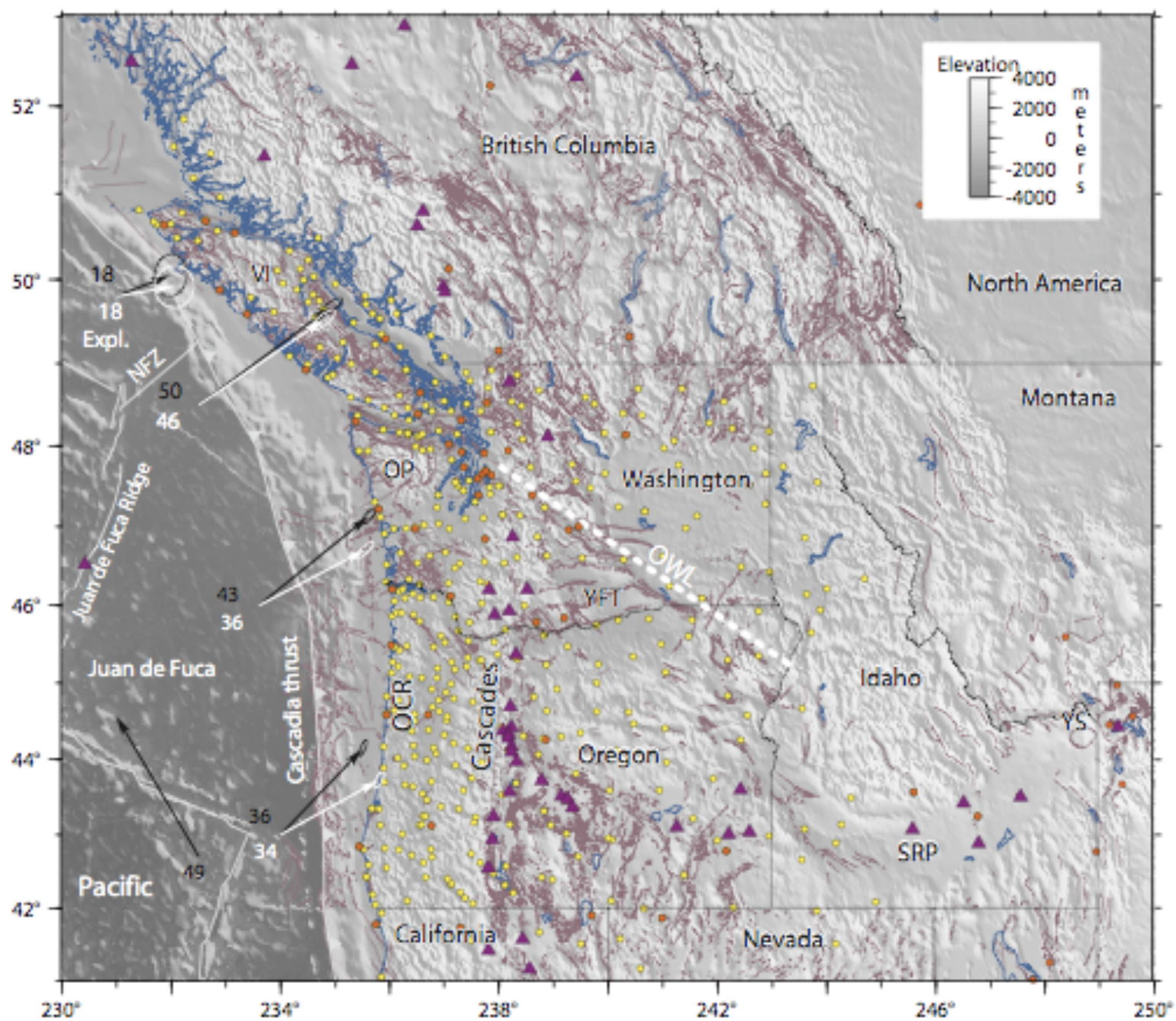




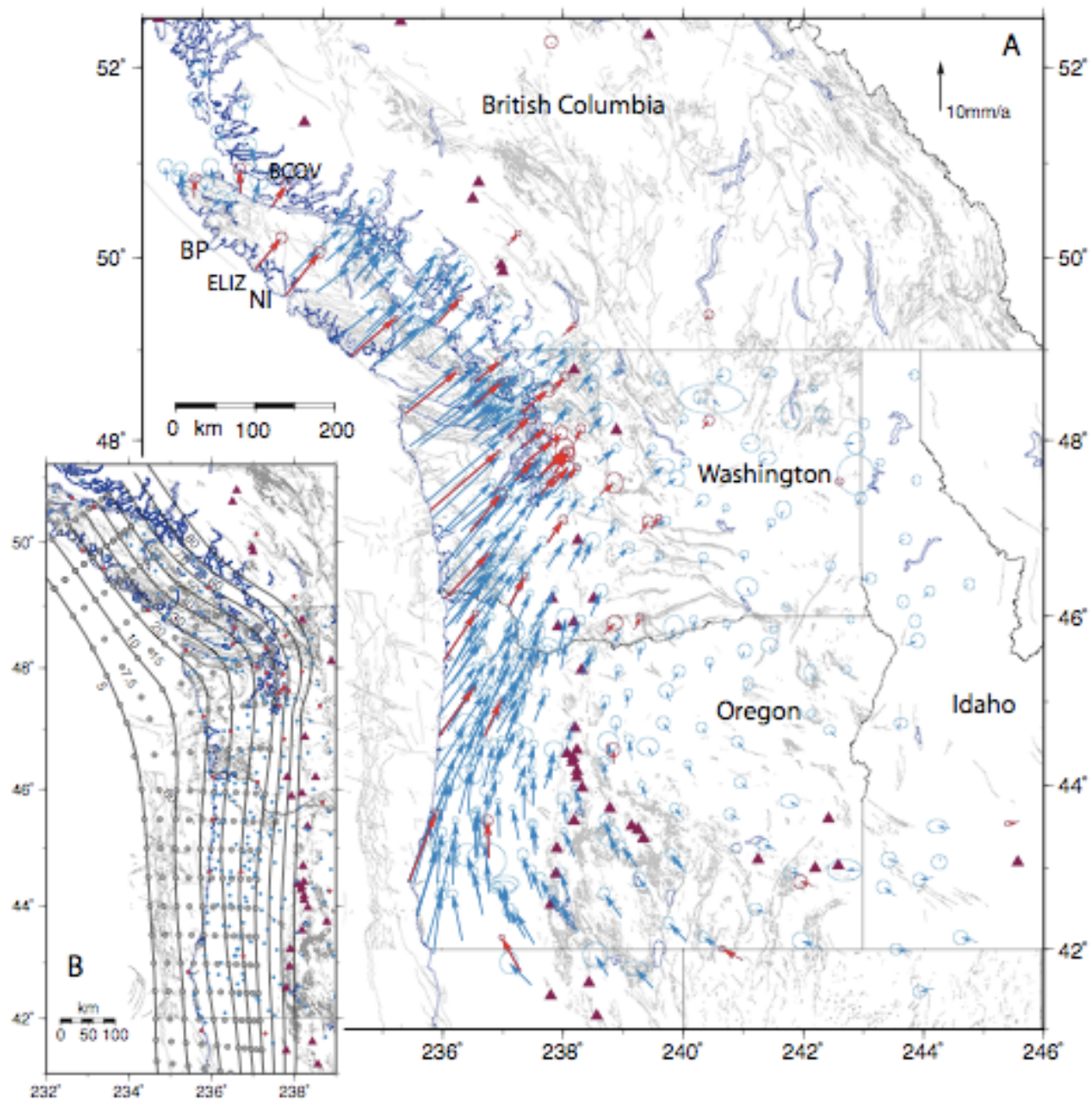
Cascadia GPS data and analysis

