

Uncertainty in Weathercasting

Opportunities and Challenges
In Better Communication

“The forecast process can be thought of as three parallel processes: (1) a prediction process that provides information, (2) a communication process that shares information, and (3) a choice process that focuses on decision.”

“It is not enough that the forecast process is judged as meeting the criteria of success within each of the three processes. The three processes must also be working together in harmony”

Roger Pielke Jr.

A “Correct” Forecast. . .

But with “Wrong” Decisions

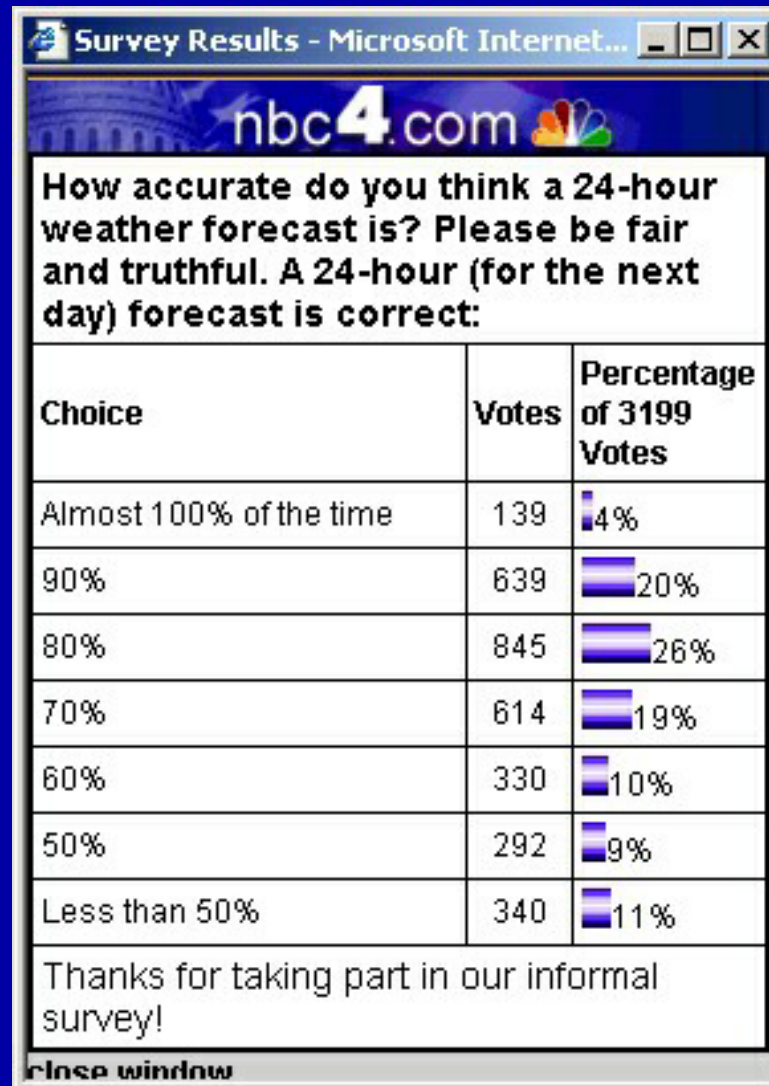
