WpsHistory Database Documentation

V 310

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1 Preface

1.1Scope

The scope of the WpsHistory Database Documentation is to

Provide an understanding of the tables, datatypes, and columns associated with tables which are used for storing history descriptions.

For more information on web WPS and different reports, refer to ***Web WPS User Manual***.

1.2Document Structure

The document is organized into the following sections:

- **Retrieving Data:** Describes an example to retrieve data from database .
- **Log Tables:** Describes the different excel reports under the **History** menu.
- **Raw Data Table Descriptions:** Describes the prefix extensions, postfix extensions, common columns, and the tables which contain the raw data.
- **Summary Data:** Describes the column which is used for calculating summary data.

Note

This document covers only information about the important tables used in Web WPS. For more information on WPS features, procedures, and reports, refer ***Web WPS User Manual.***

2 Retrieving data

Retrieving data from the WpsHistory database should be possible with any application that can connect to an MS SQL Server, either through ODBC or directly.

It can be problematic when working with retrieving data and filtering on date / time. In the following section a small example is provided, mainly to support date / time queries. Logging information is usually stored with the DateTime datatype in MS SQL Server. Retrieving and displaying data from a DateTime column might be displayed in a format other than your current locale (may default to the locale of the Database Server).
In the following section some examples are provided on how to filter date and time and display the date and time in an explicit format.

2.1Retrieve wind speed and turbine active power

In order to retrieve how much power a turbine is generating and the wind speed, for a given 24 hour period, the query could look like:

```
SELECT tblSCTurbine.[TimeStamp], tblSCTurbine.StationId,
    tblSCTurGrid.wtc_ActPower_mean AS ActivePower,
    tblSCTurbine.wtc_AcWindSp_mean AS WindSpeed
FROM tblSCTurbine INNER JOIN
    tblSCTurGrid ON tblSCTurbine.[TimeStamp] =
tblSCTurGrid.[TimeStamp] AND tblSCTurbine.StationId
= tblSCTurGrid.StationId
WHERE tblSCTurbine.StationId = 1234567 AND
    tblSCTurbine.[TimeStamp] > '2010-11-15T00:00:00'
    AND tblSCTurbine.[TimeStamp] <= '2010-11-
    16T00:00:00'
```

As shown in the above example, it is recommended to query with the column names, instead of *****.

Please note the [TimeStamp] filter in the WHERE statement. The format used is 'YYYY-MM-DDThh:mm:ss', this format is ISO 8601 and is unambiguous for all SQL Server versions.

If you want the [TimeStamp] output format to be in text, the CONVERT function has style 126 which converts to ISO 8601. Such a query could look like:

```
SELECT CONVERT(varchar(23), tblSCTurbine.[TimeStamp], 126) AS
[TimeStamp], tblSCTurbine.StationId,
    tblSCTurGrid.wtc_ActPower_mean AS ActivePower,
    tblSCTurbine.wtc_AcWindSp_mean AS WindSpeed
FROM tblSCTurbine INNER JOIN
    tblSCTurGrid ON tblSCTurbine.[TimeStamp] =
tblSCTurGrid.[TimeStamp] AND tblSCTurbine.StationId
= tblSCTurGrid.StationId
WHERE tblSCTurbine.StationId = 1234567 AND
    tblSCTurbine.[TimeStamp] > '2010-11-15T00:00:00' AND
    tblSCTurbine.[TimeStamp] <= '2010-11-16T00:00:00'
```

Note the line with "`CONVERT(varchar(23), tblSCTurbine.[TimeStamp], 126)`".

For better performance, the number of records that is retrieved from the database can be limited.

In order to retrieve the first 100 records for the power generated by a turbine and the wind speed, for a given 24 hour period, the query could look like:

```
SELECT TOP 100 tblSCTurbine.[TimeStamp],
    tblSCTurbine.StationId,
    tblSCTurGrid.wtc_ActPower_mean AS ActivePower,
    tblSCTurbine.wtc_AcWindSp_mean AS WindSpeed
FROM tblSCTurbine INNER JOIN
    tblSCTurGrid ON tblSCTurbine.[TimeStamp] =
tblSCTurGrid.[TimeStamp] AND tblSCTurbine.StationId
= tblSCTurGrid.StationId
WHERE tblSCTurbine.StationId = 1234567 AND
    tblSCTurbine.[TimeStamp] > '2010-11-15T00:00:00'
    AND tblSCTurbine.[TimeStamp] <= '2010-11-
    16T00:00:00'
```

3 Log Tables

This section details the table columns, datatype, and description of the columns for site logging purposes.

3.1.1 tblAlarmLog

The `tblAlarmLog` table is used for storing alarms and events for the stations in the site. The alarms are stored in the database. However, the events are removed from the database after every 6 months. You can retrieve previous data using the Backup facility provided in Web WPS. For more information on Back up, refer ***WPS User Manual***.

Column Name	DataType	Description
Acknowledge	TinyInt	The alarm has been acknowledged by a user.
Alarmcode	Int	Error code.
AlarmGroup	Int	Group number – coding: 0: System. 1: Turbine. 2: Meteorology. 3: Grid.
Comment	NVarChar(255)	User comments (used with acknowledgement).
ID	Int	Primary Key, auto incrementing.
idKey	Int	A serial number for alarms (unique per station).
LogType	Int	Log type - coding: 0: Alarm from station in normal production. 1: Event. 2: Alarm from station in service condition.
MailSend	Int	Mail system has seen this alarm and acted upon it.
Parameter	NVarChar(255)	Extra information.
Reset	TinyInt	A reset command has been sent for this specific alarm.
StationNr	Int	Station Id.
TimeOff	DateTime	End of alarm time. Not used when LogType = Event.
TimeOn	DateTime	Rise time for alarm.
UserName	NVarChar(50)	Used by system events initiated by user interaction or when commenting alarms.

3.1.2 tblAptAveragedValueLog

The `tblAptAveragedValueLog` is used for logging purposes by Wind Power Estimator on a site where it is enabled. The table is updated after 5 minutes. Therefore, it is recommended to query this table after
5 minutes.

Column Name	DataType	Description
ActivePowerSum	Real	[MW] Sum of P_RawPower from all HPPPs
FarmActivePowerRawValue UsedByHpppSum	Real	[MW] Sum of P_RawPower from all HPPPs
ID	Int	[ID] Primary Key,autoincrementing
IsAllOnline	TinyInt	[boolean] All turbines have been online the last sample period
SiteAvailablePower	Real	[MW] TurbineAvailablePowerFarmSetupSum * (100 - Parkloss) %
TimeStamp	DateTime	[timestamp] TimeStamp for logging
TurbineAvailablePowerFarmSetup Sum	Real	[MW] Sum of all turbine available estimated power with consideration from Farm Setup
TurbineAvailablePowerSum	Real	[MW] Sum of all turbine available estimated power

4 Raw Data

This section details several tables which contain the raw data. The table includes `tblSCWps`, `tblSCTurTemp`, `tblSCTurPress`, `tblSCTurIntern`, `tblSCTurGrid`, `tblSCTurFlag`, `tblSCTurDigiOut`, `tblSCTurDigiIn`, `tblSCTurCount`, `tblSCTurbine`, and `tblSCMet`. The column name prefix and post fix extensions, amd common columns used in the tables.

4.1Column name Prefix Extensions

The prefix extension of the column names below gives information of the source:

Pre fix extension	Description
wtc_	Signal source is the wtc controller in the turbine
ibx_	Signal source is the Ibox in the turbine
met_	Signal source is the met mast controller
wps_	Signal source is the WPS scada system

4.2Column name Postfix Extensions

Raw data column names are extended with some of the following postfix extensions to give a total column name in each table. The extensions are as follows:

Post fix Extension	Description
_min	Minimum value in 10 min. Interval
_max	Maximum value in 10 minutes interval
_mean	Mean value in 10 minutes interval
_stddev	Standard deviation in 10 minutes interval
_endvalue	The last received value in 10 minutes interval
_accum	Accumulated value in period
_counts	Number of changes to off position and changes to on position
_timeon	Time in sec. signal has been active

4.3Common columns

Following are the common columns used in the tables.

Column	Description
Timestamp	The timestamp for the record. Indicates the end of a 10 minutes period
StationId	The Id for the station. For WTC-3 turbines the production number is used

4.4Table Descriptions

This section contains the table descriptions for all the raw tables along with the column name, data type, and descriptions.

Turbine data is replicated and transformed after an interval of 10 minutes. New turbine data if present is added to the tables mentioned below, only after 10 minute intervals. Hence, it is recommended to query the table only after 10 minutes, to retrieve new turbine data.

Data in the tables listed below are stored in the database for 6 months. To retrieve data prior to 6 months, you can use the backup facility available in Web WPS. For more information on backup option, refer ***WPS User Manual***.

4.4.1 tblSCWps

A common table which contains the states for other tblSCxxx tables.

Column Name	Datatype	Description
met_WpsStatus_endvalue	Int	Not used.
StationId	Int	[ID] Station ID
TimeStamp	DateTime	[timestamp] TimeStamp for logging
wps_CurtailedPower_endvalue	Real	[kW] Curtailed power due to Park Pilot regulation
wps_NoiseFunctionSetID_endvalue	SmallInt	[enum] Active noise function
wps_PilotStatus_endvalue	NVarChar (20)	[text] Status for Park pilot
wps_PowerBatch_endvalue	Float	[kW] Peak Power since last reset
wps_PowerBatchMeanWind_endvalue	Float	[m/s] Mean wind for period with Peak power
wps_PowerBatchMetWindDir_endvalue	Float	[degree] Wind direction for period with Peak power.
wps_PowerBatchPeakWind_endvalue	Float	[m/s] Peak wind for period with Peak power
wps_PowerBatchPowerTimestamp_endvalue	DateTime	[timestamp] Timestamp for Peak Power
wps_PowerBatchTemperature_endvalue	Float	[C°] Ambie nt temperature minut period with Peak power
wps_PowerBatchTimestamp_endvalue	DateTime	[timestamp] Timestamp for last reset
wps_PowerBatchYawAngle_endvalue	Float	[degree] Yaw angle for period with Peak power
wps_ScientificFieldCount_endvalue	SmallInt	[amount] Records tranformed (old replicator)
wps_WpsStatus_endvalue	Int	[enum] Status for all records with same timestamp and StationId. The coding is documented in the Wps Manual

4.4.2 tblSCTurTemp

Table tblSCTurTemp contains the temperature measurements.

Column Name	Datatype	Description
StationId	Int	[ID] Station ID
TimeStamp	DateTime	[timestamp] TimeStamp for logging
wtc_A1ExtTmp_max	Real	[C°] A1 external temperature
wtc_A1ExtTmp_mean	Real	[C°] A1 external temperature
wtc_A1ExtTmp_min	Real	[C°] A1 external temperature
wtc_A1ExtTmp_stddev	Real	[C°] A1 external temperature
wtc_A1IntTmp_max	Real	[C°] A1 internal temperature
wtc_A1IntTmp_mean	Real	[C°] A1 internal temperature
wtc_A1IntTmp_min	Real	[C°] A1 internal temperature
wtc_A1IntTmp_stddev	Real	[C°] A1 internal temperature
wtc_A2IntTmp_max	Real	[C°] A2 internal temperature
wtc_A2IntTmp_mean	Real	[C°] A2 internal temperature
wtc_A2IntTmp_min	Real	[C°] A2 internal temperature
wtc_A2IntTmp_stddev	Real	[C°] A2 internal temperature
wtc_A3LefTmp_max	Real	[C°] A3 internal temperature,left
wtc_A3LefTmp_mean	Real	[C°] A3 internal temperature,left
wtc_A3LefTmp_min	Real	[C°] A3 internal temperature,left
wtc_A3LefTmp_stddev	Real	[C°] A3 internal temperature,left
wtc_A3RigTmp_max	Real	[C°] A3 internal temperature,right
wtc_A3RigTmp_mean	Real	[C°] A3 internal temperature,right
wtc_A3RigTmp_min	Real	[C°] A3 internal temperature,right
wtc_A3RigTmp_stddev	Real	[C°] A3 internal temperature,right
wtc_A4AmbTmp_max	Real	[C°] A4 external temperature
wtc_A4AmbTmp_mean	Real	[C°] A4 external temperature
wtc_A4AmbTmp_min	Real	[C°] A4 external temperature
wtc_A4AmbTmp_stddev	Real	[C°] A4 external temperatu re
wtc_A4IntTmp_max	Real	[C°] A4 internal temperature
wtc_A4IntTmp_mean	Real	[C°] A4 internal temperature
wtc_A4IntTmp_min	Real	[C°] A4 internal temperature
wtc_A4IntTmp_stddev	Real	[C°] A4 internal temperatu re
wtc_A9IntTmp_max	Real	[C°] A9 internal temperature
wtc_A9IntTmp_mean	Real	[C°] A9 internal temperature
wtc_A9IntTmp_min	Real	[C°] A9 internal temperature
wtc_A9IntTmp_stddev	Real	[C°] A9 internal temperatu re
wtc_A21IntTm_max	Real	[C°] A21 internal temperature
wtc_A21IntTm_mean	Real	[C°] A21 internal temperature
wtc_A21IntTm_min	Real	[C°] A21 internal temperature
wtc_A21IntTm_stddev	Real	[C°] A21 internal temperature
wtc_AmbieTmp_max	Real	[C°] Ambient temperature
wtc_AmbieTmp_mean	Real	[C°] Ambient temperature
wtc_AmbieTmp_min	Real	[C°] Ambient temperature
wtc_AmbieTmp_stddev	Real	[C°] Ambient temperature
wtc_BrkTmpGn_max	Real	[C°] Brake temperature,GEAR
wtc_BrkTmpGn_mean	Real	[C°] Brake temperature,GEAR
wtc_BrkTmpGn_min	Real	[C°] Brake temperature,GEAR
wtc_BrkTmpGn_stddev	Real	[C°] Brake temperature,GEAR
wtc_BrkTmpGr_max	Real	[C°] Brake temperature,GEN
wtc_BrkTmpGr_mean	Real	[C°] Brake temperature,GEN
wtc_BrkTmpGr_min	Real	[C°] Brake temperature,GEN

Column Name	Datatype	Description
wtc_BrkTmpGr_stddev	Real	[C°] Brake temperature,GEN
wtc_ConvWTmp_max	Real	[C°] Inverter coolant (tower) temperature
wtc_ConvWTmp_mean	Real	[C°] Inverter coolant (tower) temperature
wtc_ConvWTmp_min	Real	[C°] Inverter coolant (tower) temperature
wtc_ConvWTmp_stddev	Real	[C°] Inverter coolant (tower) temperature
wtc_ConvWTm2_max	Real	[C°] Nacelle converter coolant temperature
wtc_ConvWTm2_max	Real	[C°] Nacelle converter coolant temperature
wtc_ConvWTm2_max	Real	[C°] Nacelle converter coolant temperature
wtc_ConvWTm2_max	Real	[C°] Nacelle converter coolant temperature
wtc_DeltaTmp_max	Real	[C°] Temperature in delta modules (tower)
wtc_DeltaTmp_mean	Real	[C°] Temperature in delta modules (tower)
wtc_DeltaTmp_min	Real	[C°] Temperature in delta modules (tower)
wtc_DeltaTmp_stddev	Real	[C°] Temperature in delta modules (tower)
wtc_Gen1U1Tm_max	Real	[C°] Generator temperature,1 U1
wtc_Gen1U1Tm_mean	Real	[C°] Generator temperature, 1U1
wtc_Gen1U1Tm_min	Real	[C°] Generator temperature,1 U1
wtc_Gen1U1Tm_stddev	Real	[C°] Generator temperature ,1U1
wtc_Gen1V1Tm_max	Real	[C°] Generator temperature,1 V1
wtc_Gen1V1Tm_mean	Real	[C°] Generator temperature, 1V1
wtc_Gen1V1Tm_min	Real	[C°] Generator temperature,1 V1
wtc_Gen1V1Tm_stddev	Real	[C°] Generator temperature,1V1
wtc_Gen1W1Tm_max	Real	[C°] Generator temperature,1 W1
wtc_Gen1W1Tm_mean	Real	[C°] Generator temperature, 1W1
wtc_Gen1W1Tm_min	Real	[C°] Generator temperature,1 W1
wtc_Gen1W1Tm_stddev	Real	[C°] Generator temperature,1W1
wtc_Gen2U1Tm_max	Real	[C°] Generator temperature,2 U1
wtc_Gen2U1Tm_mean	Real	[C°] Generator temperature, 2U1
wtc_Gen2U1Tm_min	Real	[C°] Generator temperature, 2 U1
wtc_Gen2U1Tm_stddev	Real	[C°] Generator temperature, 2U1
wtc_Gen2V1Tm_max	Real	[C°] Generator temperature, 2 V1
wtc_Gen2V1Tm_mean	Real	[C°] Generator temperature, 2V1
wtc_Gen2V1Tm_min	Real	[C°] Generator temperature, 2 V1
wtc_Gen2V1Tm_stddev	Real	[C°] Generator temperature, 2V1
wtc_Gen2W1Tm_max	Real	[C°] Generator temperature, 2 W1
wtc_Gen2W1Tm_mean	Real	[C°] Generator temperature, 2W1
wtc_Gen2W1Tm_min	Real	[C°] Generator temperature, 2 W1
wtc_Gen2W1Tm_stddev	Real	[C°] Generator temperature, 2W1
wtc_GenBeGTm_max	Real	[C°] Generator bearing temperature, NDE
wtc_GenBeGTm_mean	Real	[C°] Generator bearing temperature, NDE
wtc_GenBeGTm_min	Real	[C°] Generator bearing temperature, NDE
wtc_GenBeITm_max	Real	[C°] Generator bearing inner ring temperature
wtc_GenBeITm_mean	Real	[C°] Generator bearing inner ring temperature
wtc_GenBeITm_min	Real	[C°] Generator bearing inner ring temperature
wtc_GenBeITm_stddev	Real	[C°] Generator bearing inner ring temperature
wtc_GenBeOTm_min	Real	[C°] Generator bearing outer ring temperature
wtc_GenBeOTm_max	Real	[C°] Generator bearing outer ring temperature
wtc_GenBeOTm_mean	Real	[C°] Generator bearing outer ring temperature
wtc_GenBeOTm_ stddev	Real	[C°] Generator bearing outer ring temperature
wtc_GenBeGTm_stddev	Real	[C°] Generator bearing temperature, NDE
wtc_GenBeRTm_max	Real	[C°] Generator bearing temperature, DE
wtc_GenBeRTm_mean	Real	[C°] Generator bearing temperature, DE
wtc_GenBeRTm_min	Real	[C°] Generator bearing temperature, DE
wtc_GenBeRTm_stddev	Real	[C°] Generator bearing temperature, DE