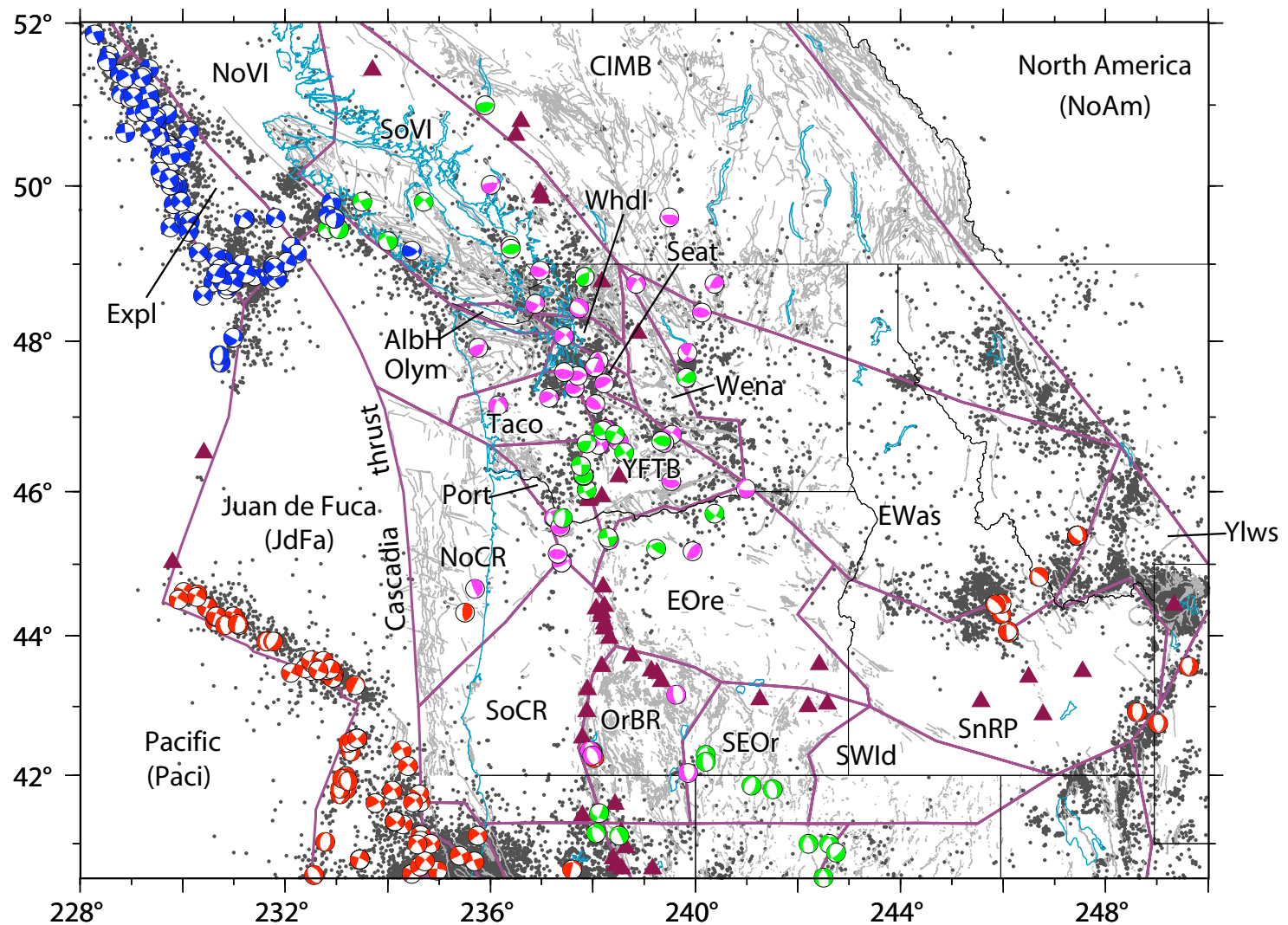
- From

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

Robert McCaffrey,¹ Anthony I. Qamar,^{2*} Robert W. King,³ Ray Wells,⁴ Giorgi Khazaradze^{2,5},
Charles A. Williams,¹ Colleen W. Stevens,^{1,6} Jesse J. Vollick¹ and Peter C. Zwick^{1,7}

