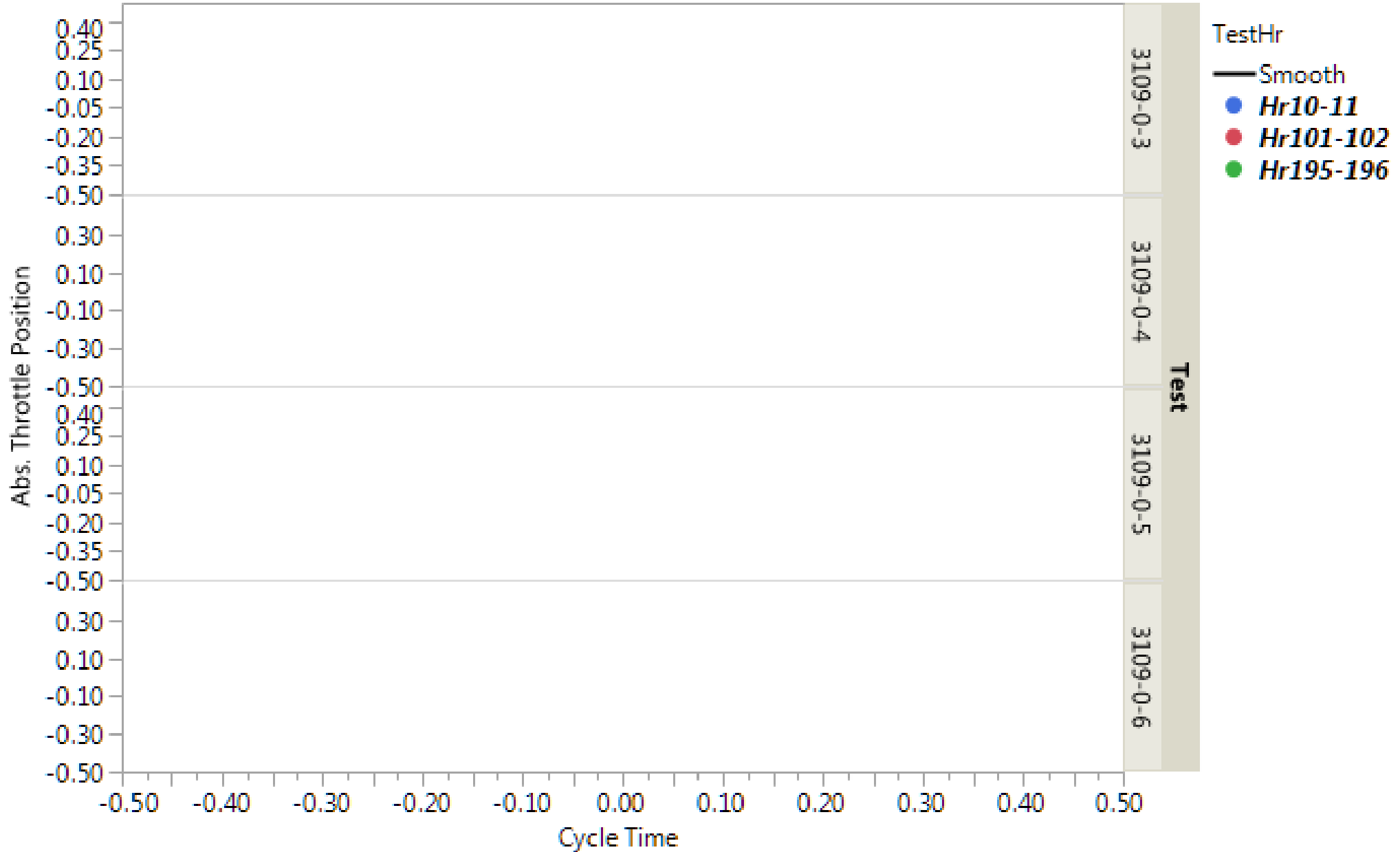


# XOM Lab Operational Plots

By: Stats Group

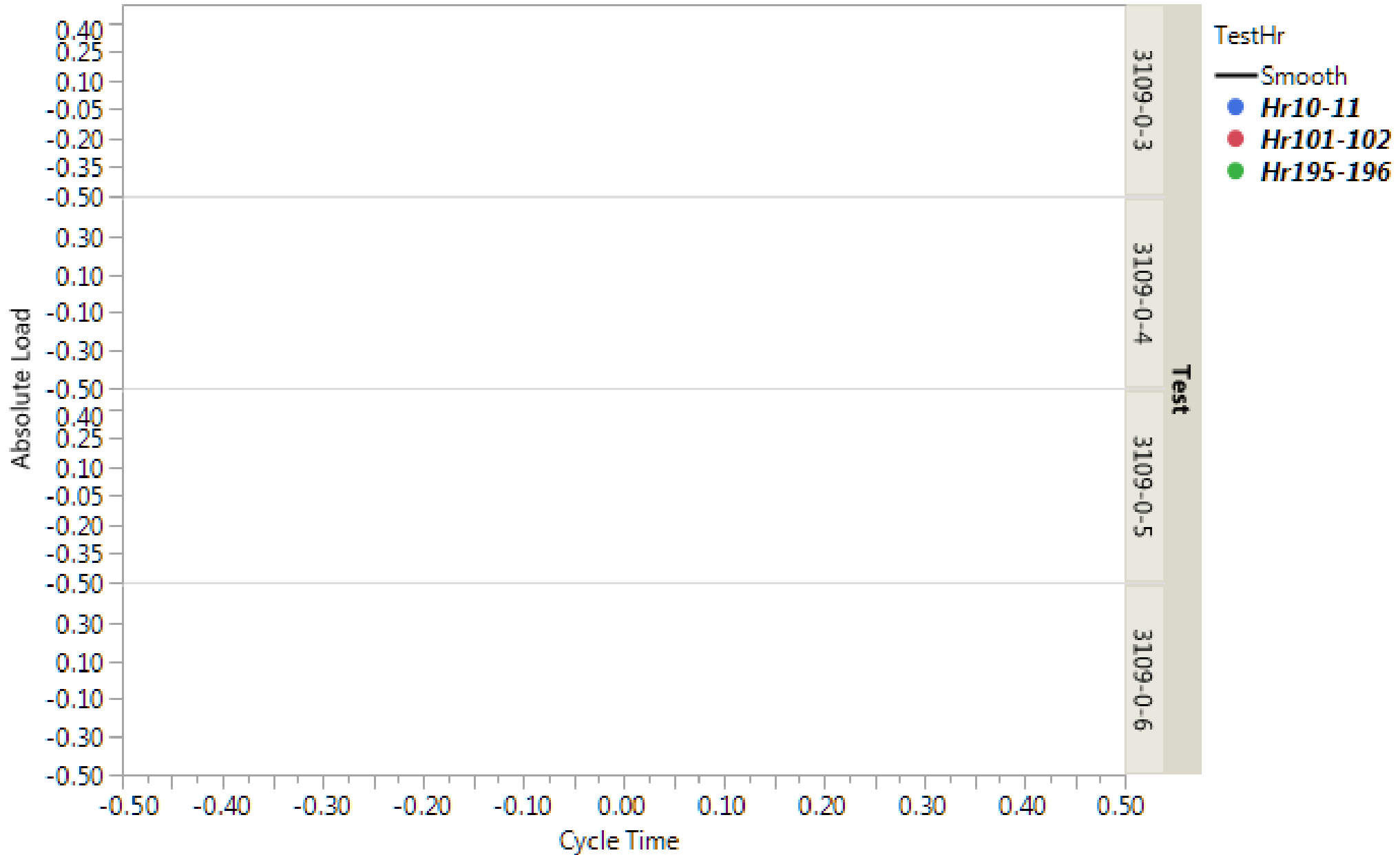
02-28-18

### Abs. Throttle Position vs. Cycle Time



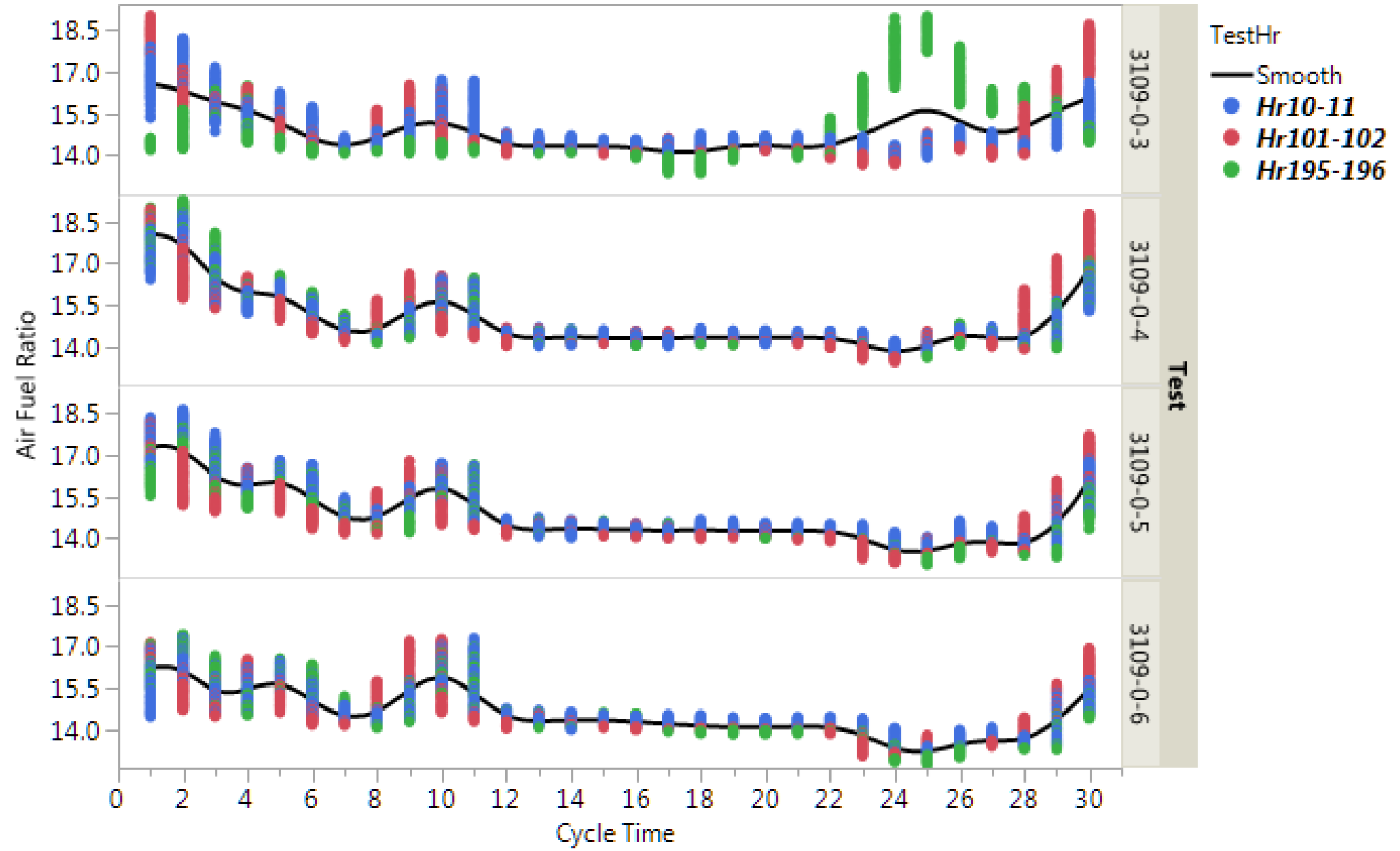
Where(LAB = ExxonMobil)

### Absolute Load vs. Cycle Time



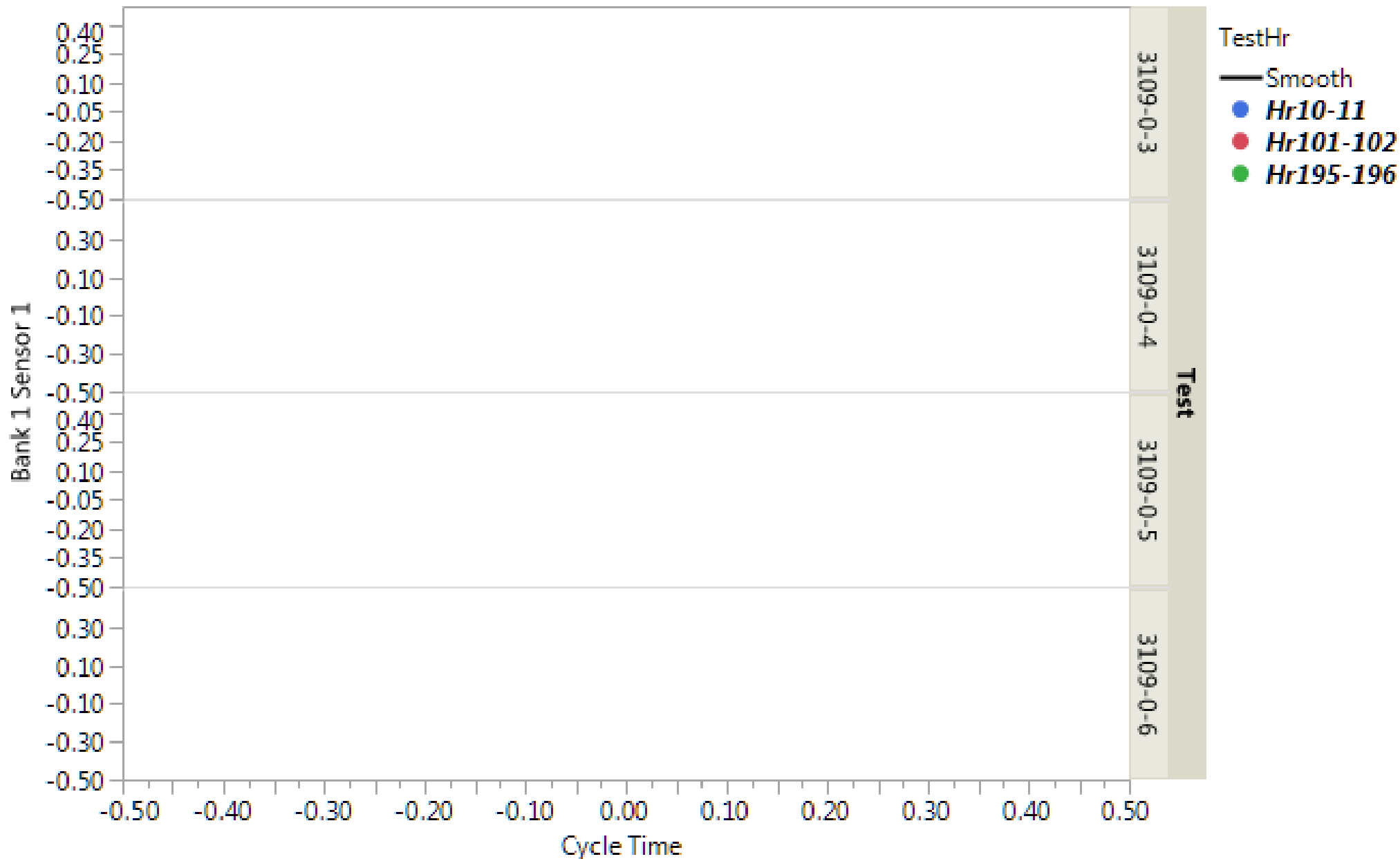
Where(LAB = ExxonMobil)

### Air Fuel Ratio vs. Cycle Time



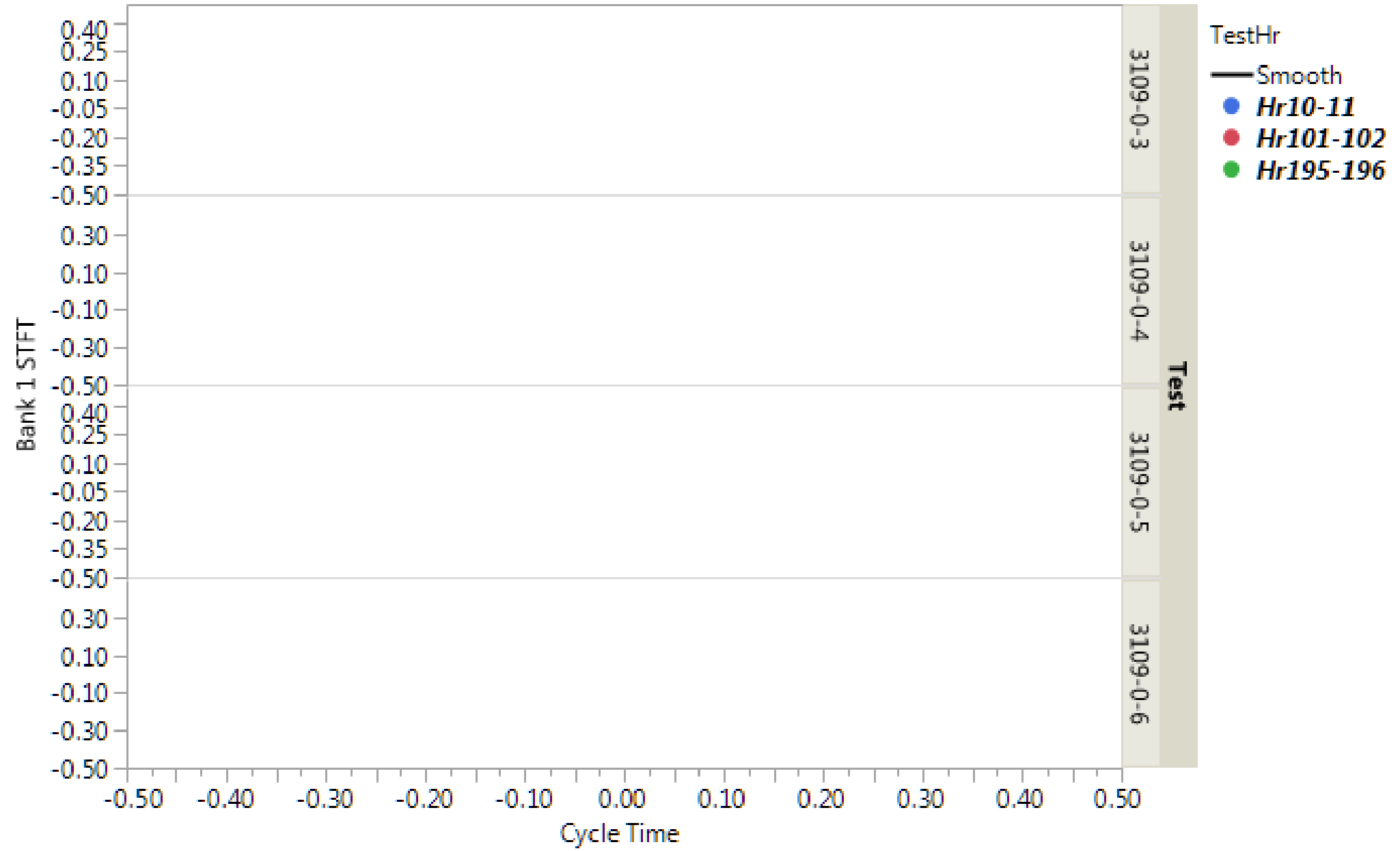
Where(LAB = ExxonMobil)

### Bank 1 Sensor 1 vs. Cycle Time



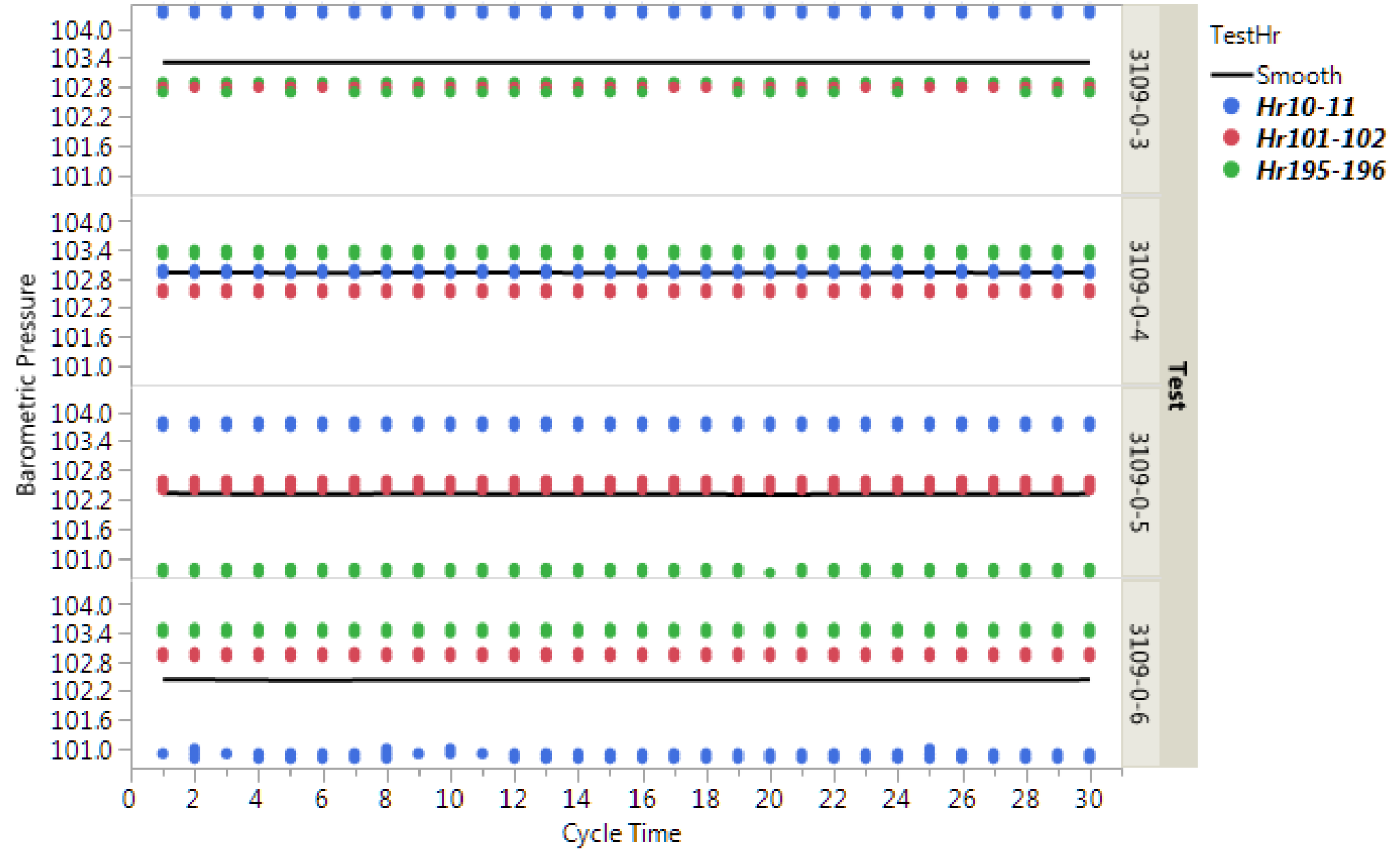
Where(LAB = ExxonMobil)

