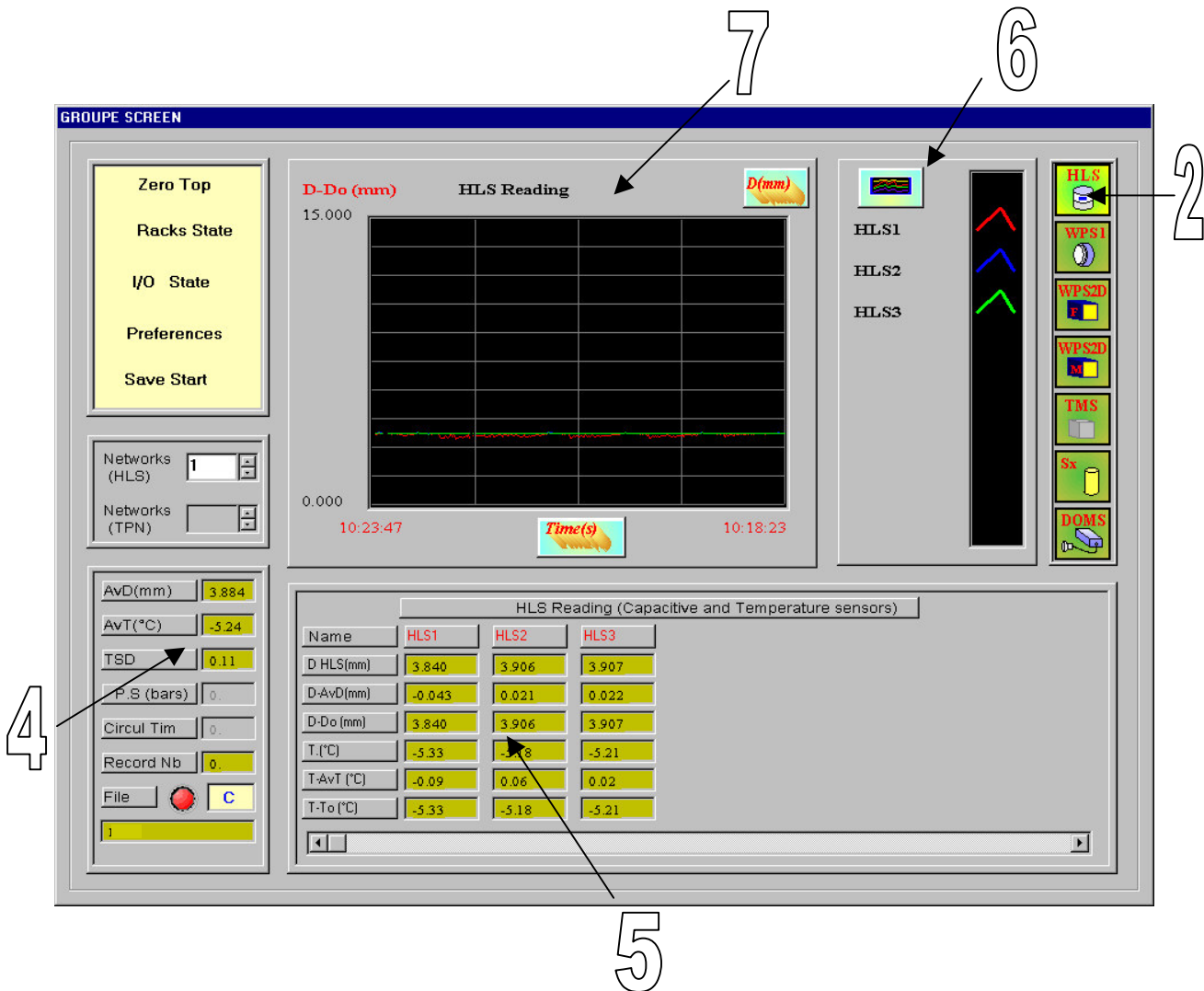


4.4.6. Selection of the HLS icon



Clicking on the HLS icon of the sensors table (table 2) allows to display all HLS measurement data on graph 7 and tables 5 and 6.

