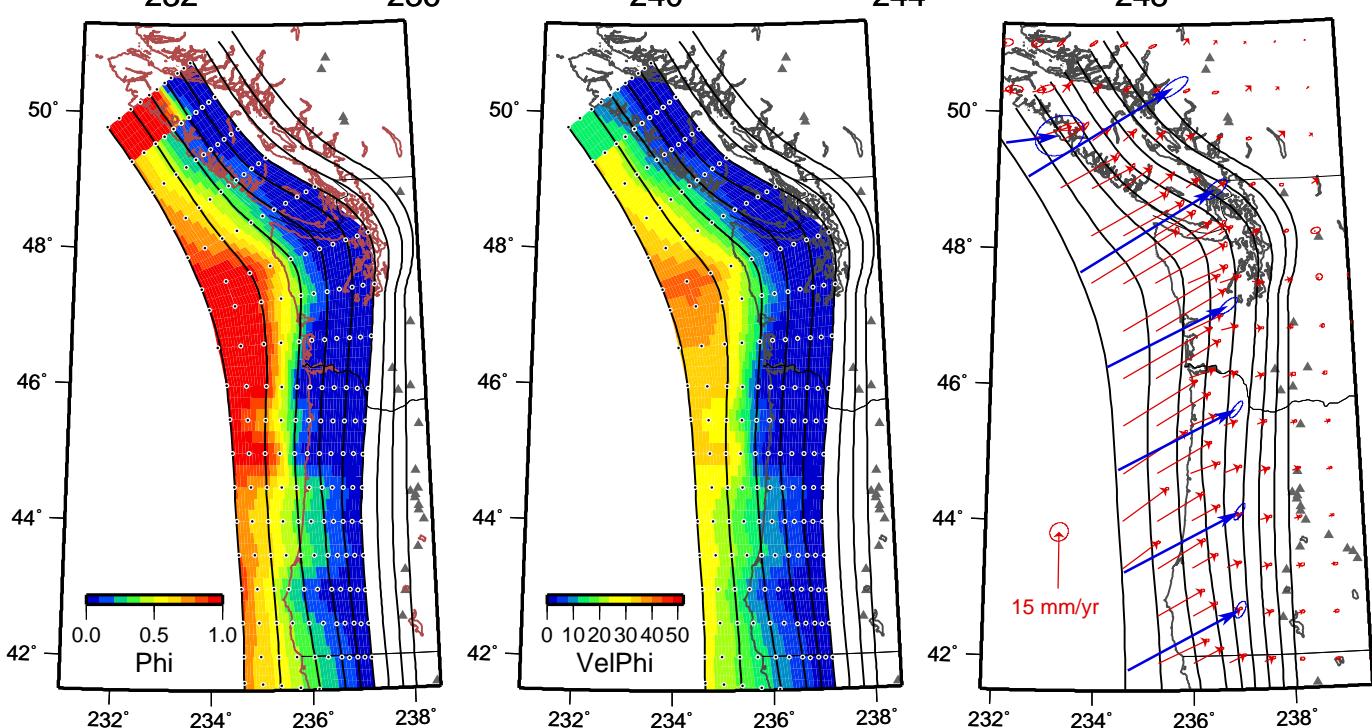
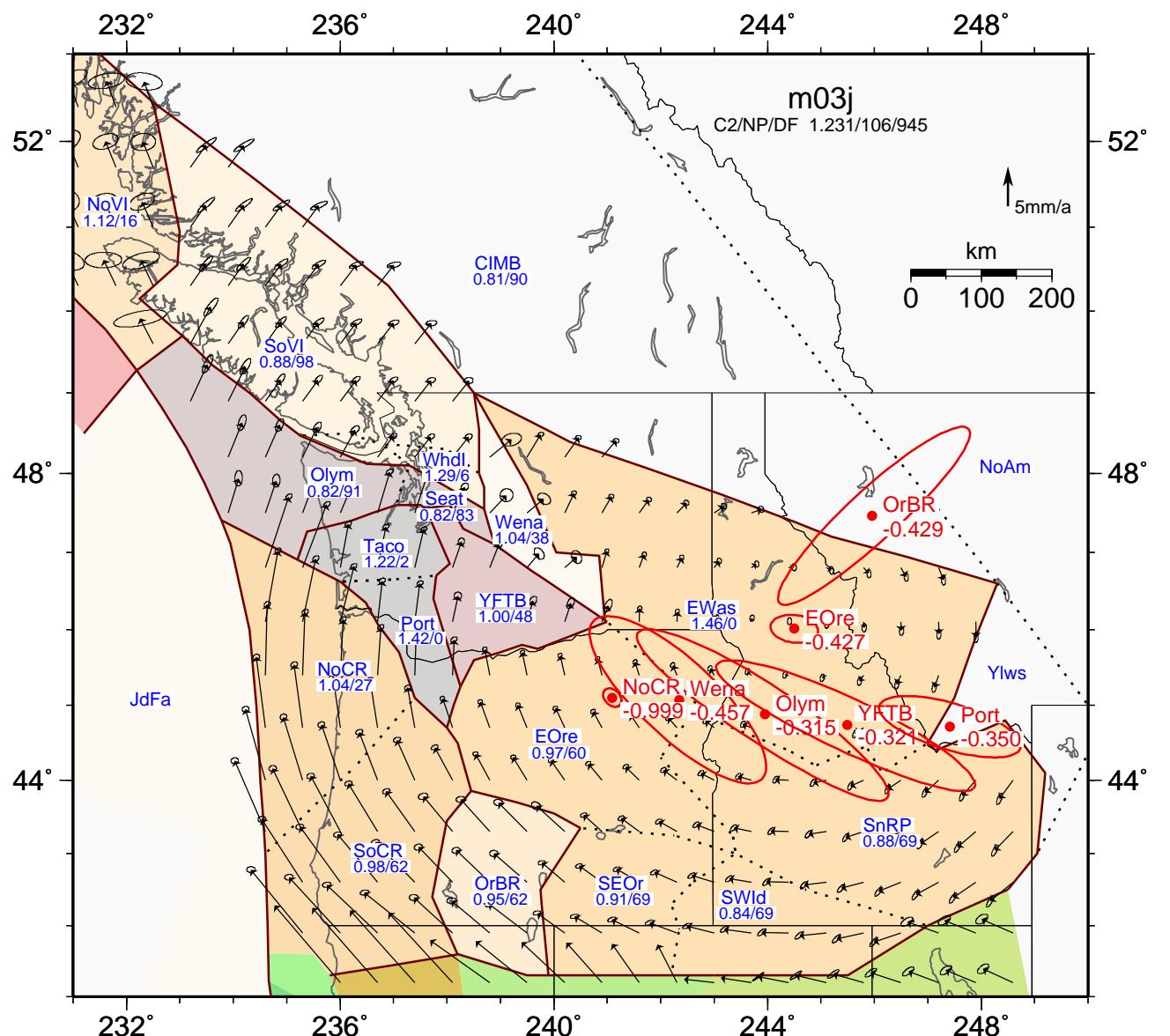
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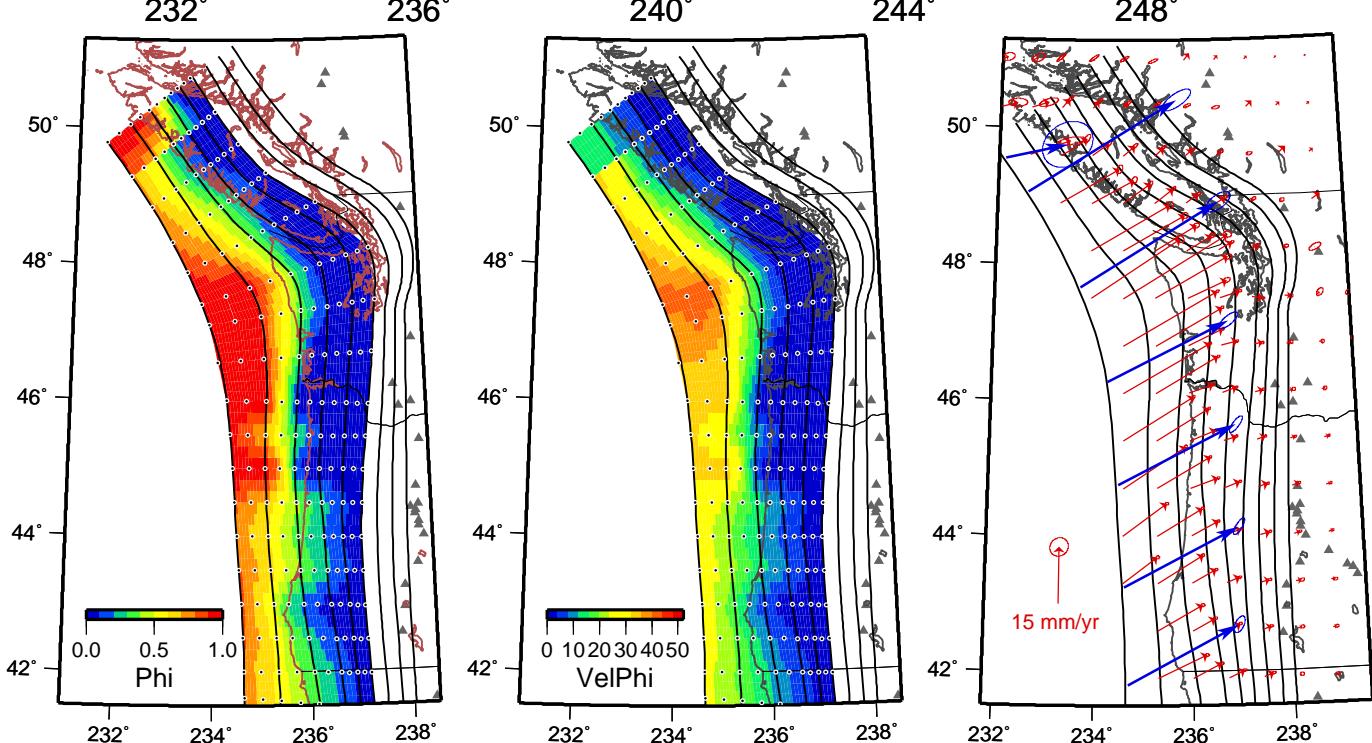
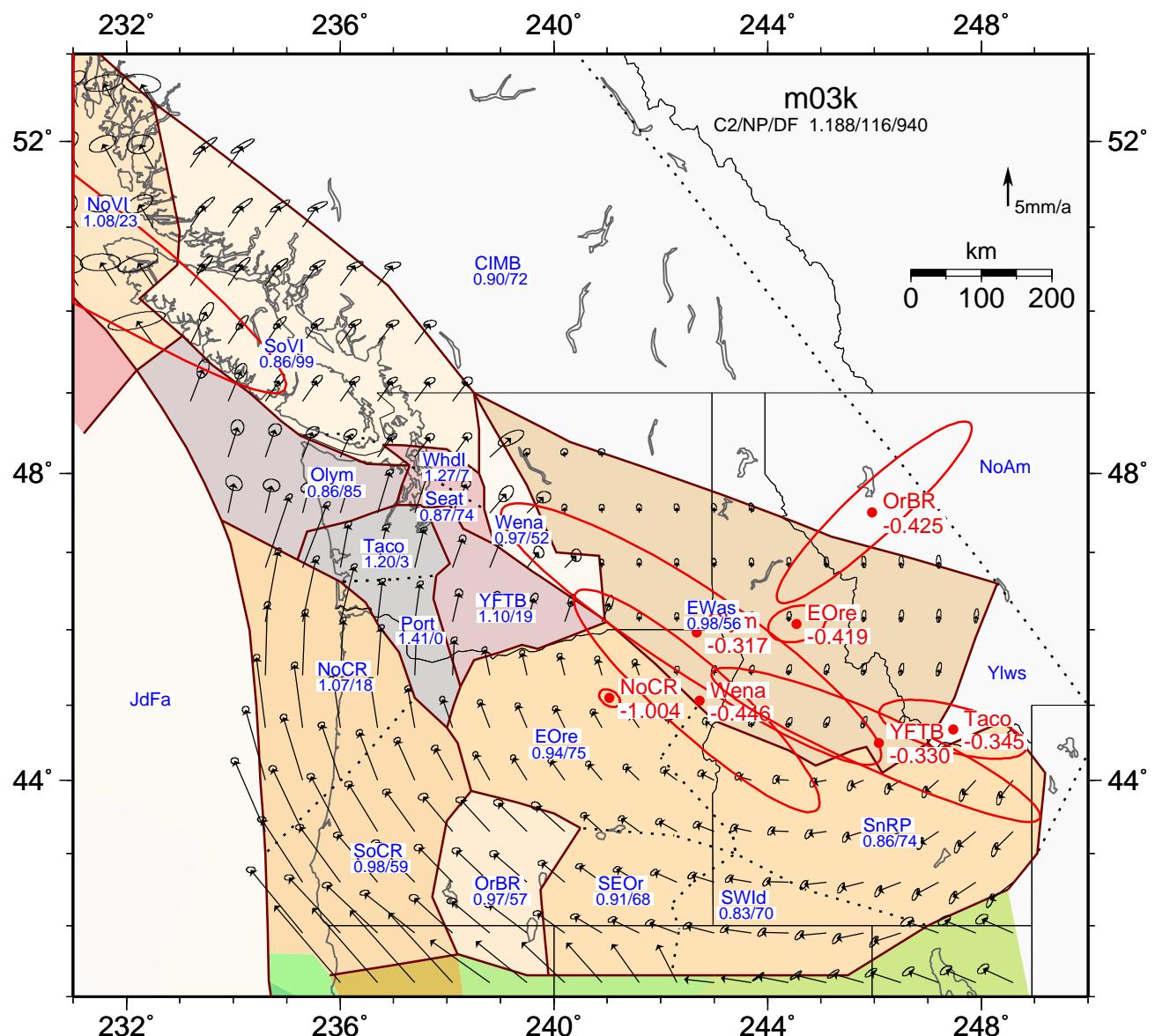
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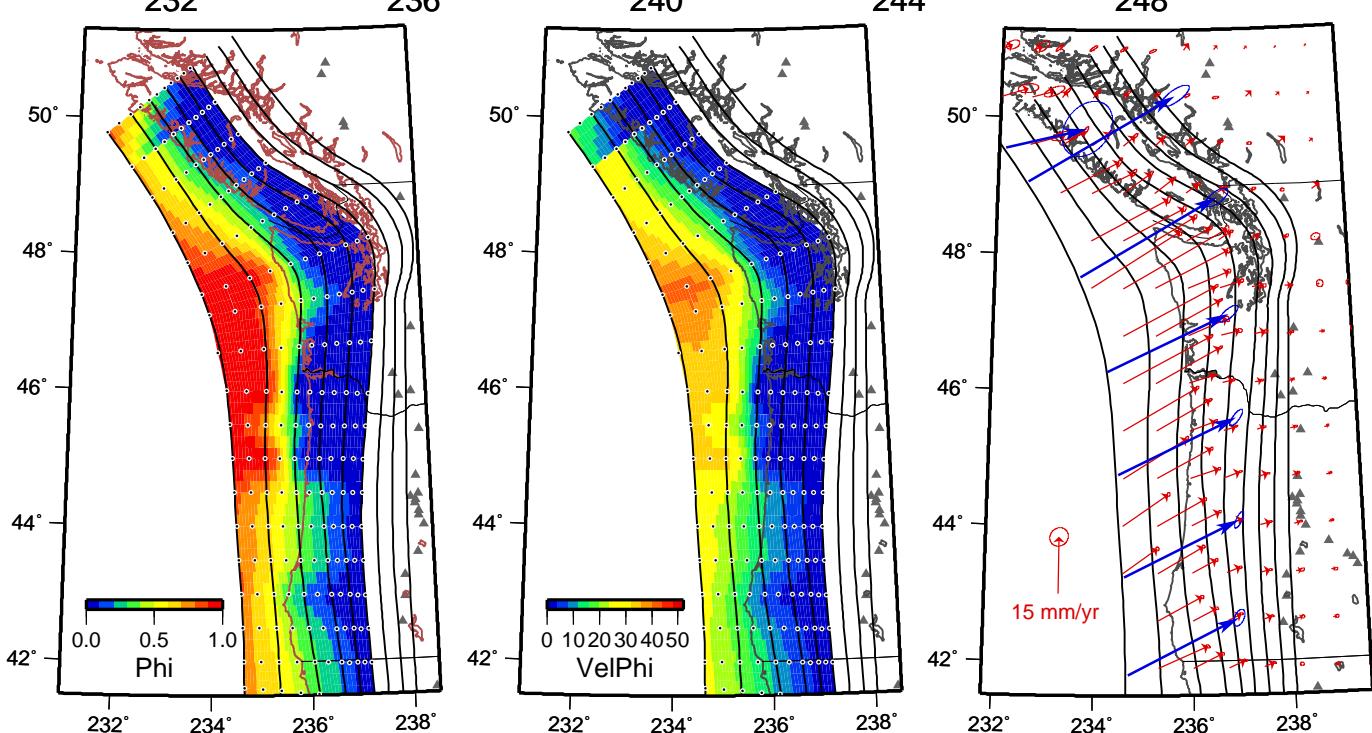
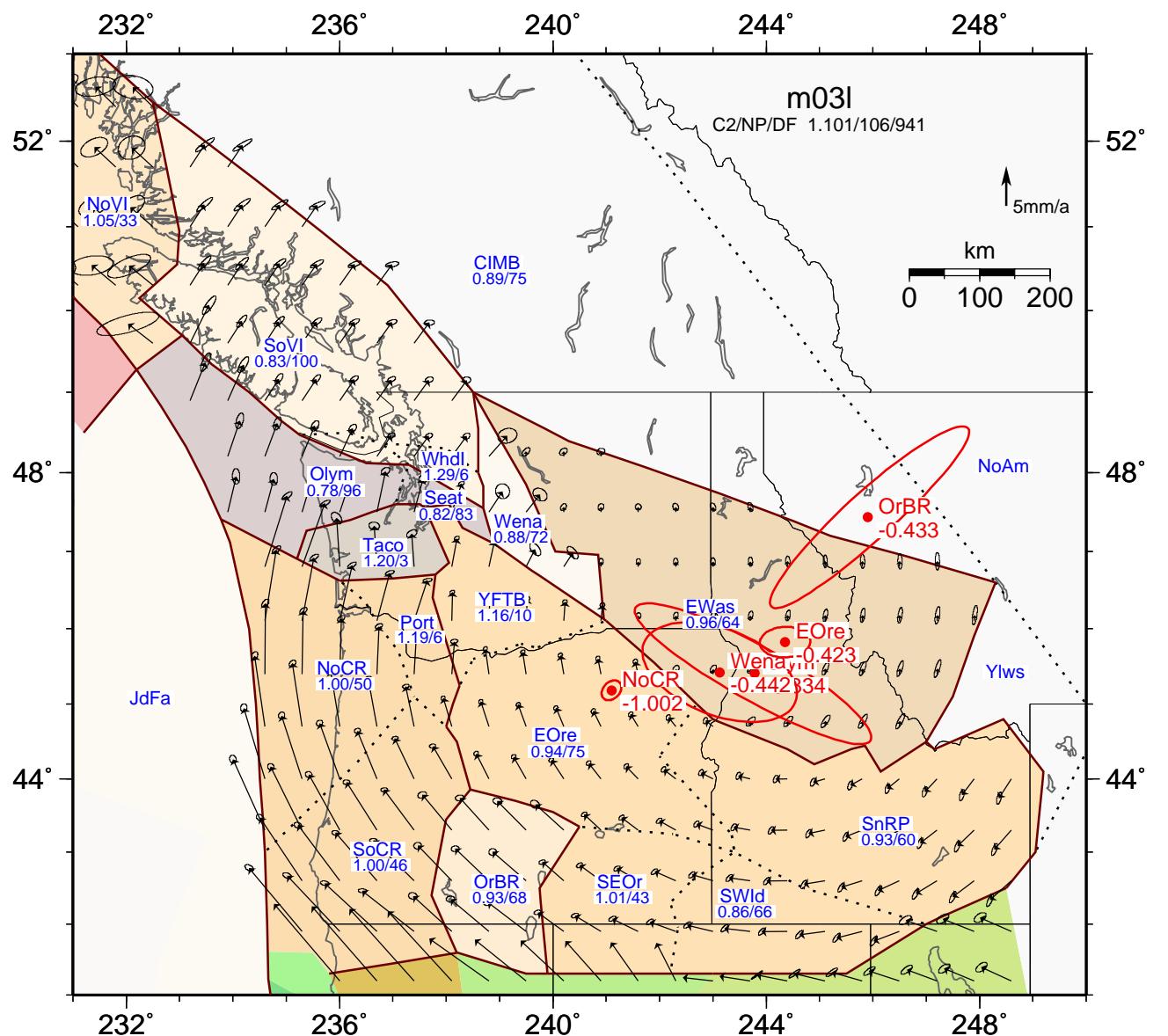
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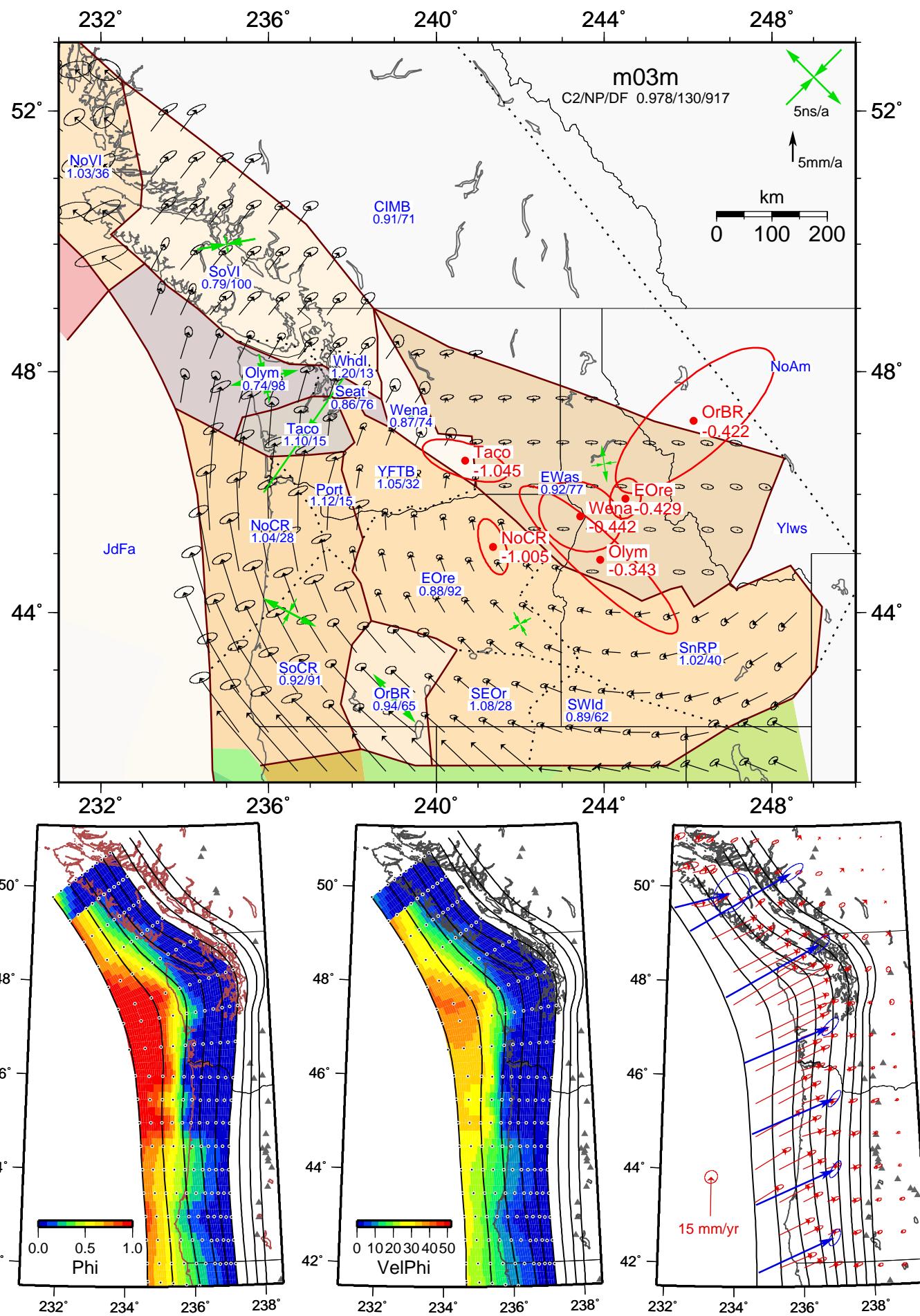
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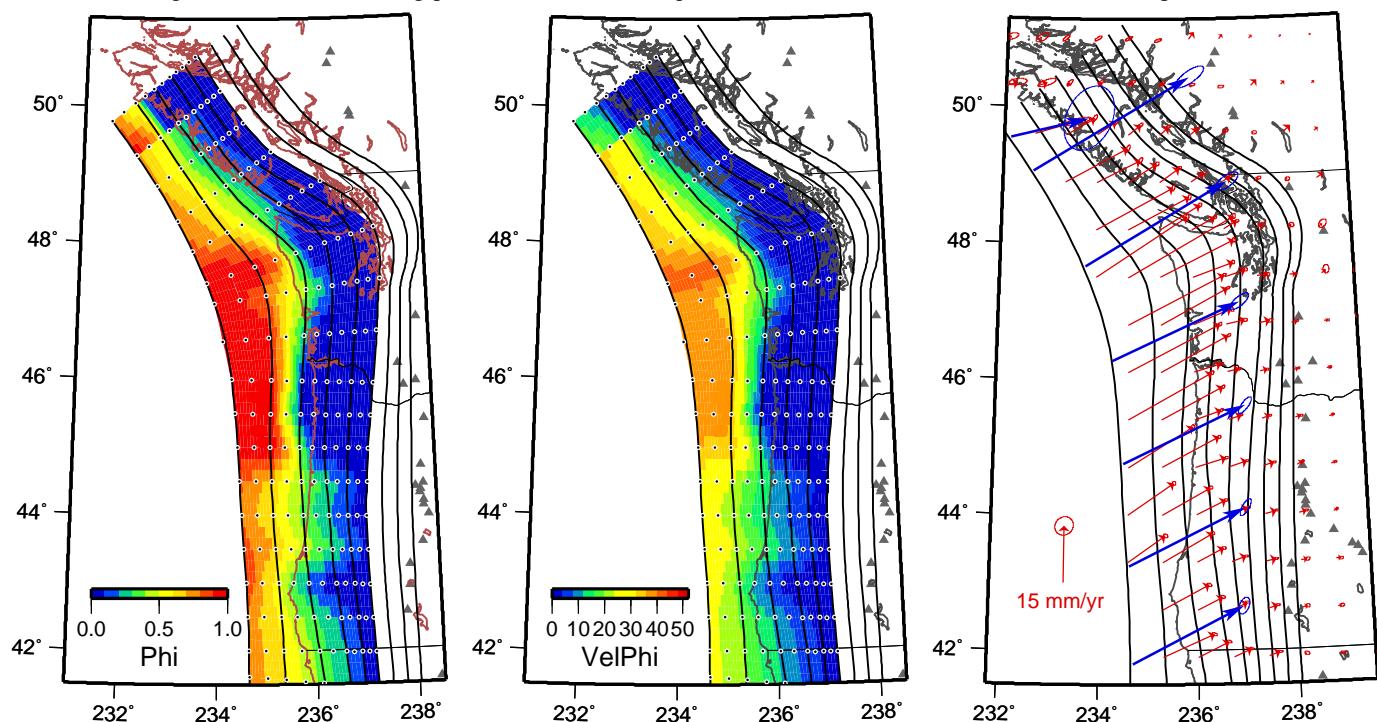
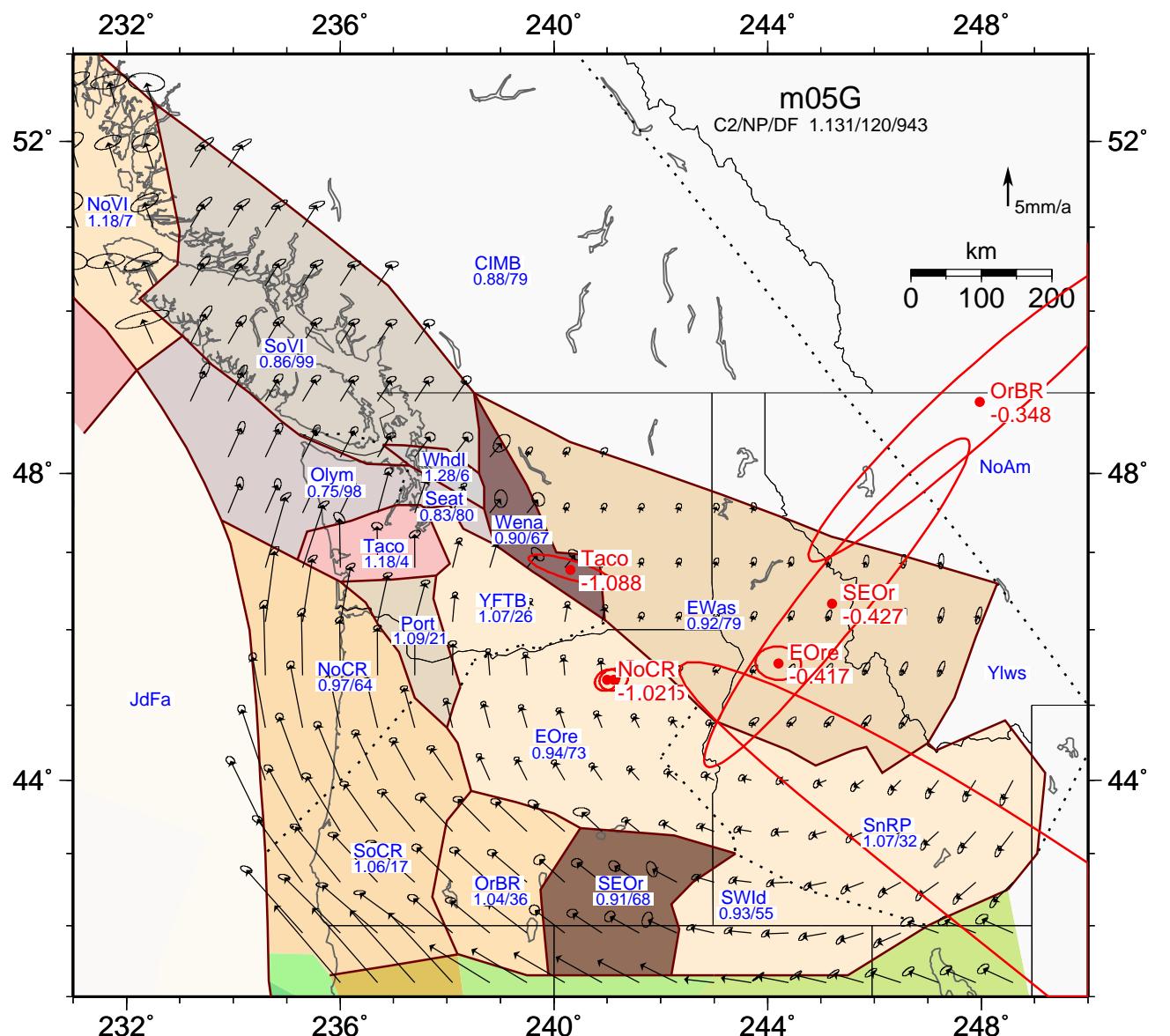
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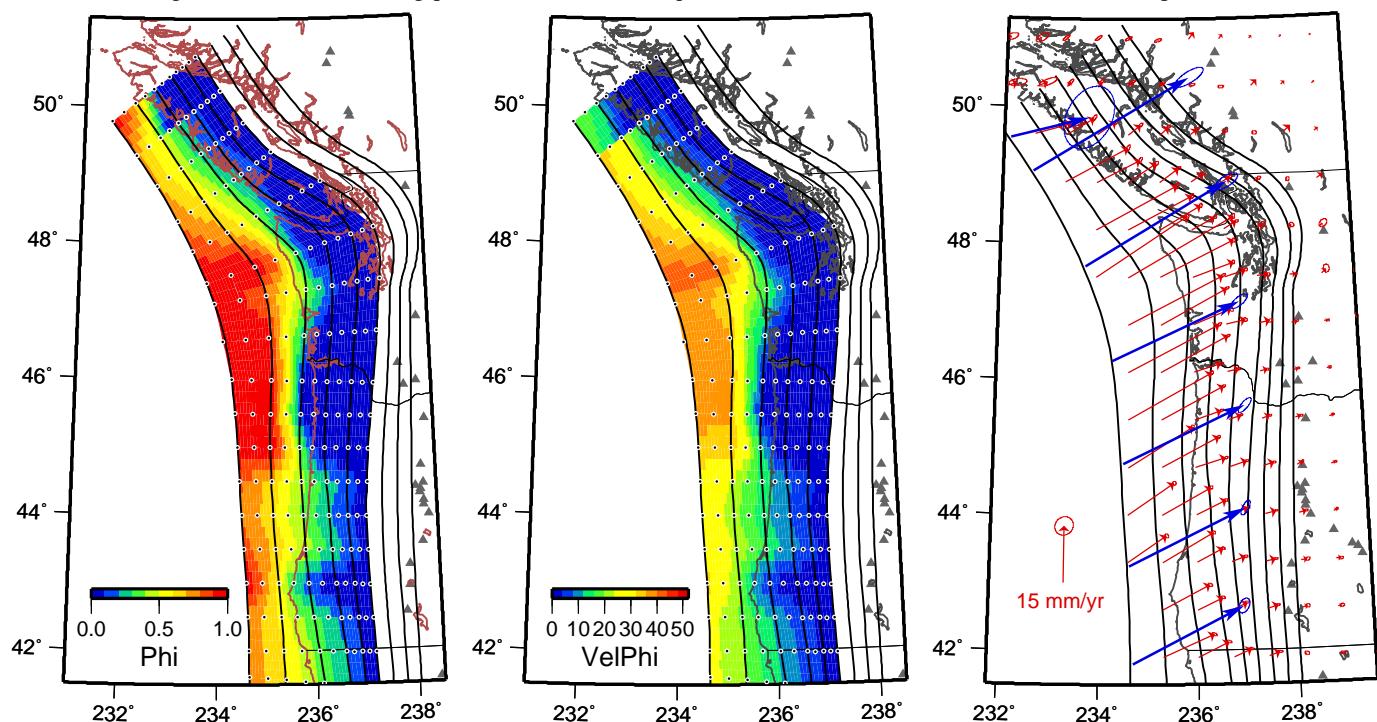
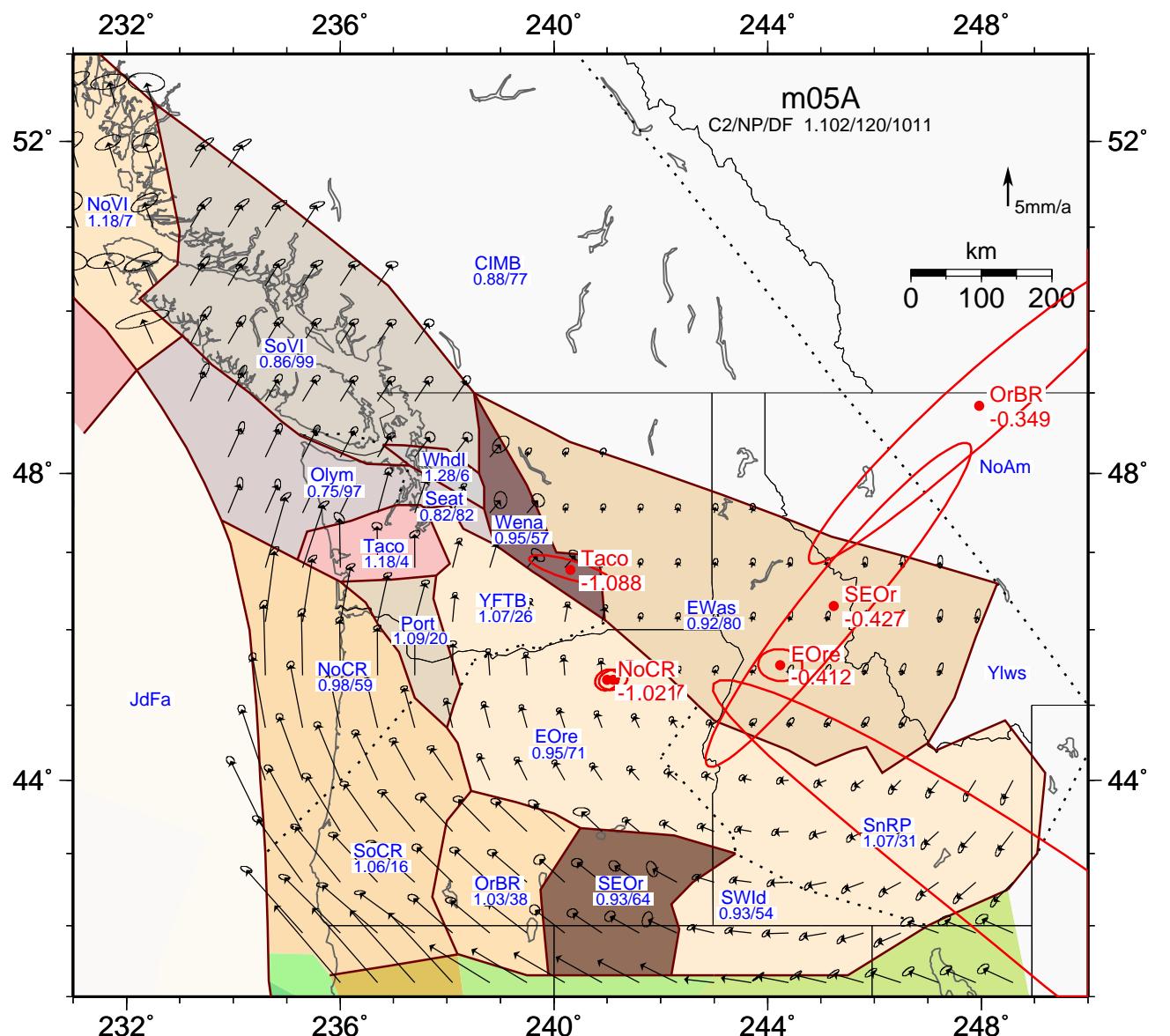
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figA3\_m03m