The Data

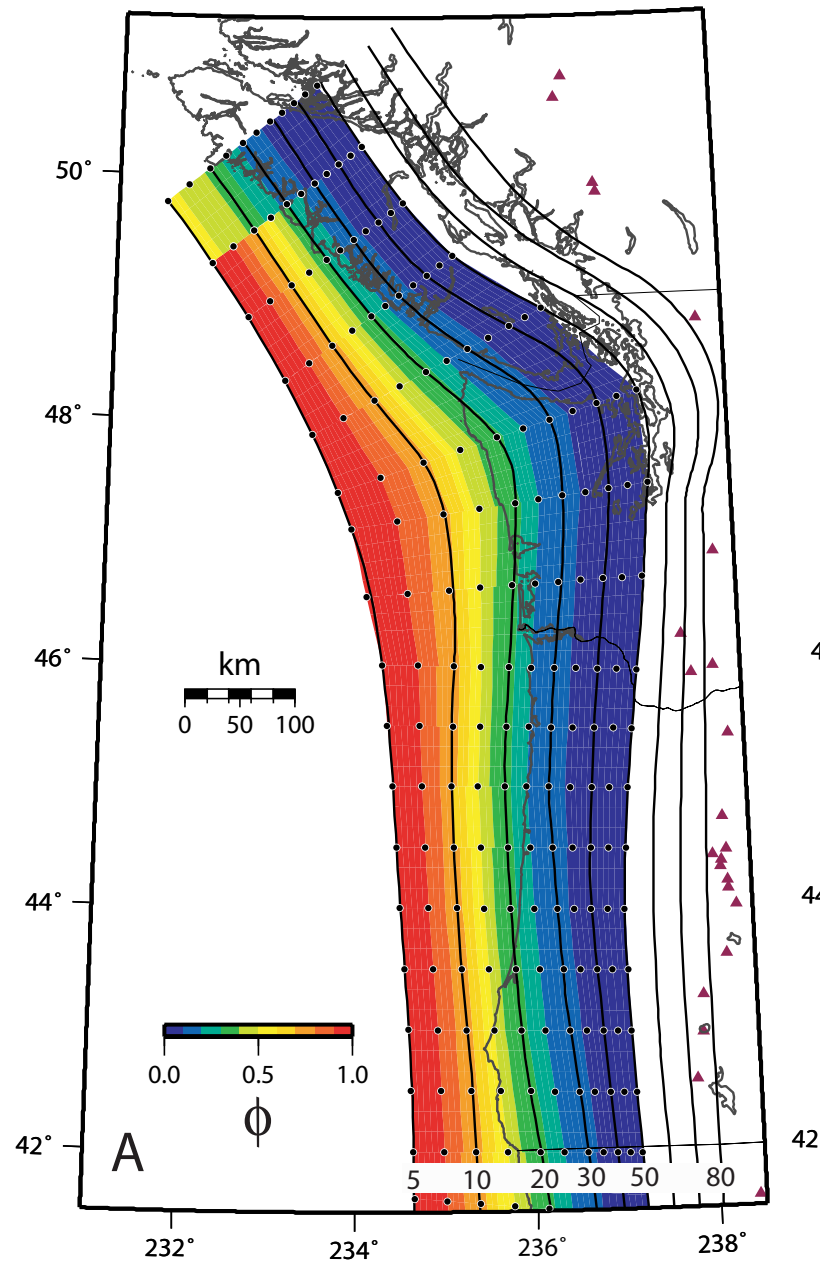




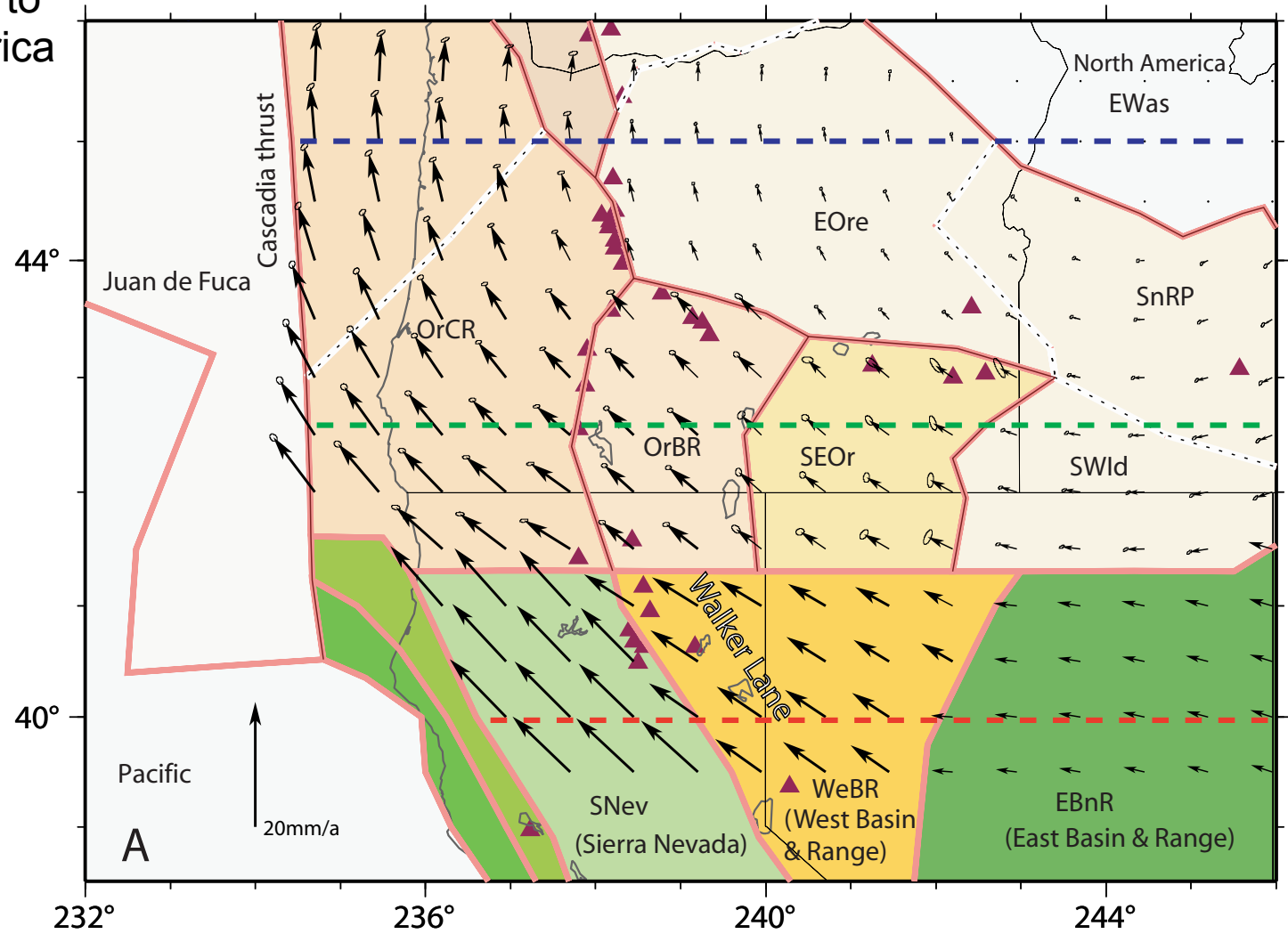
Seismic data that help define the “micro-plates”
 Note locations and focal mechanisms

