

SYNOPTIC METEOROLOGY

- Surface and upper air observational methods.
- Surface and upper air weather charts.
- Air masses and fronts.
- Surface pressure systems and their vertical structure.
- Basic factors for formation and evolution of the surface depressions. Omega equation.
- Analysis of the 850hPa charts. Isotherms. Temperature advection. Determination of upper air fronts.
- Analysis of the 700 hPa charts. Humidity. Clouds and types of clouds.
- Analysis of the 500 hPa and 300 hPa weather charts. Thickness contours. Thickness advection.
- Middle and Upper Atmosphere. Cut lows. Jet streams.
- Cyclogenesis. Anticyclogenesis. Frontogenesis.
- Sub-synoptic scale phenomena. Tropical cyclones.