



CUAHSI
universities allied for water research
CUAHSI Board Meeting Minutes
July 19-20, 2011, Boston, Mass

**Notes for the meeting are recorded by the CUAHSI secretary (Chris Graham) as representation of the discussion topics and point and are not the opinion of the secretary

Roll Call (Chris Graham, Secretary)

- 11 members are present, needed 10 for quorum
- “X” indicates director is present

Term expires 12/31/2011

Larry Band - University of North Carolina - Chapel Hill X
Jay Famiglietti, University of California – Irvine
Tissa Illangasekare - Colorado School of Mines X
Jennifer Jacobs - University of New Hampshire X
Scott Tyler - University of Nevada - Reno X (via phone Day 2)

Term expires 12/31/2012

Robyn Hannigan – University of Massachusetts-Boston (Instrumentation Liaison) X
Carol Johnston – South Dakota State University (Informatics Liaison) X
Witold Krajewski – University of Iowa X
Larry Murdoch – Clemson University X
Aaron Packman – Northwestern University X

Term expires 12/31/2013

David L. Freyberg, Stanford University ([Education & Outreach](#) Liaison) X
Brian McGlynn, Montana State University
Jim McNamara, Boise State University ([Observations](#) Liaison)
Todd Rasmussen, University of Georgia (Research Applications Liaison) X
Ying Fan Reinfelder, Rutgers University X

Officers Present: Chris Graham (Boise State University), Richard Hooper (CUAHSI), Rina Schumer (Desert Research Institute)

Others: Jennifer Arrigo (CUAHSI), Yoori Choi (CUAHSI),

Tuesday, July 19

- 8:40 Call to Order (Murdoch)
 - Agenda for meeting
 - Develop priority list for future funding
 - Evaluate marginal value of each service CUAHSI provides, for submittal to NSF re: 2012, 13 funding
- HIS project status and updates
 - HIS use metrics
 - 18,000 variables, 1.96 million sites...
 - 10 new services this year
 - Usage reports – 7,000 sites accessed
 - 224 downloads of new release of HydroDesktop
 - Google Group has 119 members
 - International use – Spain, Canada, France, South Korea, etc...
 - Requests for CUAHSI data hosting – North Dakota, COSMOS
 - Project status
 - Establishment of Google group
 - Usage reports
 - HydroDesktop
 - Hydro-Informatics Conference, July 22-25
 - 95 attendees
 - Interest in repeat of conference
 - Request for formal HIS evaluation committee
 - Formal committee on functionality of HIS
 - Makes development suggestions for HIS
 - Solicit feedback on HIS and prioritize developments
 - Focus on feature requests
 - Kathleen McKee, Jim Nelson and Stephen Brown
 - Hooper requests board to approve unfunded committee. Excom will develop charge for committee
 - Committee will result in a marginal increase in work for Choi, who will act as interface between committee and HIS developers.
 - Charge will include explicit details on how recommendations are transmitted to development group. Recommendations should be recorded, for submittal to NSF
 - **Motion to approve establishment of HIS users committee**
 - **Motion to approve: Packman**
 - **Second: Band**
 - **Discussion: None**
 - **Approval: Yes**
 - HIS Budget
 - Year 3: \$265,000
 - Year 4 request: \$637,000

- Includes similar staff support from year 3, plus taking over San Diego Super Computer center contract
 - Operational data center
 - Implementation plan by Jan 31, 2012
 - Alva Couch (Professor, Tufts University) suggested to lead project
 - Hooper suggests 10/40/70 review by panel
 - NSF recommended Mark Williams and Barbara Minsker
 - Also: Tim Ahearn, Judy Cushing, Wendy Graham and Claire Welty
 - Pay honorarium \$1000
 - Cost equivalent to Software Engineer
 - Proposal to IF Competition July, 2012
 - NSF has appropriated \$20,000 for consultant
 - Data center proposed start date: January 2013
 - SDSC will continue operation of HIS central until data center launch
 - Data center is high priority for CUAHSI
 - **Motion: Board strongly implement plan development as outlined in slide 10(appendex)**
 - **Motion to approve: Band**
 - **Second: Hannigan**
 - **Discussion: None**
 - **Approval: Yes**
- CHyMP Community recommendations vs. opportunity presented by NSF
 - CHyMP presented to NSF
 - 3 workshops between 2008 and 2011 demonstrate community desire for CHyMP
 - Community computational resources to enable the simulation and understanding of hydrological processes across the United States
 - Strategy:
 - Advance computational capabilities
 - Advance individual scientist capability
 - Enable collaboration between individuals
 - Proposed CHyMP resources
 - Infrastructure for PIs
 - Modeling database
 - Computational platform
 - Simulation gallery
 - National water model
 - Database
 - Codes
 - Plan for creating CUAHSI resources
 - Design
 - Develop