Column Name	Datatype	Description
wtc_GenCoTmA_min	Real	[C°] Generator cooling water temperature A
wtc_GenCoTmA_max	Real	[C°] Generator cooling water temperature A
wtc_GenCoTmA_mean	Real	[C°] Generator cooling water temperature A
wtc_GenCoTmA_stddev	Real	[C°] Generator cooling water temperature A
wtc_GenCoTmB_min	Real	[C°] Generator cooling water temperature B
wtc_GenCoTmB_max	Real	[C°] Generator cooling water temperature B
wtc_GenCoTmB_mean	Real	[C°] Generator cooling water temperature B
wtc_GenCoTmB_stddev	Real	[C°] Generator cooling water temperature B
wtc_GenS01Tm_min	Real	[C°] Generator wdg temperature, segment 1.
wtc_GenS01Tm_max	Real	[C°] Generator wdg temperature, segment 1.
wtc_GenS01Tm_mean	Real	[C°] Generator wdg temperature, segment 1.
wtc_GenS01Tm_stddev	Real	[C°] Generator wdg temperature, segment 1.
wtc_GenS02Tm_min	Real	[C°] Generator wdg temperature, segment 2.
wtc_GenS02Tm_max	Real	[C°] Generator wdg temperature, segment 2.
wtc_GenS02Tm_mean	Real	[C°] Generator wdg temperature, segment 2.
wtc_GenS02Tm_stddev	Real	[C°] Generator wdg temperature, segment 2.
wtc_GenS03Tm_min	Real	[C°] Generator wdg temperature, segment 3.
wtc_GenS03Tm_max	Real	[C°] Generator wdg temperature, segment 3.
wtc_GenS03Tm_mean	Real	[C°] Generator wdg temperature, segment 3.
wtc_GenS03Tm_stddev	Real	[C°] Generator wdg temperature, segment 3.
wtc_GenS04Tm_min	Real	[C°] Generator wdg temperature, segment 4.
wtc_GenS04Tm_max	Real	[C°] Generator wdg temperature, segment 4.
wtc_GenS04Tm_mean	Real	[C°] Generator wdg temperature, segment 4.
wtc_GenS04Tm_stddev	Real	[C°] Generator wdg temperature, segment 4.
wtc_GenS05Tm_min	Real	[C°] Generator wdg temperature, segment 5.
wtc_GenS05Tm_max	Real	[C°] Generator wdg temperature, segment 5.
wtc_GenS05Tm_mean	Real	[C°] Generator wdg temperature, segment 5.
wtc_GenS05Tm_stddev	Real	[C°] Generator wdg temperature, segment 5.
wtc_GenS06Tm_min	Real	[C°] Generator wdg temperature, segment 6.
wtc_GenS06Tm_max	Real	[C°] Generator wdg temperature, segment 6.
wtc_GenS06Tm_mean	Real	[C°] Generator wdg temperature, segment 6.
wtc_GenS06Tm_stddev	Real	[C°] Generator wdg temperature, segment 6.
wtc_GeOilTmp_max	Real	[C°] Gear oil temperature
wtc_GeOilTmp_mean	Real	[C°] Gear oil temperature
wtc_GeOilTmp_min	Real	[C°] Gear oil temperature
wtc_GeOilTmp_stddev	Real	[C°] Gear oil temperature
wtc_GFilB1Tm_max	Real	[C°] Grid filter B1 temperature
wtc_GFilB1Tm_mean	Real	[C°] Grid filter B1 temperature
wtc_GFilB1Tm_min	Real	[C°] Grid filter B1 temperature
wtc_GFilB1Tm_stddev	Real	[C°] Grid filter B1 temperature
wtc_GFilB2Tm_max	Real	[C°] Grid filter B2 temperature
wtc_GFilB2Tm_mean	Real	[C°] Grid filter B2 temperature
wtc_GFilB2Tm_min	Real	[C°] Grid filter B2 temperature
wtc_GFilB2Tm_stddev	Real	[C°] Grid filter B2 temperature
wtc_GFilB3Tm_max	Real	[C°] Grid filter B3 temperature
wtc_GFilB3Tm_mean	Real	[C°] Grid filter B3 temperature
wtc_GFilB3Tm_min	Real	[C°] Grid filter B3 temperature
wtc_GFilB3Tm_stddev	Real	[C°] Grid filter B3 temperature
wtc_HSGenTmp_max	Real	[C°] Gear bearing temperature, HS- GEN
wtc_HSGenTmp_mean	Real	[C°] Gear bearing temperature, HS- GEN
wtc_HSGenTmp_min	Real	[C°] Gear bearing temperature, HS- GEN
wtc_HSGenTmp_stddev	Real	[C°] Gear bearing temperature, HS- GEN
wtc_HSRotTmp_max	Real	[C°] Gear bearing temperature , HS- ROT

Column Name	Datatype	Description
wtc_HSRotTmp_mean	Real	[C°] Gear bearing temperature, HS- ROT
wtc_HSRotTmp_min	Real	[C°] Gear bearing temperature, HS- ROT
wtc_HSRotTmp_stddev	Real	[C°] Gear bearing temperature, HS- ROT
wtc_HubBrdTm_max	Real	[C°] Hub computer board temperature
wtc_HubBrdTm_mean	Real	[C°] Hub computer board temperature
wtc_HubBrdTm_min	Real	[C°] Hub computer board temperature
wtc_HubBrdTm_stddev	Real	[C°] Hub computer board temperature
wtc_HubTemp_max	Real	[C°] Temperature in hub
wtc_HubTemp_mean	Real	[C°] Temperature in hub
wtc_HubTemp_min	Real	[C°] Temperature in hub
wtc_HubTemp_stddev	Real	[C°] Temperature in hub
wtc_HubTRef1_max	Real	[C°] Temperature reference 1, Hub computer
wtc_HubTRef1_mean	Real	[C°] Temperature reference 1, Hub computer
wtc_HubTRef1_min	Real	[C°] Temperature reference 1, Hub computer
wtc_HubTRef1_stddev	Real	[C°] Temperature reference 1, Hub computer
wtc_HubTRef2_max	Real	[C°] Temperature reference 2, Hub computer
wtc_HubTRef2_mean	Real	[C°] Temperature reference 2 , Hub computer
wtc_HubTRef2_min	Real	[C°] Temperature reference 2, Hub computer
wtc_HubTRef2_stddev	Real	[C°] Temperature reference 2, Hub computer
wtc_HydOilTm_max	Real	[C°] Temperature in hydraulic oil
wtc_HydOilTm_mean	Real	[C°] Temperature in hydraulic oil
wtc_HydOilTm_min	Real	[C°] Temperature in hydraulic oil
wtc_HydOilTm_stddev	Real	[C°] Temperature in hydraulic oil
wtc_IMSGenTm_max	Real	[C°] Gear bearing temperature, IMS- GEN
wtc_IMSGenTm_mean	Real	[C°] Gear bearing temperature, IMS- GEN
wtc_IMSGenTm_min	Real	[C°] Gear bearing temperature, IMS- GEN
wtc_IMSGenTm_stddev	Real	[C°] Gear bearing temperature, IMS- GEN
wtc_IMSRotTm_max	Real	[C°] Gear bearing temperature, IMS- ROT
wtc_IMSRotTm_mean	Real	[C°] Gear bearing temperature, IMS- ROT
wtc_IMSRotTm_min	Real	[C°] Gear bearing temperature, IMS- ROT
wtc_IMSRotTm_stddev	Real	[C°] Gear bearing temperature, IMS- ROT
wtc_IO1IntTm_max	Real	[C°] Internal temperature at IO module 1
wtc_IO1IntTm_mean	Real	[C°] Internal temperature at IO module 1
wtc_IO1IntTm_min	Real	[C°] Internal temperature at IO module 1
wtc_IO1IntTm_stddev	Real	[C°] Internal temperature at IO module 1
wtc_IO2IntTm_max	Real	[C°] Internal temperature at IO module 2
wtc_IO2IntTm_mean	Real	[C°] Internal temperature at IO module 2
wtc_IO2IntTm_min	Real	[C°] Internal temperature at IO module 2
wtc_IO2IntTm_stddev	Real	[C°] Internal temperature at IO module 2
wtc_IO3IntTm_max	Real	[C°] Internal temperature at IO module 3
wtc_IO3IntTm_mean	Real	[C°] Internal temperature at IO module 3
wtc_IO3IntTm_min	Real	[C°] Internal temperature at IO module 3
wtc_IO3IntTm_stddev	Real	[C°] Internal temperature at IO module 3
wtc_MainBTmp_max	Real	[C°] Main bearing temperature measurement.
wtc_MainBTmp_mean	Real	[C°] Main bearing temperature measurement.
wtc_MainBTmp_min	Real	[C°] Main bearing temperature measurement.
wtc_MainBTmp_stddev	Real	[C°] Main bearing temperature measurement.
wtc_MBearGTm_max	Real	[C°] Temperature of main bearing near the gear (turbines with two main bearings).
wtc_MBearGTm_mean	Real	[C°] Temperature of main bearing near the gear (turbines with two main bearings).
wtc_MBearGTm_min	Real	[C°] Temperature of main bearing near the gear (turbines with two main bearings).

Column Name	Datatype	Description
wtc_MBearGTm_stddev	Real	[C°] Temperature of main bearing near the gear (turbines with two main bearings).
wtc_MBearHTm_max	Real	[C°] Temperature of main bearing near the hub (turbines with two main bearings).
wtc_MBearHTm_mean	Real	[C°] Temperature of main bearing near the hub (turbines with two main bearings).
wtc_MBearHTm_min	Real	[C°] Temperature of main bear ing near the hub (turbines with two main bearings).
wtc_MBearHTm_stddev	Real	[C°] Temperature of main b earing near the hub (turbines with two main bearings).
wtc_NacelTmp_max	Real	[C°] Nacelle temperature
wtc_NacelTmp_mean	Real	[C°] Nacelle temperature
wtc_NacelTmp_min	Real	[C°] Nacelle temperature
wtc_NacelTmp_stddev	Real	[C°] Nacelle temperature
wtc_NMMBrdTm_max	Real	[C°] Board temperature, Grid module
wtc_NMMBrdTm_mean	Real	[C°] Board temperature, Grid module
wtc_NMMBrdTm_min	Real	[C°] Board temperature, Grid module
wtc_NMMBrdTm_stddev	Real	[C°] Board temperature, Gr id module
wtc_PFMaTemp_max	Real	[C°] Temperature in or around the master unit
wtc_PFMaTemp_mean	Real	[C°] Temperature in or around the master unit
wtc_PFMaTemp_min	Real	[C°] Temperature in or around the master unit
wtc_PFMaTemp_stddev	Real	[C°] Temperature in or around the master unit
wtc_PFMCapTm_max	Real	[C°] Temperature at capacitors on the master unit
wtc_PFMCapTm_mean	Real	[C°] Temperature at capacitors on the master unit
wtc_PFMCapTm_min	Real	[C°] Temperature at capacitors on the master unit
wtc_PFMCapTm_stddev	Real	[C°] Temperature at capaci tors on the master unit
wtc_PFS1CapT_max	Real	[C°] Temperature at capacitors on the slave unit 1
wtc_PFS1CapT_mean	Real	[C°] Temperature at capacitors on the slave unit 1
wtc_PFS1CapT_min	Real	[C°] Temperature at capacitors on the slave unit 1
wtc_PFS1CapT_stddev	Real	[C°] Temperature at capacitors on the slave unit 1
wtc_PFS1Temp_max	Real	[C°] Temperature in or around the slave unit 1
wtc_PFS1Temp_mean	Real	[C°] Temperature in or around the slave unit 1
wtc_PFS1Temp_min	Real	[C°] Temperature in or around the slave unit 1
wtc_PFS1Temp_stddev	Real	[C°] Temperature in or around the slave unit 1
wtc_ReacUTmp_max	Real	[C°] Main reactor U temperature
wtc_ReacUTmp_mean	Real	[C°] Main reactor U temperature
wtc_ReacUTmp_min	Real	[C°] Main reactor U temperature
wtc_ReacUTmp_stddev	Real	[C°] Main reactor U temperature
wtc_ReacVTmp_max	Real	[C°] Main reactor V temperature
wtc_ReacVTmp_mean	Real	[C°] Main reactor V temperature
wtc_ReacVTmp_min	Real	[C°] Main reactor V temperature
wtc_ReacVTmp_stddev	Real	[C°] Main reactor V temperature
wtc_ReacWTmp_max	Real	[C°] Main reactor W temperature
wtc_ReacWTmp_mean	Real	[C°] Main reactor W temperature
wtc_ReacWTmp_min	Real	[C°] Main reactor W temperature
wtc_ReacWTmp_stddev	Real	[C°] Main reactor W temperature
wtc_TrafL1Tm_max	Real	[C°] Transformer temperature, L1
wtc_TrafL1Tm_mean	Real	[C°] Transformer temperature, L1
wtc_TrafL1Tm_min	Real	[C°] Transformer temperature, L1
wtc_TrafL2Tm_max	Real	[C°] Transformer temperature, L2
wtc_TrafL2Tm_mean	Real	[C°] Transformer temperature, L2
wtc_TrafL2Tm_min	Real	[C°] Transformer temperature, L2
wtc_TrafL3Tm_max	Real	[C°] Transformer temperature, L3

Column Name	Datatype	Description
wtc_TrafL3Tm_mean	Real	[C°] Transformer temperature , L3
wtc_TrafL3Tm_min	Real	[C°] Transformer temperature, L3
wtc_TrafOilT_max	Real	[C°] Transformer oil temperature
wtc_TrafOilT_mean	Real	[C°] Transformer oil temperature
wtc_TrafOilT_min	Real	[C°] Transformer oil temperature
wtc_TrafOilT_stddev	Real	[C°] Transformer oil temperature
wtc_TraOilTF_max	Real	[C°] Filtered temperature transformer oil temperature.
wtc_TraOilTF_mean	Real	[C°] Filtered temperature transformer oil temperature.
wtc_TraOilTF_min	Real	[C°] Filtered temperature transformer oil temperature.
wtc_TraOilTF_stddev	Real	[C°] Filtered temperature transformer oil temperature.
wtc_TraRoomT_max	Real	[C°] Transformer room temperature
wtc_TraRoomT_mean	Real	[C°] Transformer room temperature
wtc_TraRoomT_min	Real	[C°] Transformer room temperature
wtc_TraRoomT_stddev	Real	[C°] Transformer room temperature
wtc_TraRooTF_max	Real	[C°] Filtered temperature in transformer room.
wtc_TraRooTF_mean	Real	[C°] Filtered temperature in transformer room.
wtc_TraRooTF_min	Real	[C°] Filtered temperature in transformer room.
wtc_TraRooTF_stddev	Real	[C°] Filtered temperature in transformer room.

4.4.3 tblSCTurPress

The table `tblSCTurPress` contains the pressure measurements.

Column Name	Datatype	Description
StationId	Int	[ID] Station ID
TimeStamp	DateTime	[timestamp] Timestamp for logging
wtc_BrAccPrs_max	Real	[bar] Brake accumulator pressure
wtc_BrAccPrs_mean	Real	[bar] Brake accumulator pressure
wtc_BrAccPrs_min	Real	[bar] Brake accumulator pressure
wtc_BrAccPrs_stddev	Real	[bar] Brake accumulator pressure
wtc_BrakPres_max	Real	[bar] Oil pressure, brake
wtc_BrakPres_mean	Real	[bar] Oil pressure, brake
wtc_BrakPres_min	Real	[bar] Oil pressure, brake
wtc_BrakPres_stddev	Real	[bar] Oil pressure, brake
wtc_GearPres_max	Real	[bar] Gear oil pressure
wtc_GearPres_mean	Real	[bar] Gear oil pressure
wtc_GearPres_min	Real	[bar] Gear oil pressure
wtc_GearPres_stddev	Real	[bar] Gear oil pressure
wtc_HubPresA_max	Real	[bar] Oil pressure, blade A
wtc_HubPresA_mean	Real	[bar] Oil pressure, blade A
wtc_HubPresA_min	Real	[bar] Oil pressure, blade A
wtc_HubPresA_stddev	Real	[bar] Oil pressure, blade A
wtc_HubPresB_max	Real	[bar] Oil pressure, blade B
wtc_HubPresB_mean	Real	[bar] Oil pressure, blade B
wtc_HubPresB_min	Real	[bar] Oil pressure, blade B
wtc_HubPresB_stddev	Real	[bar] Oil pressure, blade B
wtc_HubPresC_max	Real	[bar] Oil pressure, blade C
wtc_HubPresC_mean	Real	[bar] Oil pressure, blade C
wtc_HubPresC_min	Real	[bar] Oil pressure, blade C
wtc_HubPresC_stddev	Real	[bar] Oil pressure, blade C
wtc_HydPress_max	Real	[bar] Hydraulic oil pressure measured at pump station
wtc_HydPress_mean	Real	[bar] Hydraulic oil pressure measured at pump station
wtc_HydPress_min	Real	[bar] Hydraulic oil pressure measured at pump station
wtc_HydPress_stddev	Real	[bar] Hydraulic oil pressure measured at pump station

Column Name	Datatype	Description
wtc_IdlPmPrs_max	Real	[bar] Idle pump pressure
wtc_IdlPmPrs_mean	Real	[bar] Idle pump pressure
wtc_IdlPmPrs_min	Real	[bar] Idle pump pressure
wtc_IdlPmPrs_stddev	Real	[bar] Idle pump pressure
wtc_InlPrAft_max	Real	[bar] Gear oil pressure after inline filter
wtc_InlPrAft_mean	Real	[bar] Gear oil pressure after inline filter
wtc_InlPrAft_min	Real	[bar] Gear oil pressure after inline filter
wtc_InlPrAft_stddev	Real	[bar] Gear oil pressure after inline filter
wtc_InlPrBef_max	Real	[bar] Gear oil pressure before inline filter
wtc_InlPrBef_mean	Real	[bar] Gear oil pressure before inline filter
wtc_InlPrBef_min	Real	[bar] Gear oil pressure before inline filter
wtc_InlPrBef_stddev	Real	[bar] Gear oil pressure before inline filter
wtc_InvNPres_max	Real	[bar] Inverter nacelle, coolant presseure (pos. 8)
wtc_InvNPres_mean	Real	[bar] Inverter nacelle, coolant presseure (pos. 8)
wtc_InvNPres_min	Real	[bar] Inverter nacelle, coolant presseure (pos. 8)
wtc_InvNPres_stddev	Real	[bar] Inverter nacelle, coolant presseure (pos. 8)
wtc_InvPress_max	Real	[bar] Inverter coolant pressure
wtc_InvPress_mean	Real	[bar] Inverter coolant pressure
wtc_InvPress_min	Real	[bar] Inverter coolant pressure
wtc_InvPress_stddev	Real	[bar] Inverter coolant pressure
wtc_OfflPres_max	Real	[bar] Differential pressure, offline filter
wtc_OfflPres_mean	Real	[bar] Differential pressure, offline filter
wtc_OfflPres_min	Real	[bar] Differential pressure, offline filter
wtc_OfflPres_stddev	Real	[bar] Differential pressure, offline filter
wtc_YawPmPrs_max	Real	[bar] Pressure at yaw pump station
wtc_YawPmPrs_mean	Real	[bar] Pressure at yaw pump station
wtc_YawPmPrs_min	Real	[bar] Pressure at yaw pump station
wtc_YawPmPrs_stddev	Real	[bar] Pressure at yaw pump station
wtc_YawPress_max	Real	[bar] Yaw brake hydraulic pressure (pos. 339)
wtc_YawPress_mean	Real	[bar] Yaw brake hydraulic pressure (pos. 339)
wtc_YawPress_min	Real	[bar] Yaw brake hydraulic pressure (pos. 339)
wtc_YawPress_stddev	Real	[bar] Yaw brake hydraulic pressure (pos. 339)

4.4.4 tblSCTurIntern

Table contains all the internal signals. Columns, datatype and column descriptions are explained below.

