[*Ruano et al.*, 2014] talks about building MLP and SVM method to classify seismic signals. They use sliding window to extract features from one station, and train a MLP and SVM method to classify different signals. For the SVM, they use an active learning method to retrain on the mis-classified results, and achieved better results. Besides, they also train a model with shorter time window which can be applied to EEW. Overall, it is a paper overlays the correct procedure to do signal classification. But a few things not correctly or clearly stated, for example, for the imbalanced dataset, how they deal with it.

[*Shirzaei et al.*, 2016] reports the surface uplift due to the injection in eastern Texas. Using time evolution InSAR images, they get a uplift of 3 mm/year over >8km area from the injection wells. They also build a poroelastic model to explain the uplift. They invested two wells, one in the west, and one in the east, and only the east shows the uplift. The west wells do not show the uplift, but accompanied by a sequence of earthquakes. They attribute this to the low compressibility of the rocks at the west wells. Therefore, the seismicity and the deformation behavior depends both on the injection activity and the local hydrogeological properties. Some interesting things from this paper: (1) Seismic activity increased even while the injection rates declined, owing to diffusion of pore pressure from earlier periods with higher injection rates. (2) Induced seismicity potential is suppressed where tight confining formations prevent pore pressure from propagating into crystalline basement rocks. (3) Over time, the increased pore pressure due to injection can spread to distances of many kilometers. (4) A localized increase in pore pressure shifts the circle (Mohr circle) to the left and changes its radius because of poroelastic strain, whereas a spatially uniform pore pressure increase only shifts the circle to the left until it touches the failure envelope.

[*Levander et al.*, 2011] proposed the hypothesis for the uplift of the Colorado plateau – delamination style convective lithospheric downwelling. The main method they used is from body wave tomography and receiver function. Based on the results from these two methods, they propose the process like this: The Colorado plateau lithosphere has been dydrated, and the small increase in density from the freezing metls, and the viscosicty reduction from hydration and advected heat, destabilizes the lithosphere and initiates a localized downwelling. The re-fertilized Colorado plateau mantle has been removed, delaminating the lowermost crust with it. The asthenosphere is invading the region from the beneath the drip and around the peripheries of the drip. They inferred that the lowermost crust involved in the dwonwelling has been modified by intrusion of basaltic melts that froze to produce high density eclogites. A series of these events have been removing the lithosphere from the Colorado plateau peripheries since the Farallon slab was removed 20-30 Myr ago, and causing the uplift.

[*Taira et al.*, 2009] reports the changes of fault-strength on the San Andreas fault at Parkfield by remote triggering. They argue that the seismicity of the repeating earthquakes at Parkfield have revealed a means of monitoring fault strength. For the Landers and Sumatra earthquake, the dynamic strain causes the changes in two manifestations: temporal variations in the properties of seismic scatters – probably reflecting the stress-induced migration of fluids – and systematic temporal variations in the characteristics of repeating-earthquake sequences that are most consistent with changes in fault strength. They also found the 2004 M6 Parkfield earthquake causing the two remote triggering different maybe due to: it damaged the fault zone by creating new fractures, it relieved most of the stress stored in the fault zone, and the absence of accompanying slip for the 2004 Sumatra earthquake can be explained by the low driving stress.

[*Bayrakci et al.*, 2016] reports the fault-controlled hydration of the upper mantle during continental rifting. They shoed the serpentinization at the rifted continental margin offshore from western Spain was probably initiated when the whole crust cooled to become brittle and deformation was focused along large normal faults. They use seismic tomography to image the 3D distribution of serpentinization in the mantle and find that the local volume of serpentinite beneath thinned, brittle crust is related to the amount of displacement along each fault. This implies that sea water reaches the mantle only when the faults are active. They also estimate the fluid flux along the faults and find it is comparable to that inferred for mid-ocean ridge hydrothermal systems. They conclude that brittle processes in the crust may ultimately control the global flux of sea water into the Earth. Some useful backgrounds can be found [here](https://en.wikipedia.org/wiki/Non-volcanic_passive_margins).

Bayrakci, G. et al. (2016), Fault-controlled hydration of the upper mantle during continental rifting, *Nat. Geosci.*, *9*(March), 1–6, doi:10.1038/ngeo2671.

Levander, A., B. Schmandt, M. S. Miller, K. Liu, K. E. Karlstrom, R. S. Crow, C. T. A. Lee, and E. D. Humphreys (2011), Continuing Colorado plateau uplift by delamination-style convective lithospheric downwelling, *Nature*, *472*(7344), 461–465, doi:10.1038/nature10001.

Ruano, A. E., G. Madureira, O. Barros, H. R. Khosravani, M. G. Ruano, and P. M. Ferreira (2014), Seismic detection using support vector machines, *Neurocomputing*, *135*(January), 273–283, doi:10.1016/j.neucom.2013.12.020.

Shirzaei, M., W. L. Ellsworth, K. F. Tiampo, P. J. Gonzalez, and M. Manga (2016), Surface uplift and time-dependent seismic hazard due to fluid injection in eastern Texas, *Science (80-. ).*, *353*(6306), 1416–1419, doi:10.1126/science.aag0262.

Taira, T., P. G. Silver, F. Niu, and R. M. Nadeau (2009), Remote triggering of fault-strength changes on the San Andreas fault at Parkfield, *Nature*, *461*(7264), 636–639, doi:10.1038/nature08395.