- Sustain
- CUAHSI supported working groups
 - 1-2 years
 - 3-10 members
- NSF supported less broad plan
 - Encourages development of single code and development of computational platform
 - Single Model
 - Unify community ala WRF
 - Meet diverse science needs
 - Advanced capabilities
- Next steps
 - White paper on CHyMP justification and vision
 - Implementation plan
 - Upcoming opportunities
 - CIF21, EarthCube, SEES
 - Leverage funds from Hydrology
 - Two approaches
 - Development up to PIs, with limited CUAHSI involvement
 - CUAHSI coordinates proposal with multiple PIs
 - CUAHSI embraces funding and organizational opportunity, and pushes community towards reference models
 - Discussion
 - NSF desires model that equivalent to / can interface with WRF
 - Expected community resistance
 - Resistance may be reduced by proper presentation
 - Model as learning tool
 - Model as benchmark / reference model
 - Project objectives must be clearly identified / presented
 - Model will likely focus on fluxes, rather than water quality
 - Complications due to heterogeneities in near surface hydrology (parameters, processes) resist development of single model
 - Difficulties not encountered by atmosphere model (WRF)
 - Modeling platform may be more appropriate than model (semantic issue)
 - Avoid competition with CSDMS
 - What should CUAHSI's role be?
 - Center on hydro-cyberinfrastructure
 - HIS
 - Instrument development
 - Model development
 - Distinction between CUAHSI supporting science, and CUAHSI leading science (CUAHSI as PI on CHyMP, or supporting CHyMP)
 - CHyMP needs to better articulate on future and status of project

- CHyMP report
 - Must be finished this summer
 - Should get past jargon
 - Presented future of project
 - Report will be reviewed by subset of board
 - Schumer, Freyberg, Illangasekare
 - CUAHSI could present shorter position paper to NSF
- Subcommittee to further CHyMP report
 - Reinfelder, Band and Packman
 - Due August 15
- **Motion: Based on community workshops and discussion with NSF, CUAHSI will take leadership role to coordinate proposal development for hydrologic community modeling platform**
 - **Motion: Krajewski**
 - **Second: Packman**
 - **Discussion: Specifics of direction must be discussed and very clearly defined**
 - **Approval: Yes**
- Appointment of Informatics Standing Committee
 - Chair has stepped down
 - Suggestions from past chair, HIS committee
 - Suggestions from HIS team for board to approach as possible committee chairs
 - Jeff Dozier
 - SAC as possible conflict (little concern from board)
 - Chris Duffy
 - Has submitted community prospectus (possible conflict of interest)
 - Marian Muste (Iowa)
 - Glenn Moglin (Virginia Tech)
 - Christina Tague
 - Currently on CUAHSI E/O Standing Committee
 - Pat Reed
 - Jim Mackay
 - Committee will oversee data center and oversee CHyMP
 - 3 committee members have rotated off
 - Prioritization of chair and open positions tomorrow
- Node model for Virtual HMF
 - Some specific suggestions from Standing Committee
 - Improve visibility
 - Website has been modified
 - Optical sensor networking promotion with USGS.
 - Identify PIs, etc...
 - Follow on workshop proposed by USGS on hydroacoustics for suspended sediments
 - Uncertain interest in technology in academic community
 - Contact manufacturers to determine users
 - Users may not be in traditional CUAHSI community

- Marion Muste
 - NESTE
 - Tom Drake
 - Todd Cowen
- Academic champion of technology will be found
- Community support for publication of field notes
 - No outlet for publication of field methods papers for new technology in hydrology
 - L&O methods
 - CUAHSI could serve as publisher of field notes
 - CUAHSI can issue DOIs.
 - Would need editorial board to evaluate notes
 - Board resistance o CUAHSI taking lead
 - CUAHSI could make directed recommendations to journals to include field methods
 - Identify topics
 - Identify authors
 - CUAHSI facilitate access to papers via website
 - Website or message board with “tricks of trade”
 - Watersensors.org as example
- Training and Development
 - Small amount of funds for training, but strong support from standing committee
 - Proposal from Gooseff et al. on geophysics on stream – groundwater exchange
 - Standing committee support
 - Gooseff has matching funds
 - **Motion: CUAHSI will commit to holding workshop on geophysics method on stream – groundwater exchange**
 - **Motion: Murdoch**
 - **Second: Jacobs**
 - **Discussion: Good team, good instrument. CUAHSI could help put together small workshop proposal for additional funds.**
 - **Approval: Yes**
- HydroGeoPhysics node
 - 11 proposed projects
 - 3 funded
 - 3 going through review
 - Community demand for geophysics education is uncertain.
 - Need to demonstrate demand to NSF
 - Need CUAHSI to better advertise potential of Geophysics Methods
 - Better marketing
 - More graphics, on websites and presentations

- NSF has observed unsophisticated proposals of geophysics by hydrologists, and felt there was a need for training / evaluation of applicability of geophysics.
- Many potential users do not know what methods they need. CUAHSI as matchmaker between methods and users. CUAHSI is positioned as such, but needs to advertise better (via web?).
- Investment options:
 - Continued investment in Node Model
 - Establish 2 nodes in next couple years
 - Requires champions, possible workshops
 - Focus on training, increase investment
 - Build on small scale success
 - Requires additional investment to succeed
 - More staff time to develop
 - Transition from asking experts to put on workshops, towards CUAHSI putting together curriculum.
- Education and Outreach
 - Funded activities
 - Cyberseminars
 - Standing committee supportive
 - Low cost and high success rate
 - Pathfinder
 - Standing committee supportive
 - Needs better advertisement
 - Let's talk about water
 - Standing committee supportive
 - \$20,000 grant from Johnson Family Foundation for online materials
 - E/O Developments
 - REU program
 - Ala IRIS REU program
 - Develop small (3-4) student pilot
 - Teachable Moments discussion
 - Using local / national floods, droughts as opportunity to get Op-Ed materials in local papers.
 - CUAHSI could help produce informational documents on hydrological processes (tile drains, return intervals, wide range of concepts).
 - Communicating Research Public Audiences (CRPA) – NSF funds for podcasts, films, etc...
 - AGU Congressional Science Days program to get geologists to contact members
 - How can CUAHSI represent Hydrology Academic Communities?
 - Students – helping research via field notes, etc...
 - Policy makers

- Business community
 - Board decisions re: E/O
 - REU support
 - Fall Spring cyberseminar series
 - Highlighting CZOs and WSC
 - Conceptual design of observatories (rather than individual results)
 - Need specific instructions
 - Board concurs
 - How to implement teachable moments
 - Prioritization of Pathfinder
 - Educational cyberseminar series, concurrent with usual cyberseries
 - Suggested topic: Modeling
 - Model specific training
 - Modeling concepts
 - **Motion: Accept possible E/O Year 4 activities listed above for prioritization**
 - **Motion: Hannigan**
 - **Second: Murdoch**
 - **Discussion: None**
 - **Approval: Yes**
- Lunch Break at 12:45
- Resume at 1:30
- Research Applications
 - Report from Ken Potter
 - Submitted prospectus on national survey of practitioners on current state of hydrological science
 - How do you rate last decade of hydro research?
 - Where does hydrological research need to focus?
 - Etc...
 - Wisconsin survey center to implement survey
 - ~1000 email surveys
 - \$5000 - \$8000
 - CUAHSI contribution
 - Funding
 - Outreach committee input on questions
 - CUAHSI requests of organizations for email lists for surveys
 - End products
 - Report to board
 - Journal article
 - NSF funding supports project via RTP, Blue Book 2
 - America competes act
 - When developing questions, consider fit with other CUAHSI initiatives
 - Continuing Education program

- CUAHSI could serve as an easier / non university mechanism for CE for non-students / professionals
 - CE could be a revenue stream for CUAHSI
 - Standing committee support further staff development
 - Survey current CE programs. Advertise current programs and look into filling gaps in current programs
 - Board suggests focusing on surveying. Include CE requirements for certified hydrologists
 - CUAHSI should not compete with member universities, but if gaps are found, CUAHSI can fill them
 - Proposal should go to E/O committee
 - Ideally funded via membership funds
 - Business model
 - CUAHSI hires instructor, charges tuition
 - Philosophical issue of making a profit off of intellectual property.
 - Need to focus on translational science, to remain close to CUAHSI mission. Relate to key CUAHSI key activities, i.e. HIS.
 - **Motion: Approve looking for funds for Ken Potter survey, with consultation from E/O committee regarding questions on Continuing Education**
 - **Motion: Packman**
 - **Second: Freyberg**
 - **Discussion: None**
 - **Approval: Yes**
 - **Motion: Staff should develop income generating opportunities for CUAHSI**
 - **Motion: Hannigan**
 - **Second: Jacobs**
 - **Discussion: NSF would support CUAHSI looking for additional funds. Need to be careful about competing with member universities. Needs to forward strategic plan. Later business plan development will be funded with non-NSF funds.**
 - **Approval: Yes**
 - Staff time to work on revenue generation will be addressed in the prioritization discussion later.
- Observations
 - Standing committee recommendations
 - Catalog of field sites
 - Moving beyond dots on a map to catchment outlines, additional metadata.
 - Would supplement HIS data, but remain independent of HIS
 - Recommended by standing committee
 - Low cost, high payoff
 - Coordinated deployment
 - SC felt objectives were high but the outcomes were uncertain
 - Facilitate research collaboration among small and large universities and federal organizations
 - Recommended by standing committee

- Will include in prioritization discussions
- Community outreach
 - Board meeting, newsletter, town halls, etc...
- Year 4 Budget
 - Large increase in HIS budget (from \$265,000 to \$637,000)
 - Total year 3 budget \$1,146,000
 - CHyMP funding zeros out in year 4 due to reduced staff time.
 - Funding scenarios, with modifications suggested by Hooper
 - \$1,660,000
 - Funding needed for business as usual
 - \$1,500,000
 - Tom's "high" option
 - Modify:
 - Remove published annual report
 - Reduce subcontract to SDSC
 - Remove in person SC meetings
 - Remove one in person board meeting
 - \$1,300,000
 - Medium option
 - Above plus modify:
 - Reduce chair competition
 - Reduce subcontract to SDSC
 - Remove sensor workshop
 - Remove Pathfinder
 - \$1,100,000
 - Low option
 - Above plus: modify
 - Remove Town Hall
 - Reduce subcontract to SDSC
 - Remove HGP node
 - Reduce chair compensation
 - Remove conferences other than AGU
 - Remove biennial meeting
 - Board needs to make case for incremental increase in funds
 - Packman: Rather than provide menu of line items, should focus on core mission, and what funding is needed to meet it.
 - As co-op, CUAHSI must present individual items
 - Service to CZO/Surface Earth would potentially help get more funds for hydrology.
 - Packman and Murdoch serve as liaisons with CZO
 - CZO does not see how CUAHSI can support their mission
 - Broad disciplinary mission of CZO resists tight coordination with CUAHSI
 - Tom needs quantified data on CUAHSI services to other directorates

- Need to identify key figures that cross disciplinary lines, and determine how CUAHSI can help the community
 - Emphasis on budget areas where projects benefit other surface earth disciplines
- Funding priorities
 - Costs excluding staff time (in thousands)
 - HIS development \$150
 - HIS maintenance \$250
 - CHyMP \$50
 - Biennial \$72
 - HGP \$40
 - Instrument Training \$30
 - Pathfinder \$30
 - Field Site Catalog \$0
 - Practitioner Survey \$8
 - Discussion as to whether HIS (operational work) is core mission of HIS, or other developmental work, i.e. CHyMP, HGP etc...
 - Discussion on priorities
 - Pathfinder: High impact on small number of students
 - Biennial: Lower impact on larger number of scientists. Possibility of raising entry fees to reduce costs. Concern addressed about higher fees.
 - Guidance for ExCom needed from board on priorities. Need to show NSF high return for each additional investment.
 - In January board meeting, board decided that HIS is flagship project for CUAHSI. To show progress in HIS, need to fund above \$250,000 level. Strategic decision is to fully fund HIS.
 - EAGER funding available for extending HIS to geomorphology (etc...).
 - Funding list of activities will be emailed to board for prioritization
- Break for day 1 at 5:20
- Begin day 2 session at 8:30
- Corporate operations
 - Staff will send out doodle poll regarding monthly board of directors meeting.
 - **Motion: Approve minutes from March 7, 2011**
 - **Motion: Band**
 - **Second: Freyberg**
 - **Discussion: None**
 - **Approval: Yes**
 - Draft handout for potential corporate members
 - Staff will submit to graphic designer
 - Should include mention of HydroDesktop
- Discussion of Synthesis Committee
 - Committee currently not active
 - No current chair of committee
 - Possible report from committee (new charge to renew committee activity)
 - View on synthesis opportunities

- Future directions for community
 - What role can CUAHSI provide re: synthesis
 - Serve to get CUAHSI a seat at table with NASA, NOAA, etc... synthesis centers and projects
 - Improve synthesis
 - Ad hoc committee will work on reactivating synthesis committee
 - Schumer, Reinfelder, Packman, Jacobs
 - Board tasks before reactivation of synthesis committee
 - Survey on synthesis to community as input to committee.
 - New charge for committee
 - Identify additional committee members
 - Paul Kirchen
 - Young scientists passing through Sivapalan
 - Determine additional opportunities for synthesis projects
 - Deadline for tasks of AGU (December)
- Report on Committee on Broadening the Funding Base (Tyler)
 - Recommendations
 - Conclusion of strategic plan as opportunity to engage with federal agencies
 - Create clear and consistent formal policy on corporate membership
 - The role of CUAHSI in proposal writing needs to be clarified to the community
 - Criteria needed to determine when CUAHSI would lead, assist and stay out of proposal development, and codified into public documents
 - CUAHSI leads with services that fit with strategic plan (i.e. HIS)
 - CUAHSI assists with community research by member, limited to commitment letters
 - Assists with all requests, as demand for CUAHSI services is highest priority for NSF
 - CUAHSI should not limit proposal application, though Board approval may be necessary (Packman)
 - CUAHSI will, in general, not submit proposals on research
 - Committee focused on other federal agencies rather than other directorates at NSF.
 - Committee will meet and develop policy statements regarding CUAHSI proposal guidelines
- Report on Ad hoc committee on Disposition of Senior Advisory Council (Band)
 - Recommendations
 - Council should be maintained, but with codified charge and new membership
 - Members are appointed from extent of CUAHSI community (i.e. surface earth, CZO), and not restricted to academic community
 - Senior means position in field, and connection to field
 - Meet with SAC via web shortly after board meetings
 - Does not interact directly with board

- SAC is advisory board, independent group to give feedback on board activities
 - 3 year staggered terms
 - SAC does not have veto power on board activities / decisions
 - Will assess action items of board, in terms of strategic plan
 - Follow up board meeting will discuss SAC comments
 - Increase membership (10 – 15) to increase breadth of disciplines and increase participation numbers
 - Board recommendations
 - Change “Senior” to “Strategic”
 - Make sure committee know CUAHSI activities, and can act as advertisers for CUAHSI
 - Support inclusion of diverse viewpoints (one or two agency, private)
 - 15 members is too many – 10 – 12 more manageable
 - Useful for SAC to map Blue Book 2 to Board strategic plan
 - More of board responsibility
 - Committee will submit draft charge to Ex Com
- Report of Ad hoc committee on Corporate affiliates (Arrigo)
 - Not enough members were identified for committee
 - Arrigo and Hooper drafted policy for corporate affiliates with input from Hannigan and Executive Committee
 - \$2,000 initiation, plus prorated annual fees based on company size
 - Board members
 - Q: Are advertisements on newsletter appropriate?
 - Sure
 - Q: How does biennial presence (booth space) cost compare to membership?
 - Membership fees greater than booth space
 - No access to email list
 - Corporate member list with links on CUAHSI web site
 - Clarify that links will be on corporate affiliate page, not main CUAHSI web page
 - **Motion: Approve policy on corporate membership**
 - **Motion: Freyberg**
 - **Second: Jacobs**
 - **Discussion: Approved with edit to corporate privileges: if advertising in newsletter, corporate members will get discount.**
 - **Approval: Yes**
- Application for corporate membership: Aquatic Informatics
 - Attending a number of CUAHSI meetings
 - Software company based in Vancouver
 - Involved with HIS
 - **Motion: Approve Aquatic Informatics as corporate member**
 - **Motion: Jacobs**
 - **Second: Johnston**
 - **Discussion: None.**

- **Approval: Yes**
- Biennial planning
 - Approval of theme and set organizing committee
 - Proposed theme: Fusing Science and Solutions: Bridging the gap between knowledge and prediction
 - Board comments
 - Theme does not speak to CUAHSI diversification efforts
 - Add text to summary indicating interest in diverse attendees
 - Invite diverse group
 - Knowledge and prediction or knowledge and practice?
 - Change title to “Bridging the gap between knowledge and practice”
 - Remove sentence “Bridging the gap between knowledge and practice”
 - Does this theme draw in other earth surface groups
 - Concept is fine, but summary statement needs to be rewritten to include other groups (i.e. sustainability, geomorphology, ecology, critical zone, other key words)
 - Are practitioners really the core audience?
 - Opportunity to sharpen CUAHSI message
 - Suggested speakers
 - High level policy person
 - Women
 - Jane Lubchenco (NOAA)
 - Mary Power
 - Concern that increased membership (and subsequent increase in biennial attendance) will change nature of meeting (Freyberg).
 - Move to keep meeting small (~150 people)
 - Modify theme, invite Jim to ExCom meeting and re – present theme at next board meeting
 - Organizing committee
 - Illangasekare, Schumer
- Results of Prioritization survey
 - Money
 - High
 - HIS
 - Cyberseminars
 - Survey of practitioners
 - Biennial meeting
 - Medium
 - CHyMP
 - HydroGeophysics
 - Chair compensation
 - Exhibit at professional meeting

- Hands of workshops
 - Summer board meeting
 - Town hall
 - Low
 - Pathfinders
 - Standing Committees
- Staff time
 - High
 - Catalog of field sites
 - Educational Cyberseminar series
 - REU
 - Medium
 - CE
 - Low
 - Teaching moments
- Lunch Break at 11:55
- Resume at 12:30
- Meeting with NSF
 - Tom Torgersen, Richelle Allen-King and Lina Patino via Teleconference
 - Preliminary comments from Torgersen
 - Earth Cube will be important
 - 2012 will be bad budget year
 - Standing Committees
 - History of Standing Committee development
 - Input from 4 of 5 active committees
 - Served as filters of inputs (prospectuses) to boards
 - Prospectuses are generally problem based with science foundation
 - Invitation to submit was broad, but little input from non water groups
 - Recommended new activities
 - Standing committees are working better than in past due to clearer instructions
 - CUAHSI activities re: mission statement
 - Research infrastructure / HIS development
 - Strong CUAHSI support
 - CUAHSI assumption of operation of data service
 - Diverse agencies, disciplines, nationalities submitting data
 - Hydroinformatics conference
 - User group self established
 - Challenge of data service
 - Large additional financial obligation
 - Expanding HIS to encourage use by other disciplines, i.e. geomorphology, atmospheric data.
 - EarthCube as vehicle to encourage interdisciplinary work
 - HIS as mechanism for this

- Additional Webinar, October Charrette leading to EAGERS
- Education
 - Interdisciplinary education in water science
 - Cyberseminars
 - High attendance live and recorded
 - Next series will focus on WSC and CZOs
 - Another series on education (modeling)
 - Patino encourages cyberseminars, especially modeling education.
 - Torgersen questions target audience of cyberseminar
 - Board: Broader audience than water community
 - Pathfinder Fellowships
 - 2 cohorts
 - Patino concerned about implementation of Pathfinder
 - Let's Talk About Water
 - New initiatives
 - Modest REU program pilot being discussed with Patino
- Diversification of CUAHSI
 - Increasing membership has increased diversity of membership
 - HIS serving different data types and communities
 - Biennial meeting next year directed towards increasing diversity of attendees
 - Review of success of last year's meeting
 - Proposed theme (Fusing Science and Solutions), with respect to increasing interest in other communities
 - Torgersen – CZOs have biennial meeting on alternating years
 - Torgersen – include system science individuals, including WSC
- Research Applications
 - Survey on practitioners in terms of transformational science needs of community
 - Member survey of new members on demands, needs in hydrological science
 - Torgersen – surveys avenue for creation of specific cyberseminars, as well as broadening intellectual base
- Data and information / models
 - HIS
 - CHyMP
 - Discussions with NSF have focused activities
 - Community modeling platform
 - Subcommittee working on CHyMP report, and crafting working group focusing on proposal to move program forward with Earth3, CIF21

- Torgersen – when writing report, prepare proposal for next opportunities. Funding opportunities will be fewer. 3 page white paper should be in circulation now. Value of CHyMP
- Torgersen –Earth3 will likely require CHyMP to incorporate all terrestrial processes. Earth3 focus will be on asking “What sort of infrastructure will be needed to support system science?”
- Board question: Does CHyMP need to be water version of WRF?
 - Torgersen – Want to build something that takes a giant step forward. Depends on funding source (CIF21, Earth3).
- Board question: Should this remain part of CUAHSI core funding
 - Torgersen – Yes, though concerned about time scale. Money can be shifted to continue project.
- Board question: How are community models built? Is extra funding for CUAHSI possible?
 - Torgersen: General solicitations are viable. EAGER possible. Model prospectus can be shopped around
- Board question: Can CUAHSI work with NCAR to leverage
 - Torgersen: If relationship is built, NSF would be amenable to cooperation
- Preparation for management review
 - Patino and Torgersen will give questions in October, review in October and November.
- Funding priorities
 - HIS is large project, top priority
 - Projects were prioritized
 - Torgersen – funding uncertain, but will try to abide by CUAHSI project prioritization
- Fiscal outlook 2012
 - Flat funding is best case scenario
 - Earth3 – high priority independent of fiscal situation 2012
- New activities
 - E/O – education cyberseminar series (modeling)
 - Instrumentation – hands on workshops proposed (Gooseff hydrogeophysics)
 - Observatories – catalogue of field sites
 - Torgersen – had request of field sites recently
 - Research Applications – survey of practitioners
- Next chair meeting with NSF in September
 - Torgersen busy with many NSF section meetings in September
- Meeting breaks 2:15

Towards an Operational Data Center

- Implementation Plan by Jan 31, 2012
 - 10/40/70 Review. Panel composition?
 - NSF recommends Mark Williams, Barbara Minsker
 - Other possibilities: Tim Ahearn (IRIS DMC), Judy Cushing (Evergreen State), Wendy Graham, Claire Welty
 - Cost equivalent to Software Engineer
- Proposal to IF Competition July, 2012
 - EarthCube/CIF21??
- Start Date: January, 2013
- Note: SDSC to continue operation of HIS Central under subcontract to CUAHSI until Data Center launch