Standard Data Logging Practices

Cornell Racing

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1 Overview

The purpose of this document is to detail a proposed standard to documenting engine log events. This standard seeks to address several perceived short comings in current practice that have negatively impact our capacity to pursue a data-driven design for our vehicle. Specifically the standards seeks to:

- Capture information regarding the current configuration (Suspension parameters, Tune used, components used)of the vehicle/ dynamometer

- Standardize the format of fields (Driver, venue, event,...) to enable easy sorting and identification of log files

- Documentation of failures and failure severity that is directly tied to the log file

- Eliminate the logging of faultily/broken/configured sensors

- Record track and atmospheric conditions

2 MoTeC Log file Details

Table 1: Overview of the Detail Fields

Field name	Description
Event	Event Type Identifier
Venue	Physical Location
Engine ID	Tune File Name
Vehicle ID	Filename of Configuration Excel File
Driver	NetID of the Driver/Operator
Session	"Subteam Running Test"_"NetID of Tester"
Start Lap	Test Report Code
Short	Test Status Code
Long	Additional details pertaining to test conditions