### Bank 1 STFT vs. Cycle Time



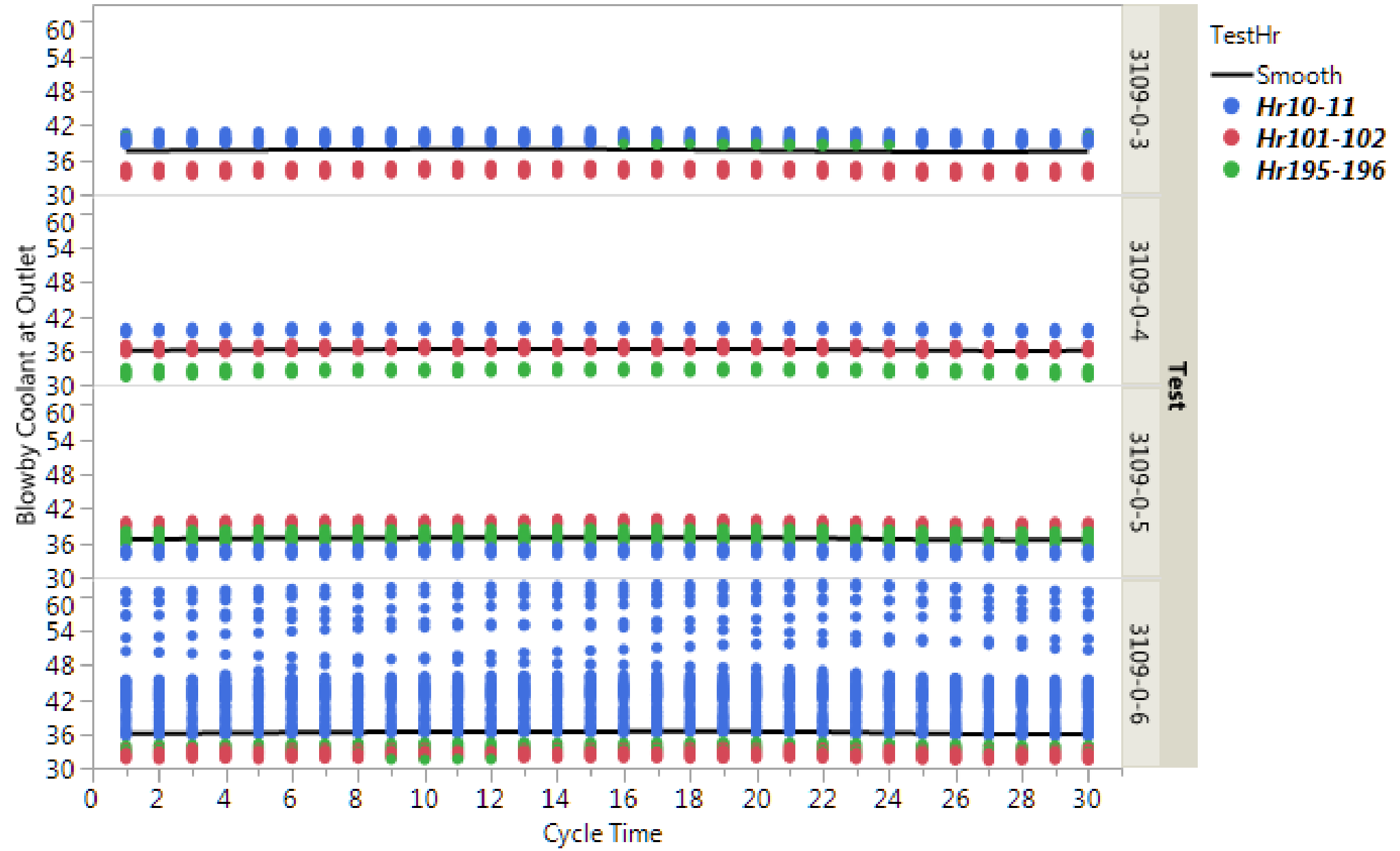
Where(LAB = ExxonMobil)

### Barometric Pressure vs. Cycle Time



Where(LAB = ExxonMobil)

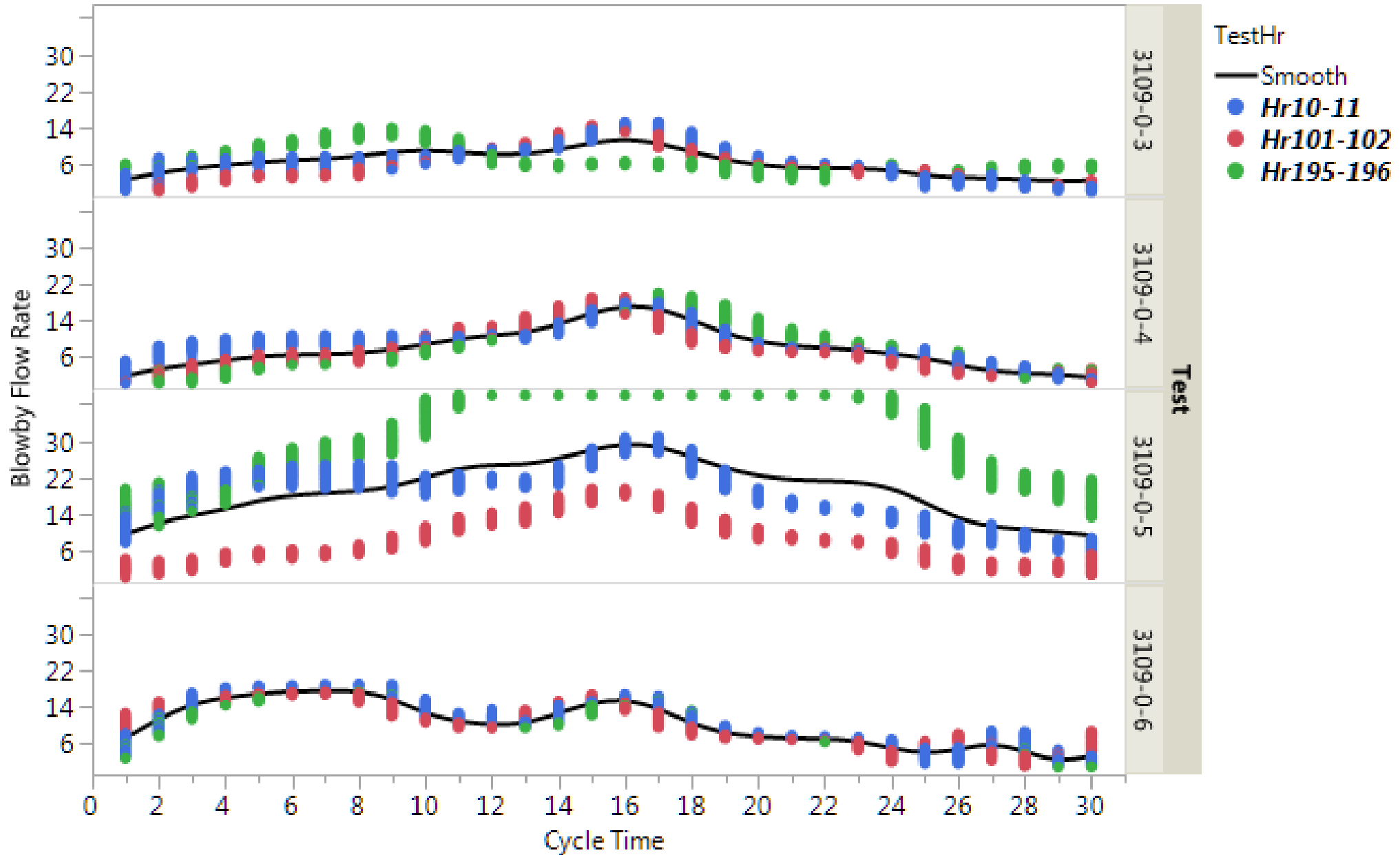
### Blowby Coolant at Outlet vs. Cycle Time



Where(LAB = ExxonMobil)

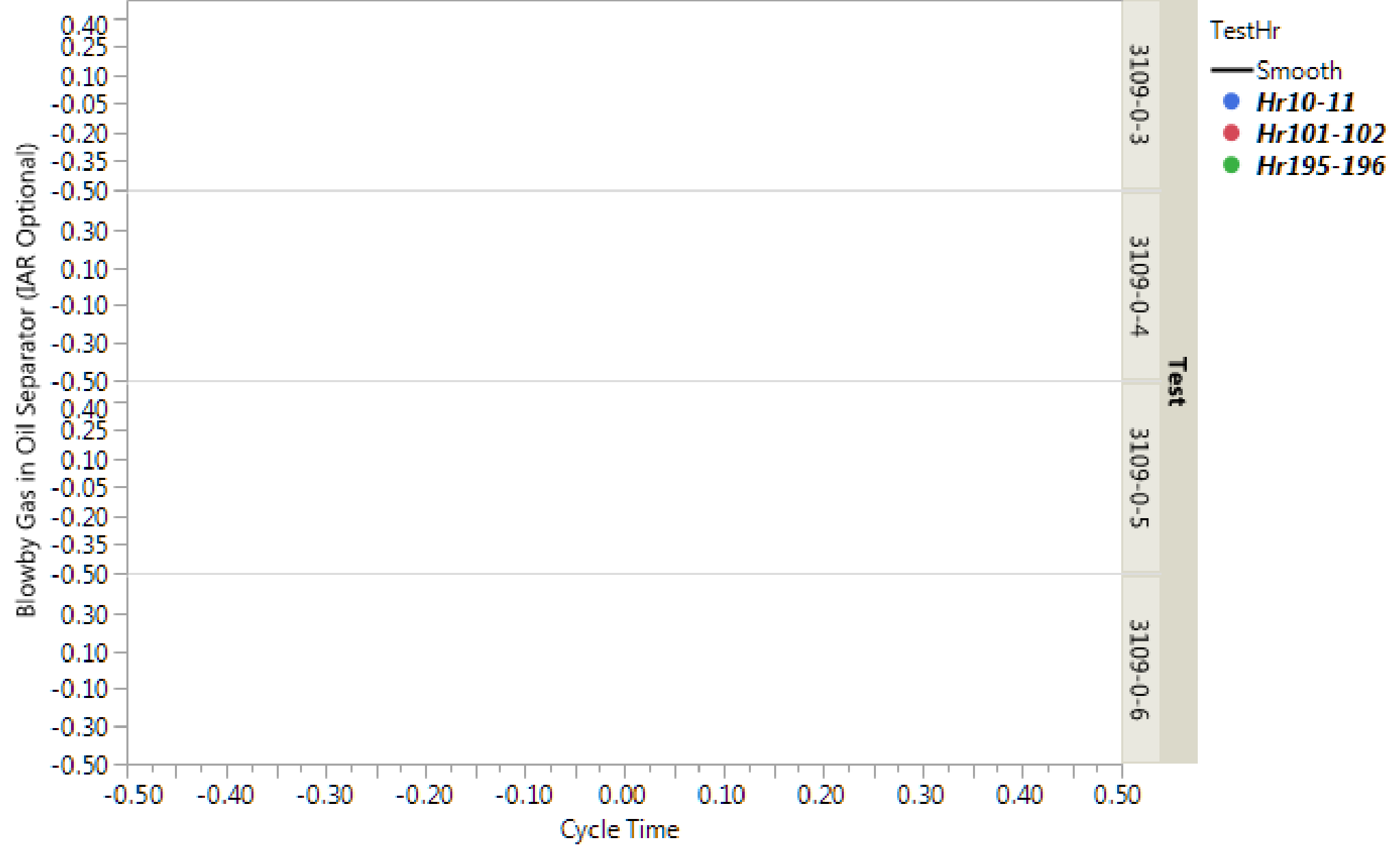


### Blowby Flow Rate vs. Cycle Time



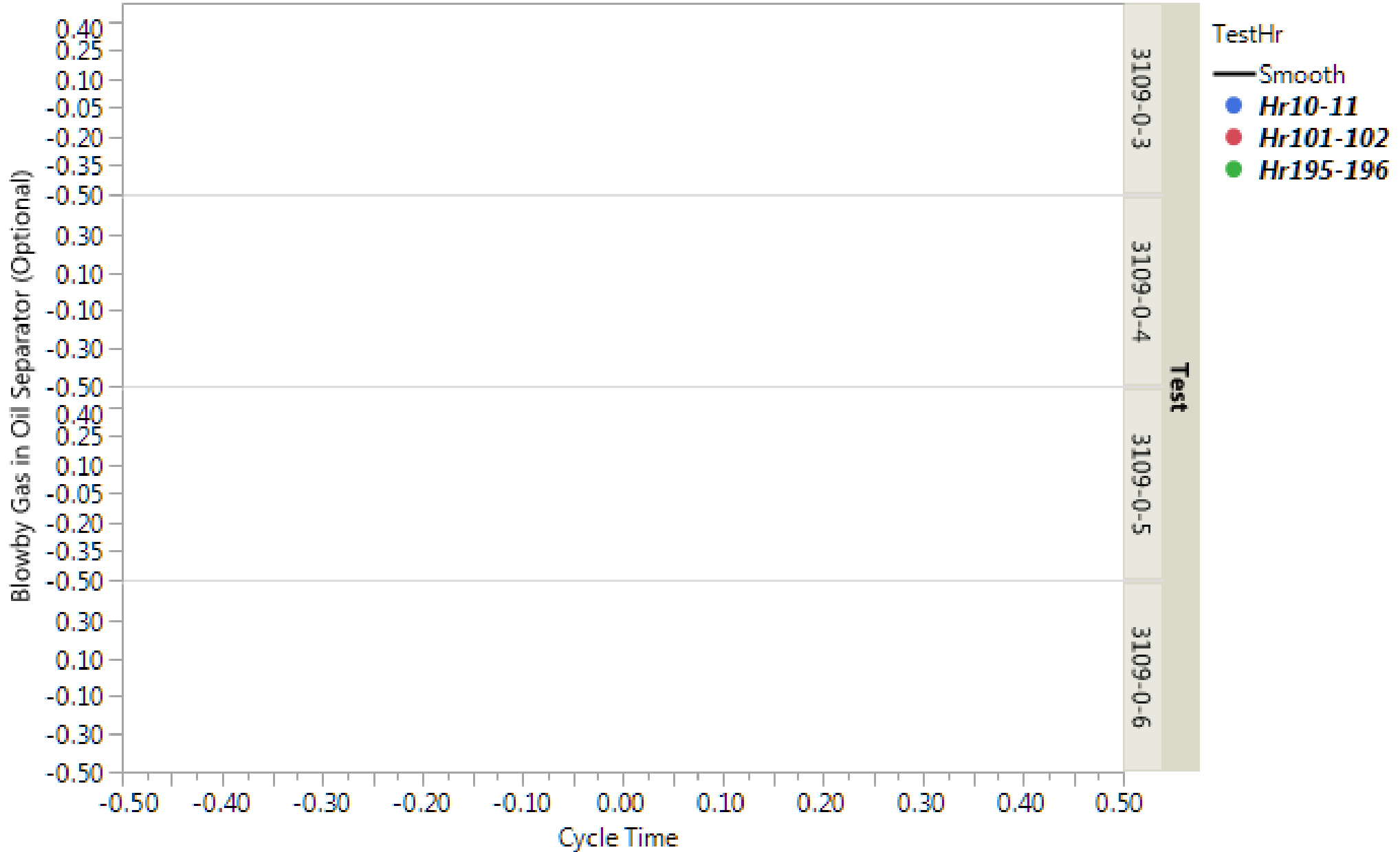
Where(LAB = ExxonMobil)

### Blowby Gas in Oil Separator (IAR Optional) vs. Cycle Time



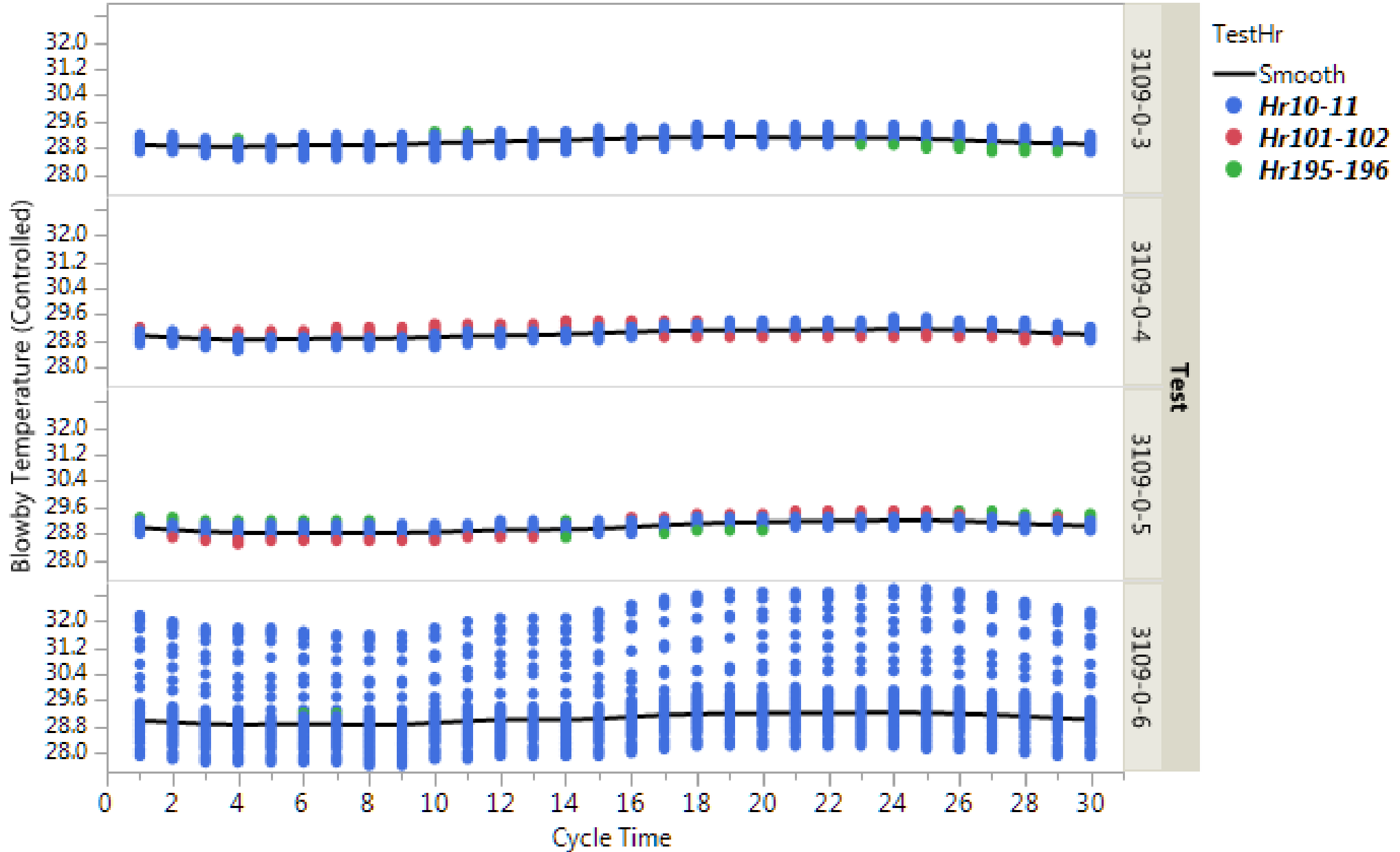
Where(LAB = ExxonMobil)

### Blowby Gas in Oil Separator (Optional) vs. Cycle Time



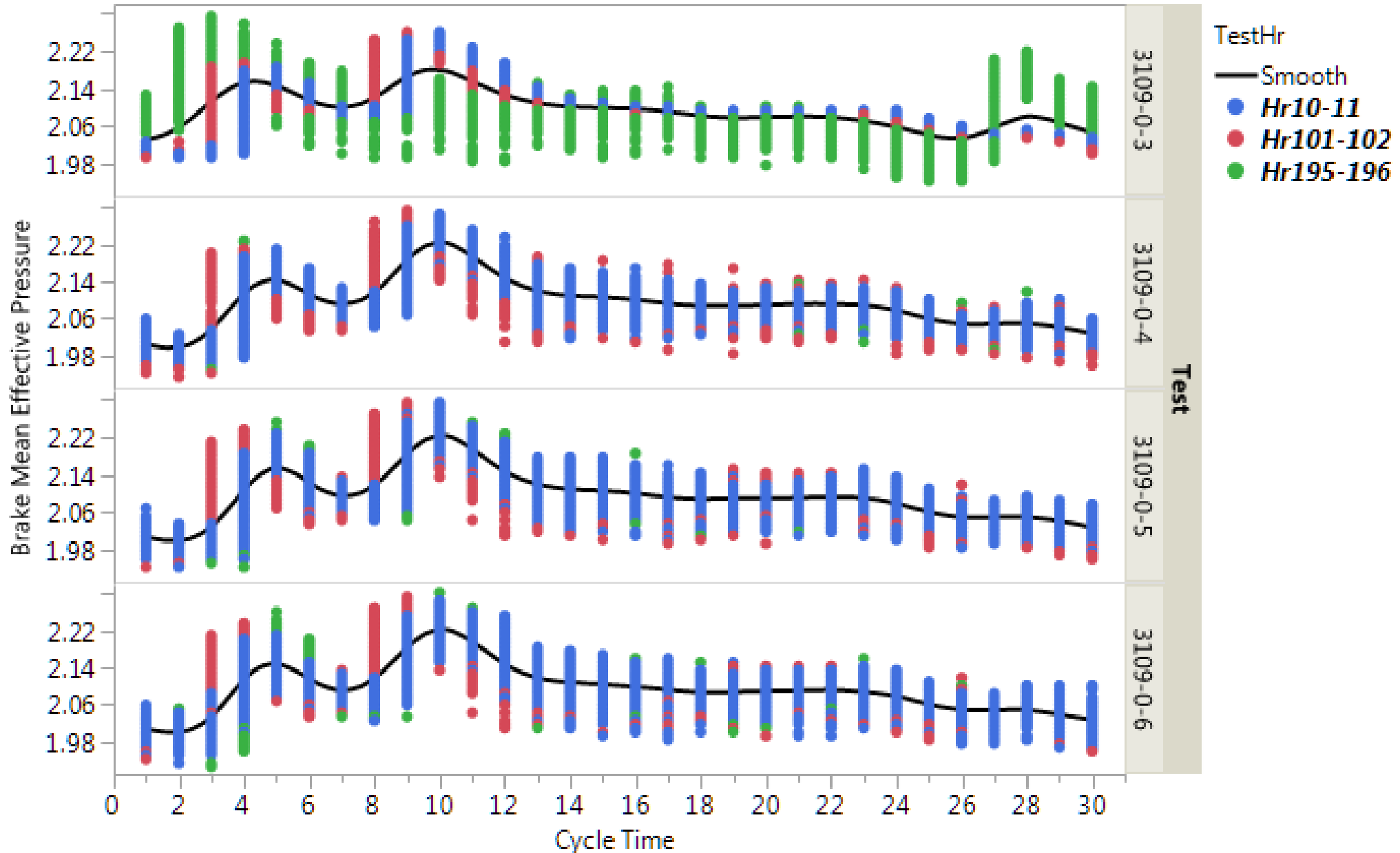
Where(LAB = ExxonMobil)

