

# "Height" contour information

850 mb

This "constant pressure chart" shows free air conditions above most surface influences. This is in the general vicinity of 5000 ft above mean sea level.

Geopotential heights (or just "heights") is computed in ~~geopotential~~ meters.

The first digit "1" is omitted during labelling of ~~height~~<sup>stations</sup> lines. (For example, 1516 geopotential meters is "516" on weather charts).

Contours of height lines is done in 30 m intervals. Intervals are done  $\pm 30$  m from 1500m. Lines are labeled by dropping the "0"  
(1500m is "150," 1530 is "153," 1470 is "147").

By dropping the "0," height units are often referred to as "decameters."

700 mb

Situated near 3000 m (10,000 ft), this surface also shows the flying conditions for a great deal of aviation operations, especially local and light plane activity.

The first digit "2" or "3" is omitted during labelling of stations.

Contours of height lines are done in 60 m intervals. Values should be divisible by 60, like 3000 m. Lines are labeled by dropping the "0." (3000 m is "300," 3060 m is "306," etc).

500 mb

This is a "prime" upper-level chart because of its "center of gravity" location with about half the mass of the atmosphere below. It's near the "level of non-divergence" which has some dynamics consequences.

Stations are labeled in decameters, values in meters rounded to tens with final zero omitted

Contours are 60 m intervals, divisible by 60, with last "0" dropped. i.e., 600, 594, 588, 582, 576, 570, 564, etc.

300 mb

Lies near jet stream level. Stations are labeled in decameters, values in meters rounded to tens with final zero omitted.

Contours are 120 m intervals, divisible by 120, with last "0" dropped. i.e., 960, 948, 936, 924, 912, 900, etc.

200 mb

Analogous to 300 mb, but first digit "1" also dropped.

Contours are 120 m intervals, divisible by 120, with first digit "1" and last digit "0" dropped. i.e., 12120 m is "212", 12000 m is "200", etc.

## Station plots

## Contours

850  
1 is dropped  
at beginning

1516 → 516

30 m increments

Drop "0"

1500 m → 150

1530 → 153

700  
2 or 3 is dropped  
at beginning

3000 → 000

2940 → 940

60 m increment

Drop "0"

3000 m → 300

3060 → 306

2940 → 294

500  
Nothing dropped,  
but plotted in  
decimeter.

Rounded to 0,  
and zero is dropped

60 m increments  
with zero dropped.