By the Public/User

Is a ***BAD*** Forecast

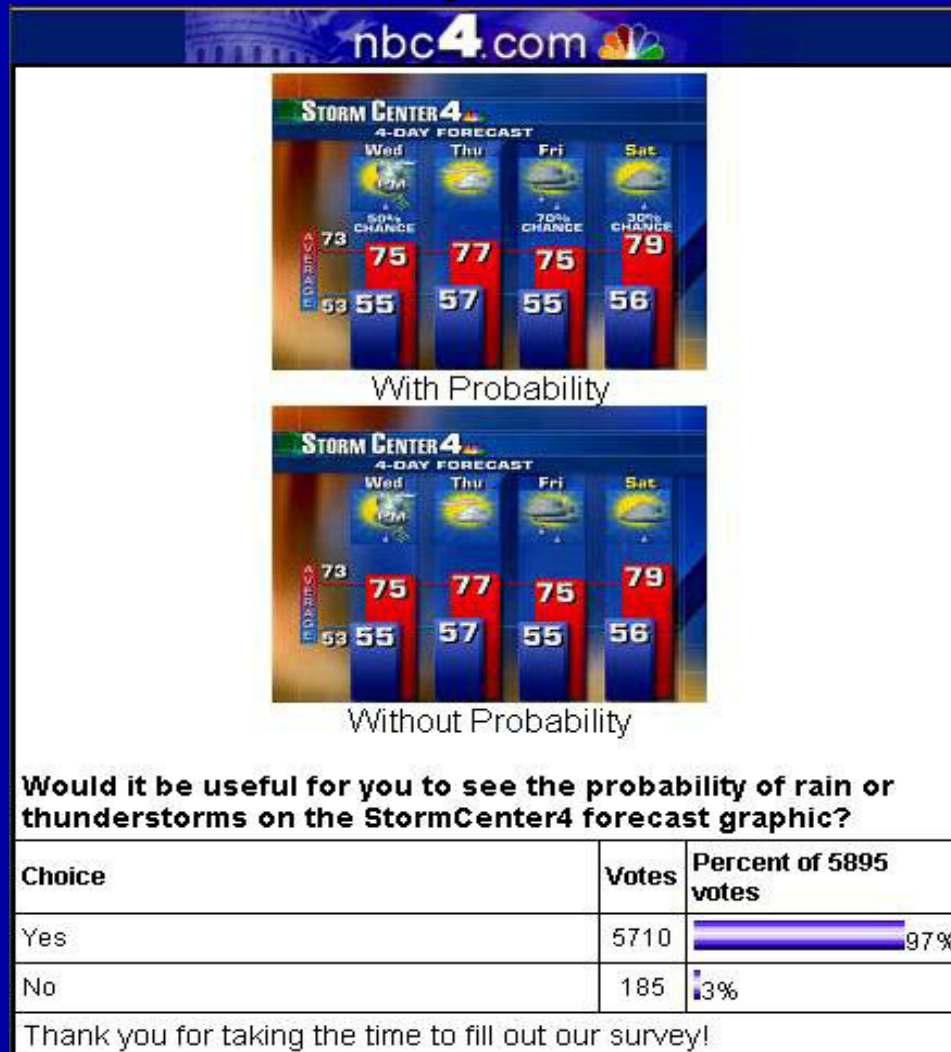
Forecast Uncertainty

Can Aid Decision Making


How Accurate are Our Forecasts?



Do viewers/users think Probability is Useful?



How do Viewers Use Probability?

nbc4.com 

What is the minimum probability of rain forecast that would prompt you to carry an umbrella?

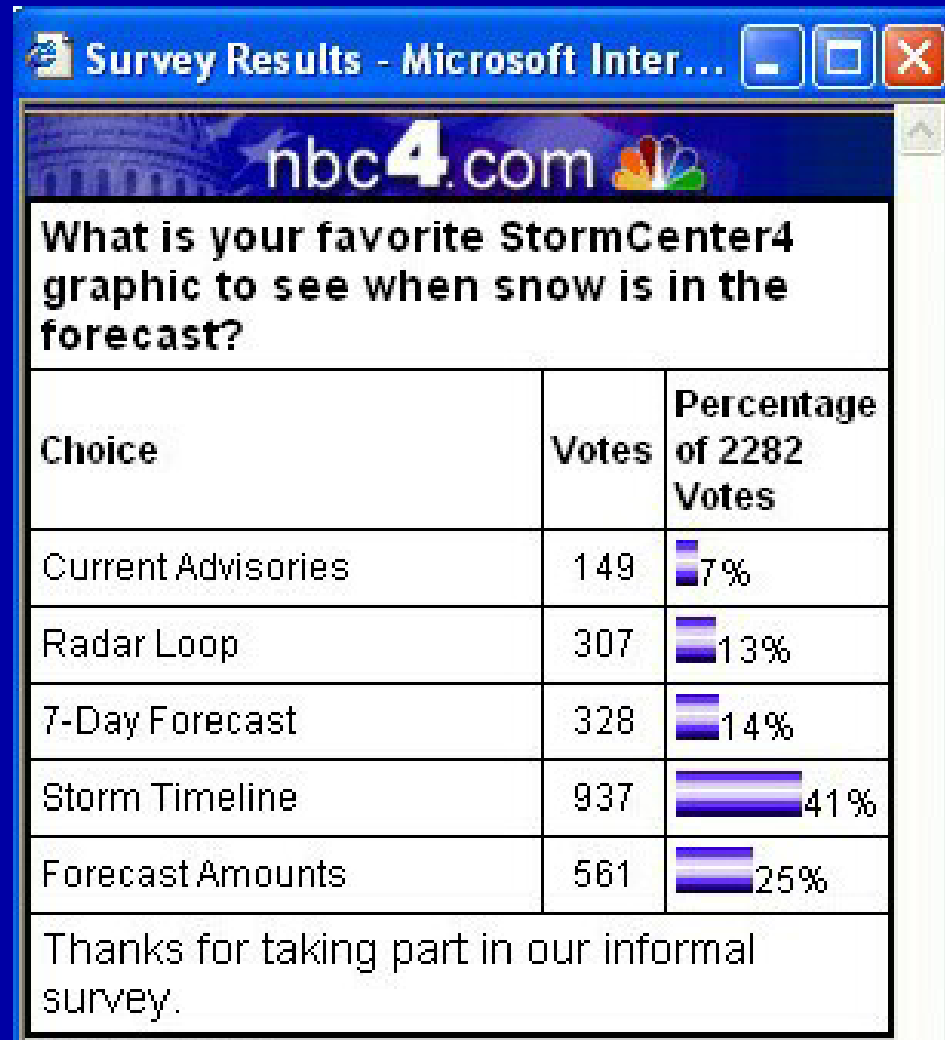
Choice	Votes	Percent of 2640 votes
10% chance	104	4%
20% chance	52	2%
30% chance	297	11%
40% chance	400	15%
50% chance	471	18%
60% chance	350	13%
70% chance	373	14%
80% chance	222	8%
90% chance	96	4%
100% chance	275	10%