figA3\_m05G



figA3\_m05A

Supplementary information for:

McCaffrey, R., A. I. Qamar, R. W. King, R. Wells, G. Khazaradze, C. A. Williams, C. W. Stevens, J. J. Vollick, and P. C. Zwick, Fault locking, block rotation and crustal deformation in the Pacific Northwest, Geophysical Journal International, 2007.

Summary of fits to data

N = number of data

SSData = sum of squares of weighted data

SSfit = sum of squares of weighted predicted data

SSres = sum of squares of weighted residuals

Chi2/N = chi-square of weighted residuals

Nrms = normalized rms of weighted residuals

Wrms = weighted rms of residuals

SumWt = sum of weights

Data type	N	SSData	SSfit	SSres	Chi2/N	Nrms	Wrms	SumWt
Tilt rates	11	1.36E+01	8.63E-01	1.13E+01	1.031	1.015	15.66	4.62E-02
Uplift rates	42	8.98E+01	6.07E+01	2.49E+01	0.592	0.769	0.95	2.78E+01
GPS	24	2.30E+01	1.32E+01	1.00E+01	0.419	0.647	0.92	1.20E+01
Tide gauge	18	6.68E+01	4.75E+01	1.48E+01	0.820	0.910	0.97	1.58E+01
Slip rates	62	3.77E+04	3.77E+04	5.33E+01	0.860	0.928	0.67	1.18E+02
Slip Vect. Az.	142	4.41E+04	4.52E+04	2.08E+02	1.462	1.209	18.68	5.95E-01
Strain rates	15	2.16E+01	1.23E+01	6.82E+00	0.454	0.674	13.59	3.69E-02
Rotation rates	57	2.07E+02	1.31E+02	4.36E+01	0.764	0.874	0.30	4.74E+02
GPS	802	6.91E+04	6.85E+04	7.85E+02	0.979	0.989	0.59	2.22E+03

Fits to GPS vectors by domain

Domain	N	SSData	SSfit	SSres	Chi2/N	Nrms	Wrms	SumWt	Q%
WhdI	14	0.412E+03	0.418E+03	0.230E+02	1.646	1.283	0.79	0.365E+02	6.0
AlbH	14	0.589E+03	0.556E+03	0.738E+01	0.527	0.726	0.59	0.213E+02	91.9
EOre	66	0.685E+03	0.697E+03	0.594E+02	0.900	0.949	0.59	0.171E+03	70.4
SEOr	20	0.345E+03	0.332E+03	0.172E+02	0.861	0.928	0.64	0.416E+02	63.8
SWId	8	0.587E+02	0.429E+02	0.695E+01	0.869	0.932	0.75	0.123E+02	54.2
SnRP	14	0.989E+02	0.706E+02	0.161E+02	1.153	1.074	0.60	0.446E+02	30.4
Wena	16	0.198E+03	0.173E+03	0.144E+02	0.901	0.949	0.56	0.463E+02	56.8
YFTB	30	0.715E+03	0.727E+03	0.345E+02	1.150	1.072	0.66	0.801E+02	26.2
Taco	48	0.149E+05	0.147E+05	0.671E+02	1.398	1.182	0.57	0.206E+03	3.6
Port	34	0.311E+04	0.288E+04	0.406E+02	1.193	1.092	0.55	0.135E+03	20.3
EWas	54	0.136E+03	0.850E+02	0.452E+02	0.837	0.915	0.58	0.134E+03	79.7
OrBR	32	0.124E+04	0.119E+04	0.339E+02	1.059	1.029	0.62	0.894E+02	37.6
NoCR	90	0.157E+05	0.162E+05	0.862E+02	0.958	0.979	0.53	0.309E+03	59.3
Olym	30	0.611E+04	0.616E+04	0.170E+02	0.565	0.752	0.44	0.863E+02	97.3
Seat	16	0.461E+03	0.439E+03	0.109E+02	0.680	0.824	0.62	0.282E+02	81.7
SoVI	130	0.799E+04	0.777E+04	0.960E+02	0.738	0.859	0.56	0.309E+03	98.9
NoVI	32	0.319E+03	0.281E+03	0.445E+02	1.391	1.180	1.01	0.438E+02	7.0
CIMB	24	0.370E+02	0.665E+01	0.187E+02	0.777	0.882	0.59	0.527E+02	77.0
SoCR	130	0.160E+05	0.158E+05	0.146E+03	1.124	1.060	0.62	0.376E+03	15.7

Fits to GPS vectors by block (multi-domain)

Pole	N	SSData	SSfit	SSres	Chi2/N	Nrms	Wrms	SumWt	Q%
OrId	118	0.156E+04	0.154E+04	0.117E+03	0.991	0.996	0.62	0.308E+03	50.9
NoVI	32	0.319E+03	0.281E+03	0.445E+02	1.391	1.180	1.01	0.438E+02	7.0
OrBR	32	0.124E+04	0.119E+04	0.339E+02	1.059	1.029	0.62	0.894E+02	37.6
OrCR	220	0.317E+05	0.320E+05	0.232E+03	1.056	1.028	0.58	0.685E+03	27.0
EWas	54	0.136E+03	0.850E+02	0.452E+02	0.837	0.915	0.58	0.134E+03	79.7
Port	34	0.311E+04	0.288E+04	0.406E+02	1.193	1.092	0.55	0.135E+03	20.3
SoVI	144	0.858E+04	0.833E+04	0.103E+03	0.718	0.847	0.56	0.330E+03	99.6
WhdI	14	0.412E+03	0.418E+03	0.230E+02	1.646	1.283	0.79	0.365E+02	6.0
Olym	46	0.657E+04	0.660E+04	0.278E+02	0.605	0.778	0.49	0.114E+03	98.4
Taco	48	0.149E+05	0.147E+05	0.671E+02	1.398	1.182	0.57	0.206E+03	3.6
Wena	16	0.198E+03	0.173E+03	0.144E+02	0.901	0.949	0.56	0.463E+02	56.8
SEOr	20	0.345E+03	0.332E+03	0.172E+02	0.861	0.928	0.64	0.416E+02	63.8

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### Slip rates

Long. = Longitude, E  
 Lat. = Latitude, N  
 Obs. = observed value  
 Sig. = uncertainty (1-standard deviation)  
 Calc. = predicted value of observation  
 Res = residual (observed - calculated)  
 R/S = residual divided by uncertainty  
 Blocks = blocks in relative motion  
 Az. = azimuth at which rate was estimated  
 Vtot = total slip rate between blocks  
 FIXD = fixed block (ref frame for relative motion)  
 MOVG = moving block

Juan de Fuca Ridge spreading rates (in mm/yr) from marine magnetic anomalies  
 (C. DeMets unpublished data)

Long.	Lat.	Obs.	Sig.	Calc.	Res.	R/S	--Blocks-	Az.	Vtot
230.960	47.300	52.60	2.30	56.24	-3.64	-1.58	Paci JdFa	112.0	57.45
230.900	47.160	54.00	1.50	56.00	-2.00	-1.33	Paci JdFa	112.0	57.22
230.690	46.830	54.60	1.50	55.39	-0.79	-0.53	Paci JdFa	112.0	56.66
230.600	46.680	53.60	1.50	55.12	-1.52	-1.01	Paci JdFa	112.0	56.41
230.600	46.650	54.00	1.50	55.08	-1.08	-0.72	Paci JdFa	112.0	56.36
230.530	46.470	54.60	1.50	54.77	-0.17	-0.11	Paci JdFa	112.0	56.06
230.030	45.500	51.00	1.50	53.03	-2.03	-1.35	Paci JdFa	112.0	54.42
229.920	45.340	50.00	1.50	52.72	-2.72	-1.81	Paci JdFa	112.0	54.15
229.850	45.160	52.00	1.50	52.41	-0.41	-0.27	Paci JdFa	112.0	53.84
229.820	45.100	53.80	1.50	52.30	1.50	1.00	Paci JdFa	112.0	53.74
229.800	45.000	51.80	1.50	52.14	-0.34	-0.22	Paci JdFa	112.0	53.58
229.790	44.980	51.40	1.50	52.10	-0.70	-0.47	Paci JdFa	112.0	53.54
229.740	44.890	51.20	1.50	51.93	-0.73	-0.49	Paci JdFa	112.0	53.39
229.780	44.890	50.40	1.50	51.96	-1.56	-1.04	Paci JdFa	112.0	53.40
229.740	44.880	52.80	1.50	51.92	0.88	0.59	Paci JdFa	112.0	53.37
229.710	44.860	53.00	1.50	51.87	1.13	0.75	Paci JdFa	112.0	53.33
229.710	44.850	53.20	1.50	51.86	1.34	0.90	Paci JdFa	112.0	53.32
229.660	44.750	53.60	1.50	51.67	1.93	1.28	Paci JdFa	112.0	53.15
229.660	44.750	53.40	1.50	51.67	1.73	1.15	Paci JdFa	112.0	53.15
229.630	44.670	52.60	1.50	51.54	1.06	0.71	Paci JdFa	112.0	53.01
229.580	44.580	52.60	1.50	51.37	1.23	0.82	Paci JdFa	112.0	52.86
229.520	44.510	54.20	1.50	51.23	2.97	1.98	Paci JdFa	112.0	52.73
233.330	42.870	51.00	1.50	50.82	0.18	0.12	Paci JdFa	112.0	51.06
233.300	42.810	52.20	1.50	50.71	1.49	0.99	Paci JdFa	112.0	50.96
233.260	42.780	50.00	2.30	50.65	-0.65	-0.28	Paci JdFa	112.0	50.89
233.220	42.670	49.80	2.30	50.46	-0.66	-0.29	Paci JdFa	112.0	50.70
233.180	42.600	51.60	1.50	50.33	1.27	0.85	Paci JdFa	112.0	50.58
233.170	42.530	49.20	1.50	50.22	-1.02	-0.68	Paci JdFa	112.0	50.46
233.330	42.870	51.00	1.51	50.96	0.04	0.02	Paci JdFa	110.0	51.06
233.300	42.810	52.20	1.51	50.86	1.34	0.89	Paci JdFa	110.0	50.96
233.260	42.780	50.00	2.26	50.79	-0.79	-0.35	Paci JdFa	110.0	50.89
233.220	42.670	49.80	2.26	50.60	-0.80	-0.35	Paci JdFa	110.0	50.70

233.180	42.600	51.60	1.51	50.47	1.13	0.75	Paci	JdFa	110.0	50.58
233.170	42.530	49.20	1.51	50.36	-1.16	-0.77	Paci	JdFa	110.0	50.46

Miscellaneous fault slip rates (mm/yr)

Long.	Lat.	Obs.	Sig.	Calc.	Res.	R/S	--Blocks--	Az.	Vtot	Source
238.000	47.800	0.35	0.50	0.38	-0.03	-0.06	Seat WhdI	20.0	0.50	RH_SWIF
237.400	47.600	1.00	0.50	1.08	-0.08	-0.17	Seat Taco	1.0	1.08	RH_Seattle_ft (Seattle fault between 0.9 and 1.0 mm/yr; ten Brink et al, 2002, J al, GSAB 1999)
238.100	41.500	1.00	0.50	2.30	-1.30	-2.60	SoCR OrBR	240.0	2.49	PW_LassenPk-MedLk
237.200	48.200	0.35	0.50	0.46	-0.11	-0.22	Seat WhdI	30.0	0.59	AF_S_Whidbey
237.600	48.400	0.10	0.50	0.03	0.07	0.14	SoVI WhdI	10.0	0.20	AF_DevilsMtn
242.200	45.400	0.22	0.50	0.07	0.15	0.30	EOre EWas	45.0	0.50	AF_GrdRnd_Wall
241.160	46.040	0.24	0.50	0.47	-0.23	-0.46	EOre EWas	310.0	1.00	AF_Wallula
237.800	47.500	0.84	0.50	0.49	0.35	0.71	YFTB Seat	10.0	0.60	AF_E_Seattle_ft
237.300	47.600	0.84	0.50	1.21	-0.37	-0.74	Taco Seat	1.0	1.21	AF_W_Seattle_ft
237.180	45.090	0.04	0.50	0.04	0.00	0.00	NoCR Port	50.0	0.08	AF_Mount_Angel
239.850	42.600	0.50	0.50	1.32	-0.82	-1.64	OrBR SEOOr	290.0	1.32	AF_AbertRim
238.000	42.400	0.36	0.50	1.28	-0.92	-1.85	OrBR SoCR	270.0	1.31	AF_Klamath_W_E
237.900	43.000	0.49	0.50	0.50	-0.01	-0.01	SoCR OrBR	270.0	0.52	AF_Chemult_W_E
242.300	41.900	0.13	0.50	0.76	-0.63	-1.26	SEOr SWId	270.0	0.97	AF_St_Rosa
239.100	43.700	0.29	0.50	0.76	-0.47	-0.94	EOre OrBR	45.0	2.37	AF_Paulina_Marsh
237.800	42.200	0.28	0.50	1.55	-1.27	-2.53	SoCR OrBR	270.0	1.55	AF_Sky_Lakes
239.300	43.400	0.51	0.50	0.71	-0.20	-0.41	EOre OrBR	45.0	2.35	AF_SE_Newberry
239.800	41.500	1.30	0.50	0.94	0.36	0.72	OrBR SEOOr	260.0	1.16	AF_Surprise_Valley

Long.	Lat.	Min	Max	Sig	Calc	Res	R/S	-Blocks--	Az.	Vtot	Source
235.400	48.400	0.60	3.00	0.60	0.69	0.00	0.00	AlbH Olym	10.0	0.69	RW_JdF_Straits (JdF slip > 0.6 mm/yr; Johnson et al, USGS PP 2003 )
236.920	46.640	0.15	2.00	0.60	0.68	0.00	0.00	Port Taco	0.1	2.79	RW_Doty (R. Wells, USGS OF Map 1981, I-Map 1989 and field work 1991-93)
236.390	46.320	0.16	2.00	0.60	0.15	0.01	0.01	Port NoCR	48.0	0.16	RW_Nemah (ibid)
236.720	46.050	0.16	2.00	0.60	0.11	0.05	0.09	Port NoCR	0.1	0.13	RW_Columbia_R_Ft (ibid)
237.420	45.110	0.50	2.00	0.60	0.06	0.44	0.73	Port NoCR	10.0	0.06	RW_Portland_Hills (ibid)
235.800	47.300	2.20	3.30	0.60	3.11	0.00	0.00	Olym Taco	335.0	3.20	McCrory (2002)
239.800	41.500	0.50	1.00	0.50	0.94	0.00	0.00	OrBR SEOOr	260.0	1.16	PW_Surprise_Valley
239.850	42.600	0.50	1.00	0.50	1.32	-0.32	-0.64	OrBR SEOOr	290.0	1.32	PW_AbertRim
239.100	43.700	0.10	0.50	0.50	0.76	-0.26	-0.52	EOre OrBR	45.0	2.37	PW_Viewpoint_Crack
242.200	42.300	0.50	1.00	0.50	0.84	0.00	0.00	SEOOr SWId	280.0	0.96	PW_SR-Quinn-Owyhee

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Slip Vector Azimuths (in degrees clockwise from North)

Geologic slip vectors

Lon	Lat	Obs	Sig	Calc	Res	R/S	FIXD	MOVG	Source
236.920	46.640	19.0	20.0	75.9	-56.9	-2.73	Taco	Port	RW_Doty (R. Wells, USGS OF Map 1981, I-Map 1989 and field work 1991-93)
236.390	46.320	26.0	10.0	37.2	-11.2	-1.11	Port	NoCR	RW_Nemah (ibid)
236.720	46.050	25.0	10.0	34.4	-9.4	-0.94	Port	NoCR	RW_Columbia_R_Ft (ibid)
237.420	45.110	10.0	20.0	-8.2	18.2	0.91	Port	NoCR	RW_Portland_Hills (ibid)
235.800	47.300	335.0	20.0	348.4	-13.4	-0.67	Olym	Taco	McCrory (2002)
240.780	46.200	310.0	20.0	295.3	14.7	0.73	Wena	YFTB	PW_Milton-Fwater
237.500	47.500	345.0	10.0	347.0	-2.0	-0.20	Seat	Taco	RW_Seattle_ft (Toe Jam Hill Ft; Nelson et al GSAB 2003 and R. Wells, field data 1998, 1999)
237.510	47.500	340.0	20.0	346.8	-6.8	-0.34	Seat	Taco	RW_Seattle_ft (ibid)
238.000	47.500	10.0	15.0	-30.2	40.2	2.62	Seat	YFTB	RW_Vasa (Vasa Park, R. Wells, P. Haeussler and B. Sherrod, 2001; R. Wells and B. Sherrod, 2002)
237.400	47.510	320.0	20.0	349.4	-29.4	-1.45	Seat	Taco	RW_Illahee (R. Wells, field work, 2000)
237.400	47.510	348.0	20.0	349.4	-1.4	-0.07	Seat	Taco	RW_Illahee (ibid)
238.600	44.300	275.0	10.0	280.2	-5.2	-0.52	EOre	SoCR	RW_Green_R (Green Ridge: R. Wells, field work, 2000)
238.600	44.300	280.0	10.0	280.2	-0.2	-0.02	EOre	SoCR	RW_Green_R (ibid)
237.300	48.310	293.0	20.0	291.5	1.5	0.08	WhdI	SoVI	RW_Utsalady (S. Johnson et al, BSSA 2005)
236.900	47.350	351.0	20.0	343.3	7.7	0.38	Olym	Taco	RW_Saddle_Mt
236.700	47.400	47.0	99.0	-12.1	59.1	0.57	Olym	Taco	RW_Canyon_R (Canyon River; R. Wells, T. Walsh, J. Logan, field work, 2004)
238.500	41.400	265.0	15.0	254.5	10.5	0.70	OrBR	SoCR	RW_Medicine_Lake (R. Wells, Z. Venera, field work 2005)

