CONFERENCE NOTES

Browse

≡ (1) An activity as part of the data selection and ordering task.

≡ (2) Explore ~~without necessary purpose~~ with curiosity WWW

≡ (3) Intensly examine large volumns of data requires tools + rapid access - could be scheduled

Much of the ordering questions can be done with limited samples or ~~the~~ existing other products of lower volumn (Cloud Mask, L III, etc.

Substantial support for on demand subsetting at DAAC. Goal is clear, we were uncertain as to ECS intention.

There are indications of ECS intent to develop + support subsetting for products compliant with hdf image format.

→ SDST will explore by product with Team.

2. LOTS OF enthusiasm for having a WWW accessible image on a daily basis for every product. This could be for example a 400 × 180 pixel (100 km × 100 km) image and ECS put these on a Web server.

— Suggest to Team
— " " ECS

3 Browse Tool and data access.

Need to look at spectral, spatial, temporal slices thru multiple data sets. For validation, for science, for selection. Requires display tool with algebraic capability. Required rapid access (big pipe) between tool running at archive and data. Could be scheduled + staged → Recommend to ECS

4. Need to be responsive to needs of sci community and IDS as collected by ECS, but uncertain as to current status. — SDST will follow

Simulated data

Wayne Esaias

3 slides, then go to panelist

Difference btw test data and simulated data

Oceans planned on seawifs for simulated data, but hasn't launched yet, worrisiome as deadlines approach.

PI is primarily responsible

PRIORITIES

agreements in place - ICDs, SOW's team leader agreements

level of launch readiness

Some handouts yesterday by Ed and Al. Go around table .

Strahler -

gray area between test/simulated data PI may choose odd data of interest only to their product. want to have test data with some information value in it. Need to move beyond black/white squares or moire patterns - need to hit a happy medium.

flieg - test data - good definition. need more than just 1s and 0s (although good check - if you can't get a checkerboard out, have problems). But ECS will use to determine if thy have system scaled properly - need right number of iterations. ALso need output useable by net step. need reasonable set of radiences, but don't need "right definition of a cloud". everything so far cloud-free, will need to excercise cloud algorithms.

Reber

Skip ..(q) (1) need to know when done with test data (2) need test data to come in with software, so that should be a issue in figuring elaborateness of test data. \

Wayne - version beta- algorithms tested individualy. at some point, need more realisti data set to proudce realistic output so next step can use it.

Flieg - will hve 1st test data set by end of month.

barbara - will do both - test individually, and will integrate
wayne - very little coordination between groups

btw level 1 and 2 will break

joann - thats why icds are imprtant

Level 1B will provide calibrated radiences. can be used for level 2

Joanne - not all level 2 require level 1b - many and use calculated reflectance

Barbara - error handling - SDST will bring in error handling routines (from PGS toolkit)

Flieg - another issue - software verification before launch.

Barker - verification of level 1b data different - some will be point data. whether waivers asked for by SBRC are appropriate, etc. Simulations to understand wheter that will be a problem. @0-25 bad waivers a concern doing things on geo,etric - landsat. had sugestion that landsat slope planes not as stable as thought. have been substantial changes
since launch - 1/2 pixel sice launch on landsat 4 - a surprise.

Think scattering is significant - hard to simulate, but simulating ghosting relatively easilyt to see effect on calibration.
Update level 0 data to reflect anomolies as they are found, have shecule for release, will make easier for PIs to test for errors, etc.

To extent possible, will make available. i.e. put sci data into 1b output format
Std format? As resources available, yes.

MCST is testing instrument, as calibraton understood, fine. haven't had energy/rsources to put in useable form, but as it is in useable form, will make it available.

Wayne - dont want to impact mcsts work on characterizing sensor - thats critical - but need data to characterie anomolies. How useful is

barker - no idea how to simulate stray-light problem. ghosting we can do that. can invert that problem , provide image with ghsting. modelling question. problem is not going from image in one fmt to format useful, problem is getting an image with anomalies. Must understand how anomoliy is produced, then simulate it.

is test data of protoflight data going to e available soon enough or use pre launch - when will be available

flieg - more basic question - test data as planned - will it give scattering?

barker - not sure test procedures are going to adress yet phenomenon that are significant before launch.

if you want to be able to sepearate phenomenon going on in insreument - not sure that wil be ale to do that

Will there be tests on reticules or images where result should be known, and show all phenomenon?

Barker - thought that only usefull thing would be to model phenomena, so could characterize it. SBRC doesn' t collect image data in their testing

any plan to take sub-pixel light source. move thru all points in FOV to look at ight pathe?>
Would like to, but not planned.

How good can data be?

Some stuff might be very good. Ghosting wll be very good.
Will start to get data - possibly engineering but probably protoflight, better than test data can be, bette than can be modelled. Will get data that is a better than can do on orbit because of controls that can do on ground. eg - spectral test. Very good data, can do very good simulations before launch. Hw soon? i's a contimuum. bits and pieces will come in.
Radiometric and geometric data will wait to protoflight, because some fixes not in engineering
spectral available now -

wayne evolutionary thing - some will be as good as they will be before flight, otherw will wait until orbit.

other things will be better through modelling, because you cna't coleect enough data.

3 levels

Ungar - different spin I don't think we have a simulation plan, because dont value simulation. Simualtion fell by wayside as funds got cut. DOn't have, cant have

good simulation is present product which is extemely well charactericzed, can recoup variations in original scene. can have synthetic scenes, simulated scenes, characterize algorithm sensitiviry, adjacency, etc.

Pint 2 - emphasis on need ready now - best time to have simulatin ready is post-launch

if we gt a scene back , with striping, nice to have simulation to verify behavior, propose fix/workaround.

Wayne - most simulations described were level 0/level 1. ??

Steve - triggered by scene variations. could be algorithm artifact. could get ringing going from low contrast to hight contrast scene ...

King - c valuable, but can be big sinkhole

wayne - hoping group can give guidance as to how much is enough - Encouraged ongoing dialog

steve - least effort should be hightest priority. synthetic scenes. diagnostic. used to adust tv with tet pattern.

wayne - do we have that at level 0 for everyne who needs it? level 1?

Skip - distiction beween test and simulation data restated

Wayne - gray area for level 1 processing.

barbara - als group putting together simulated data package, goig to evolve t. would it help others to have their hands on it??

al - have tool swhihc are partal solutions, would talk wth folk on producing subsets f test data, subjec tot resouce availability

--- nice to have radiative trhansfer model

yess, but can't be generic

barker - was original intent. Havent had resources to suppor t htat. not trivial effort. going at it piecemeal now. do pieces that are most critical first.

Summize -

will have to be evolutionary, tuned to peoples needs.

performance of algrithems wrt instrument anomolies instead of geophysical artifatcson ground.

need something in simulated data to handle anomolies.

Limit samples from MCST if not facts

Software verification - what is it if not making sure than things flow.

Yield other to QA, QC, Val

Q - wil test data include tag ancillary data??
Al -Twst data will have geolcaton and DEM (elevation).

Need ongoing coord with Sci Team