

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 500 (hpa):

50h4h4h4 T₄T₄T_aD₄D₄ d₄d₄d₄f₄f₄ ←

The standard altitude for this level is (5576 gpm), and its average temperature is (-21.2 °C).

To calculate the value of the real height, the number **0** is added to **the right**, and in the case of the drawing, it is written as on the station as it is in the code.

50569 ⇒ 5690 real height ⇒ 569 drown

TTAA 73121	TTAA 16061
40580 50577 18947 30017	40375 50531 17120 20015
17240 50581 16963 15025	62414 50557 10183 33006

Standard level 300 (hpa):

30h6h6h6 T₆T₆T_aD₆D₆ d₆d₆d₆f₆f₆ ←

This axis is important in the study of the jet stream, the record height of this level (9168 gpm), and its average temperature (-44.6 °C).

To find the value of the real height, the number **0** is added to **the right**, and in the case of the drawing, it is written as on the station as it is in the code.

30923 ⇒ 9230 real height ⇒ 923 drown

TTAA 73121	TTAA 16061
40580 30906 50143 31035	40375 30953 51723 34013
17240 30928 44172 25040	62414 30919 35966 18520

Standard level 200 (hpa):

20h₈h₈h₈ T₈T₈T₈D₈D₈ d₈d₈d₈f₈f₈ ←

This level is characterized by high values of wind speed, which makes it a place for the axis of the jet stream. It is also of special importance in military aviation. The record height of this level is (11777 gpm), and its average temperature is (-61.5 °C).

To find the value of the **real height** we add number **1** to **the left** of the number and number **0** to **the right** of the number and when drawing it is drawn as it is in the code hhh.

20214 ⇒ 12140 real height ⇒ 214 down

20194 ⇒ 11940 real height ⇒ 194 down

TTAA 73121	TTAA 16061
40580 20189 59731 16070	40375 20160 58362 31035
17240 20211 57743 05040	62414 20221 56982 29016

Standard level 100 (hpa):

10h₁₀h₁₀h₁₀ T₁₀T₁₀T₁₀D₁₀D₁₀ d₁₀d₁₀d₁₀f₁₀f₁₀ ←

This level represents the top of the troposphere and sometimes it enters the stratosphere according to weather conditions, the record height of this level is (15802 gpm), and its average temperature is (-87.7 °C).

To find the value of the **real height** we add the number **1** to **the left** of the number and the number **0** to **the right** of the number and when drawing the values are written as they are in the code hhh.

10650 ⇒ 16500 real height ⇒ 650 down

10588 ⇒ 15880 real height ⇒ 588 down

TTAA 73121	TTAA 16061
40580 10597 70157 29055	40375 10630 53961 30120
17240 10616 64976 34010	62414 10589 60938 25715