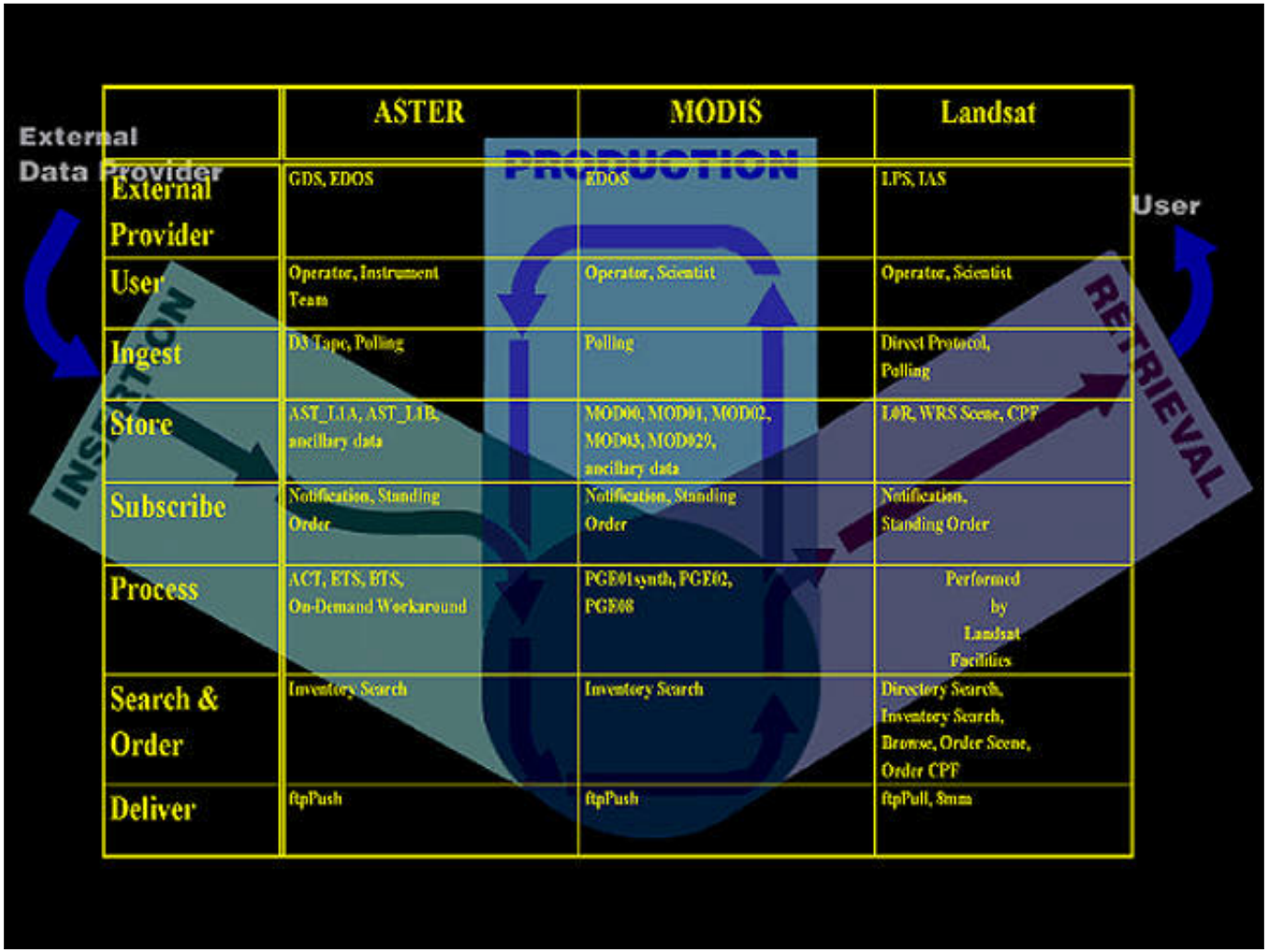