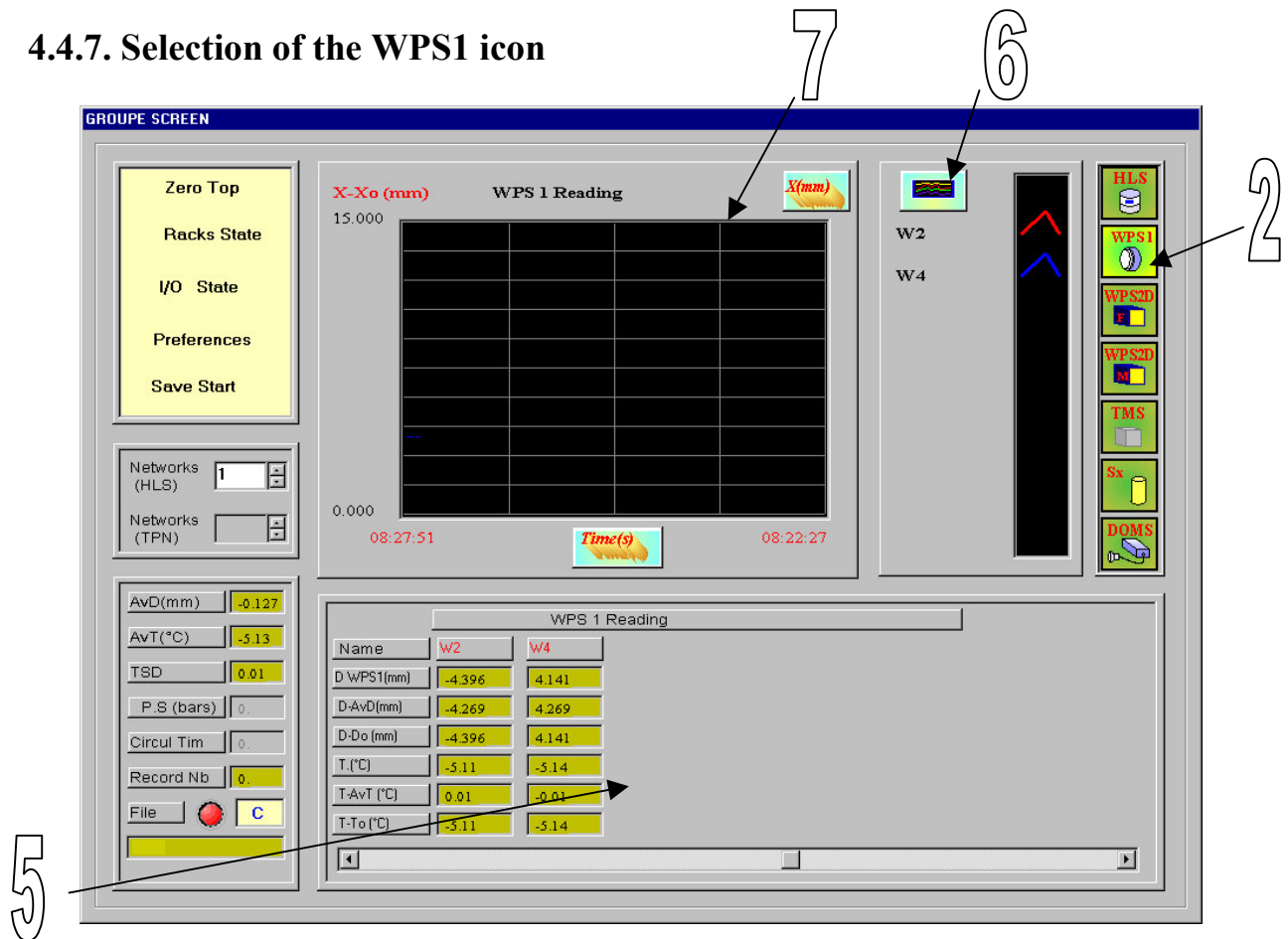
4 Statistics

Av D(mm) :	average of HLS measurement data of the corresponding network
Av T(°C) :	average of HLS temperatures (in Celcius degrees) of the corresponding network
T.SD :	temperatures standard deviation
PS (bars) :	pressure measurement
Circul tim :	circulation time (network with water circulation)
Record nb :	number of savings in the active file
File :	file name

