

This article is an introduction to the field of short-term weather forecasting (nowcasting). Currently, warnings are issued by analyzing the results of various numerical forecast models, which are provided meteorological observations as input. Observations represent the foundation of all meteorological activity. Ground, aerological, satellite, and RADAR observations serve as input data for various numerical forecast models, which are further used to develop short-, medium- and very short-range forecasts, known as nowcasting. Weather warnings are issued when potentially hazardous or severe weather occurs or is forecast. Severe weather phenomena are defined as meteorological phenomena that violently affect relatively large areas of land and have the potential to cause loss of life, property damage or environmental degradation.