Column Name	Datatype	Description
Ibx_DBSupervision_Enabled_endvalue	Real	Not used
Ibx_health_processHandles_mean	Real	Not used
Ibx_health_processMemory_mean	Real	Not used
StationId	Int	[ID] Station ID
TimeStamp	DateTime	[timestamp] Timestamp for logging
wtc_AnaPiRef_max	Real	[V] Analog output showing the actual blade position reference. Used for Bonus PLM system.
wtc_AnaPiRef_mean	Real	[V] Analog output showing the actual blade position reference. Used for Bonus PLM system.
wtc_AnaPiRef_min	Real	[V] Analog output showing the actual blade position reference. Used for Bonus PLM system.

Column Name	Datatype	Description
wtc_AnaPiRef_stddev	Real	[V] Analog output showing the actual blade position reference. Used for Bonus PLM system.
wtc_DataLink_RecvSec_endvalue	Real	[amount] Number of data updates received from WTC3 to Ibox last sec.
wtc_DataLink_RecvSec_mean	Real	[amount] Number of data updates received from WTC3 to Ibox last sec.
wtc_DataLink_RecvSec_min	Real	[amount] Number of data updates received from WTC3 to Ibox last sec.
wtc_FlapLoad_FlpLoadA_max	Real	[kNm] Flap load blade A
wtc_FlapLoad_FlpLoadA_mean	Real	[kNm] Flap load blade A
wtc_FlapLoad_FlpLoadA_min	Real	[kNm] Flap load blade A
wtc_FlapLoad_FlpLoadA_stddev	Real	[kNm] Flap load blade A
wtc_FlapLoad_FlpLoadB_max	Real	[kNm] Flap load blade B
wtc_FlapLoad_FlpLoadB_mean	Real	[kNm] Flap load blade B
wtc_FlapLoad_FlpLoadB_min	Real	[kNm] Flap load blade B
wtc_FlapLoad_FlpLoadB_stddev	Real	[kNm] Flap load blade B
wtc_FlapLoad_FlpLoadC_max	Real	[kNm] Flap load blade C
wtc_FlapLoad_FlpLoadC_mean	Real	[kNm] Flap load blade C
wtc_FlapLoad_FlpLoadC_min	Real	[kNm] Flap load blade C
wtc_FlapLoad_FlpLoadC_stddev	Real	[kNm] Flap load blade C
wtc_IO1FrRef_max	Real	[mHz] IO card 1 frequency reference
wtc_IO1FrRef_mean	Real	[mHz] IO card 1 frequency reference
wtc_IO1FrRef_min	Real	[mHz] IO card 1 frequency reference
wtc_IO1FrRef_stddev	Real	[mHz] IO card 1 frequency reference
wtc_IO1Ref20_max	Real	[mA] 20 mA current reference, IO module 1
wtc_IO1Ref20_mean	Real	[mA] 20 mA current reference, IO module 1
wtc_IO1Ref20_min	Real	[mA] 20 mA current reference, IO module 1
wtc_IO1Ref20_stddev	Real	[mA] 20 mA current reference, IO module 1
wtc_IO1Ref4_max	Real	[mA] 4 mA current reference, IO module 1
wtc_IO1Ref4_mean	Real	[mA] 4 mA current reference, IO module 1
wtc_IO1Ref4_min	Real	[mA] 4 mA current reference, IO module 1
wtc_IO1Ref4_stddev	Real	[mA] 4 mA current reference, IO module 1
wtc_IO1TRef1_max	Real	[C°] Temperature reference 1, IO module 1
wtc_IO1TRef1_mean	Real	[C°] Temperature reference 1 , IO module 1
wtc_IO1TRef1_min	Real	[C°] Temperature reference 1, IO module 1
wtc_IO1TRef1_stddev	Real	[C°] Temperature reference 1, IO module 1
wtc_IO1TRef2_max	Real	[C°] Temperature reference 2, IO module 1
wtc_IO1TRef2_mean	Real	[C°] Temperature reference 2 , IO module 1
wtc_IO1TRef2_min	Real	[C°] Temperature reference 2, IO module 1

Column Name	Datatype	Description
wtc_IO1TRef2_stddev	Real	[C°] Temperature reference 2, IO module 1
wtc_IO2FrRef_max	Real	[Hz] IO card 2 frequency reference
wtc_IO2FrRef_mean	Real	[Hz] IO card 2 frequency reference
wtc_IO2FrRef_min	Real	[Hz] IO card 2 frequency reference
wtc_IO2FrRef_stddev	Real	[Hz] IO card 2 frequency reference
wtc_IO2Ref20_max	Real	[mA] 20 mA current reference, IO module 2
wtc_IO2Ref20_mean	Real	[mA] 20 mA current reference, IO module 2
wtc_IO2Ref20_min	Real	[mA] 20 mA current reference, IO module 2
wtc_IO2Ref20_stddev	Real	[mA] 20 mA current reference, IO module 2
wtc_IO2Ref4_max	Real	[mA] 4 mA current reference, IO module 2
wtc_IO2Ref4_mean	Real	[mA] 4 mA current reference, IO module 2
wtc_IO2Ref4_min	Real	[mA] 4 mA current reference, IO module 2
wtc_IO2Ref4_stddev	Real	[mA] 4 mA current reference, IO module 2
wtc_IO2TRef1_max	Real	[C°] Temperature reference 1, IO module 2
wtc_IO2TRef1_mean	Real	[C°] Temperature reference 1 , IO module 2
wtc_IO2TRef1_min	Real	[C°] Temperature reference 1, IO module 2
wtc_IO2TRef1_stddev	Real	[C°] Temperature reference 1, IO module 2
wtc_IO2TRef2_max	Real	[C°] Temperature reference 2, IO module 2
wtc_IO2TRef2_mean	Real	[C°] Temperature reference 2 , IO module 2
wtc_IO2TRef2_min	Real	[C°] Temperature reference 2, IO module 2
wtc_IO2TRef2_stddev	Real	[C°] Temperature reference 2, IO module 2
wtc_IO3FrRef_max	Real	[Hz] IO card 3 frequency reference
wtc_IO3FrRef_mean	Real	[Hz] IO card 3 frequency reference
wtc_IO3FrRef_min	Real	[Hz] IO card 3 frequency reference
wtc_IO3FrRef_stddev	Real	[Hz] IO card 3 frequency reference
wtc_IO3Ref20_max	Real	[mA] 20 mA current reference, IO module 3
wtc_IO3Ref20_mean	Real	[mA] 20 mA current reference, IO module 3
wtc_IO3Ref20_min	Real	[mA] 20 mA current reference, IO module 3
wtc_IO3Ref20_stddev	Real	[mA] 20 mA current reference, IO module 3
wtc_IO3Ref4_max	Real	[mA] 4 mA current reference, IO module 3
wtc_IO3Ref4_mean	Real	[mA] 4 mA current reference, IO module 3
wtc_IO3Ref4_min	Real	[mA] 4 mA current reference, IO module 3
wtc_IO3Ref4_stddev	Real	[mA] 4 mA current reference, IO module 3

Column Name	Datatype	Description
wtc_IO3TRef1_max	Real	[C°] Temperature reference 1, IO module 3
wtc_IO3TRef1_mean	Real	[C°] Temperature reference 1 , IO module 3
wtc_IO3TRef1_min	Real	[C°] Temperature reference 1, IO module 3
wtc_IO3TRef1_stddev	Real	[C°] Temperature reference 1, IO module 3
wtc_IO3TRef2_max	Real	[C°] Temperature reference 2, IO module 3
wtc_IO3TRef2_mean	Real	[C°] Temperature reference 2 , IO module 3
wtc_IO3TRef2_min	Real	[C°] Temperature reference 2, IO module 3
wtc_IO3TRef2_stddev	Real	[C°] Temperature reference 2, IO module 3
wtc_IRefAa_max	Real	[A] Valve current reference, blade A, coil a
wtc_IRefAa_mean	Real	[A] Valve current reference, blade A, coil a
wtc_IRefAa_min	Real	[A] Valve current reference, blade A, coil a
wtc_IRefAa_stddev	Real	[A] Valve current reference, blade A, coil a
wtc_IRefBa_max	Real	[A] Valve current reference, blade B, coil a
wtc_IRefBa_mean	Real	[A] Valve current reference, blade B, coil a
wtc_IRefBa_min	Real	[A] Valve current reference, blade B, coil a
wtc_IRefBa_stddev	Real	[A] Valve current reference, blade B, coil a
wtc_IRefCa_max	Real	[A] Valve current reference, blade C, coil a
wtc_IRefCa_mean	Real	[A] Valve current reference, blade C, coil a
wtc_IRefCa_min	Real	[A] Valve current reference, blade C, coil a
wtc_IRefCa_stddev	Real	[A] Valve current reference, blade C, coil a
wtc_NMMTRef1_max	Real	[C°] Temperature reference 1, Grid module
wtc_NMMTRef1_mean	Real	[C°] Temperature reference 1 , Grid module
wtc_NMMTRef1_min	Real	[C°] Temperature reference 1, Grid module
wtc_NMMTRef1_stddev	Real	[C°] Temperature reference 1, Grid module
wtc_NMMTRef2_max	Real	[C°] Temperature reference 2, Grid module
wtc_NMMTRef2_mean	Real	[C°] Temperature reference 2 , Grid module
wtc_NMMTRef2_min	Real	[C°] Temperature reference 2, Grid module
wtc_NMMTRef2_stddev	Real	[C°] Temperature reference 2, Grid module

Column Name	Datatype	Description
wtc_OrStpDat_LampStat_endvalue	VarChar (20)	[text] Orientation stop - Lamp status
wtc_OrStpDat_Status_endvalue	VarChar (20)	[text] Orientation stop - Status
wtc_TLC_DeltaDay_max	Real	[days] Diff. between real and TLC age
wtc_TLC_DeltaDay_mean	Real	[days] Diff. between real and TLC age
wtc_TLC_DeltaDay_min	Real	[days] Diff. between real and TLC age
wtc_TLC_DeltaDay_stddev	Real	[days] Diff. between real and TLC age
wtc_TLC_SpeedRed_max	Real	[%] Speed reduction due to TLC
wtc_TLC_SpeedRed_mean	Real	[%] Speed reduction due to TLC
wtc_TLC_SpeedRed_min	Real	[%] Speed reduction due to TLC
wtc_TLC_SpeedRed_stddev	Real	[%] Speed reduction due to TLC
wtc_ValSuppV_max	Real	[V] Hub valve supply voltage
wtc_ValSuppV_mean	Real	[V] Hub valve supply voltage
wtc_ValSuppV_min	Real	[V] Hub valve supply voltage
wtc_ValSuppV_stddev	Real	[V] Hub valve supply voltage

4.4.5 tblSCTurGrid

Table `tblSCTurGrid` contains all the grid related measurements.

Column Name	Datatype	Description
StationId	Int	[ID] Station ID
TimeStamp	DateTime	[timestamp] Timestamp for logging
wps_CurtailedPower_endvalue	Real	[kWh] Curtailed power due to Park Pilot regulation
wps_PilotStatus_endvalue	VarChar (50)	[text] Status for Park pilot
wtc_ActPower_endvalue	Real	[kW] Active power
wtc_ActPower_max	Real	[kW] Active power
wtc_ActPower_mean	Real	[kW] Active power
wtc_ActPower_min	Real	[kW] Active power
wtc_ActPower_Quality_endvalue	Real	[enum] Quality, Active power
wtc_ActPower_stddev	Real	[kW] Active power
wtc_ActRegSt_endvalue	NVarChar (50)	[text] Power regulator state
wtc_AmpPhR_max	Real	[A] Current, phase R
wtc_AmpPhR_mean	Real	[A] Current, phase R
wtc_AmpPhR_min	Real	[A] Current, phase R
wtc_AmpPhR_stddev	Real	[A] Current, phase R
wtc_AmpPhS_max	Real	[A] Current, phase S
wtc_AmpPhS_mean	Real	[A] Current, phase S
wtc_AmpPhS_min	Real	[A] Current, phase S
wtc_AmpPhS_stddev	Real	[A] Current, phase S
wtc_AmpPhT_max	Real	[A] Current, phase T
wtc_AmpPhT_mean	Real	[A] Current, phase T
wtc_AmpPhT_min	Real	[A] Current, phase T
wtc_AmpPhT_stddev	Real	[A] Current, phase T
wtc_CosPhi_endvalue	Real	[ratio] Power factor
wtc_CosPhi_max	Real	[ratio] Power factor
wtc_CosPhi_mean	Real	[ratio] Power factor
wtc_CosPhi_min	Real	[ratio] Power factor
wtc_CosPhi_stddev	Real	[ratio] Power factor
wtc_GridFreq_max	Real	[Hz] Grid frequency

Column Name	Datatype	Description
wtc_GridFreq_mean	Real	[Hz] Grid frequency
wtc_GridFreq_min	Real	[Hz] Grid frequency
wtc_GridFreq_stddev	Real	[Hz] Grid frequency
wtc_PFCKVAr_endvalue	Real	[kVar] Amount of KVArs connected (only used on few WTC2 sites)
wtc_ReactPwr_endvalue	Real	[kVar] Reactive power
wtc_ReactPwr_max	Real	[kVar] Reactive power
wtc_ReactPwr_mean	Real	[kVar] Reactive power
wtc_ReactPwr_min	Real	[kVar] Reactive power
wtc_ReactPwr_stddev	Real	[kVar] Reactive power
wtc_VoltPhR_max	Real	[V] Voltage, phase R
wtc_VoltPhR_mean	Real	[V] Voltage, phase R
wtc_VoltPhR_min	Real	[V] Voltage, phase R
wtc_VoltPhR_stddev	Real	[V] Voltage, phase R
wtc_VoltPhS_max	Real	[V] Voltage, phase S
wtc_VoltPhS_mean	Real	[V] Voltage, phase S
wtc_VoltPhS_min	Real	[V] Voltage, phase S
wtc_VoltPhS_stddev	Real	[V] Voltage, phase S
wtc_VoltPhT_max	Real	[V] Voltage, phase T
wtc_VoltPhT_mean	Real	[V] Voltage, phase T
wtc_VoltPhT_min	Real	[V] Voltage, phase T
wtc_VoltPhT_stddev	Real	[V] Voltage, phase T

4.4.6 tblSCTurFlag

The table `tblSCTurFlag` contains all the turbine status information.

Column Name	Datatype	Description
StationId	Int	[ID] Station ID
TimeStamp	DateTime	[timestamp] Timestamp for logging
wtc_AlarmCde_endvalue	Int	[boolean] Newest turbine alarm code
wtc_BrakStat_endvalue	VarChar (1)	[enum] Rotor brake status
wtc_GenStat_endvalue	VarChar (1)	[enum] Generator status
wtc_LocRemSt_endvalue	Int	[boolean] Status for local/remote switch
wtc_OpCode_endvalue	Int	[boolean] CMC operation code
wtc_PriAnAct_endvalue	Int	[boolean] Status for primary anemometer
wtc_ScAStart_counts	Int	[amount] Scientific. Start attempted
wtc_ScAStart_endvalue	Int	[boolean] Scientific. Start attempted
wtc_ScBrakOp_counts	Int	[amount] Scientific: Brake released
wtc_ScBrakOp_endvalue	Int	[boolean] Scientific: Brake released
wtc_ScBrakOp_timeon	Int	[seconds] Scientific: Brake released
wtc_ScComSto_counts	Int	[amount] Scientific. Commanded error active
wtc_ScComSto_endvalue	Int	[boolean] Scientific. Commanded error active
wtc_ScComSto_timeon	Int	[seconds] Scientific. Commanded error active
wtc_ScEnvSto_counts	Int	[amount] Scientific. Environment error active.
wtc_ScEnvSto_endvalue	Int	[boolean] Scientific. Environment error active.
wtc_ScEnvSto_timeon	Int	[seconds] Scientific. Environment error active.
wtc_ScFrsErr_endvalue	Int	[boolean] Scientific. The first stop error
wtc_ScGrdSto_counts	Int	[amount] Scientific. Grid error active

wtc_ScGrdSto_endvalue	Int	[boolean] Scientific. Grid error active

Column Name	Datatype	Description
wtc_ScGrdSto_timeon	Int	[seconds] Scientific. Grid error active
wtc_ScInOper_counts	Int	[amount] Scientific: In operation
wtc_ScInOper_endvalue	Int	[boolean] Scientific: In operation
wtc_ScInOper_timeon	Int	[seconds] Scientific: In operation
wtc_ScLNrSto_endvalue	Real	[boolean] Scientific. Low Noise errors active
wtc_ScReToOp_counts	Int	[amount] Scientific: Released to operation
wtc_ScReToOp_endvalue	Int	[boolean] Scientific: Released to operation
wtc_ScReToOp_timeon	Int	[seconds] Scientific: Released to operation
wtc_ScStartC_counts	Int	[amount] Scientific. Start completed
wtc_ScTurSto_counts	Int	[amount] Scientific. Turbine error active
wtc_ScTurSto_endvalue	Int	[boolean] Scientific. Turbine error active
wtc_ScTurSto_timeon	Int	[seconds] Scientific. Turbine error active
wtc_ScWindIR_counts	Int	[amount] Scientific: Wind inside limit
wtc_ScWindIR_endvalue	Int	[boolean] Scientific: Wind inside limit
wtc_ScWindIR_timeon	Int	[seconds] Scientific: Wind inside limit
wtc_ScYawOpe_counts	Int	[amount] Scientific: Yaw operation
wtc_ScYawOpe_endvalue	Int	[boolean] Scientific: Yaw operation
wtc_ScYawUnw_counts	Int	[amount] Scientific. Unwind active
wtc_ScYawUnw_endvalue	Int	[boolean] Scientific. Unwind active
wtc_TlcLowSpeed_endvalue	Int	[boolean] Is LowSpeed the active power limit
wtc_TlcStat_endvalue	Int	[boolean] Turbine is being limited by the TLC speed source
wtc_TLCRedun_StatCode_endvalue	SmallInt	[enum] TLC redundancy code
wtc_Turbstat_endvalue	VarChar (1)	[enum] Actual turbine status
wtc_YawStat_endvalue	VarChar (1)	[enum] Yaw direction, symbol

4.4.7 tblSCTurDigiOut

The table `tblSCTurDigiOut` contains all the digital output signals.