5 Measurements

Name :	sensor number
D HLS (mm) :	distance in millimeters measured by the sensor
D-AvD (mm) :	difference between the measurement D of the considered sensor and the distances average value AvD
D-Do (mm) :	difference between the sensor measurement and the reference value Do given by the Zero Top
T (°C) :	sensor temperature
T-AvT (°C) :	difference between the temperature of the considered sensor and the sensors temperatures average value
T-To(°C) :	difference between the temperature of the considered sensor and the Zero Top value of this same sensor

4.4.7. Selection of the WPS1 icon

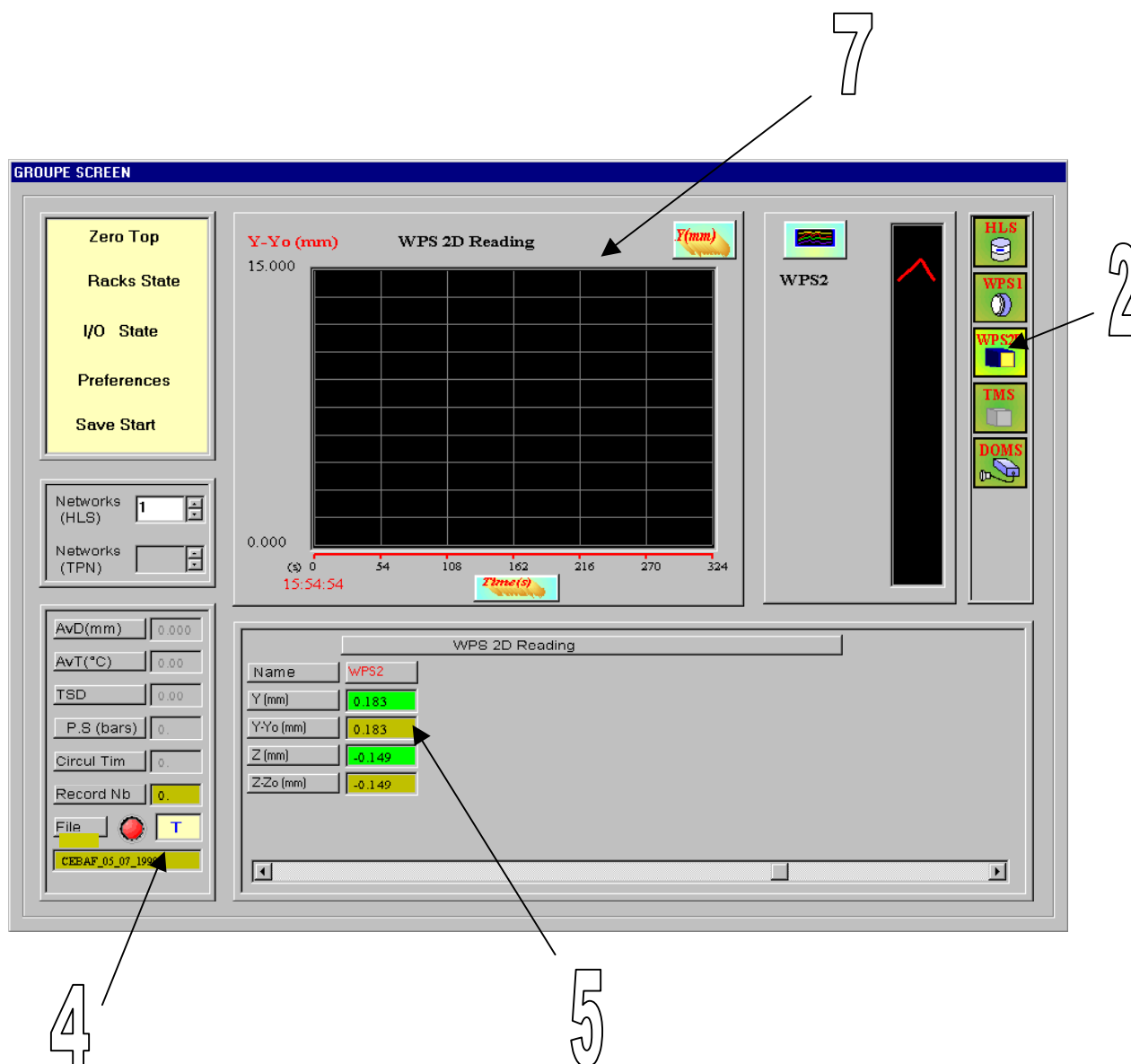


Clicking on the WPS1 icon of the sensors table (table 2) allows to display all WPS measurement data on graph 7 and tables 5 and 6.