### Blowby Temperature (Controlled) vs. Cycle Time



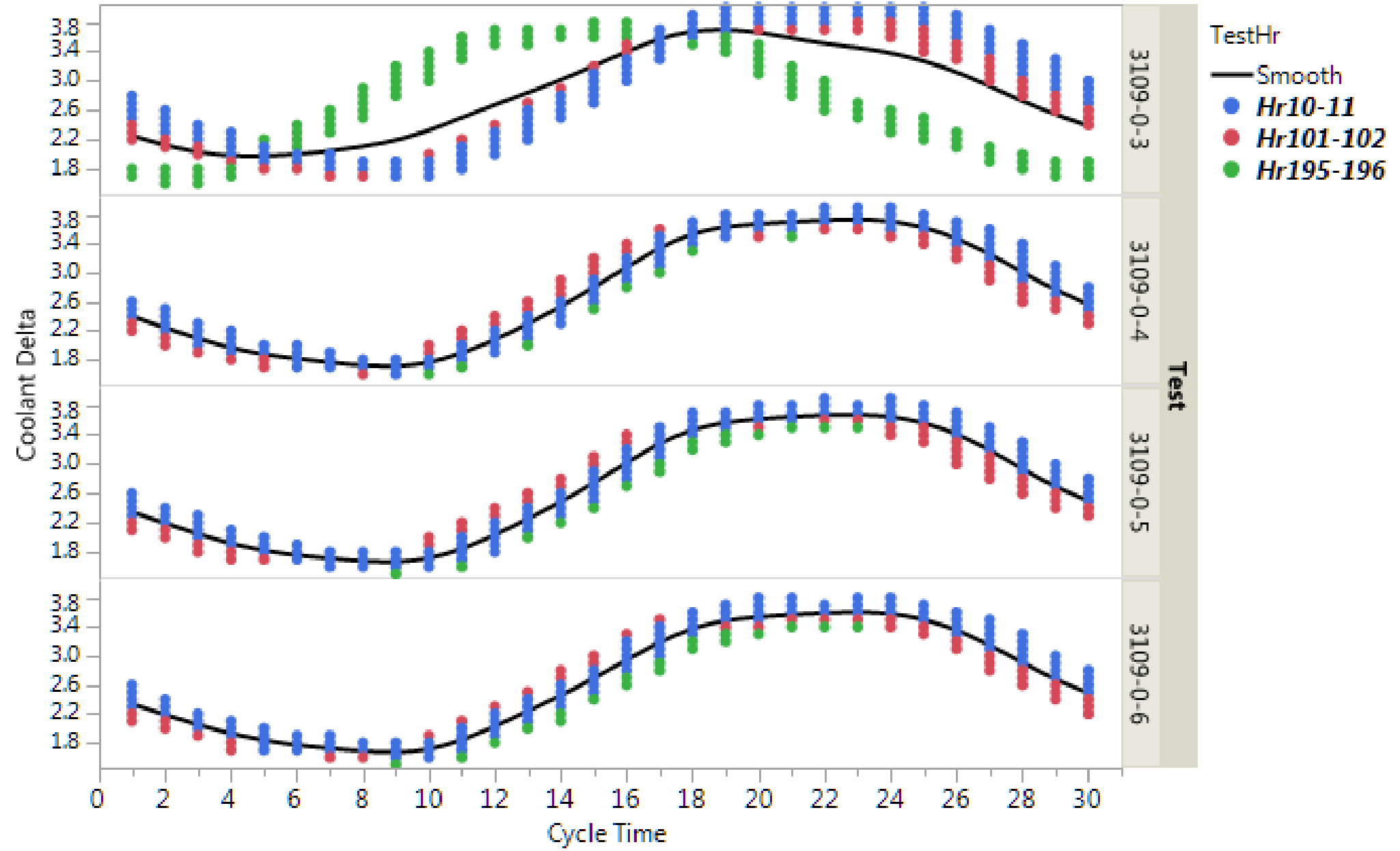
Where(LAB = ExxonMobil)

### Brake Mean Effective Pressure vs. Cycle Time



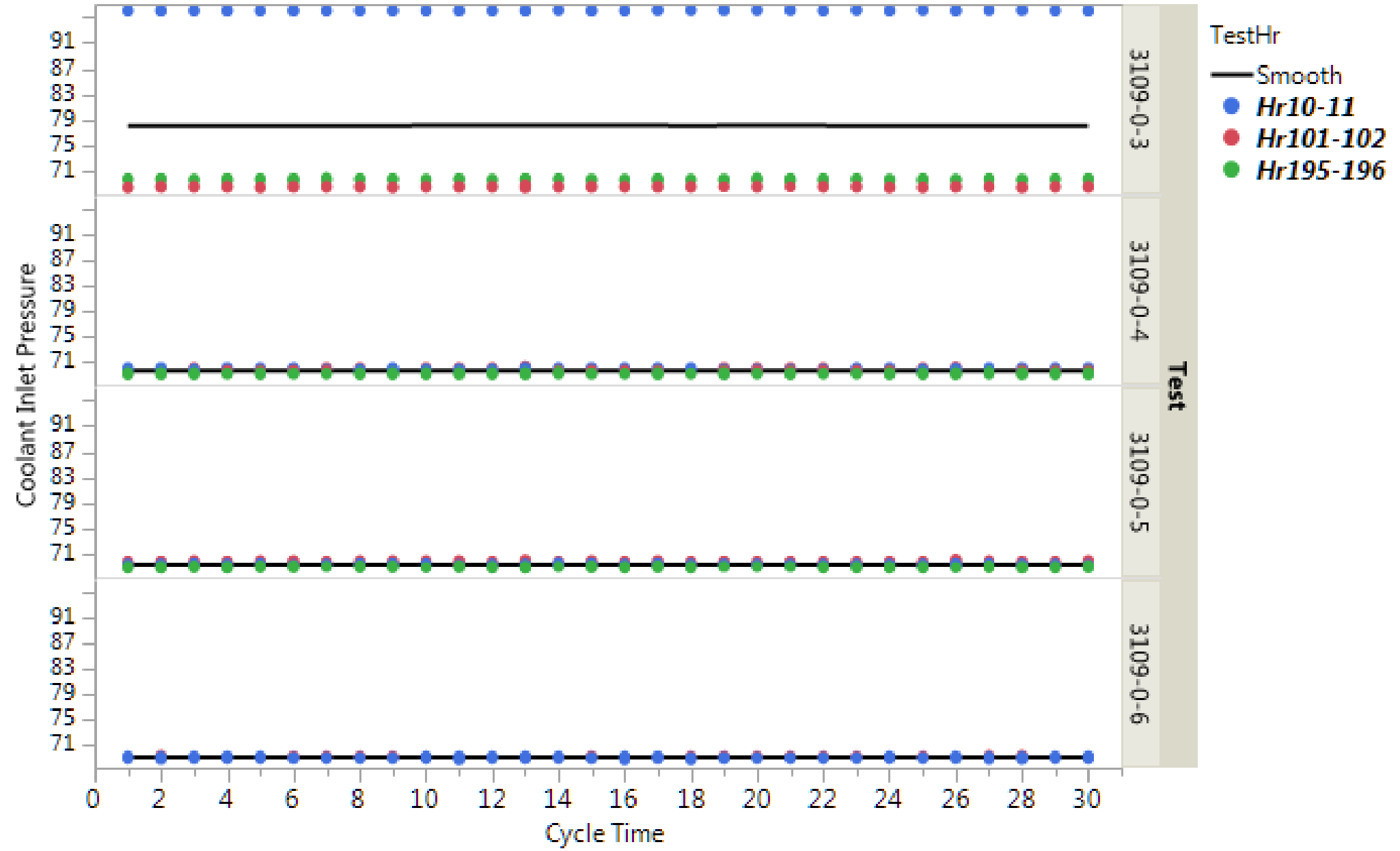
Where(LAB = ExxonMobil)

### Coolant Delta vs. Cycle Time



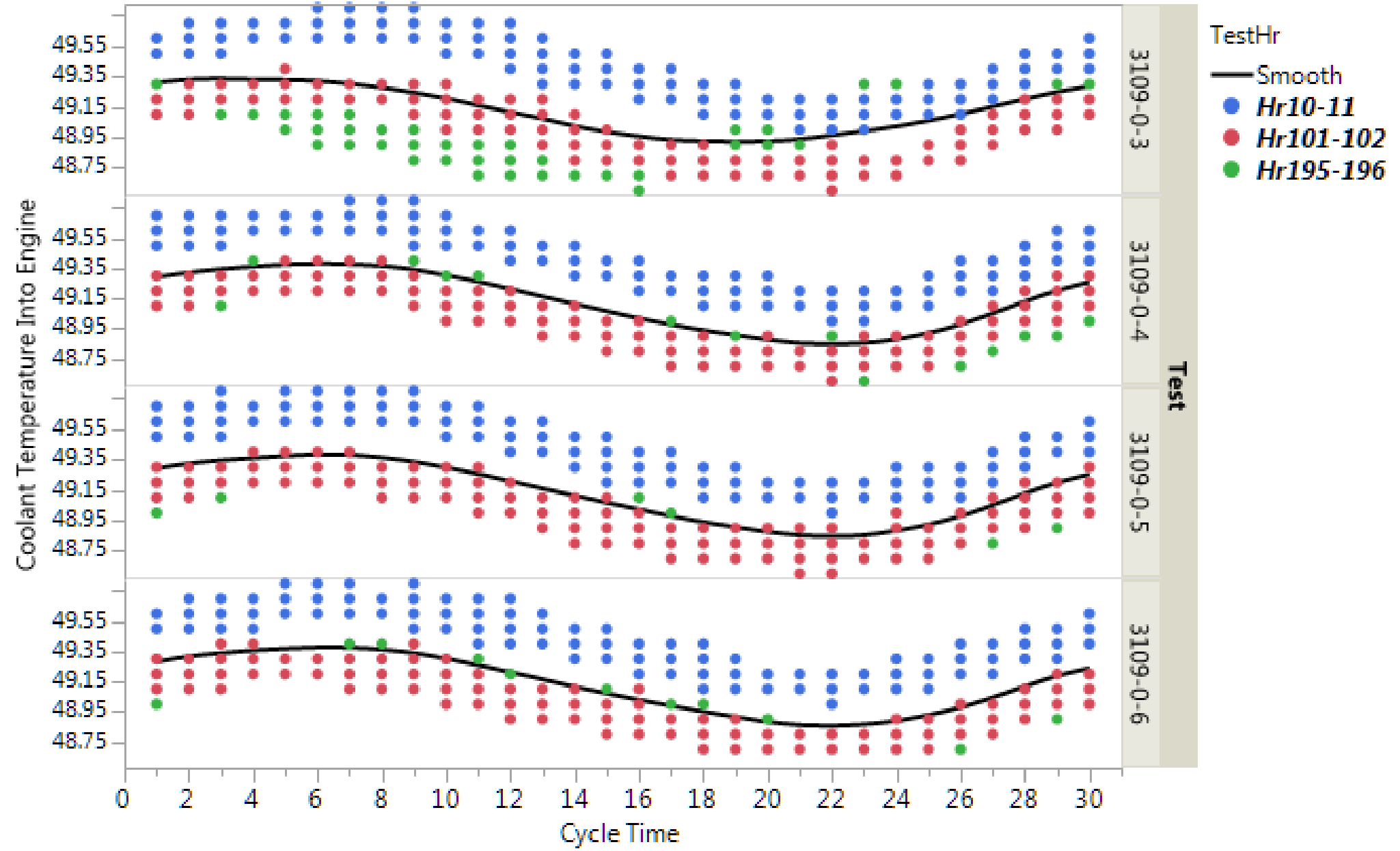
Where(LAB = ExxonMobil)

### Coolant Inlet Pressure vs. Cycle Time



Where(LAB = ExxonMobil)

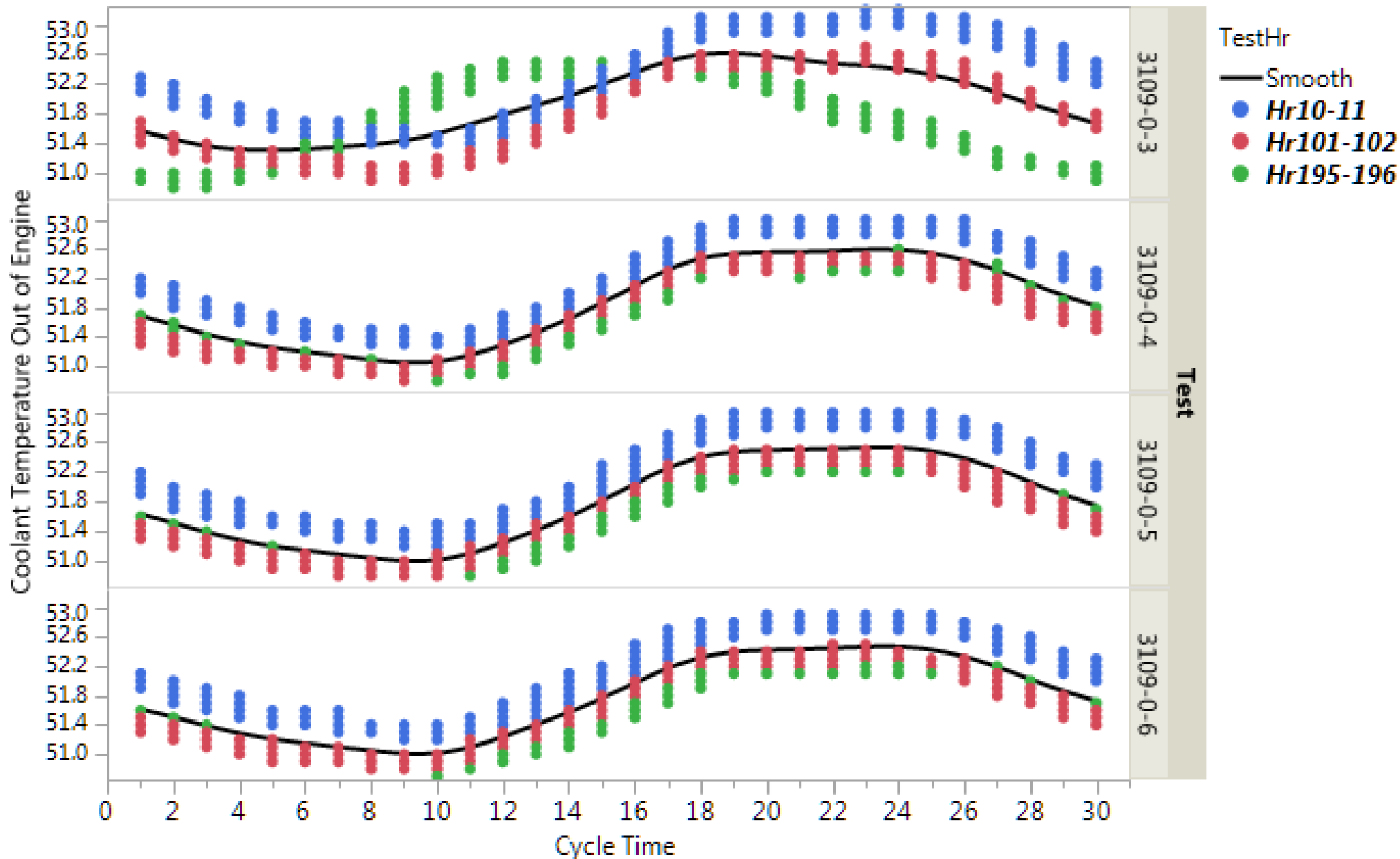
### Coolant Temperature Into Engine vs. Cycle Time



Where(LAB = ExxonMobil)

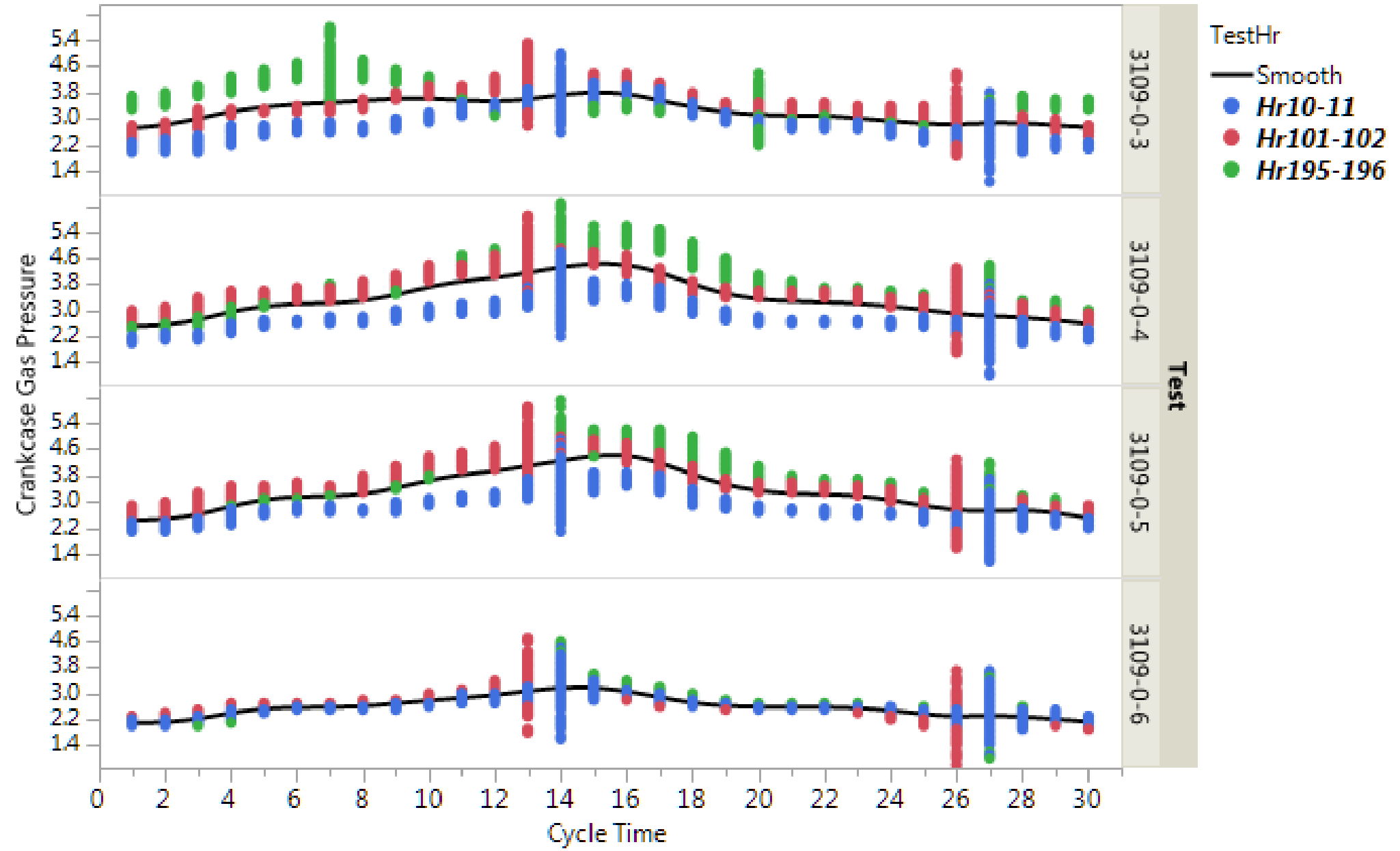


### Coolant Temperature Out of Engine vs. Cycle Time



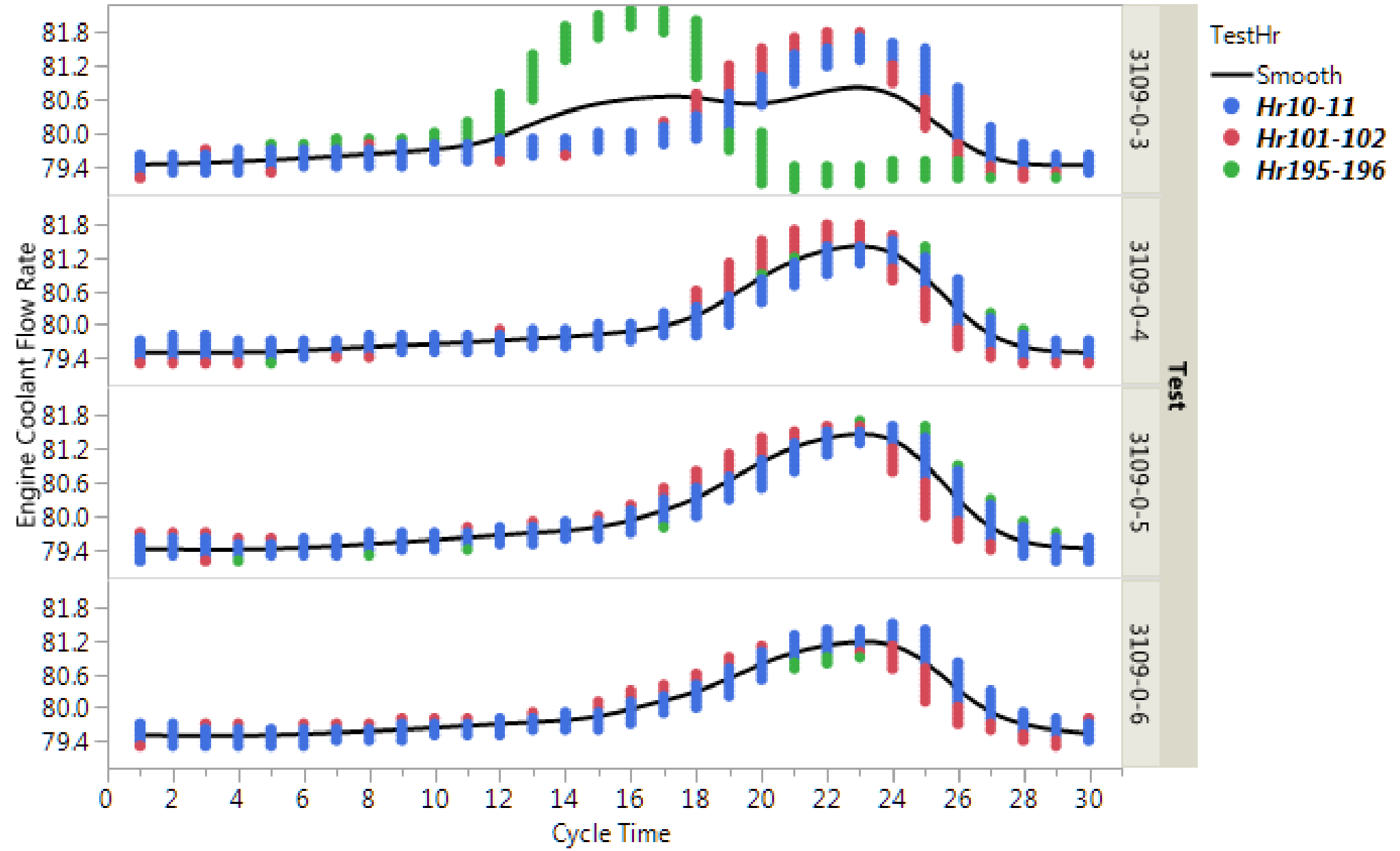
Where(LAB = ExxonMobil)

