

(Framework for)

**Thinking about use and value of
weather forecasts**

(aka some random thoughts)

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NAT SERA Workshop - Boulder, CO
August 14, 2006**

Outline

- **Weather forecasts as information**
- **Weather forecasts as commodities**
- **Public information and value-added forecasts**
- **Economic ‘versus’ social value**
- **Concluding issues**

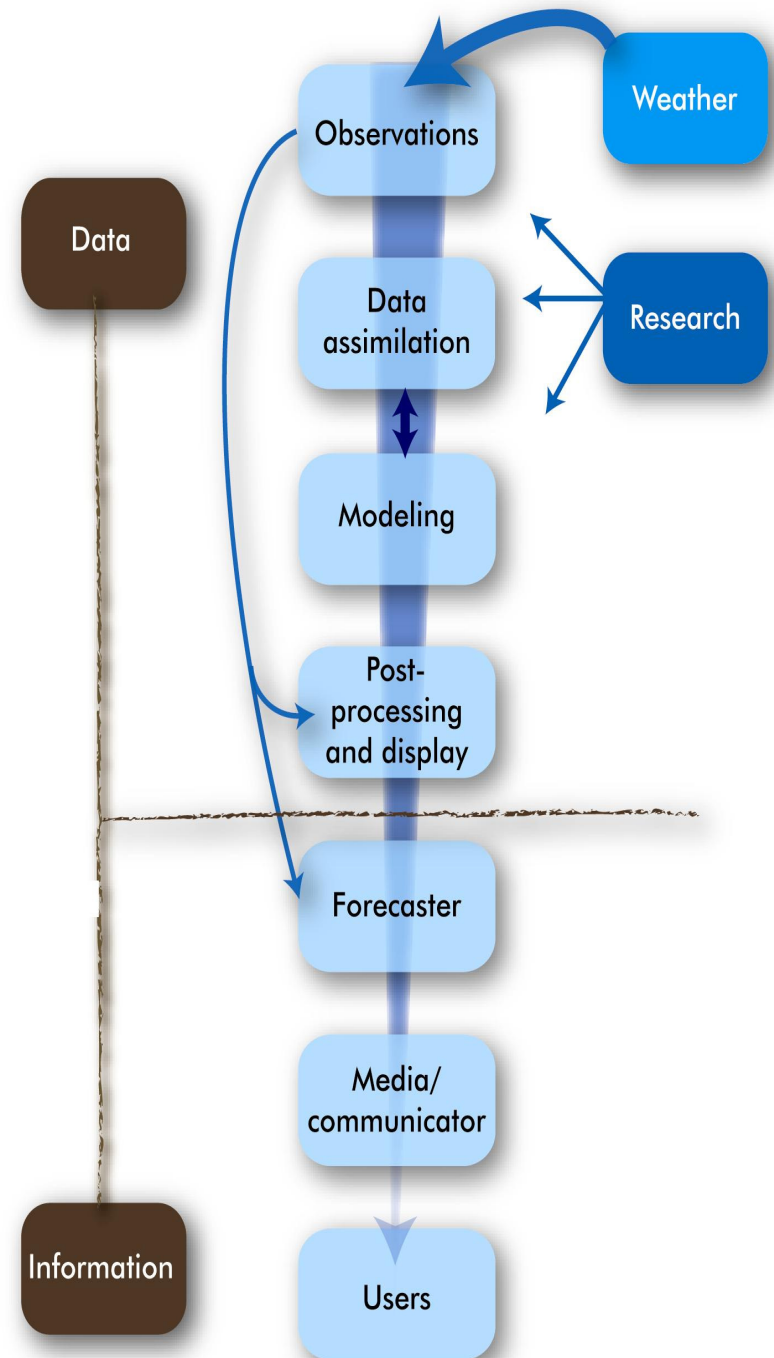
Weather forecasts as information

value chain

data → information

does “data” have value?

What we are interested in therefore is the creation, communication, use, and value of information.



