# *Presentation Overview*


- **Introduce the AM-1 Outreach Team at GSFC**
  - formed to serve the ECSO & build Earth Observatory
- **How to share EOS data with the general public?**
  - reasons for developing a common Web space
- **A walk through the Interactive Earth Observatory**
- **Visualization experiments & samples**
- **Progress made & milestones**
- **Conclusions & recommendations**

# *EOS AM-1 Outreach Team*


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# *Everyone talks to everyone all of the time—is this OK?*


NASA HQ

EOS PSO

Earth System Sciences Program office

Instrument writers/visual.

Instrument writers/visual.

EOS IDS PIs

DAAC writers/visualizers

DAACs

EOSDIS

NASA PAOs

NASA SVS's

NASA TV Studios

NASA Educational Programs

Newspapers

News magazines

Science magazines

TV News

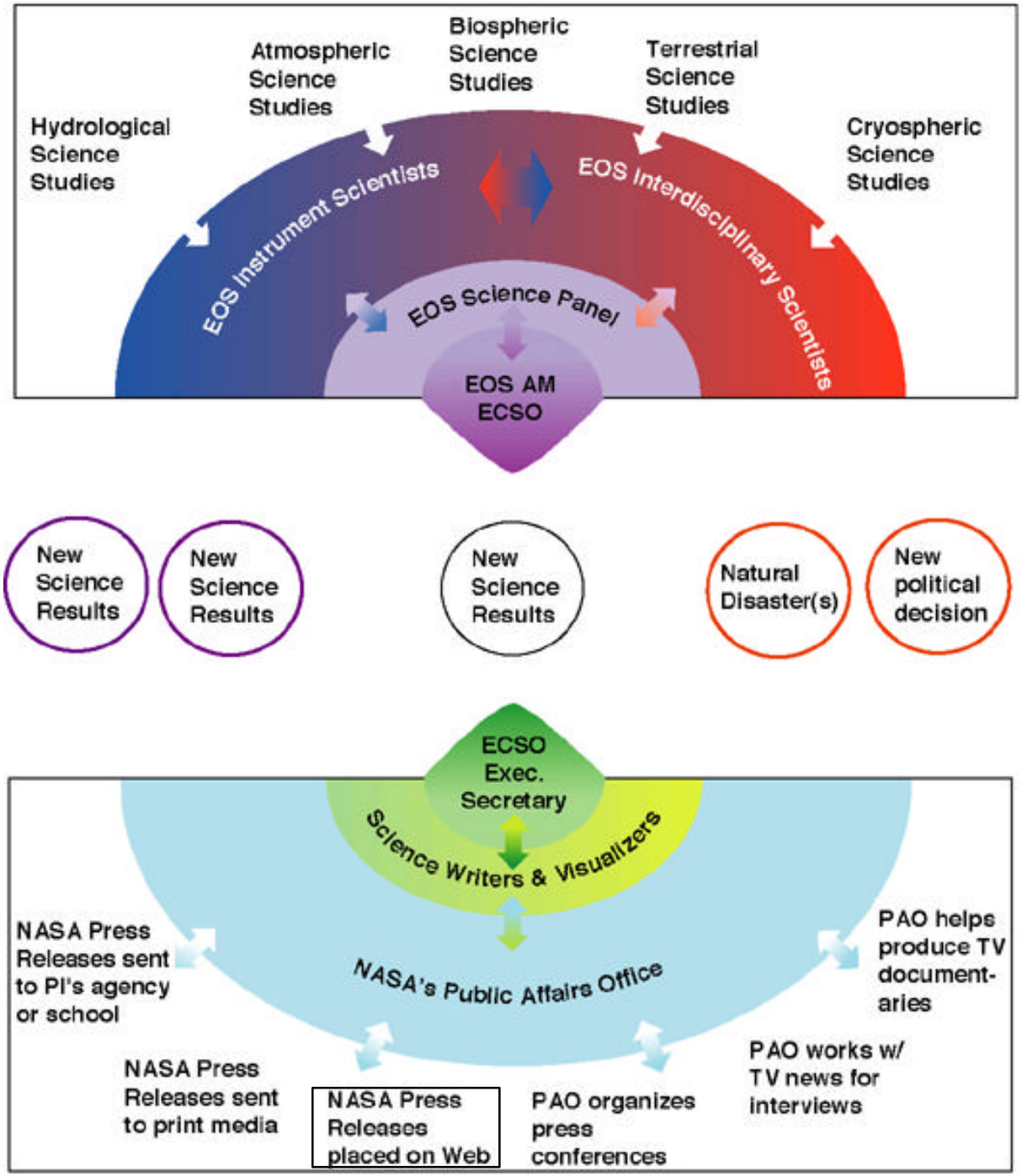
TV documentaries

Web pages

Public school system

# *AM-1 Executive Committee for Science Outreach*


- **Nine members of EOS community chosen**
  - represent AM-1 instruments & interdisciplinary teams
  - each selected 5 science panelists (45 total in the network)
- **Will teleconference bi-monthly to review latest**
  - although, occasionally stories will require 24-hour turnaround
- **"Harvests" new science results for public release**
  - prioritizes EOS PSO promotion of candidate news stories
- **Provides a sound gateway for info flow**
  - amplifies stories' play in public media
- **Links PIs with AM-1 writers & visualizers**
  - press releases produced to scientists' satisfaction


