ID: Type: **Poster**

4.1-P17. Performance of the primary seismic array stations of the IMS network for the year 2014 (Part I): An Analyst's perspective

During interactive analysis retiming and frequency wave number analysis (FK analysis) are performed to refine arrival time, azimuth and slowness estimates of automatic detections. Differences between automatically and interactively obtained parameters are investigated using data from all primary seismic array stations of the IMS network during the year 2014. The differences shed light on the work load that analysts have to deal with during interactive analysis. In addition, performance of the network is evaluated from an analyst's perspective. Parameter estimate differences; Aridif for arrival time, Azmdif for azimuth and Slodif for slowness between automatic and interactive analysis are obtained by subtracting REB parameters estimates from the automatic detection parameter estimates. The study shows that analysts have to recalculate parameters for many of the automatic detections during interactive analysis. For example, the results indicate that of the total number of common detections 15009 (65.8%) were retimed for WRA. The results of the study should help CTBTO develop plans to improve performance of the IMS Network of primary seismic array stations, ensuring that the quality of the input data for interactive analysis is high so as to enhance the quality of the REB as well as its timely issuance to customers.

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Track Classification: 4. Performance Optimization