

Example file generated by 'real' Cumulus		Contents	HWA Application	Domoticz		Script-operation	Remarks
#		Short description	B = Basic/Basis O = Option/ Optie D = Don't care	svalue	API/ JSON	Generation of data-contents	Fields marked <b>B</b> are mandatory for the minimal uploadfile for HWA. Fields marked <b>O</b> are optional, with data to be used if presented. For commonality with Cumulus-layout all other fields must be present, but their contents will not be used at the HWA-server: minimal placeholder-content per field is --- If the file is uniquely generated for HWA-application, then all light & dark blue-marked fields may be deleted.
0	BOF	File-Header	B				Fixed contents/ character-string
1							
2	\$stationDate = "07-01-2021";	Local Date (CET)	B		x	x	Extract in script
3	\$stationTime = "18:30";	Local time (CET)	B		x	x	Extract in script
4							
5	\$tempUnit = "&#176;C";	Unit	O				Fixed contents/ character-string
6	\$shumUnit = "%";	Unit	O				Fixed contents/ character-string
7	\$sbarUnit = "hPa";	Unit	O				Fixed contents/ character-string
8	\$rainUnit = "mm";	Unit	O				Fixed contents/ character-string
9	\$rateUnit = "mm/hr";	Unit	O				Fixed contents/ character-string
10	\$windUnit = "km/h";	Unit	O				Fixed contents/ character-string
11							
12	\$sunriseTime = "08:45";	Sunrise (CET)	B		x	x	Extract in script
13	\$sunsetTime = "16:32";	Sunset (CET)	B		x	x	Extract in script
14							
15	\$soutsideTemp = "1,2";	Current Temperature	B	x	x	x	Extract in script
16	\$hioutsideTemp = "3,3";	Highest Temp. Today	B			x	Calculate in script/ from Database?
17	\$slowoutsideTemp = "0,6";	Lowest Temp. Today	B			x	Calculate in script/ from Database?
18							
19	\$slowoutsideTempTime = "00:00";	Time of Lowest Temp.	B			x	Calculate in script/ from Database?
20	\$hioutsideTempTime = "13:54";	Time of Highest Temp.	B			x	Calculate in script/ from Database?
21							
22	\$slowMonthlyOutsideTemp = "----";		D				
23	\$hiMonthlyOutsideTemp = "----";		D				
24	\$hiYearlyOutsideTemp = "----";		D				
25	\$slowYearlyOutsideTemp = "----";		D				
26							
27	\$soutsideHumidity = "97";	Current Humidity	B	x	x	x	Extract in script
28	\$slowHumidity = "----";		D				
29	\$hiHumidity = "----";		D				
30	\$slowHumTime = "----";		D				
31	\$hiHumTime = "----";		D				
32	\$hiMonthlyHumidity = "----";		D				
33	\$slowMonthlyHumidity = "----";		D				
34	\$hiYearlyHumidity = "----";		D				
35	\$slowYearlyHumidity = "----";		D				
36							
37	\$soutsideDewPt = "0,8";	Current Dewpoint	B	x	x	x	Extract in script
38	\$hiDewpoint = "----";		D				
39	\$slowDewpoint = "----";		D				
40	\$hiDewpointTime = "----";		D				
41	\$slowDewpointTime = "----";		D				
42	\$hiMonthlyDewpoint = "----";		D				
43	\$slowMonthlyDewpoint = "----";		D				
44	\$hiYearlyDewpoint = "----";		D				
45	\$slowYearlyDewpoint = "----";		D				

46  
 47 \$windSpeed = "0,0";  
 48 \$wind10Avg = "0,0";  
 49 \$hiWindSpeed = "3,0";  
 50 \$hiWindSpeedTime = "13:14";  
 51 \$hiMonthlyWindSpeed = "----";  
 52 \$hiYearlyWindSpeed = "----";  
 53  
 54 \$windDir = "313";  
 55 \$windDirection = "-";  
 56  
 57 \$windChill = "1,2";  
 58 \$lowWindchill = "----";  
 59 \$lowWindchillTime = "----";  
 60 \$lowMonthlyWindchill = "----";  
 61 \$lowYearlyWindchill = "----";  
 62  
 63 \$outsideHeatIndex = "1,2";  
 64 \$hiHeatindex = "----";  
 65 \$hiHeatindexTime = "----";  
 66 \$hiMonthlyHeatindex = "----";  
 67 \$hiYearlyHeatindex = "----";  
 68  
 69 \$thw = "----";  
 70  
 71 \$hiTHSWindex = "----";  
 72 \$hiTHSWindexTime = "----";  
 73 \$hiMonthlyTHSWindex = "----";  
 74 \$hiYearlyTHSWindex = "----";  
 75  
 76 \$barometer = "1010,3";  
 77 \$barTrend = "Rising slowly";  
 78 \$lowBarometer = "1009,6";  
 79 \$hiBarometer = "1013,0";  
 80 \$lowMonthlyBarometer = "----";  
 81 \$hiMonthlyBarometer = "----";  
 82 \$lowYearlyBarometer = "----";  
 83 \$hiYearlyBarometer = "----";  
 84 \$lowBarometerTime = "14:46";  
 85 \$hiBarometerTime = "00:00";  
 86  
 87 \$dailyRain = "1,6";  
 88 \$stormRain = "----";  
 89 \$monthlyRain = "4,8";  
 90 \$totalRain = "4,8";  
 91  
 92 \$rainRate = "0,0";  
 93 \$hiRainRate = "0,0";  
 94 \$hiRainRateTime = "00:00";