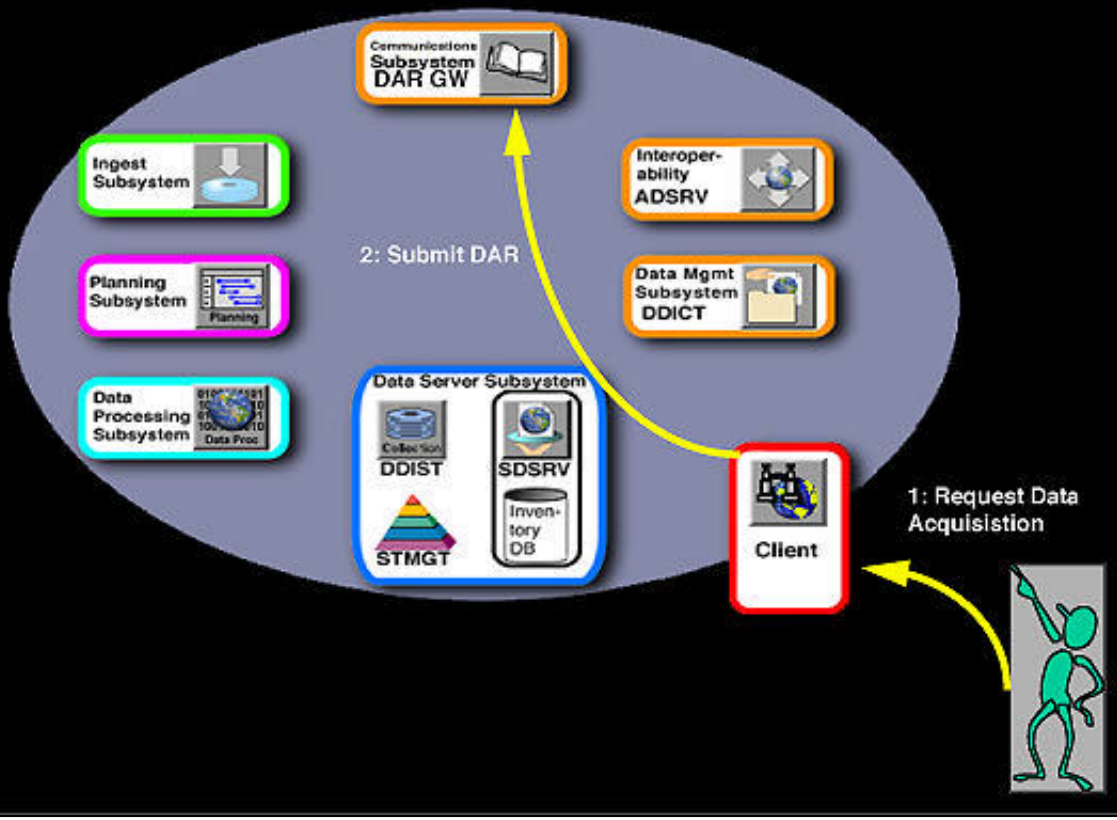

