## Behavior of common verification scores in the case of forecasts for rear weather events

L. Kalin (1), Z. Vakula (2)

(1) Meteorological and Hydrological Service, Croatia (kalin@cirus.dhz.hr), (2) Meteorological and Hydrological Service, Croatia (vakula@cirus.dhz.hr)

Common verification score values for weather forecasts (CSI; ETSS, TSS etc) between 0.6 and 0.8 are relatively high but still remarkably less than value 1.0 which is valid for perfect forecast. Value 1.0 probably will never be achieved for rare weather events which have frequency of occurring less than 5%, (for example), even for the very short range. In these cases tetrahoric correlation coefficient (TCC) is involved. Its values are about 0.9 when values of common verification scores are between 0.6 and 0.8, and much better reflect our presumptions about connection between forecasts and observations than common scores. Involving of TCC value is recommended as a measure for linking forecasts and observations.