

In this paper we have seen that there is three main ways to do **AD!** (**AD!**), forecasting, clustering, index monitoring. It can be observed that the dataset usually used to compare the forecasting methods (cf ??) may not be generalized to **TBM!** (**TBM!**). The reasoning is that those data set is homogenous in time, when the **TBM!**'s ones highly depend on a varying geology. We also found, some ways to improve those methods using topologies information, contamination handling and dimension reduction. The aim of future works will be to test those methods on actual **TBM!** data to see how well they work, and under which condition.