External Data Provider
User
INSERTION
PRODUCTION
RETRIEVAL
ASTER
MODIS
Landsat
External Provider
GDS, EDOS
EDOS
LPS, IAS
User
Operator, Instrument Team
Operator, Scientist
Operator, Scientist
Ingest
DS Tape, Polling
Polling
Direct Protocol, Polling
Store
AST_L1A, AST_L1B, ancillary data
MOD00, MOD01, MOD02, MOD03, MOD029, ancillary data
L0R, WRS Scene, CPF
Subscribe
Notification, Standing Order
Notification, Standing Order
Notification, Standing Order
Process
ACT, ETS, BTS, On-Demand Workaround
PGE01synth, PGE02, PGE08
Performed by Landsat Facilities
Search & Order
Inventory Search
Inventory Search
Directory Search, Inventory Search, Browse, Order Scene, Order CPF
Deliver
ftpPush
ftpPush
ftpPull, 8mm

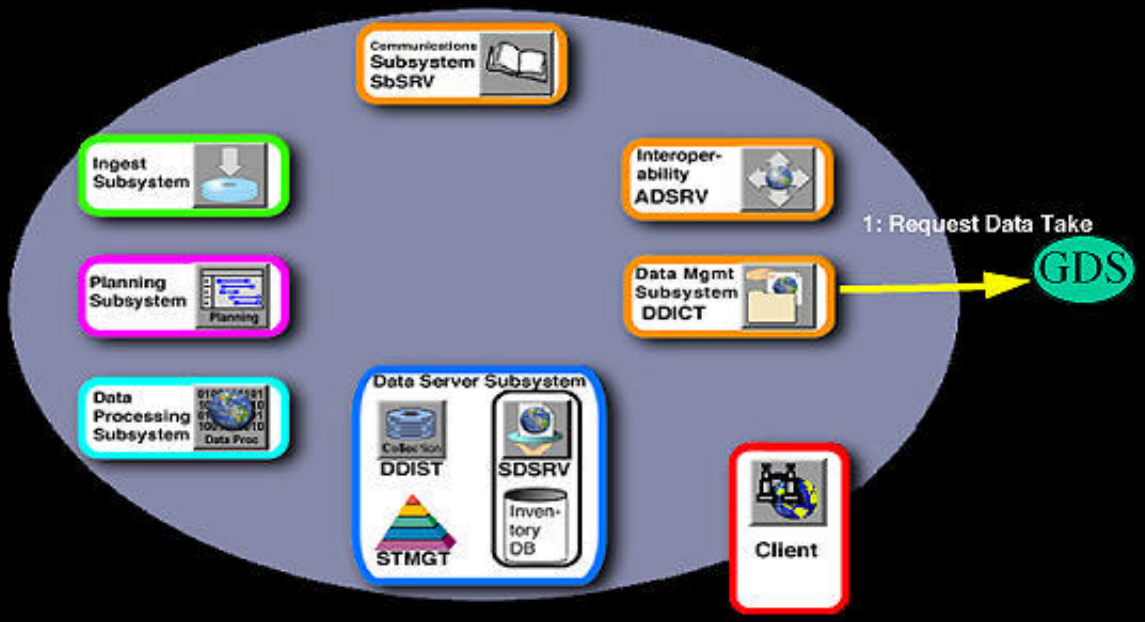
ASTER 2

ASTER Scientist determines an area of interest. The scientist decides to request an ASTER data take over that area, using the DARTool.