One of several models for
the “locked zone” of the
subducting plate

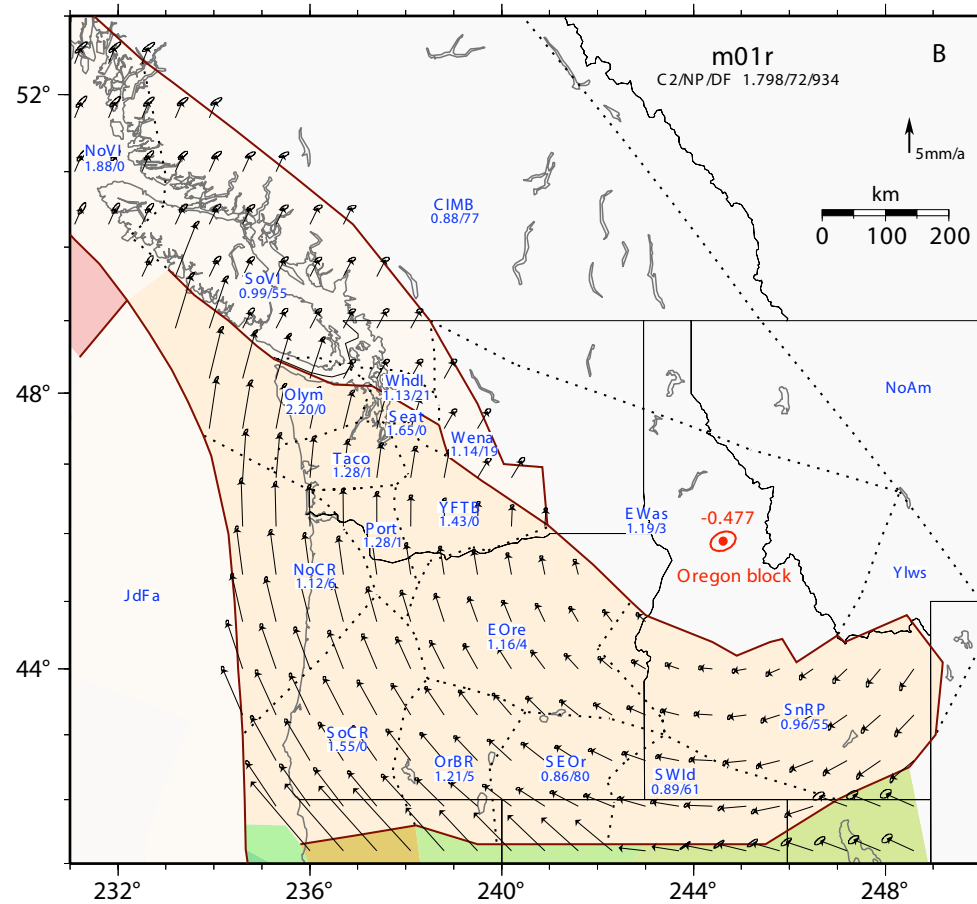
Colors
indicate
fractional
locking from
fully locked
(red) to
slipping
(deep blue)