Column Name	Datatype	Description
StationId	Int	[ID] Station ID
TimeStamp	DateTime	[timestamp] Timestamp for logging
wtc_AviInte0_counts	Int	[amount] Aviation light intensity, bit 0
wtc_AviInte0_endvalue	Int	[boolean] Aviation light intensity, bit 0
wtc_AviInte0_timeon	Int	[seconds] Aviation light intensity, bit 0
wtc_AviInte1_counts	Int	[amount] Aviation light intensity, bit 1
wtc_AviInte1_endvalue	Int	[boolean] Aviation light intensity, bit 1
wtc_AviInte1_timeon	Int	[seconds] Aviation light intensity, bit 1
wtc_AviInte2_counts	Int	[amount] Aviation light intensity, bit 2
wtc_AviInte2_endvalue	Int	[boolean] Aviation light intensity, bit 2
wtc_AviInte2_timeon	Int	[seconds] Aviation light intensity, bit 2
wtc_BeaconSw_counts	Int	[amount] Marine beacon switch
wtc_BeaconSw_endvalue	Int	[boolean] Marine beacon switch
wtc_BeaconSw_timeon	Int	[seconds] Marine beacon switch
wtc_BypassCo_counts	Int	[amount] Bypass contactor
wtc_BypassCo_endvalue	Int	[boolean] Bypass contactor
wtc_BypassCo_timeon	Int	[seconds] Bypass contactor
wtc_ConBoVen_counts	Int	[amount] Grid box ventilator
wtc_ConBoVen_endvalue	Int	[boolean] Grid box ventilator

Column Name	Datatype	Description
wtc_ConBoVen_timeon	Int	[seconds] Grid box ventilator
wtc_ContEnab_counts	Int	[amount] Contactor enable signal
wtc_ContEnab_endvalue	Int	[boolean] Contactor enable signal
wtc_ContEnab_timeon	Int	[seconds] Contactor enable signal
wtc_EmergOut_counts	Int	[amount] Emergency stop output
wtc_EmergOut_endvalue	Int	[boolean] Emergency stop output
wtc_EmergOut_timeon	Int	[seconds] Emergency stop output.
wtc_GearCoHS_counts	Int	[amount] Gear oil cooling fan, high speed
wtc_GearCoHS_endvalue	Int	[boolean] Gear oil cooling fan, high speed
wtc_GearCoHS_timeon	Int	[seconds] Gear oil cooling fan, high speed
wtc_GearCoLS_counts	Int	[amount] Gear oil cooling fan, low speed
wtc_GearCoLS_endvalue	Int	[boolean] Gear oil cooling fan, low speed
wtc_GearCoLS_timeon	Int	[seconds] Gear oil cooling fan, low speed
wtc_GearFilt_counts	Int	[amount] Gear oil offline filter pump
wtc_GearFilt_endvalue	Int	[boolean] Gear oil offline filter pump
wtc_GearFilt_timeon	Int	[seconds] Gear oil offline filter pump
wtc_GearHeat_counts	Int	[amount] Gear oil heating
wtc_GearHeat_endvalue	Int	[boolean] Gear oil heating
wtc_GearHeat_timeon	Int	[seconds] Gear oil heating
wtc_GearPuHS_counts	Int	[amount] Gear oil pump, high speed
wtc_GearPuHS_endvalue	Int	[boolean] Gear oil pump, high speed
wtc_GearPuHS_timeon	Int	[seconds] Gear oil pump, high speed
wtc_GearPuLS_counts	Int	[amount] Gear oil pump, low speed
wtc_GearPuLS_endvalue	Int	[boolean] Gear oil pump, low speed
wtc_GearPuLS_timeon	Int	[seconds] Gear oil pump, low speed.
wtc_GenHeat_counts	Int	[amount] Generator heating
wtc_GenHeat_endvalue	Int	[boolean] Generator heating
wtc_GenHeat_timeon	Int	[seconds] Generator heating
wtc_GenLubPu_counts	Int	[amount] Pump for generator bearing lubrication
wtc_GenLubPu_endvalue	Int	[boolean] Pump for generator bearing lubrication
wtc_GenLubPu_timeon	Int	[seconds] Pump for generator bearing lubrication
wtc_GridAlrm_counts	Int	[amount] Grid alarm
wtc_GridAlrm_endvalue	Int	[boolean] Grid alarm
wtc_GridAlrm_timeon	Int	[seconds] Grid alarm
wtc_Hardbrak_counts	Int	[amount] Hard disc brake
wtc_Hardbrak_endvalue	Int	[boolean] Hard disc brake
wtc_Hardbrak_timeon	Int	[seconds] Hard disc brake
wtc_HubLubPu_counts	Int	[amount] Pump for hub lubrication
wtc_HubLubPu_endvalue	Int	[boolean] Pump for hub lubrication
wtc_HubLubPu_timeon	Int	[seconds] Pump for hub lubrication
wtc_HubSafeP_counts	Int	[amount] Safe pitch output in hub
wtc_HubSafeP_endvalue	Int	[boolean] Safe pitch output in hub
wtc_HubSafeP_timeon	Int	[seconds] Safe pitch output in hub
wtc_HubSafSw_counts	Int	[amount] Hub safety switch
wtc_HubSafSw_endvalue	Int	[boolean] Hub safety switch
wtc_HubSafSw_timeon	Int	[seconds] Hub safety switch
wtc_HydrV35_counts	Int	[amount] Valve pos. 25
wtc_HydrV35_endvalue	Int	[boolean] Valve pos. 25
wtc_HydrV35_timeon	Int	[seconds] Valve pos. 25
wtc_HydrV48A_counts	Int	[amount] Valve pos. 48A
wtc_HydrV48A_endvalue	Int	[boolean] Valve pos. 48A
wtc_HydrV48A_timeon	Int	[seconds] Valve pos. 48A
wtc_HydrV48B_counts	Int	[amount] Valve pos. 48B

Column Name	Datatype	Description
wtc_HydrV48B_endvalue	Int	[boolean] Valve pos. 48B
wtc_HydrV48B_timeon	Int	[seconds] Valve pos. 48B
wtc_HydrV50_counts	Int	[amount] Valve pos. 50
wtc_HydrV50_endvalue	Int	[boolean] Valve pos. 50
wtc_HydrV50_timeon	Int	[seconds] Valve pos. 50
wtc_IdleValv_counts	Int	[amount] Idle pump valve
wtc_IdleValv_endvalue	Int	[boolean] Idle pump valve
wtc_IdleValv_timeon	Int	[seconds] Idle pump valve
wtc_LargeGen_counts	Int	[amount] Serial contactor, large generator
wtc_LargeGen_endvalue	Int	[boolean] Serial contactor, large generator
wtc_LargeGen_timeon	Int	[seconds] Serial contactor, large generator
wtc_MainBrOp_counts	Int	[amount] Open main breaker
wtc_MainBrOp_endvalue	Int	[boolean] Open main breaker
wtc_MainBrOp_timeon	Int	[seconds] Open main breaker
wtc_MBLubPu_counts	Int	[amount] Pump for main bearing lubrication
wtc_MBLubPu_endvalue	Int	[boolean] Pump for main bearing lubrication
wtc_MBLubPu_timeon	Int	[seconds] Pump for main bearing lubrication
wtc_OilCoByp_counts	Int	[amount] Gear oil cooler bypass valve
wtc_OilCoByp_endvalue	Int	[boolean] Gear oil cooler bypass valve
wtc_OilCoByp_timeon	Int	[seconds] Gear oil cooler bypass valve
wtc_ParkBrak_counts	Int	[amount] Soft disc brake
wtc_ParkBrak_endvalue	Int	[boolean] Soft disc brake
wtc_ParkBrak_timeon	Int	[seconds] Soft disc brake
wtc_PFCOutpt_counts	Int	[amount] Phase compensation control signal
wtc_PFCOutpt_endvalue	Int	[boolean] Phase compensation control signal
wtc_PFCOutpt_timeon	Int	[seconds] Phase compensation control signal
wtc_PitchByp_counts	Int	[amount] Bypass valve, pitch hydraulic station
wtc_PitchByp_endvalue	Int	[boolean] Bypass valve, pitch hydraulic station
wtc_PitchByp_timeon	Int	[seconds] Bypass valve, pitch hydraulic station
wtc_PitchPum_counts	Int	[amount] Hydraulic pump, pitch hydraulic station
wtc_PitchPum_endvalue	Int	[boolean] Hydraulic pump, pitch hydraulic station
wtc_PitchPum_timeon	Int	[seconds] Hydraulic pump, pitch hydraulic station
wtc_PitcPalA_counts	Int	[amount] Pitch pal A
wtc_PitcPalA_endvalue	Int	[boolean] Pitch pal A
wtc_PitcPalA_timeon	Int	[seconds] Pitch pal A
wtc_PitcPalB_counts	Int	[amount] Pitch pal B
wtc_PitcPalB_endvalue	Int	[boolean] Pitch pal B
wtc_PitcPalB_timeon	Int	[seconds] Pitch pal B
wtc_PitcPalC_counts	Int	[amount] Pitch pal C
wtc_PitcPalC_endvalue	Int	[boolean] Pitch pal C
wtc_PitcPalC_timeon	Int	[seconds] Pitch pal C
wtc_PWMEnabl_counts	Int	[amount] Enable PWM diver system on hub computer
wtc_PWMEnabl_endvalue	Int	[boolean] Enable PWM diver system on hub computer
wtc_PWMEnabl_timeon	Int	[seconds] Enable PWM diver system on hub computer
wtc_ResLight_counts	Int	[amount] Lightning detector reset
wtc_ResLight_endvalue	Int	[boolean] Lightning detector reset
wtc_ResLight_timeon	Int	[seconds] Lightning detector reset
wtc_SafPitch_counts	Int	[amount] Safety pitch valve
wtc_SafPitch_endvalue	Int	[boolean] Safety pitch valve
wtc_SafPitch_timeon	Int	[seconds] Safety pitch valve
wtc_SmallGen_counts	Int	[amount] Contactor, small generator
wtc_SmallGen_endvalue	Int	[boolean] Contactor, small generator
wtc_SmallGen_timeon	Int	[seconds] Contactor, small generator

Column Name	Datatype	Description
wtc_SmokeRes_counts	Int	[amount] Smoke detector - Reset signal
wtc_SmokeRes_endvalue	Int	[boolean] Smoke detector - Reset signal
wtc_SmokeRes_timeon	Int	[seconds] Smoke detector - Reset signal
wtc_ToVentHS_counts	Int	[amount] The output is used to set the ventilator (transformer door) in high-speed mode.
wtc_ToVentHS_endvalue	Int	[boolean] The output is used to set the ventilator (transformer door) in high-speed mode.
wtc_ToVentHS_timeon	Int	[seconds] The output is used to set the ventilator (transformer door) in high-speed mode.
wtc_ToVentLS_counts	Int	[amount] The output is used to set the ventilator (transformer door) in low-speed mode.
wtc_ToVentLS_endvalue	Int	[boolean] The output is used to set the ventilator (transformer door) in low-speed mode.
wtc_ToVentLS_timeon	Int	[seconds] The output is used to set the ventilator (transformer door) in low-speed mode.
wtc_TurbinOK_counts	Int	[amount] Turbine OK signal
wtc_TurbinOK_endvalue	Int	[boolean] Turbine OK signal
wtc_TurbinOK_timeon	Int	[seconds] Turbine OK signal
wtc_UPSShutd_counts	Int	[amount] UPS shutdown output signal
wtc_UPSShutd_endvalue	SmallInt	[boolean] UPS shutdown output signal
wtc_UPSShutd_timeon	Int	[seconds] UPS shutdown output signal
wtc_V116ValA_counts	Int	[amount] Relief valve A in hub, pos.116
wtc_V116ValA_endvalue	Int	[boolean] Relief valve A in hub, pos.116
wtc_V116ValA_timeon	Int	[seconds] Relief valve A in hub, pos.116
wtc_V116ValB_counts	Int	[amount] Relief valve B in hub, pos.116
wtc_V116ValB_endvalue	Int	[boolean] Relief valve B in hub, pos.116
wtc_V116ValB_timeon	Int	[seconds] Relief valve B in hub, pos.116
wtc_V116ValC_counts	Int	[amount] Relief valve C in hub, pos.116
wtc_V116ValC_endvalue	Int	[boolean] Relief valve C in hub, pos.116
wtc_V116ValC_timeon	Int	[seconds] Relief valve C in hub, pos.116
wtc_WndVHeat_counts	Int	[amount] Output for activation of vind vane heat
wtc_WndVHeat_endvalue	Int	[boolean] Output for activation of vind vane heat
wtc_WndVHeat_timeon	Int	[seconds] Output for activation of vind vane heat
wtc_YawLubPu_counts	Int	[amount] Lubrication pump, yaw system
wtc_YawLubPu_endvalue	Int	[boolean] Lubrication pump, yaw system
wtc_YawLubPu_timeon	Int	[seconds] Lubrication pump, yaw system
wtc_YawMoCCW_counts	Int	[amount] Yaw motor CCW (Counterclockwise)
wtc_YawMoCCW_endvalue	Int	[boolean] Yaw motor CCW (Counterclockwise)
wtc_YawMoCCW_timeon	Int	[seconds] Yaw motor CCW (Counterclockwise)
wtc_YawMoCW_counts	Int	[amount] Yaw motor CW (Clockwise)
wtc_YawMoCW_endvalue	Int	[boolean] Yaw motor CW (Clockwise)
wtc_YawMoCW_timeon	Int	[seconds] Yaw motor CW (Clockwise)

4.4.8 tblSCTurDigiIn

The table `tblSCTurDigiIn` contains all digital input signals.

Column Name	Datatype	Description
StationId	Int	[ID] Station ID
TimeStamp	DateTime	[timestamp] Timestamp for logging
wtc_AviError_counts	Int	[amount] Aviation light error
wtc_AviError_endvalue	TinyInt	[boolean] Aviation light error
wtc_AviError_timeon	Int	[seconds] Aviation light error
wtc_AviPhoto_counts	Int	[amount] Aviation light day/night status
wtc_AviPhoto_endvalue	TinyInt	[boolean] Aviation light day/night status
wtc_AviPhoto_timeon	Int	[seconds] Aviation light day/night status
wtc_AviWarn_counts	Int	[amount] Aviation light warning
wtc_AviWarn_endvalue	TinyInt	[boolean] Aviation light warning
wtc_AviWarn_timeon	Int	[seconds] Aviation light warning
wtc_Bea1Err_counts	Int	[amount] Beacon 1 error
wtc_Bea1Err_endvalue	TinyInt	[boolean] Beacon 1 error
wtc_Bea1Err_timeon	Int	[seconds] Beacon 1 error
wtc_Bea1Warn_counts	Int	[amount] Beacon 1 warning
wtc_Bea1Warn_endvalue	TinyInt	[boolean] Beacon 1 warning
wtc_Bea1Warn_timeon	Int	[seconds] Beacon 1 warning
wtc_BrakLin1_counts	Int	[amount] Brake lining indication 1
wtc_BrakLin1_endvalue	TinyInt	[boolean] Brake lining indication 1
wtc_BrakLin1_timeon	Int	[seconds] Brake lining indication 1
wtc_BrakLin2_counts	Int	[amount] Brake lining indication 2
wtc_BrakLin2_endvalue	TinyInt	[boolean] Brake lining indication 2
wtc_BrakLin2_timeon	Int	[seconds] Brake lining indication 2
wtc_BrakLin3_counts	Int	[amount] Brake lining indication 3
wtc_BrakLin3_endvalue	TinyInt	[boolean] Brake lining indication 3
wtc_BrakLin3_timeon	Int	[seconds] Brake lining indication 3
wtc_BrakPos1_counts	Int	[amount] Brake position 1
wtc_BrakPos1_endvalue	TinyInt	[boolean] Brake position 1
wtc_BrakPos1_timeon	Int	[seconds] Brake position 1
wtc_BrakPos2_counts	Int	[amount] Brake position 2
wtc_BrakPos2_endvalue	TinyInt	[boolean] Brake position 2
wtc_BrakPos2_timeon	Int	[seconds] Brake position 2
wtc_BrakPos3_counts	Int	[amount] Brake position 3
wtc_BrakPos3_endvalue	TinyInt	[boolean] Brake position 3
wtc_BrakPos3_timeon	Int	[seconds] Brake position 3
wtc_BypasOut_counts	Int	[amount] Bypass contactor feedback "All out"
wtc_BypasOut_endvalue	TinyInt	[boolean] Bypass contactor feedback "All out"
wtc_BypasOut_timeon	Int	[seconds] Bypass contactor feedback "All out"
wtc_Bypass_counts	Int	[amount] Bypass contactor feedback"All in"
wtc_Bypass_endvalue	TinyInt	[boolean] Bypass contactor feedback"All in"
wtc_Bypass_timeon	Int	[seconds] Bypass contactor feedback "All in"
wtc_DAMAlarm_counts	Int	[amount] Alarm signal from DAM modules. DAM-modules monitor vibrations in the turbines components.
wtc_DAMAlarm_endvalue	TinyInt	[boolean] Alarm signal from DAM modules. DAM-modules monitor vibrations in the turbines components.
wtc_DAMAlarm_timeon	Int	[seconds] Alarm signal from DAM modules. DAM-modules monitor vibrations in the turbines components.
wtc_EmergInp_counts	Int	[amount] Emergency stop input
wtc_EmergInp_endvalue	TinyInt	[boolean] Emergency stop input
wtc_EmergInp_timeon	Int	[seconds] Emergency stop input

Column Name	Datatype	Description
StationId	Int	[ID] Station ID
TimeStamp	DateTime	[timestamp] Timestamp for logging
wtc_AviError_counts	Int	[amount] Aviation light error
wtc_AviError_endvalue	TinyInt	[boolean] Aviation light error
wtc_ExtStop_counts	Int	[amount] External stop
wtc_ExtStop_endvalue	TinyInt	[boolean] External stop
wtc_ExtStop_timeon	Int	[seconds] External stop
wtc_GBLubGr_counts	Int	[amount] Grease level, generator bearing lubrication
wtc_GBLubGr_endvalue	TinyInt	[boolean] Grease level, generator bearing lubrication
wtc_GBLubGr_timeon	Int	[seconds] Grease level, generator bearing lubrication
wtc_GBLubPis_counts	Int	[amount] Piston movement, generator bearing lubrication
wtc_GBLubPis_endvalue	TinyInt	[boolean] Piston movement, generator bearing lubrication
wtc_GBLubPis_timeon	Int	[seconds] Piston movement, generator bearing lubrication
wtc_GearLevl_counts	Int	[amount] Gear oil level
wtc_GearLevl_endvalue	TinyInt	[boolean] Gear oil level
wtc_GearLevl_timeon	Int	[seconds] Gear oil level
wtc_GenTherm_counts	Int	[amount] Generator thermistors
wtc_GenTherm_endvalue	TinyInt	[boolean] Generator thermistors
wtc_GenTherm_timeon	Int	[seconds] Generator thermistors
wtc_GPSSynkr_counts	Int	[amount] GPS synchronization
wtc_GPSSynkr_endvalue	TinyInt	[boolean] GPS synchronization
wtc_GPSSynkr_timeon	Int	[seconds] GPS synchronization
wtc_GSensor_counts	Int	[amount] G-sensor alarm
wtc_GSensor_endvalue	TinyInt	[boolean] G-sensor alarm
wtc_GSensor_timeon	Int	[seconds] G-sensor alarm
wtc_HCUFeedb_counts	Int	[amount] Feedback from HCU circuit. Indicates if HCU (over speed protection) has been activated.
wtc_HCUFeedb_endvalue	TinyInt	[boolean] Feedback from HCU circuit. Indicates if HCU (over speed protection) has been activated.
wtc_HCUFeedb_timeon	Int	[seconds] Feedback from HCU circuit. Indicates if HCU (over speed protection) has been activated.
wtc_HydLevel_counts	Int	[amount] Pitch hydraulic oil level
wtc_HydLevel_endvalue	TinyInt	[boolean] Pitch hydraulic oil level
wtc_HydLevel_timeon	Int	[seconds] Pitch hydraulic oil level
wtc_HydrFilt_counts	Int	[amount] Pitch hydraulic filter
wtc_HydrFilt_endvalue	TinyInt	[boolean] Pitch hydraulic filter
wtc_HydrFilt_timeon	Int	[seconds] Pitch hydraulic filter
wtc_HydTemp_counts	Int	[amount] Pitch hydraulic oil temperature
wtc_HydTemp_endvalue	TinyInt	[boolean] Pitch hydraulic oil temperature
wtc_HydTemp_timeon	Int	[seconds] Pitch hydraulic oil temperature
wtc_IceRelay_counts	Int	[amount] Digital signal from Ice sensor
wtc_IceRelay_endvalue	TinyInt	[boolean] Digital signal from Ice sensor
wtc_IceRelay_timeon	Int	[seconds] Digital signal from Ice sensor
wtc_Lightnin_counts	Int	[amount] Lightning indication
wtc_Lightnin_endvalue	TinyInt	[boolean] Lightning indication
wtc_Lightnin_timeon	Int	[seconds] Lightning indication
wtc_LubPistA_counts	Int	[amount] Piston movement, blade A lubrication
wtc_LubPistA_endvalue	TinyInt	[boolean] Piston movement, blade A lubrication
wtc_LubPistA_timeon	Int	[seconds] Piston movement, blade A lubrication