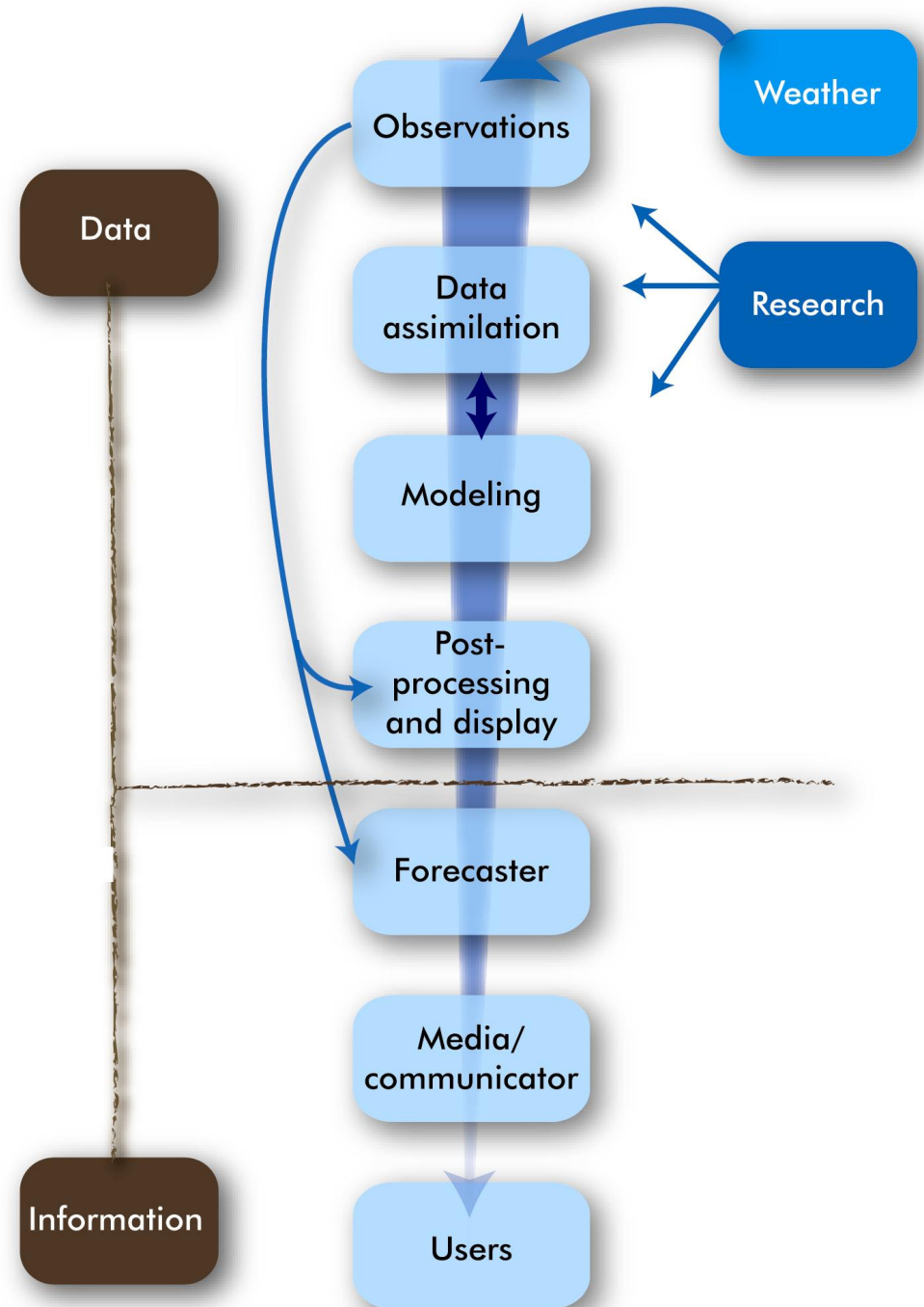
Weather forecasts as commodities

- public goods
 - rival: Does my use keep you from using it?
 - exclusion: Is it possible and/or reasonable to prevent you using it without paying for it?
- quasi-public goods?
 - excludable: For some forecasts it is possible to prevent others from using it without paying.
 - rival: For some forecasts there may be a competitive advantage from knowing what someone else does not.

Public and value-added forecasts

It is difficult to determine exactly where is value added.

It is not clear whose responsibility it is for different steps in the value chain.



“Economic” versus “Social” Value

- Welfare versus ‘economic’ impacts
 - Individual welfare is the ultimate measure of economic value from a theoretical perspective.

Economic and societal impacts

- societal versus economic?
- societal versus monetary?
 - need to be clear about what can be “monetized”
 - need to be clear about what should be “monetized”

Summary

Weather forecasts are “information.”

The creation, communication, use, and value of weather forecast information can be conceptualized through a value chain.

Value can be added (or lost) anywhere along the value chain.

Weather information can be a public good or a quasi-public good.

This has implications for understanding the value of forecasts, the public-private debate, and for thinking about responsibilities for improving forecasts.

We need to be clear about the meaning of economic (versus social) values.

Concluding thoughts

Improving the societal value of weather forecasts requires interdisciplinary approaches and research.

Social and economic research and applications is not and should not just be 'add-ons' to meteorological research programs – depending on the goals of such programs.

Best practices for integrating social and economic research and applications with meteorological programs are not yet well developed.

Thank you for listening!