

EDITORIAL POLICY ON
FORECAST TECHNIQUE PAPERS:
SEVERE WEATHER FEATURE EDITOR
NATIONAL WEATHER DIGEST

by

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This discussion outlines the policy on papers termed "forecast techniques" by their author. It will be this editor's opinion as to what should be called a "forecast technique". We will outline the development of a technique to define better what is considered to be a "technique".

1. AN IDEA: A forecast technique starts with an idea. This idea should be based on sound physical reasonings. That is, a logical physical connection should exist between the forecast parameter(s) and the phenomenon being forecast. An idea, by itself, is not publishable.

2. EVIDENCE: Once the idea is formulated, you need some evidence to support the idea. This evidence is usually a group of cases in which the idea is shown to be associated with the forecast of the phenomenon. Remember that because an idea works in a few "big" cases, it has not yet been shown to work on a wider scale. At this point a viable forecast technique has not been developed, but the feasibility of the idea as a potential forecast technique has been shown. Things at this point are still not publishable.

3. OCCURRENCE: At this stage, many investigators accumulate a large sample of cases in which the phenomenon being forecast has occurred. Then, the forecast parameters under study are shown to be present, or have certain magnitudes, when the phenomenon happens. Statistics on the parameter are usually generated. A result like this in itself is not a forecast technique, but falls somewhere between a technique and climatology (probably closer to climatology). A paper on something like this is

publishable, assuming the data is analyzed properly, but NOT as a forecast technique.

4. TECHNIQUE: To be a forecast technique, an idea must be taken further than the occurrence stage. The sample of cases studied must contain both the occurrence and the non-occurrence of the phenomenon. With this type of sample, the investigator can answer these questions during the test and evaluation period:

Does the idea clearly distinguish between the occurrence and non-occurrence of the phenomenon?

When does the idea work?
When does it NOT work?
(Reliability)

Can the idea be combined with other parameters to be more effective?
(Statistically; use of decision tables; etc.)

Is the idea objective enough to be used by all forecasters in a similarly effective manner?

These and similar questions should be part of a thorough, unbiased evaluation. You should not assume a priori that an idea is useful; doing that may bias the subsequent evaluation. Every idea formulated will not become a viable forecast technique. A paper outlining a research product conducted along these lines AND answering these questions will be published as a forecast technique. Techniques thus defined should be useful by the nature of their development.