Column Name	Datatype	Description
StationId	Int	[ID] Station ID
TimeStamp	DateTime	[timestamp] Timestamp for logging
wtc_AviError_counts	Int	[amount] Aviation light error
wtc_AviError_endvalue	TinyInt	[boolean] Aviation light error
wtc_LubPistB_counts	Int	[amount] Piston movement, blade B lubrication
wtc_LubPistB_endvalue	TinyInt	[boolean] Piston movement, blade B lubrication
wtc_LubPistB_timeon	Int	[seconds] Piston movement, blade B lubrication
wtc_LubPistC_counts	Int	[amount] Piston movement, blade C lubrication
wtc_LubPistC_endvalue	TinyInt	[boolean] Piston movement, blade C lubrication
wtc_LubPistC_timeon	Int	[seconds] Piston movement, blade C lubrication
wtc_MainBCur_counts	Int	[amount] Feedback from Main Breaker: Over current trip
wtc_MainBCur_endvalue	TinyInt	[boolean] Feedback from Main Breaker: Over current trip
wtc_MainBCur_timeon	Int	[seconds] Feedback from Main Breaker: Over current trip
wtc_MainBPos_counts	Int	[amount] Main breaker position
wtc_MainBPos_endvalue	TinyInt	[boolean] Main breaker position
wtc_MainBPos_timeon	Int	[seconds] Main breaker position
wtc_MBLubGr_counts	Int	[amount] Grease level, main bearing lubrication
wtc_MBLubGr_endvalue	TinyInt	[boolean] Grease level, main bearing lubrication
wtc_MBLubGr_timeon	Int	[seconds] Grease level, main bearing lubrication
wtc_MBLubPis_counts	Int	[amount] Piston movement, main bearing lubrication
wtc_MBLubPis_endvalue	TinyInt	[boolean] Piston movement, main bearing lubrication
wtc_MBLubPis_timeon	Int	[seconds] Piston movement, main bearing lubrication
wtc_MVBrkPos_counts	Int	[amount] MV breaker position
wtc_MVBrkPos_endvalue	TinyInt	[boolean] MV breaker position
wtc_MVBrkPos_timeon	Int	[seconds] MV breaker position
wtc_PFCInput_counts	Int	[amount] Feedback from phase compensation.
wtc_PFCInput_endvalue	TinyInt	[boolean] Feedback from phase compensation.
wtc_PFCInput_timeon	Int	[seconds] Feedback from phase compensation.
wtc_PiPalAFb_counts	Int	[amount] Pitch paddle/stopposition sensor, blade A
wtc_PiPalAFb_endvalue	TinyInt	[boolean] Pitch paddle/stopposition sensor, blade A
wtc_PiPalAFb_timeon	Int	[seconds] Pitch paddle/stopposition sensor, blade A
wtc_PiPalBFb_counts	Int	[amount] Pitch paddle/stopposition sensor, blade B
wtc_PiPalBFb_endvalue	TinyInt	[boolean] Pitch paddle/stopposition sensor, blade B
wtc_PiPalBFb_timeon	Int	[seconds] Pitch paddle/stopposition sensor, blade B
wtc_PiPalCFb_counts	Int	[amount] Pitch paddle/stopposition sensor, blade C
wtc_PiPalCFb_endvalue	TinyInt	[boolean] Pitch paddle/stopposition sensor, blade C
wtc_PiPalCFb_timeon	Int	[seconds] Pitch paddle/stopposition sensor, blade C

Column Name	Datatype	Description
StationId	Int	[ID] Station ID
TimeStamp	DateTime	[timestamp] Timestamp for logging
wtc_AviError_counts	Int	[amount] Aviation light error
wtc_AviError_endvalue	TinyInt	[boolean] Aviation light error
wtc_PoweRed1_counts	Int	[amount] Power reduction output 1
wtc_PoweRed1_endvalue	TinyInt	[boolean] Power reduction output 1
wtc_PoweRed1_timeon	Int	[seconds] Power reduction output 1
wtc_PoweRed2_counts	Int	[amount] Power reduction output 2
wtc_PoweRed2_endvalue	TinyInt	[boolean] Power reduction output 2
wtc_PoweRed2_timeon	Int	[seconds] Power reduction output 2
wtc_SafeOK_counts	Int	[amount] SafeOK signal
wtc_SafeOK_endvalue	TinyInt	[boolean] SafeOK signal
wtc_SafeOK_timeon	Int	[seconds] SafeOK signal
wtc_SeaCabSh_counts	Int	[amount] MV cable short circuit detection
wtc_SeaCabSh_endvalue	TinyInt	[boolean] MV cable short circuit detection
wtc_SeaCabSh_timeon	Int	[seconds] MV cable short circuit detection
wtc_Sectlizr_counts	Int	[amount] Position - Section analyser
wtc_Sectlizr_endvalue	TinyInt	[boolean] Position - Section analyser
wtc_Sectlizr_timeon	Int	[seconds] Position - Section analyser
wtc_SerialCo_counts	Int	[amount] Serial contactor feedback
wtc_SerialCo_endvalue	TinyInt	[boolean] Serial contactor feedback
wtc_SerialCo_timeon	Int	[seconds] Serial contactor feedback
wtc_SmokeBot_counts	Int	[amount] Smoke detector - bottom
wtc_SmokeBot_endvalue	TinyInt	[boolean] Smoke detector – bottom
wtc_SmokeBot_timeon	Int	[seconds] Smoke detector - bottom
wtc_SmokeNac_counts	Int	[amount] Smoke sensor located in the Nacelle
wtc_SmokeNac_endvalue	TinyInt	[boolean] Smoke sensor located in the Nacelle
wtc_SmokeNac_timeon	Int	[seconds] Smoke sensor located in the Nacelle
wtc_SmokeTop_counts	Int	[amount] Smoke detector - top
wtc_SmokeTop_endvalue	TinyInt	[boolean] Smoke detector - top
wtc_SmokeTop_timeon	Int	[seconds] Smoke detector - top
wtc_SmokeTra_counts	Int	[amount] Smoke detector – transformer
wtc_SmokeTra_endvalue	TinyInt	[boolean] Smoke detector - transformer
wtc_SmokeTra_timeon	Int	[seconds] Smoke detector - transformer
wtc_ThyrTemp_counts	Int	[amount] Thyristor thermostats
wtc_ThyrTemp_endvalue	TinyInt	[boolean] Thyristor thermostats
wtc_ThyrTemp_timeon	Int	[seconds] Thyristor thermostats
wtc_TORGear_counts	Int	[amount] Thermal overload, gear oil pump/fan
wtc_TORGear_endvalue	TinyInt	[boolean] Thermal overload, gear oil pump/fan
wtc_TORGear_timeon	Int	[seconds] Thermal overload, gear oil pump/fan
wtc_TOROffli_counts	Int	[amount] Thermal overload, gear oil offline filter
wtc_TOROffli_endvalue	TinyInt	[boolean] Thermal overload, gear oil offline filter
wtc_TOROffli_timeon	Int	[seconds] Thermal overload, gear oil offline filter
wtc_TORPitch_counts	Int	[amount] Thermal overload, pitch hydraulic pump
wtc_TORPitch_endvalue	TinyInt	[boolean] Thermal overload, pitch hydraulic pump
wtc_TORPitch_timeon	Int	[seconds] Thermal overload, pitch hydraulic pump
wtc_TORTrVen_counts	Int	[amount] Thermal overload - ventilator transformer door
wtc_TORTrVen_endvalue	TinyInt	[boolean] Thermal overload - ventilator transformer door
wtc_TORTrVen_timeon	Int	[seconds] Thermal overload - ventilator transformer door
wtc_TORYaw_counts	Int	[amount] Thermal overload, yaw motors
wtc_TORYaw_endvalue	TinyInt	[boolean] Thermal overload, yaw motors
wtc_TORYaw_timeon	Int	[seconds] Thermal overload, yaw motors

Column Name	Datatype	Description
StationId	Int	[ID] Station ID
TimeStamp	DateTime	[timestamp] Timestamp for logging
wtc_AviError_counts	Int	[amount] Aviation light error
wtc_AviError_endvalue	TinyInt	[boolean] Aviation light error
wtc_TraGasAl_counts	Int	[amount] Transformer supervision - Gas alarm
wtc_TraGasAl_endvalue	TinyInt	[boolean] Transformer supervision - Gas alarm
wtc_TraGasAl_timeon	Int	[seconds] Transformer supervision - Gas alarm
wtc_TraOilAl_counts	Int	[amount] Transformer supervision - Oil alarm
wtc_TraOilAl_endvalue	TinyInt	[boolean] Transformer supervision - Oil alarm
wtc_TraOilAl_timeon	Int	[seconds] Transformer supervision - Oil alarm
wtc_UPSBypas_counts	Int	[amount] UPS bypass
wtc_UPSBypas_endvalue	TinyInt	[boolean] UPS bypass
wtc_UPSBypas_timeon	Int	[seconds] UPS bypass
wtc_UpsLineF_counts	Int	[amount] UPS line fail
wtc_UpsLineF_endvalue	TinyInt	[boolean] UPS line fail
wtc_UpsLineF_timeon	Int	[seconds] UPS line fail
wtc_UPSLowBt_counts	Int	[amount] UPS low battery
wtc_UPSLowBt_endvalue	TinyInt	[boolean] UPS low battery
wtc_UPSLowBt_timeon	Int	[seconds] UPS low battery
wtc_UVLightn_counts	Int	[amount] Low voltage, lightning detector
wtc_UVLightn_endvalue	TinyInt	[boolean] Low voltage, lightning detector
wtc_UVLightn_timeon	Int	[seconds] Low voltage, lightning detector
wtc_VCU_A_counts	SmallInt	[amount] Feedback from VCU (overspeed protection) in blade A
wtc_VCU_A_endvalue	SmallInt	[boolean] Feedback from VCU (overspeed protection) in blade A
wtc_VCU_A_timeon	Int	[seconds] Feedback from VCU (overspeed protection) in blade A
wtc_VCU_B_counts	SmallInt	[amount] Feedback from VCU (overspeed protection) in blade B
wtc_VCU_B_endvalue	SmallInt	[boolean] Feedback from VCU (overspeed protection) in blade B
wtc_VCU_B_timeon	Int	[seconds] Feedback from VCU (overspeed protection) in blade B
wtc_VCU_C_counts	SmallInt	[amount] Feedback from VCU (overspeed protection) in blade C
wtc_VCU_C_endvalue	SmallInt	[boolean] Feedback from VCU (overspeed protection) in blade C
wtc_VCU_C_timeon	Int	[seconds] Feedback from VCU (overspeed protection) in blade C
wtc_VCUA_counts	Int	[amount] VCU, blade A
wtc_VCUA_endvalue	TinyInt	[boolean] VCU, blade A
wtc_VCUA_timeon	Int	[seconds] VCU, blade A
wtc_VCUB_counts	Int	[amount] VCU, blade B
wtc_VCUB_endvalue	TinyInt	[boolean] VCU, blade B
wtc_VCUB_timeon	Int	[seconds] VCU, blade B
wtc_VCUC_counts	Int	[amount] VCU, blade C
wtc_VCUC_endvalue	TinyInt	[boolean] VCU, blade C
wtc_VCUC_timeon	Int	[seconds] VCU, blade C
wtc_VisibHig_counts	SmallInt	[amount] Indication of "high" visibility from visibility sensor.
wtc_VisibHig_endvalue	TinyInt	[boolean] Indication of "high" visibility from visibility sensor.
wtc_VisibHig_timeon	Int	[seconds] Indication of "high" visibility from visibility sensor.

Column Name	Datatype	Description
StationId	Int	[ID] Station ID
TimeStamp	DateTime	[timestamp] Timestamp for logging
wtc_AviError_counts	Int	[amount] Aviation light error
wtc_AviError_endvalue	TinyInt	[boolean] Aviation light error
wtc_VisibMed_counts	SmallInt	[amount] Indication of "medium" visibility from visibility sensor.
wtc_VisibMed_endvalue	TinyInt	[boolean] Indication of "medium" visibility from visibility sensor.
wtc_VisibMed_timeon	Int	[seconds] Indication of "medium" visibility from visibility sensor.
wtc_VisibOk_counts	SmallInt	[amount] Visibility meter fault indication.
wtc_VisibOk_endvalue	TinyInt	[boolean] Visibility meter fault indication.
wtc_VisibOk_timeon	Int	[seconds] Visibility meter fault indication.
wtc_Windvan2_counts	Int	[amount] Secondary windvane
wtc_Windvan2_endvalue	TinyInt	[boolean] Secondary windvane
wtc_Windvan2_timeon	Int	[seconds] Secondary windvane
wtc_Windvane_counts	Int	[amount] Primary windvane
wtc_Windvane_endvalue	TinyInt	[boolean] Primary windvane
wtc_Windvane_timeon	Int	[seconds] Primary windvane
wtc_Y1LubPis_counts	Int	[amount] Piston movement, yaw lubrication
wtc_Y1LubPis_endvalue	TinyInt	[boolean] Piston movement, yaw lubrication
wtc_Y1LubPis_timeon	Int	[seconds] Piston movement, yaw lubrication
wtc_YawLubGr_counts	Int	[amount] Grease level, yaw lubrication
wtc_YawLubGr_endvalue	TinyInt	[boolean] Grease level, yaw lubrication
wtc_YawLubGr_timeon	Int	[seconds] Grease level, yaw lubrication

4.4.9 tblSCTurCount

The table `tblSCTurCount` contains all the counter signals (hours, events, and the like)

Column Name	Datatype	Description
StationId	Int	[ID] Station ID
TimeStamp	DateTime	[timestamp] Timestamp for logging
wtc_AvailHrS_endvalue	Float	[hours] Availability, period hours, subtotal
wtc_AvailHrT_endvalue	Float	[hours] Availability, period hours, total
wtc_AvailP2S_endvalue	Real	[%] Standard Availability percentage, subtotal
wtc_AvailP2T_endvalue	Real	[%] Standard Availability percentage, total
wtc_AvailPcS_endvalue	Real	[%] Availability percentage, subtotal
wtc_AvailPcT_endvalue	Real	[%] Availability percentage, total
wtc_BoostKWh_endvalue	Real	[kwh] The accumulated boosted energy production.
wtc_ErrHrCnS_endvalue	Float	[hours] Availability, error hours, subtotal
wtc_ErrHrCnT_endvalue	Float	[hours] Availability, error hours, total
wtc_ExtErHrS_endvalue	Float	[hours] External error hours, subtotal
wtc_ExtErHrT_endvalue	Float	[hours] External error hours, total
wtc_ErLWHCnS_ErLWHCnS_endvalue	Real	[hours] Subtotal hourcounter: Error during low wind
wtc_ErLWHCnT_ErLWHCnT_endvalue	Float	[hours] Total hourcounter: Error during low wind
wtc_G1HrsSub_endvalue	Float	[hours] Large generator operation hours, subtotal
wtc_G1HrsTot_endvalue	Float	[hours] Large generator operation hours, total
wtc_G2HrsSub_endvalue	Float	[hours] Small generator operation hours, subtotal
wtc_G2HrsTot_endvalue	Float	[hours] Small generator operation hours, total
wtc_GrdFaHrS_endvalue	Float	[hours] Grid fault hours, subtotal

Column Name	Datatype	Description
wtc_GrdFaHrT_endvalue	Float	[hours] Grid fault hours, total
wtc_GridFaCS_endvalue	Float	[hours] Calculated "Grid fault" hours, subtotal
wtc_GridFaCT_endvalue	Float	[hours] Calculated "Grid fault" hours, total
wtc_GridOKHS_endvalue	Float	[hours] "Grid OK" hours, subtotal
wtc_GridOKHT_endvalue	Float	[hours] "Grid OK" hours, total
wtc_GustWndS_endvalue	Real	[hours] Gust wind, subtotal
wtc_GustWndT_endvalue	Real	[hours] Gust wind, total
wtc_kVAG1SuE_endvalue	Int	[kVarh] Generator 1 export reactive energy SubTotal
wtc_kVAG1SuI_endvalue	Int	[kVarh] Generator 1 import reactive energy SubTotal
wtc_kVAG1ToE_accum	Real	[kVarh] Generator 1 export reactive energy Total
wtc_kVAG1ToE_endvalue	Real	[kVarh] Generator 1 export reactive energy Total
wtc_kVAG1ToI_accum	Real	[kVarh] Generator 1 import reactive energy Total
wtc_kVAG1ToI_endvalue	Real	[kVarh] Generator 1 import reactive energy Total
wtc_kVAG1Tot_accum	Real	[kVarh] Reactive energy, large generator total
wtc_kVAG1Tot_endvalue	Real	[kVarh] Reactive energy, large generator total
wtc_kVAG2SuE_endvalue	Int	[kVarh] Generator 2 export reactive energy SubTotal
wtc_kVAG2SuI_endvalue	Int	[kVarh] Generator 2 import reactive energy SubTotal
wtc_kVAG2ToE_accum	Real	[kVarh] Generator 2 export reactive energy Total
wtc_kVAG2ToE_endvalue	Real	[kVarh] Generator 2 export reactive energy Total
wtc_kVAG2ToI_accum	Real	[kVarh] Generator 2 import reactive energy Total
wtc_kVAG2ToI_endvalue	Real	[kVarh] Generator 2 import reactive energy Total
wtc_kVAG2Tot_accum	Real	[kVarh] Reactive energy, small generator total
wtc_kVAG2Tot_endvalue	Real	[kVarh] Reactive energy, small generator total
wtc_kWG1Sub_endvalue	Int	[kWh] Active energy, large generator subtotal
wtc_kWG1SubE_endvalue	Int	[kWh] Generator 1 export energy SubTotal
wtc_kWG1SubI_endvalue	Int	[kWh] Generator 1 import energy SubTotal
wtc_kWG1Tot_accum	Real	[kWh] Active energy, large generator total
wtc_kWG1Tot_endvalue	Real	[kWh] Active energy, large generator total
wtc_kWG1TotE_accum	Real	[kWh] Generator 1 export energy Total
wtc_kWG1TotE_endvalue	Real	[kWh] Generator 1 export energy Total
wtc_kWG1TotI_accum	Real	[kWh] Generator 1 import energy Total
wtc_kWG1TotI_endvalue	Real	[kWh] Generator 1 import energyTotal
wtc_kWG2Sub_endvalue	Int	[kWh] Active energy, small generator subtotal
wtc_kWG2SubE_endvalue	Int	[kWh] Generator 2 export energy subtotal
wtc_kWG2SubI_endvalue	Int	[kWh] Generator 2 import energy SubTotal
wtc_kWG2Tot_accum	Real	[kWh] Active energy, small generator total
wtc_kWG2Tot_endvalue	Real	[kWh] Active energy, small generator total
wtc_kWG2TotE_accum	Real	[kWh] Generator 2 export energy Total
wtc_kWG2TotE_endvalue	Real	[kWh] Generator 2 export energy Total
wtc_kWG2TotI_accum	Real	[kWh] Generator 2 import energy Total
wtc_kWG2TotI_endvalue	Real	[kWh] Generator 2 import energy Total
wtc_LifeTime_BldAHour_endvalue	Float	[hours] Consumed lifetime of blade A in hours
wtc_LifeTime_BldBHour_endvalue	Float	[hours] Consumed lifetime of blade B in hours