Thank you for participating in our informal survey.

Probability/Uncertainty in Storm Tracks



Favorite Graphic Before Storms



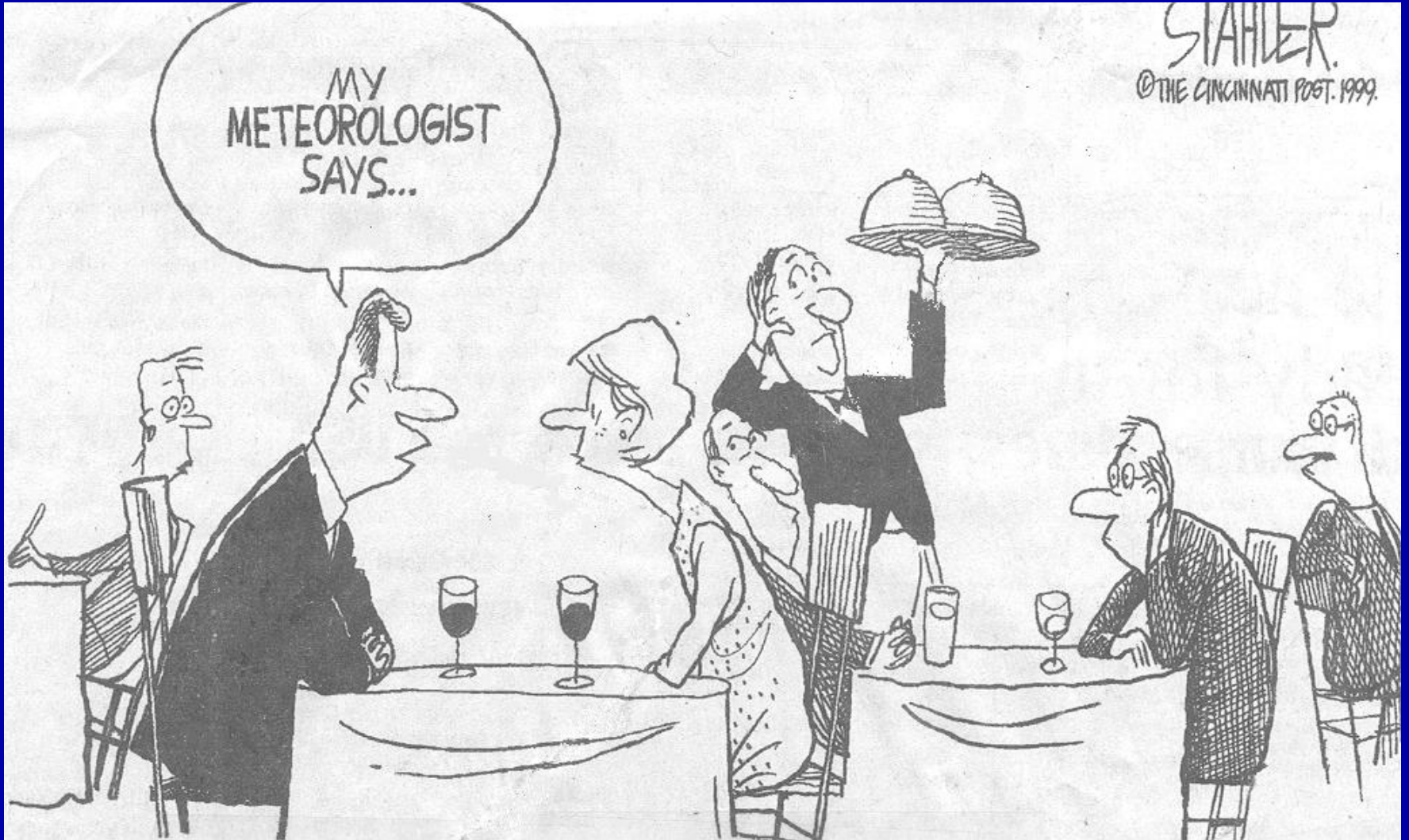
