## C46400: Measurement technique in wind energy

## Dataset\_as03: Access to and description of input dataset



Assignment AS03 requires access to a large dataset, which are stored in DB=c46400; TB="dataset\_as03" with the access properties listed in Table 1.

Table 1: Database access properties

Server	data02.windenergy.dtu.dk		
Port	3306		
Username	students		
Password	H040		
Database	c46400		
Table	dataset_as03		

The *dataset\_AS03* used in the assignment AS03 includes 39 signals, which are defined in Table 2. Note that the second field, *Date* is absent – please ignore this. Use *name* instead.

Table 2: Definitions of signals in Dataset\_AS03

Column	Sensor	meas. height	Units	Description
name	-	-	yyyymmddhhmr	time stamp
Date	-	-	dd-mm-yyyy hh:	time stamp
Cup116m_Mean	Windsensor cup	116.5m	m/s	average
Cup116m_Stdv	Windsensor cup	116.5m	m/s	standard deviation
Cup116m_Min	Windsensor cup	116.5m	m/s	minimum
Cup116m_Max	Windsensor cup	116.5m	m/s	maximum
Cup114m_Mean	Windsensor cup	114m	m/s	average
Cup114m_Stdv	Windsensor cup	114m	m/s	standard deviation
Cup114m_Min	Windsensor cup	114m	m/s	minimum
Cup114m_Max	Windsensor cup	114m	m/s	maximum
Cup100m_Mean	Windsensor cup	100m	m/s	average
Cup100m_Stdv	Windsensor cup	100m	m/s	standard deviation
Cup100m_Min	Windsensor cup	100m	m/s	minimum
Cup100m_Max	Windsensor cup	100m	m/s	maximum
Vane100m_Mean	Potentiometer van	100m	deg	average
Vane100m_Stdv	Potentiometer van	100m	deg	standard deviation
Vane100m_Min	Potentiometer van	100m	deg	minimum
Vane100m_Max	Potentiometer van	100m	deg	maximum
Temp100m_Mean	PT100	100m	degC	average
Temp100m_Stdv	PT100	100m	degC	standard deviation
Temp100m_Min	PT100	100m	degC	minimum
Temp100m_Max	PT100	100m	degC	maximum
Sonic100m_Scalar_Mean	Metek sonic	100m	m/s	average wind speed (scalar mean)
Sonic100m_Scalar_Stdv	Metek sonic	100m	m/s	standard deviation
Sonic100m_Scalar_Min	Metek sonic	100m	m/s	minimum
Sonic100m_Scalar_Max	Metek sonic	100m	m/s	maximum
Sonic100m_Dir	Metek sonic	100m	deg	mean wind direction
Sonic100m_Vector_Mean	Metek sonic	100m	m/s	average wind speed (vector mean)
Spd	Windcube	100m	m/s	average wind speed
Spd_stdv	Windcube	100m	m/s	wind speed standard deviation
Spd_min	Windcube	100m	m/s	minimum wind speed
Spd_max	Windcube	100m	m/s	maximum wind speed
Dir	Windcube	100m	deg	average wind direction
Dir_stdv	Windcube	100m	deg	standard deviation of the wind direction
W	Windcube	100m	m/s	Average of the vertical wind speed
W_stdv	Windcube	100m	m/s	Standard deviation of the vertical wind
				Availability - shows how many samples have
Available	Windcube	100m	%	a CNR above a certain threshold
CNR	Windcube	100m	dB	10min average, Carrier to noise ratio
Broad	Windcube	100m	m/s	Spectral broadening, average value