### Crankcase Gas Pressure vs. Cycle Time



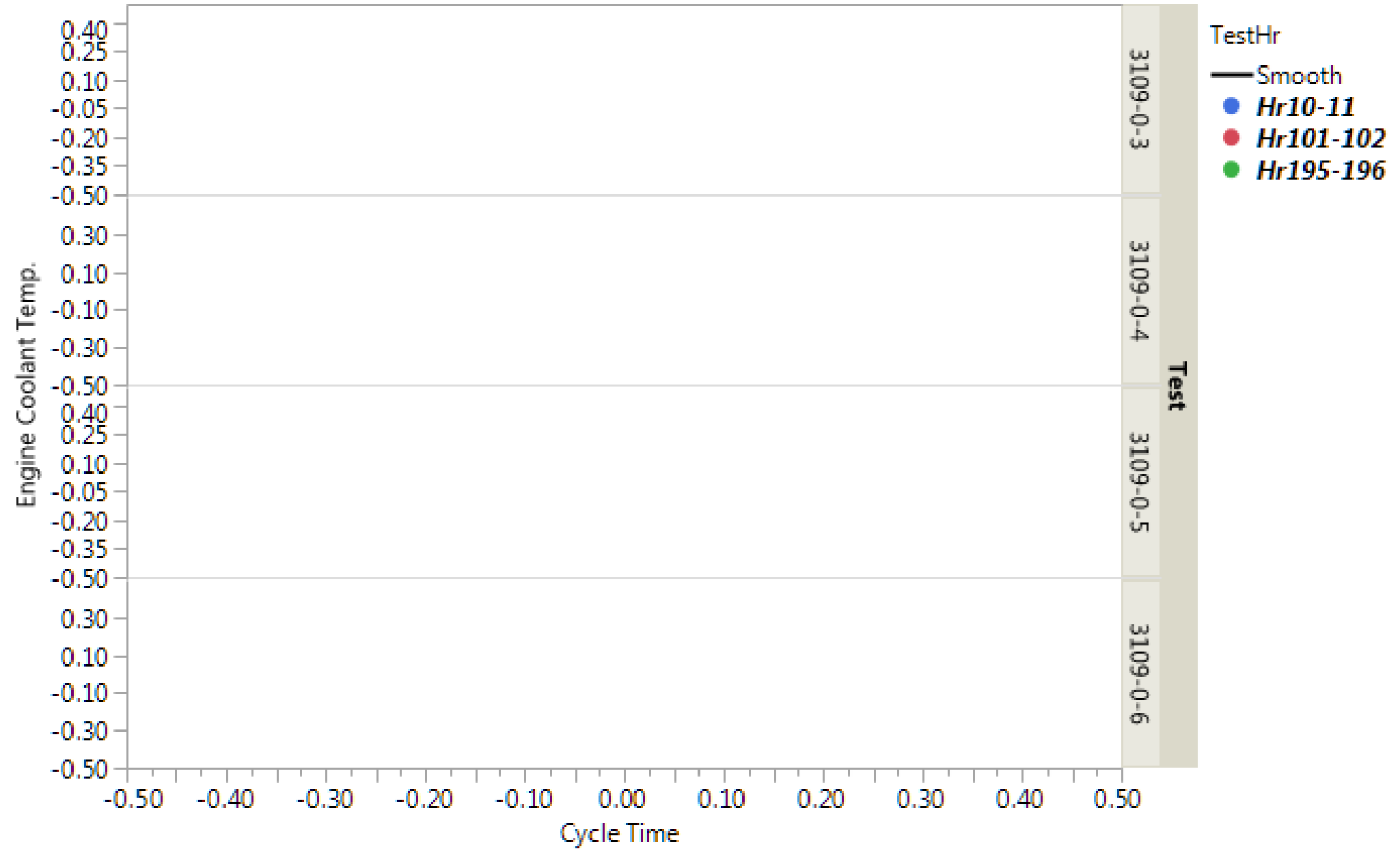
Where(LAB = ExxonMobil)

### Engine Coolant Flow Rate vs. Cycle Time



Where(LAB = ExxonMobil)

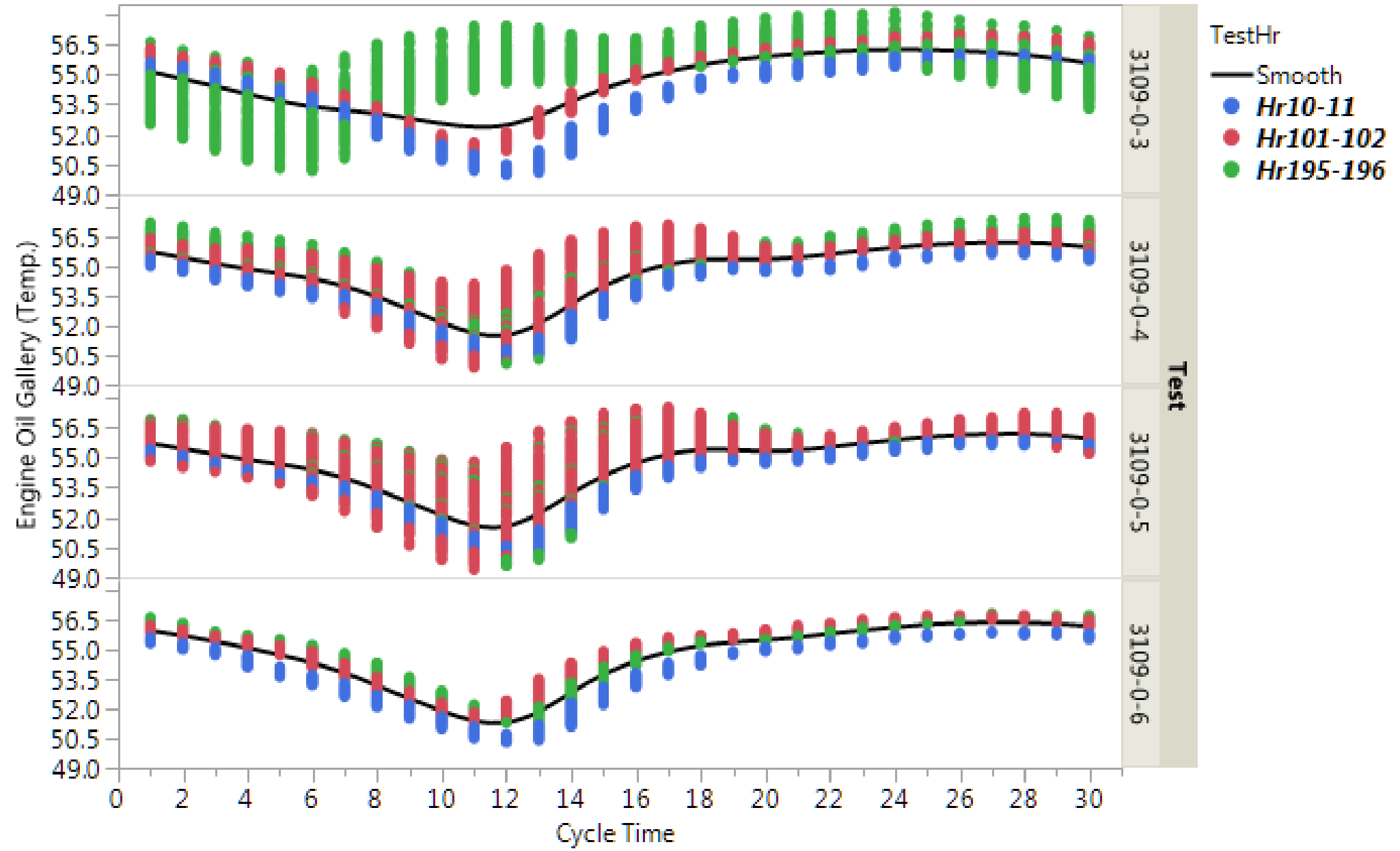
### Engine Coolant Temp. vs. Cycle Time



Where(LAB = ExxonMobil)

# Graph Builder

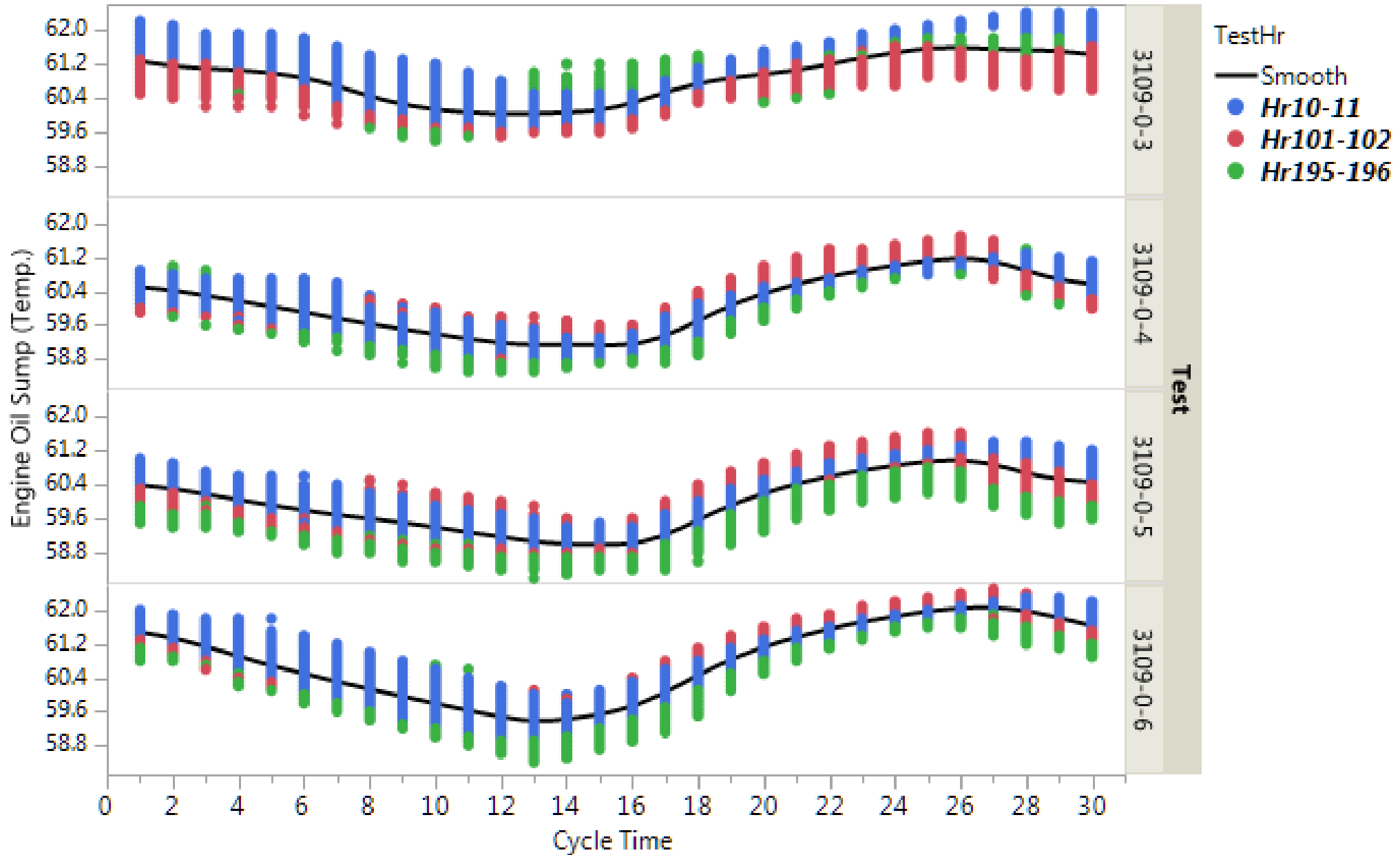
## Engine Oil Gallery (Temp.) vs. Cycle Time



Where(LAB = ExxonMobil)

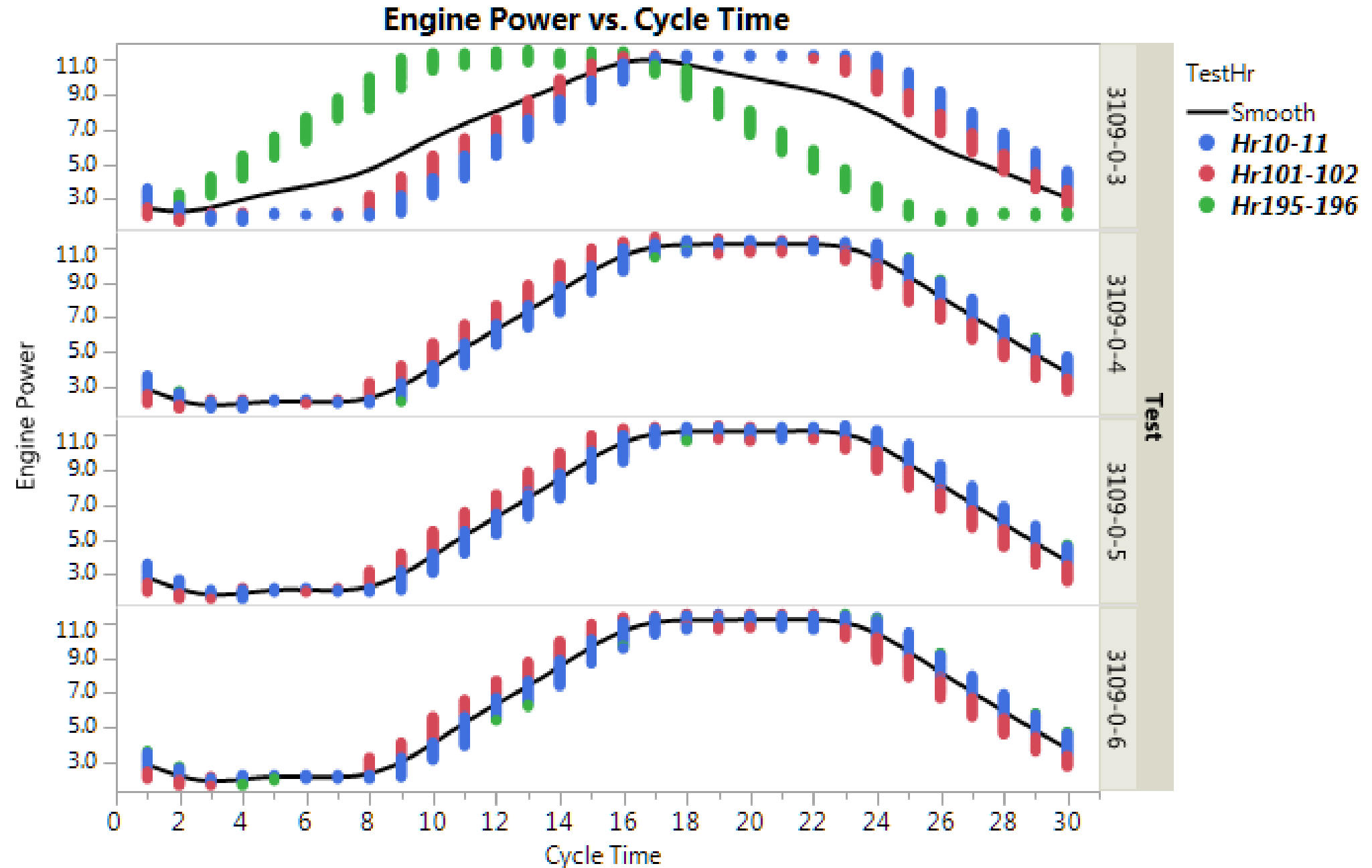
# Graph Builder

## Engine Oil Sump (Temp.) vs. Cycle Time



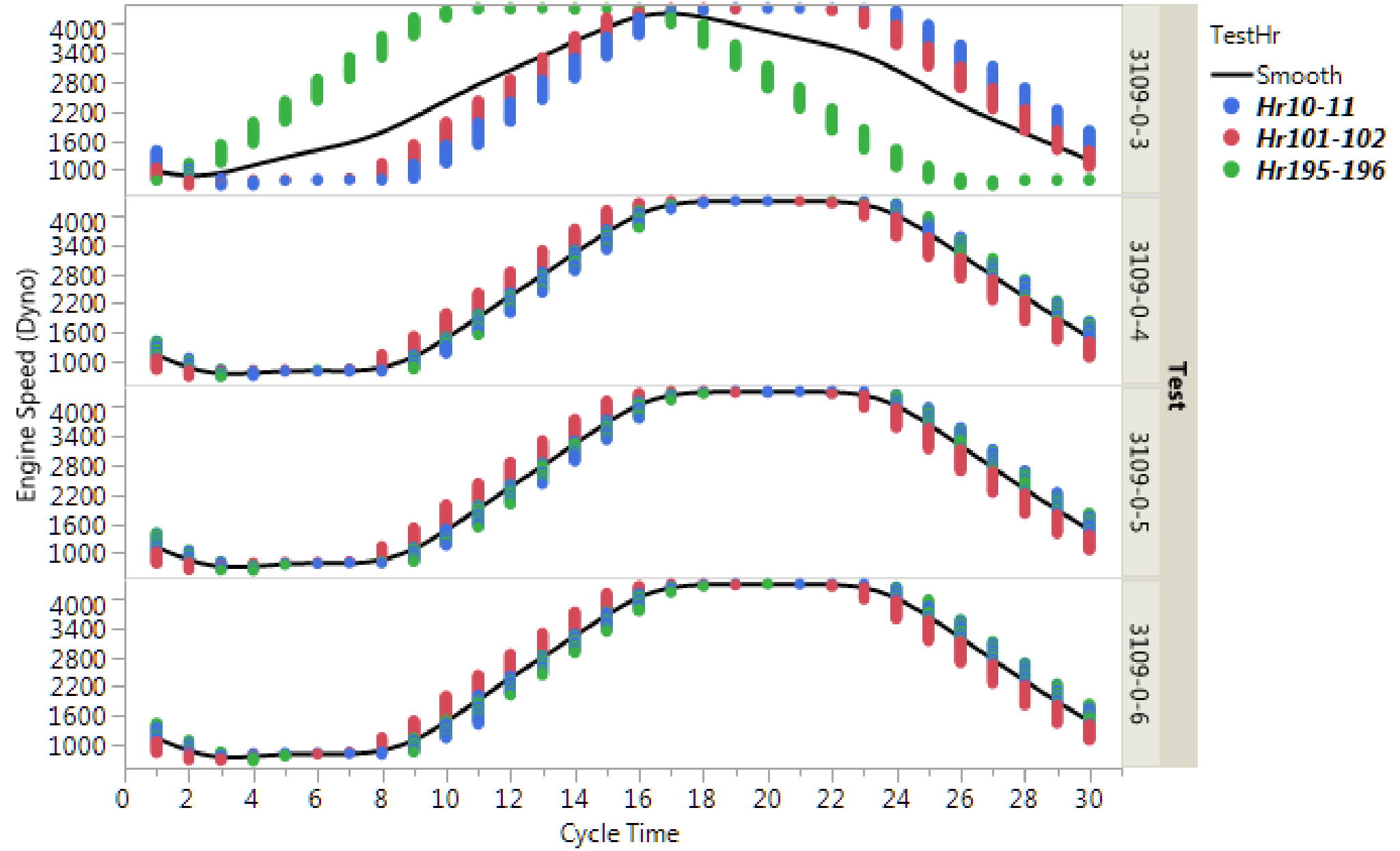
Where(LAB = ExxonMobil)

# Graph Builder



Where(LAB = ExxonMobil)

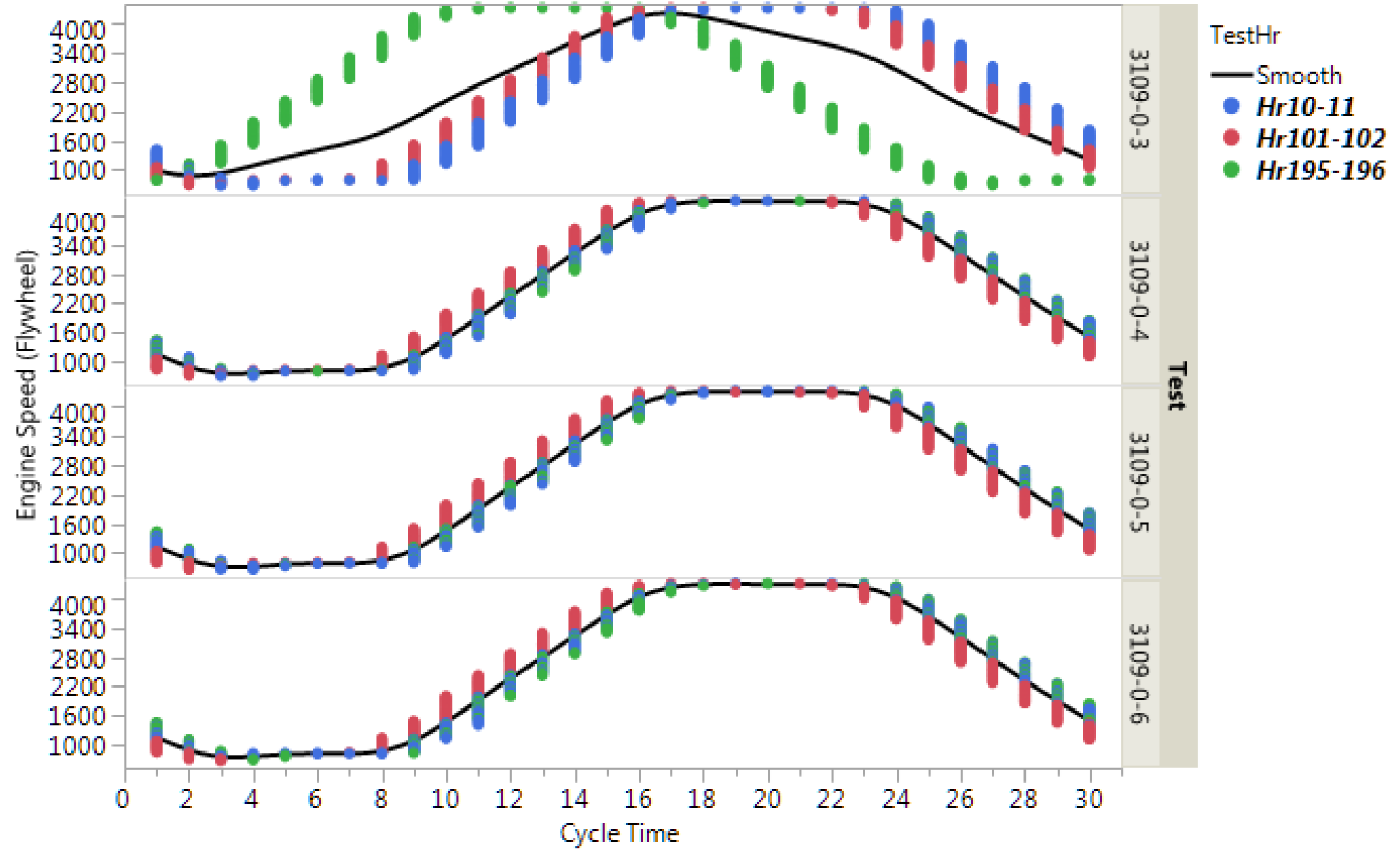
### Engine Speed (Dyno) vs. Cycle Time



Where(LAB = ExxonMobil)