Earthquake - derived slip vectors

Lon	Lat	Obs	Sig	Calc	Res	R/S	FIXD	MOVG	Source
237.390	45.030	327.0	20.0	346.0	-19.0	-0.95	Port	NoCR	OSU_930325_SctMls
237.260	45.640	25.0	20.0	27.2	-2.2	-0.11	Port	NoCR	PNSN_030725
237.250	45.650	50.0	20.0	27.5	22.5	1.12	Port	NoCR	PNSN_040226
237.240	45.640	30.0	20.0	26.8	3.2	0.16	Port	NoCR	PNSN_030424
237.310	45.150	3.0	20.0	-4.6	7.6	0.38	Port	NoCR	OSU_950208
237.970	42.320	241.0	20.0	261.2	-20.2	-1.01	OrBR	SoCR	OSU_930921a_KlFls
237.940	42.360	261.0	20.0	262.1	-1.1	-0.06	OrBR	SoCR	OSU_930921b_KlFls
237.990	42.290	241.0	20.0	260.7	-19.7	-0.98	OrBR	SoCR	OSU_931204_KlFls
237.430	48.070	-45.0	20.0	-11.9	-33.1	-1.63	WhdI	Seat	PNSN_050203
237.640	47.390	21.0	20.0	-29.1	50.1	2.42	Seat	YFTB	OSU_950129_PtRobnsn
238.220	47.450	6.0	20.0	-38.3	44.3	2.16	Seat	YFTB	OSU_960121
237.700	47.550	14.0	20.0	-22.5	36.5	1.80	Seat	YFTB	OSU_970210_Bremerton
237.430	47.600	5.0	20.0	-1.7	6.7	0.34	Seat	Taco	OSU_970623_Bremerton
239.540	46.770	307.0	20.0	337.5	-30.5	-1.51	Wena	YFTB	OSU_970101
237.760	46.350	350.0	15.0	417.4	-67.4	-4.24	YFTB	Port	CMT_810214_MSH_ss
237.880	46.020	335.0	20.0	411.9	-76.9	-3.56	YFTB	Port	Ludwin_610917
235.510	44.330	88.0	15.0	65.5	22.5	1.49	NoCR	JdFa	CMT_040712
235.700	44.660	66.0	20.0	66.0	0.0	0.00	NoCR	JdFa	UCB_040819
239.850	42.040	298.0	20.0	294.6	3.4	0.17	SEOr	OrBR	UCB_040630
240.200	42.300	271.0	15.0	295.7	-24.7	-1.64	SEOr	OrBR	Patton_680530
240.200	42.200	266.0	15.0	296.0	-30.0	-1.98	SEOr	OrBR	Patton_680603
247.450	45.400	269.0	15.0	376.8	-107.8	-6.17	Ylws	EWas	CMT_050726
245.970	44.450	258.0	15.0	212.5	45.5	2.96	EWas	SnRP	CMT_840822
245.850	44.440	224.0	15.0	213.6	10.4	0.69	EWas	SnRP	CMT_840908
245.970	44.310	227.0	15.0	215.0	12.0	0.80	EWas	SnRP	CMT_831029
246.090	44.070	267.0	15.0	218.1	48.9	3.16	EWas	SnRP	CMT_831028_Borah_Pk
232.958	49.583	95.0	15.0	75.9	19.1	1.27	NoVI	Olym	BN_9401030126

232.897	49.791	74.0	15.0	75.9	-1.9	-0.13	NoVI	Olym	BN_9603180801
232.840	49.630	80.0	15.0	75.8	4.2	0.28	NoVI	Olym	BN_9806271020
233.500	49.800	68.0	30.0	76.5	-8.5	-0.28	NoVI	Olym	Rogers_571216
232.820	49.450	64.0	20.0	75.8	-11.8	-0.59	NoVI	Olym	Rogers_720705
234.460	49.180	-20.0	15.0	17.0	-37.0	-2.42	SoVI	Olym	BN_9411200122
234.000	49.300	-10.0	20.0	16.9	-26.9	-1.33	SoVI	Olym	Rogers_750331
235.900	51.000	181.0	20.0	213.6	-32.6	-1.61	SoVI	CIMB	Rogers_681101
230.690	48.890	306.0	15.0	313.6	-7.6	-0.50	Expl	Paci	CMT_010111
230.710	48.800	307.0	15.0	313.1	-6.1	-0.40	Expl	Paci	CMT_761220
230.790	48.740	325.0	15.0	312.6	12.4	0.83	Expl	Paci	CMT_920102
230.810	48.850	306.0	15.0	313.0	-7.0	-0.47	Expl	Paci	CMT_031219
230.650	49.102	315.0	15.0	314.7	0.3	0.02	Expl	Paci	BN_9402120704
229.810	50.302	320.0	15.0	323.3	-3.3	-0.22	Expl	Paci	BN_9404122114
230.855	48.677	320.0	15.0	312.1	7.9	0.53	Expl	Paci	BN_9404270030
229.935	50.472	317.0	15.0	324.1	-7.1	-0.47	Expl	Paci	BN_9407150502
229.570	50.398	321.0	15.0	324.4	-3.4	-0.23	Expl	Paci	BN_9408211305
229.714	50.515	323.0	15.0	324.8	-1.8	-0.12	Expl	Paci	BN_9411021352
229.263	51.045	332.0	15.0	329.0	3.0	0.20	Expl	Paci	BN_9501090650
229.904	49.971	324.0	15.0	321.2	2.8	0.19	Expl	Paci	BN_9501160701
229.880	50.026	334.0	15.0	321.5	12.5	0.83	Expl	Paci	BN_9501170813
229.812	50.004	334.0	15.0	321.6	12.4	0.83	Expl	Paci	BN_9501171442
230.035	50.503	320.0	15.0	324.1	-4.1	-0.27	Expl	Paci	BN_9503081630
229.781	50.457	313.0	15.0	324.3	-11.3	-0.75	Expl	Paci	BN_9504230929
229.317	50.931	328.0	15.0	328.2	-0.2	-0.01	Expl	Paci	BN_9505310338
229.253	50.919	332.0	15.0	328.2	3.8	0.25	Expl	Paci	BN_9506212024
228.800	51.143	330.0	15.0	330.4	-0.4	-0.03	Expl	Paci	BN_9509122244
229.100	51.312	328.0	15.0	331.1	-3.1	-0.20	Expl	Paci	BN_9509130759
228.966	51.092	330.0	15.0	329.8	0.2	0.01	Expl	Paci	BN_9509131119
231.399	48.850	303.0	15.0	311.4	-8.4	-0.56	Expl	Paci	BN_9510150129
229.544	50.617	328.0	15.0	325.8	2.2	0.15	Expl	Paci	BN_9510311940
230.821	48.838	316.0	15.0	313.0	3.0	0.20	Expl	Paci	BN_9511121305
229.962	50.363	321.0	15.0	323.4	-2.4	-0.16	Expl	Paci	BN_9512010329
229.758	49.473	315.0	15.0	318.8	-3.8	-0.25	Expl	Paci	BN_9601031312
230.724	48.945	318.0	15.0	313.7	4.3	0.28	Expl	Paci	BN_9601281130
229.564	50.573	324.0	15.0	325.5	-1.5	-0.10	Expl	Paci	BN_9603102112
230.120	50.690	323.0	15.0	325.1	-2.1	-0.14	Expl	Paci	BN_9603162318
229.355	51.097	335.0	15.0	329.2	5.8	0.38	Expl	Paci	BN_9608160341
229.330	51.150	338.0	15.0	329.6	8.4	0.56	Expl	Paci	BN_9608160954
229.723	50.512	319.0	15.0	324.8	-5.8	-0.39	Expl	Paci	BN_9608202241
230.023	49.581	335.0	15.0	318.7	16.3	1.08	Expl	Paci	BN_9610090712
230.080	49.546	312.0	15.0	318.4	-6.4	-0.43	Expl	Paci	BN_9610090952
229.787	50.454	316.0	15.0	324.3	-8.3	-0.55	Expl	Paci	BN_9611060655
228.285	51.867	341.0	15.0	335.9	5.1	0.34	Expl	Paci	BN_9612241240
228.568	51.615	339.0	15.0	333.9	5.1	0.34	Expl	Paci	BN_9702051927
228.526	51.543	339.0	15.0	333.4	5.6	0.37	Expl	Paci	BN_9702051929
229.774	50.475	322.0	15.0	324.5	-2.5	-0.16	Expl	Paci	BN_9703290545
229.779	50.485	319.0	15.0	324.5	-5.5	-0.37	Expl	Paci	BN_9703300650
228.776	51.388	328.0	15.0	332.1	-4.1	-0.27	Expl	Paci	BN_9704132025
229.702	50.892	325.0	15.0	327.2	-2.2	-0.15	Expl	Paci	BN_9709200439
229.477	50.754	331.0	15.0	326.8	4.2	0.28	Expl	Paci	BN_9709200709
229.831	50.412	317.0	15.0	323.9	-6.9	-0.46	Expl	Paci	BN_9710210810
229.658	50.447	321.0	15.0	324.5	-3.5	-0.23	Expl	Paci	BN_9712200422
229.713	50.499	320.0	15.0	324.7	-4.7	-0.31	Expl	Paci	BN_9802081911

229.495	50.845	328.0	15.0	327.3	0.7	0.04	Expl	Paci	BN_9802140545
229.489	50.855	335.0	15.0	327.4	7.6	0.51	Expl	Paci	BN_9802140619
230.142	49.543	315.0	15.0	318.3	-3.3	-0.22	Expl	Paci	BN_9802181846
230.968	48.892	304.0	15.0	312.8	-8.8	-0.59	Expl	Paci	BN_9806122024
229.731	50.085	328.0	15.0	322.2	5.8	0.39	Expl	Paci	BN_9806252251
229.672	50.548	324.0	15.0	325.1	-1.1	-0.07	Expl	Paci	BN_9807100305
230.856	48.728	308.0	15.0	312.3	-4.3	-0.29	Expl	Paci	BN_9807140105
230.991	48.773	309.0	15.0	312.2	-3.2	-0.21	Expl	Paci	BN_9807140149
230.985	48.773	310.0	15.0	312.2	-2.2	-0.15	Expl	Paci	BN_9807140227
229.218	51.362	339.0	15.0	331.2	7.8	0.52	Expl	Paci	BN_9807310740
229.202	51.341	333.0	15.0	331.1	1.9	0.13	Expl	Paci	BN_9807310818
230.651	48.885	302.0	15.0	313.6	-11.6	-0.77	Expl	Paci	BN_9808061817
229.755	50.009	329.0	15.0	321.7	7.3	0.49	Expl	Paci	BN_9808161925
229.662	50.386	319.0	15.0	324.1	-5.1	-0.34	Expl	Paci	BN_9808190439
229.342	50.969	339.0	15.0	328.4	10.6	0.71	Expl	Paci	BN_9808301133
229.290	50.901	327.0	15.0	328.1	-1.1	-0.07	Expl	Paci	BN_9809010743
229.416	50.732	332.0	15.0	326.8	5.2	0.35	Expl	Paci	BN_9809011812
231.767	48.983	35.0	15.0	39.8	-4.8	-0.32	Expl	JdFa	BN_9604231516
231.792	48.965	43.0	15.0	39.7	3.3	0.22	Expl	JdFa	BN_9610062013
231.856	48.863	43.0	15.0	38.9	4.1	0.27	Expl	JdFa	BN_9610062029
231.750	48.792	45.0	15.0	37.2	7.8	0.52	Expl	JdFa	BN_9610062043
231.843	48.815	61.0	15.0	38.2	22.8	1.51	Expl	JdFa	BN_9610070204
231.676	48.831	24.0	15.0	37.1	-13.1	-0.87	Expl	JdFa	BN_9610070737
231.741	48.944	57.0	15.0	39.1	17.9	1.19	Expl	JdFa	BN_9610071018
231.887	48.920	19.0	15.0	39.9	-20.9	-1.38	Expl	JdFa	BN_9610071836
231.836	48.899	30.0	15.0	39.2	-9.2	-0.61	Expl	JdFa	BN_9610131133
231.797	48.841	35.0	15.0	38.2	-3.2	-0.21	Expl	JdFa	BN_9610142304
232.119	49.231	27.0	15.0	45.5	-18.5	-1.23	Expl	JdFa	BN_9707100649
232.225	49.143	58.0	15.0	45.4	12.6	0.84	Expl	JdFa	BN_9809010919
232.780	41.030	281.0	15.0	286.3	-5.3	-0.35	JdFa	Paci	CMT_790801
233.070	41.730	276.0	15.0	286.5	-10.5	-0.70	JdFa	Paci	CMT_900920
233.070	41.810	271.0	15.0	286.5	-15.5	-1.03	JdFa	Paci	CMT_900930
233.140	40.350	270.0	15.0	287.5	-17.5	-1.16	JdFa	Paci	CMT_840910
233.160	41.850	275.0	15.0	286.7	-11.7	-0.78	JdFa	Paci	CMT_850723
233.190	41.800	274.0	15.0	286.7	-12.7	-0.85	JdFa	Paci	CMT_900105
233.220	41.920	268.0	15.0	286.7	-18.7	-1.24	JdFa	Paci	CMT_960904
233.230	42.480	282.0	15.0	286.5	-4.5	-0.30	JdFa	Paci	CMT_041222
233.280	42.350	275.0	15.0	286.6	-11.6	-0.77	JdFa	Paci	CMT_900731
233.450	40.770	291.0	15.0	287.9	3.1	0.21	JdFa	Paci	CMT_050617
233.580	40.410	303.0	15.0	288.4	14.6	0.97	JdFa	Paci	CMT_931023
233.590	40.400	273.0	15.0	288.4	-15.4	-1.03	JdFa	Paci	CMT_960906
233.520	40.430	271.0	15.0	288.3	-17.3	-1.15	JdFa	Paci	CMT_970607
230.739	47.727	280.0	15.0	279.7	0.3	0.02	JdFa	Paci	BN_9608230913
230.715	47.821	283.0	15.0	279.6	3.4	0.22	JdFa	Paci	BN_9807150030
230.978	48.057	295.0	15.0	280.0	15.0	0.99	JdFa	Paci	BN_9710041515

RW - Ray Wells (unpublished data)

AF - Arthur Frankel (unpublished data)

RH - Ralph A. Haugerud (unpublished data)

CMT - Harvard CMT (<http://www.seismology.harvard.edu/projects/CMT/>)

OSU - Oregon State University moment tensor (<http://quakes.oce.orst.edu/moment-tensor/index.html>)

UCB - UC Berkeley NCECD (<http://www.ncedc.org/>)

PNSN - Pacific Northwest Seismic Network solution (<http://www.ess.washington.edu/SEIS/PNSN/>)  
 PW - Pezzopane & Weldon (1993)  
 BN - Braunmiller & Nabelek (2001)  
 Ludwin - Ludwin et al. (1991)  
 Patton - Patton & Zandt (1991)  
 Rogers - Rogers (1979)

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#### Uplift rates (in mm/yr)

Site	Long.	Lat.	Obs.	Sig	Calc.	Res.	Res/Sig
<b>Mitchell et al. (1994) tide gauge</b>							
NBtM	235.470	48.310	3.4	0.6	2.9	0.5	0.791
TPtM	236.000	46.730	-0.3	0.9	1.5	-1.8	-1.964
AstM	236.110	46.140	1.8	0.6	1.7	0.1	0.247
SBtM	235.970	44.650	-0.4	1.2	1.5	-1.9	-1.625
ChtM	235.680	43.270	2.2	2.1	-0.6	2.8	1.335
<b>Savage et al. (1991) tide gauge</b>							
NeaS	235.470	48.310	4.1	2.0	2.9	1.2	0.587
AstS	236.110	46.140	3.8	2.2	1.7	2.1	0.977
SeaS	237.650	47.660	-0.6	2.0	0.1	-0.7	-0.372
FrHS	236.940	48.540	0.7	2.0	0.2	0.5	0.235
<b>Dragert et al. (1994) tide gauge</b>							
camD	234.905	49.956	0.9	1.0	0.5	0.4	0.391
litD	235.090	49.777	1.4	1.2	0.6	0.8	0.670
atkD	236.784	49.314	-0.3	1.2	0.1	-0.4	-0.364
vanD	236.930	49.260	-0.5	1.2	0.1	-0.6	-0.514
tofD	234.251	49.082	2.2	1.2	0.1	2.1	1.718
neaD	235.390	48.367	3.3	1.0	2.9	0.4	0.442
fulD	236.579	48.718	0.7	1.2	0.3	0.4	0.301
vicD	236.697	48.387	0.1	1.0	0.4	-0.3	-0.324
friD	236.995	48.513	0.1	1.2	0.2	-0.1	-0.096
<b>GPS (this study; 2.0 mm/yr added to each observation)</b>							
APSA	237.015	46.671	-0.3	1.8	0.6	-0.9	-0.474
BLCO	235.514	42.801	0.8	1.7	0.6	0.2	0.113
BURN	242.156	42.780	0.6	0.9	0.0	0.6	0.629
CABL	235.437	42.836	2.1	0.8	0.5	1.6	1.960
CC25	241.411	46.973	0.1	2.6	0.0	0.2	0.064
CHWK	237.992	49.157	0.8	1.7	0.2	0.6	0.353
CHZZ	236.022	45.487	1.3	1.6	2.1	-0.9	-0.547
CORV	236.695	44.586	2.4	1.4	1.2	1.2	0.836
FORK	235.604	47.937	2.0	2.7	4.0	-1.9	-0.720
GOBS	239.185	45.839	-1.0	0.9	0.0	-1.0	-1.128
HEAD	235.924	46.300	1.3	1.8	2.4	-1.1	-0.596
LKCP	238.169	47.944	0.3	2.8	0.1	0.2	0.086
NANO	235.914	49.295	-0.3	2.0	0.5	-0.8	-0.394
NEAH	235.375	48.298	3.6	1.6	2.9	0.7	0.412

NEWP	235.938	44.585	1.7	1.0	1.1	0.6	0.593
OP25	236.076	46.972	1.4	2.5	1.5	-0.1	-0.055
P75Z	235.825	43.124	0.8	1.7	0.1	0.7	0.385
PTSG	235.745	41.783	1.1	2.0	-0.6	1.7	0.862
REDM	238.852	44.260	0.0	0.9	0.0	0.0	-0.035
SARG	239.523	46.602	0.1	2.9	0.0	0.1	0.039
SHLD	240.984	41.868	0.9	2.0	0.0	0.9	0.457
SISK	236.303	45.483	2.3	2.9	1.1	1.2	0.404
SPRO	237.126	45.269	0.7	1.6	0.4	0.3	0.186
YOUN	235.738	48.901	0.4	1.1	1.0	-0.6	-0.558

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Surface tilt rates (in 10^-9 /yr) estimated from profiles of Hyndman & Wang (1995)

Line E	-- W Endpoint --		-- E Endpoint --		Length (km)	Obs.	Sigma	Calc.	Res.	Res/Sig
	N	E	N	E						
Aber	236.200	46.950	237.100	47.050	69.39	-34.00	75.00	-13.63	-20.37	-0.27
Bamf	234.860	48.800	235.400	49.200	59.55	-84.00	30.00	-7.28	-76.72	-2.56
Coqu	235.890	43.110	236.570	43.100	55.39	-18.00	45.00	3.07	-21.07	-0.47
Hebo	236.180	45.280	236.970	44.930	73.38	-22.00	45.00	-14.35	-7.65	-0.17
Neah	235.290	48.410	236.090	48.160	65.61	-43.00	30.00	-14.99	-28.01	-0.93
Newp	235.950	44.650	236.920	44.630	77.03	-5.00	30.00	-5.93	0.93	0.03
Reed	235.880	43.720	236.680	43.670	64.76	-55.00	45.00	14.85	-69.85	-1.55
TP_E	234.800	49.100	235.700	49.200	66.65	-36.00	30.00	-6.72	-29.28	-0.98
Warr	236.050	46.200	237.060	46.090	79.03	-46.00	120.00	-20.71	-25.29	-0.21
Wes1	235.880	46.880	236.140	46.910	20.11	22.00	180.00	4.33	17.67	0.10
Vanc	234.500	48.700	235.200	49.500	102.69	0.00	5.00	2.16	-2.16	-0.43

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Rotation rates relative to North America (England & Wells 1991)

Long.	Lat.	Obs	Sig	Calc	Res	R/S	Blok	Label
243.000	46.000	0.00	0.20	0.00	0.00	-0.01	EWas	RWD1
240.500	44.500	-0.36	0.20	-0.41	0.05	0.26	EOre	RWD3
236.500	45.000	-1.19	0.20	-1.02	-0.17	-0.85	NoCR	RWD4
236.300	47.500	-0.14	0.20	-0.11	-0.03	-0.17	Olym	RWD2a_Olym
240.800	42.400	-0.08	0.10	-0.43	0.35	3.46	SEOr	RW_Steens
238.500	47.600	-0.01	0.10	-0.11	0.10	0.97	Seat	RW_Snoqualamie
234.500	49.000	-0.03	0.30	-0.03	0.00	0.00	SoVI	RW_Vanc
236.340	48.400	-0.45	0.15	-0.03	-0.42	-2.80	AlbH	RW_Sooke
241.440	46.620	0.48	0.82	0.00	0.48	0.58	EWas	DC4
240.060	46.840	0.03	0.66	-0.02	0.05	0.07	Wena	GET_CO
239.890	46.960	-0.08	0.66	-0.02	-0.06	-0.09	Wena	HOLT_B
239.640	46.810	-0.08	0.74	-0.02	-0.06	-0.08	Wena	SQ_CR
239.570	46.530	-0.20	0.90	-0.41	0.21	0.23	YFTB	UN_GP1
239.570	46.530	-0.17	0.76	-0.41	0.24	0.32	YFTB	UN_GP2
239.520	46.610	0.27	0.82	-0.41	0.68	0.83	YFTB	REST_H
239.450	45.850	-0.39	0.98	-0.41	0.02	0.02	YFTB	RK_CR1
239.450	45.850	-0.57	1.10	-0.41	-0.16	-0.14	YFTB	RK_CR2
239.410	45.700	-0.67	0.80	-0.41	-0.26	-0.32	EOre	COT_CR
239.140	45.690	-0.87	1.06	-0.41	-0.46	-0.43	EOre	MARY_H
238.780	45.640	-0.19	1.86	-0.41	0.22	0.12	EOre	ORT2
238.780	45.640	-0.09	1.90	-0.41	0.32	0.17	EOre	ORT1
238.080	45.500	-0.86	0.50	-0.98	0.12	0.23	Port	BV4
238.080	45.500	-1.00	0.50	-0.98	-0.02	-0.05	Port	BV3
237.380	45.350	-1.37	0.50	-0.98	-0.39	-0.79	Port	OC2
237.380	45.350	-1.43	0.52	-0.98	-0.45	-0.87	Port	OC3
236.730	46.040	-1.75	0.62	-1.02	-0.73	-1.18	NoCR	CO19
235.940	44.760	-1.21	0.62	-1.02	-0.19	-0.31	NoCR	CO23
235.930	44.780	-2.11	1.20	-1.02	-1.09	-0.91	NoCR	CO22
235.930	44.780	-1.94	0.62	-1.02	-0.92	-1.48	NoCR	CO21
235.930	44.670	-2.08	0.78	-1.02	-1.06	-1.36	NoCR	CO20
242.820	46.410	-0.44	0.56	0.00	-0.44	-0.79	EWas	PO4
241.450	46.590	0.28	0.50	0.00	0.28	0.55	EWas	PO2
241.000	46.590	0.15	0.42	0.00	0.15	0.35	EWas	PO1
240.430	46.270	-0.33	0.98	-0.41	0.08	0.08	YFTB	PO-4
240.130	46.540	0.60	0.74	-0.02	0.62	0.83	Wena	PO-11
240.020	46.240	0.29	1.36	-0.41	0.70	0.52	YFTB	PO-8
240.000	46.130	-0.31	1.72	-0.41	0.10	0.06	YFTB	PO-7
239.800	45.800	-0.22	0.96	-0.41	0.19	0.20	YFTB	PO-9
239.530	46.710	-0.30	0.72	-0.41	0.11	0.15	YFTB	PO-1
239.430	46.620	-0.23	0.90	-0.41	0.18	0.20	YFTB	PO-2
239.350	46.690	-0.23	0.78	-0.41	0.18	0.23	YFTB	PO-3
238.650	45.690	0.26	0.92	-0.41	0.67	0.73	YFTB	PO-5
238.630	45.710	-0.74	1.36	-0.41	-0.33	-0.24	YFTB	PO-10
238.590	45.690	0.22	2.38	-0.41	0.63	0.27	YFTB	PO-6
238.390	45.700	0.53	1.94	-0.41	0.94	0.49	YFTB	ML4
237.790	45.560	-0.97	0.38	-0.98	0.01	0.02	Port	BV9
236.910	46.210	-1.30	0.46	-0.98	-0.32	-0.71	Port	MS11
236.780	46.200	-1.22	0.44	-0.98	-0.24	-0.56	Port	MS6
236.760	46.220	-1.30	0.38	-0.98	-0.32	-0.86	Port	MS10

238.680	45.710	-0.02	1.88	-0.41	0.39	0.21	YFTB	BO13
236.530	46.730	-1.59	0.54	-1.09	-0.50	-0.93	Taco	MS5
236.500	46.720	-1.73	0.38	-1.09	-0.64	-1.69	Taco	MS4
236.500	46.690	-1.00	0.68	-1.09	0.09	0.13	Taco	MS3
236.460	46.720	-1.39	0.40	-1.09	-0.30	-0.76	Taco	MS2
236.230	46.440	-1.34	0.70	-1.02	-0.32	-0.46	NoCR	W058
236.220	46.470	-1.58	0.64	-1.02	-0.56	-0.88	NoCR	W050
236.200	46.430	-1.94	0.56	-1.02	-0.92	-1.64	NoCR	W022

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Surface strain rates (in nanostrain/yr; x = East, y = North; Savage et al. 1991)

Net	Centroid	Exx	sig.	Calc.	Res.	R/S	Exy	sig.	Calc.	Res.	R/S	Eyy	sig.	Calc.	Res.	R/S	
	Long.	Lat.															
HANF	240.286	46.491	-20.0	18.0	-1.0	-19.0	-1.1	0.0	10.5	2.8	-2.8	-0.3	-20.0	18.0	-7.6	-12.4	-0.7
OLY1	236.495	47.913	-64.0	39.0	-59.7	-4.3	-0.1	-45.0	19.5	-33.6	-11.4	-0.6	-16.0	42.0	-10.6	-5.4	-0.1
GldH	237.295	47.555	-38.0	24.0	-42.4	4.4	0.2	-10.0	21.0	-16.6	6.6	0.3	-18.0	40.5	-24.6	6.6	0.2
Tigr	237.930	47.538	-26.0	25.5	-13.0	-13.0	-0.5	-25.0	19.5	0.0	-25.0	-1.3	27.0	33.0	-10.8	37.8	1.1
SEAT	237.608	47.545	-34.0	21.0	-27.3	-6.7	-0.3	-21.0	15.0	-8.2	-12.8	-0.9	10.0	27.0	-10.6	20.6	0.8

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Slip rate hard constraints (mm/yr)

Type	Long.	Lat.	FIXD	MOVG	Min.	Max.	Calc.
Rate	240.9000	42.4000	SEOr	OrBR	0.00	2.50	1.35
Rate	235.5000	47.0000	Olym	NoCR	0.00	4.50	4.49
Rate	237.5000	47.6000	Taco	Seat	0.00	4.00	0.96
Rate	240.0000	43.5000	OrBR	EOre	0.00	4.00	2.39
Rate	238.0000	42.0000	SoCR	OrBR	0.00	3.50	1.82
Rate	236.0000	48.2000	AlbH	Olym	0.60	3.00	0.63
Rate	233.0000	51.0000	SoVI	NoVI	0.00	2.80	2.79
Rate	239.5000	47.8000	EWas	Wena	0.00	1.50	1.50
Rate	237.9900	49.1500	CIMB	SoVI	0.00	10.00	3.16
Rate	237.0800	50.1300	CIMB	SoVI	0.00	10.00	3.22

## GPS velocities and residuals

Evel = East velocity (all in mm/yr)