Column Name	Datatype	Description
wtc_LifeTime_BldCHour_endvalue	Float	[hours] Consumed lifetime of blade C in hours
wtc_LnZ12HrS_endvalue	Float	[hours] Low Noise zone 1 & 2 Subtotal hour counter
wtc_LnZ12HrT_endvalue	Float	[hours] Low Noise zone 1 & 2 Total hour counter
wtc_LnZ3HrSu_endvalue	Float	[hours] Low Noise zone 3 Subtotal hour counter
wtc_LnZ3HrTo_endvalue	Float	[hours] Low Noise Total hour counter for zone 3.
wtc_MeanWndS_endvalue	Real	[m/s] Mean wind speed, subtotal
wtc_MeanWndT_endvalue	Real	[m/s] Mean wind speed, total
wtc_NotStStS_endvalue	Real	[hours] Not standstill hours, subtotal
wtc_NotStStT_endvalue	Float	[hours] Not standstill hours, total
wtc_OtherHoS_endvalue	Float	[hours] Other hours counter, subtotal
wtc_OtherHoT_endvalue	Float	[hours] Other hours counter, total
wtc_ResetTmS_endvalue	DateTime	[timestamp] Reset time, subtotal values
wtc_ResetTmT_endvalue	DateTime	[timestamp] Reset time, total values
wtc_ScComErr_accum	Int	[amount] Scientific. Commanded error counter.
wtc_ScComErr_endvalue	Real	[amount] Scientific. Commanded error counter.
wtc_ScEnvErr_accum	Char (10)	[amount] Scientific. Environment error counter.
wtc_ScEnvErr_endvalue	Real	[amount] Scientific. Environment error counter.
wtc_ScGrdErr_accum	Int	[amount] Scientific. Grid error counter.
wtc_ScGrdErr_endvalue	Real	[amount] Scientific. Grid error counter.
wtc_ScLaToSm_counts	TinyInt	[amount] Scientific. Large to small generator transition
wtc_ScLaToSm_endvalue	Real	[amount] Scientific. Large to small generator transition
wtc_ScLNrErr_endvalue	Real	[amount] Scientific. Low Noise errors counter.
wtc_ScSmToLa_counts	TinyInt	[amount] Scientific. Small to large generator transition
wtc_ScSmToLa_endvalue	Real	[amount] Scientific. Small to large generator transition
wtc_ScTurErr_accum	Int	[amount] Scientific. Turbine error counter (since start up)
wtc_ScTurErr_endvalue	Real	[amount] Scientific. Turbine error counter (since start up)
wtc_StandStS_endvalue	Float	[hours] Standstill hours, subtotal
wtc_StandStT_endvalue	Float	[hours] Standstill hours, total
wtc_TurOkHrS_endvalue	Real	[hours] Turbine OK hours, subtotal
wtc_TurOkHrT_endvalue	Float	[hours] Turbine OK hours, total
wtc_TurRdHrS_endvalue	Float	[hours] Turbine released hours, subtotal
wtc_TurRdHrT_endvalue	Float	[hours] Turbine released hours, total
wtc_WindFauS_endvalue	Float	[hours] Wind fault hours, subtotal
wtc_WindFauT_endvalue	Float	[hours] Wind fault hours, total
wtc_WndIRHrS_endvalue	Float	[hours] Wind inside range hours, subtotal
wtc_WndIRHrT_endvalue	Float	[hours] Wind inside range hours, total

4.4.10 tblSCTurbine

The table `tblSCTurbine` contains signals not related to other groups

Column Name	Datatype	Description
StationId	Int	[ID] Station ID
TimeStamp	DateTime	[timestamp] TimeStamp for logging
wtc_AcWindSp_max	Real	[m/s] Wind speed from active wind sensor. (Only IBox release >= 1.05)
wtc_AcWindSp_mean	Real	[m/s] Wind speed from active wind sensor. (Only IBox release >= 1.05)
wtc_AcWindSp_min	Real	[m/s] Wind speed from active wind sensor. (Only IBox release >= 1.05)
wtc_AcWindSp_stddev	Real	[m/s] Wind speed from active wind sensor. (Only IBox release >= 1.05)
wtc_BoostAva_max	Real	[KW] The current boost allowed.
wtc_BoostAva_mean	Real	[KW] The current boost allowed.
wtc_BoostAva_min	Real	[KW] The current boost allowed.
wtc_BoostAva_stddev	Real	[KW] The current boost allowed.
wtc_CurTime_endvalue	DateTime	[timestamp] WTC-3 Time
wtc_GenRpm_max	Real	[rpm] Generator RPM
wtc_GenRpm_mean	Real	[rpm] Generator RPM
wtc_GenRpm_min	Real	[rpm] Generator RPM
wtc_GenRpm_stddev	Real	[rpm] Generator RPM
wtc_HubAnIn5_max	Real	[mV] Hub. Analog voltage input 5 (- X48)
wtc_HubAnIn5_mean	Real	[mV] Hub. Analog voltage input 5 (- X48)
wtc_HubAnIn5_min	Real	[mV] Hub. Analog voltage input 5 (- X48)
wtc_HubAnIn5_stddev	Real	[mV] Hub. Analog voltage input 5 (- X48)
wtc_HubAnIn6_max	Real	[mV] Hub. Analog voltage input 6 (- X49)
wtc_HubAnIn6_mean	Real	[mV] Hub. Analog voltage input 6 (- X49)
wtc_HubAnIn6_min	Real	[mV] Hub. Analog voltage input 6 (- X49)
wtc_HubAnIn6_stddev	Real	[mV] Hub. Analog voltage input 6 (- X49)
wtc_HubAnIn7_max	Real	[mV] Hub. Analog voltage input 7 (- X50)
wtc_HubAnIn7_mean	Real	[mV] Hub. Analog voltage input 7 (- X50)
wtc_HubAnIn7_min	Real	[mV] Hub. Analog voltage input 7 (- X50)
wtc_HubAnIn7_stddev	Real	[mV] Hub. Analog voltage input 7 (- X50)
wtc_HubLubGr_max	Real	[signal] Low grease level, hub lubrication
wtc_HubLubGr_mean	Real	[signal] Low grease level, hub lubrication
wtc_HubLubGr_min	Real	[signal] Low grease level, hub lubrication
wtc_HubLubGr_stddev	Real	[signal] Low grease level, hub lubrication
wtc_IceDetec_max	Real	[value] Ice detector value
wtc_IceDetec_mean	Real	[value] Ice detector value
wtc_IceDetec_min	Real	[value] Ice detector value
wtc_IceDetec_stddev	Real	[value] Ice detector value
wtc_IMidAa_max	Real	[A] Mean valve current, blade A, coil a
wtc_IMidAa_mean	Real	[A] Mean valve current, blade A, coil a
wtc_IMidAa_min	Real	[A] Mean valve current, blade A, coil a
wtc_IMidAa_stddev	Real	[A] Mean valve current, blade A, coil a
wtc_IMidBa_max	Real	[A] Mean valve current, blade B, coil a
wtc_IMidBa_mean	Real	[A] Mean valve current, blade B, coil a
wtc_IMidBa_min	Real	[A] Mean valve current, blade B, coil a
wtc_IMidBa_stddev	Real	[A] Mean valve current, blade B, coil a
wtc_IMidCa_max	Real	[A] Mean valve current, blade C, coil a
wtc_IMidCa_mean	Real	[A] Mean valve current, blade C, coil a
wtc_IMidCa_min	Real	[A] Mean valve current, blade C, coil a
wtc_IMidCa_stddev	Real	[A] Mean valve current, blade C, coil a
wtc_MainSRpm_max	Real	[rpm] Main shaft RPM
wtc_MainSRpm_mean	Real	[rpm] Main shaft RPM

Column Name	Datatype	Description
wtc_MainSRpm_min	Real	[rpm] Main shaft RPM
wtc_MainSRpm_stddev	Real	[rpm] Main shaft RPM
wtc_NacelPos_max	Real	[degree] Nacelle position. (Direction in relation to North) (Only IBox release >= 1.06)
wtc_NacelPos_mean	Real	[degree] Nacelle position. (Direction in relation to North) (Only IBox release >= 1.06)
wtc_NacelPos_min	Real	[degree] Nacelle position. (Direction in relation to North) (Only IBox release >= 1.06)
wtc_NacelPos_stddev	Real	[degree] Nacelle position. (Direction in relation to North) (Only IBox release >= 1.06)
wtc_NacHumid_max	Real	[%] Relative humidity measured in nacelle
wtc_NacHumid_mean	Real	[%] Relative humidity measured in nacelle
wtc_NacHumid_min	Real	[%] Relative humidity measured in nacelle
wtc_NacHumid_stddev	Real	[%] Relative humidity measured in nacelle
wtc_PitchRef_BladeA_max	Real	[degree] Pitch reference blade A
wtc_PitchRef_BladeA_mean	Real	[degree] Pitch reference blade A
wtc_PitchRef_BladeA_min	Real	[degree] Pitch reference blade A
wtc_PitchRef_BladeA_stddev	Real	[degree] Pitch reference blade A
wtc_PitchRef_BladeB_max	Real	[degree] Pitch reference blade B
wtc_PitchRef_BladeB_mean	Real	[degree] Pitch reference blade B
wtc_PitchRef_BladeB_min	Real	[degree] Pitch reference blade B
wtc_PitchRef_BladeB_stddev	Real	[degree] Pitch reference blade B
wtc_PitchRef_BladeC_max	Real	[degree] Pitch reference blade C
wtc_PitchRef_BladeC_mean	Real	[degree] Pitch reference blade C
wtc_PitchRef_BladeC_min	Real	[degree] Pitch reference blade C
wtc_PitchRef_BladeC_stddev	Real	[degree] Pitch reference blade C
wtc_PitchRef_max	Real	Not used.
wtc_PitchRef_mean	Real	Not used.
wtc_PitchRef_min	Real	Not used.
wtc_PitchRef_stddev	Real	Not used.
wtc_PitcPosA_max	Real	[degree] Blade A position
wtc_PitcPosA_mean	Real	[degree] Blade A position
wtc_PitcPosA_min	Real	[degree] Blade A position
wtc_PitcPosA_stddev	Real	[degree] Blade A position
wtc_PitcPosB_max	Real	[degree] Blade B position
wtc_PitcPosB_mean	Real	[degree] Blade B position
wtc_PitcPosB_min	Real	[degree] Blade B position
wtc_PitcPosB_stddev	Real	[degree] Blade B position
wtc_PitcPosC_max	Real	[degree] Blade C position
wtc_PitcPosC_mean	Real	[degree] Blade C position
wtc_PitcPosC_min	Real	[degree] Blade C position
wtc_PitcPosC_stddev	Real	[degree] Blade C position
wtc_PitcRefA_max	Real	[degree] Blade A position reference
wtc_PitcRefA_mean	Real	[degree] Blade A position reference
wtc_PitcRefA_min	Real	[degree] Blade A position reference
wtc_PitcRefA_stddev	Real	[degree] Blade A position reference
wtc_PowerRef_endvalue	Real	[kW] Turbine power reference (setpoint)
wtc_PriAnemo_max	Real	[m/s] Primary anemometer (mechanic). wtc_PrWindSp is recommended when available.
wtc_PriAnemo_mean	Real	[m/s] Primary anemometer (mechanic). wtc_PrWindSp is recommended when available.
wtc_PriAnemo_min	Real	[m/s] Primary anemometer (mechanic). wtc_PrWindSp is recommended when available.
wtc_PriAnemo_stddev	Real	[m/s] Primary anemometer (mechanic). wtc_PrWindSp

Column Name	Datatype	Description
		is recommended when available.
wtc_PrWindSp_max	Real	[m/s] Wind speed from primary wind sensor (Only IBox release >= 1.05)
wtc_PrWindSp_mean	Real	[m/s] Wind speed from primary wind sensor (Only IBox release >= 1.05)
wtc_PrWindSp_min	Real	[m/s] Wind speed from primary wind sensor (Only IBox release >= 1.05)
wtc_PrWindSp_stddev	Real	[m/s] Wind speed from primary wind sensor (Only IBox release >= 1.05)
wtc_PWMAa_max	Real	[%] Valve output dutycycle, blade A coil a
wtc_PWMAa_mean	Real	[%] Valve output dutycycle, blade A coil a
wtc_PWMAa_min	Real	[%] Valve output dutycycle, blade A coil a
wtc_PWMAa_stddev	Real	[%] Valve output dutycycle, blade A coil a
wtc_PWMBa_max	Real	[%] Valve output dutycycle, blade B coil a
wtc_PWMBa_mean	Real	[%] Valve output dutycycle, blade B coil a
wtc_PWMBa_min	Real	[%] Valve output dutycycle, blade B coil a
wtc_PWMBa_stddev	Real	[%] Valve output dutycycle, blade B coil a
wtc_PWMCa_max	Real	[%] Valve output dutycycle, blade C coil a
wtc_PWMCa_mean	Real	[%] Valve output dutycycle, blade C coil a
wtc_PWMCa_min	Real	[%] Valve output dutycycle, blade C coil a
wtc_PWMCa_stddev	Real	[%] Valve output dutycycle, blade C coil a
wtc_ReactRef_endvalue	Real	[kVar] Turbine reactive power reference (setpoint)
wtc_ScYawPos_max	Real	[degree] Scientific: Yaw position
wtc_ScYawPos_mean	Real	[degree] Scientific: Yaw position
wtc_ScYawPos_min	Real	[degree] Scientific: Yaw position
wtc_ScYawPos_stddev	Real	[degree] Scientific: Yaw position
wtc_SecAnemo_max	Real	[m/s] Secondary anemometer (mechanic). wtc_SeWindSp is recommended when available.
wtc_SecAnemo_mean	Real	[m/s] Secondary anemometer (mechanic). wtc_SeWindSp is recommended when available.
wtc_SecAnemo_min	Real	[m/s] Secondary anemometer (mechanic). wtc_SeWindSp is recommended when available.
wtc_SecAnemo_stddev	Real	[m/s] Secondary anemometer (mechanic). wtc_SeWindSp is recommended when available.
wtc_SeWindSp_max	Real	[m/s] Wind speed from secondary wind sensor (Only IBox release >=1.05)
wtc_SeWindSp_mean	Real	[m/s] Wind speed from secondary wind sensor (Only IBox release >=1.05)
wtc_SeWindSp_min	Real	[m/s] Wind speed from secondary wind sensor (Only IBox release >=1.05)
wtc_SeWindSp_stddev	Real	[m/s] Wind speed from secondary wind sensor (Only

Column Name	Datatype	Description
		IBox release >=1.05)
wtc_TetAnemo_max	Real	[m/s] Tertiary anemometer.
wtc_TetAnemo_mean	Real	[m/s] Tertiary anemometer.
wtc_TetAnemo_min	Real	[m/s] Tertiary anemometer.
wtc_TetAnemo_stddev	Real	[m/s] Tertiary anemometer.
wtc_TetAnFrq_max	Real	[Hz] Tertiary anemometer, raw signal
wtc_TetAnFrq_mean	Real	[Hz] Tertiary anemometer, raw signal
wtc_TetAnFrq_min	Real	[Hz] Tertiary anemometer, raw signal
wtc_TetAnFrq_stddev	Real	[Hz] Tertiary anemometer, raw signal
wtc_TowerFrq_Frequenc_max	Real	[Hz] Tower frequency detected by GS1
wtc_TowerFrq_Frequenc_mean	Real	[Hz] Tower frequency detected by GS1
wtc_TowerFrq_Frequenc_min	Real	[Hz] Tower frequency detected by GS1
wtc_TowerFrq_Frequenc_stddev	Real	[Hz] Tower frequency detected by GS1
wtc_TwrHumid_mean	Real	[%] Humidity in tower
wtc_VisMeter_endvalue	Real	[m] Visibility
wtc_YawPos_max	Real	[degree] Yaw position. wtc_NacelPos is recommended when available.
wtc_YawPos_mean	Real	[degree] Yaw position. wtc_NacelPos is recommended when available.
wtc_YawPos_min	Real	[degree] Yaw position. wtc_NacelPos is recommended when available.
wtc_YawPos_stddev	Real	[degree] Yaw position. wtc_NacelPos is recommended when available.

4.4.11 tblSCMet

The table `tblSCMet` contains the signals from meteorology stations.

Column Name	Datatype	Description
met_AmbienTemp65_max	Real	[C°] Ambient temperature measured in xx m height
met_AmbienTemp65_mean	Real	[C°] Ambient temperature measured in xx m height
met_AmbienTemp65_min	Real	[C°] Ambient temperature measured in xx m height
met_AmbienTemp65_stddev	Real	[C°] Ambient temperatu re measured in xx m height
met_CurTime_endvalue	DateTime	[timestamp] MET station timestamp
met_Humidity_max	Real	[%] Relative hummidity
met_Humidity_mean	Real	[%] Relative hummidity
met_Humidity_min	Real	[%] Relative hummidity
met_Humidity_stddev	Real	[%] Relative hummidity
met_MonPow_max	Real	Deprecated colum. Not used.
met_MonPow_mean	Real	Deprecated column. Not used.
met_MonPow_min	Real	Depreacated column. Not used.
met_MonPow_stddev	Real	Deprecated column. Not used.
met_MonPowBackup_max	Real	Deprecated column. Not used.
met_MonPowBackup_mean	Real	Not used.
met_MonPowBackup_min	Real	Not used.
met_MonPowBackup_stddev	Real	Not used.
met_NavLampError_max	Real	Not used.
met_NavLampError_mean	Real	Not used.
met_NavLampError_min	Real	Not used.