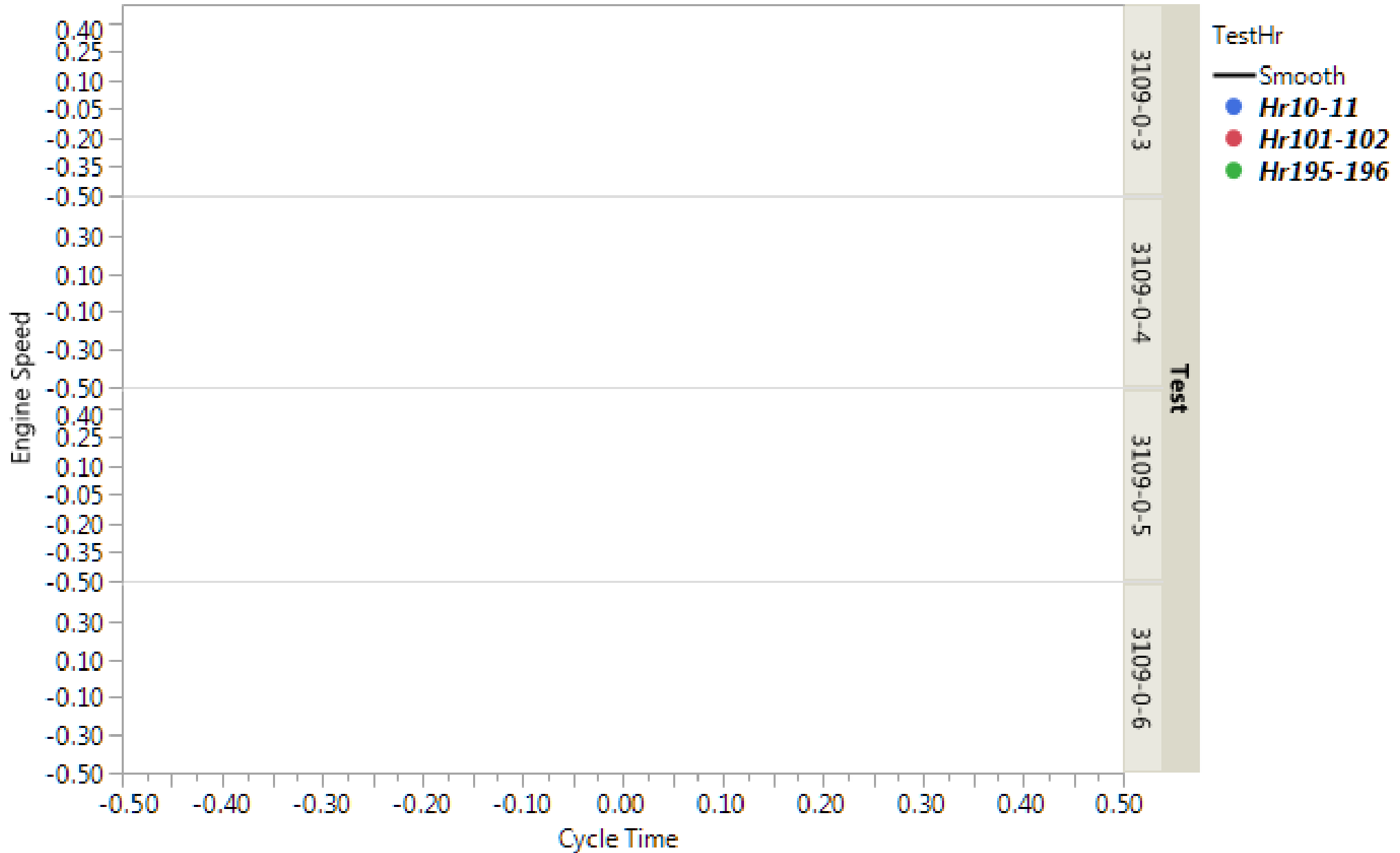


### Engine Speed (Flywheel) vs. Cycle Time



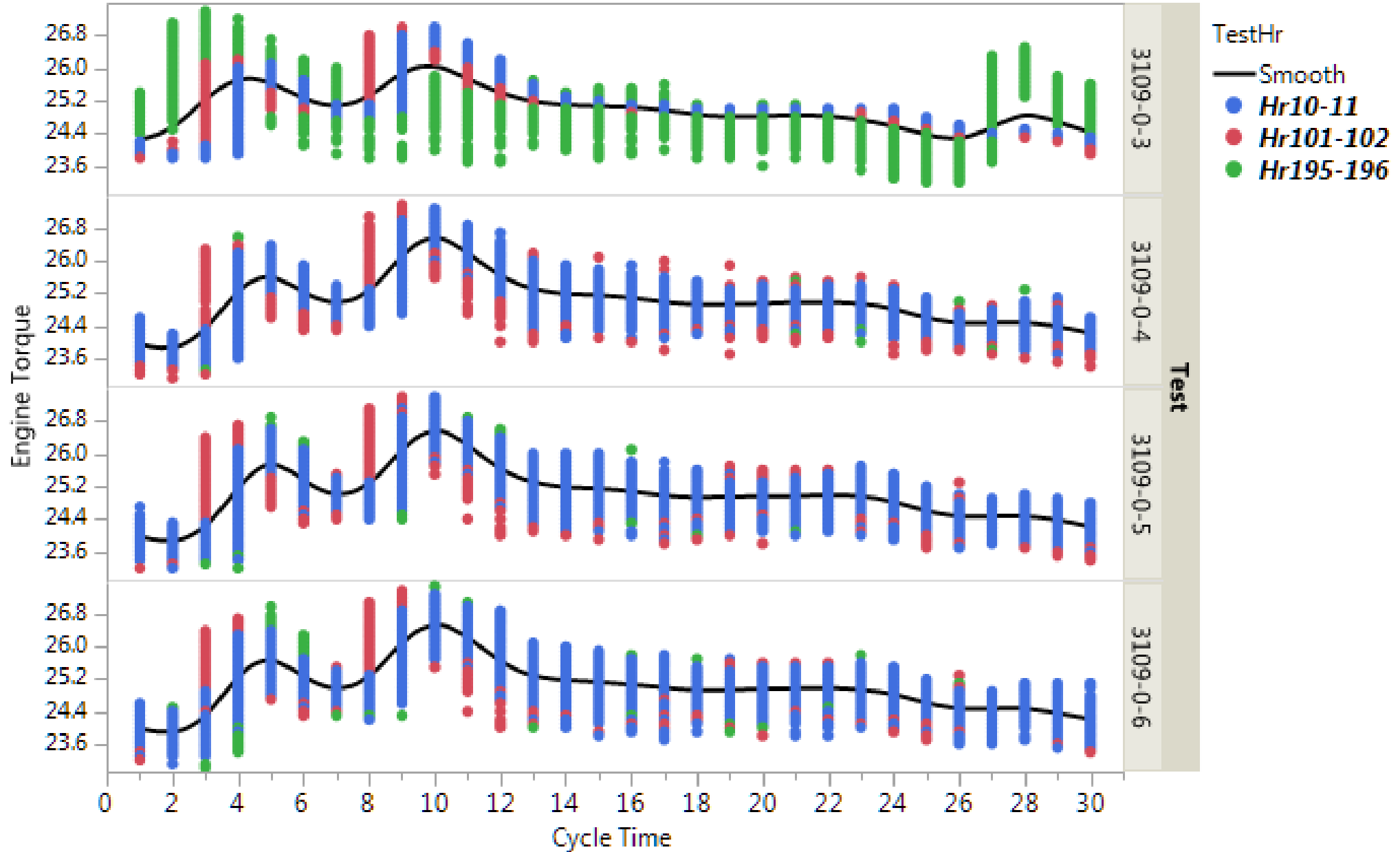
Where(LAB = ExxonMobil)

### Engine Speed vs. Cycle Time



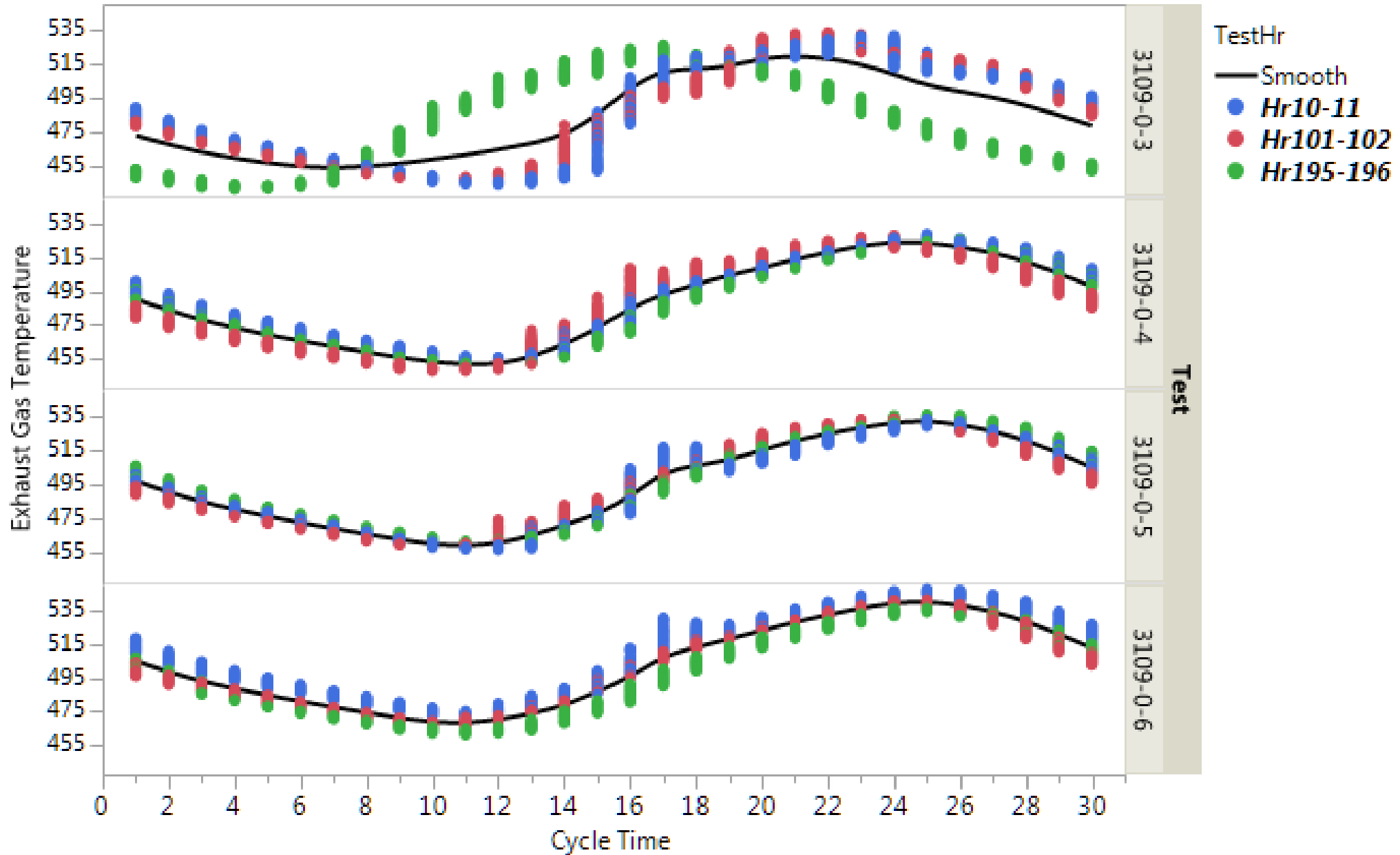
Where(LAB = ExxonMobil)

## Engine Torque vs. Cycle Time



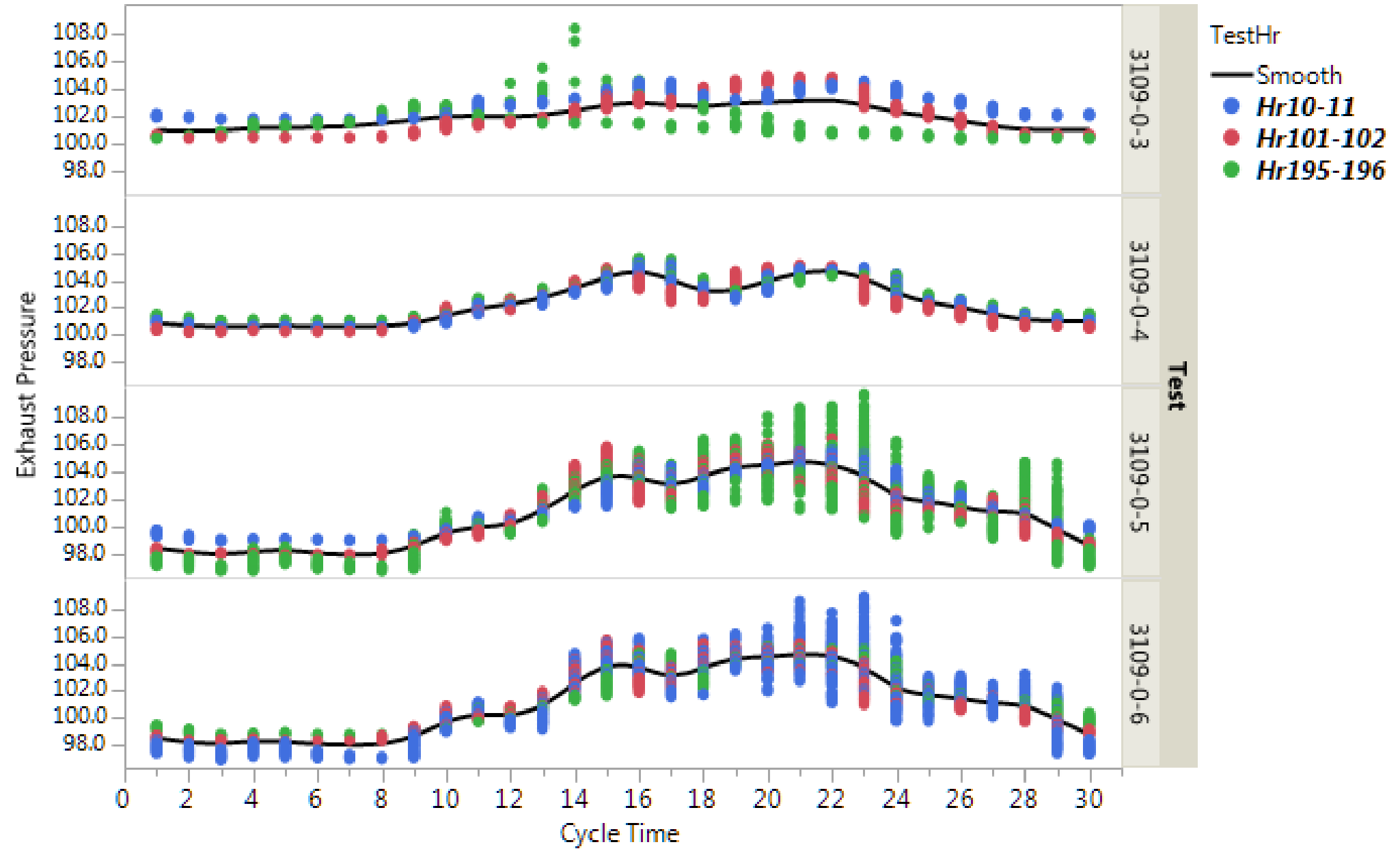
Where(LAB = ExxonMobil)

### Exhaust Gas Temperature vs. Cycle Time



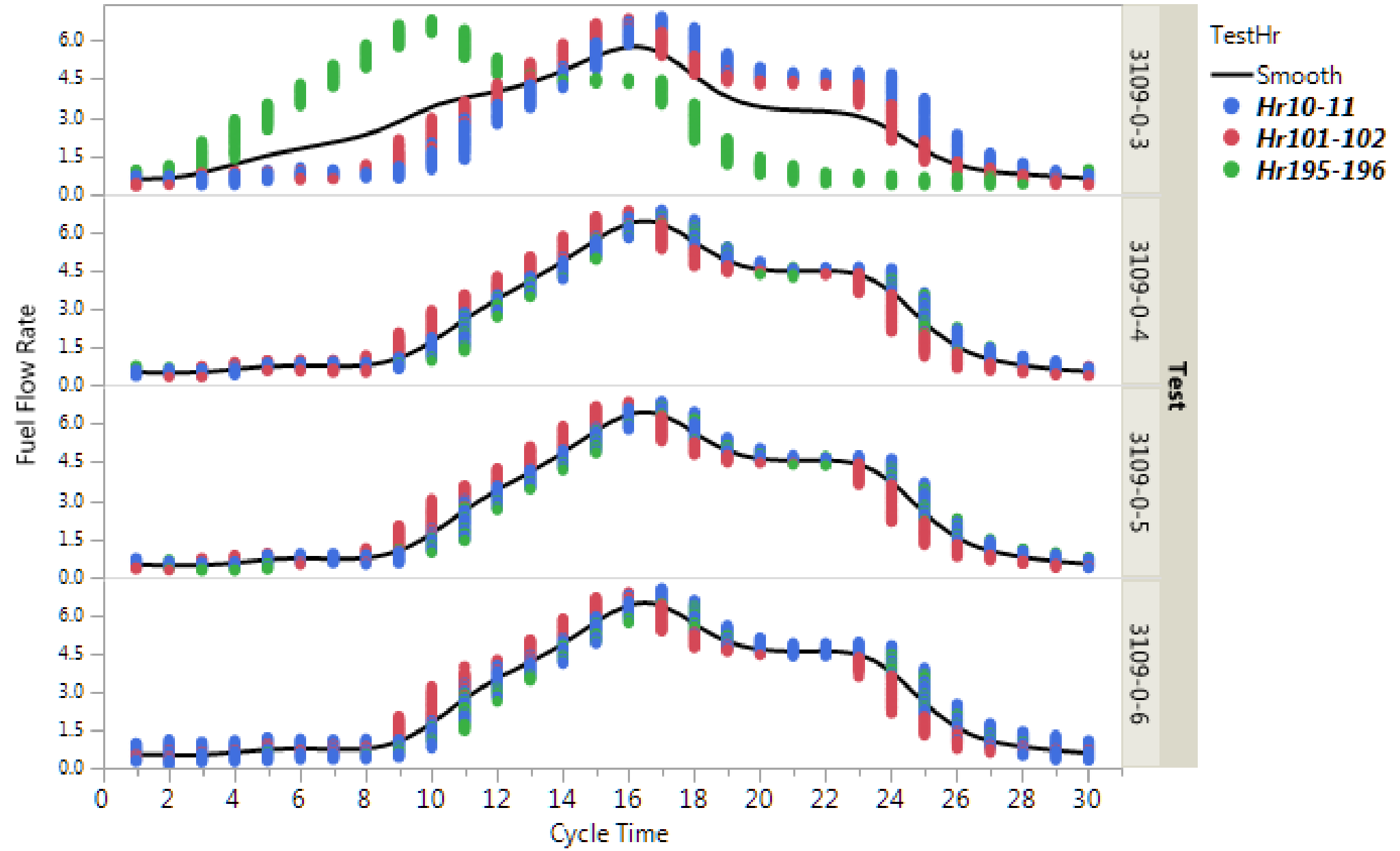
Where(LAB = ExxonMobil)