Nvel = North velocity

Eres = East velocity residual

Nres = North velocity residual

Esig = East velocity uncertainty

Nsig = North velocity uncertainty

rho = EN correlation coefficient

Site = site code

Blok = block containing this site

Pole = pole number for this block

E\_R/S = East residual divided by East sigma

N\_R/S = North residual divided by North sigma

Vres = total velocity residual magnitude

Vsig = total velocity uncertainty

V\_R/S = total velocity residual magnitude divided by total velocity uncertainty

Long	Lat	Evel	Nvel	Eres	Nres	Esig	Nsig	rho	Site	Blok	E_R/S	N_R/S	Vres	Vsig	V_R/S
240.017	43.590	-1.90	2.25	-0.51	-0.46	0.59	0.64	-0.0890	0047_GPS	EOre	-0.857	-0.724	0.686	0.585	1.172
235.842	41.933	1.51	11.78	-0.67	0.09	0.68	0.73	-0.0240	0113_GPS	SoCR	-0.985	0.117	0.675	0.683	0.989
238.742	41.671	-2.44	4.05	2.11	-0.28	1.58	1.61	0.0270	0209_GPS	OrBR	1.338	-0.176	2.133	1.575	1.355
244.168	41.511	-2.84	-0.62	0.31	-0.71	0.80	0.75	-0.0090	036C_GPS	SWId	0.390	-0.944	0.774	0.761	1.017
237.059	42.397	-0.30	6.59	2.43	-0.20	1.75	1.01	-0.1720	1214_GPS	SoCR	1.386	-0.198	2.434	1.760	1.383
243.534	42.656	-2.38	1.81	-0.29	1.38	0.86	0.84	0.0030	16EM_GPS	SWId	-0.340	1.643	1.411	0.840	1.679
239.335	47.768	1.73	2.53	-0.44	0.60	0.52	0.55	-0.0200	1882_GPS	Wena	-0.847	1.096	0.746	0.545	1.370
238.095	46.542	2.74	5.03	0.70	1.22	0.48	0.59	0.0360	217U_GPS	YFTB	1.448	2.067	1.404	0.573	2.451
237.409	45.216	2.52	7.39	0.65	1.63	2.32	1.09	-0.0250	4S9B_GPS	Port	0.281	1.498	1.758	1.312	1.340
236.549	48.124	5.93	4.86	0.11	0.35	0.73	0.92	-0.0140	4Z9A_GPS	AlbH	0.157	0.384	0.371	0.900	0.412
238.825	43.313	-1.55	4.45	1.07	0.22	0.70	0.69	-0.0240	A074_GPS	OrBR	1.532	0.320	1.095	0.696	1.573
236.467	46.991	7.10	6.10	0.40	-0.96	0.53	0.60	-0.0460	A479_GPS	Taco	0.750	-1.597	1.037	0.599	1.732
239.575	48.594	0.70	1.77	-0.22	0.60	0.95	0.92	-0.0480	A515_GPS	EWas	-0.228	0.651	0.637	0.938	0.679
239.256	45.475	0.42	3.06	-0.40	0.02	0.60	0.62	-0.0050	A545_GPS	EOre	-0.659	0.038	0.396	0.600	0.659
241.549	43.216	-2.62	1.23	-0.42	-0.90	0.73	0.72	-0.0420	A699_GPS	SEOr	-0.569	-1.256	0.995	0.710	1.401
237.796	48.711	3.29	4.28	0.20	1.12	0.79	1.01	-0.0580	ACME_GPS	SoVI	0.250	1.108	1.137	0.996	1.141
242.185	44.833	-0.69	0.35	-0.54	-0.86	0.56	0.50	-0.0120	AIRP_GPS	EOre	-0.967	-1.729	1.020	0.515	1.982
236.513	48.390	5.40	4.55	0.27	0.01	0.42	0.42	0.0000	ALBH_GPS	AlbH	0.652	0.015	0.274	0.420	0.653
232.481	50.458	-0.19	3.01	-0.54	-1.07	0.73	0.75	0.0160	ALCC_GPS	NoVI	-0.746	-1.431	1.203	0.751	1.603
234.507	49.738	5.28	5.96	0.72	0.80	1.02	1.05	-0.0400	ALEX_GPS	SoVI	0.703	0.758	1.071	1.016	1.054
240.001	42.954	-2.48	3.56	0.57	0.22	0.62	0.70	-0.0450	ALKA_GPS	OrBR	0.912	0.316	0.607	0.621	0.978
238.253	42.209	-3.43	5.15	-0.21	0.35	0.40	0.44	-0.0680	ALTA_GPS	OrBR	-0.535	0.792	0.409	0.442	0.926
233.453	49.789	5.88	5.89	-0.09	-0.29	0.74	0.78	-0.0250	ANAW_GPS	SoVI	-0.117	-0.368	0.300	0.772	0.388
234.685	50.491	2.35	3.11	-0.23	-0.72	0.85	0.88	-0.0220	ANNA_GPS	SoVI	-0.273	-0.814	0.753	0.872	0.864
237.015	46.671	3.77	5.74	-0.26	0.26	0.40	0.40	-0.0020	APSA_GPS	Taco	-0.641	0.657	0.367	0.400	0.917
237.842	48.162	2.67	2.90	-0.86	-0.35	0.44	0.45	-0.0080	ARLI_GPS	WhdI	-1.948	-0.777	0.926	0.440	2.103
237.846	48.170	2.85	3.64	-0.68	0.39	0.59	0.68	-0.0450	ARLO_GPS	WhdI	-1.147	0.574	0.781	0.626	1.248
236.168	46.173	7.28	8.29	-0.01	-0.02	0.76	0.78	-0.0280	ASTO_GPS	NoCR	-0.015	-0.030	0.026	0.768	0.034
241.529	45.813	-0.24	0.45	-0.73	-0.65	0.52	0.51	-0.0470	ATHE_GPS	EWas	-1.404	-1.279	0.979	0.503	1.945
236.747	49.337	3.11	3.50	-0.23	-0.13	1.17	0.93	0.0750	ATKI_GPS	SoVI	-0.196	-0.138	0.263	1.148	0.229
237.751	47.686	4.25	3.18	0.34	-0.47	0.58	0.58	-0.0030	AVIA_GPS	Seat	0.588	-0.806	0.579	0.581	0.996
236.747	42.799	-0.60	8.34	1.29	0.75	0.75	0.74	-0.1020	AZAL_GPS	SoCR	1.716	1.011	1.489	0.714	2.085
238.574	47.735	3.63	3.10	0.59	0.29	0.54	0.56	-0.0310	B059_GPS	WhdI	1.086	0.515	0.654	0.537	1.217
237.245	47.501	4.92	5.58	0.05	0.35	0.58	0.64	-0.0020	B197_GPS	Taco	0.086	0.548	0.354	0.639	0.555

240.273	46.578	0.72	1.71	-1.01	0.01	0.55	0.61	-0.0380	B317_GPS	Wena	-1.842	0.019	1.013	0.550	1.841
236.803	44.149	2.42	5.00	0.49	-2.27	0.91	0.99	-0.1090	B737_GPS	SoCR	0.535	-2.291	2.320	1.007	2.305
236.589	43.129	-0.68	8.53	0.18	0.60	0.66	0.72	-0.0350	B741_GPS	SoCR	0.267	0.826	0.621	0.709	0.875
238.326	48.865	1.55	1.99	-0.96	-0.55	1.24	1.39	-0.0430	BAKR_GPS	SoVI	-0.771	-0.395	1.103	1.254	0.880
235.934	44.830	7.39	9.81	0.03	0.14	0.57	0.59	-0.0420	BAL2_GPS	NoCR	0.054	0.234	0.142	0.584	0.243
235.842	49.347	4.77	5.27	0.49	0.71	0.55	0.60	0.0250	BALL_GPS	SoVI	0.898	1.191	0.868	0.591	1.470
234.866	48.828	8.60	7.46	0.18	-0.04	0.78	0.96	-0.0470	BAMF_GPS	SoVI	0.230	-0.044	0.184	0.800	0.230
237.453	45.781	2.96	5.76	0.34	0.34	0.42	0.45	-0.0590	BATT_GPS	Port	0.810	0.746	0.478	0.422	1.133
236.349	48.316	5.53	4.82	-0.26	-0.09	1.31	0.93	0.1440	BCHD_GPS	AlbH	-0.198	-0.097	0.274	1.317	0.208
234.777	49.650	5.80	4.60	1.23	-0.55	0.72	0.78	-0.0360	BCHR_GPS	SoVI	1.713	-0.711	1.352	0.741	1.825
233.157	50.544	2.79	4.20	0.25	0.56	0.69	0.71	-0.0110	BCOV_GPS	SoVI	0.367	0.792	0.617	0.704	0.876
238.195	43.133	-2.19	5.09	0.29	0.45	0.40	0.45	-0.0770	BEAV_GPS	OrBR	0.737	1.004	0.539	0.421	1.282
237.465	48.791	3.83	2.09	0.56	-1.25	1.95	1.14	0.0390	BHAP_GPS	SoVI	0.287	-1.101	1.374	1.285	1.070
236.419	46.146	4.74	6.43	-0.92	-0.91	0.54	0.60	-0.0190	BIGC_GPS	NoCR	-1.706	-1.515	1.294	0.565	2.291
241.470	45.600	-0.37	1.03	-0.87	-0.54	1.08	0.92	-0.0190	BIGH_GPS	EOr	-0.802	-0.590	1.023	1.029	0.994
235.514	42.801	3.53	12.79	-0.69	0.11	0.43	0.42	-0.0120	BLCO_GPS	SoCR	-1.616	0.251	0.703	0.431	1.632
236.740	47.955	5.69	5.16	0.03	0.26	0.38	0.40	0.0030	BLUE_GPS	Olym	0.083	0.660	0.266	0.400	0.665
237.072	48.016	4.55	4.46	-0.15	0.15	0.87	0.96	0.0100	BLYN_GNI	Olym	-0.177	0.161	0.218	0.912	0.239
238.341	48.273	2.67	1.95	-0.29	-0.96	0.58	0.59	-0.0250	BM31_GPS	SoVI	-0.504	-1.619	0.999	0.585	1.707
236.164	42.792	-0.02	9.35	0.12	-0.13	0.35	0.35	-0.0290	BOLI_GPS	SoCR	0.351	-0.363	0.177	0.355	0.498
237.004	49.078	3.68	3.99	0.29	0.44	1.23	0.94	0.0980	BOUN_GPS	SoVI	0.233	0.464	0.522	1.085	0.481
243.598	46.857	1.16	0.48	0.68	-0.35	0.75	0.70	-0.0090	BOVL_GPS	EWas	0.909	-0.496	0.765	0.743	1.030
236.588	45.065	3.67	6.52	0.11	-1.08	0.95	0.97	0.0010	BRAE_GPS	NoCR	0.121	-1.112	1.085	0.970	1.119
240.317	48.132	1.37	1.60	0.58	0.58	0.61	0.64	-0.0070	BREW_GPS	EWas	0.947	0.911	0.821	0.623	1.317
239.400	43.814	-1.08	3.18	-0.17	0.10	0.44	0.45	-0.0460	BROT_GPS	EOr	-0.390	0.226	0.199	0.452	0.442
237.556	47.306	3.73	2.80	0.04	-1.66	0.98	1.18	-0.0210	BROW_GPS	Taco	0.043	-1.407	1.661	1.180	1.407
234.360	50.125	4.39	4.48	1.03	-0.10	0.76	0.79	0.0000	BRWV_GPS	SoVI	1.349	-0.127	1.030	0.760	1.355
236.274	43.660	2.23	8.72	-0.77	-0.57	0.61	0.62	-0.0560	BSTR_GPS	SoCR	-1.263	-0.921	0.959	0.597	1.607
232.890	50.961	-1.25	4.42	-1.18	0.98	0.86	0.91	0.0100	BULC_GPS	NoVI	-1.367	1.079	1.531	0.877	1.747
242.156	42.780	-2.46	0.84	0.11	-0.91	0.87	0.87	0.0000	BURN_GPS	SEOr	0.128	-1.046	0.917	0.870	1.054
240.189	47.242	1.72	1.55	0.95	0.63	0.76	0.74	0.0140	C033_GPS	EWas	1.245	0.849	1.135	0.759	1.497
239.499	41.510	-3.54	3.99	1.35	0.13	1.58	0.93	-0.0780	C093_GPS	OrBR	0.857	0.142	1.360	1.568	0.867
242.431	46.486	0.18	1.63	-0.37	0.75	0.63	0.66	-0.0310	C334_GPS	EWas	-0.586	1.141	0.839	0.662	1.267
236.900	44.633	4.21	7.02	1.66	-0.01	0.88	1.14	-0.2140	C715_GPS	SoCR	1.881	-0.006	1.656	0.881	1.879
235.437	42.836	5.33	13.57	0.25	0.22	0.45	0.45	0.0000	CABL_GPS	SoCR	0.555	0.490	0.333	0.450	0.741
232.046	51.544	-1.96	2.39	-1.24	-0.80	0.91	0.95	0.0140	CALV_GPS	NoVI	-1.359	-0.839	1.472	0.928	1.586
236.222	43.002	-0.14	9.31	0.16	-0.05	0.43	0.43	-0.0030	CAM4_GPS	SoCR	0.373	-0.116	0.168	0.430	0.390
236.040	45.862	7.61	8.58	0.19	-0.25	0.38	0.40	-0.0400	CANN_GPS	NoCR	0.508	-0.635	0.319	0.400	0.797
235.435	42.837	4.99	14.02	-0.09	0.67	0.41	0.40	-0.0210	CAPE_GPS	SoCR	-0.224	1.670	0.674	0.401	1.680
237.401	48.513	5.18	3.21	1.63	-0.26	0.92	1.08	-0.0420	CAPS_GPS	SoVI	1.773	-0.243	1.652	0.931	1.773
240.451	45.344	-0.17	2.11	-0.61	-0.13	0.53	0.57	-0.0550	CBL1_GPS	EOr	-1.152	-0.226	0.624	0.525	1.188
241.411	46.973	0.62	1.76	-0.03	0.83	0.52	0.52	-0.0400	CC25_GPS	EWas	-0.054	1.591	0.828	0.521	1.589
236.154	45.214	5.19	8.28	-0.76	-0.55	0.59	0.63	-0.0190	CEDC_GPS	NoCR	-1.294	-0.877	0.942	0.598	1.575
237.009	45.524	3.18	6.14	0.39	-0.21	0.42	0.47	-0.0660	CHAS_GPS	NoCR	0.940	-0.441	0.446	0.444	1.005
236.297	48.920	5.58	4.93	1.13	0.57	0.81	0.73	0.0240	CHEM_GPS	SoVI	1.394	0.787	1.267	0.801	1.580
237.992	49.157	2.37	2.15	-0.17	-0.53	0.32	0.32	-0.0060	CHWK_GPS	SoVI	-0.546	-1.645	0.555	0.319	1.736
236.022	45.487	6.22	9.26	-0.61	0.06	0.40	0.41	0.0200	CHZZ_GPS	NoCR	-1.536	0.143	0.617	0.399	1.546
236.795	46.105	4.73	6.81	0.55	0.41	1.06	1.11	-0.0170	CLAT_GPS	Port	0.522	0.366	0.687	1.069	0.642
237.425	45.326	1.75	8.01	-0.22	2.34	1.04	1.27	-0.0600	CLCC_GPS	Port	-0.214	1.844	2.353	1.274	1.847
237.639	45.296	1.34	5.10	-0.39	-0.19	0.59	0.64	-0.0310	CLFH_GPS	Port	-0.665	-0.296	0.436	0.592	0.736
236.326	48.465	5.74	4.80	0.30	-0.03	1.31	1.01	0.1490	CNSP_GPS	SoVI	0.225	-0.026	0.296	1.294	0.229
236.297	46.973	8.50	7.37	0.77	-0.57	0.52	0.59	-0.0330	CNTR_GPS	Taco	1.478	-0.972	0.959	0.555	1.728
243.204	47.743	0.86	0.16	0.48	-0.21	0.52	0.51	0.0060	COEU_GPS	CIMB	0.916	-0.420	0.523	0.517	1.010

237.170	44.208	2.35	6.40	1.16	0.14	1.00	1.02	-0.1780	COLR_GPS	SoCR	1.165	0.141	1.173	0.978	1.200
236.083	46.057	7.80	7.71	0.17	-0.99	0.55	0.58	-0.0040	COND_GPS	NoCR	0.307	-1.699	1.000	0.580	1.726
236.695	44.586	3.16	6.97	-0.01	-0.52	0.32	0.32	0.0010	CORV_GPS	NoCR	-0.036	-1.633	0.523	0.320	1.633
242.180	45.297	-0.74	0.82	-0.99	-0.36	0.79	1.03	-0.0500	COVE_GPS	EOre	-1.257	-0.347	1.055	0.805	1.311
231.401	50.813	-0.19	2.91	-0.28	-0.62	0.90	0.95	0.0020	COXI_GPS	NoVI	-0.307	-0.653	0.679	0.943	0.720
237.743	46.840	3.06	4.60	0.66	0.22	0.56	0.56	0.0010	CPXF_GNI	Taco	1.183	0.395	0.698	0.560	1.246
238.056	43.530	-0.57	5.04	1.24	0.50	0.90	0.75	-0.0030	CRES_GPS	SoCR	1.374	0.666	1.334	0.880	1.516
236.681	43.986	1.92	8.30	0.00	0.59	0.67	0.71	-0.0710	CROW_GPS	SoCR	-0.007	0.831	0.590	0.710	0.831
241.014	47.971	1.36	-0.04	0.66	-1.00	1.19	1.10	-0.0330	CRWN_GPS	EWas	0.556	-0.909	1.199	1.146	1.047
237.081	46.283	3.75	6.44	-0.25	0.58	0.62	0.69	-0.0350	CSTL_GPS	Port	-0.398	0.844	0.632	0.688	0.920
241.618	47.127	0.55	1.62	-0.08	0.70	0.96	1.15	-0.0690	CTHS_GPS	EWas	-0.086	0.612	0.709	1.155	0.614
237.765	44.119	0.98	5.12	1.11	0.12	1.21	1.03	-0.0380	CUGR_GPS	SoCR	0.919	0.117	1.119	1.204	0.930
236.401	44.377	3.49	8.26	-0.51	-0.17	0.50	0.53	-0.0550	CURT_GPS	NoCR	-1.021	-0.313	0.537	0.494	1.085
240.177	45.813	-0.04	2.42	-0.89	0.03	0.49	0.54	-0.0680	D639_GPS	EOre	-1.821	0.059	0.893	0.491	1.817
241.068	43.960	-1.41	1.27	-0.60	-0.56	0.76	0.71	-0.0890	D706_GPS	EOre	-0.785	-0.786	0.817	0.704	1.161
238.825	45.618	1.39	3.34	0.33	0.00	0.35	0.41	0.0020	DALL_GPS	EOre	0.948	0.010	0.332	0.350	0.948
236.607	43.242	-1.67	9.39	-1.17	1.72	0.93	0.73	-0.0840	DARL_GPS	SoCR	-1.261	2.357	2.082	0.831	2.505
235.680	49.599	4.43	5.20	0.55	0.76	0.54	0.57	0.0140	DAVI_GPS	SoVI	1.024	1.329	0.938	0.563	1.665
236.756	43.119	-0.15	7.47	1.24	0.21	0.68	0.69	0.0050	DDSN_GPS	SoCR	1.829	0.298	1.261	0.681	1.852
236.545	43.126	0.06	7.92	0.93	-0.08	0.73	0.79	-0.0320	DELI_GPS	SoCR	1.268	-0.096	0.928	0.732	1.267
236.773	48.425	4.61	4.66	0.13	0.51	1.37	0.99	0.1540	DISC_GPS	SoVI	0.096	0.514	0.526	1.067	0.493
236.725	46.631	4.85	6.81	-0.06	0.19	0.46	0.52	-0.0370	DOTT_GPS	Port	-0.124	0.371	0.201	0.520	0.387
236.653	48.493	4.97	4.02	0.38	-0.23	1.30	0.93	0.1850	DOUG_GPS	SoVI	0.291	-0.245	0.442	1.128	0.392
240.375	49.323	0.62	1.14	0.09	0.82	0.59	0.58	0.0080	DRAO_GPS	CIMB	0.147	1.413	0.824	0.581	1.420
236.890	48.181	6.73	3.17	2.09	-0.88	1.20	1.23	0.0470	DUNG_GPS	AlbH	1.743	-0.713	2.268	1.184	1.916
237.613	47.595	4.87	5.34	0.66	1.55	1.17	1.46	-0.0700	DUWA_GPS	Seat	0.568	1.064	1.690	1.388	1.217
239.820	45.243	1.32	1.93	0.83	-0.72	0.76	0.76	-0.0320	E040_GPS	EOre	1.095	-0.952	1.103	0.772	1.429
243.588	43.075	-1.96	0.42	-0.24	0.01	0.97	1.00	-0.0430	E072_GPS	SnRP	-0.244	0.005	0.237	0.971	0.244
239.408	47.559	3.29	2.68	1.11	0.76	1.25	0.95	-0.0370	E518_GPS	Wena	0.885	0.801	1.343	1.144	1.173
236.591	47.939	6.81	4.31	0.59	-0.88	0.45	0.47	0.0130	EA40_GPS	Olym	1.310	-1.874	1.060	0.461	2.298
236.024	49.753	3.52	4.25	0.20	0.31	0.48	0.52	-0.0090	EARL_GPS	SoVI	0.411	0.593	0.366	0.507	0.723
236.233	44.612	5.42	7.95	0.19	-0.71	1.04	1.25	-0.2910	EDDY_GPS	NoCR	0.184	-0.565	0.732	1.312	0.558
232.877	49.873	5.18	6.26	-0.20	0.79	0.70	0.73	0.0020	ELIZ_GPS	SoVI	-0.281	1.077	0.810	0.728	1.113
237.655	46.301	2.07	6.48	-1.32	1.43	0.69	0.72	-0.0630	ELKR_GPS	Port	-1.916	1.990	1.949	0.728	2.677
236.837	44.079	1.99	7.12	0.32	-0.05	0.82	0.94	-0.1220	EZEL_GPS	SoCR	0.395	-0.058	0.328	0.842	0.390
243.551	44.669	0.85	1.23	0.68	0.14	0.89	0.64	-0.0160	F408_GPS	EWas	0.770	0.218	0.699	0.879	0.795
238.803	44.269	-0.62	4.17	-0.68	0.74	1.31	1.27	-0.1440	F735_GPS	EOre	-0.522	0.581	1.005	1.378	0.729
235.801	43.340	4.49	11.56	0.04	-0.31	0.97	1.11	-0.0960	F751_GPS	SoCR	0.036	-0.279	0.311	1.119	0.278
237.375	42.142	-3.23	5.43	0.44	-0.60	0.77	0.89	-0.0650	F760_GPS	SoCR	0.567	-0.676	0.744	0.875	0.850
243.881	45.942	-0.25	-0.02	-0.70	-0.84	0.74	0.84	0.0050	FAAS_GPS	EWas	-0.947	-1.001	1.095	0.802	1.364
238.867	46.629	2.58	2.70	0.70	-0.48	0.81	0.75	-0.0060	FALL_GPS	YFTB	0.859	-0.642	0.846	0.793	1.067
236.661	42.423	-1.86	8.54	-0.22	0.61	0.60	0.66	-0.1240	FARO_GPS	SoCR	-0.360	0.931	0.651	0.677	0.962
237.347	43.586	-0.05	7.45	0.63	1.79	0.66	0.75	-0.0650	FARV_GPS	SoCR	0.956	2.380	1.893	0.727	2.605
236.624	47.015	5.60	6.69	-0.36	0.28	0.50	0.56	-0.0400	FARW_GPS	Taco	-0.717	0.500	0.455	0.534	0.852
241.845	48.278	-0.60	0.01	-1.05	-0.28	1.29	1.71	-0.0460	FERR_GPS	CIMB	-0.812	-0.163	1.084	1.303	0.832
236.140	44.019	4.52	9.56	0.21	-0.46	1.56	1.54	-0.0120	FHAM_GPS	SoCR	0.135	-0.296	0.502	1.551	0.324
234.302	49.883	4.43	4.21	0.20	-0.84	0.75	0.79	-0.0240	FILB_GPS	SoVI	0.264	-1.070	0.868	0.792	1.096
235.732	42.046	3.19	11.85	0.17	-0.36	0.74	0.62	-0.1040	FISH_GPS	SoCR	0.224	-0.579	0.396	0.670	0.590
244.685	46.339	0.89	0.48	0.46	-0.32	0.69	0.76	-0.0380	FLAT_GPS	EWas	0.673	-0.417	0.562	0.726	0.775
241.042	45.138	0.50	1.26	0.31	-0.62	0.69	0.83	-0.1120	FORE_GPS	EOre	0.446	-0.744	0.690	0.835	0.826
235.604	47.937	12.92	9.18	-0.51	-0.13	0.53	0.54	-0.0080	FORK_GPS	Olym	-0.964	-0.238	0.527	0.530	0.995
239.780	45.000	-0.75	2.15	-1.06	-0.53	0.92	0.92	-0.0210	FOSS_GPS	EOre	-1.149	-0.578	1.184	0.912	1.298
234.718	49.192	6.41	6.16	-0.30	-0.18	0.60	0.63	-0.0050	FOUR_GPS	SoVI	-0.503	-0.281	0.350	0.606	0.577

236.500	46.541	6.11	7.65	0.04	0.46	0.48	0.51	-0.0490	FRAN_GPS	Port	0.086	0.893	0.457	0.508	0.901
234.493	48.985	9.08	9.01	0.33	1.59	0.79	0.89	0.0010	FRDC_GPS	SoVI	0.420	1.782	1.620	0.886	1.828
237.397	48.892	3.58	3.54	0.34	0.19	1.06	1.35	-0.0480	FRND_GPS	SoVI	0.317	0.139	0.384	1.109	0.347
236.044	46.205	8.52	8.74	0.06	-0.33	0.26	0.26	0.0000	FTS1_GPS	NoCR	0.230	-1.280	0.338	0.260	1.300
240.048	42.098	-3.52	3.68	-0.41	0.54	0.67	0.75	-0.0310	G118_GPS	SEOr	-0.617	0.714	0.677	0.732	0.925
238.731	48.674	2.81	2.34	0.94	0.23	0.61	0.62	-0.0240	G370_GPS	Wena	1.543	0.378	0.970	0.607	1.597
243.627	46.142	0.38	0.43	-0.09	-0.40	0.72	0.83	-0.0320	G404_GPS	EWas	-0.119	-0.480	0.408	0.821	0.497
239.491	44.353	-0.95	1.84	-0.79	-1.04	1.37	1.12	-0.1080	G753_GPS	EOre	-0.578	-0.929	1.308	1.150	1.137
236.180	49.203	4.57	4.39	0.44	0.12	0.70	0.66	0.0420	GABR_GPS	SoVI	0.632	0.184	0.459	0.704	0.652
236.930	45.612	2.97	5.65	-0.08	-0.80	0.46	0.48	0.0090	GARY_GPS	NoCR	-0.164	-1.657	0.799	0.480	1.663
241.923	43.744	-1.81	1.12	-0.75	-0.22	1.20	0.84	-0.1570	GENT_GPS	EOre	-0.624	-0.257	0.779	1.140	0.683
234.636	49.552	5.64	4.30	0.52	-1.14	0.71	0.76	-0.0400	GLAC_GPS	SoVI	0.735	-1.495	1.250	0.762	1.640
237.213	47.549	5.42	4.59	0.36	-0.69	0.41	0.43	-0.0040	GLDH_GPS	Taco	0.866	-1.594	0.772	0.427	1.810
235.572	42.421	3.71	12.82	-0.58	0.06	0.44	0.39	-0.0270	GO89_GPS	SoCR	-1.328	0.143	0.587	0.441	1.333
239.185	45.839	1.20	2.49	0.09	-0.57	0.48	0.48	0.0010	GOBS_GPS	YFTB	0.197	-1.193	0.580	0.480	1.209
235.822	47.114	13.54	12.58	0.55	0.93	0.45	0.50	-0.0130	GP14_GPS	Taco	1.213	1.859	1.078	0.485	2.222
238.375	47.138	2.49	2.85	-0.17	-0.63	0.63	0.64	0.1180	GP17_GPS	YFTB	-0.265	-0.985	0.652	0.658	0.992
238.406	48.486	1.16	2.29	-1.63	-0.45	0.58	0.57	-0.0170	GP29_GPS	SoVI	-2.810	-0.792	1.691	0.577	2.932
236.351	46.334	6.73	7.08	0.22	-0.52	0.61	0.64	-0.0010	GP35_GPS	NoCR	0.355	-0.816	0.565	0.636	0.889
237.857	48.917	2.56	1.70	-0.36	-1.33	0.70	0.86	-0.0590	GP37_GPS	SoVI	-0.517	-1.550	1.381	0.839	1.646
235.900	46.903	10.84	10.94	-0.20	0.27	0.47	0.48	-0.0070	GRAY_GPS	Taco	-0.427	0.568	0.339	0.478	0.708
237.474	41.555	-4.43	4.38	0.43	-1.04	1.13	1.39	-0.1730	GREN_GPS	SoCR	0.385	-0.751	1.131	1.424	0.794
235.721	47.304	14.79	12.39	-0.04	0.16	0.33	0.35	-0.0050	GREV_GPS	Taco	-0.115	0.460	0.165	0.349	0.474
235.296	48.996	7.24	7.16	0.94	1.07	0.63	0.67	-0.0020	GREY_GPS	SoVI	1.488	1.597	1.423	0.652	2.181
238.223	48.539	3.40	3.87	0.50	0.96	0.83	1.03	-0.0630	GRSM_GPS	SoVI	0.606	0.936	1.088	0.968	1.124
246.759	43.244	-2.05	-0.61	-0.34	0.64	0.34	0.34	0.0060	GTRG_GPS	SnRP	-0.997	1.870	0.721	0.339	2.124
238.672	45.783	2.29	2.31	1.06	-1.12	0.97	0.97	0.0000	GWEN_GPS	YFTB	1.096	-1.153	1.544	0.970	1.591
243.813	41.962	-3.21	0.60	-0.52	0.32	0.76	0.71	0.0180	H318_GPS	SWId	-0.682	0.455	0.611	0.740	0.825
239.785	45.745	0.76	2.13	-0.12	-0.53	1.30	1.51	-0.0370	H428_GPS	EOre	-0.094	-0.351	0.543	1.489	0.365
237.824	47.485	3.26	3.90	-0.32	-0.10	0.70	0.74	-0.0140	HAFF_GPS	YFTB	-0.464	-0.135	0.340	0.701	0.485
235.935	44.602	6.59	8.96	-0.29	-0.96	0.42	0.44	-0.0500	HAMI_GPS	NoCR	-0.679	-2.171	0.997	0.433	2.304
235.041	49.069	6.12	6.11	-0.45	-0.21	0.60	0.63	-0.0060	HAND_GPS	SoVI	-0.744	-0.336	0.494	0.604	0.818
236.430	45.885	5.10	6.58	0.17	-0.79	0.50	0.52	-0.0030	HANS_GPS	NoCR	0.341	-1.521	0.809	0.519	1.557
232.619	50.698	-0.11	3.31	0.09	-0.45	0.77	0.80	0.0250	HARD_GPS	NoVI	0.123	-0.558	0.456	0.795	0.574
235.924	46.300	9.56	10.48	-0.43	0.33	0.73	0.74	-0.0050	HEAD_GPS	NoCR	-0.591	0.448	0.544	0.735	0.740
237.199	45.857	2.98	6.94	-0.03	1.14	0.40	0.44	-0.0310	HELE_GPS	Port	-0.079	2.583	1.137	0.440	2.583
234.159	50.335	3.37	4.18	0.55	-0.04	0.76	0.78	0.0040	HKUS_GPS	SoVI	0.729	-0.057	0.556	0.760	0.732
245.586	43.563	-2.07	-0.39	-0.68	0.23	0.39	0.39	-0.0030	HLID_GPS	SnRP	-1.744	0.600	0.719	0.390	1.842
231.865	50.640	0.11	3.73	0.08	0.05	0.63	0.63	0.0110	HOLB_GPS	NoVI	0.122	0.086	0.094	0.633	0.148
237.120	44.990	2.81	6.81	0.65	0.32	0.47	0.49	-0.0560	HOWE_GPS	NoCR	1.392	0.658	0.729	0.463	1.575
240.741	45.827	-0.25	1.38	-1.01	-0.61	0.49	0.51	-0.0200	HRMA_GPS	EOre	-2.058	-1.197	1.179	0.491	2.401
237.189	45.179	4.15	7.27	2.01	1.05	1.07	1.28	-0.0200	HUBB_GPS	NoCR	1.877	0.817	2.265	1.108	2.044
236.471	47.990	6.60	5.65	0.09	0.28	0.45	0.47	-0.0070	HUR2_GPS	Olym	0.190	0.597	0.293	0.467	0.628
238.608	47.388	2.93	2.35	0.12	-0.73	1.07	1.33	-0.0380	HYAK_GPS	Seat	0.116	-0.552	0.744	1.330	0.559
237.115	48.420	4.95	4.14	0.98	0.41	0.58	0.50	0.0350	ICEB_GPS	SoVI	1.690	0.812	1.061	0.575	1.844
236.318	42.104	-1.88	9.27	-1.39	-0.10	0.66	0.53	-0.1340	ILLI_GPS	SoCR	-2.109	-0.180	1.395	0.655	2.131
237.174	44.795	2.84	6.32	0.85	-0.10	0.54	0.58	-0.0620	IMPO_GPS	SoCR	1.578	-0.175	0.858	0.545	1.575
236.051	45.273	5.68	9.48	-1.04	0.20	1.41	1.53	-0.0160	ISLE_GPS	NoCR	-0.738	0.134	1.061	1.419	0.748
240.143	44.119	-0.81	2.27	-0.27	-0.15	0.48	0.51	-0.0530	J090_GPS	EOre	-0.554	-0.296	0.306	0.476	0.643
237.029	44.876	2.61	6.39	0.30	-0.35	0.98	1.14	-0.1120	JAIL_GPS	NoCR	0.305	-0.304	0.458	1.131	0.405
236.122	45.906	6.71	7.93	-0.13	-0.50	0.60	0.68	-0.0200	JEFF_GPS	NoCR	-0.219	-0.738	0.519	0.672	0.771
231.735	50.646	-1.47	3.84	-1.59	0.18	0.92	0.94	0.0040	JENS_GPS	NoVI	-1.730	0.195	1.603	0.920	1.742
235.906	42.815	0.82	10.03	-0.29	-0.48	0.68	0.67	-0.0420	JHNS_GPS	SoCR	-0.425	-0.714	0.559	0.660	0.847