Column Name	Datatype	Description
met_NavLampError_stddev	Real	Not used.
met_NavLastLamp_max	Real	Not used.
met_NavLastLamp_mean	Real	Not used.
met_NavLastLamp_min	Real	Not used.
met_NavLastLamp_stddev	Real	Not used.
met_Pressure_max	Real	[mBar] Atmospheric Pressure
met_Pressure_mean	Real	[mBar] Atmospheric Pressure
met_Pressure_min	Real	[mBar] Atmospheric Pressure
met_Pressure_stddev	Real	[mBar] Atmospheric Pressure
met_Rainfall10_max	Real	[boolean] Rainfall sensor in xx m height
met_Rainfall10_mean	Real	[boolean] Rainfall sensor in xx m height
met_Rainfall10_min	Real	[boolean] Rainfall sensor in xx m height
met_Rainfall10_stddev	Real	[boolean] Rainfall sensor in xx m height
met_ResetTmS_endvalue	DateTime	[timestamp] Reset time subtotal counters
met_ResetTmT_endvalue	DateTime	[timestamp] Reset time total counters
met_SonicTemp63_max	Real	Not used.
met_SonicTemp63_mean	Real	Not used.
met_SonicTemp63_min	Real	Not used.
met_SonicTemp63_stddev	Real	Not used.
met_Temperature29_max	Real	[C°] Temperature measure d at xx m height
met_Temperature29_mean	Real	[C°] Temperature measured at xx m height
met_Temperature29_min	Real	[C°] Temperature measured at xx m height
met_Temperature29_stddev	Real	[C°] Temperature measured at xx m height
met_Temperature74_max	Real	[C°] Temperature measured at xx m height
met_Temperature74_mean	Real	[C°] Temperature measured at xx m height
met_Temperature74_min	Real	[C°] Temperature measured at xx m height
met_Temperature74_stddev	Real	[C°] Temperature measured at xx m height
met_TemperatureRot_mean	Real	[C°] Mean temperature measured at rotor height
met_TemperatureTen_max	Real	[C°] Temperature measured in ten m height
met_TemperatureTen_mean	Real	[C°] Temperature measured in ten m height
met_TemperatureTen_min	Real	[C°] Temperature measur ed in ten m height
met_TemperatureTen_stddev	Real	[C°] Temperature mea sured in ten m height
met_VoltageBat_max	Real	[V] Battery Voltage
met_VoltageBat_mean	Real	[V] Battery Voltage
met_VoltageBat_min	Real	[V] Battery Voltage
met_VoltageBat_stddev	Real	[V] Battery Voltage
met_WaterTempminus2_max	Real	Not used.
met_WaterTempminus2_mean	Real	Not used.
met_WaterTempminus2_min	Real	Not used.
met_WaterTempminus2_stddev	Real	Not used.
met_WindComposantX_max	Real	Not used.
met_WindComposantX_mean	Real	Not used.
met_WindComposantX_min	Real	Not used.
met_WindComposantX_stddev	Real	Not used.
met_WindComposantY_max	Real	Not used.
met_WindComposantY_mean	Real	Not used.
met_WindComposantY_min	Real	Not used.
met_WindComposantY_stddev	Real	Not used.
met_WindComposantZ_max	Real	Not used.
met_WindComposantZ_mean	Real	Not used.
met_WindComposantZ_min	Real	Not used.

Column Name	Datatype	Description
met_WindComposantZ_stddev	Real	Not used.
met_Winddirection10_max	Real	[degree] Wind direction measured in x m height
met_Winddirection10_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection10_min	Real	[degree] Wind direction measured in x m height
met_Winddirection10_stddev	Real	[degree] Wind direction measured in x m height
met_Winddirection12_max	Real	[degree] Wind direction measured in x m height
met_Winddirection12_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection12_min	Real	[degree] Wind direction measured in x m height
met_Winddirection12_stddev	Real	[degree] Wind direction measured in x m height
met_Winddirection14_max	Real	[degree] Wind direction measured in x m height
met_Winddirection14_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection14_min	Real	[degree] Wind direction measured in x m height
met_Winddirection14_stddev	Real	[degree] Wind direction measured in x m height
met_Winddirection16_max	Real	[degree] Wind direction measured in x m height
met_Winddirection16_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection16_min	Real	[degree] Wind direction measured in x m height
met_Winddirection16_stddev	Real	[degree] Wind direction measured in x m height
met_Winddirection17_max	Real	[degree] Wind direction measured in x m height
met_Winddirection17_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection17_min	Real	[degree] Wind direction measured in x m height
met_Winddirection17_stddev	Real	[degree] Wind direction measured in x m height
met_Winddirection18_max	Real	[degree] Wind direction measured in x m height
met_Winddirection18_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection18_min	Real	[degree] Wind direction measured in x m height
met_Winddirection18_stddev	Real	[degree] Wind direction measured in x m height
met_Winddirection19_max	Real	[degree] Wind direction measured in x m height

Column Name	Datatype	Description
met_Winddirection19_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection19_min	Real	[degree] Wind direction measured in x m height
met_Winddirection19_stddev	Real	[degree] Wind direction measured in x m height
met_Winddirection24_max	Real	[degree] Wind direction measured in x m height
met_Winddirection24_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection24_min	Real	[degree] Wind direction measured in x m height
met_Winddirection24_stddev	Real	[degree] Wind direction measured in x m height
met_Winddirection27_max	Real	[degree] Wind direction measured in x m height
met_Winddirection27_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection27_min	Real	[degree] Wind direction measured in x m height
met_Winddirection27_stddev	Real	[degree] Wind direction measured in x m height
met_Winddirection29_max	Real	[degree] Wind direction measured in x m height
met_Winddirection29_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection29_min	Real	[degree] Wind direction measured in x m height
met_Winddirection29_stddev	Real	[degree] Wind direction measured in x m height
met_Winddirection34_max	Real	[degree] Wind direction measured in x m height
met_Winddirection34_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection34_min	Real	[degree] Wind direction measured in x m height
met_Winddirection34_stddev	Real	[degree] Wind direction measured in x m height
met_Winddirection38_max	Real	[degree] Wind direction measured in x m height
met_Winddirection38_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection38_min	Real	[degree] Wind direction measured in x m height
met_Winddirection38_stddev	Real	[degree] Wind direction measured in x m height
met_Winddirection40_max	Real	[degree] Wind direction measured in x m height
met_Winddirection40_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection40_min	Real	[degree] Wind direction measured in x m height
met_Winddirection40_stddev	Real	[degree] Wind direction measured in x m

Column Name	Datatype	Description
		height
met_Winddirection42_max	Real	[degree] Wind direction measured in x m height
met_Winddirection42_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection42_min	Real	[degree] Wind direction measured in x m height
met_Winddirection42_stddev	Real	[degree] Wind direction measured in x m height
met_Winddirection44_max	Real	[degree] Wind direction measured in x m height
met_Winddirection44_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection44_min	Real	[degree] Wind direction measured in x m height
met_Winddirection44_stddev	Real	[degree] Wind direction measured in x m height
met_Winddirection5_max	Real	[degree] Wind direction measured in x m height
met_Winddirection5_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection5_min	Real	[degree] Wind direction measured in x m height
met_Winddirection5_stddev	Real	[degree] Wind direction measured in x m height
met_Winddirection54_max	Real	[degree] Wind direction measured in x m height
met_Winddirection54_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection54_min	Real	[degree] Wind direction measured in x m height
met_Winddirection54_stddev	Real	[degree] Wind direction measured in x m height
met_Winddirection55_max	Real	[degree] Wind direction measured in x m height
met_Winddirection55_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection55_min	Real	[degree] Wind direction measured in x m height
met_Winddirection55_stddev	Real	[degree] Wind direction measured in x m height
met_Winddirection56_max	Real	[degree] Wind direction measured in x m height
met_Winddirection56_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection56_min	Real	[degree] Wind direction measured in x m height
met_Winddirection56_stddev	Real	[degree] Wind direction measured in x m height
met_Winddirection60_max	Real	[degree] Wind direction measured in x m height
met_Winddirection60_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection60_min	Real	[degree] Wind direction measured in x m

Column Name	Datatype	Description
		height
met_Winddirection60_stddev	Real	[degree] Wind direction measured in x m height
met_Winddirection64_max	Real	[degree] Wind direction measured in x m height
met_Winddirection64_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection64_min	Real	[degree] Wind direction measured in x m height
met_Winddirection64_stddev	Real	[degree] Wind direction measured in x m height
met_Winddirection65_max	Real	[degree] Wind direction measured in x m height
met_Winddirection65_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection65_min	Real	[degree] Wind direction measured in x m height
met_Winddirection65_stddev	Real	[degree] Wind direction measured in x m height
met_Winddirection75_max	Real	[degree] Wind direction measured in x m height
met_Winddirection75_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection75_min	Real	[degree] Wind direction measured in x m height
met_Winddirection75_stddev	Real	[degree] Wind direction measured in x m height
met_Winddirection77_max	Real	[degree] Wind direction measured in x m height
met_Winddirection77_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection77_min	Real	[degree] Wind direction measured in x m height
met_Winddirection77_stddev	Real	[degree] Wind direction measured in x m height
met_Winddirection78_max	Real	[degree] Wind direction measured in x m height
met_Winddirection78_mean	Real	[degree] Wind direction measured in x m height
met_Winddirection78_min	Real	[degree] Wind direction measured in x m height
met_Winddirection78_stddev	Real	[degree] Wind direction measured in x m height
met_WinddirectionRot_max	Real	[degree] Wind direction measured in rotor (hub) height
met_WinddirectionRot_mean	Real	[degree] Wind direction measured in rotor (hub) height
met_WinddirectionRot_min	Real	[degree] Wind direction measured in rotor (hub) height
met_WinddirectionRot_stddev	Real	[degree] Wind direction measured in rotor (hub) height
met_WindDirectionTiltangleZ63_max	Real	Not used.
met_WindDirectionTiltangleZ63_mean	Real	Not used.
met_WindDirectionTiltangleZ63_min	Real	Not used.

Column Name	Datatype	Description
met_WindDirectionTiltangleZ63_stddev	Real	Not used.
met_WindDirectionXY63_max	Real	Not used.
met_WindDirectionXY63_mean	Real	Not used.
met_WindDirectionXY63_min	Real	Not used.
met_WindDirectionXY63_stddev	Real	Not used.
met_WindSpeed12_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed12_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed12_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed12_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed14_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed14_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed14_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed14_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed16_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed16_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed16_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed16_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed17_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed17_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed17_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed17_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed18_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed18_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed18_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed18_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed19_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed19_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed19_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed19_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed24_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed24_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed24_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed24_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed25_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed25_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed25_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed25_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed27_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed27_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed27_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed27_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed29_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed29_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed29_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed29_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed31_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed31_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed31_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed31_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed34_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed34_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed34_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed34_stddev	Real	[m/s] Windspeed measured in xx m height

Column Name	Datatype	Description
met_WindSpeed38_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed38_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed38_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed38_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed40_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed40_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed40_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed40_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed41_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed41_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed41_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed41_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed42_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed42_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed42_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed42_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed43_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed43_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed43_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed43_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed44_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed44_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed44_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed44_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed47_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed47_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed47_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed47_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed5_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed5_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed5_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed5_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed51_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed51_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed51_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed51_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed54_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed54_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed54_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed54_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed55_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed55_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed55_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed55_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed56_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed56_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed56_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed56_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed57_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed57_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed57_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed57_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed58_max	Real	[m/s] Windspeed measured in xx m height

Column Name	Datatype	Description
met_WindSpeed58_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed58_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed58_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed60_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed60_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed60_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed60_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed63_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed63_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed63_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed63_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed64_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed64_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed64_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed64_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed65_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed65_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed65_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed65_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed66_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed66_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed66_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed66_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed67_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed67_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed67_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed67_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed68_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed68_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed68_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed68_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed75_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed75_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed75_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed75_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed78_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed78_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed78_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed78_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed80_max	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed80_mean	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed80_min	Real	[m/s] Windspeed measured in xx m height
met_WindSpeed80_stddev	Real	[m/s] Windspeed measured in xx m height
met_WindSpeedGustMaxRotSub_endvalue	Real	[m/s] Gust Windspeed total subvalue since ResetTmS
met_WindSpeedGustMaxRotTot_endvalue	Real	[m/s] Gust Windspeed total value since ResetTmT
met_WindSpeedInsRangeRotSub_endvalue	Real	[hours] Windspeed inside range subtotal hours since ResetTmS
met_WindSpeedInsRangeRotTot_endvalue	Real	[hours] Windspeed inside range total hours since ResetTmT
met_WindSpeedMeanRotSub_endvalue	Real	[m/s] Windspeed mean total subvalue since ResetTmS

Column Name	Datatype	Description
met_WindSpeedMeanRotTot_endvalue	Real	[m/s] Windspeed mean total value since ResetTmT
met_WindSpeedRot_max	Real	[m/s] WindSpeed in rotor (hub) height
met_WindSpeedRot_mean	Real	[m/s] WindSpeed in rotor (hub) height
met_WindSpeedRot_min	Real	[m/s] WindSpeed in rotor (hub) height
met_WindSpeedRot_stddev	Real	[m/s] WindSpeed in rotor (hub) height
met_WindSpeedTen_max	Real	[m/s] Windspeed measured in ten m height
met_WindSpeedTen_mean	Real	[m/s] Windspeed measured in ten m height
met_WindSpeedTen_min	Real	[m/s] Windspeed measured in ten m height
met_WindSpeedTen_stddev	Real	[m/s] Windspeed measured in ten m height
StationId	Int	[ID] Station ID
TimeStamp	DateTime	[timestamp] Timestamp for logging

4.4.12 tblGrid

Table which is used to store information for all grid stations. `TblGrid` Contains signals from GMS Station.

Column Name	Datatype	Description
ActivePower	Real	[MW] Active power
ActivePowerExport	Int	[kWh] Active power export
ActivePowerImport	Int	[kWh] Active power import
CurrentL1	SmallInt	[Amp] Current phase 1
CurrentL2	SmallInt	[Amp] Current phase 2
CurrentL3	SmallInt	[Amp] Current phase 3
DigitalInputBlock1	NChar (16)	[text] Digital inputs block 1
DigitalInputBlock2	NChar (16)	[text] Digital inputs block 2
DigitalInputBlock3	NChar (16)	[text] Digital inputs block 3
DigitalInputBlock4	NChar (16)	[text] Digital inputs block 4
Frequency	Real	[Hz] Frequency
GridTHD	Real	[%] Total harmonic distortion
PowerFactor	Real	[factor] Power factor (cos phi)
ReActivePower	Real	[Mvar] Reactive power
ReActivePowerExport	Int	[kVarh] Reactive power export
ReActivePowerImport	Int	[kVarh] Reactive power import
Station	Int	[ID] Id for the station
TimeStamp	DateTime	[timestamp] TimeStamp for logging
TimestampStation	DateTime	[timestamp] Timestamp from Grid station
VoltageL1	Real	[kV] Voltage phase 1
VoltageL2	Real	[kV] Voltage phase 2
VoltageL3	Real	[kV] Voltage phase 3
WPSStatus	TinyInt	[enum] WPS Grid station status

4.4.13 tblGridScientific

The table `tblGridScientific` which stores information from all grid stations and it contains scientific signals from GMS Station.

Column Name	Data type	Description
ActiveEnergy	SmallInt	[MWh] Active Energy
ActivePowerMax	Real	[kW] Active Power Max.
ActivePowerMean	Real	[kW] Active Power Mean
ActivePowerMin	Real	[kW] Active Power Min.
ActivePowerSD	Real	[kW] Active Power S.D.
CurrentMax	SmallInt	[A] Current max.
CurrentMean	SmallInt	[A] Current mean
CurrentMin	SmallInt	[A] Current min.
CurrentSD	SmallInt	[A] Current S.D.
DataOk	TinyInt	[enum] Data ok (0=not ok; 1=ok)
Energy	SmallInt	- Not used.
ReActiveEnergy	SmallInt	[MWh] ReActive Energy
ReActivePowerMax	Real	[kVAr] ReActive Power Max.
ReActivePowerMean	Real	[kVAr] ReActive Power Mean
ReActivePowerMin	Real	[kVAr] ReActive Power Min.
ReActivePowerSD	Real	[kVAr] ReActive Power S.D.
Station	Int	[ID] Id for the station
TimeStamp	DateTime	[timestamp] TimeStamp for logging
VoltageMax	Real	[kV] Voltage max.
VoltageMean	Real	[kV] Voltage mean
VoltageMin	Real	[kV] Voltage min.
VoltageSD	Real	[kV] Voltage S.D.
WPSStatus	TinyInt	[enum] WPS grid station status

5 Summary data

Summary data is calculated on the park server based on raw data from turbines, in order to create reports. The calculation is normally performed every night at 01:00. You can query tblDailySummary once a day after 01:00. In case failures occur during update, retry is performed after every half an hour and the report is generated.
Each value is averaged or the last value of the period depending on the data type.

5.1.1 tblDailySummary

Most column names have a postfix that indicates the period:

- **Tot**: Total (since reset time total).
- **Sub**: Subtotal (since reset time subtotal, which is normally beginning of month).
- **No postfix**: Daily value.

Column Name	Data Type	Description
ActiveEnergyExport	Int	[kWh] tblSCTurCount.wtc_kWG1TotE_endvalue + wtc_kWG2TotE_endvalue
ActiveEnergyExportTot	BigInt	[kWh] tblSCTurCount.wtc_kWG1TotE_endvalue + wtc_kWG2TotE_endvalue
ActiveEnergyImport	Int	[kWh] tblSCTurCount.wtc_kWG1TotI_endvalue + wtc_kWG2TotI_endvalue
ActiveEnergyImportTot	BigInt	[kWh] tblSCTurCount.wtc_kWG1TotI_endvalue + wtc_kWG2TotI_endvalue
Availability2	Real	[%] Standard Availability, calculated
Availability2Sub	Real	[%] Standard Availability, turbine
Availability2Tot	Real	[%] Standard Availability, turbine
Availabillity	Real	[%] Manufacturers Availability, calculated
AvailabillitySub	Real	[%] Manufacturers Availability, turbine
AvailabillityTot	Real	[%] Manufacturers Availability, turbine
CapacityFactor	Real	[%] Capacity Factor, calculated
ConsumedLifeTimeBladeA	Real	[hours] Consumed lifetime of blade A in hours tblScTurCount.wtc_LifeTime_BldAHou r_endvalue
ConsumedLifeTimeBladeATot	Float	[hours] Consumed lifetime of blade A in hours tblScTurCount.wtc_LifeTime_BldAHou r_endvalue
ConsumedLifeTimeBladeB	Real	[hours] Consumed lifetime of blade B in hours tblScTurCount.wtc_LifeTime_BldBHour_endvalue
ConsumedLifeTimeBladeBTot	Float	[hours] Consumed lifetime of blade B tblScTurCount.wtc_LifeTime_BldBHou r_endvalue in hours
ConsumedLifeTimeBladeC	Real	[hours] Consumed lifetime of blade C in hours tblScTurCount.wtc_LifeTime_BldCHou r_endvalue
ConsumedLifeTimeBladeCTot	Float	[hours] Consumed lifetime of blade C in hours tblScTurCount.wtc_LifeTime_BldCHou r_endvalue
CurtailmentEnergy	Float	[kWh] Total Curtailment Energy
CurtailmentEnergyTot	BigInt	[kWh] Total Curtailment Energy
CurtailmentExternalEnergy	Real	[kWh] Curtailment Energy due to external reduction
CurtailmentExternalHours	Real	[hours] Curtailment Hours due to external reduction
CurtailmentHours	Float	[hours] Total Curtailment Hours
CurtailmentOverFreqEnergy	Real	[kWh] Curtailment Energy due to over frequency
CurtailmentOverFreqHours	Real	[hours] Curtailment Hours due to over frequency
CurtailmentOverWindEnergy	Real	[kWh] Curtailment Energy due to over wind
CurtailmentOverWindHours	Real	[hours] Curtailment Hours due to over wind