Hydrological Science Studies
Atmospheric Science Studies
Biospheric Science Studies
Terrestrial Science Studies
Cryospheric Science Studies
EOS Instrument Scientists
EOS Interdisciplinary Scientists
EOS Science Panel
EOS AM ECSO
New Science Results
New Science Results
New Science Results
Natural Disaster(s)
New political decision
ECSO Exec. Secretary
Science Writers & Visualizers
NASA's Public Affairs Office
NASA Press Releases sent to PI's agency or school
NASA Press Releases sent to print media
NASA Press Releases placed on Web
PAO organizes press conferences
PAO works w/ TV news for interviews
PAO helps produce TV document-aries

# *ECSO's Players*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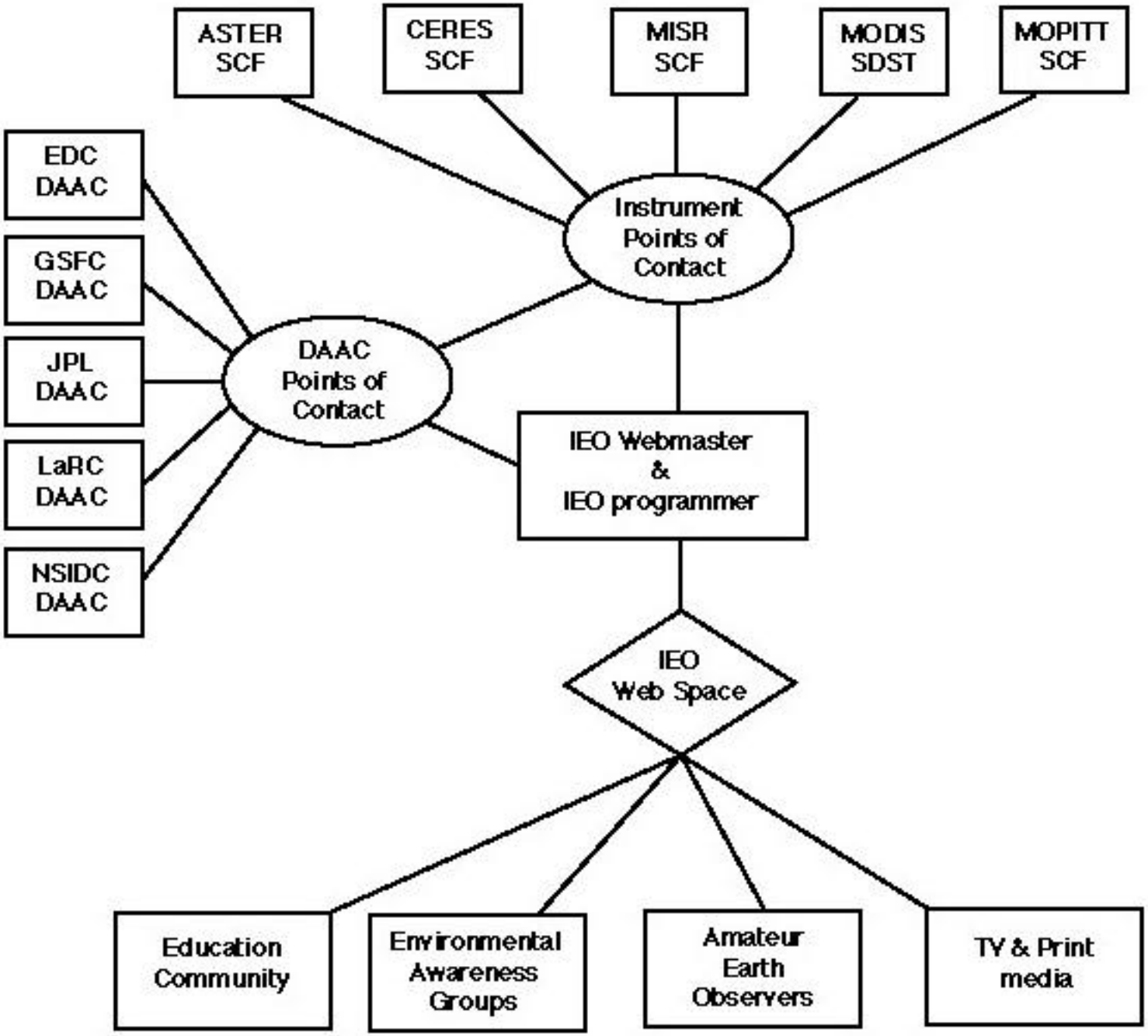
# *Interactive Earth Observatory*


