

## Low level significant weather chart

One of the duties of Hungarian Meteorological Service is to regularly provide general aviation with area forecasts in chart form (hereafter referred to as LL SIGWX), covering the airspace below FL100 over the central parts of Europe.

The charts contain weather fronts, areas of different types of weather, significant weather phenomena and wind forecast for the standard isobaric level of 850 hPa (~1500 m) in case of winds stronger than 7 m/s.

The LL SIGWX charts are issued three times a day:

Validity

- 06 UTC
- 12 UTC
- 18 UTC

In a separate text box are included visibility, forecast weather phenomena, the expected amount, the types, the bases and the tops of clouds, besides the level of 0°C and the intensity of icing and of turbulence expected in the different areas are also indicated.

### Areas, subareas and symbols used

In the charts symbols, coloured areas and lines are used to describe relevant weather characteristics:

Symbols	
	Cold front at the surface
	Warm front at the surface
	Occluded front at the surface
	Quasi-stationary front at the surface
	Upper-level cold front
	Squall line at the surface
	Convergence line at the surface
	Rain, Snow, Sleet
	Showers
	Freezing precipitation
	Thunderstorm, Cb calvus, Cb capillatus
	Drizzle, Snow grains, Ice pellets
	Fog, Mist
	Sandstorm, Blowing snow, Windstorm
	Boundary for significant weather
	Mountain obscuration
	Moderate, Severe turbulence
	Light, Moderate, Severe icing
	Direction and speed of wind at 5000 ft

  

Sub areas (OCNL)	
On occasions there will be a need to include sub areas (OCNL) within a larger area of weather. The sub areas are hatched depending on the meteorological phenomena.	
	Rain
	Drizzle
	Snow
	Fog
	Mist
	Freezing rain
	Thunderstorm

  

Notes	
Symbols    imply hail, moderate or severe turbulence and icing. Units used: heights in hectofeet AMSL; visibility in meters or kilometres.	
xxx = above 10000 ft	
<b>CHECK SIGMET</b>	

### 1. Separating areas

The aim is to define areas the weather characteristics of which are expected to significantly differ from each other. The separated areas are named as **A**, **B**, **C** etc, starting in the north-west and ending in the south-east, and the borders of them are indicated by black curved lines. Example: AREA A.

### 2. Separating areas

Within a given area hatched polygons are used to separate regions in which adverse weather conditions like hazardous precipitation, thunderstorms or banks of fog are expected to occur in huge spatial extent (OCNL or FRQ). VFR weather conditions are usually not met in these subareas. The subareas are indicated as **a1**, **a2**, etc or **b1**, **b2** etc in the chart, and as SUBAREA a1, SUBAREA a2 etc or SUBAREA b1, SUBAREA b2 etc in the text box right below the main area.

*Coloured polygons are not used to refer to showers of OCNL or FRQ frequency in the chart but they are mentioned in the text box instead. Example: OCNL SHRA. Unlike OCNL or FRQ showers thunderstorms of OCNL or FRQ frequency are indicated by coloured polygons in the chart in order to underline that thunderstorms in the given area probably cannot be avoided, because they are expected to be too close to each other.*

### **3. Usage of symbols**

#### a) Fronts, objects

If the weather situation requires the symbols of fronts or lines of instability or of convergence on the surface are put on the chart.

#### b) Symbols

In case of phenomena of ISOL/LCA frequency only symbols are used indicate them in the chart.

