# SM Data

The SM data is retrieved from Brisbane's SCATS via the ITS-port on a continual basis. This data is persisted within an internal database. Every minute the export process checks the SM table for new records.

These are exported as a list of JSON objects within the file named traffic-data-at-int.json. The JSON is not pretty-printed.

A sample is:

[

{"dbid":53036622,"recorded":"2015-05-28T17:01:00","ct":40,"plan":0,"married":"N","ss":518,"tsc":644,"id":"SA-256","ds1":0,"mf1":0,"rf1":0,"ds2":0,"mf2":0,"rf2":0},

{"dbid":53036622,"recorded":"2015-05-28T17:01:00","ct":40,"plan":0,"married":"N","ss":518,"tsc":644,"id":"SA-257","ds1":0,"mf1":0,"rf1":0,"ds2":0,"mf2":0,"rf2":0},

{"dbid":53036622,"recorded":"2015-05-28T17:01:00","ct":40,"plan":0,"married":"N","ss":518,"tsc":644,"id":"SA-258","ds1":0,"mf1":0,"rf1":0,"ds2":0,"mf2":0,"rf2":0},

...

]

The fields are as follows

* dbid - the internal database identifier record for the header record. Useful for back references.
* recorded - the timestamp taken within the SCATS system when the data was recorded.
* ct - the actual cycle time of the traffic signal controller (TSC) at the specific time.
* link\_plan - the linking plan running at this TSC, which is related to another TSC to optimize traffic flow.
* married - an boolean indicating whether the link plan was actually running in a linked mode with the related TSC.
* ss - the sub-system number - identifies a group of TSC within a region.
* tsc - the traffic signal controller (TSC) Site ID installed at the intersection. The number is the suffix of the TSC name, which is attached to the physical chassis.
* lane - identifies a strategic approach or link into the intersection.
* dsN - degree of saturation for lane N - the average occupancy time of a lane detector expressed as a percentage. There may be 1 to 4 lanes.
* mfN - measured flow for lane N - the number of vehicles for the respective cycle for that lane. There may be 1 to 4 lanes.
* rfN - reconstituted flow for lane N - a SCATS calculated expected number of vehicles for the respective cycle for that lane. There may be 1 to 4 lanes.

The records are unordered. They can be grouped by subsystem, tsc and then by lane.