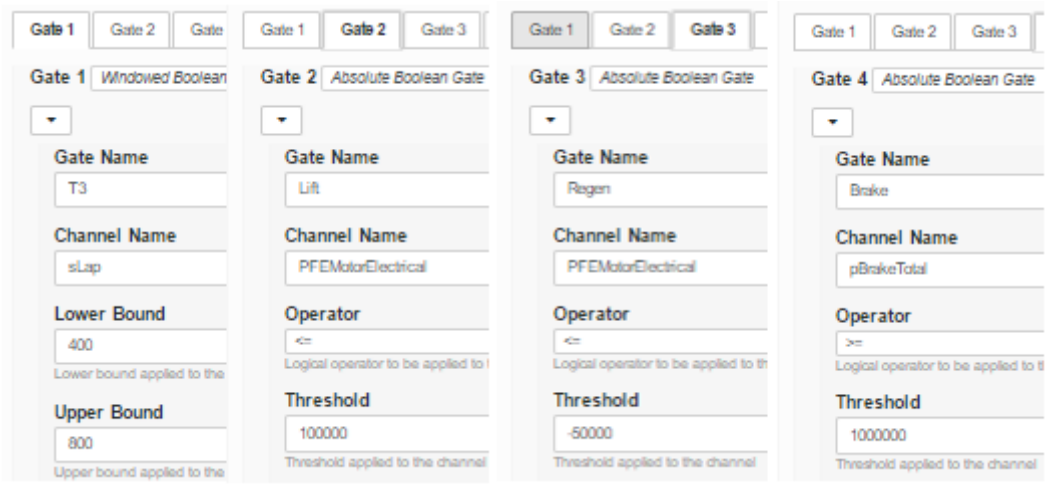
User Maths

User Maths can produce more complex lap scalar results than those defined for a track.

Boolean Gates

These are a set of conditions to be satisfied while evaluating a scalar result. The example below shows how you might extract lift off, regen and braking points for Turn 3 from a simulation. Firstly we define four Boolean Gates as shown:



Note that a Compound Boolean Gates can be defined allowing you to stack gates on top of gates using logical operators. When defining a gate in terms of sLap, we can wrap around the start finish line by setting the lower bound near the end of the lap, and upper bound near the start of the lap, for example 4200m to 200m.

Scalar Results Definitions

Now that we have a set of conditions (Boolean Gates), we specify which channels we would like to extract data from in the region where the Boolean Gates are satisfied, and the computation (min, mean, max, integral, rms) we would like to take place in this region.

To continue the example from above, if we specify that we only want to look at data for T3 (Boolean Condition: sLap between 400m and 800m) AND Lift (Boolean Condition: PFEMotorElectrical <=100kW), by computing Min of channel sLap in this region, we can find the lift off point. Similar logical conditions can be specified for regen and braking points as shown below: