Review 1

I have been interested in and have enjoyed learning of the developing philosophical framework behind OPeNDAP which underpins the everyday applications development (eg DODS).

I note that the boundary between the DDS and the DAS is a somewhat moveable feast depending on the position one comes from. I would like to see, in a follow up paper, a parallel description of the DDS/DAS structure in a contrasting area of science (or arts!) in order to bring out more clearly the boundaries between the two descriptions. If the authors have actually such an example to hand it would I believe be useful to incorporate it.
I note that the OPeNDAP web site is currently largely in the environmental sciences field, Publication in non-discipline oriented journals such as this is important to a wider adoption and formal definition in the science community (and as suggested in the introduction to a wider community in the arts).

Definitions of DDS and DAS appear tentative at the moment, perhaps appropriate to early presentation of these ideas to the wider data community. Sooner or later after discussion one would look for a rigorous description of the OPenDAP.

Coming from the viewpoint of a user of the DODS application I have enjoyed reading (several times, with a bit more understanding!) the background to the project.

Review 2

The idea of data interoperability is an extremely important one. I commend the authors for addressing these issues. I would, however, like to see a broader review of the state of the art in order to understand why this data organization should be considered.

There was no discussion of the merits of describing their encoding in ASN.1 and the ISO Basic Encoding Rules.

There was no discussion of the efficiencies to be gained from non-tcp network protocols. The use of multi-path UDP distribution with forward error control would seem to be of importance to the terabyte sized datasets used in the geospatial community.

There was no discussion the work being done in the World Wide Web Consortiums Semantic Web projects. How do they compare with the proposed solution?

There was no discussion of the XML family of standards and compare them to their designs including RDF and RDF schema. Why were they not considered?

How does the proposed semantic processing relate to the DAML+OIL work done by DARPA? What is the relationship of the semantic mapping being proposed to the Institute of Electrical and Electronic Engineers (IEEE) OWL ontology work?

Further comments have been marked on the paper itself (see attached

ds247comments.pdf).