The Experiments of Weather Instruments & Observations lab.

(First Semester)

ASD / 2nd Stage

2021 - 2022

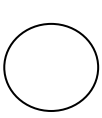
Preparing by: L. Nagham T. Ibraheem, L. Ruaa M. Ibraheem

Standard level 1000 (hpa):

$$00h_1h_1h_1 \quad T_1T_1T_{a1}D_1D_1 \quad d_1d_1d_1f_1f_1 \quad \leftarrow$$

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 ⟹ 

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

Standard level 850 (hpa):

$$85h_2h_2h_2 \quad T_2T_2T_{a2}D_2D_2 \quad d_2d_2d_2f_2f_2 \quad \leftarrow$$

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 ⟹ drown ⟹ 535
85573 ⟹ 1573 ⟹ drown ⟹ 573

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

Standard level 700 (hpa):

$70h_3h_3h_3 \quad T_3T_3T_{a3}D_3D_3 \quad d_3d_3d_3f_3f_3$ ←

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 ⇨ 3149 ⇨ 149 drown

70621 ⇨ 2621 ⇨ 621 drown

TTAA 73121	
40580 70162 03316 29019	40375 70633 11958 26006
17240 70421 05364 15025	62414 70856 15338 06005