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Analysis And Prediction Of Chilled Water Plant Performance Based
On Multivariate Statistical Methods And Large Historical Data

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Highlights

- PCA explains up to 80% of the variance in a chiller operation with only 2 components
- The first component is driven by weather, the second by operation set points
- PLS can predict present and future COP values, up to 3h in advance, with $R^2 = 77\%$
- PCA/PLS effectively extract useful knowledge from the large historical dataset

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