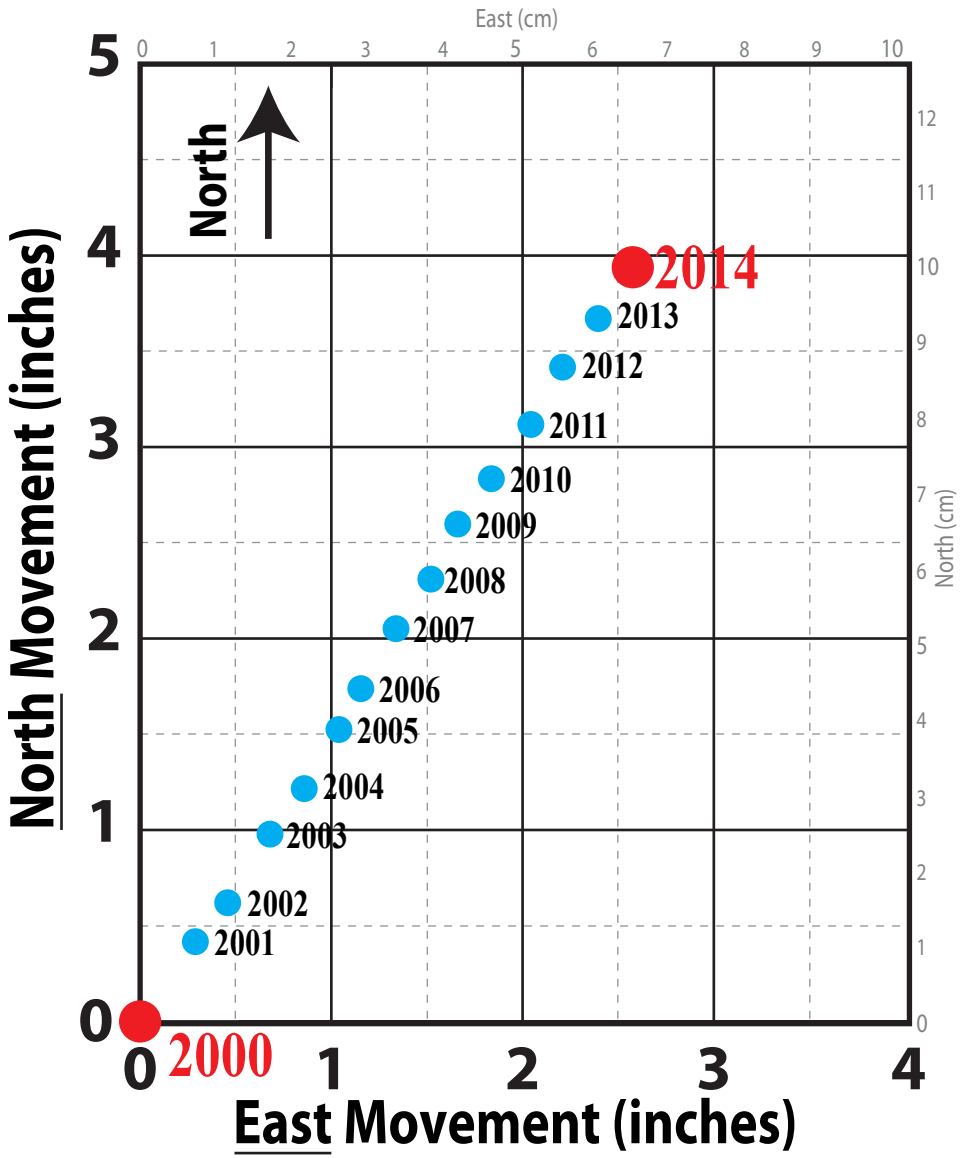
Corvallis, Oregon GPS Station

Yearly Movement, 2000 - 2014

(Referenced to North America's stable east)



The dots on this card show motion of the Corvallis GPS station since 2000. Because the station is anchored into hard rock beneath the soil, the dots represent the year-to-year movement of the Corvallis region toward the northeast.

Orient this graph toward the north, tape it to the floor, and think about the questions below.

1. How far has the Corvallis region moved since the year 2000? At what rate (inches per year) is the region moving? At that rate, how far has the region moved since the year 1700?

2. Why is the region moving towards the northeast?

3. The last big earthquake in the Pacific Northwest occurred in the year 1700. **What will happen to the Corvallis region when the next big earthquake occurs?**

Cut Here

Station CORV from the EarthScope Plate Boundary Observatory (**http://pbo.unavco.org**). GPS time series data provided by UNAVCO (**http://www.unavco.org**). Data as of July 15, 2015. Position offset -0.65 inches east and -1.44 inches north from the NAM08 .cvs file to bring 2000 average to zero.

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