234.603	50.033	4.16	4.33	0.62	-0.28	0.76	0.78	-0.0200	JHRT_GPS	SoVI	0.813	-0.354	0.677	0.769	0.880
240.372	44.623	-0.80	1.14	-0.67	-1.15	0.67	0.67	0.0050	JONY_GPS	EOre	-1.000	-1.712	1.328	0.671	1.978
242.947	42.980	-3.06	-0.09	-0.67	-1.34	2.18	1.36	-0.2570	JORD_GPS	SEOr	-0.309	-0.987	1.501	1.350	1.112
242.748	45.349	-0.37	0.39	-0.83	-0.50	0.54	0.57	-0.0490	JOSE_GPS	EWas	-1.528	-0.872	0.963	0.536	1.798
235.897	48.465	6.73	5.24	-0.17	-0.67	1.26	1.08	0.0850	JRDR_GPS	AlbH	-0.136	-0.625	0.696	1.117	0.623
239.053	44.920	0.40	2.93	-0.08	-0.27	0.53	0.61	-0.0390	JUNC_GPS	EOre	-0.151	-0.447	0.284	0.598	0.475
240.067	42.930	-2.30	2.74	0.68	-0.51	0.43	0.44	-0.0600	JUNI_GPS	OrBR	1.576	-1.167	0.850	0.446	1.906
237.123	42.323	-2.46	7.36	0.48	0.73	0.46	0.53	-0.0110	JUST_GPS	SoCR	1.049	1.381	0.877	0.507	1.728
242.941	48.179	0.87	0.05	0.52	-0.15	0.60	0.67	0.0010	JUSW_GPS	CIMB	0.866	-0.227	0.541	0.606	0.894
242.268	48.208	0.43	1.41	0.02	1.15	0.87	1.00	-0.0110	K024_GPS	CIMB	0.025	1.152	1.153	1.000	1.153
243.995	46.213	1.28	1.26	0.83	0.44	0.61	0.68	-0.0240	KAMI_GPS	EWas	1.362	0.651	0.942	0.620	1.520
241.341	48.698	1.08	0.97	0.61	0.70	0.93	0.65	-0.0410	KELL_GPS	CIMB	0.658	1.080	0.931	0.767	1.214
237.104	46.118	3.05	5.78	-0.59	-0.09	0.39	0.40	-0.0010	KELS_GPS	Port	-1.513	-0.217	0.596	0.390	1.529
232.229	51.854	-3.74	2.47	-2.98	-0.50	0.93	0.96	0.0140	KING_GPS	NoVI	-3.208	-0.518	3.024	0.933	3.242
237.352	47.735	5.73	4.62	1.15	0.36	0.67	0.81	-0.0740	KINW_GPS	Seat	1.723	0.446	1.210	0.667	1.814
236.280	46.089	6.48	7.21	0.22	-0.59	0.64	0.71	0.0470	KLAS_GPS	NoCR	0.349	-0.825	0.627	0.691	0.906
232.836	50.573	1.36	4.70	1.02	0.65	1.20	1.23	0.0030	KLUC_GPS	NoVI	0.851	0.528	1.211	1.210	1.000
232.101	50.486	2.75	2.86	2.53	-0.95	0.84	0.86	0.0150	KOPR_GPS	NoVI	3.010	-1.100	2.700	0.838	3.221
239.937	47.656	1.30	1.68	0.49	0.65	0.60	0.57	-0.0390	L387_GPS	EWas	0.810	1.142	0.812	0.570	1.426
237.044	44.566	2.79	6.30	0.68	-0.37	0.60	0.62	-0.0950	LANG_GPS	SoCR	1.127	-0.600	0.771	0.629	1.227
242.868	47.274	1.05	1.30	0.53	0.45	0.66	0.77	-0.0400	LATA_GPS	EWas	0.797	0.584	0.692	0.694	0.996
236.176	48.612	5.17	4.17	-0.26	-0.78	1.15	0.98	0.0670	LAZA_GPS	SoVI	-0.229	-0.797	0.824	1.021	0.807
236.762	43.706	1.50	6.38	0.51	-0.93	0.68	0.83	-0.0040	LESL_GPS	SoCR	0.753	-1.124	1.065	0.799	1.332
237.379	47.094	3.67	6.54	0.10	1.82	0.57	0.63	-0.0160	LEWG_GPS	Taco	0.183	2.890	1.824	0.629	2.898
239.461	47.000	1.55	2.21	-0.39	0.27	0.37	0.38	0.0000	LINH_GPS	Wena	-1.044	0.702	0.469	0.373	1.258
236.330	48.150	6.77	4.36	0.26	-1.07	2.04	2.23	-0.0090	LK42_GNI	Olym	0.126	-0.481	1.104	2.224	0.496
236.330	48.150	6.26	5.13	-0.25	-0.30	0.78	0.85	-0.0280	LK42_GPS	Olym	-0.325	-0.357	0.396	0.811	0.488
238.169	47.944	1.53	3.30	-1.85	0.17	0.57	0.59	0.0300	LKCP_GNI	WhdI	-3.238	0.289	1.853	0.569	3.260
236.330	48.150	6.08	4.47	-0.43	-0.96	3.23	1.99	0.1600	LKR1_GPS	Olym	-0.134	-0.484	1.057	2.412	0.438
240.646	41.997	-3.74	2.47	-0.44	-0.18	0.66	0.70	-0.0710	LOPE_GPS	SEOr	-0.672	-0.256	0.478	0.648	0.738
237.205	43.922	2.20	5.63	1.74	-0.49	1.08	1.07	-0.0090	LOWL_GPS	SoCR	1.608	-0.455	1.803	1.082	1.667
235.941	42.552	2.16	10.73	0.62	0.28	1.32	1.20	-0.0050	LUCA_GPS	SoCR	0.467	0.232	0.676	1.298	0.521
236.174	48.160	6.58	6.13	-0.63	0.23	2.59	1.41	0.0100	LYRE_GPS	Olym	-0.245	0.163	0.675	2.478	0.272
235.678	42.183	3.15	13.72	-0.36	1.28	0.76	0.70	-0.0550	M746_GPS	SoCR	-0.468	1.824	1.325	0.715	1.853
236.869	45.190	2.91	7.37	0.18	0.49	1.07	1.14	-0.0370	MACK_GPS	NoCR	0.164	0.430	0.521	1.120	0.465
234.503	50.231	2.58	4.44	-0.49	0.12	0.74	0.75	0.0010	MENZ_GPS	SoVI	-0.658	0.161	0.501	0.740	0.677
240.993	46.621	0.31	1.50	-0.14	0.43	0.56	0.52	-0.0370	MESA_GPS	EWas	-0.255	0.823	0.451	0.530	0.851
237.520	44.752	2.25	5.88	0.92	0.25	0.53	0.58	-0.0400	MILL_GPS	SoCR	1.735	0.433	0.953	0.528	1.806
233.942	50.104	4.63	4.06	1.15	-0.72	0.78	0.82	-0.0320	MOAK_GPS	SoVI	1.472	-0.884	1.358	0.803	1.691
239.697	41.902	-4.75	3.66	-0.73	0.04	0.51	0.51	-0.0010	MODB_1PS	OrBR	-1.426	0.074	0.728	0.510	1.428
236.165	44.777	5.22	8.37	-0.53	-0.35	0.50	0.46	-0.0100	MOON_GPS	NoCR	-1.065	-0.766	0.639	0.486	1.314
237.730	46.551	3.44	5.12	-0.19	0.03	0.32	0.33	-0.0020	MORT_GPS	Port	-0.608	0.102	0.197	0.320	0.616
236.448	44.504	4.15	7.85	0.09	-0.29	0.57	0.56	-0.0160	MRY5_GPS	NoCR	0.157	-0.524	0.307	0.563	0.544
238.458	46.000	2.14	5.01	0.67	1.45	0.83	0.86	-0.0370	MTAD_GPS	YFTB	0.813	1.687	1.600	0.843	1.898
238.066	47.142	2.31	3.88	-0.67	0.07	0.46	0.48	-0.0200	MUDM_GPS	YFTB	-1.447	0.137	0.669	0.461	1.450
236.212	45.907	5.42	8.35	-0.76	0.30	0.68	0.73	-0.0380	N274_GPS	NoCR	-1.116	0.408	0.815	0.696	1.171
236.618	42.621	-2.56	8.71	-1.05	0.69	1.54	1.42	-0.0320	N748_GPS	SoCR	-0.683	0.486	1.258	1.526	0.825
235.001	49.949	4.54	5.02	1.00	0.53	0.72	0.75	-0.0110	NACH_GPS	SoVI	1.382	0.701	1.125	0.723	1.556
235.914	49.295	4.48	4.92	0.18	0.40	0.33	0.32	0.0000	NANO_GPS	SoVI	0.548	1.254	0.440	0.322	1.368
235.401	48.370	9.67	8.21	-0.28	-0.10	0.50	0.50	0.0020	NBCG_GPS	Olym	-0.562	-0.194	0.297	0.500	0.594
235.375	48.298	10.26	8.39	-0.55	-0.43	0.47	0.47	-0.0010	NEAH_GPS	Olym	-1.171	-0.910	0.697	0.470	1.484
236.034	45.134	7.36	9.32	0.43	-0.05	0.39	0.40	-0.0730	NESK_GPS	NoCR	1.103	-0.121	0.433	0.393	1.100
236.772	44.925	3.41	7.41	0.45	0.13	0.62	0.65	-0.0800	NESM_GPS	NoCR	0.729	0.197	0.470	0.609	0.772

235.938	44.585	6.77	9.49	-0.07	-0.42	0.28	0.27	0.0010	NEWP_GPS	NoCR	-0.256	-1.559	0.427	0.270	1.579
236.555	46.100	6.19	7.32	1.23	0.34	2.73	1.37	0.4340	NICR_GPS	NoCR	0.452	0.251	1.281	2.809	0.456
233.383	49.592	6.69	8.50	-1.81	1.18	0.70	0.73	-0.0050	NTKA_GPS	SoVI	-2.586	1.612	2.159	0.711	3.038
237.501	43.752	0.08	5.98	0.58	0.57	0.43	0.45	-0.0080	OAKR_GPS	SoCR	1.346	1.270	0.813	0.438	1.856
241.039	44.410	-1.66	1.91	-1.25	0.04	0.74	0.71	-0.0660	OGIL_GPS	EOre	-1.685	0.060	1.248	0.742	1.683
239.674	47.480	2.65	1.64	0.69	-0.09	0.97	1.00	-0.0060	OHME_GNI	Wena	0.709	-0.093	0.694	0.971	0.714
235.736	49.228	4.91	5.20	0.20	0.36	0.51	0.53	0.0090	OKAY_GPS	SoVI	0.393	0.684	0.414	0.527	0.785
237.092	46.967	3.99	5.60	-0.01	0.43	0.38	0.32	-0.0130	OLYM_GPS	Taco	-0.015	1.335	0.427	0.320	1.335
236.769	42.692	-0.52	6.37	1.41	-1.19	2.50	2.30	0.0320	ONIO_GPS	SoCR	0.565	-0.518	1.849	2.381	0.777
236.076	46.972	10.38	8.70	0.82	-0.72	0.45	0.47	-0.0220	OP25_GPS	Taco	1.821	-1.535	1.092	0.464	2.354
237.340	47.447	4.73	3.62	0.24	-1.35	0.99	1.15	-0.0300	ORCT_GPS	Taco	0.247	-1.172	1.370	1.150	1.191
237.858	47.636	2.70	3.76	-1.04	0.28	0.87	0.99	-0.0390	OVER_GPS	Seat	-1.198	0.288	1.081	0.889	1.216
234.600	49.823	4.69	4.91	0.52	-0.05	0.73	0.77	-0.0350	OYST_GPS	SoVI	0.712	-0.064	0.522	0.733	0.712
235.825	43.124	1.99	10.09	-0.43	-1.35	0.54	0.56	-0.0150	P75Z_GPS	SoCR	-0.805	-2.405	1.415	0.556	2.546
235.795	47.213	13.45	11.55	-0.29	-0.25	0.28	0.28	-0.0020	PABH_GPS	Taco	-1.042	-0.882	0.382	0.280	1.367
234.957	48.865	8.18	7.17	0.30	-0.04	0.56	0.58	-0.0050	PACH_GPS	SoVI	0.528	-0.069	0.298	0.561	0.532
237.125	42.336	-1.52	6.82	1.40	0.19	1.61	0.86	-0.2590	PACI_GPS	SoCR	0.868	0.226	1.410	1.568	0.899
238.325	46.607	2.00	4.53	-0.07	0.95	0.97	0.99	0.0080	PACK_GPS	YFTB	-0.074	0.957	0.950	0.989	0.960
237.728	47.908	2.92	3.04	-0.95	-0.75	0.81	0.88	-0.0260	PAIN_GPS	Seat	-1.175	-0.854	1.212	0.827	1.467
239.451	42.704	-2.22	2.59	1.12	-1.21	0.78	0.92	-0.1430	PAIS_GPS	OrBR	1.432	-1.313	1.645	0.916	1.796
236.540	46.268	6.65	8.13	1.20	1.14	0.50	0.57	-0.0070	PARK_GPS	NoCR	2.391	1.991	1.649	0.532	3.096
240.969	45.499	0.67	1.69	0.19	-0.22	0.87	0.87	-0.0010	PAUL_GPS	EOre	0.214	-0.247	0.284	0.870	0.327
237.031	44.510	2.41	6.58	0.33	-0.10	0.74	0.82	-0.0910	PETE_GPS	SoCR	0.452	-0.123	0.350	0.767	0.456
236.549	48.648	4.70	4.12	0.19	-0.14	0.53	0.53	0.0000	PGC4_GPS	SoVI	0.365	-0.266	0.239	0.530	0.452
238.717	44.061	-0.47	3.64	-0.34	0.08	0.65	0.67	-0.0200	PIBU_GPS	EOre	-0.531	0.122	0.354	0.654	0.542
233.878	49.619	7.00	5.23	0.58	-0.83	0.73	0.77	-0.0370	PIER_GPS	SoVI	0.800	-1.077	1.014	0.770	1.317
237.317	47.922	5.02	3.78	0.61	-0.39	0.62	0.70	-0.0560	PLUD_GPS	Seat	0.980	-0.556	0.721	0.661	1.091
235.555	49.710	3.57	4.56	-0.16	0.14	0.58	0.64	0.0120	POCA_GPS	SoVI	-0.281	0.223	0.216	0.603	0.359
235.883	44.170	5.91	9.02	-0.20	-2.23	1.49	1.50	-0.0060	PONS_GPS	NoCR	-0.136	-1.486	2.238	1.499	1.493
235.544	49.807	4.56	4.37	1.03	0.08	0.60	0.67	0.0190	POWE_GPS	SoVI	1.708	0.115	1.028	0.601	1.709
236.176	45.421	4.94	9.06	-0.75	0.46	1.09	1.29	-0.0320	PRAI_GPS	NoCR	-0.687	0.358	0.880	1.166	0.755
237.075	46.040	3.30	7.08	-0.23	1.14	0.75	0.65	-0.0860	PRES_GPS	Port	-0.301	1.757	1.164	0.666	1.748
239.135	44.301	-0.43	4.19	-0.35	1.04	0.58	0.55	-0.0610	PRIN_GPS	EOre	-0.610	1.888	1.097	0.564	1.946
237.489	42.741	-1.89	6.77	1.05	1.11	0.71	0.80	-0.0780	PROS_GPS	SoCR	1.482	1.386	1.529	0.729	2.097
235.139	49.256	5.30	5.16	-0.25	-0.48	0.73	0.72	-0.0030	PTAL_GPS	SoVI	-0.348	-0.667	0.543	0.721	0.753
236.505	48.117	5.19	5.27	-0.72	0.19	0.66	0.65	-0.0050	PTAN_GPS	Olym	-1.093	0.290	0.746	0.660	1.130
232.625	50.686	-0.10	4.85	0.11	1.09	0.73	0.70	-0.0180	PTHY_GPS	NoVI	0.146	1.564	1.100	0.699	1.573
237.280	46.533	4.53	5.60	0.61	0.09	0.56	0.66	-0.0770	PTS5_GPS	Port	1.093	0.140	0.619	0.555	1.116
235.745	41.783	2.13	11.65	-0.61	-0.42	0.39	0.39	-0.0020	PTSG_GPS	SoCR	-1.565	-1.073	0.740	0.390	1.900
235.881	48.198	8.34	6.80	-0.28	-0.21	0.63	0.78	-0.0390	PYST_GPS	Olym	-0.450	-0.273	0.355	0.674	0.526
235.440	47.935	15.39	10.84	0.21	0.48	0.41	0.43	0.0150	QUIL_GPS	Olym	0.507	1.111	0.521	0.429	1.214
242.751	45.929	0.41	0.50	-0.10	-0.36	0.46	0.49	-0.0430	R409_GPS	EWas	-0.226	-0.740	0.377	0.482	0.782
242.543	44.578	-1.25	1.38	-0.87	0.36	0.72	0.59	-0.0050	R489_GPS	SnRP	-1.210	0.613	0.944	0.703	1.341
234.159	49.084	9.31	7.38	-0.18	-0.14	0.60	0.65	-0.0040	RADA_GPS	SoVI	-0.308	-0.212	0.230	0.617	0.373
238.852	44.260	-0.22	2.77	-0.24	-0.62	0.86	0.86	0.0000	REDM_GPS	EOre	-0.285	-0.721	0.666	0.860	0.775
235.895	43.703	3.64	10.54	-1.76	-0.85	2.11	1.47	-0.1060	REED_GPS	SoCR	-0.836	-0.580	1.960	1.939	1.011
235.600	48.556	3.85	6.27	-3.73	-0.36	4.28	1.87	-0.0060	RENF_GPS	SoVI	-0.871	-0.190	3.744	4.263	0.878
236.539	45.797	4.62	7.43	0.30	0.28	0.48	0.48	-0.0590	REST_GPS	NoCR	0.619	0.587	0.409	0.466	0.879
236.403	42.719	-1.22	8.90	-0.31	0.23	0.34	0.34	-0.0110	REUB_GPS	SoCR	-0.898	0.671	0.381	0.342	1.115
237.434	45.547	2.34	5.97	0.08	0.43	0.34	0.36	-0.0490	RKBU_GPS	Port	0.229	1.184	0.433	0.356	1.216
237.900	42.473	-3.29	6.30	-0.76	1.22	0.70	0.81	-0.0050	RKPT_GPS	OrBR	-1.086	1.510	1.440	0.783	1.840
232.399	51.186	-1.83	2.70	-1.24	-0.62	0.86	0.89	0.0210	ROBI_GPS	NoVI	-1.443	-0.695	1.387	0.873	1.588
235.572	42.430	4.20	13.17	-0.11	0.41	0.97	0.90	0.0050	ROG2_GPS	SoCR	-0.116	0.451	0.421	0.904	0.466

236.645	43.246	-0.89	7.52	-0.40	-0.10	0.40	0.41	-0.0180	ROSE_GPS	SoCR	-1.009	-0.235	0.415	0.399	1.040
240.263	48.394	0.23	1.54	-0.66	0.46	0.87	0.84	-0.0240	ROSW_GPS	EWas	-0.754	0.550	0.803	0.870	0.923
237.625	47.388	3.23	4.00	-0.49	-0.36	0.39	0.39	-0.0010	RPT1_GPS	Taco	-1.269	-0.931	0.614	0.390	1.575
237.652	42.619	-2.24	5.82	0.93	0.45	0.72	0.63	-0.1660	RUST_GPS	SoCR	1.289	0.721	1.033	0.660	1.566
242.950	46.426	2.01	0.13	1.50	-0.72	0.72	0.66	-0.0300	S262_GPS	EWas	2.080	-1.095	1.663	0.717	2.320
236.080	44.646	5.54	10.15	-0.55	1.01	2.16	2.00	-0.1210	S334_GPS	NoCR	-0.256	0.505	1.152	2.143	0.538
243.742	48.731	1.26	-0.13	0.99	-0.26	0.58	0.65	-0.0170	S381_GPS	CIMB	1.699	-0.407	1.020	0.588	1.736
239.930	48.157	0.92	1.45	0.08	0.38	0.51	0.55	-0.0250	S389_GPS	EWas	0.150	0.698	0.392	0.546	0.717
244.162	42.880	-2.76	-0.41	-0.84	-0.50	0.81	0.84	-0.0240	S418_GPS	SnRP	-1.041	-0.600	0.982	0.809	1.214
241.287	47.761	1.38	0.68	0.72	-0.25	1.12	0.85	-0.0080	S509_GPS	EWas	0.642	-0.293	0.760	1.096	0.694
238.051	44.434	1.03	4.22	0.85	-0.26	0.50	0.54	-0.0340	SANM_GPS	SoCR	1.690	-0.485	0.885	0.509	1.739
237.686	43.963	1.77	4.59	2.10	-0.52	0.65	0.67	-0.0290	SARD_GPS	SoCR	3.233	-0.772	2.164	0.656	3.301
239.523	46.602	0.97	1.82	-0.71	-0.84	0.57	0.61	-0.0140	SARG_GPS	YFTB	-1.250	-1.379	1.102	0.590	1.870
240.662	47.185	0.58	0.95	-0.20	0.02	0.45	0.48	-0.0280	SAT3_GPS	EWas	-0.443	0.033	0.200	0.451	0.444
236.459	46.966	6.01	7.53	-0.64	0.46	0.76	0.81	0.0240	SATS_GPS	Taco	-0.841	0.568	0.788	0.768	1.025
236.829	48.774	4.22	4.19	0.32	0.34	1.33	1.05	0.2060	SATU_GPS	SoVI	0.243	0.323	0.469	1.306	0.359
239.275	46.951	1.69	2.32	-0.06	0.24	0.71	0.74	0.0000	SC00_GNI	Wena	-0.081	0.328	0.249	0.738	0.338
236.992	48.546	3.42	3.68	-0.55	-0.13	0.88	0.91	-0.0140	SC02_GNI	SoVI	-0.626	-0.147	0.567	0.879	0.645
231.992	50.654	1.09	2.65	1.16	-1.03	0.86	0.88	0.0180	SCAR_GPS	NoVI	1.354	-1.167	1.553	0.861	1.803
236.796	45.469	4.66	6.05	1.53	-0.76	1.33	1.45	-0.1160	SCAZ_GPS	NoCR	1.150	-0.526	1.709	1.419	1.204
237.125	47.824	6.18	5.26	1.24	0.81	0.79	0.83	-0.0540	SCHO_GPS	Olym	1.573	0.978	1.485	0.782	1.899
236.935	43.372	-0.21	7.06	0.51	0.49	0.35	0.36	-0.0190	SCOT_GPS	SoCR	1.457	1.354	0.705	0.351	2.008
236.897	44.780	3.78	8.15	1.16	1.10	0.83	0.86	-0.0310	SDNY_GPS	NoCR	1.398	1.281	1.600	0.831	1.925
237.691	47.654	3.96	3.58	-0.06	-0.10	0.58	0.57	-0.0040	SEAT_GPS	Seat	-0.101	-0.181	0.118	0.571	0.207
236.123	49.598	3.59	4.73	0.09	0.73	0.57	0.63	0.0190	SECH_GPS	SoVI	0.155	1.160	0.736	0.630	1.167
237.776	48.522	3.06	3.31	-0.18	0.08	0.52	0.56	-0.0270	SEDR_GPS	SoVI	-0.346	0.135	0.195	0.532	0.368
234.042	49.956	4.55	3.93	0.42	-1.18	1.02	1.04	-0.0030	SENT_GPS	SoVI	0.417	-1.132	1.252	1.039	1.205
232.720	51.465	-0.27	3.43	0.00	0.39	0.88	0.92	0.0210	SEYM_GPS	NoVI	0.001	0.427	0.393	0.920	0.427
235.813	49.535	4.23	4.74	0.34	0.36	0.53	0.56	0.0120	SHEP_GPS	SoVI	0.636	0.646	0.494	0.550	0.899
236.079	48.377	6.90	4.51	0.33	-1.01	1.52	1.23	0.0740	SHER_GPS	AlbH	0.219	-0.823	1.066	1.228	0.868
240.984	41.868	-3.94	2.15	-0.49	-0.28	0.38	0.38	0.0040	SHLD_GPS	SEOr	-1.281	-0.750	0.564	0.381	1.481
232.191	50.781	-0.67	3.38	-0.34	-0.22	1.07	1.09	0.0090	SHUS_GPS	NoVI	-0.314	-0.201	0.402	1.080	0.372
238.939	43.125	-2.12	4.47	0.75	0.32	1.45	1.32	0.0110	SILV_GPS	OrBR	0.514	0.240	0.811	1.436	0.564
236.303	45.483	5.95	8.57	1.03	0.50	0.48	0.45	-0.0420	SISK_GPS	NoCR	2.138	1.119	1.143	0.467	2.450
238.444	44.306	0.26	3.70	-0.14	-0.11	0.38	0.41	-0.0320	SIST_GPS	EORE	-0.367	-0.259	0.175	0.385	0.455
237.447	47.571	1.78	4.02	-2.69	-0.70	1.59	1.87	-0.1560	SITA_GPS	Taco	-1.692	-0.373	2.779	1.537	1.808
238.103	42.318	-3.68	6.21	-0.72	1.27	0.88	0.92	-0.0100	SKIL_GPS	OrBR	-0.814	1.382	1.459	0.914	1.596
238.872	44.634	0.05	1.95	-0.29	-1.40	0.66	0.83	-0.1090	SKYO_GPS	EORE	-0.436	-1.692	1.433	0.809	1.770
238.428	48.079	2.90	3.72	-0.15	0.78	1.20	1.54	-0.0970	SLVR_GPS	WhDI	-0.122	0.503	0.789	1.551	0.509
243.824	47.546	0.71	0.09	0.36	-0.32	0.58	0.64	-0.0140	SMLT_GPS	CIMB	0.618	-0.502	0.482	0.612	0.788
236.859	47.237	4.55	6.00	-1.14	0.10	0.57	0.58	0.0120	SNDR_GPS	Taco	-1.999	0.170	1.144	0.569	2.008
236.450	44.038	2.73	7.71	-0.19	-0.88	0.52	0.56	-0.0820	SOAM_GPS	SoCR	-0.364	-1.565	0.896	0.549	1.632
236.190	46.663	7.63	9.33	-0.11	1.23	0.49	0.55	0.0050	SOBE_GPS	Taco	-0.219	2.228	1.230	0.549	2.239
235.886	43.885	5.80	10.74	0.20	-0.71	0.68	0.73	0.0010	SOOS_GPS	SoCR	0.294	-0.968	0.734	0.726	1.011
237.521	42.065	-3.72	6.34	0.31	0.62	0.38	0.38	-0.0170	SOR4_GPS	SoCR	0.815	1.630	0.693	0.377	1.835
231.673	50.678	-0.38	4.82	-0.49	1.19	0.87	0.90	-0.0010	SPAT_GPS	NoVI	-0.562	1.318	1.283	0.896	1.431
238.700	46.873	2.08	3.08	-0.11	-0.13	0.55	0.62	-0.0020	SPIL_GPS	YFTB	-0.194	-0.217	0.172	0.593	0.290
242.576	47.518	0.29	0.34	-0.26	-0.53	0.47	0.47	0.0000	SPN1_GPS	EWas	-0.551	-1.120	0.587	0.470	1.248
237.836	47.401	4.04	4.83	0.55	0.82	0.81	0.83	-0.0040	SPOO_GPS	YFTB	0.682	0.985	0.986	0.822	1.200
237.126	45.269	2.97	6.25	0.66	-0.04	0.45	0.43	0.0090	SPRO_GPS	NoCR	1.463	-0.095	0.660	0.450	1.467
237.262	43.344	-1.26	6.35	0.07	0.56	0.35	0.38	-0.0510	STEA_GPS	SoCR	0.210	1.462	0.561	0.377	1.486
238.117	45.692	2.06	4.34	0.65	0.50	0.61	0.67	-0.0420	STEV_GPS	YFTB	1.061	0.743	0.816	0.620	1.317
240.215	41.583	-4.02	2.53	-0.09	-0.44	0.66	0.69	0.0080	STNN_GPS	SEOr	-0.134	-0.636	0.448	0.690	0.649