5 Measurements

Name :	sensor number
DWPS1 (mm) :	distance in millimeters measured by the sensor
D-AvD (mm) :	difference between the measurement D of the considered sensor and the distances average value AvD
D-Do (mm) :	difference between the sensor measurement and the reference value Do given by the Zero Top
T (°C) :	sensor temperature
T-AvT (°C) :	difference between the temperature of the considered sensor and the sensors temperatures average value
T-To (°C) :	difference between the temperature of the considered sensor and the Zero Top value of this same sensor

4.4.8. Selection of the WPS 2D icon



Clicking on the WPS 2D icon of the sensors table (tableau 2) allows to display all WPS 2D measurement data on graph 7 and table 5.

5 Measurements

Name : sensor number

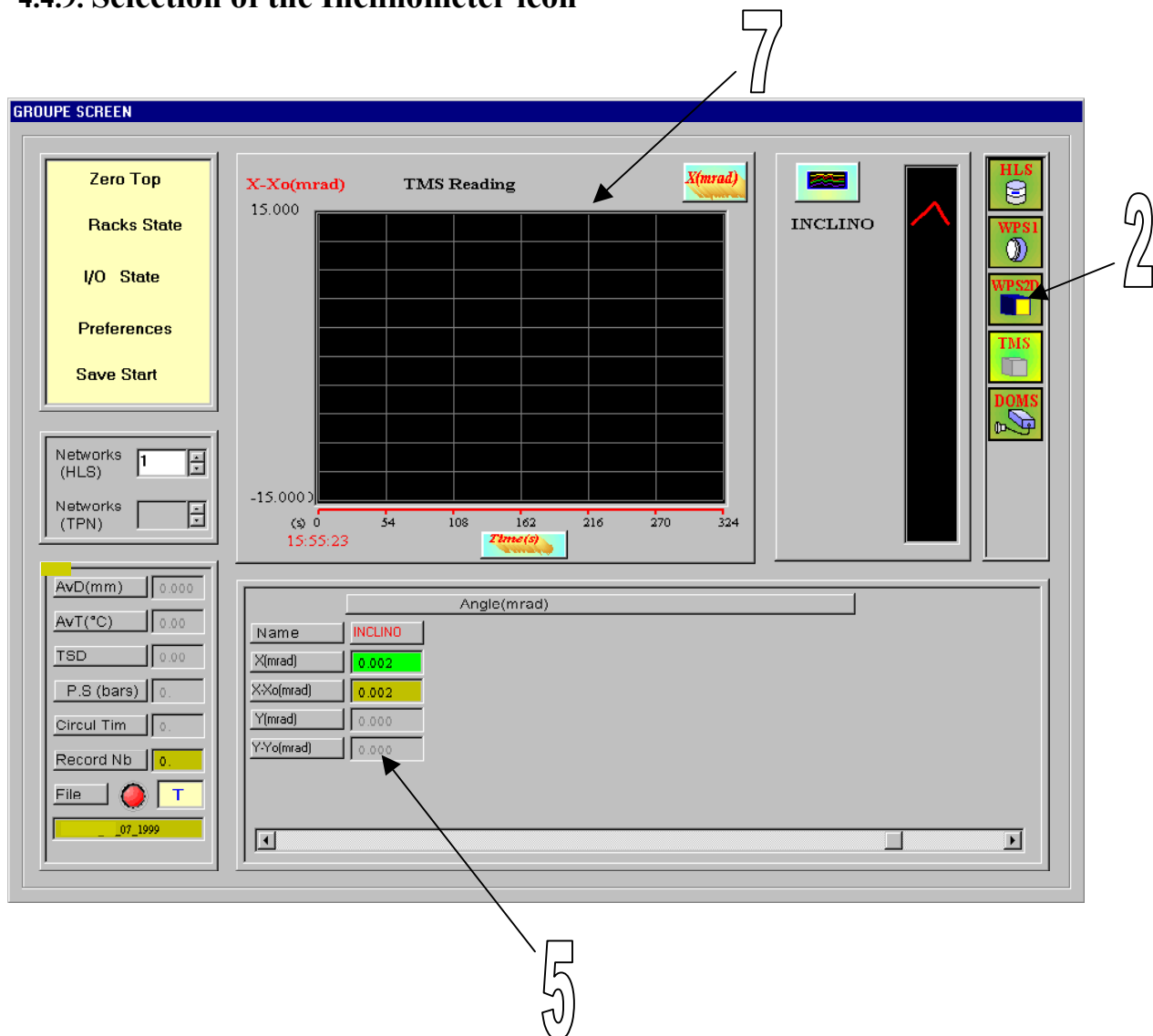
X (mm) : horizontal distance in millimeters measured by the sensor