### Exhaust Pressure vs. Cycle Time



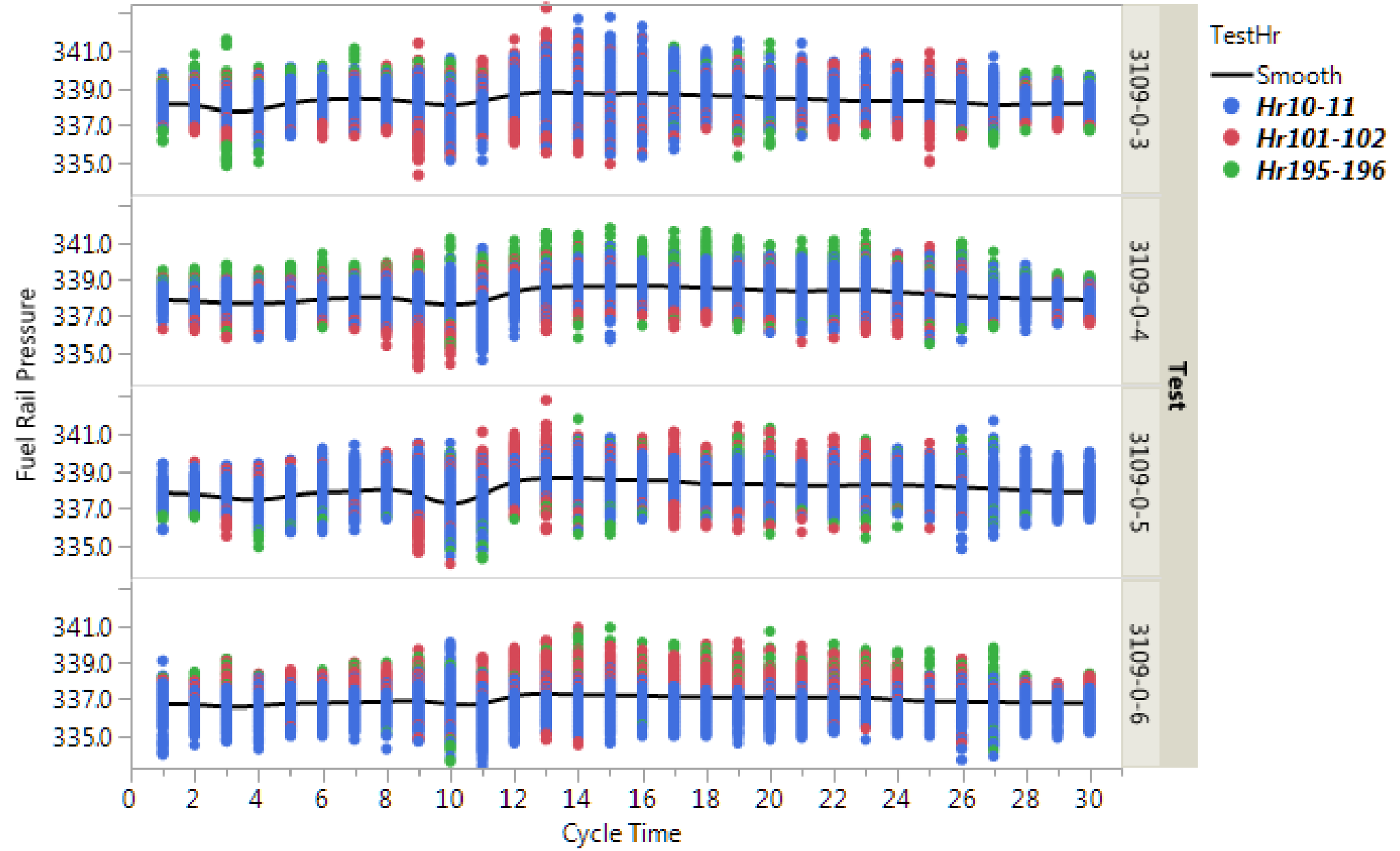
Where(LAB = ExxonMobil)

### Fuel Flow Rate vs. Cycle Time



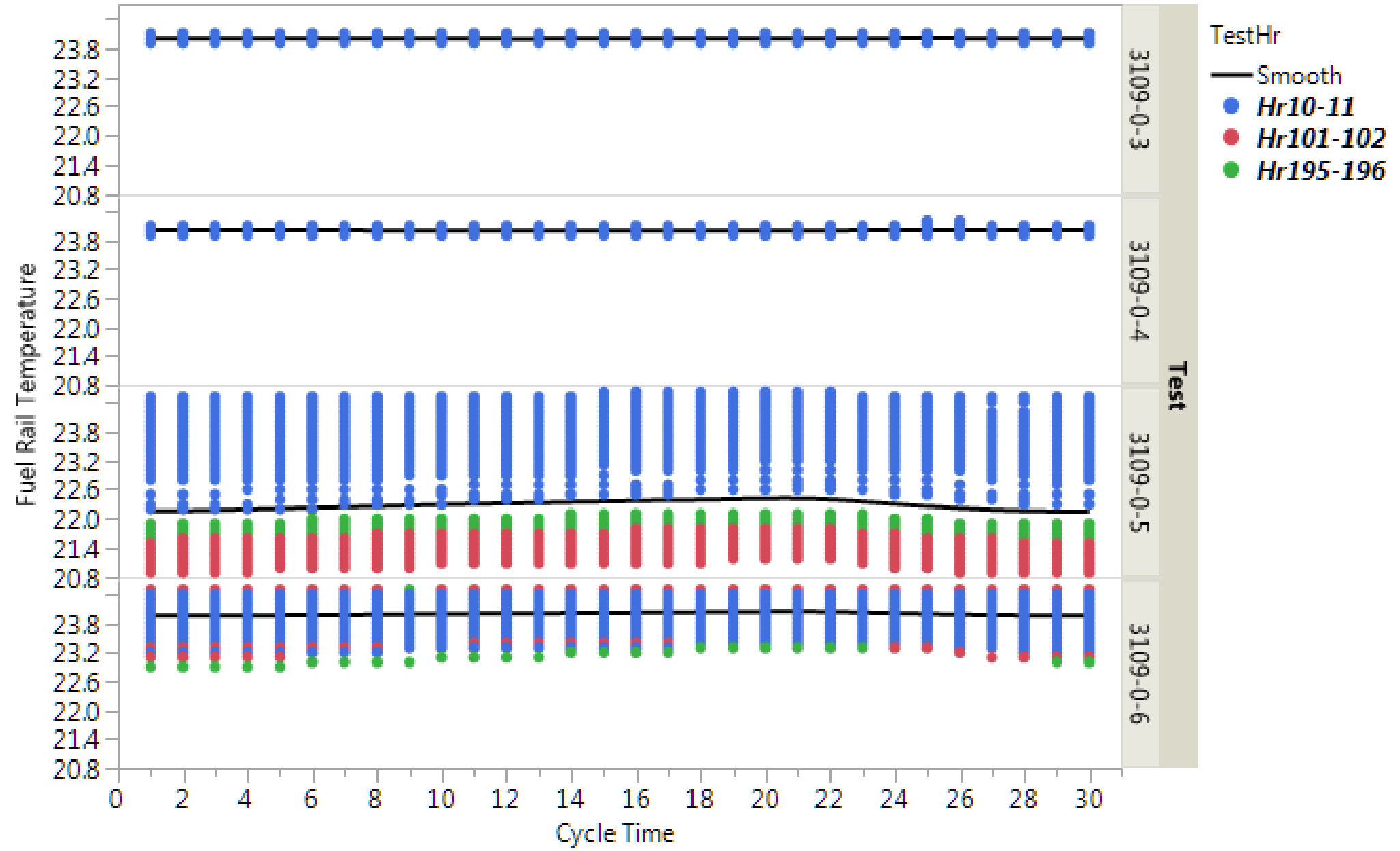
Where(LAB = ExxonMobil)

### Fuel Rail Pressure vs. Cycle Time



Where(LAB = ExxonMobil)

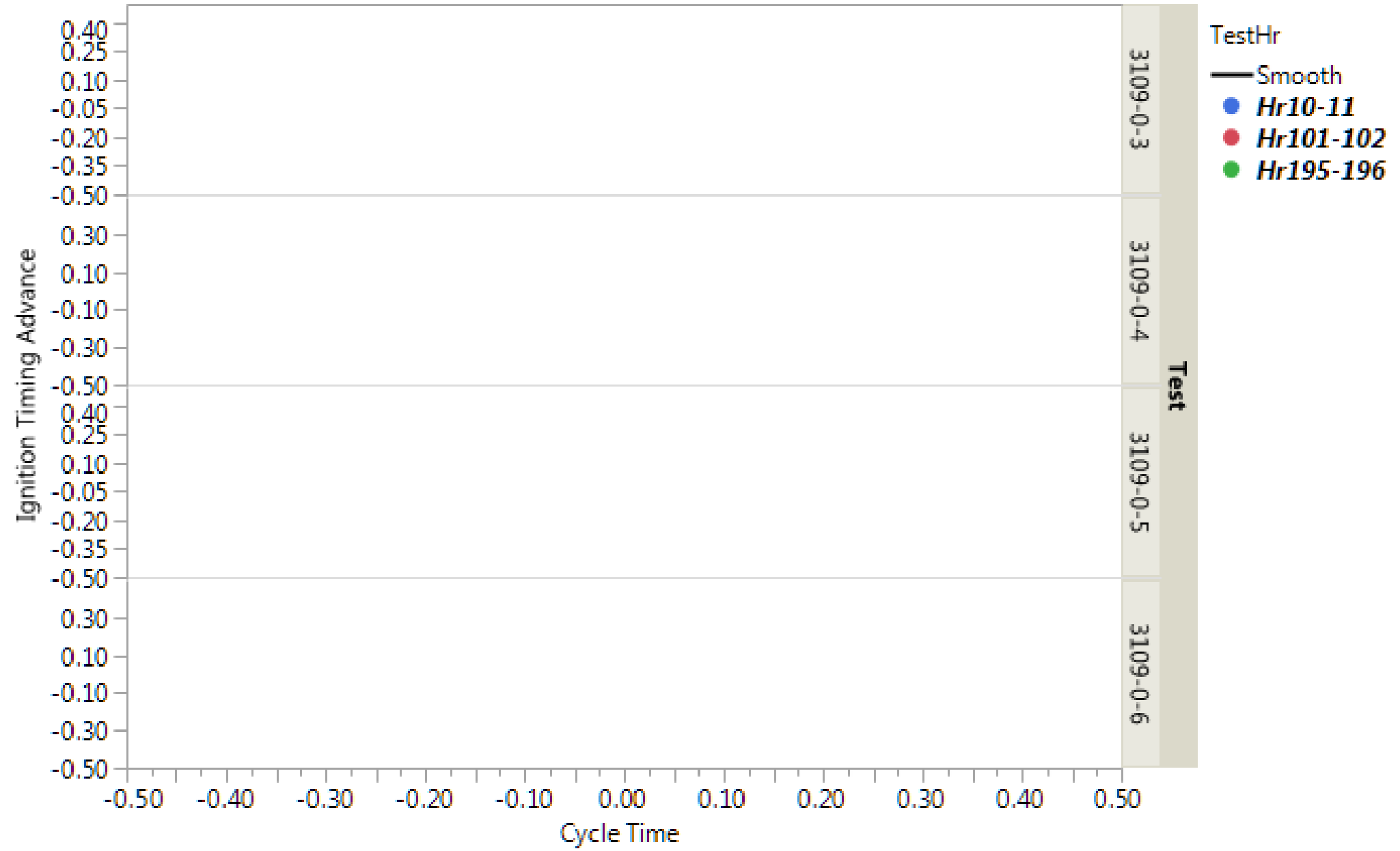
### Fuel Rail Temperature vs. Cycle Time



Where(LAB = ExxonMobil)

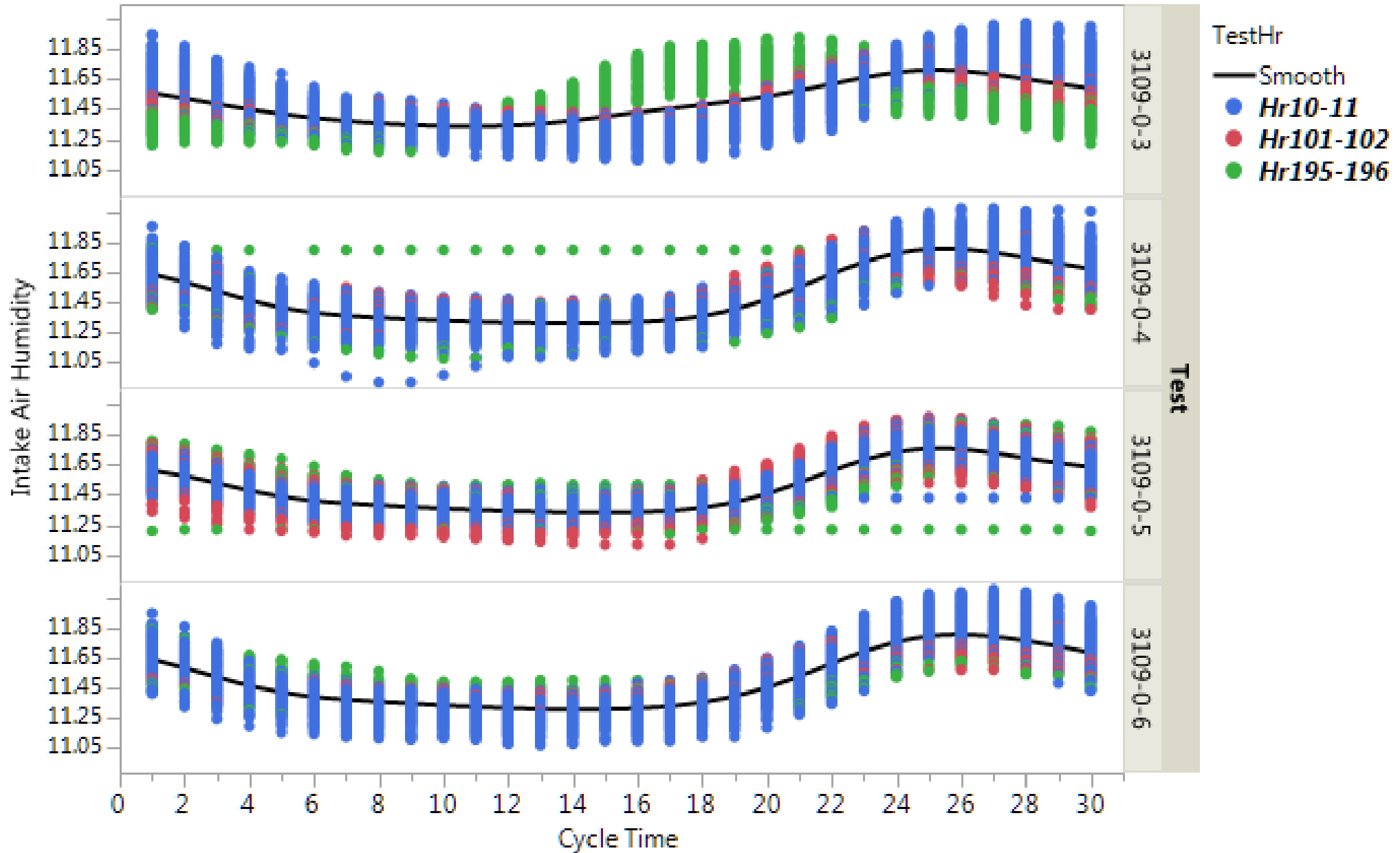


### Ignition Timing Advance vs. Cycle Time



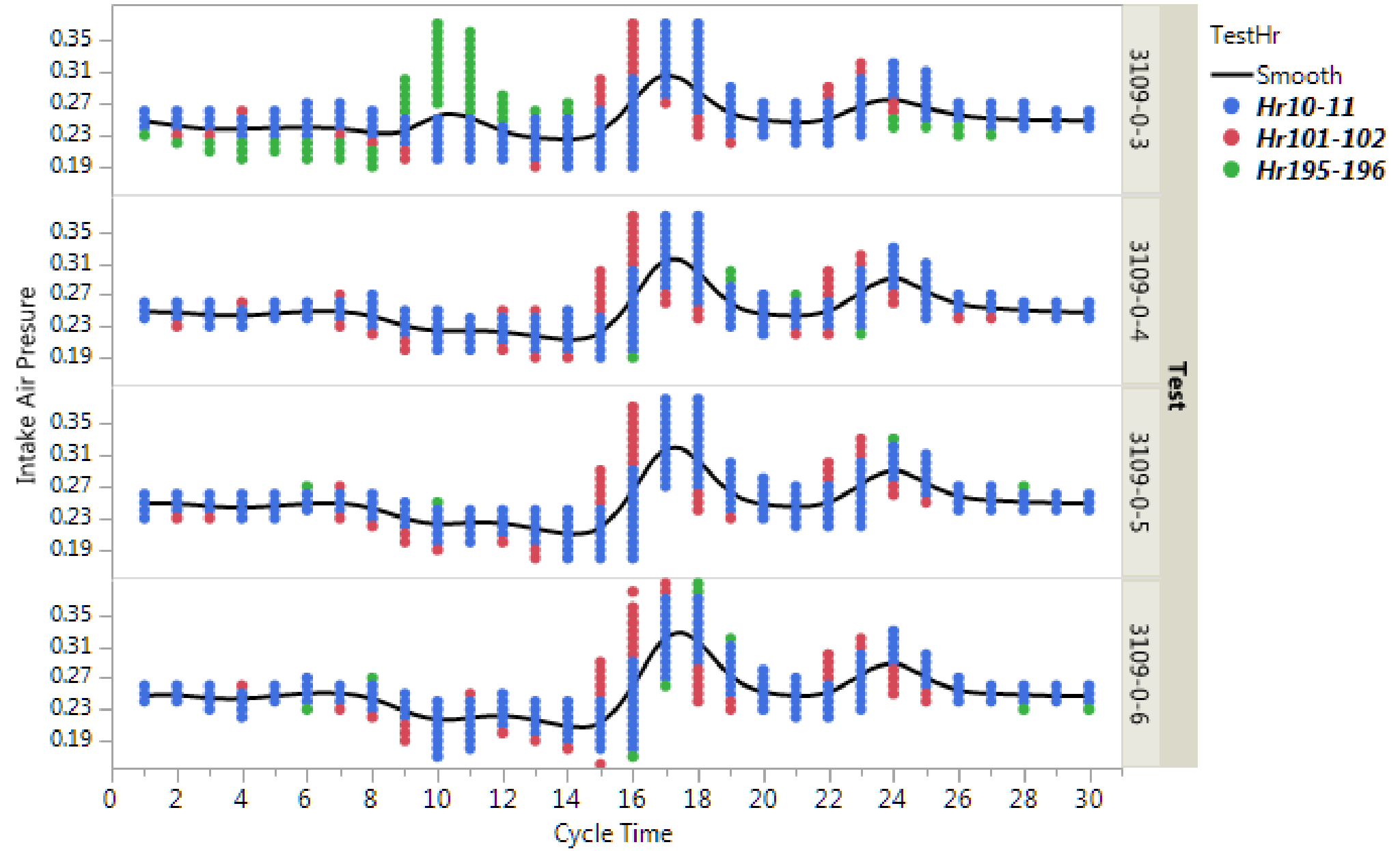
Where(LAB = ExxonMobil)

### Intake Air Humidity vs. Cycle Time



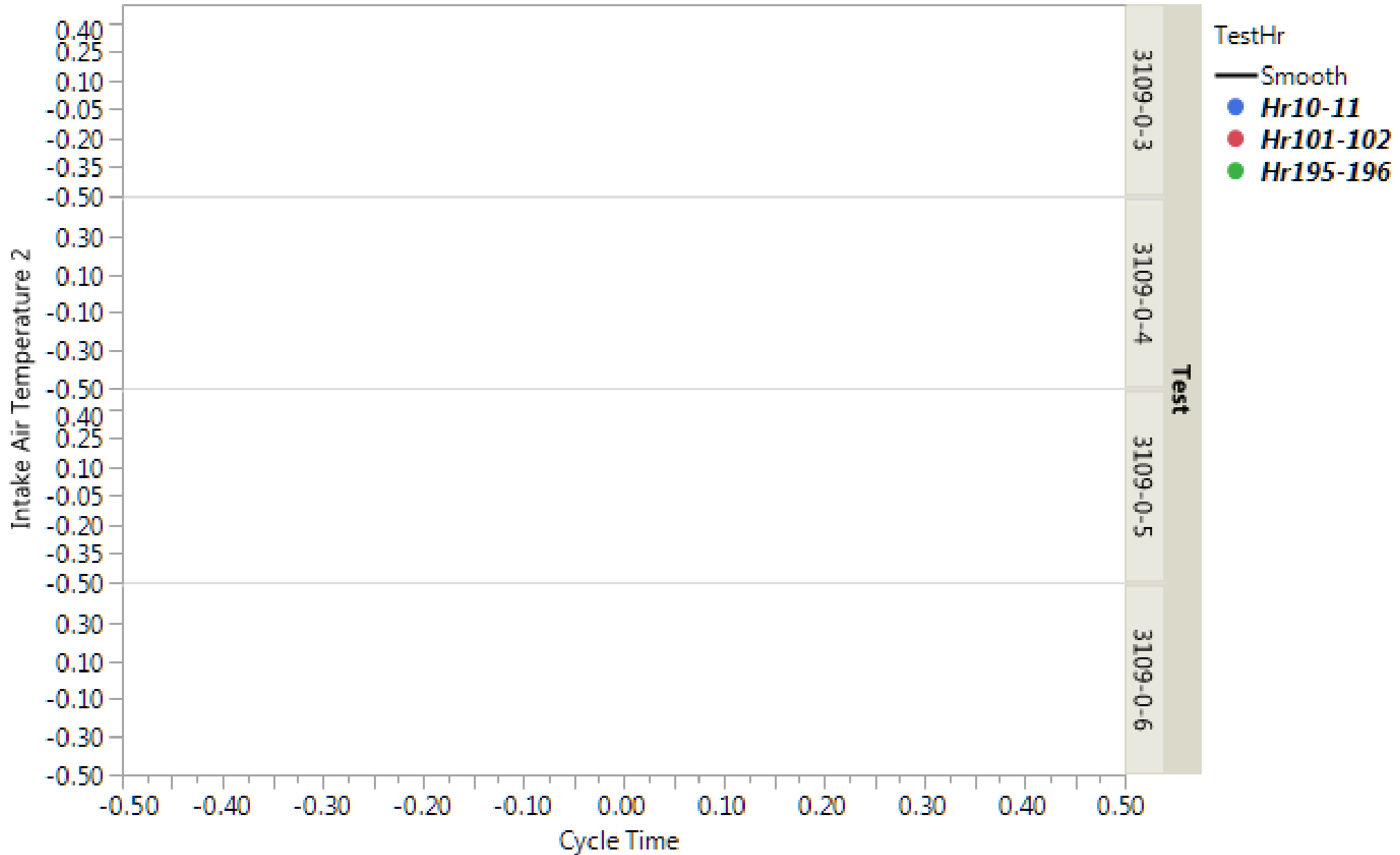
Where(LAB = ExxonMobil)

