RF System Error Analysis and Prediction Project

The Klystron and RF System Error Analysis and Prediction Project is a pilot study to try to predict klystron faults based on archived Process Variable values, message logs and CATER. It is a collaboration between SLAC and UC Berkeley students taking a class in Machine Learning.

References

See the CHEATSHEET FOR THE LCLS ACCELERATOR COMPLEX PHYSICS ENVIRONMENT for getting started with accessing data of the LCLS accelerator, including the RF system.

Downloads

klysPvs.xlsx is a spreadsheet of the most important EPICS process variables in the RF control system of LCLS, compiled by Sean Kalsi.



171121-RFStationOverview.pdf is the slides of the talk given by Tim Maxwell to outline the RF system to people interested in taking predictive failure analysis of the system.



CaterTextSearch.sql is a text file containing a SQL select statement that can be used in the CATER database to find issue reports matching given criteria, and can therefore be used to find issue reports of failures in the RF system.