Current Windspeed	O	x	x	x	Extract in script	
Average Windspeed	B			x	Calculate in script/ from Database?	If not available, contact HWA for resolution
Highest Windgust	B			x	Calculate in script/ from Database?	Latest Gust-info is in svalue/JSON. If no gust info, then placeholder = Current Windspeed.
Time of Highest Windgust	B			x	Calculate in script/ from Database?	To be aligned with selection for Highest Windgust.
	D					
	D					
Current Winddirection (number)	O	x	x	x	Extract in script	
Current Winddirection (text)	B	x	x	x	Extract in script	max. 3 letters [allowed catalogue is NEWS (English) or NOWZ(Nederlands)]
Current Windchill	B			x	Calculate in script/ from Database? [fill-in is more important than preference for formula]	Formula: see <a href="https://en.wikipedia.org/wiki/Wind_chill">https://en.wikipedia.org/wiki/Wind_chill</a> or <a href="https://sciencing.com/calculate-wind-chill-factor-5981683.html">https://sciencing.com/calculate-wind-chill-factor-5981683.html</a> or <a href="https://www.wikihow.com/Calculate-Wind-Chill#Calculating-Wind-Chill-Yourself">https://www.wikihow.com/Calculate-Wind-Chill#Calculating-Wind-Chill-Yourself</a>
	D					
	D					
	D					
	D					
Current HeatIndex	O			x	Calculate in script/ from Database?	Formula: see <a href="https://en.wikipedia.org/wiki/Heat_index">https://en.wikipedia.org/wiki/Heat_index</a> or <a href="https://sciencing.com/calculate-heat-index-formula-6200182.html">https://sciencing.com/calculate-heat-index-formula-6200182.html</a>
	D					
	D					
	D					
	D					
	D					
	D					
	D					
Actual pressure at MSL	B	x	x	x	Extract in script	MSL is mandatory! If stationpressure available, then correction required.
Pressure Trend	O			x	Calculate in script/ from Database?	Requires calculation of deltaP/1hour and deltaP/3hours, in hPa
Lowest Pressure Today	O			x	Calculate in script/ from Database?	Interpretation of values into text => 5* or 7* text [English or Dutch]
Highest Preessure Today	O			x	Calculate in script/ from Database?	
	D					
	D					
	D					
	D					
Time Lowest	O			x	Calculate in script/ from Database?	
Time Highest Rain Rate	O			x	Calculate in script/ from Database?	
Rain Today	B	x	x	x	Extract in script	Reset to 0 at 00:00 CET
	D					
Rain This Month	B			x	Calculate in script/ from Database?	
Rain This Year	D	x	x	x	Calculate in script/ from Database?	Not used in HWA
Rain This Hour	O	x	x	x	Extract in script	Not used in HWA if interval > 5 minutes
Highest RainRate Today	D			x	Calculate in script/ from Database?	
Time Highest Rain Rate	D			x	Calculate in script/ from Database?	



\$stationAlt = "5";  
 \$stationLon = "3.742904";  
 \$stationLat = "51.160928";  
  
 \$altUnit = "m";  
  
 \$stationStatus = "ONLINE";  
 \$stationWithRainModule = "YES";  
 \$stationWithWindModule = "NO";

	D					To be determined how to process if the station becomes mobile
	D					To be determined how to process if the station becomes mobile
	D					To be determined how to process if the station becomes mobile
	D					To be determined how to process if the station becomes mobile
	D					Any other report than 'ONLINE' indicates that stationdata is invalid
	D					Configuration info indicating whether Rain-module is part of configuration
	D					Configuration info indicating whether Anemo-module is part of configuration

Formula/ Classification for barotrend as found in Davis-documentation and at weather-forums.

Barotrend [text/tekst]	Formula
Snel stijgend / Rising rapidly	barorate >= +2 hPa/3hr
Stijgend / Rising	+1 hPa/3hr <= barorate < +2 hPa/3hr
Langzaam stijgend / Rising slowly	+0,7 hPa/3hr < barorate < +1 hPa/3hr
Stabiel / Steady	-0,7 hPa/3hr <= barorate <= +0,7 hPa/3hr
Langzaam dalend / Falling slowly	-1 hPa/3hr < barorate < -0,7 hPa/3hr
Dalend / Falling	-2 hPa/3hr < barorate <= -1 hPa/3hr
Snel dalend / Falling rapidly	barorate <= -2 hPa/3hr

Decoding/classification as used by AWEKAS

N	Formula for numeric 5 levels
2	barorate >= +2 hPa/3hr
1	+1 hPa/3hr <= barorate < +2 hPa/3hr
0	-1 hPa/3hr < barorate < +1 hPa/3hr
-1	-2 hPa/3hr < barorate <= -1 hPa/3hr
-2	barorate <= -2 hPa/3hr