### Intake Air Pressure vs. Cycle Time



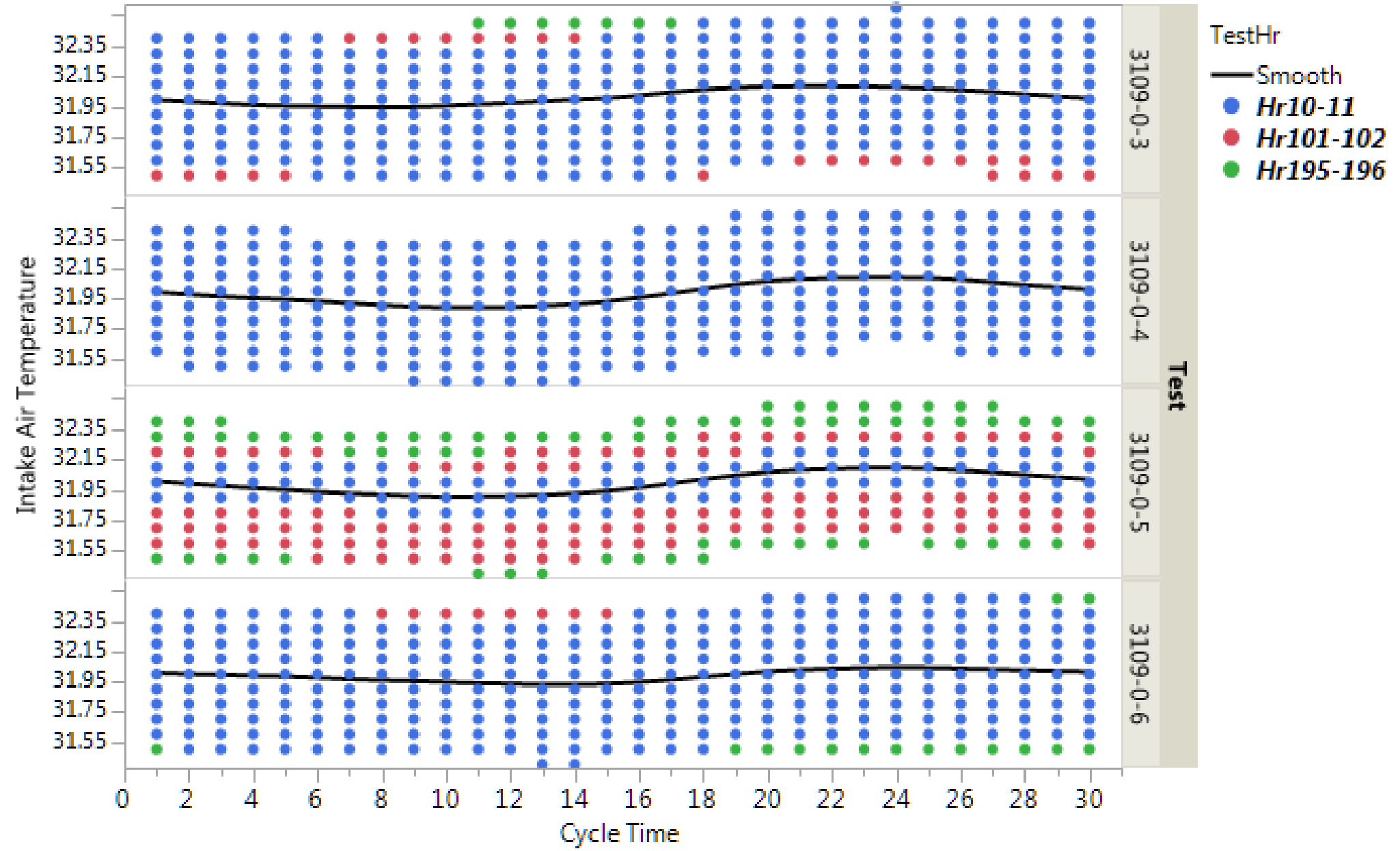
Where(LAB = ExxonMobil)

### Intake Air Temperature 2 vs. Cycle Time



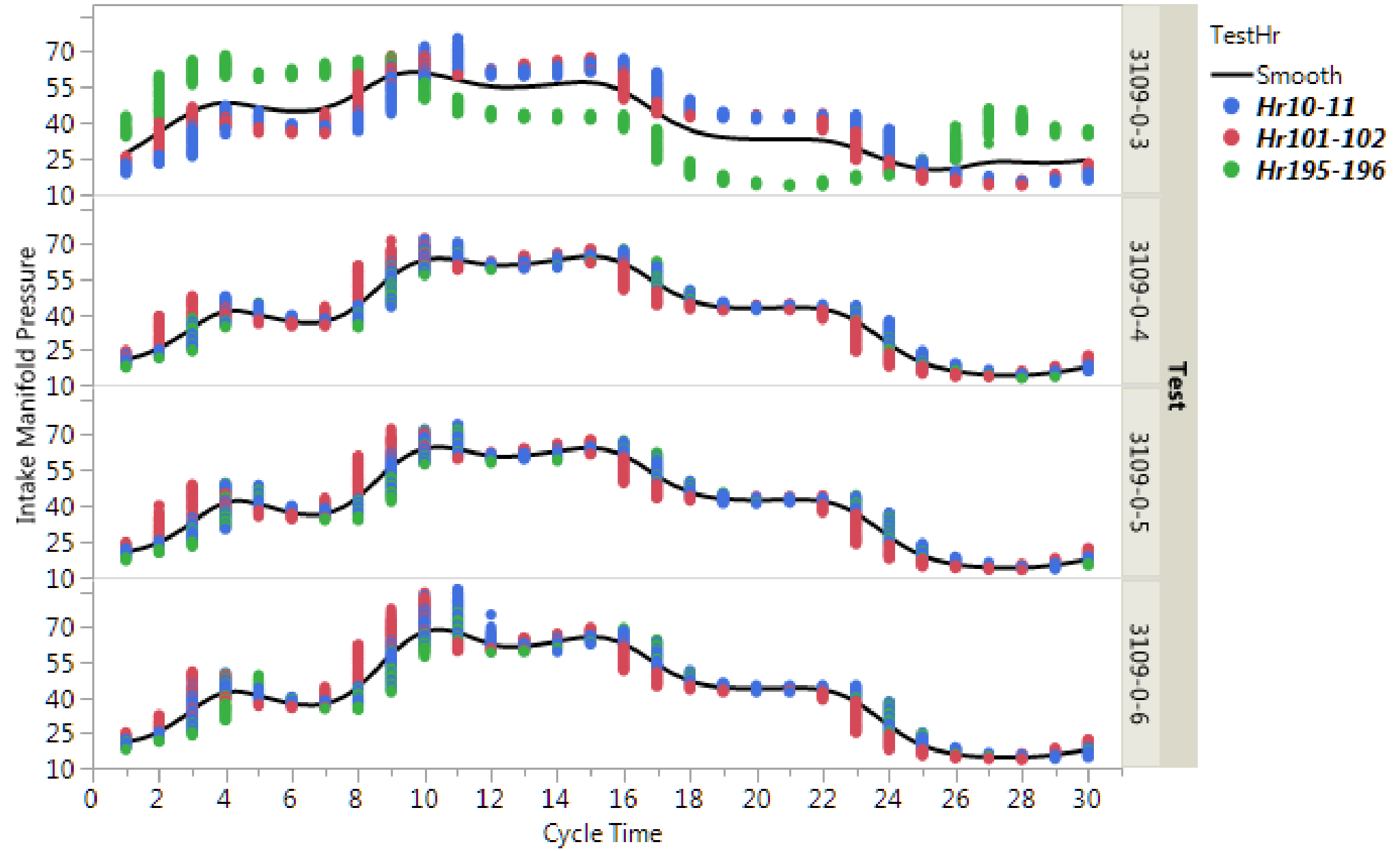
Where(LAB = ExxonMobil)

### Intake Air Temperature vs. Cycle Time



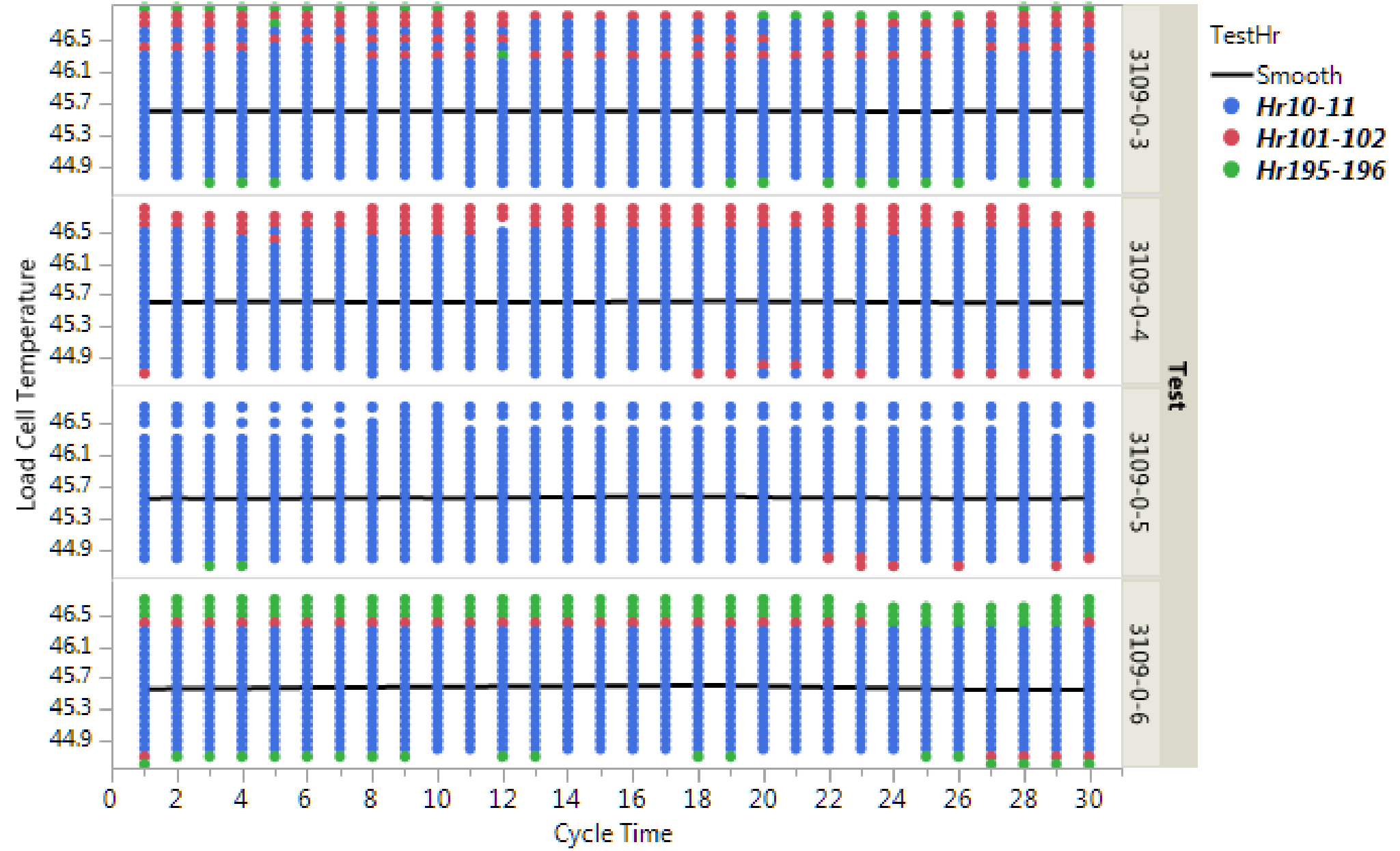
Where(LAB = ExxonMobil)

### Intake Manifold Pressure vs. Cycle Time



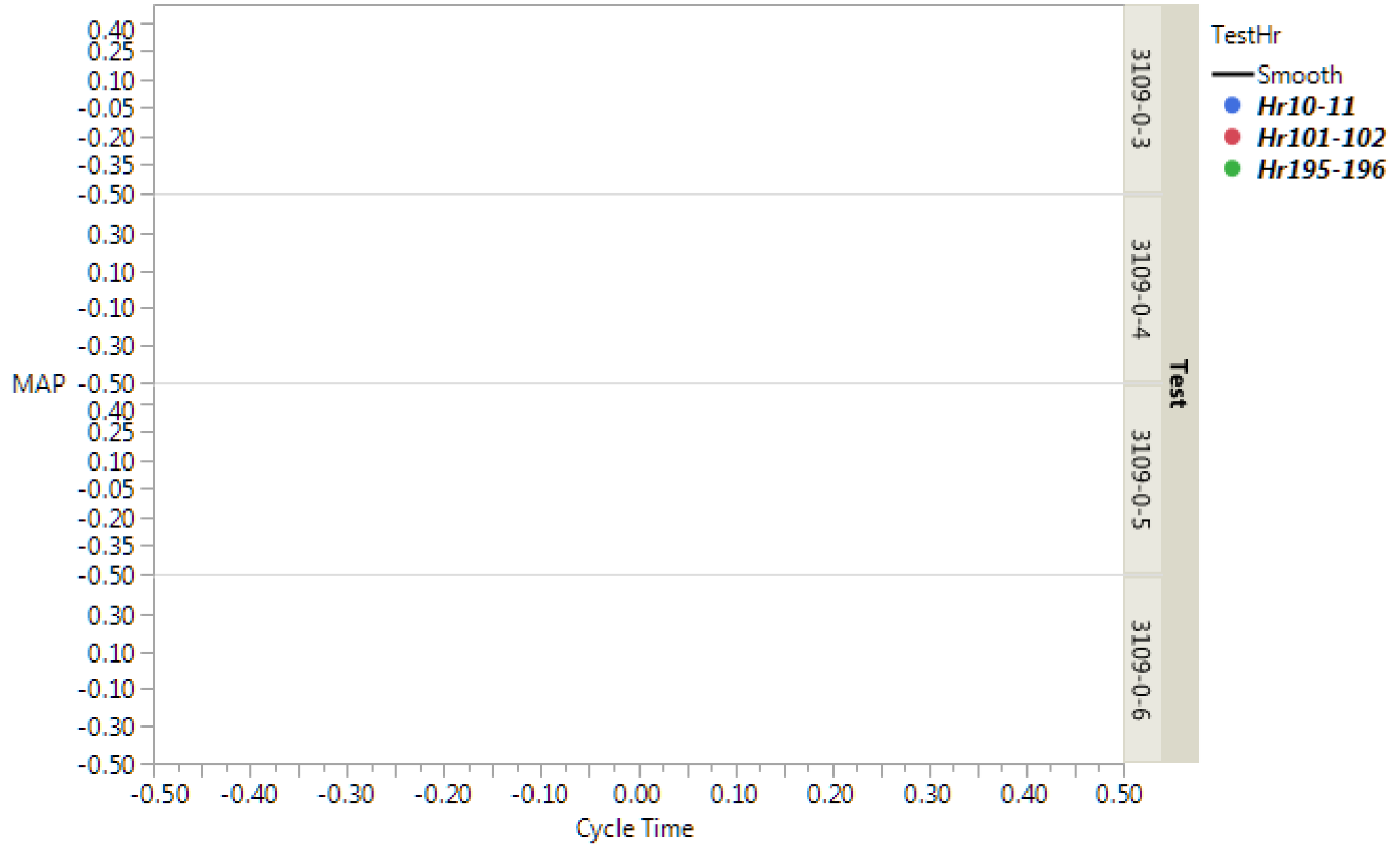
Where(LAB = ExxonMobil)

### Load Cell Temperature vs. Cycle Time



Where(LAB = ExxonMobil)

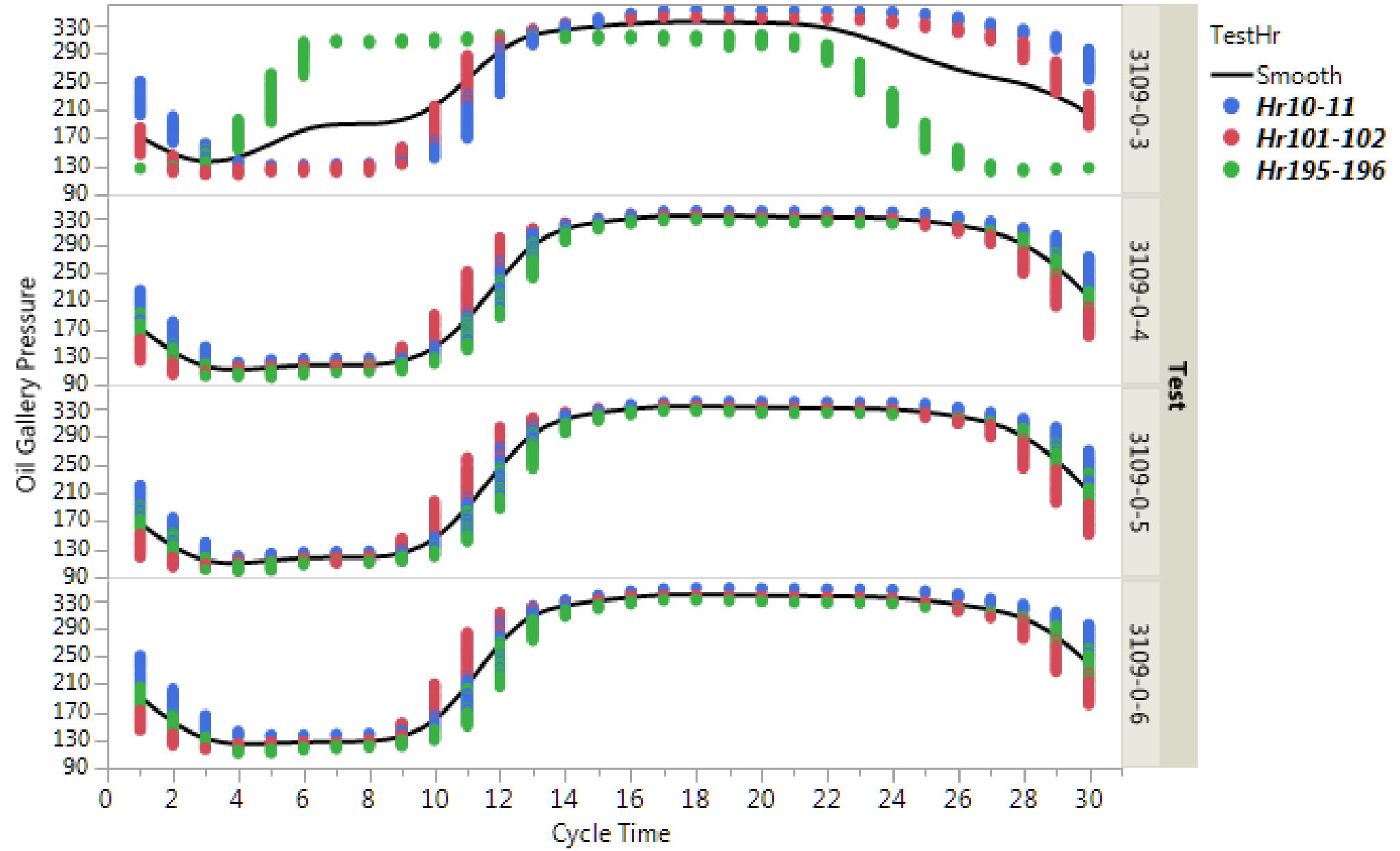
### MAP vs. Cycle Time



Where(LAB = ExxonMobil)

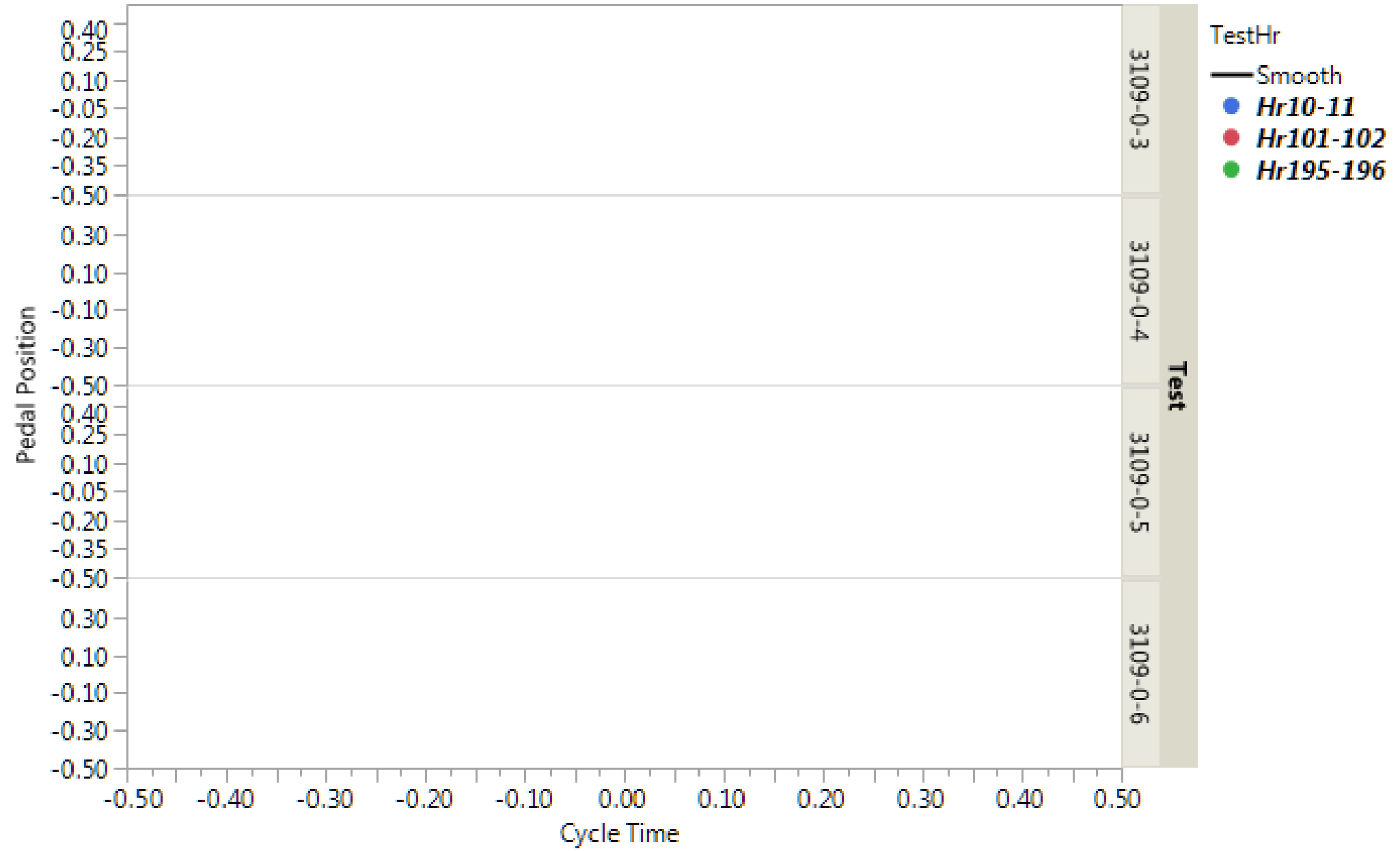


### Oil Gallery Pressure vs. Cycle Time



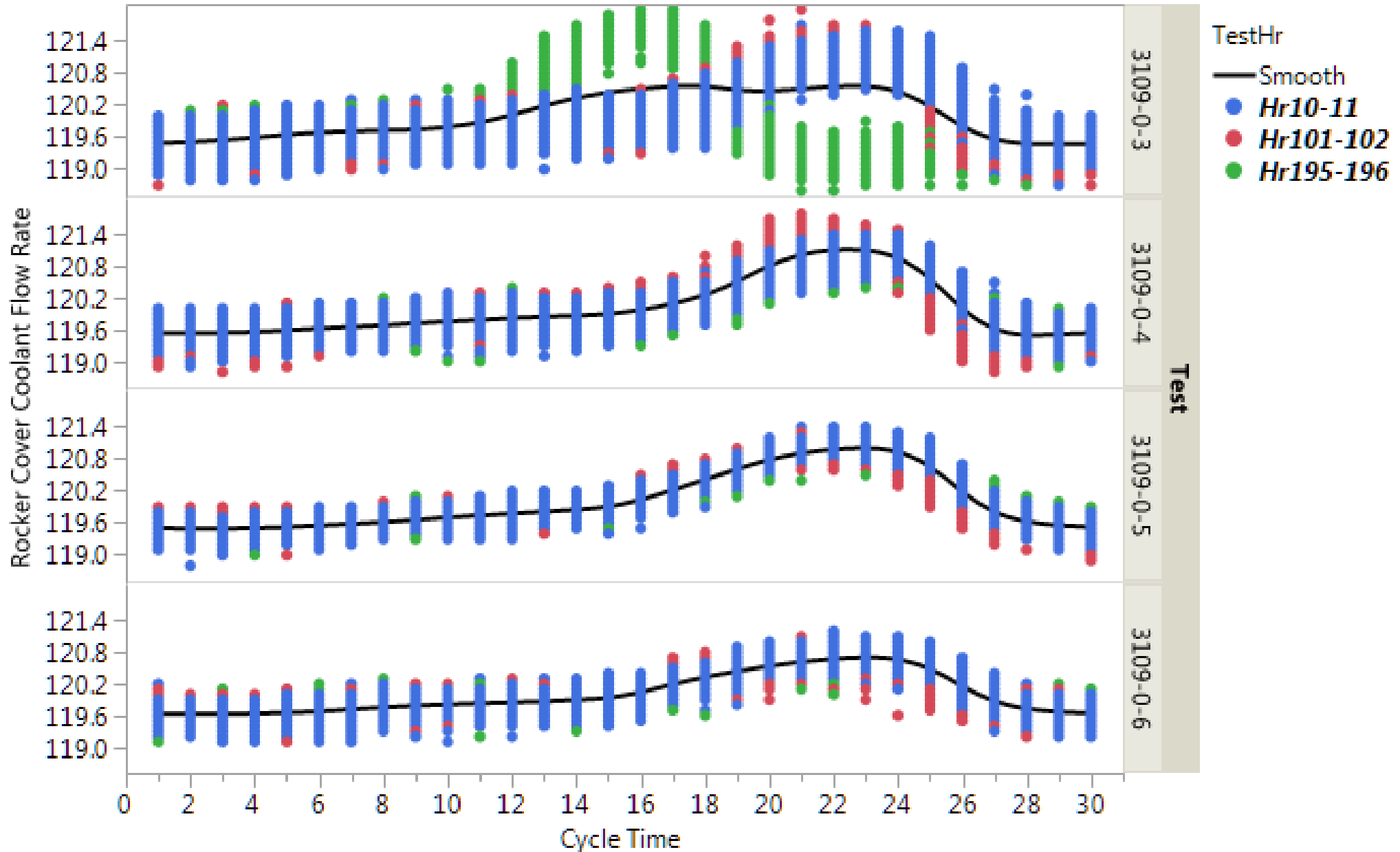
Where(LAB = ExxonMobil)