- **AM-1 featured, but will represent all NASA's Earth science missions**
  - with links to instrument & DAAC Web pages
- **Global data sets of key climate change parameters**
- **Higher-res regional & local data products**
  - data products easily understandable & accessible to public
- **Everyone "chips in"**
  - requires input & guidance from science community
  - processing & formatting of data by DAACs
  - writing & visualization expertise of AM-1 outreach team
  - contributions solicited from distributed EOS community


ASTER SCF
CERES SCF
MISR SCF
MODIS SDST
MOPITT SCF
EDC DAAC
GSFC DAAC
JPL DAAC
LaRC DAAC
NSIDC DAAC
Instrument Points of Contact
DAAC Points of Contact
IEO Webmaster & IEO programmer
IEO Web Space
Education Community
Environmental Awareness Groups
Amateur Earth Observers
TV & Print media

# *Visualization Experiments & Samples*


- **Interested in hearing scientists' thoughts on visualizing your data**
  - which products ready in launch + 60 days period? Priorities?
  - who are the primary points of contact from each disc. group?
    - some MODLAND, Atmosphere contacts identified
    - MOCEAN...?
- **Anticipate news events whenever possible**
  - El Nino & La Nina
  - Wild fires
  - Changing seasons

# *Some Candidate AM-1 Global Data Sets*


- global biosphere (MODIS)
- fires & fire susceptibility; based upon NDVI & surface temp (MODIS)
- surface temperature of seas & lands (MODIS)
- spatial dist. (horiz.—total & in 2 layers) of water vapor in troposphere
- spatial dist. (vert. & horiz.) of clouds & aerosols (MODIS & MISR)
- cloud radiative (shortwave) forcing (CERES)
- cloud radiative (longwave) forcing (CERES)
- spatial dist. (vert. & horiz.) of carbon monoxide (MOPITT)
- spatial dist. (vert. & horiz.) of methane (MOPITT)
- elevation maps (ASTER—initially for certain scenes, global after 4 years)
- a globe in the visible (MODIS, MISR)
- *others*...?

# *Goals & Objectives*


- **Develop closer working relationship with science community**
  - identify points of contact from each science team
  - solicit guidance on content of outreach activities
  - scientists feedback on outreach plans
- **Establish formats for submitting data products**
  - need good balance b/t AM-1 Vis Team & sci teams efforts
  - automate process wherever possible
- **Long-term goals**
  - "showcase" AM-1 scientists' work in the public media
  - render data products easily accessible via Web
  - provide context & background info for public "translators"

# *Progress & Milestones*


- **Brainstorming essentially complete**
- **Textual & visual materials being assembled now**
- **Converting *NASA Fact Sheets* into case studies**
- **Online Style Guide under development**
- **Exploring options for indexing & searching site**
- **News releases being actively solicited now**
  - MAS demonstration of MODIS' fire observation capabilities
  - *Others*...?
- **Simplified, interactive models for Laboratory?**
- **Internal review prototype completed Sept. 1, 1998**
  - something in every room

# *Conclusions & Recommendations*


- **AM-1 Team creates POC database**
  - teleconference interactions among scientists, DAACs, & Earth Observatory staff as needed
- **AM-1 Team develops template for submission of case studies from scientists &/or DAACs**
  - see L. Remer's submission to Fire Monitoring Web site
- **AM-1 Team creates database of developing stories**
  - accessible via semi-secure Web site
- **Scientists identify what products ready, & when**
  - over what regions?
  - at what temporal & spatial resolutions?
  - how to automate submission to Earth Observatory

# *Global Fire Monitoring Web Site*


- **http://modarch.gsfc.nasa.gov/fire_atlas**
- **Began as exercise in producing a press release**
  - MAS demonstration of MODIS' new fire monitoring capability
- **White House OSTP wanted rapid response report on Mexican fires**
  - opportunity to demonstrate our new team & test the system
  - hoped to garner added funding for a more robust global fire monitoring effort w/in EOS science community
  - would provide a new case study for the Earth Observatory
- **Proved to be a good and valuable exercise**
  - ~ 75K hits in just over 2 weeks
  - requests from Alachua County Fire Chief; *Time* magazine

# *Lessons Learned*


- **Establish priorities right up front**
  - who is the product for?
  - when is it due? (allow time for review!)
  - how will it be shown?
- **Break up task & delegate w/ clear deadlines**
  - clear, timely communications are essential
  - complete hardest & highest priority tasks first
  - finish prototype, then layer in “bells & whistles”
- **AM-1 outreach team’s primary purpose is public outreach**
  - yet, we may be called upon to help produce scientific or political presentations