AGRICULTURAL AND FOREST METEOROLOGY-HYDROLOGY

- Ground. Soil layers. Physiology. Development Indices.
- Agricultural and Phenological parameters Networks. Agricultural experimentation.
- Plant formations. Atmospheric parameters effects on plant formations and physiology. Terrain effects.
- The role of severe atmospheric phenomena activation damaging crop destruction mechanisms.
- Characteristics of forest environment and atmospheric parameters. Interaction between forest and atmosphere.
- Forest fires (types, meteorological parameters in forest fires. Forecasting methods and risks assessment).
- Introduction to Hydrology. Hydrologic cycle.
- Hydrologic statistics (Statistical treatment of hydrological data, frequency analysis of extreme events, analysis and modeling of hydrologic time series).
- Precipitation {Analysis of point precipitation (quality of precipitation data, estimation of missing precipitation data, time distribution of precipitation), precipitation in watersheds}.
- Evapotranspiration (Fundamental physical processes, measurement of evapotranspiration, estimation of evapotranspiration).
- Water balance (Simple water balance of a watershed, Thornthwaite's water balance model, water balance of a lake).
- Rainfall surplus (Rainfall losses due to vegetation holdings, infiltration, methods for estimating rainfall losses, SCS method for estimating rainfall surplus).