

# **The Experiments of Weather Instruments & Observations lab.**

**(First Semester)**

**ASD / 2<sup>nd</sup> Stage**

**2021 – 2022**

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## Standard level 1000 (hpa):

00h<sub>1</sub>h<sub>1</sub>h<sub>1</sub> T<sub>1</sub>T<sub>1</sub>T<sub>1</sub>a<sub>1</sub>D<sub>1</sub>D<sub>1</sub> d<sub>1</sub>d<sub>1</sub>d<sub>1</sub>f<sub>1</sub>f<sub>1</sub> ←

This level is close to the surface of the station and represents the lower part of the troposphere (a layer extending from the surface of the earth to 12 km during which most weather events occur) close to the surface of the earth, the record height of this level is (113 gpm), and its average temperature is (14.3 °C).

The pressure is written on the station as it is in the code.

00240 ⇒ ○<sup>240</sup>

TTAA 73121	TTAA 16061
40580 00202 11825 32509	40375 00195 12864 32012
17240 00167 19242 14514	62414 00142 13687 30010

## Standard level 850 (hpa):

85h<sub>2</sub>h<sub>2</sub>h<sub>2</sub> T<sub>2</sub>T<sub>2</sub>T<sub>2</sub>a<sub>2</sub>D<sub>2</sub>D<sub>2</sub> d<sub>2</sub>d<sub>2</sub>d<sub>2</sub>f<sub>2</sub>f<sub>2</sub> ←

The standard altitude for this level is (1457 gpm), and its average temperature is (5 °C).

To calculate the value of the real height, add the number **1** to the height from **the left side**. In the case of drawing on the station, the value is written as it is in the code.

85535 ⇒ 1535 ⇒ down ⇒ 535  
 85573 ⇒ 1573 ⇒ down ⇒ 573

TTAA 73121	TTAA 16061
40580 85583 03440 27517	40375 85578 08256 29612
17240 85514 05518 04011	62414 85616 04679 17003

## Standard level 700 (hpa):

70h<sub>3</sub>h<sub>3</sub>h<sub>3</sub> T<sub>3</sub>T<sub>3</sub>T<sub>3</sub>a<sub>3</sub>D<sub>3</sub>D<sub>3</sub> d<sub>3</sub>d<sub>3</sub>d<sub>3</sub>f<sub>3</sub>f<sub>3</sub>



The standard altitude for this level is (3043 gpm), and its average temperature is (-4.6 °C).

To calculate the value of the ***real height*** of this level, add the number 2 to the left if the height values after the number 70 are (5,6,7,8,9), and add the number 3 to the left if the height values after the number 70 are (0,1,2,3,4), and in the case of drawing on the station, write the value as it is in the code.

70149     $\Rightarrow$     3149     $\Rightarrow$     149    down

70621     $\Rightarrow$     2621     $\Rightarrow$     621    down

TTAA 73121	TTAA 16061
40580 70162 03316 29019	40375 70633 11958 26106
17240 70421 05364 15025	62414 70856 15338 06505