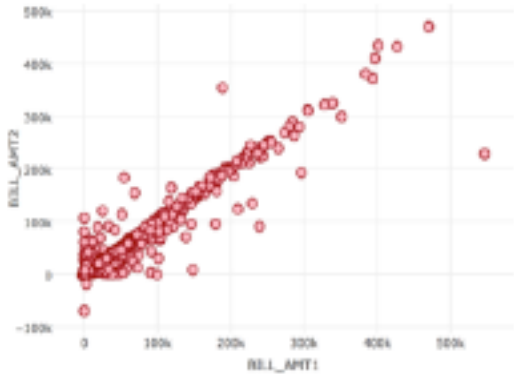
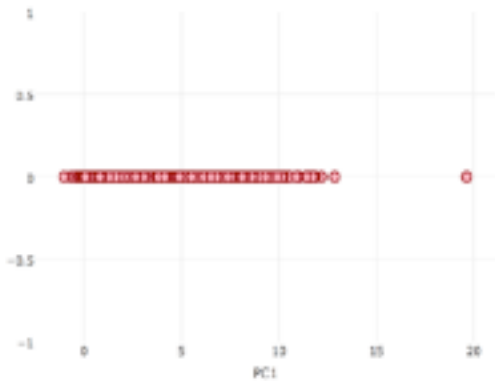




Principal Components Analysis

- Orthogonal rotation of covariance or correlation matrix that orders derived measures from highest to lowest variation
- Useful for dimensionality reduction / removing collinearities







H2O Principal Components Analysis

```
h2o.prcomp(training_frame, x, model_id = NULL, validation_frame = NULL,  
            ignore_const_cols = TRUE, score_each_iteration = FALSE,  
            transform = c("NONE", "STANDARDIZE", "NORMALIZE", "DEMEAN",  
                           "DESCALE"), pca_method = c("GramSVD", "Power", "Randomized",  
               "GLRM"), k = 1, max_iterations = 1000,  
            use_all_factor_levels = FALSE, compute_metrics = TRUE,  
            impute_missing = FALSE, seed = -1, max_runtime_secs = 0)
```



```
from h2o.estimators.pca import H2OPrincipalComponentAnalysisEstimator  
pca = H2OPrincipalComponentAnalysisEstimator(...)  
pca.train(x = x, training_frame = data)
```



Principal Components Analysis

- Orthogonal rotation of covariance or correlation matrix that orders derived measures from highest to lowest variation
- Useful for dimensionality reduction / removing collinearities

