Marching Advice from Unidata Policy Committee to UPC about 2004-2008 Proposal
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Overall Purpose of the Proposal:

To secure next 5 years of funding and endorsement of proposed directions and programs.

Candidates for Overarching Theme:

New scientific developments providing information and models at smaller scales will be the major factor in enabling future directions. Not only will Unidata services need to accommodate these developments, but it will now be a natural outgrowth to serve other communities besides atmospheric science (e.g., hydrology, geology). Weather prediction is central to accurate modeling of many environmental situations.

Past 5 years has seen an explosion of data and high-resolution models. The next 5 years will see an explosion of applications. Unidata is now at the point of being relevant to many applications.

Take-Home Messages That Need to Be in Proposal:

Unidata is not an end in itself; it's a means to implement scientific and educational goals. It's a service, with a research component so it provides the best possible service.

Unidata supports the NSF core missions of enabling research and education.

Proposal needs to be based on consensus about scientific and educational drivers over the next 5 years (see, e.g., GEO 2000; 1998 environmental report's 12 objectives; decadal plan for environmental research initiative). It should focus on some subset of those drivers.

Three starting points for Unidata's reasoning in setting directions for next 5 years:

- the science and education drivers
- response from the community (What has Unidata done right? What was surprising? What does Unidata need to do more of or change?)
- expectations of how technology will change

Other front-and-center ideas: partnerships in implementing these drivers, and commonalities with strategic plans outside Unidata (e.g., NCAR, UCAR).

What Unidata needs to implement its programs.

How the scientific and educational drivers are related to Unidata strategic goals—explicitly.

Clarify current partners and Unidata's exact relations with them. (Continue discussion about careful choice of letters from partners vs. eliminating too many potential reviewers by creating conflict of interest.) Letters from Jack Fellows and Tim Killeen might emphasize how Unidata services are useful to UCAR and NCAR activities (past and future).

Unidata products and services could be useful for homeland defense, even though not primarily or originally developed for that purpose. Reasoning: Unidata, for its original purpose of serving the scientific community, had to know and apply the best technology available. Therefore, it developed products that

have applications broader than their original objectives (list some past examples) and that might be used in unanticipated ways.

Proposal is based on widespread input: user survey, more.

Unidata's history of providing leadership through listening to scientific community, providing what they really need, adding UPC expertise about how technology can best serve.

Unidata's service to diverse users (both current and planned): diverse demographically, in sizes and missions of institutions (e.g., R1 vs teaching), in disciplines.

Show coordinated planning with other initiatives as related to Unidata core services (e.g., THREDDS is most obvious). Decide how to address each initiative. TBD: include reference in this proposal, make separate? Needs more research and negotiation (e.g., up front, Cliff could discuss appropriate division of budgets with THREDDS program officer at NSF; gather DLESE info at upcoming annual meeting).

Strike appropriate balance between new initiatives (e.g., social scale) and continuing support (e.g., global, synoptic scale).

Show awareness of parallel efforts (e.g., MMM work on fire and flood). Show interactions with university and UCAR scientists engaged in those efforts.

Ideas to Consider:

Reach out to community colleges via nearby 4-year institutions already using Unidata. TBD: incentives and costs to both sides; ways to overcome institutional rivalry and suspicion. Check into possible FEMA collaboration.

Allocate more effort to building community through personal (vs electronic) interactions; consider adding a staff slot for a community coordinator.

Aim more training materials at users directly, not just side administrators.

Ways to make it possible for more individuals to attend workshops. (funding)

Address the past disconnect between modelers and visualization software.

Other Miscellaneous Advice:

Don't just copy the vision from the strategic plan into the proposal.

Move core values to an appendix?

Consider not including Unidata strategic plan, but providing link to Web version. But don't overdo the links.

Use results from user survey, with caution not to imply that a single response indicates a trend.

Use clear and consistent terminology (e.g., community, constituency, partners)

Specify dollar range of equipment grants Unidata will fund.