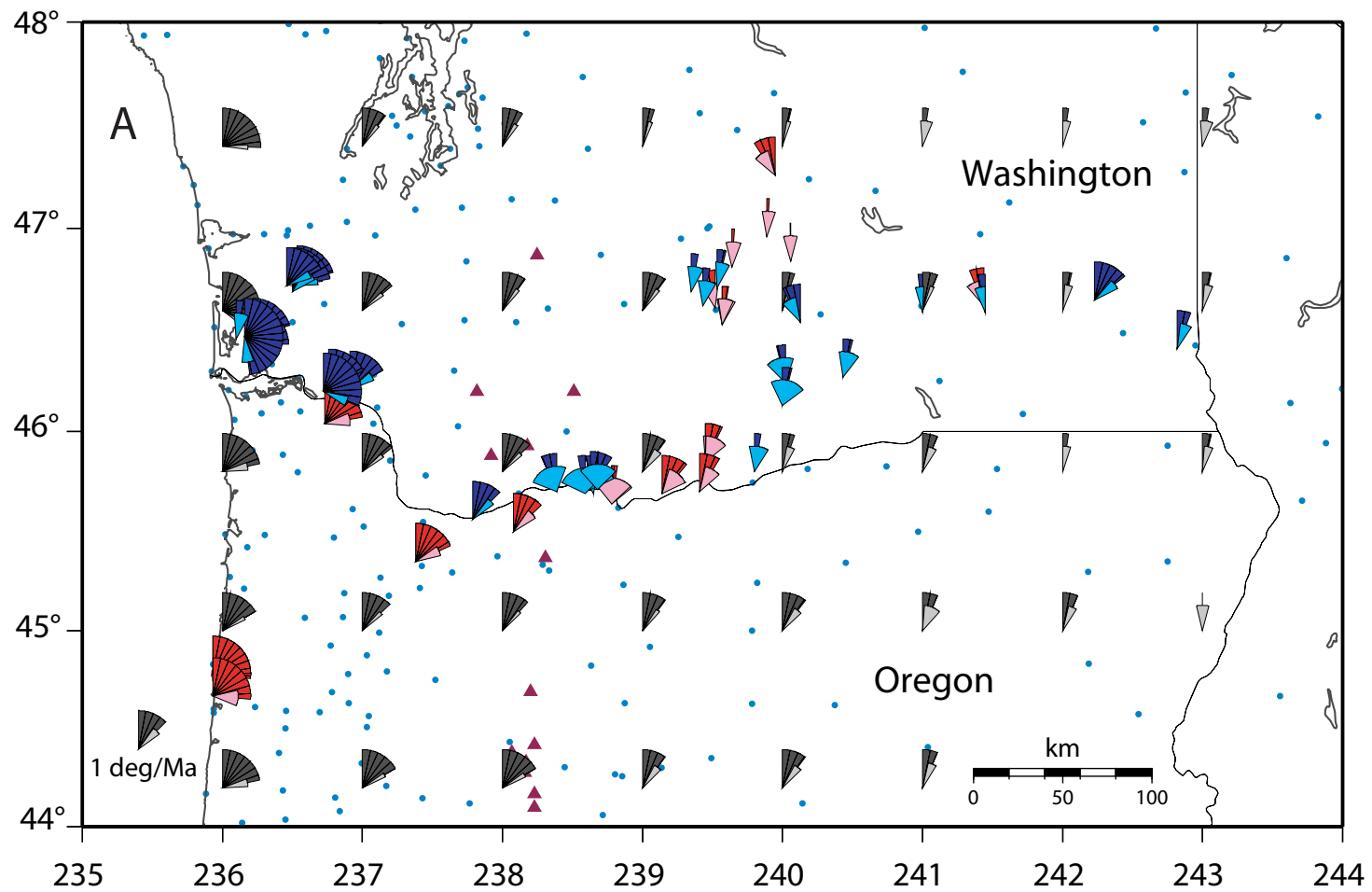


Motions in western US relative to North America



Rotations of Oregon about its pole





Rotation rates from GPS (blue)
compared to paleomagnetic data
(black)