**NSC Automation Validation**

The purpose of this project is to install and commission automated PID control of the NSC/CSR test using coke sample temperature as the process variable in three test furnaces at CSIRO QCAT (Pullenvale). The CSR test is a high temperature reactivity and coke strength test that is used to simulate the behaviour of coke in an iron-making blast furnace.

The data in this project is both coke quality and process data that will be used to assess the effectiveness of the implementation of automated temperature control as well as determining if any systematic changes in results have been introduced due to the process change implemented.

The directory structure used is as follows

Folder: NSC Automation Validation contains four folders (listed below), this READ\_ME file, .gitignore,.RData,.Rhistory and NSC Automation Validation.Rproj.

* Data: contains raw data file called commissioning\_data.xlsx (the data can be obtained on Github)
* Figures: contains all figures
* Results: contains the output of scripts
* Scripts: contains r scripts

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