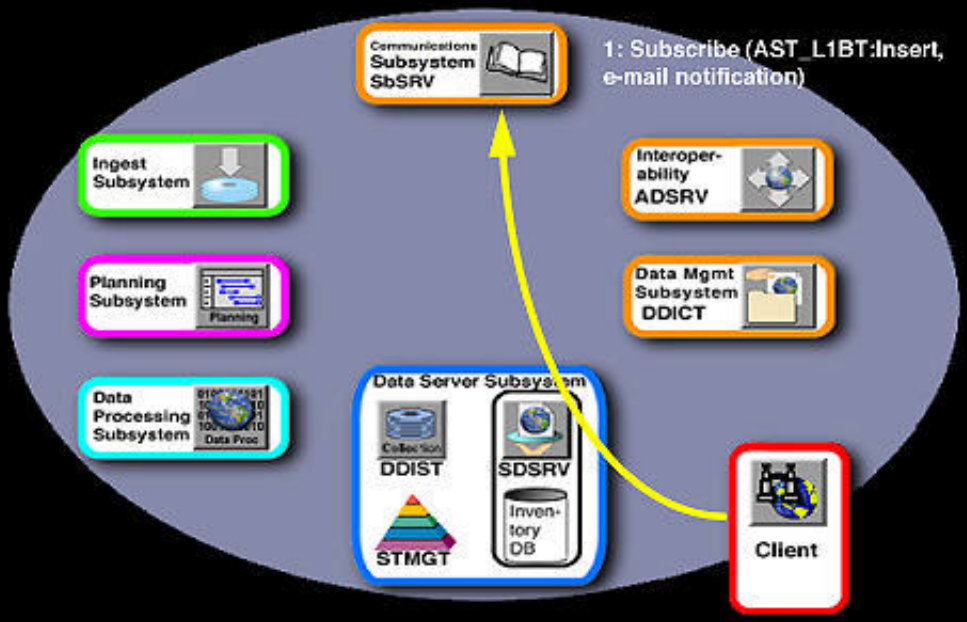
ASTER 3

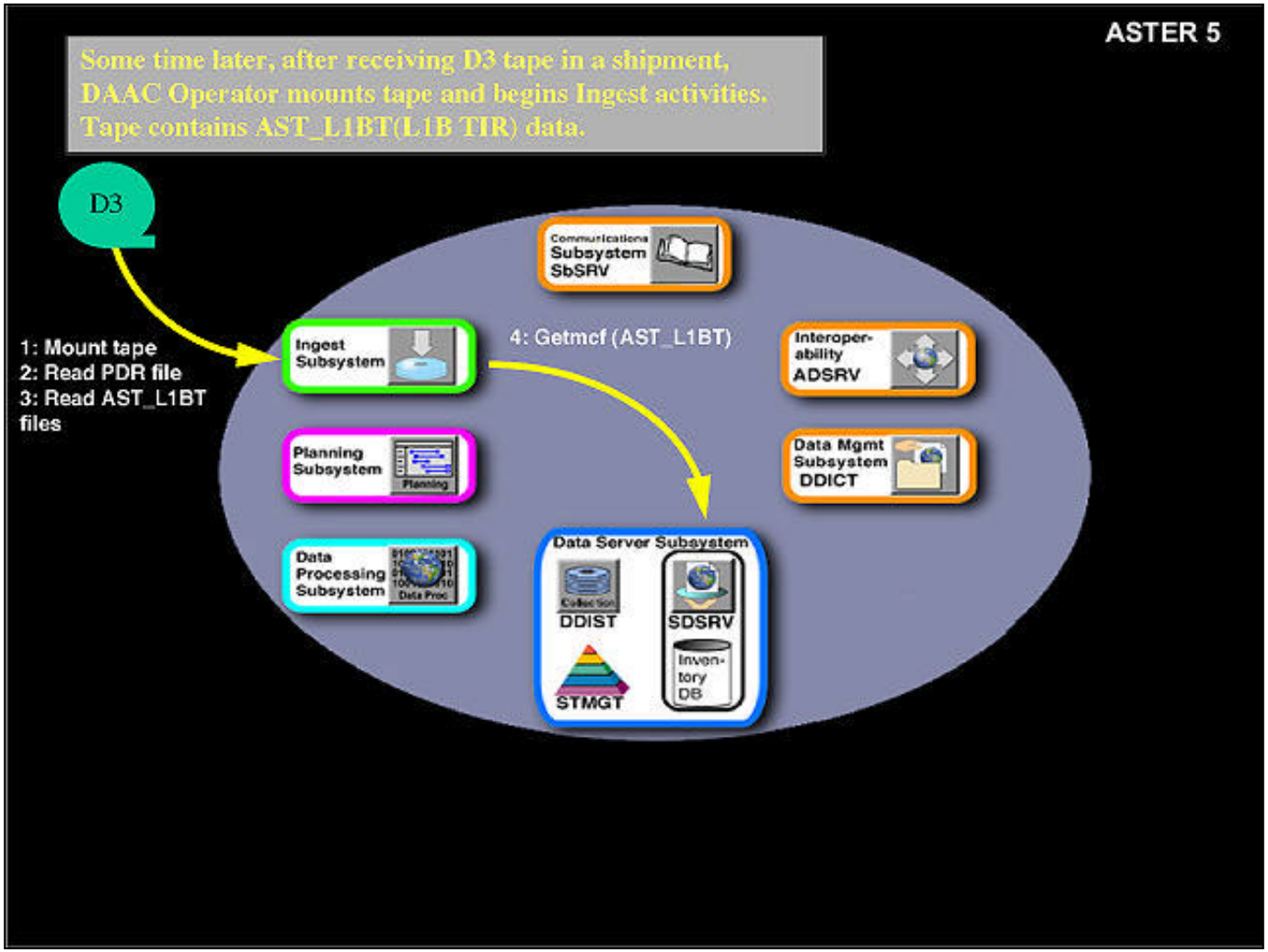
ECS-GDS Gateway submits a request for a data take over the area of interest. GDS responds with a DARid.