Column Name	Data Type	Description
CurtailmentTurbineEnergy	Real	[kWh] Turbine Specific Curtailment Energy
CurtailmentTurbineHours	Real	[hours] Turbine Specific Curtailment Hours
eAPF1	Float	[kWh] Values used for efficiency reporting. Actual Production grouped by turbine state. (extension function)
eAPF10	Float	[kWh] Values used for efficiency reporting. Actual Production grouped by turbine state. (extension function)
eAPF11	Float	[kWh] Values used for efficiency reporting. Actual Production grouped by turbine state. (extension function)
eAPF12	Float	[kWh] Values used for efficiency reporting. Actual Production grouped by turbine state. (extension function)
eAPF13	Float	[kWh] Values used for efficiency reporting. Actual Production grouped by turbine state. (extension function)
eAPF2	Float	[kWh] Values used for efficiency reporting. Actual Production grouped by turbine state. (extension function)
eAPF3	Float	[kWh] Values used for efficiency reporting. Actual Production grouped by turbine state. (extension function)
eAPF4	Float	[kWh] Values used for efficiency reporting. Actual Production grouped by turbine state. (extension function)
eAPF5	Float	[kWh] Values used for efficiency reporting. Actual Production grouped by turbine state. (extension function)
eAPF6	Float	[kWh] Values used for efficiency reporting. Actual Production grouped by turbine state. (extension function)
eAPF7	Float	[kWh] Values used for efficiency reporting. Actual Production grouped by turbine state. (extension function)
eAPF8	Float	[kWh] Values used for efficiency reporting. Actual Production grouped by turbine state. (extension function)
eAPF9	Float	[kWh] Values used for efficiency reporting. Actual Production grouped by turbine state. (extension function)
EffNumberOfValidSamples	SmallInt	[amount] Number of valid efficiency samples in period
Energy	Float	[kWh] Net Energy produced by turbine
EnergyLossAbsolutePower	Real	[kWh] Absolute Power (Requires High Performance Park Pilot)
EnergyLossAbsoluteSpinningReserve	Real	[kWh] Absolute Spinning Reserve
EnergyLossCorrection	Real	[kWh] Correction
EnergyLossExternalLimit	Real	[kWh] External Limit
EnergyLossFreeze	Real	[kWh] Freeze
EnergyLossFrequencyResponse	Real	[kWh] Frequency Response
EnergyLossGridProtection	Real	[kWh] Grid Protection
EnergyLossParkStart	Real	[kWh] Park Start
EnergyLossProgramStart	Real	[kWh] Program Start
EnergyLossRelativeSpinningReserve	Real	[kWh] Relative Spinning Reserve
EnergyLossSampleCount	Int	[amount] Number of samples per day
EnergyLossVariationControl	Real	[kWh] Variation Control
EnergyLossWindMonitor	Real	[kWh] Wind Monitor
EnergyTot	Float	[kWh] Net Energy produced by turbine, tblSCTurCount.wtc_kWG1Tot_endvalue + wtc_kWG2Tot_endvalue
eOTF1	Int	[amount] Value used for efficiency reporting. Number of hours grouped by turbine state. (extension function)
eOTF10	Int	[amount] Value used for efficiency reporting. Number of hours grouped by turbine state. (extension function)
eOTF11	Int	[amount] Value used for efficiency reporting. Number of hours grouped by turbine state. (extension function)
eOTF12	Int	[amount] Value used for efficiency reporting. Number of hours grouped by turbine state. (extension function)

Column Name	Data Type	Description
eOTF13	Int	[amount] Value used for efficiency reporting. Number of hours grouped by turbine state. (extension function)
eOTF2	Int	[amount] Value used for efficiency reporting. Number of hours grouped by turbine state. (extension function)
eOTF3	Int	[amount] Value used for efficiency reporting. Number of hours grouped by turbine state. (extension function)
eOTF4	Int	[amount] Value used for efficiency reporting. Number of hours grouped by turbine state. (extension function)
eOTF5	Int	[amount] Value used for efficiency reporting. Number of hours grouped by turbine state. (extension function)
eOTF6	Int	[amount] Value used for efficiency reporting. Number of hours grouped by turbine state. (extension function)
eOTF7	Int	[amount] Value used for efficiency reporting. Number of hours grouped by turbine state. (extension function)
eOTF8	Int	[amount] Value used for efficiency reporting. Number of hours grouped by turbine state. (extension function)
eOTF9	Int	[amount] Value used for efficiency reporting. Number of hours grouped by turbine state. (extension function)
ePPF1	Float	[amount] Value used for efficiency reporting. Potential power grouped by turbine state. (extension function)
ePPF10	Float	[amount] Value used for efficiency reporting. Potential power grouped by turbine state. (extension function)
ePPF11	Float	[amount] Value used for efficiency reporting. Potential power grouped by turbine state. (extension function)
ePPF12	Float	[amount] Value used for efficiency reporting. Potential power grouped by turbine state. (extension function)
ePPF13	Float	[amount] Value used for efficiency reporting. Potential power grouped by turbine state. (extension function)
ePPF2	Float	[amount] Value used for efficiency reporting. Potential power grouped by turbine state. (extension function)
ePPF3	Float	[amount] Value used for efficiency reporting. Potential power grouped by turbine state. (extension function)
ePPF4	Float	[amount] Value used for efficiency reporting. Potential power grouped by turbine state. (extension function)
ePPF5	Float	[amount] Value used for efficiency reporting. Potential power grouped by turbine state. (extension function)
ePPF6	Float	[amount] Value used for efficiency reporting. Potential power grouped by turbine state. (extension function)
ePPF7	Float	[amount] Value used for efficiency reporting. Potential power grouped by turbine state. (extension function)
ePPF8	Float	[amount] Value used for efficiency reporting. Potential power grouped by turbine state. (extension function)
ePPF9	Float	[amount] Value used for efficiency reporting. Potential power grouped by turbine state. (extension function)
ExtErrHoursTot	Float	[hours] External Error Hours Total, tblSCTurCount.wtc_ExtErHrT_endvalu e
GeneratorHoursTot	Float	[hours] Generator Online Hours Tot tblSCTurCount.wtc_G1HrsTot_endvalue + wtc_G2HrsTot_endvalue
GridExportEnergy	Real	[kWh] Exported Energy at Grid station. tblGrid.ActivePowerExport
GridExportEnergyTot	BigInt	[kWh] Exported Energy at Grid station. tblGrid.ActivePowerExport
GridFault2Hours	Real	[hours] Grid Fault Hours

Column Name	Data Type	Description
		tblSCTurCount.wtc_GridFaCT_endvalue
GridFault2HoursTot	Float	[hours] Grid Fault Hours tblSCTurCount.wtc_GridFaCT_endvalue
GridFaultTot	Float	[hours] Grid Error Hours Total tblSCTurCount.wtc_GrdFaHrT_endvalue
GridImportEnergy	Real	[kWh] Imported Energy at Grid station. tblGrid.ActivePowerImport
GridImportEnergyTot	BigInt	[kWh] Imported Energy at Grid station. tblGrid.ActivePowerImport
GridNetto	Real	[kWh] Delivered minus received power at grid station. GridExportEnergy – GridImportEnergy
GridOkHours	Real	[hours] Grid OK hours. tblSCTurCount.wtc_GridOKHT_endval ue
GridOkHoursTot	Float	[hours] Grid OK hours. tblSCTurCount.wtc_GridOKHT_endval ue
GridOutTime	Real	[hours] Grid Error Hours tblSCTurCount.wtc_GrdFaHrT_endvalue
GridReactiveExportEnergy	Real	[kWh] Exported Reactive Energy at grid station. tblGrid.ReActivePowerExport
GridReactiveExportEnergyTot	BigInt	[kWh] Exported Reactive Energy at grid station. tblGrid.ReActivePowerExport
GridReactiveImportEnergy	Real	[kWh] Imported Reactive Energy at grid station. tblGrid.ReActivePowerImport
IntErrHoursTot	Float	[hours] Number of error hours. tblSCTurCount.wtc_ErrHrCnt_endvalue
ManufAvailTot	Real	[%] Same as AvailabillityTot tblSCTurCount.wtc_AvailPcT_endvalue
MeanFlapLoadBladeA	Real	[hours] Consumed life time of Blades tblScTurIntern.wtc_FlapLoad_FlpLoad A_mean
MeanFlapLoadBladeB	Real	[hours] Consumed life time of Blades tblScTurIntern.wtc_FlapLoad_FlpLoad B_mean
MeanFlapLoadBladeC	Real	[hours] Consumed life time of Blades tblScTurIntern.wtc_FlapLoad_FlpLoad C_mean
MeanPower	Real	[kW] Mean power during period. tblSCTurGrid.wtc_ActPower_mean
MeanTlcDeltaDay	Real	[days] Diff. between real and TLC age tblScTurIntern.wtc_TLC_DeltaDay_en dvalue
MeanTlcSpeedReduction	Real	[%] Speed reduction due to TLC tblScTurIntern.wtc_TLC_SpeedRed_e ndvalue
MetMaxGustWindSpeed	Real	[m/s] Subtotal max gust wind speed from meteorology station. tblSCMet.met_WindSpeedGustMaxRo tSub_endvalue
MetMeanWindSpeed	Real	[m/s] Subtotal mean wind speed from meteorology station. tblSCMet.met_WindSpeedMeanRotSu b_endvalue
MetWindInsRange	Real	[hours] Hours where the wind has been inside production range. tblSCMet.met_WindSpeedInsRangeR otTot_endvalue
MetWindInsRangeTot	Int	[hours] Hours where the wind has been inside production range. tblSCMet.met_WindSpeedInsRangeR otTot_endvalue
MetWindSpeed	Real	[m/s] Mean wind speed at meteorology station tblSCMet.met_WindSpeedRot_mean

Column Name	Data Type	Description
MetWindSpeedGustMaxTot	Real	[m/s] Max gust wind speed from meteorology station. tblSCMet.met_WindSpeedGustMaxRo tTot_endvalue
MetWindSpeedMeanTot	Real	[m/s] Mean wind speed from meteorology station. tblSCMet.met_WindSpeedMeanRotTo t_endvalue
NacelleWind	Real	[m/s] Average of wind speed measured by turbine. tblSCTurbine.wtc_AcWindSp_mean
NetEnergyTot	BigInt	[kWh] Equivalent to EnergyTot tblSCTurCount.wtc_kWG1Tot_endval ue + wtc_kWG2Tot_endvalue
NominalPower	Int	[kW] Turbine nominal power. tblStation.NominalPower
NotStandStillHours	Real	[hours] Not standstill hours tblSCTurCount.wtc_NotStStT_endvalue
NotStandStillHoursTot	Float	[hours] Not standstill hours tblSCTurCount.wtc_NotStStT_endvalue
OnOffCycles	Int	[amount] Value used for efficiency reporting. Number of starts and stops. tblSCTurFlag.wtc_ScStartC_counts
OtherHours	Real	[hours] Other Hours counter. tblSCTurCount.wtc_OtherHoT_endvalue
OtherHoursTot	Float	[hours] Other Hours counter. tblSCTurCount.wtc_OtherHoT_endvalue
OutCmdHours	Real	[hours] Commanded error active hours. tblSCTurFlag.wtc_ScComSto_timeon
OutCmdHoursTot	Real	[hours] Commanded error active hours. tblSCTurFlag.wtc_ScComSto_timeon
OutEnvHours	Real	[hours] Environment error active hours. tblSCTurFlag.wtc_ScEnvSto_timeon
OutEnvHoursTot	Real	[hours] Environment error active hours. tblSCTurFlag.wtc_ScEnvSto_timeon
OutGrdHours	Real	[hours] Grid error active hours. tblSCTurFlag.wtc_ScGrdSto_timeon
OutGrdHoursTot	Real	[hours] Grid error active hours. tblSCTurFlag.wtc_ScGrdSto_timeon
OutTurHours	Real	[hours] Turbine error active hours. tblSCTurFlag.wtc_ScTurSto_timeon
OutTurHoursTot	Real	[hours] Turbine error active hours. tblSCTurFlag.wtc_ScTurSto_timeon
PeriodHoursTot	Float	[hours] Total number of hours since reset. tblSCTurCount.wtc_AvailHrT_endvalue
ProdAvail	Real	[%] Specific for “Production Availability”. Production loss is based on the production of the neighbor turbine during error period. This sum up to a percentage value and a number of valid samples.
ProdAvailTotalLoss	Real	[kWh] Specific for “Production Availability”. Production loss is based on the production of the neighbor turbine during error period. This sum up to a percentage value and a number of valid samples.
ProdAvailValidSamples	SmallInt	[amount] Specific for “Production Availability”. Production loss is based on the production of the neighbor turbine during error period. This sum up to a percentage value and a number of valid samples.
ReactiveEnergyConsTot	BigInt	[kWh] Total reactive power import at grid station. tblGrid.ReActivePowerImport
ReactiveEnergyExport	Int	[kWh] Reactive energy export at turbine. tblSCTurCount.wtc_kVAG1ToE_endvalue +

Column Name	Data Type	Description
		wtc_kVAG2ToE_endvalue
ReactiveEnergyExportTot	BigInt	[kWh] Reactive energy export at turbine. tblSCTurCount.wtc_kVAG1ToE_endvalue + wtc_kVAG2ToE_endvalue
ReactiveEnergyImport	Int	[kWh] Reactive energy import at turbine. tblSCTurCount.wtc_kVAG1ToI_endval ue + wtc_kVAG2ToI_endvalue
ReactiveEnergyImportTot	BigInt	[kWh] Reactive energy import at turbine. tblSCTurCount.wtc_kVAG1ToI_endvalue + wtc_kVAG2ToI_endvalue
ResetDateTot	DateTime	[timestamp] Timestamp of reset of total counters. tblSCTurCount.wtc_ResetTmT_endval ue
SamplePeriode	Int	[hours] Calculated length of period (normally 24 hours)
Samples	SmallInt	[%] Percentage amount of samples compared to expected amount. Valid samples (turbine online etc.) during period are counted
SamplesTot	Int	[%] Percentage amount of samples compared to expected amount. Valid samples (turbine online etc.) during period are counted
SpecialAvailGridTime	Real	[hours] Values used for Special availability (extension function). Based on values from tblAlarmLog and tblStationAlarmText.
SpecialAvailHighWindTime	Real	[hours] Values used for Special availability (extension function). Based on values from tblAlarmLog and tblStationAlarmText.
SpecialAvailParkPilotTime	Real	[hours] Values used for Special availability (extension function). Based on values from tblAlarmLog and tblStationAlarmText.
SpecialAvailStopTime	Real	[hours] Values used for Special availability (extension function). Based on values from tblAlarmLog and tblStationAlarmText.
StandStillHours	Real	[hours] Standstill hours. tblSCTurCount.wtc_StandStT_endvalue
StandStillHoursTot	Float	[hours] Standstill hours. tblSCTurCount.wtc_StandStT_endvalue
StartsAttempted	Int	[amount] Starts attempted. tblSCTurFlag.wtc_ScAStart_counts
StartsAttemptedTot	Int	[amount] Starts attempted. tblSCTurFlag.wtc_ScAStart_counts
StartsCompleted	Int	[amount] Starts completed tblSCTurFlag.wtc_ScStartC_counts
StartsCompletedTot	Int	[amount] Starts completed tblSCTurFlag.wtc_ScStartC_counts
StationGroupId	SmallInt	[ID] Defines the type of station (grid, turbine etc.) tblStation.StationGroupId
StationId	Int	[ID] Station ID
StopsCommanded	Int	[amount] Commanded Error counter. tblSCTurCount.wtc_ScComErr_endvalue
StopsCommandedTot	Int	[amount] Commanded Error counter. tblSCTurCount.wtc_ScComErr_endvalue
StopsEnvironmental	Int	[amount] Environmental error counter. tblSCTurCount.wtc_ScEnvErr_endvalue
StopsEnvironmentalTot	Int	[amount] Environmental error counter.

Column Name	Data Type	Description
		tblSCTurCount.wtc_ScEnvErr_endvalue
StopsGridFault	Int	[amount] Grid Error counter. tblSCTurCount.wtc_ScGrdErr_endvalue
StopsGridFaultTot	Int	[amount] Grid Error counter. tblSCTurCount.wtc_ScGrdErr_endvalue
StopsNoiseZ12	Real	[hours] Low Noise total hour counter for zones 1 & 2. tblSCTurCount.wtc_LnZ12HrT_endval ue
StopsNoiseZ12Tot	Float	[hours] Low Noise total hour counter for zones 1 & 2. tblSCTurCount.wtc_LnZ12HrT_endval ue
StopsNoiseZ3	Real	[hours] Low Noise total hour counter for zone 3. tblSCTurCount.wtc_LnZ3HrTo_endval ue
StopsNoiseZ3Tot	Float	[hours] Low Noise total hour counter for zone 3. tblSCTurCount.wtc_LnZ3HrTo_endval ue
StopsTurbineFault	Int	[amount] Turbine error counter. tblSCTurCount.wtc_ScTurErr_endvalue
StopsTurbineFaultTot	Int	[amount] Turbine error counter. tblSCTurCount.wtc_ScTurErr_endvalue
TimeErr	Real	[hours] Number of error hours. tblSCTurCount.wtc_ErrHrCnT_endvalue
TimeExternalErr	Real	[hours] External error hours. tblSCTurCount.wtc_ExtErHrT_endvalue
TimeGenerator	Real	[hours] Generator online hours. tblSCTurCount.wtc_G1HrsTot_endvalue + wtc_G2HrsTot_endvalue
TimeOk	Real	[hours] Number of hours in period. tblSCTurCount.wtc_AvailHrT_endvalue
TimeReady	Real	[hours] Turbine released. tblSCTurCount.wtc_TurRdHrT_endvalue
TimeStamp	DateTime	[timestamp] TimeStamp for logging
TransitionsHighToLow	Int	[amount] Large to small generator transitions. tblSCTurCount.wtc_ScLaToSm_counts
TransitionsHighToLowTot	Int	[amount] Large to small generator transitions. tblSCTurCount.wtc_ScLaToSm_counts
TransitionsLowToHigh	Int	[amount] Small to large generator transitions. tblSCTurCount.wtc_ScSmToLa_count
TransitionsLowToHighTot	Int	[amount] Small to large generator transitions. tblSCTurCount.wtc_ScSmToLa_counts
TurbineNotReadyTot	Float	[hours] Equivalent to IntErrHoursTot. tblSCTurCount.wtc_ErrHrCnT_endvalue
TurbineOkHours	Real	[hours] Hours where no Stop type is active & WTC has Power tblSCTurCount.wtc_TurOkHrT_endvalue
TurbineOkHoursTot	Float	[hours] Hours where no Stop type is active & WTC has Power tblSCTurCount.wtc_TurOkHrT_endvalue
TurbineReadyTot	Float	[hours] Turbine released. tblSCTurCount.wtc_TurRdHrT_endvalue
WindFaultHours	Real	[hours] Wind fault hours. tblSCTurCount.wtc_WindFauT_endvalue
WindFaultHoursTot	Float	[hours] Wind fault hours. tblSCTurCount.wtc_WindFauT_endvalue
WindInsRange	Real	[hours] Hours the wind speed (30s mean) has been > 5 m/s and < 25 m/s tblSCTurCount.wtc_WndIRHrT_endvalue

Column Name	Data Type	Description
WindInsRangeTot	Float	[hours] Hours the wind speed (30s mean) has been > 5 m/s and < 25 m/s tblSCTurCount.wtc_WndIRHrT_endvalue
WindSpeedGustMaxSub	Real	[m/s] Highest (30s mean) wind speed. tblSCTurCount.wtc_GustWndS_endvalue
WindSpeedGustMaxTot	Real	[m/s] Highest (30s mean) wind speed. tblSCTurCount.wtc_GustWndS_endvalue
WindSpeedMeanSub	Real	[m/s] Overall mean wind speed. tblSCTurCount.wtc_MeanWndS_endvalue
WindSpeedMeanTot	Real	[m/s] Overall mean wind speed. tblSCTurCount.wtc_MeanWndS_endvalue