238.330	45.304	1.86	4.95	0.74	1.18	0.50	0.59	0.0080	STOL_GPS	EOre	1.485	2.003	1.396	0.568	2.458
234.417	49.995	3.30	4.34	-0.45	-0.44	0.75	0.79	-0.0100	STRA_GPS	SoVI	-0.597	-0.560	0.630	0.766	0.822
236.681	43.465	0.84	7.75	0.45	0.36	1.02	0.87	-0.1240	T739_GPS	SoCR	0.446	0.408	0.577	0.909	0.635
236.887	47.387	5.67	5.60	-0.29	-0.46	0.45	0.48	-0.0240	TAHU_GPS	Taco	-0.639	-0.964	0.545	0.467	1.166
244.897	42.087	-3.31	0.91	-0.70	1.20	0.90	0.89	0.0070	THR3_GPS	SWId	-0.776	1.348	1.388	0.890	1.560
237.710	47.103	3.94	4.80	0.99	0.58	0.56	0.58	-0.0030	THUN_GPS	Taco	1.777	0.992	1.149	0.564	2.036
238.015	47.509	2.60	3.27	-0.83	-0.54	0.40	0.41	0.0000	TIGR_GPS	YFTB	-2.075	-1.319	0.991	0.403	2.458
238.288	45.334	2.10	3.51	0.97	-0.26	0.63	0.77	-0.0860	TIME_GPS	YFTB	1.532	-0.334	0.999	0.656	1.522
235.336	49.490	4.09	5.30	-0.41	0.33	0.67	0.70	0.0090	TOBY_GPS	SoVI	-0.606	0.469	0.522	0.679	0.769
237.572	43.228	-0.99	4.88	1.05	-0.37	0.66	0.71	-0.0670	TOKE_GPS	SoCR	1.584	-0.523	1.109	0.681	1.630
240.934	43.585	-1.87	1.12	-0.71	-0.76	0.72	0.76	-0.0590	TOMB_GPS	EOre	-0.991	-1.003	1.044	0.720	1.451
240.548	48.694	1.62	0.44	1.05	0.09	0.87	0.94	0.0090	TONA_GPS	CIMB	1.210	0.095	1.056	0.871	1.212
236.433	44.185	3.00	9.08	-0.35	0.54	0.56	0.61	-0.0040	TRIA_GPS	SoCR	-0.629	0.886	0.645	0.597	1.081
236.597	48.140	7.47	4.53	1.97	-0.10	1.38	1.19	0.1280	TUCK_GPS	AlbH	1.430	-0.086	1.975	1.372	1.440
241.993	42.923	-2.61	0.29	-0.15	-1.57	0.88	0.77	-0.0280	TURN_GPS	SEOr	-0.167	-2.039	1.577	0.769	2.052
236.996	44.325	2.66	5.63	0.83	-1.08	0.85	0.86	-0.0140	TWIN_GPS	SoCR	0.977	-1.261	1.366	0.862	1.584
236.453	44.594	4.03	8.63	-0.12	0.56	0.57	0.67	-0.0100	U727_GPS	NoCR	-0.218	0.831	0.571	0.667	0.856
239.782	44.631	-1.39	1.91	-1.40	-0.77	0.80	0.82	0.0320	U73H_GPS	EOre	-1.745	-0.937	1.593	0.816	1.953
244.269	43.131	-0.12	-0.96	1.59	-1.00	0.97	0.90	-0.0050	U76A_GPS	SnRP	1.635	-1.111	1.875	0.953	1.968
234.458	48.926	9.01	7.64	-0.43	-0.17	0.31	0.30	-0.0010	UCLU_GPS	SoVI	-1.401	-0.570	0.467	0.309	1.513
244.442	43.490	-2.57	0.26	-1.16	0.30	1.24	0.85	-0.0180	V162_GPS	SnRP	-0.937	0.356	1.200	1.223	0.982
238.973	42.393	-3.40	4.72	0.12	0.58	0.69	0.82	-0.0530	V357_GPS	OrBR	0.169	0.711	0.594	0.808	0.735
238.122	42.574	-1.94	6.07	0.89	1.26	0.61	0.67	-0.0280	V546_GPS	OrBR	1.466	1.875	1.542	0.642	2.402
241.385	42.450	-2.24	0.74	0.61	-1.46	0.87	0.75	-0.0610	V696_GPS	SEOr	0.706	-1.950	1.586	0.787	2.014
237.429	44.146	1.02	5.78	0.49	0.13	0.51	0.49	-0.0120	VIDA_GPS	SoCR	0.956	0.259	0.504	0.507	0.993
239.226	43.011	-2.98	4.06	0.08	0.10	0.58	0.64	-0.0650	W072_GPS	OrBR	0.132	0.159	0.127	0.600	0.212
241.717	46.088	-0.10	0.31	-0.70	-0.66	0.50	0.52	-0.0420	WALA_GPS	EWas	-1.393	-1.260	0.956	0.499	1.917
234.703	49.752	3.35	4.96	-0.95	-0.06	1.75	1.66	0.0130	WAS2_GPS	SoVI	-0.545	-0.035	0.956	1.751	0.546
236.417	43.644	0.68	8.88	-1.55	0.27	1.54	1.85	-0.0580	WELK_GPS	SoCR	-1.004	0.147	1.570	1.568	1.001
237.304	48.313	5.30	4.39	1.41	0.86	0.84	0.90	-0.0360	WHD1_GPS	WhdI	1.679	0.961	1.654	0.843	1.963
237.965	45.376	1.07	5.57	-0.53	0.88	0.51	0.56	-0.0140	WHEY_GPS	Port	-1.046	1.573	1.030	0.550	1.872
238.312	43.682	-1.35	4.74	0.66	-0.04	0.37	0.40	-0.0460	WICK_GPS	OrBR	1.790	-0.096	0.663	0.371	1.787
237.832	52.237	-0.36	0.40	-0.65	0.07	0.80	0.80	0.0000	WILL_GPS	CIMB	-0.813	0.084	0.654	0.800	0.817
239.479	47.012	2.78	1.42	0.84	-0.52	0.59	0.55	-0.0410	WILS_GPS	Wena	1.429	-0.950	0.992	0.589	1.683
237.232	48.141	4.82	3.69	0.62	0.11	0.64	0.62	-0.0440	WORD_GPS	Whdi	0.973	0.172	0.632	0.635	0.995
237.079	50.127	2.04	2.46	0.14	0.05	0.38	0.39	0.0020	WSLR_GPS	SoVI	0.364	0.117	0.146	0.381	0.382
235.943	46.516	8.81	11.06	-1.23	0.91	0.56	0.62	-0.0440	X537_GPS	NoCR	-2.191	1.474	1.530	0.595	2.573
238.865	45.233	0.72	2.50	-0.07	-0.84	0.46	0.48	-0.0440	Y109_GPS	EOre	-0.150	-1.743	0.840	0.478	1.756
242.284	42.013	-3.89	1.49	-0.83	0.07	1.05	1.07	0.0120	Y129_GPS	SEOr	-0.789	0.067	0.832	1.049	0.793
243.709	45.656	2.29	0.95	1.84	0.12	0.86	0.93	-0.0310	Y405_GPS	EWas	2.144	0.132	1.848	0.858	2.153
238.634	44.823	0.93	3.12	0.33	-0.43	0.57	0.71	0.0260	Y502_GPS	EOre	0.571	-0.611	0.542	0.655	0.827
236.781	44.689	3.61	7.36	0.67	0.06	1.54	0.82	-0.0130	Y683_GPS	NoCR	0.434	0.068	0.670	1.535	0.437
237.682	46.026	2.13	4.71	-0.74	-0.31	0.38	0.40	-0.0140	YALE_GPS	Port	-1.946	-0.771	0.801	0.381	2.103
236.861	45.070	3.15	6.65	0.44	-0.34	0.53	0.56	-0.1460	YAMB_GPS	NoCR	0.825	-0.616	0.557	0.579	0.961
237.289	41.732	-3.67	6.61	0.67	0.37	0.32	0.31	0.0000	YBHB_GPS	SoCR	2.087	1.195	0.764	0.318	2.404
235.738	48.901	5.88	5.24	0.25	-0.14	0.44	0.43	0.0040	YOUB_GPS	SoVI	0.567	-0.329	0.287	0.437	0.657
242.667	47.969	2.40	-0.05	2.00	-0.35	1.13	1.38	-0.0160	Z231_GPS	CIMB	1.772	-0.257	2.034	1.142	1.781
242.112	48.541	0.84	0.72	0.44	0.50	0.44	0.46	-0.0200	Z264_GPS	CIMB	0.997	1.082	0.663	0.447	1.484
236.888	47.033	5.55	6.67	0.67	1.05	0.47	0.51	-0.0590	Z478_GPS	Taco	1.433	2.055	1.246	0.486	2.565

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Fault node information:

F, X, Z give fault node indices (fault number, along-strike node number, down-dip node number)

Hwall = hanging wall block

Fwall = footwall block

Long = longitude of node

Lat = latitide of node

Depth = depth of node in kms

phi = phi of node

phi\_sig = sigma of pho ( when phi\_sig = 0 node was unconstrained and fixed)

Ve, Vn = velocity of hanging wall relative to footwall at node (mm/yr)

Se, Sn = standard errors in velocity of node

Fault	Indices	Hwall	Fwall	Long.	Lat.	Depth	phi	phi_sig	Ve	Vn	Se	Sn	
	F	X	Z										
Cascadia	1	1	1	WCCR JdFa	234.799	40.516	5.000	0.782	0.146	-32.3	0.6	1.5	1.7
Cascadia	1	2	1	ECCR JdFa	234.668	41.227	5.000	0.782	0.220	-31.6	-7.2	2.1	1.9
Cascadia	1	3	1	ECCR JdFa	234.655	41.613	5.000	0.782	0.210	-32.5	-7.3	2.3	1.9
Cascadia	1	4	1	SoCR JdFa	234.642	41.998	5.000	0.782	0.192	-29.6	-15.4	0.6	1.2
Cascadia	1	5	1	SoCR JdFa	234.619	42.498	5.000	0.767	0.050	-30.1	-15.4	0.6	1.2
Cascadia	1	6	1	SoCR JdFa	234.597	42.998	5.000	1.000	0.389	-30.5	-15.5	0.6	1.2
Cascadia	1	7	1	NoCR JdFa	234.553	43.498	5.000	0.831	0.311	-31.0	-15.5	0.6	1.2
Cascadia	1	8	1	NoCR JdFa	234.508	43.998	5.000	0.795	0.314	-31.4	-15.5	0.7	1.2
Cascadia	1	9	1	NoCR JdFa	234.468	44.499	5.000	0.821	0.309	-31.8	-15.6	0.8	1.2
Cascadia	1	10	1	NoCR JdFa	234.428	45.000	5.000	1.000	0.266	-32.3	-15.6	0.9	1.2
Cascadia	1	11	1	NoCR JdFa	234.367	45.496	5.000	1.000	0.363	-32.7	-15.7	1.0	1.2
Cascadia	1	12	1	NoCR JdFa	234.306	45.993	5.000	1.000	0.000	-33.1	-15.8	1.1	1.2
Cascadia	1	13	1	NoCR JdFa	234.123	46.551	5.000	1.000	0.145	-33.6	-15.9	1.2	1.2
Cascadia	1	14	1	NoCR JdFa	233.940	47.109	5.000	1.000	0.150	-34.0	-16.1	1.3	1.2
Cascadia	1	15	1	Olym JdFa	233.772	47.408	5.000	1.000	0.000	-36.4	-22.6	1.4	1.3
Cascadia	1	16	1	Olym JdFa	233.462	47.878	5.000	0.872	0.261	-37.5	-23.3	1.5	1.3
Cascadia	1	17	1	Olym JdFa	233.119	48.321	5.000	0.791	0.311	-38.6	-24.1	1.6	1.4
Cascadia	1	18	1	Olym JdFa	232.651	48.835	5.000	0.717	0.310	-39.7	-25.1	1.7	1.4
Cascadia	1	19	1	Olym JdFa	232.190	49.277	5.000	0.717	0.315	-40.7	-26.2	1.8	1.5
Cascadia	1	1	2	WCCR JdFa	235.203	40.401	7.500	0.689	0.054	-32.1	1.3	1.5	1.6
Cascadia	1	2	2	ECCR JdFa	235.047	41.183	7.500	0.689	0.198	-31.5	-6.4	2.1	1.8
Cascadia	1	3	2	ECCR JdFa	235.017	41.589	7.500	0.689	0.255	-32.5	-6.5	2.3	1.8
Cascadia	1	4	2	SoCR JdFa	234.987	41.995	7.500	0.689	0.129	-29.7	-15.1	0.6	1.1
Cascadia	1	5	2	SoCR JdFa	234.955	42.495	7.500	0.669	0.287	-30.1	-15.1	0.6	1.1
Cascadia	1	6	2	SoCR JdFa	234.923	42.996	7.500	0.812	0.380	-30.6	-15.1	0.6	1.1
Cascadia	1	7	2	NoCR JdFa	234.877	43.496	7.500	0.754	0.311	-31.0	-15.2	0.6	1.1
Cascadia	1	8	2	NoCR JdFa	234.830	43.996	7.500	0.705	0.323	-31.5	-15.2	0.7	1.1
Cascadia	1	9	2	NoCR JdFa	234.799	44.497	7.500	0.741	0.321	-31.9	-15.3	0.8	1.1
Cascadia	1	10	2	NoCR JdFa	234.768	44.997	7.500	1.000	0.311	-32.3	-15.3	0.9	1.1
Cascadia	1	11	2	NoCR JdFa	234.748	45.492	7.500	1.000	0.358	-32.8	-15.3	1.0	1.1
Cascadia	1	12	2	NoCR JdFa	234.728	45.987	7.500	1.000	0.000	-33.2	-15.3	1.1	1.1
Cascadia	1	13	2	NoCR JdFa	234.612	46.578	7.500	1.000	0.203	-33.7	-15.4	1.2	1.2
Cascadia	1	14	2	Olym JdFa	234.496	47.169	7.500	0.906	0.181	-35.9	-21.0	1.3	1.2
Cascadia	1	15	2	Olym JdFa	234.293	47.530	7.500	1.000	0.000	-36.8	-21.5	1.4	1.2
Cascadia	1	16	2	Olym JdFa	233.836	48.020	7.500	0.800	0.278	-38.0	-22.5	1.5	1.3
Cascadia	1	17	2	Olym JdFa	233.408	48.468	7.500	0.693	0.320	-39.0	-23.4	1.6	1.3
Cascadia	1	18	2	Olym JdFa	232.918	48.969	7.500	0.604	0.325	-40.2	-24.5	1.7	1.4
Cascadia	1	19	2	NoVI JdFa	232.448	49.415	7.500	0.604	0.324	-44.4	-26.4	2.3	1.5
Cascadia	1	1	3	WCCR JdFa	235.607	40.286	10.000	0.606	0.199	-31.9	1.9	1.5	1.4
Cascadia	1	2	3	ECCR JdFa	235.426	41.139	10.000	0.606	0.261	-31.4	-5.6	2.1	1.6
Cascadia	1	3	3	ECCR JdFa	235.379	41.566	10.000	0.606	0.122	-32.4	-5.7	2.3	1.6
Cascadia	1	4	3	SoCR JdFa	235.332	41.992	10.000	0.606	0.194	-29.7	-14.7	0.6	1.1
Cascadia	1	5	3	SoCR JdFa	235.290	42.493	10.000	0.582	0.212	-30.2	-14.7	0.6	1.1
Cascadia	1	6	3	SoCR JdFa	235.249	42.993	10.000	0.569	0.389	-30.6	-14.8	0.6	1.1
Cascadia	1	7	3	NoCR JdFa	235.201	43.494	10.000	0.684	0.319	-31.1	-14.8	0.6	1.1
Cascadia	1	8	3	NoCR JdFa	235.152	43.994	10.000	0.625	0.333	-31.5	-14.9	0.7	1.1
Cascadia	1	9	3	NoCR JdFa	235.130	44.494	10.000	0.667	0.332	-32.0	-14.9	0.8	1.1
Cascadia	1	10	3	NoCR JdFa	235.108	44.994	10.000	1.000	0.326	-32.4	-14.9	0.9	1.1
Cascadia	1	11	3	NoCR JdFa	235.129	45.487	10.000	1.000	0.261	-32.8	-14.9	1.0	1.1
Cascadia	1	12	3	NoCR JdFa	235.150	45.980	10.000	1.000	0.000	-33.3	-14.9	1.1	1.1
Cascadia	1	13	3	NoCR JdFa	235.101	46.604	10.000	1.000	0.267	-33.8	-14.9	1.2	1.1
Cascadia	1	14	3	Olym JdFa	235.053	47.228	10.000	0.797	0.204	-36.2	-19.8	1.4	1.1
Cascadia	1	15	3	Olym JdFa	234.815	47.652	10.000	1.000	0.000	-37.3	-20.3	1.4	1.2
Cascadia	1	16	3	Olym JdFa	234.211	48.162	10.000	0.725	0.284	-38.5	-21.6	1.6	1.2
Cascadia	1	17	3	Olym JdFa	233.697	48.615	10.000	0.606	0.329	-39.5	-22.8	1.7	1.3
Cascadia	1	18	3	Olym JdFa	233.185	49.102	10.000	0.508	0.332	-40.6	-23.9	1.8	1.4
Cascadia	1	19	3	NoVI JdFa	232.705	49.552	10.000	0.508	0.331	-44.9	-25.8	2.3	1.5

Cascadia	1	1	4	WCCR JdFa	235.861	40.212	15.000	0.466	0.083	-31.8	2.3	1.5	1.4
Cascadia	1	2	4	ECCR JdFa	235.813	41.092	15.000	0.466	0.248	-31.3	-4.8	2.1	1.5
Cascadia	1	3	4	SoCR JdFa	235.751	41.540	15.000	0.466	0.177	-29.4	-14.3	0.6	1.1
Cascadia	1	4	4	SoCR JdFa	235.688	41.987	15.000	0.466	0.194	-29.8	-14.3	0.6	1.1
Cascadia	1	5	4	SoCR JdFa	235.620	42.488	15.000	0.440	0.234	-30.2	-14.4	0.6	1.1
Cascadia	1	6	4	SoCR JdFa	235.553	42.989	15.000	0.269	0.390	-30.7	-14.5	0.6	1.1
Cascadia	1	7	4	SoCR JdFa	235.505	43.490	15.000	0.558	0.328	-31.1	-14.5	0.7	1.1
Cascadia	1	8	4	NoCR JdFa	235.458	43.990	15.000	0.488	0.338	-31.6	-14.6	0.7	1.1
Cascadia	1	9	4	NoCR JdFa	235.436	44.490	15.000	0.538	0.339	-32.0	-14.6	0.8	1.1
Cascadia	1	10	4	NoCR JdFa	235.414	44.990	15.000	0.771	0.371	-32.4	-14.6	0.9	1.1
Cascadia	1	11	4	NoCR JdFa	235.444	45.481	15.000	0.525	0.375	-32.9	-14.6	1.0	1.1
Cascadia	1	12	4	NoCR JdFa	235.473	45.973	15.000	0.599	0.000	-33.3	-14.6	1.1	1.1
Cascadia	1	13	4	NoCR JdFa	235.478	46.621	15.000	0.535	0.329	-33.9	-14.6	1.2	1.1
Cascadia	1	14	4	Taco JdFa	235.482	47.270	15.000	0.601	0.219	-37.2	-15.2	1.4	1.1
Cascadia	1	15	4	Olym JdFa	235.261	47.752	15.000	0.829	0.000	-37.7	-19.3	1.5	1.1
Cascadia	1	16	4	Olym JdFa	234.531	48.280	15.000	0.572	0.302	-38.9	-20.9	1.6	1.2
Cascadia	1	17	4	Olym JdFa	233.939	48.735	15.000	0.462	0.331	-39.9	-22.3	1.7	1.3
Cascadia	1	18	4	Olym JdFa	233.404	49.210	15.000	0.358	0.335	-41.0	-23.5	1.8	1.3
Cascadia	1	19	4	NoVI JdFa	232.909	49.659	15.000	0.358	0.332	-45.2	-25.4	2.3	1.5
Cascadia	1	1	5	WCCR JdFa	236.114	40.138	20.000	0.355	0.137	-31.6	2.7	1.4	1.3
Cascadia	1	2	5	SNev JdFa	236.201	41.045	20.000	0.355	0.185	-28.7	-10.9	0.8	1.0
Cascadia	1	3	5	SoCR JdFa	236.123	41.514	20.000	0.355	0.156	-29.4	-13.9	0.6	1.0
Cascadia	1	4	5	SoCR JdFa	236.044	41.982	20.000	0.355	0.251	-29.9	-14.0	0.6	1.0
Cascadia	1	5	5	SoCR JdFa	235.951	42.483	20.000	0.329	0.235	-30.3	-14.1	0.6	1.0
Cascadia	1	6	5	SoCR JdFa	235.857	42.985	20.000	0.116	0.387	-30.7	-14.2	0.6	1.0
Cascadia	1	7	5	SoCR JdFa	235.810	43.486	20.000	0.450	0.335	-31.2	-14.2	0.7	1.1
Cascadia	1	8	5	NoCR JdFa	235.763	43.986	20.000	0.378	0.346	-31.6	-14.3	0.7	1.1
Cascadia	1	9	5	NoCR JdFa	235.742	44.487	20.000	0.429	0.342	-32.1	-14.3	0.8	1.1
Cascadia	1	10	5	NoCR JdFa	235.720	44.987	20.000	0.401	0.378	-32.5	-14.3	0.9	1.1
Cascadia	1	11	5	NoCR JdFa	235.758	45.476	20.000	0.074	0.235	-32.9	-14.3	1.0	1.1
Cascadia	1	12	5	NoCR JdFa	235.796	45.965	20.000	0.086	0.000	-33.4	-14.2	1.1	1.1
Cascadia	1	13	5	NoCR JdFa	235.854	46.639	20.000	0.253	0.292	-34.0	-14.2	1.2	1.1
Cascadia	1	14	5	Taco JdFa	235.912	47.312	20.000	0.430	0.197	-37.3	-14.8	1.4	1.1
Cascadia	1	15	5	Olym JdFa	235.708	47.852	20.000	0.294	0.000	-38.0	-18.3	1.5	1.1
Cascadia	1	16	5	Olym JdFa	234.852	48.398	20.000	0.413	0.297	-39.3	-20.2	1.6	1.2
Cascadia	1	17	5	Olym JdFa	234.180	48.855	20.000	0.349	0.328	-40.3	-21.7	1.7	1.2
Cascadia	1	18	5	Olym JdFa	233.622	49.318	20.000	0.250	0.324	-41.3	-23.0	1.8	1.3
Cascadia	1	19	5	SoVI JdFa	233.113	49.767	20.000	0.250	0.327	-42.6	-25.0	1.9	1.4
Cascadia	1	1	6	ECCR JdFa	236.385	40.057	25.000	0.268	0.180	-29.0	-3.6	1.6	1.3
Cascadia	1	2	6	SNev JdFa	236.452	41.013	25.000	0.268	0.151	-28.6	-10.4	0.8	1.0
Cascadia	1	3	6	SoCR JdFa	236.380	41.495	25.000	0.268	0.114	-29.5	-13.6	0.6	1.0
Cascadia	1	4	6	SoCR JdFa	236.308	41.976	25.000	0.268	0.106	-29.9	-13.7	0.6	1.0
Cascadia	1	5	6	SoCR JdFa	236.219	42.478	25.000	0.244	0.096	-30.3	-13.8	0.6	1.0
Cascadia	1	6	6	SoCR JdFa	236.130	42.980	25.000	0.037	0.392	-30.8	-13.9	0.6	1.0
Cascadia	1	7	6	SoCR JdFa	236.079	43.481	25.000	0.359	0.327	-31.2	-13.9	0.7	1.0
Cascadia	1	8	6	SoCR JdFa	236.028	43.982	25.000	0.289	0.349	-31.7	-14.0	0.7	1.0
Cascadia	1	9	6	NoCR JdFa	236.001	44.482	25.000	0.338	0.338	-32.1	-14.0	0.8	1.0
Cascadia	1	10	6	NoCR JdFa	235.975	44.983	25.000	0.097	0.351	-32.5	-14.0	0.9	1.0
Cascadia	1	11	6	NoCR JdFa	236.018	45.471	25.000	0.000	0.216	-33.0	-14.0	1.0	1.0
Cascadia	1	12	6	NoCR JdFa	236.061	45.959	25.000	0.000	0.000	-33.4	-14.0	1.1	1.0
Cascadia	1	13	6	Taco JdFa	236.129	46.648	25.000	0.083	0.215	-36.8	-14.6	1.3	1.1
Cascadia	1	14	6	Taco JdFa	236.197	47.338	25.000	0.282	0.164	-37.4	-14.6	1.4	1.1
Cascadia	1	15	6	Olym JdFa	236.030	47.921	25.000	0.000	0.000	-38.3	-17.6	1.5	1.1
Cascadia	1	16	6	Olym JdFa	235.108	48.489	25.000	0.247	0.271	-39.6	-19.6	1.6	1.1
Cascadia	1	17	6	Olym JdFa	234.354	48.940	25.000	0.260	0.311	-40.5	-21.3	1.7	1.2
Cascadia	1	18	6	SoVI JdFa	233.789	49.398	25.000	0.173	0.311	-41.8	-23.4	1.8	1.3
Cascadia	1	19	6	SoVI JdFa	233.286	49.856	25.000	0.173	0.312	-42.9	-24.6	2.0	1.3
Cascadia	1	1	7	SNev JdFa	236.656	39.977	30.000	0.198	0.043	-26.4	-10.0	0.9	1.0
Cascadia	1	2	7	SNev JdFa	236.702	40.981	30.000	0.198	0.106	-28.6	-9.9	0.8	1.0
Cascadia	1	3	7	SoCR JdFa	236.636	41.476	30.000	0.198	0.115	-29.5	-13.4	0.6	1.0
Cascadia	1	4	7	SoCR JdFa	236.571	41.971	30.000	0.198	0.110	-29.9	-13.4	0.6	1.0
Cascadia	1	5	7	SoCR JdFa	236.487	42.472	30.000	0.178	0.291	-30.4	-13.5	0.6	1.0
Cascadia	1	6	7	SoCR JdFa	236.403	42.974	30.000	0.000	0.395	-30.8	-13.6	0.6	1.0
Cascadia	1	7	7	SoCR JdFa	236.349	43.476	30.000	0.280	0.321	-31.3	-13.7	0.7	1.0
Cascadia	1	8	7	SoCR JdFa	236.294	43.977	30.000	0.217	0.343	-31.7	-13.7	0.7	1.0
Cascadia	1	9	7	NoCR JdFa	236.261	44.478	30.000	0.261	0.330	-32.1	-13.8	0.8	1.0
Cascadia	1	10	7	NoCR JdFa	236.229	44.978	30.000	0.000	0.303	-32.6	-13.8	0.9	1.0
Cascadia	1	11	7	NoCR JdFa	236.278	45.465	30.000	0.000	0.294	-33.0	-13.7	1.0	1.0
Cascadia	1	12	7	NoCR JdFa	236.326	45.952	30.000	0.000	0.000	-33.5	-13.7	1.1	1.0
Cascadia	1	13	7	Taco JdFa	236.404	46.658	30.000	0.000	0.151	-36.9	-14.4	1.3	1.0
Cascadia	1	14	7	Taco JdFa	236.482	47.364	30.000	0.153	0.132	-37.4	-14.3	1.4	1.0
Cascadia	1	15	7	Olym JdFa	236.351	47.990	30.000	0.000	0.000	-38.6	-16.8	1.5	1.0
Cascadia	1	16	7	SoVI JdFa	235.364	48.581	30.000	0.074	0.212	-40.0	-19.7	1.7	1.1