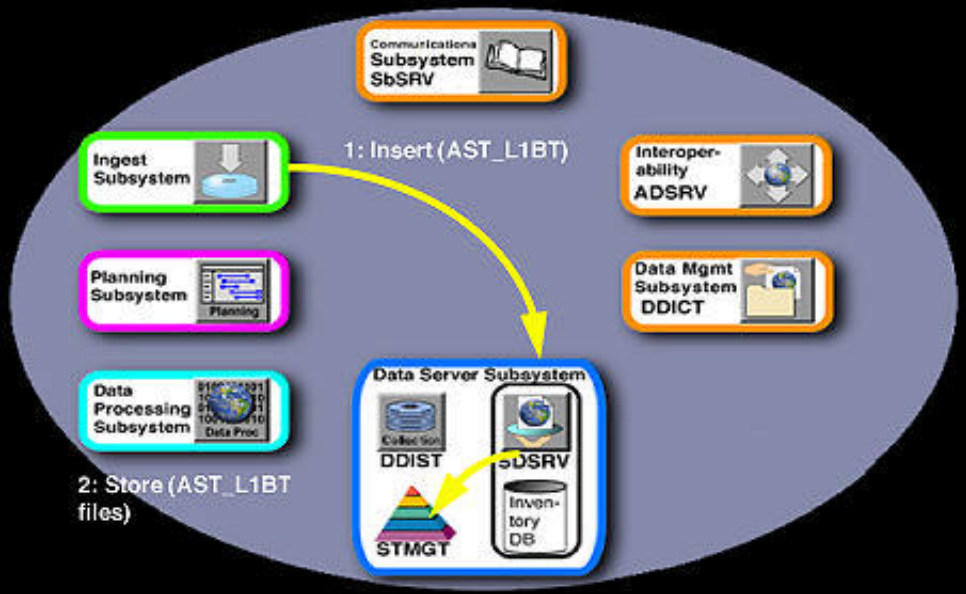
ASTER 4

DARTool submits subscription for notification on the occurrence of AST_L1BT:Insert event, qualified with the DARid.

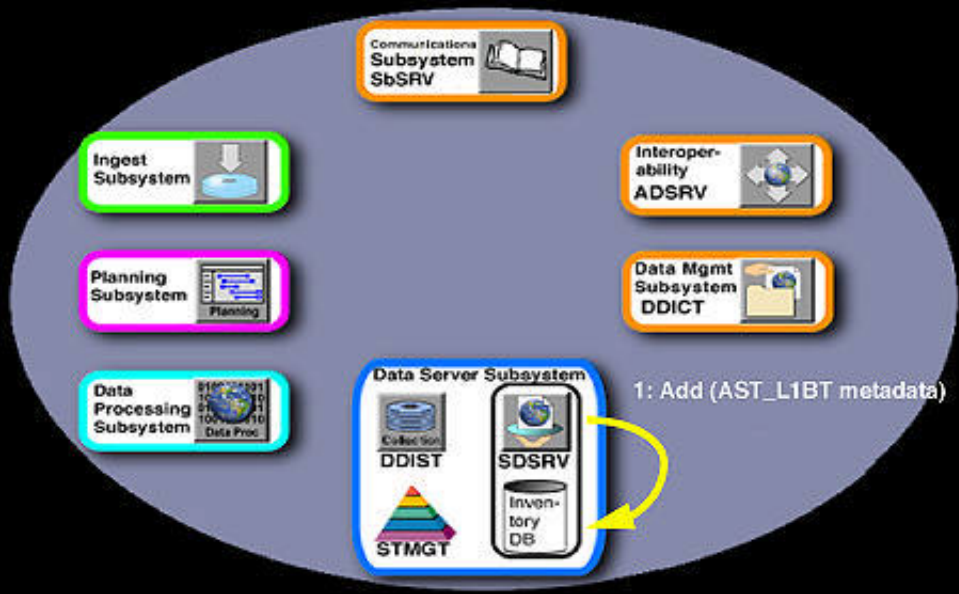



ASTER 5
Some time later, after receiving D3 tape in a shipment,
DAAC Operator mounts tape and begins Ingest activities.
Tape contains AST_L1BT(L1B TIR) data.
D3
1: Mount tape
2: Read PDR file
3: Read AST_L1BT files
Communications Subsystem SbSRV
Ingest Subsystem
4: Getmcf (AST_L1BT)
Interoper-ability ADSRV
Planning Subsystem
Planning
Data Mgmt Subsystem DDICT
Data Processing Subsystem
Data Proc
Data Server Subsystem
Collection
DDIST
SDSRV
STMGT
Inven-tory DB

Archive AST_L1BT(L1B TIR) data granules.