X-Xo (mm) : difference between the measured distance X and the Zero Top value

Z (mm) : vertical distance in millimeters measured by the sensor

Z-Zo (mm) : difference between the measured distance Z and the Zero Top value

4.4.9. Selection of the Inclinometer icon



Clicking on the Inclinometer icon of the sensors table (tableau 2) allows to display all Inclinometer measurement data on graph 7 and tables 5 and 6.

5 Measurements

Name : sensor number

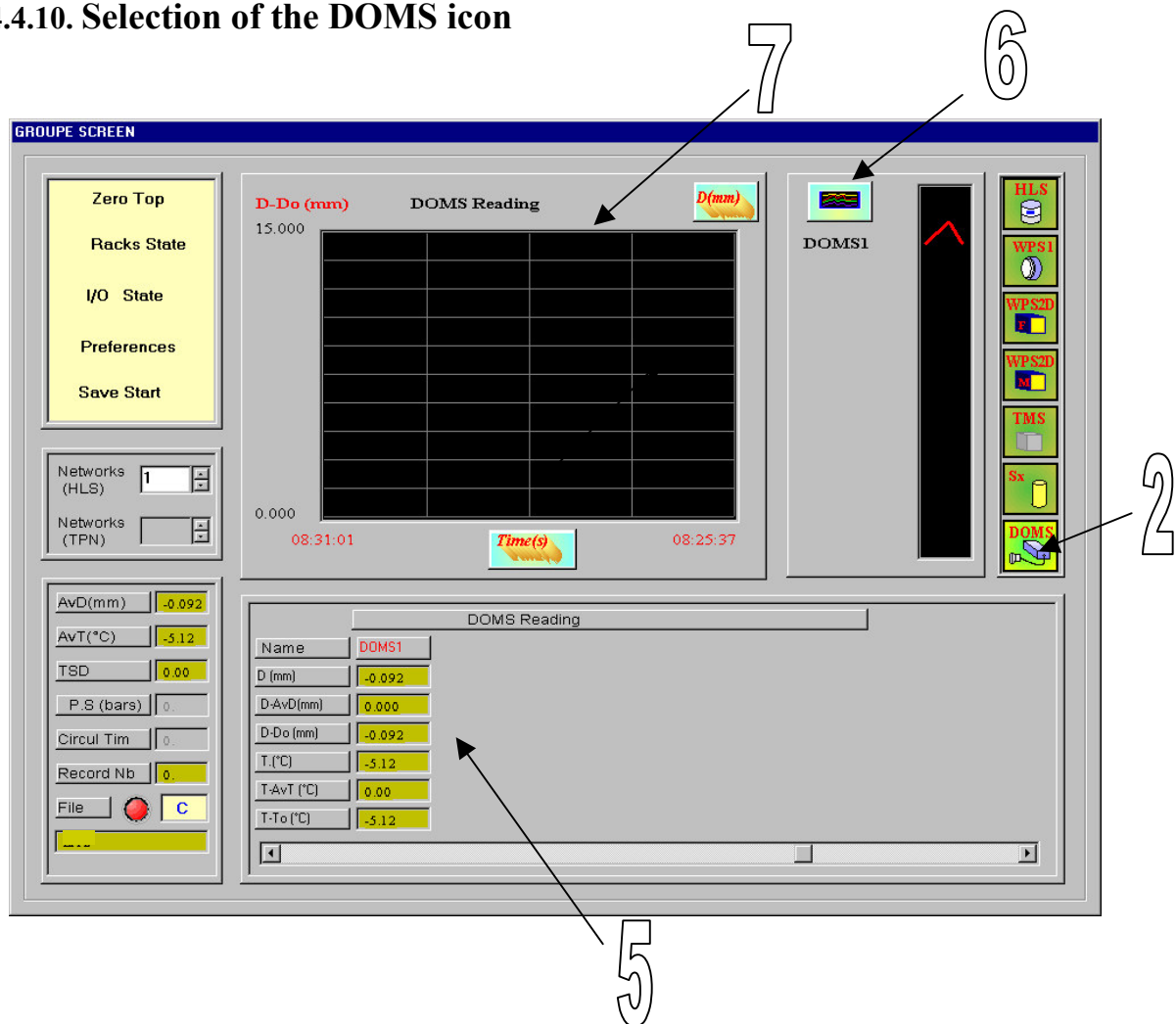
XA (mrad) : angle in grad. measured by the sensor (Channel A)