Cascadia	1	17	7	SoVI JdFa	234.528	49.024	30.000	0.191	0.296	-41.0	-21.7	1.8	1.2
Cascadia	1	18	7	SoVI JdFa	233.955	49.479	30.000	0.117	0.295	-42.1	-23.0	1.9	1.3
Cascadia	1	19	7	SoVI JdFa	233.459	49.945	30.000	0.117	0.295	-43.2	-24.2	2.0	1.3
Cascadia	1	1	8	SNev JdFa	236.788	39.936	35.000	0.144	0.227	-26.3	-9.8	0.9	1.0
Cascadia	1	2	8	SNev JdFa	236.853	40.961	35.000	0.144	0.228	-28.6	-9.6	0.8	1.0
Cascadia	1	3	8	SoCR JdFa	236.791	41.464	35.000	0.144	0.137	-29.5	-13.2	0.6	1.0
Cascadia	1	4	8	SoCR JdFa	236.730	41.967	35.000	0.144	0.164	-29.9	-13.3	0.6	1.0
Cascadia	1	5	8	SoCR JdFa	236.660	42.469	35.000	0.126	0.200	-30.4	-13.3	0.6	1.0
Cascadia	1	6	8	SoCR JdFa	236.590	42.970	35.000	0.000	0.400	-30.8	-13.4	0.6	1.0
Cascadia	1	7	8	SoCR JdFa	236.538	43.472	35.000	0.213	0.309	-31.3	-13.5	0.7	1.0
Cascadia	1	8	8	SoCR JdFa	236.485	43.973	35.000	0.159	0.336	-31.7	-13.5	0.7	1.0
Cascadia	1	9	8	NoCR JdFa	236.480	44.473	35.000	0.197	0.314	-32.2	-13.5	0.8	1.0
Cascadia	1	10	8	NoCR JdFa	236.475	44.973	35.000	0.000	0.222	-32.6	-13.5	0.9	1.0
Cascadia	1	11	8	NoCR JdFa	236.527	45.459	35.000	0.000	0.276	-33.1	-13.5	1.0	1.0
Cascadia	1	12	8	NoCR JdFa	236.579	45.944	35.000	0.000	0.000	-33.5	-13.4	1.1	1.0
Cascadia	1	13	8	Taco JdFa	236.669	46.666	35.000	0.000	0.100	-37.0	-14.1	1.3	1.0
Cascadia	1	14	8	Taco JdFa	236.759	47.388	35.000	0.042	0.090	-37.5	-14.0	1.4	1.0
Cascadia	1	15	8	Olym JdFa	236.642	48.051	35.000	0.000	0.000	-38.8	-16.2	1.6	1.0
Cascadia	1	16	8	SoVI JdFa	235.623	48.673	35.000	0.000	0.071	-40.3	-19.1	1.7	1.1
Cascadia	1	17	8	SoVI JdFa	234.698	49.106	35.000	0.137	0.278	-41.3	-21.3	1.8	1.2
Cascadia	1	18	8	SoVI JdFa	234.109	49.553	35.000	0.077	0.277	-42.4	-22.7	1.9	1.2
Cascadia	1	19	8	SoVI JdFa	233.609	50.021	35.000	0.077	0.276	-43.5	-23.9	2.0	1.3
Cascadia	1	1	9	SNev JdFa	236.919	39.896	40.000	0.100	0.169	-26.2	-9.5	0.9	1.0
Cascadia	1	2	9	SNev JdFa	237.003	40.941	40.000	0.100	0.166	-28.5	-9.3	0.8	1.0
Cascadia	1	3	9	SoCR JdFa	236.946	41.452	40.000	0.100	0.149	-29.5	-13.0	0.6	1.0
Cascadia	1	4	9	SoCR JdFa	236.890	41.964	40.000	0.100	0.247	-30.0	-13.1	0.6	1.0
Cascadia	1	5	9	SoCR JdFa	236.834	42.465	40.000	0.087	0.177	-30.4	-13.2	0.6	1.0
Cascadia	1	6	9	SoCR JdFa	236.777	42.966	40.000	0.000	0.400	-30.9	-13.2	0.6	1.0
Cascadia	1	7	9	SoCR JdFa	236.727	43.467	40.000	0.156	0.292	-31.3	-13.3	0.7	1.0
Cascadia	1	8	9	SoCR JdFa	236.677	43.969	40.000	0.113	0.324	-31.8	-13.3	0.7	1.0
Cascadia	1	9	9	SoCR JdFa	236.698	44.468	40.000	0.143	0.294	-32.2	-13.3	0.8	1.0
Cascadia	1	10	9	NoCR JdFa	236.720	44.967	40.000	0.000	0.172	-32.7	-13.3	0.9	1.0
Cascadia	1	11	9	NoCR JdFa	236.776	45.452	40.000	0.000	0.188	-33.1	-13.2	1.0	1.0
Cascadia	1	12	9	NoCR JdFa	236.833	45.936	40.000	0.000	0.000	-33.5	-13.2	1.1	1.0
Cascadia	1	13	9	Taco JdFa	236.935	46.675	40.000	0.000	0.061	-37.0	-13.8	1.3	1.0
Cascadia	1	14	9	Taco JdFa	237.037	47.413	40.000	0.000	0.048	-37.6	-13.7	1.4	1.0
Cascadia	1	15	9	AlbH JdFa	236.933	48.112	40.000	0.000	0.000	-39.1	-16.0	1.6	1.0
Cascadia	1	16	9	SoVI JdFa	235.882	48.765	40.000	0.000	0.007	-40.7	-18.5	1.7	1.1
Cascadia	1	17	9	SoVI JdFa	234.868	49.189	40.000	0.095	0.260	-41.6	-20.9	1.8	1.1
Cascadia	1	18	9	SoVI JdFa	234.263	49.627	40.000	0.048	0.261	-42.6	-22.3	1.9	1.2
Cascadia	1	19	9	SoVI JdFa	233.758	50.097	40.000	0.048	0.258	-43.7	-23.5	2.0	1.3
Cascadia	1	1	10	SNev JdFa	237.040	39.859	45.000	0.066	0.179	-26.2	-9.3	0.9	1.0
Cascadia	1	2	10	SNev JdFa	237.128	40.924	45.000	0.066	0.138	-28.5	-9.1	0.8	1.0
Cascadia	1	3	10	SNev JdFa	237.077	41.442	45.000	0.066	0.161	-29.6	-9.2	0.7	1.0
Cascadia	1	4	10	SoCR JdFa	237.027	41.961	45.000	0.066	0.106	-30.0	-13.0	0.6	1.0
Cascadia	1	5	10	SoCR JdFa	236.979	42.461	45.000	0.056	0.240	-30.4	-13.0	0.6	1.0
Cascadia	1	6	10	SoCR JdFa	236.932	42.962	45.000	0.000	0.397	-30.9	-13.1	0.6	1.0
Cascadia	1	7	10	SoCR JdFa	236.898	43.463	45.000	0.107	0.277	-31.3	-13.1	0.7	1.0
Cascadia	1	8	10	SoCR JdFa	236.865	43.964	45.000	0.075	0.307	-31.8	-13.1	0.7	1.0
Cascadia	1	9	10	SoCR JdFa	236.897	44.463	45.000	0.097	0.277	-32.2	-13.1	0.8	1.0
Cascadia	1	10	10	NoCR JdFa	236.929	44.962	45.000	0.000	0.092	-32.7	-13.1	0.9	1.0
Cascadia	1	11	10	NoCR JdFa	236.995	45.445	45.000	0.000	0.184	-33.1	-13.0	1.0	1.0
Cascadia	1	12	10	Port JdFa	237.061	45.928	45.000	0.000	0.000	-33.6	-13.0	1.1	1.0
Cascadia	1	13	10	Taco JdFa	237.168	46.680	45.000	0.000	0.036	-37.1	-13.6	1.3	1.0
Cascadia	1	14	10	Taco JdFa	237.275	47.432	45.000	0.000	0.019	-37.6	-13.5	1.4	1.0
Cascadia	1	15	10	AlbH JdFa	237.179	48.162	45.000	0.000	0.000	-39.3	-15.5	1.6	1.0
Cascadia	1	16	10	SoVI JdFa	236.084	48.835	45.000	0.000	0.000	-40.9	-18.0	1.7	1.0
Cascadia	1	17	10	SoVI JdFa	235.033	49.267	45.000	0.062	0.240	-41.8	-20.5	1.8	1.1
Cascadia	1	18	10	SoVI JdFa	234.423	49.702	45.000	0.027	0.244	-42.9	-22.0	1.9	1.2
Cascadia	1	19	10	SoVI JdFa	233.907	50.172	45.000	0.027	0.243	-44.0	-23.2	2.0	1.3
Cascadia	1	1	11	SNev JdFa	237.162	39.822	50.000	0.039	0.224	-26.1	-9.0	0.9	1.0
Cascadia	1	2	11	SNev JdFa	237.254	40.908	50.000	0.039	0.156	-28.5	-8.8	0.8	1.0
Cascadia	1	3	11	SNev JdFa	237.208	41.432	50.000	0.039	0.114	-29.6	-8.9	0.7	1.0
Cascadia	1	4	11	SoCR JdFa	237.163	41.957	50.000	0.039	0.203	-30.0	-12.8	0.6	1.0
Cascadia	1	5	11	SoCR JdFa	237.125	42.458	50.000	0.033	0.199	-30.5	-12.9	0.6	1.0
Cascadia	1	6	11	SoCR JdFa	237.087	42.958	50.000	0.000	0.402	-30.9	-12.9	0.6	1.0
Cascadia	1	7	11	SoCR JdFa	237.070	43.459	50.000	0.066	0.261	-31.4	-12.9	0.7	1.0
Cascadia	1	8	11	SoCR JdFa	237.053	43.960	50.000	0.044	0.299	-31.8	-12.9	0.7	1.0
Cascadia	1	9	11	SoCR JdFa	237.095	44.458	50.000	0.059	0.263	-32.3	-12.9	0.8	1.0
Cascadia	1	10	11	NoCR JdFa	237.137	44.956	50.000	0.000	0.069	-32.7	-12.9	0.9	1.0
Cascadia	1	11	11	NoCR JdFa	237.213	45.438	50.000	0.000	0.177	-33.1	-12.8	1.0	1.0
Cascadia	1	12	11	Port JdFa	237.290	45.919	50.000	0.000	0.000	-33.6	-12.8	1.1	1.0
Cascadia	1	13	11	Taco JdFa	237.402	46.685	50.000	0.000	0.019	-37.1	-13.4	1.3	1.0

Cascadia	1	14	11	Taco	JdFa	237.513	47.451	50.000	0.000	0.005	-37.7	-13.3	1.4	1.0
Cascadia	1	15	11	WhdI	JdFa	237.426	48.212	50.000	0.000	0.000	-39.3	-15.0	1.6	1.0
Cascadia	1	16	11	SoVI	JdFa	236.285	48.905	50.000	0.000	0.000	-41.1	-17.6	1.8	1.0
Cascadia	1	17	11	SoVI	JdFa	235.197	49.346	50.000	0.036	0.227	-42.1	-20.1	1.9	1.1
Cascadia	1	18	11	SoVI	JdFa	234.582	49.778	50.000	0.012	0.231	-43.1	-21.6	2.0	1.2
Cascadia	1	19	11	SoVI	JdFa	234.055	50.247	50.000	0.012	0.230	-44.2	-22.8	2.1	1.2
S_Explorer	2	1	1	NoVI	Expl	232.190	49.277	5.000	0.752	0.135	-22.2	-6.4	3.0	3.6
S_Explorer	2	2	1	NoVI	Expl	231.611	49.775	5.000	1.000	0.406	-19.2	-4.4	2.4	3.1
S_Explorer	2	1	2	NoVI	Expl	232.448	49.415	7.500	0.586	0.000	-21.4	-7.4	2.9	3.9
S_Explorer	2	2	2	NoVI	Expl	231.869	49.913	7.500	0.883	0.406	-18.4	-5.3	2.3	3.3
S_Explorer	2	1	3	NoVI	Expl	232.705	49.552	10.000	0.386	0.000	-20.6	-8.3	2.7	4.1
S_Explorer	2	2	3	NoVI	Expl	232.126	50.050	10.000	0.710	0.416	-17.6	-6.2	2.2	3.6
S_Explorer	2	1	4	NoVI	Expl	232.909	49.659	15.000	0.000	0.000	-20.0	-9.0	2.5	4.3
S_Explorer	2	2	4	SoVI	Expl	232.330	50.157	15.000	0.416	0.399	-14.1	-7.1	1.8	3.7
S_Explorer	2	1	5	SoVI	Expl	233.113	49.767	20.000	0.000	0.000	-16.4	-9.8	2.1	4.5
S_Explorer	2	2	5	SoVI	Expl	232.534	50.264	20.000	0.181	0.384	-13.5	-7.8	1.8	3.9
S_Explorer	2	1	6	SoVI	Expl	233.286	49.856	25.000	0.000	0.131	-15.9	-10.4	2.0	4.7
S_Explorer	2	2	6	SoVI	Expl	232.707	50.353	25.000	0.000	0.389	-13.0	-8.4	1.8	4.1
S_Explorer	2	1	7	SoVI	Expl	233.459	49.945	30.000	0.000	0.000	-15.4	-11.1	1.9	4.8
S_Explorer	2	2	7	SoVI	Expl	232.880	50.442	30.000	0.000	0.404	-12.5	-9.0	1.8	4.3
S_Explorer	2	1	8	SoVI	Expl	233.609	50.021	35.000	0.000	0.000	-15.0	-11.6	1.9	5.0
S_Explorer	2	2	8	SoVI	Expl	233.029	50.519	35.000	0.000	0.397	-12.1	-9.5	1.8	4.4
S_Explorer	2	1	9	SoVI	Expl	233.758	50.097	40.000	0.000	0.024	-14.6	-12.1	1.9	5.1
S_Explorer	2	2	9	SoVI	Expl	233.179	50.595	40.000	0.000	0.388	-11.6	-10.1	1.9	4.6
S_Explorer	2	1	10	SoVI	Expl	233.907	50.172	45.000	0.000	0.381	-14.2	-12.6	1.8	5.3
S_Explorer	2	2	10	SoVI	Expl	233.327	50.670	45.000	0.000	0.394	-11.2	-10.6	1.9	4.7
S_Explorer	2	1	11	SoVI	Expl	234.055	50.247	50.000	0.000	0.000	-13.8	-13.1	1.8	5.5
S_Explorer	2	2	11	SoVI	Expl	233.476	50.744	50.000	0.000	0.390	-10.8	-11.1	2.0	4.9
East_Owl	3	1	1	EWas	EOre	242.700	45.000	0.001	0.728	1.305	0.6	-0.1	0.2	0.2
East_Owl	3	2	1	EWas	EOre	241.900	45.550	0.001	0.728	1.305	0.2	-0.6	0.2	0.2
East_Owl	3	3	1	EWas	EOre	241.000	46.100	0.001	0.728	1.305	-0.3	-1.1	0.2	0.2
East_Owl	3	1	2	EWas	EOre	242.768	45.049	15.001	0.728	1.305	0.6	-0.1	0.2	0.2
East_Owl	3	2	2	EWas	EOre	242.011	45.632	15.001	0.728	1.305	0.1	-0.5	0.2	0.2
East_Owl	3	3	2	EWas	EOre	241.108	46.185	15.001	0.728	1.305	-0.3	-1.0	0.2	0.2
N_Explorer	4	1	1	NoVI	Expl	231.611	49.775	5.000	0.395	0.260	-19.2	-4.4	2.4	3.1
N_Explorer	4	2	1	NoVI	Expl	231.100	50.100	5.000	0.395	0.260	-17.2	-2.6	2.1	2.8
N_Explorer	4	3	1	NoVI	Expl	230.500	50.500	5.000	0.395	0.260	-14.8	-0.4	2.0	2.5
N_Explorer	4	4	1	NoVI	Expl	229.700	51.200	5.000	0.395	0.260	-10.7	2.4	2.5	2.5
N_Explorer	4	5	1	NoVI	Expl	229.000	51.650	5.000	0.395	0.260	-8.1	4.9	3.1	2.8
N_Explorer	4	1	2	NoVI	Expl	232.070	50.021	25.000	0.395	0.260	-17.7	-6.0	2.2	3.5
N_Explorer	4	2	2	NoVI	Expl	231.532	50.369	25.000	0.395	0.260	-15.7	-4.1	2.0	3.1
N_Explorer	4	3	2	NoVI	Expl	230.975	50.740	25.000	0.395	0.260	-13.4	-2.1	2.1	2.7
N_Explorer	4	4	2	NoVI	Expl	230.180	51.442	25.000	0.395	0.260	-9.3	0.7	2.8	2.5
N_Explorer	4	5	2	NoVI	Expl	229.448	51.918	25.000	0.395	0.260	-6.5	3.3	3.6	2.6
So_Can_CR	5	1	1	CIMB	SoVI	238.500	49.000	0.001	1.000	0.295	-1.8	-2.6	0.2	0.3
So_Can_CR	5	2	1	CIMB	SoVI	236.900	50.300	0.001	1.000	0.295	-1.8	-2.7	0.3	0.2
So_Can_CR	5	3	1	CIMB	SoVI	232.500	52.450	0.001	1.000	0.295	-1.8	-2.9	0.6	0.4
So_Can_CR	5	1	2	CIMB	SoVI	238.549	49.015	15.001	1.000	0.295	-1.8	-2.6	0.2	0.3
So_Can_CR	5	2	2	CIMB	SoVI	237.025	50.380	15.001	1.000	0.295	-1.8	-2.7	0.3	0.2
So_Can_CR	5	3	2	CIMB	SoVI	232.620	52.536	15.001	1.000	0.295	-1.8	-2.9	0.6	0.4
S_Casc_Arc	6	1	1	OrBR	SoCR	238.200	41.600	0.001	1.000	0.000	2.3	0.4	0.2	0.2
S_Casc_Arc	6	2	1	OrBR	SoCR	237.720	42.400	0.001	1.000	0.000	1.3	0.0	0.2	0.2
S_Casc_Arc	6	3	1	OrBR	SoCR	238.000	43.450	0.001	1.000	0.000	-0.1	0.2	0.2	0.2
S_Casc_Arc	6	4	1	OrBR	SoCR	238.450	43.850	0.001	1.000	0.000	-0.6	0.7	0.2	0.2
S_Casc_Arc	6	1	2	OrBR	SoCR	238.215	41.604	15.001	1.000	0.000	2.3	0.4	0.2	0.2
S_Casc_Arc	6	2	2	OrBR	SoCR	237.736	42.401	15.001	1.000	0.000	1.3	0.0	0.2	0.2
S_Casc_Arc	6	3	2	OrBR	SoCR	238.015	43.445	15.001	1.000	0.000	-0.1	0.3	0.2	0.2
S_Casc_Arc	6	4	2	OrBR	SoCR	238.463	43.848	15.001	1.000	0.000	-0.6	0.7	0.2	0.2
Portland	7	1	1	Port	NoCR	238.000	44.700	0.001	1.000	1.118	0.0	0.0	0.2	0.1
Portland	7	2	1	Port	NoCR	237.400	45.100	0.001	1.000	1.118	0.0	-0.1	0.2	0.1
Portland	7	3	1	Port	NoCR	237.100	45.700	0.001	1.000	1.118	0.0	-0.1	0.2	0.1
Portland	7	4	1	Port	NoCR	236.720	46.050	0.001	1.000	1.118	-0.1	-0.1	0.3	0.1
Portland	7	5	1	Port	NoCR	236.480	46.350	0.001	1.000	1.118	-0.1	-0.1	0.3	0.1
Portland	7	6	1	Taco	NoCR	236.000	46.620	0.001	1.000	1.118	-2.8	-0.7	0.4	0.3
Portland	7	1	2	EOre	NoCR	238.047	44.736	15.001	1.000	1.118	0.5	-0.6	0.2	0.1
Portland	7	2	2	Port	NoCR	237.459	45.126	15.001	1.000	1.118	0.0	-0.1	0.2	0.1
Portland	7	3	2	Port	NoCR	237.166	45.716	15.001	1.000	1.118	0.0	-0.1	0.2	0.1
Portland	7	4	2	Port	NoCR	236.782	46.074	15.001	1.000	1.118	-0.1	-0.1	0.3	0.1
Portland	7	5	2	Port	NoCR	236.526	46.388	15.001	1.000	1.118	-0.1	-0.1	0.3	0.1
Portland	7	6	2	Taco	NoCR	236.032	46.664	15.001	1.000	1.118	-2.8	-0.7	0.4	0.3
Quinault_R	8	1	1	Olym	Taco	237.050	47.600	0.001	0.033	0.412	0.0	-1.5	0.2	0.2
Quinault_R	8	2	1	Olym	Taco	236.600	47.500	0.001	0.033	0.412	0.2	-2.1	0.2	0.3
Quinault_R	8	3	1	Olym	Taco	236.200	47.400	0.001	0.033	0.412	0.4	-2.6	0.2	0.3

Quinault_R	8	4	1	Olym Taco	235.380	47.260	0.001	0.033	0.412	0.7	-3.7	0.2	0.5
Quinault_R	8	5	1	Olym Taco	235.200	46.900	0.001	0.033	0.412	1.4	-3.9	0.3	0.5
Quinault_R	8	1	2	Olym Taco	237.025	47.646	15.001	0.033	0.412	0.0	-1.6	0.2	0.2
Quinault_R	8	2	2	Olym Taco	236.575	47.546	15.001	0.033	0.412	0.2	-2.1	0.2	0.3
Quinault_R	8	3	2	Olym Taco	236.177	47.447	15.001	0.033	0.412	0.4	-2.7	0.2	0.3
Quinault_R	8	4	2	Olym Taco	235.338	47.300	15.001	0.033	0.412	0.7	-3.7	0.2	0.5
Quinault_R	8	5	2	NoCR Taco	235.134	46.919	15.001	0.033	0.412	2.8	0.7	0.3	0.5
W_Brothers	9	1	1	OrBR EOre	238.450	43.850	0.001	1.000	0.710	-2.2	1.0	0.2	0.2
W_Brothers	9	2	1	OrBR EOre	238.750	43.800	0.001	1.000	0.710	-2.1	1.0	0.2	0.2
W_Brothers	9	3	1	OrBR EOre	239.300	43.700	0.001	1.000	0.710	-2.1	1.1	0.2	0.2
W_Brothers	9	4	1	OrBR EOre	240.000	43.550	0.001	1.000	0.710	-2.1	1.2	0.2	0.2
W_Brothers	9	5	1	OrBR EOre	240.500	43.350	0.001	1.000	0.710	-2.1	1.2	0.2	0.2
W_Brothers	9	1	2	OrBR EOre	238.450	43.814	15.001	1.000	0.710	-2.2	1.0	0.2	0.2
W_Brothers	9	2	2	OrBR EOre	238.741	43.764	15.001	1.000	0.710	-2.1	1.0	0.2	0.2
W_Brothers	9	3	2	OrBR EOre	239.287	43.665	15.001	1.000	0.710	-2.1	1.1	0.2	0.2
W_Brothers	9	4	2	OrBR EOre	239.982	43.516	15.001	1.000	0.710	-2.1	1.2	0.2	0.2
W_Brothers	9	5	2	SEOr EOre	240.486	43.316	15.001	1.000	0.710	-0.7	0.6	0.3	0.2
SRosa_Quin	12	1	1	SWId SEOOr	242.200	41.300	0.001	1.000	0.000	0.8	-0.6	0.3	0.3
SRosa_Quin	12	2	1	SWId SEOOr	242.350	41.950	0.001	1.000	0.000	0.8	-0.6	0.2	0.3
SRosa_Quin	12	3	1	SWId SEOOr	242.200	42.300	0.001	1.000	0.000	0.8	-0.6	0.2	0.3
SRosa_Quin	12	4	1	SWId SEOOr	242.600	42.600	0.001	1.000	0.000	0.7	-0.6	0.2	0.4
SRosa_Quin	12	5	1	SWId SEOOr	243.400	43.000	0.001	1.000	0.000	0.7	-0.6	0.3	0.5
SRosa_Quin	12	1	2	WeBR SEOOr	242.247	41.294	15.001	1.000	0.000	-0.4	0.5	0.5	0.4
SRosa_Quin	12	2	2	SWId SEOOr	242.399	41.950	15.001	1.000	0.000	0.8	-0.6	0.2	0.3
SRosa_Quin	12	3	2	SWId SEOOr	242.247	42.290	15.001	1.000	0.000	0.8	-0.6	0.2	0.3
SRosa_Quin	12	4	2	SWId SEOOr	242.631	42.572	15.001	1.000	0.000	0.7	-0.6	0.2	0.4
SRosa_Quin	12	5	2	SWId SEOOr	243.430	42.987	15.001	1.000	0.000	0.7	-0.6	0.3	0.5
W_Sida	13	1	1	EWas SnRP	247.000	44.500	0.001	1.000	0.000	1.1	2.3	0.2	0.3
W_Sida	13	2	1	EWas SnRP	246.150	44.100	0.001	1.000	0.000	1.4	1.8	0.3	0.3
W_Sida	13	3	1	EWas SnRP	245.850	44.450	0.001	1.000	0.000	1.1	1.7	0.2	0.3
W_Sida	13	4	1	EWas SnRP	245.600	44.400	0.001	1.000	0.000	1.1	1.5	0.2	0.3
W_Sida	13	5	1	EWas SnRP	244.900	44.200	0.001	1.000	0.000	1.3	1.1	0.3	0.2
W_Sida	13	6	1	EWas SnRP	244.400	44.400	0.001	1.000	0.000	1.1	0.8	0.2	0.2
W_Sida	13	7	1	EWas SnRP	243.000	44.800	0.001	1.000	0.000	0.8	0.1	0.2	0.2
W_Sida	13	8	1	EWas SnRP	242.700	45.000	0.001	1.000	0.000	0.6	-0.1	0.2	0.2
W_Sida	13	1	2	EWas SnRP	246.962	44.523	15.001	1.000	0.000	1.1	2.3	0.2	0.3
W_Sida	13	2	2	EWas SnRP	246.155	44.124	15.001	1.000	0.000	1.4	1.8	0.3	0.3
W_Sida	13	3	2	EWas SnRP	245.862	44.472	15.001	1.000	0.000	1.1	1.7	0.2	0.3
W_Sida	13	4	2	EWas SnRP	245.585	44.421	15.001	1.000	0.000	1.1	1.5	0.2	0.3
W_Sida	13	5	2	EWas SnRP	244.900	44.224	15.001	1.000	0.000	1.3	1.1	0.3	0.2
W_Sida	13	6	2	EWas SnRP	244.414	44.422	15.001	1.000	0.000	1.1	0.8	0.2	0.2
W_Sida	13	7	2	EWas SnRP	243.015	44.821	15.001	1.000	0.000	0.8	0.1	0.2	0.2
W_Sida	13	8	2	EWas SnRP	242.768	45.049	15.001	1.000	0.000	0.6	-0.1	0.2	0.2
SnRP_Ylws	15	1	1	NoAm SnRP	248.500	42.500	0.001	1.000	0.000	2.5	2.4	0.2	0.2
SnRP_Ylws	15	2	1	NoAm SnRP	249.050	43.000	0.001	1.000	0.000	2.1	2.7	0.1	0.2
SnRP_Ylws	15	3	1	Ylws SnRP	249.200	44.100	0.001	1.000	0.000	1.2	2.8	0.1	0.2
SnRP_Ylws	15	4	1	Ylws SnRP	248.450	44.800	0.001	1.000	0.000	0.6	2.4	0.1	0.2
SnRP_Ylws	15	5	1	Ylws SnRP	247.150	44.400	0.001	1.000	0.000	0.9	1.6	0.1	0.2
SnRP_Ylws	15	6	1	Ylws SnRP	247.000	44.500	0.001	1.000	0.000	0.9	1.5	0.1	0.2
SnRP_Ylws	15	1	2	NoAm SnRP	248.525	42.485	15.001	1.000	0.000	2.5	2.4	0.2	0.2
SnRP_Ylws	15	2	2	NoAm SnRP	249.081	42.993	15.001	1.000	0.000	2.1	2.7	0.1	0.2
SnRP_Ylws	15	3	2	Ylws SnRP	249.233	44.103	15.001	1.000	0.000	1.2	2.8	0.1	0.2
SnRP_Ylws	15	4	2	Ylws SnRP	248.450	44.824	15.001	1.000	0.000	0.6	2.4	0.1	0.2
SnRP_Ylws	15	5	2	Ylws SnRP	247.148	44.424	15.001	1.000	0.000	0.9	1.6	0.1	0.2
SnRP_Ylws	15	6	2	Ylws SnRP	247.027	44.514	15.001	1.000	0.000	0.8	1.6	0.1	0.2
Devil_Mtn	16	1	1	AlbH SoVI	236.800	48.360	0.001	0.000	0.000	0.0	0.0	0.0	0.0
Devil_Mtn	16	2	1	WhdI SoVI	237.200	48.350	0.001	1.000	4.217	0.2	-0.1	0.3	0.3
Devil_Mtn	16	3	1	WhdI SoVI	238.000	48.300	0.001	1.000	4.217	0.2	0.0	0.3	0.3
Devil_Mtn	16	4	1	WhdI SoVI	238.600	48.000	0.001	1.000	4.217	0.2	0.0	0.3	0.4
Devil_Mtn	16	1	2	AlbH SoVI	236.797	48.348	15.001	0.000	0.000	0.0	0.0	0.0	0.0
Devil_Mtn	16	2	2	WhdI SoVI	237.199	48.338	15.001	1.000	4.217	0.2	-0.1	0.3	0.3
Devil_Mtn	16	3	2	WhdI SoVI	237.994	48.289	15.001	1.000	4.217	0.2	0.0	0.3	0.3
Devil_Mtn	16	4	2	WhdI SoVI	238.589	47.991	15.001	1.000	4.217	0.2	0.0	0.3	0.4
Gray_Hbr	17	1	1	Taco NoCR	236.000	46.620	0.001	1.000	1.783	-2.8	-0.7	0.4	0.3
Gray_Hbr	17	2	1	Taco NoCR	235.200	46.900	0.001	1.000	1.783	-2.8	-0.7	0.3	0.5
Gray_Hbr	17	3	1	Olym NoCR	233.772	47.408	0.001	1.000	1.783	-2.1	-6.3	0.3	0.4
Gray_Hbr	17	1	2	Taco NoCR	236.016	46.641	15.001	1.000	1.783	-2.8	-0.7	0.4	0.3
Gray_Hbr	17	2	2	Taco NoCR	235.216	46.921	15.001	1.000	1.783	-2.8	-0.7	0.3	0.5
Gray_Hbr	17	3	2	Olym NoCR	233.788	47.429	15.001	1.000	1.783	-2.2	-6.3	0.3	0.4
EWas_CIMB	18	1	1	CIMB CIMB	238.500	49.000	0.001	0.000	0.000	0.0	0.0	0.0	0.0
EWas_CIMB	18	2	1	EWas CIMB	240.300	48.390	0.001	0.982	1.292	0.1	0.7	0.2	0.2
EWas_CIMB	18	3	1	EWas CIMB	245.200	47.200	0.001	0.982	1.292	0.2	0.7	0.1	0.2
EWas_CIMB	18	4	1	EWas CIMB	248.300	46.600	0.001	0.982	1.292	0.2	0.7	0.1	0.3