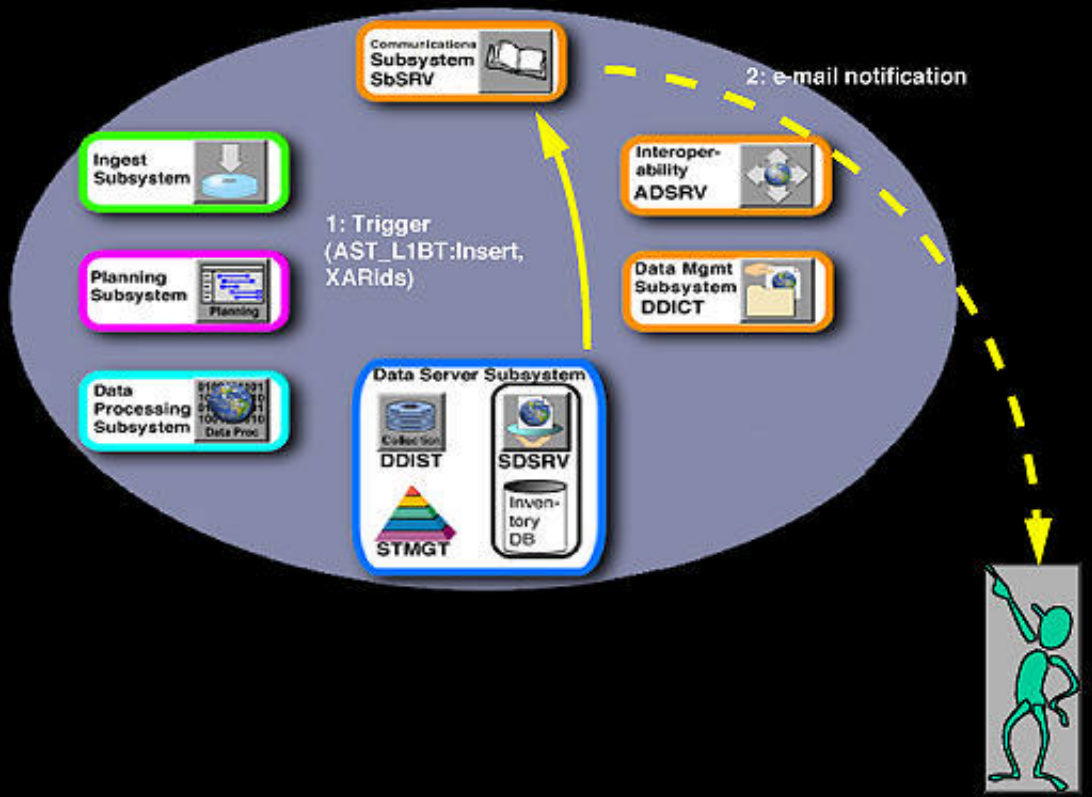


Add metadata for AST_L1BT(L1B TIR) granules to the Sybase/SQS database.

