## The Experiments of Weather

 Instruments \& Observations lab.(First Semester)<br>ASD / $2^{\text {nd }}$ Stage 2022-2023

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## Standard level 500 (hpa):

## 50h4h4h ${ }_{4} \mathrm{~T}_{4} \mathrm{~T}_{4} \mathrm{Ta}_{4} \mathrm{D}_{4} \mathrm{D}_{4} \quad \mathrm{~d}_{4} \mathrm{~d}_{4} \mathrm{~d}_{4} \mathrm{f}_{4} \mathrm{f}_{4}$

The standard altitude for this level is ( 5576 gpm ), and its average temperature is (-21.2 ${ }^{\circ} \mathrm{C}$ ).
To calculate the value of the real height, the number $\mathbf{0}$ 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.
$50569 \Longleftrightarrow 5690$ real height $\quad \square 569$ drown

| TTAA | 65121 | TTAA | 16061 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 40580 | 50577 | 18947 | 30017 | 40375 | 50531 | $17120 \quad 20015$

## Standard level 300 (hpa):

30h ${ }_{6} \mathrm{~h}_{6} \mathrm{~h}_{6} \quad \mathrm{~T}_{6} \mathrm{~T}_{6} \mathrm{Ta}_{6} \mathrm{D}_{6} \mathrm{D}_{6} \quad \mathrm{~d}_{6} \mathrm{~d}_{6} \mathrm{~d}_{6} \mathrm{f}_{6} \mathrm{f}_{6}$
This axis is important in the study of the jet stream, the record height of this level (9168 gpm), and its average temperature $\left(-44.6^{\circ} \mathrm{C}\right)$.

To find the value of the real height, the number $\mathbf{0}$ 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.

$$
30923 \Longleftrightarrow 9230 \text { real height } \quad \Longleftrightarrow 923 \text { drown }
$$

| TTAA | 65121 | TTAA | 20063 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 40580 | 30906 | 50143 | 31235 | 40375 | 30953 |
| 17240 | 30928 | 44172 | 25540 | 62414 | 30919 | | 25966 | 18520 |
| :--- | :--- | :--- | :--- |

## Standard level 200 (hpa):

20hsh8h ${ }_{8} \mathrm{~T}_{8} \mathrm{~T}_{8} \mathrm{Ta}_{8} \mathrm{D}_{8} \mathrm{D}_{8} \quad \mathrm{~d}_{8} \mathrm{~d}_{8} \mathrm{~d}_{8} \mathrm{f}_{8} \mathrm{f}_{8}$

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 $\left(-61.5^{\circ} \mathrm{C}\right)$. To find the value of the real height we add number 1 to the left of the number and number $\mathbf{0}$ to the right of the number and when drawing it is drawn as it is in the code hhh.


| TTAA | 80121 | TTAA | 25063 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 40580 | 20189 | 59731 | 16170 | 40375 | 20160 | 58362 |$\quad 31035$

## Standard level 100 (hpa):

## 10h ${ }_{10} h_{10} h_{10} \quad \mathrm{~T}_{10} \mathrm{~T}_{10} \mathrm{Ta}_{10} \mathrm{D}_{10} \mathrm{D}_{10} \quad \mathrm{~d}_{10} \mathrm{~d}_{10} \mathrm{~d}_{10} \mathrm{f}_{10} \mathrm{f}_{10}$

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 $\left(-87.7^{\circ} \mathrm{C}\right)$.
To find the value of the real height we add the number 1 to the left of the number and the number $\mathbf{0}$ to the right of the number and when drawing the values are written as they are in the code hhh.
$10650 \longmapsto 16500$ real height $\longmapsto 650$ drown
$10588 \longmapsto 15880$ real height $\longmapsto 588$ drown

| TTAA | 73121 | TTAA | 16061 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 40580 | 10597 | 70157 | 29055 | 40375 | 10630 |
| 17240 | 10616 | 64976 | 34010 | 62414 | 10589 |