XA-Xo (mrad) : difference between the measured angle and the Zero Top value

YA (mrad) : angle in grad. measured by the sensor (Channel B)

YA-Yo (mrad) : difference between the measured angle and the Zero Top value

4.4.10. Selection of the DOMS icon



Clicking on the DOMS icon of the sensors table (tableau 2) allows to display all DOMS measurement data on graph 7 and tables 5 and 6.

5 Measurements

Name :	sensor number
D (mm) :	distance in millimeters measured by the sensor
D-AvD (mm) :	difference between the measurement D of the considered sensor and the distances average value AvD
D-Do (mm) :	difference between the measured distance and the Zero Top value
T (°C) :	sensor temperature
T-AvT (°C) :	difference between the temperature of the considered sensor and the average value of the sensors temperatures
T-To (°C):	difference between the temperature of the considered sensor and the Zero Top value

4.5 Format of the saving file

The file is saved in text format which can be read by simple word processing. It is better to open it by spreadsheet and use a tabulation as separator so as to be able to make calculations. In that case, it may be necessary to replace all points of the float values (or double) by commas (american or european unit system).

The file is organized as follows :

The two first lines contain the sampling period and the saving period so as to know the measurement conditions.

Then come the data headers :

- 1st column: record number
- 2nd column: date
- 3rd column: time
- 4th column: network 1 (empty column)
- 5th column: Distance measurement sensor 1 (average value)
- 6th column: Distance standard deviation measurement sensor 1 (standard deviation on average value)
- 7th column: Temperature measurement sensor 1 (average value)
- 8th column: Temperature standard deviation measurement sensor 1 (standard deviation on average value)
-
-
-

- Xth column: Rack (Empty column)
- X+1th column: R_1 (Number of points to calculate the standard deviation)
- X+2th column : I/O_1 state (if TAP EBC is associated to rack 1)
- X+3th column : I/O_2 state (if TAP EBC is associated to rack 1)
- X+4th column : I/O_3 state (if TAP EBC is associated to rack 1)
- X+5th column : I/O_4 state (if TAP EBC is associated to rack 1)
- X+6th column : I/O_5 state (if TAP EBC is associated to rack 1)
- X+7th column : I/O_6 state (if TAP EBC is associated to rack 1)
- X+8th column : I/O_7 state (if TAP EBC is associated to rack 1)
- X+9th column : I/O_8 state (if TAP EBC is associated to rack 1)

Example : Record of a HLS measurement, with D1 for distance and T1 for temperature.

Sampl P	1 s							
Acqui P	15 s			(mm)	(rms)	(°C)	(RMS)	nb
Number	Date	Time	Network_1	D_D1	E_D_D1	T_D1	E_T_D1	R_1
1	12/05/98	10:52:00		4,2930	0,0043	23,6388	0,0038	15
2	12/05/98	10:52:15		4,2839	0,0042	23,6376	0,0018	15
3	12/05/98	10:52:30		4,2813	0,0046	23,6395	0,0051	15
4	12/05/98	10:52:45		4,2789	0,0037	23,6393	0,0028	15
5	12/05/98	10:53:00		4,2763	0,0039	23,6376	0,0058	15

The standard deviation is calculated with the following formula :

$$\sqrt{\frac{\sum X^2}{N} - (\bar{X})^2}$$

APPENDIX 1 :

Cable layout

APPENDIX 2 :

Example of synoptic

