This document will contain summary of selected papers I read.

[*Yokota et al.*, 2016] reported the seafloor geodetic observation network data and an offshore interpolate slip-deficit rates (SDRs) distribution model. They use the seafloor geodetic data to invert the SDRs in Japan, and get a model that is robustly similar to that obtained in the past studies using only the onshore data. A couple of interesting things:

* Subducting ridge not only activates shallow VLFEs, but also forms the low-SDR region (low-coupling condition)
* These low-SDR region usually is the boundary of the rupture, if the earthquake rupture stops at these boundaries, it maybe a small earthquake, but if it ruptures through, it maybe a large earthquake.

[*Hardebeck and Shelly*, 2016] using templates matching and double-difference to identify and locate the aftershocks for the 2014 Napa Earthquake. They find many aftershocks occur in a complex zone of secondary faulting. They also generate the focal mechanism and most of them show strike-slip and oblique-reverse faulting on secondary dipping faults in the main aftershock zone. These secondary faults were brought closer to failure by Coulomb stress changes from the main-shock. One conclusion is: the lack of stick-slip patches in the southern rupture zone may contribute to the low productivity of the South Napa aftershock sequence.

Hardebeck, J. L., and D. R. Shelly (2016), Aftershocks of the 2014 South Napa, California, Earthquake: Complex Faulting on Secondary Faults, *Bull. Seismol. Soc. Am.*, *106*(3), 1100–1109, doi:10.1785/0120150169.

Yokota, Y., T. Ishikawa, S. Watanabe, T. Tashiro, and A. Asada (2016), Seafloor geodetic constraints on interplate coupling of the Nankai Trough megathrust zone, *Nature*, 4–6, doi:10.1038/nature17632.