### Pedal Position vs. Cycle Time



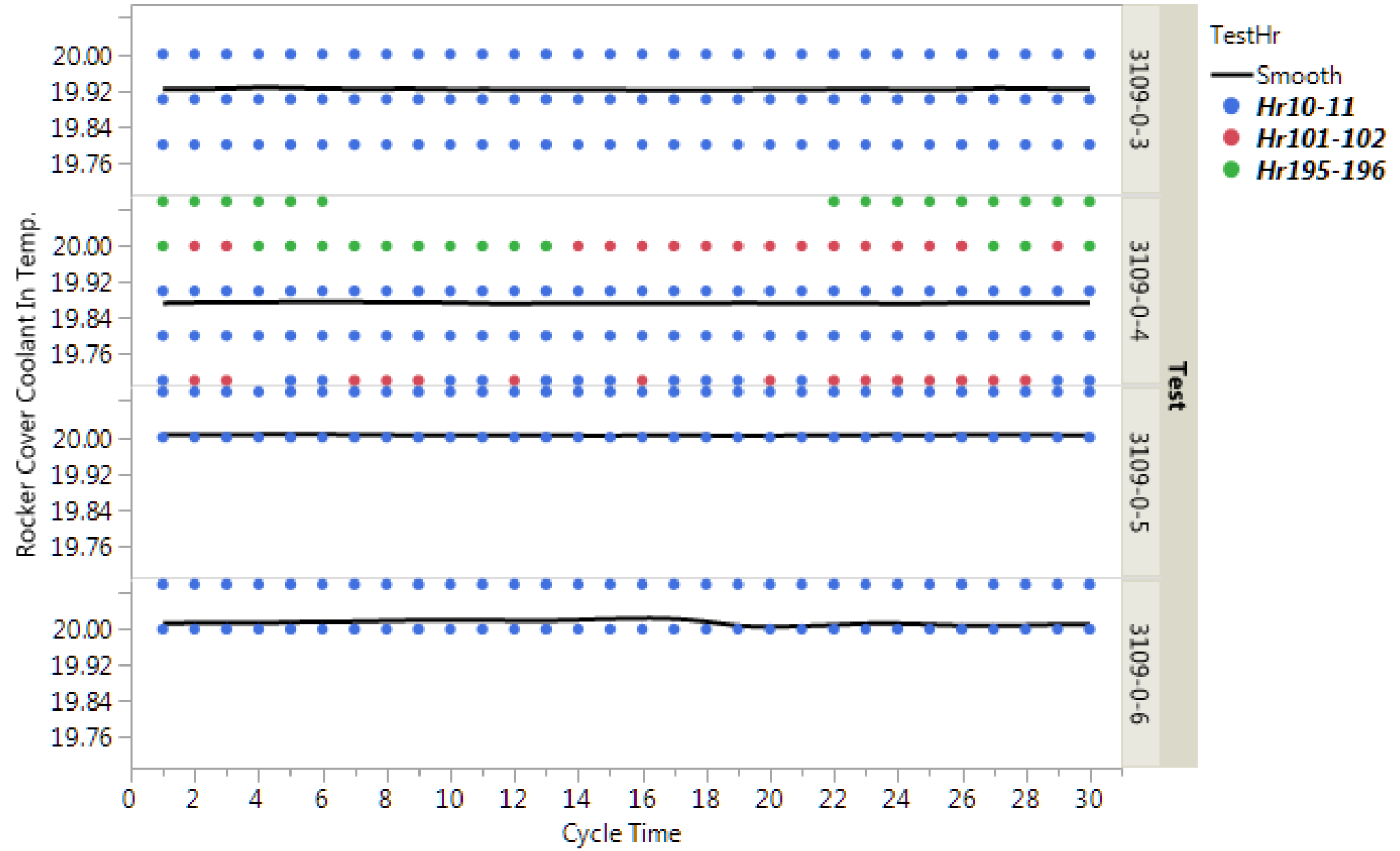
Where(LAB = ExxonMobil)

### Rocker Cover Coolant Flow Rate vs. Cycle Time



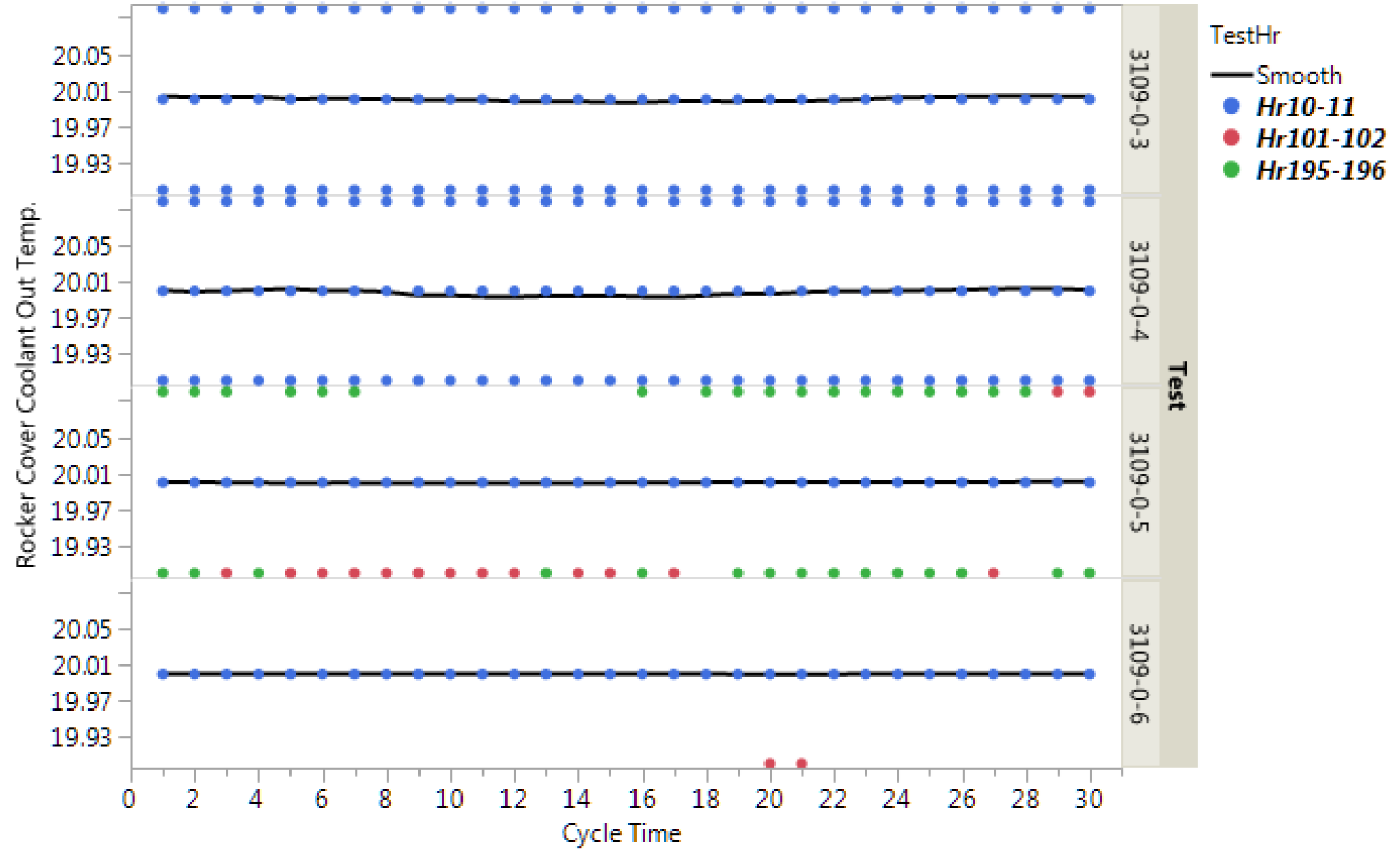
Where(LAB = ExxonMobil)

### Rocker Cover Coolant In Temp. vs. Cycle Time



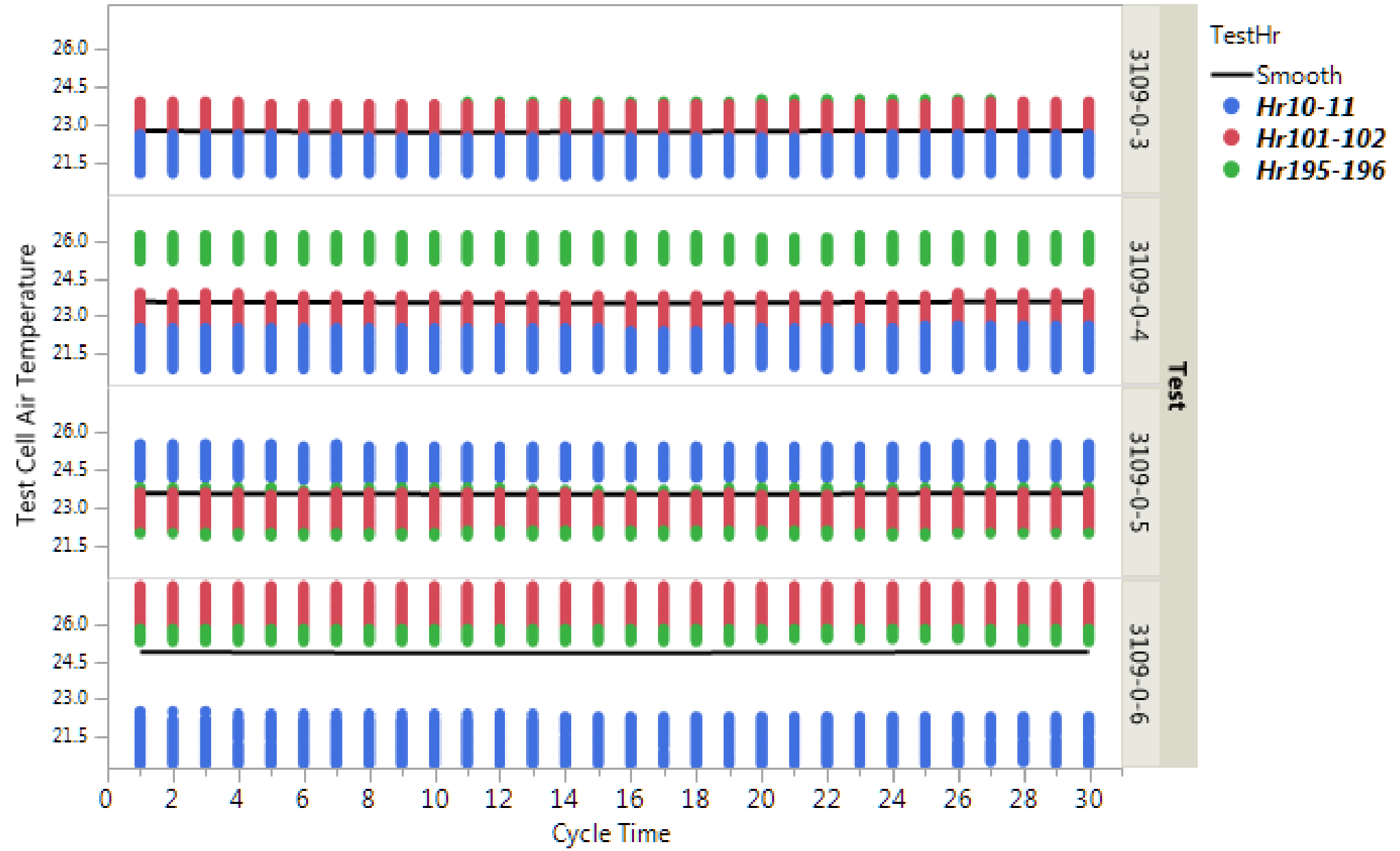
Where(LAB = ExxonMobil)

### Rocker Cover Coolant Out Temp. vs. Cycle Time



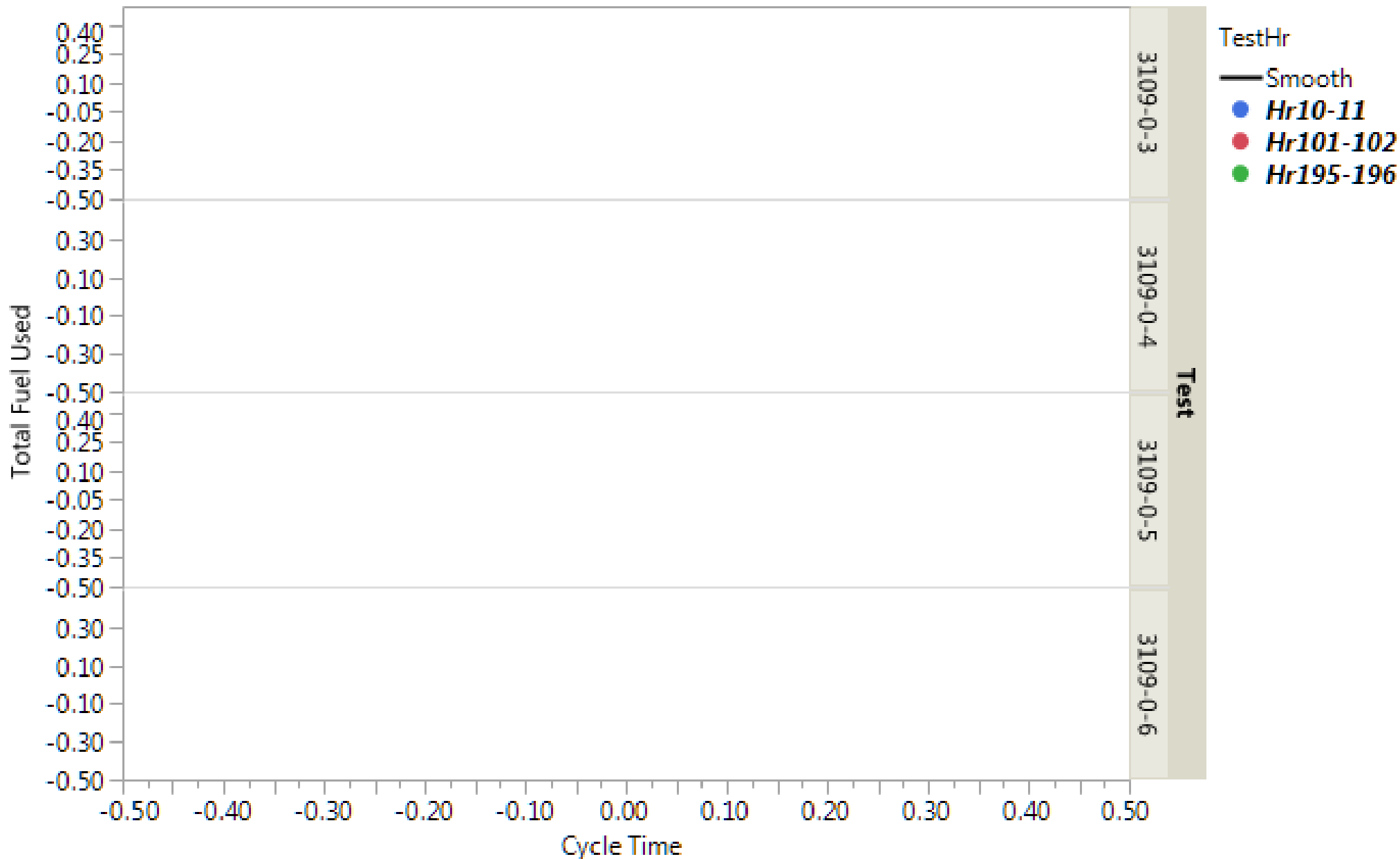
Where(LAB = ExxonMobil)

### Test Cell Air Temperature vs. Cycle Time



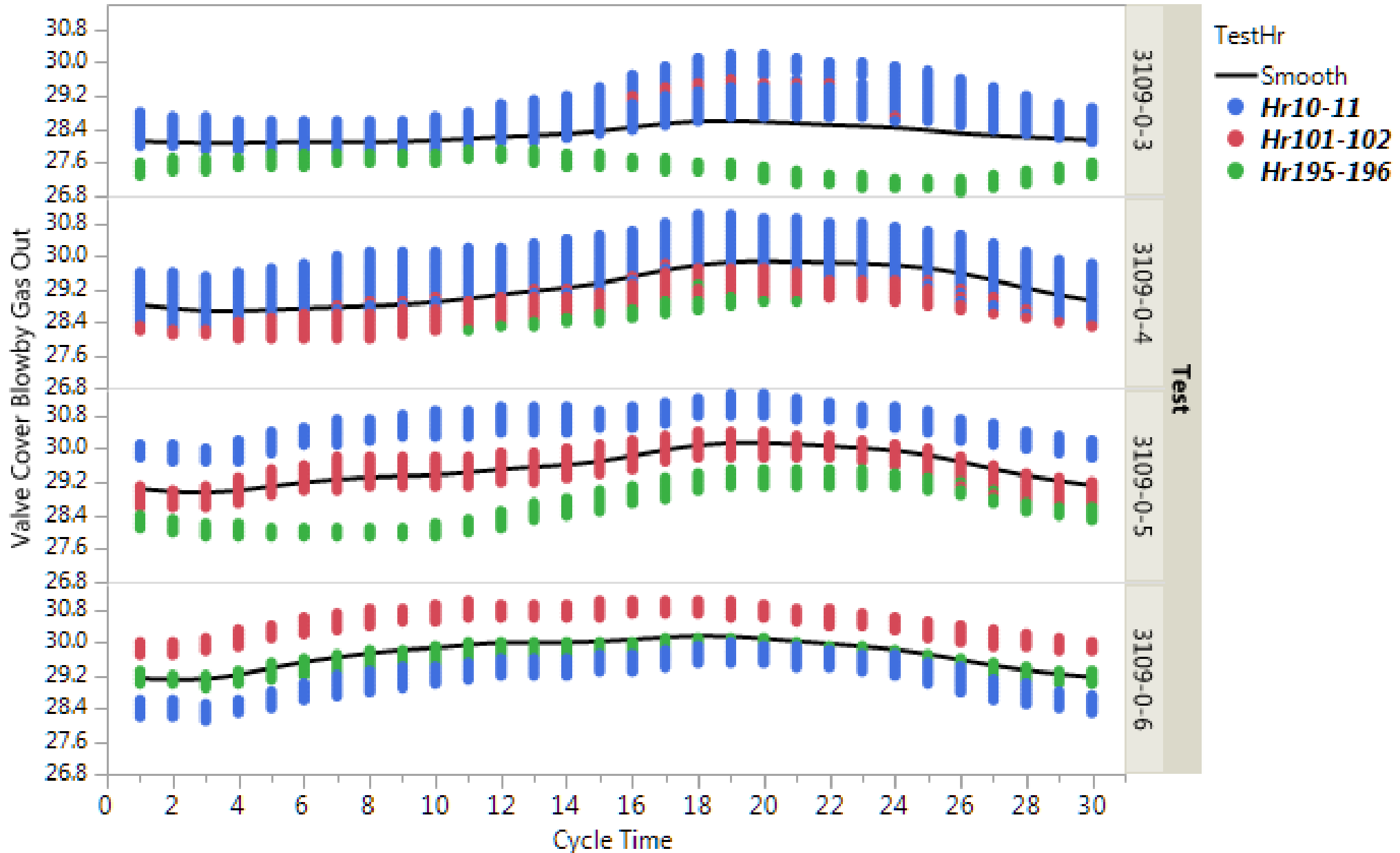
Where(LAB = ExxonMobil)

### Total Fuel Used vs. Cycle Time



Where(LAB = ExxonMobil)

### Valve Cover Blowby Gas Out vs. Cycle Time



Where(LAB = ExxonMobil)