Storm TimeLine Example



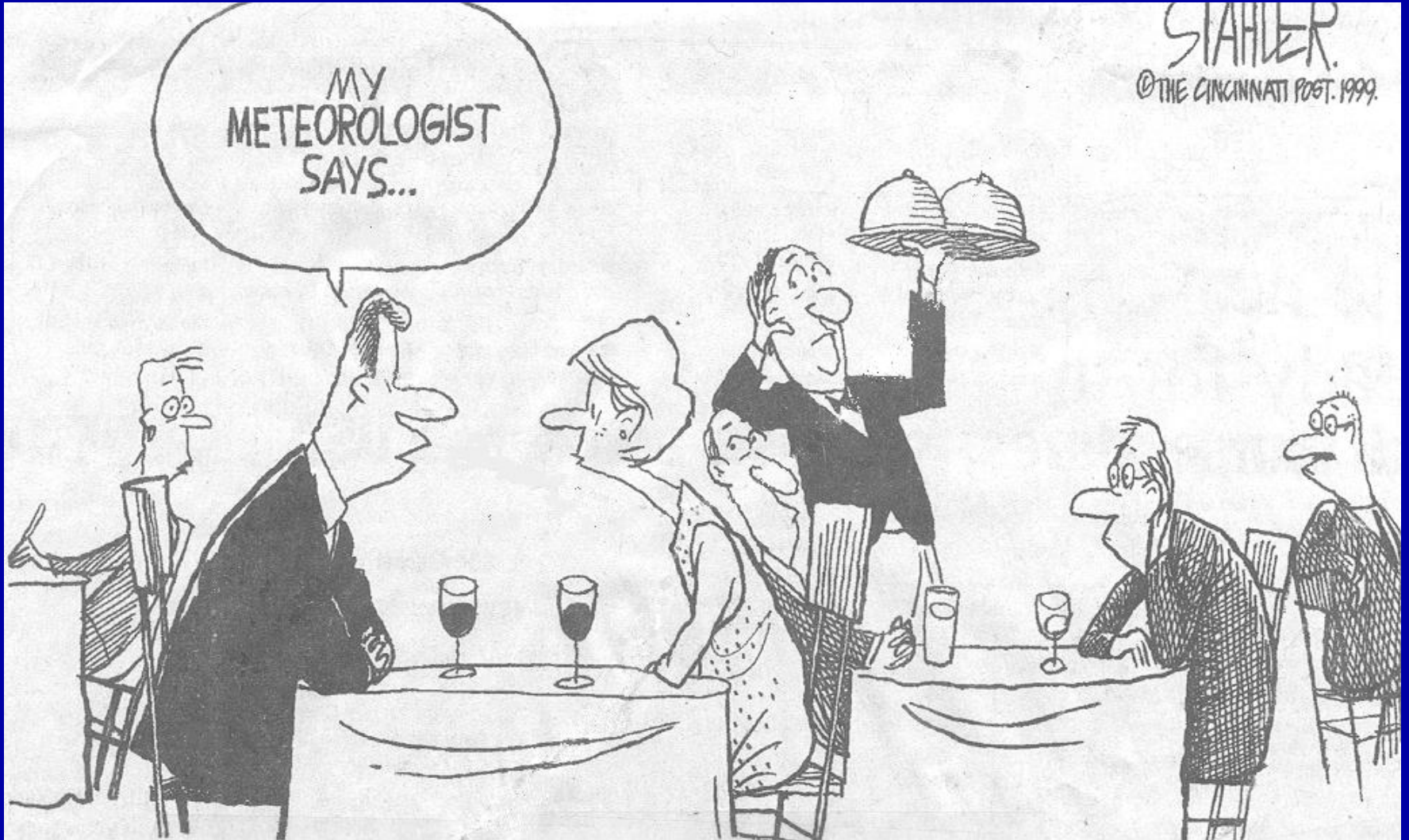
Forecast Icons with Probability



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- All the Above Can Make You That Person