EWas_CIMB	18	1	2	CIMB CIMB	238.549	49.015	15.001	0.000	0.000	0.0	0.0	0.0	0.0
EWas_CIMB	18	2	2	EWas CIMB	240.276	48.344	15.001	0.982	1.292	0.1	0.7	0.2	0.2
EWas_CIMB	18	3	2	EWas CIMB	245.181	47.153	15.001	0.982	1.292	0.2	0.7	0.1	0.2
EWas_CIMB	18	4	2	Ylws CIMB	248.282	46.552	15.001	0.000	0.000	0.0	0.0	0.0	0.0
Cent_YFTB	20	1	1	EWas YFTB	241.000	46.100	0.001	1.000	1.005	-0.3	-1.1	0.2	0.2
Cent_YFTB	20	2	1	EWas YFTB	240.950	46.120	0.001	1.000	1.005	-0.3	-1.1	0.2	0.2
Cent_YFTB	20	3	1	Wena YFTB	239.600	46.750	0.001	1.000	1.005	0.4	-1.0	0.4	0.3
Cent_YFTB	20	4	1	Wena YFTB	238.900	47.100	0.001	1.000	1.005	0.2	-1.4	0.3	0.4
Cent_YFTB	20	1	2	EWas YFTB	241.008	46.110	15.001	1.000	1.005	-0.3	-1.1	0.2	0.2
Cent_YFTB	20	2	2	EWas YFTB	240.960	46.130	15.001	1.000	1.005	-0.3	-1.1	0.2	0.2
Cent_YFTB	20	3	2	Wena YFTB	239.610	46.760	15.001	1.000	1.005	0.4	-1.0	0.3	0.3
Cent_YFTB	20	4	2	Wena YFTB	238.984	47.123	15.001	1.000	1.005	0.2	-1.3	0.3	0.4
N_St_Creek	21	1	1	Wena SoVI	238.600	48.000	0.001	1.000	1.129	-0.4	-0.9	0.5	0.5
N_St_Creek	21	2	1	Wena SoVI	238.600	48.550	0.001	1.000	1.129	-0.4	-0.9	0.5	0.5
N_St_Creek	21	3	1	EWas SoVI	238.500	49.000	0.001	1.000	1.129	-1.7	-1.8	0.3	0.3
N_St_Creek	21	1	2	Wena SoVI	238.617	48.002	15.001	1.000	1.129	-0.4	-0.9	0.5	0.5
N_St_Creek	21	2	2	Wena SoVI	238.618	48.551	15.001	1.000	1.129	-0.4	-0.9	0.5	0.5
N_St_Creek	21	3	2	CIMB SoVI	238.518	49.002	15.001	1.000	1.129	-1.8	-2.6	0.2	0.3
Entiat	22	1	1	EWas Wena	240.950	46.120	0.001	0.606	0.859	-1.2	-0.8	0.5	0.3
Entiat	22	2	1	EWas Wena	240.850	46.950	0.001	0.606	0.859	-1.2	-0.8	0.3	0.3
Entiat	22	3	1	EWas Wena	240.050	47.000	0.001	0.606	0.859	-1.2	-0.8	0.3	0.3
Entiat	22	4	1	EWas Wena	239.500	47.850	0.001	0.606	0.859	-1.2	-0.8	0.4	0.4
Entiat	22	5	1	CIMB Wena	238.500	49.000	0.001	0.606	0.859	-1.4	-1.6	0.6	0.5
Entiat	22	1	2	EWas Wena	240.967	46.121	15.001	0.606	0.859	-1.2	-0.8	0.5	0.3
Entiat	22	2	2	EWas Wena	240.864	46.957	15.001	0.606	0.859	-1.2	-0.8	0.3	0.3
Entiat	22	3	2	EWas Wena	240.062	47.008	15.001	0.606	0.859	-1.2	-0.8	0.3	0.3
Entiat	22	4	2	EWas Wena	239.516	47.855	15.001	0.606	0.859	-1.2	-0.8	0.4	0.4
Entiat	22	5	2	CIMB Wena	238.516	49.006	15.001	0.606	0.859	-1.4	-1.6	0.6	0.5
N_MSH_SZ	23	1	1	Taco YFTB	237.600	47.560	0.001	0.000	3.376	0.1	0.2	0.2	0.2
N_MSH_SZ	23	2	1	Taco YFTB	238.050	46.850	0.001	0.000	3.376	-0.8	-0.2	0.3	0.3
N_MSH_SZ	23	3	1	Taco YFTB	237.800	46.700	0.001	0.000	3.376	-1.0	0.0	0.3	0.3
N_MSH_SZ	23	1	2	Taco YFTB	237.593	47.558	15.001	0.000	3.376	0.1	0.2	0.2	0.2
N_MSH_SZ	23	2	2	Taco YFTB	238.043	46.850	15.001	0.000	3.376	-0.8	-0.2	0.3	0.3
N_MSH_SZ	23	3	2	Taco YFTB	237.795	46.701	15.001	0.000	3.376	-1.0	0.0	0.3	0.3
No_VI	24	1	1	Olym NovI	232.190	49.277	0.001	0.821	0.719	3.2	0.9	1.6	0.6
No_VI	24	2	1	SoVI NovI	233.050	49.700	0.001	0.821	0.719	3.0	-0.1	1.3	0.7
No_VI	24	3	1	SoVI NovI	232.250	50.150	0.001	0.821	0.719	2.9	-0.1	1.1	0.6
No_VI	24	4	1	SoVI NovI	232.950	50.550	0.001	0.821	0.719	2.8	-0.1	0.9	0.7
No_VI	24	5	1	SoVI NovI	233.000	50.950	0.001	0.821	0.719	2.8	-0.1	0.8	0.7
No_VI	24	6	1	SoVI NovI	232.500	52.450	0.001	0.821	0.719	2.6	-0.1	1.1	0.6
No_VI	24	1	2	Olym NovI	232.201	49.268	15.001	0.821	0.719	3.2	0.9	1.6	0.6
No_VI	24	2	2	SoVI NovI	233.068	49.700	15.001	0.821	0.719	3.0	-0.1	1.3	0.7
No_VI	24	3	2	SoVI NovI	232.268	50.153	15.001	0.821	0.719	2.9	-0.1	1.1	0.6
No_VI	24	4	2	SoVI NovI	232.965	50.543	15.001	0.821	0.719	2.8	-0.1	0.9	0.7
No_VI	24	5	2	SoVI NovI	233.019	50.949	15.001	0.821	0.719	2.8	-0.1	0.8	0.7
No_VI	24	6	2	CIMB NovI	232.519	52.448	15.001	0.821	0.719	0.8	-3.1	1.0	0.5
No_Can_CR	25	1	1	CIMB NovI	232.500	52.450	0.001	1.000	0.000	0.8	-3.1	1.0	0.5
No_Can_CR	25	2	1	CIMB NovI	231.500	53.000	0.001	1.000	0.000	0.8	-3.2	1.3	0.4
No_Can_CR	25	3	1	CIMB NovI	228.000	55.000	0.001	1.000	0.000	0.6	-3.5	2.5	1.7
No_Can_CR	25	1	2	CIMB NovI	232.620	52.536	15.001	1.000	0.000	0.8	-3.1	1.0	0.5
No_Can_CR	25	2	2	CIMB NovI	231.633	53.080	15.001	1.000	0.000	0.8	-3.2	1.3	0.4
No_Can_CR	25	3	2	NoAm NovI	228.141	55.079	15.001	1.000	0.000	0.6	-3.5	2.5	1.6
EWas_Ylws	26	1	1	EWas Ylws	248.300	46.600	0.001	1.000	0.000	0.2	0.7	0.1	0.3
EWas_Ylws	26	2	1	EWas Ylws	247.900	45.900	0.001	1.000	0.000	0.2	0.7	0.2	0.3
EWas_Ylws	26	3	1	EWas Ylws	247.500	45.100	0.001	1.000	0.000	0.2	0.7	0.2	0.3
EWas_Ylws	26	4	1	EWas Ylws	247.000	44.500	0.001	1.000	0.000	0.2	0.7	0.2	0.3
EWas_Ylws	26	1	2	CIMB Ylws	248.234	46.618	15.001	0.000	0.000	0.0	0.0	0.0	0.0
EWas_Ylws	26	2	2	EWas Ylws	247.834	45.917	15.001	1.000	0.000	0.2	0.7	0.2	0.3
EWas_Ylws	26	3	2	EWas Ylws	247.437	45.121	15.001	1.000	0.000	0.2	0.7	0.2	0.3
EWas_Ylws	26	4	2	EWas Ylws	246.962	44.523	15.001	1.000	0.000	0.2	0.7	0.2	0.3
SurpV_Goos	27	1	1	SEOr OrBR	239.900	41.300	0.000	1.000	0.000	1.0	-0.5	0.3	0.3
SurpV_Goos	27	2	1	SEOr OrBR	239.750	42.500	0.000	1.000	0.000	1.2	-0.5	0.2	0.3
SurpV_Goos	27	3	1	SEOr OrBR	240.500	43.350	0.000	1.000	0.000	1.3	-0.6	0.4	0.3
SurpV_Goos	27	1	2	SEOr OrBR	240.003	41.307	15.000	1.000	0.000	1.0	-0.5	0.3	0.3
SurpV_Goos	27	2	2	SEOr OrBR	239.853	42.484	15.000	1.000	0.000	1.2	-0.5	0.2	0.3
SurpV_Goos	27	3	2	SEOr OrBR	240.590	43.308	15.000	1.000	0.000	1.3	-0.6	0.4	0.3
JdF_Strait	28	1	1	WhdI Olym	237.300	48.100	0.001	1.000	0.825	0.1	-0.6	0.3	0.3
JdF_Strait	28	2	1	AlbH Olym	236.500	48.120	0.001	1.000	0.825	-0.1	-0.6	0.3	0.2
JdF_Strait	28	3	1	SoVI Olym	235.250	48.470	0.001	1.000	0.825	-0.1	-0.7	0.3	0.3
JdF_Strait	28	4	1	SoVI Olym	234.900	48.650	0.001	1.000	0.825	-0.2	-0.7	0.3	0.3
JdF_Strait	28	5	1	SoVI Olym	234.300	49.000	0.001	1.000	0.825	-0.2	-0.8	0.3	0.4
JdF_Strait	28	6	1	SoVI Olym	233.600	49.350	0.001	1.000	0.825	-0.3	-0.9	0.3	0.5
JdF_Strait	28	7	1	SoVI Olym	233.050	49.700	0.001	1.000	0.825	-0.3	-0.9	0.4	0.5

JdF_Strait	28	1	2	WhdI	Olym	237.295	48.146	15.001	1.000	0.825	0.1	-0.6	0.3	0.3
JdF_Strait	28	2	2	AlbH	Olym	236.546	48.229	15.001	1.000	0.825	-0.1	-0.6	0.3	0.2
JdF_Strait	28	3	2	SoVI	Olym	235.328	48.571	15.001	1.000	0.825	-0.2	-0.7	0.3	0.3
JdF_Strait	28	4	2	SoVI	Olym	235.011	48.736	15.001	1.000	0.825	-0.2	-0.7	0.3	0.3
JdF_Strait	28	5	2	SoVI	Olym	234.410	49.087	15.001	1.000	0.825	-0.2	-0.8	0.3	0.4
JdF_Strait	28	6	2	SoVI	Olym	233.735	49.421	15.001	1.000	0.825	-0.3	-0.8	0.3	0.4
JdF_Strait	28	7	2	SoVI	Olym	233.211	49.745	15.001	1.000	0.825	-0.3	-0.9	0.4	0.5
E_Seat_Ft	30	1	1	Wena	YFTB	238.900	47.100	0.001	1.000	0.000	0.2	-1.4	0.3	0.4
E_Seat_Ft	30	2	1	Seat	YFTB	238.300	47.300	0.001	1.000	0.000	0.4	-0.3	0.2	0.2
E_Seat_Ft	30	3	1	Seat	YFTB	238.050	47.600	0.001	1.000	0.000	0.2	-0.4	0.2	0.2
E_Seat_Ft	30	4	1	Seat	YFTB	237.600	47.560	0.001	1.000	0.000	0.2	-0.6	0.2	0.2
E_Seat_Ft	30	1	2	Wena	YFTB	238.908	47.111	15.001	1.000	0.000	0.2	-1.4	0.3	0.4
E_Seat_Ft	30	2	2	Seat	YFTB	238.312	47.309	15.001	1.000	0.000	0.4	-0.3	0.2	0.2
E_Seat_Ft	30	3	2	Seat	YFTB	238.058	47.610	15.001	1.000	0.000	0.2	-0.4	0.2	0.2
E_Seat_Ft	30	4	2	Seat	YFTB	237.598	47.572	15.001	1.000	0.000	0.2	-0.6	0.2	0.2
C_Casc_Arc	31	1	1	EOre	SoCR	238.450	43.850	0.001	1.000	0.000	1.5	-0.3	0.2	0.1
C_Casc_Arc	31	2	1	EOre	SoCR	238.200	44.500	0.001	1.000	0.000	0.8	-0.5	0.2	0.1
C_Casc_Arc	31	3	1	EOre	SoCR	238.000	44.700	0.001	1.000	0.000	0.5	-0.7	0.2	0.1
C_Casc_Arc	31	1	2	OrBR	SoCR	238.463	43.848	15.001	1.000	0.000	-0.6	0.7	0.2	0.2
C_Casc_Arc	31	2	2	EOre	SoCR	238.215	44.505	15.001	1.000	0.000	0.8	-0.5	0.2	0.1
C_Casc_Arc	31	3	2	EOre	SoCR	238.014	44.707	15.001	1.000	0.000	0.5	-0.7	0.2	0.1
E_Brothers	32	1	1	SEOr	EOre	240.500	43.350	0.001	0.000	0.000	-0.7	0.6	0.4	0.2
E_Brothers	32	2	1	SEOr	EOre	242.250	43.250	0.001	0.000	0.000	-0.7	0.6	0.3	0.3
E_Brothers	32	3	1	SEOr	EOre	243.400	43.000	0.001	0.000	0.000	-0.7	0.6	0.3	0.5
E_Brothers	32	1	2	SEOr	EOre	240.486	43.316	15.001	0.000	0.000	-0.7	0.6	0.3	0.2
E_Brothers	32	2	2	SEOr	EOre	242.243	43.214	15.001	0.000	0.000	-0.7	0.6	0.3	0.3
E_Brothers	32	3	2	SWId	EOre	243.386	42.972	15.001	0.000	0.000	0.0	0.0	0.0	0.0
C_St_Creek	33	1	1	Wena	WhdI	238.700	47.550	0.001	1.000	0.000	-0.6	-0.9	0.4	0.5
C_St_Creek	33	2	1	Wena	WhdI	238.700	47.825	0.001	1.000	0.000	-0.6	-0.9	0.4	0.5
C_St_Creek	33	3	1	Wena	WhdI	238.600	48.000	0.001	1.000	0.000	-0.6	-0.9	0.5	0.5
C_St_Creek	33	1	2	Wena	WhdI	238.717	47.550	15.001	1.000	0.000	-0.6	-0.9	0.4	0.5
C_St_Creek	33	2	2	Wena	WhdI	238.717	47.827	15.001	1.000	0.000	-0.6	-0.9	0.4	0.5
C_St_Creek	33	3	2	Wena	WhdI	238.617	48.002	15.001	1.000	0.000	-0.6	-0.9	0.5	0.5
S_Whdb_Is	34	1	1	WhdI	WhdI	237.300	48.100	0.001	0.000	0.000	0.0	0.0	0.0	0.0
S_Whdb_Is	34	2	1	Seat	WhdI	238.000	47.825	0.001	1.000	0.000	-0.2	0.5	0.3	0.3
S_Whdb_Is	34	3	1	Seat	WhdI	238.700	47.550	0.001	1.000	0.000	-0.2	0.4	0.3	0.3
S_Whdb_Is	34	1	2	WhdI	WhdI	237.286	48.114	15.001	1.000	0.000	0.0	0.0	0.0	0.0
S_Whdb_Is	34	2	2	Seat	WhdI	237.982	47.804	15.001	1.000	0.000	-0.2	0.5	0.3	0.3
S_Whdb_Is	34	3	2	Seat	WhdI	238.682	47.529	15.001	1.000	0.000	-0.2	0.4	0.3	0.3
S_St_Creek	36	1	1	Wena	Seat	238.900	47.100	0.001	1.000	0.000	-0.3	-1.3	0.3	0.5
S_St_Creek	36	2	1	Wena	Seat	238.800	47.300	0.001	1.000	0.000	-0.3	-1.3	0.3	0.5
S_St_Creek	36	3	1	Wena	Seat	238.700	47.550	0.001	1.000	0.000	-0.4	-1.3	0.4	0.5
S_St_Creek	36	1	2	Wena	Seat	238.984	47.123	15.001	1.000	0.000	-0.3	-1.3	0.3	0.4
S_St_Creek	36	2	2	Wena	Seat	238.960	47.333	15.001	1.000	0.000	-0.4	-1.3	0.3	0.4
S_St_Creek	36	3	2	Wena	Seat	238.862	47.580	15.001	1.000	0.000	-0.4	-1.3	0.4	0.5
Seattle_Ft	37	1	1	Taco	Seat	237.050	47.600	0.001	1.000	1.685	0.0	1.5	0.2	0.2
Seattle_Ft	37	2	1	Taco	Seat	237.500	47.600	0.001	1.000	1.685	0.0	1.0	0.2	0.3
Seattle_Ft	37	3	1	Taco	Seat	237.600	47.560	0.001	1.000	1.685	-0.1	0.8	0.2	0.3
Seattle_Ft	37	1	2	Taco	Seat	237.051	47.487	15.001	1.000	1.685	-0.3	1.5	0.2	0.2
Seattle_Ft	37	2	2	Taco	Seat	237.484	47.487	15.001	1.000	1.685	-0.2	1.0	0.2	0.2
Seattle_Ft	37	3	2	Taco	Seat	237.515	47.463	15.001	1.000	1.685	-0.3	0.9	0.2	0.3
Doty	38	1	1	NoCR	Taco	236.000	46.620	0.001	1.000	0.204	2.8	0.7	0.4	0.3
Doty	38	2	1	Port	Taco	237.000	46.650	0.001	1.000	0.204	2.7	0.7	0.4	0.2
Doty	38	3	1	Port	Taco	237.800	46.700	0.001	1.000	0.204	2.7	0.8	0.4	0.3
Doty	38	1	2	NoCR	Taco	236.001	46.608	15.001	1.000	0.204	2.8	0.7	0.4	0.3
Doty	38	2	2	Port	Taco	237.000	46.638	15.001	1.000	0.204	2.7	0.7	0.4	0.2
Doty	38	3	2	Port	Taco	237.798	46.688	15.001	1.000	0.204	2.7	0.8	0.4	0.3
N_Whdb_Is	40	1	1	AlbH	WhdI	236.800	48.360	0.001	1.000	0.000	-0.2	0.1	0.3	0.3
N_Whdb_Is	40	2	1	AlbH	WhdI	237.050	48.230	0.001	1.000	0.000	-0.2	0.1	0.3	0.3
N_Whdb_Is	40	3	1	WhdI	WhdI	237.300	48.100	0.001	1.000	0.000	0.0	0.0	0.0	0.0
N_Whdb_Is	40	1	2	AlbH	WhdI	236.778	48.341	15.001	1.000	0.000	-0.2	0.1	0.3	0.3
N_Whdb_Is	40	2	2	AlbH	WhdI	237.028	48.211	15.001	1.000	0.000	-0.2	0.1	0.3	0.3
N_Whdb_Is	40	3	2	WhdI	WhdI	237.286	48.114	15.001	1.000	0.000	0.0	0.0	0.0	0.0
Sist_Hood	41	1	1	Port	EOre	238.250	45.250	0.001	1.000	0.000	0.1	0.5	0.2	0.1
Sist_Hood	41	2	1	Port	EOre	238.120	45.000	0.001	1.000	0.000	-0.2	0.6	0.2	0.1
Sist_Hood	41	3	1	Port	EOre	238.000	44.700	0.001	1.000	0.000	-0.5	0.7	0.2	0.1
Sist_Hood	41	1	2	Port	EOre	238.235	45.255	15.001	1.000	0.000	0.1	0.5	0.2	0.1
Sist_Hood	41	2	2	Port	EOre	238.104	45.004	15.001	1.000	0.000	-0.2	0.6	0.2	0.1
Sist_Hood	41	3	2	SoCR	EOre	237.984	44.703	15.001	1.000	0.000	-0.5	0.7	0.2	0.1
S_MSH_SZ	42	1	1	Port	YFTB	237.800	46.700	0.001	0.000	0.703	1.7	0.8	0.2	0.1
S_MSH_SZ	42	2	1	Port	YFTB	237.750	46.400	0.001	0.000	0.703	1.4	0.8	0.2	0.1
S_MSH_SZ	42	3	1	Port	YFTB	238.250	45.250	0.001	0.000	0.703	0.1	0.5	0.2	0.1
S_MSH_SZ	42	1	2	Taco	YFTB	237.795	46.701	15.001	0.000	0.703	-1.0	0.0	0.3	0.3

S_MSH_SZ	42	2	2	Port YFTB	237.744	46.398	15.001	0.000	0.703	1.4	0.9	0.2	0.1
S_MSH_SZ	42	3	2	Port YFTB	238.244	45.249	15.001	0.000	0.703	0.1	0.5	0.2	0.1
N_W_BnR	47	1	1	SWId WeBR	243.000	41.300	0.001	1.000	0.000	0.6	-1.0	0.5	0.4
N_W_BnR	47	2	1	SEOr WeBR	242.200	41.300	0.001	1.000	0.000	0.5	-0.5	0.5	0.4
N_W_BnR	47	3	1	SEOr WeBR	239.900	41.300	0.001	1.000	0.000	2.4	-0.8	0.5	0.4
N_W_BnR	47	4	1	OrBR WeBR	239.500	41.300	0.001	1.000	0.000	1.7	-0.3	0.5	0.3
N_W_BnR	47	5	1	OrBR WeBR	238.200	41.600	0.001	1.000	0.000	2.8	-0.4	0.5	0.4
N_W_BnR	47	1	2	SWId WeBR	243.000	41.378	15.000	1.000	0.000	0.6	-1.0	0.5	0.4
N_W_BnR	47	2	2	SEOr WeBR	242.202	41.378	15.000	1.000	0.000	0.5	-0.5	0.5	0.4
N_W_BnR	47	3	2	SEOr WeBR	239.902	41.378	15.000	1.000	0.000	2.4	-0.7	0.5	0.4
N_W_BnR	47	4	2	OrBR WeBR	239.502	41.378	15.000	1.000	0.000	1.7	-0.3	0.5	0.3
N_W_BnR	47	5	2	OrBR WeBR	238.202	41.678	15.000	1.000	0.000	2.8	-0.3	0.5	0.4
N_E_BnR	48	1	1	SnRP EBnR	248.500	42.500	0.001	1.000	0.000	1.6	-4.1	0.4	0.3
N_E_BnR	48	2	1	SnRP EBnR	247.000	42.000	0.001	1.000	0.000	1.1	-2.9	0.3	0.3
N_E_BnR	48	3	1	SWId EBnR	245.500	41.300	0.001	1.000	0.000	0.4	-1.7	0.3	0.3
N_E_BnR	48	4	1	SWId EBnR	243.000	41.300	0.001	1.000	0.000	0.5	0.3	0.3	0.2
N_E_BnR	48	1	2	SnRP EBnR	248.458	42.571	15.000	1.000	0.000	1.7	-4.0	0.4	0.3
N_E_BnR	48	2	2	SnRP EBnR	246.952	42.069	15.000	1.000	0.000	1.2	-2.9	0.3	0.3
N_E_BnR	48	3	2	SWId EBnR	245.479	41.376	15.000	1.000	0.000	0.5	-1.7	0.3	0.3
N_E_BnR	48	4	2	SWId EBnR	243.001	41.378	15.000	1.000	0.000	0.5	0.3	0.3	0.2