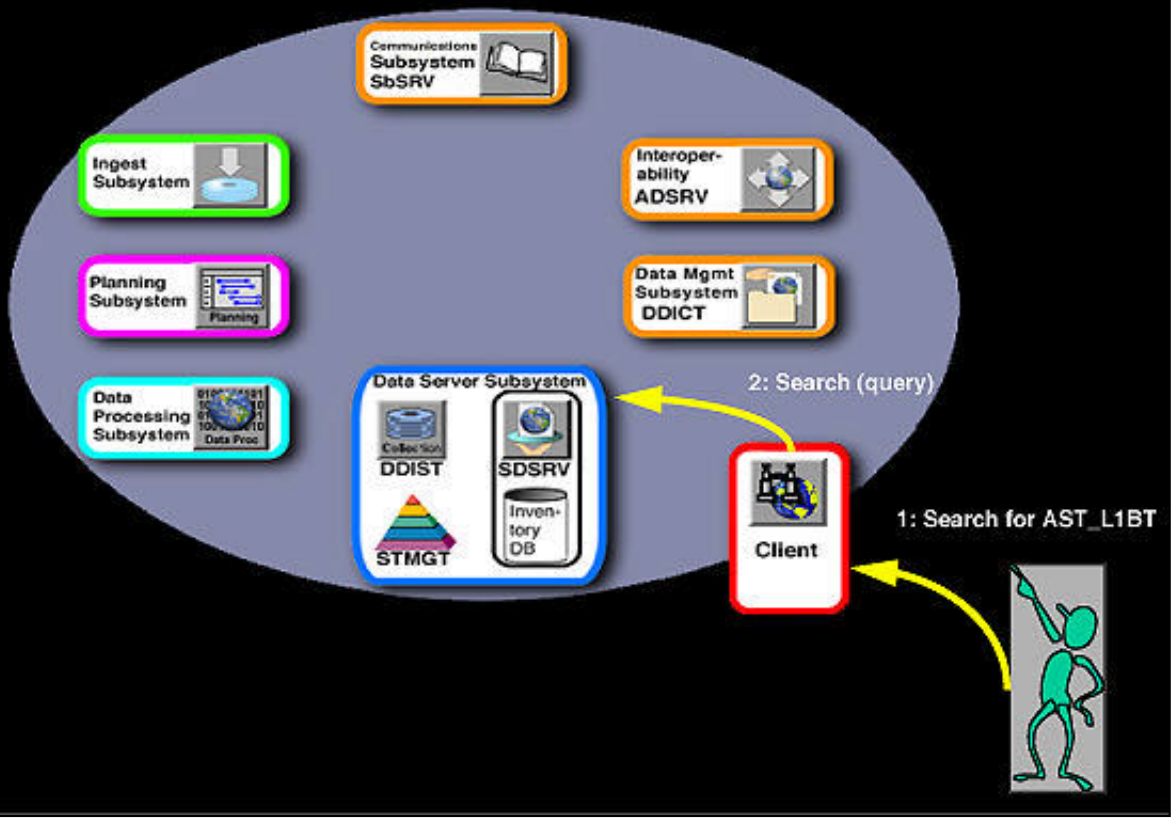


ASTER 8

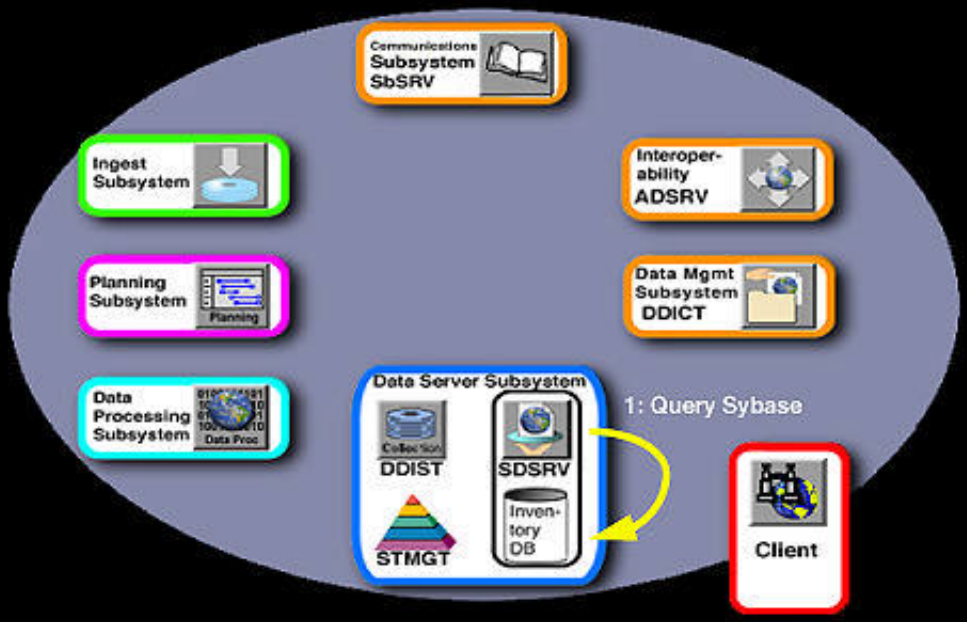
Notify all AST_L1BT:Insert event subscribers whose DARids are matched with the ingested granules.



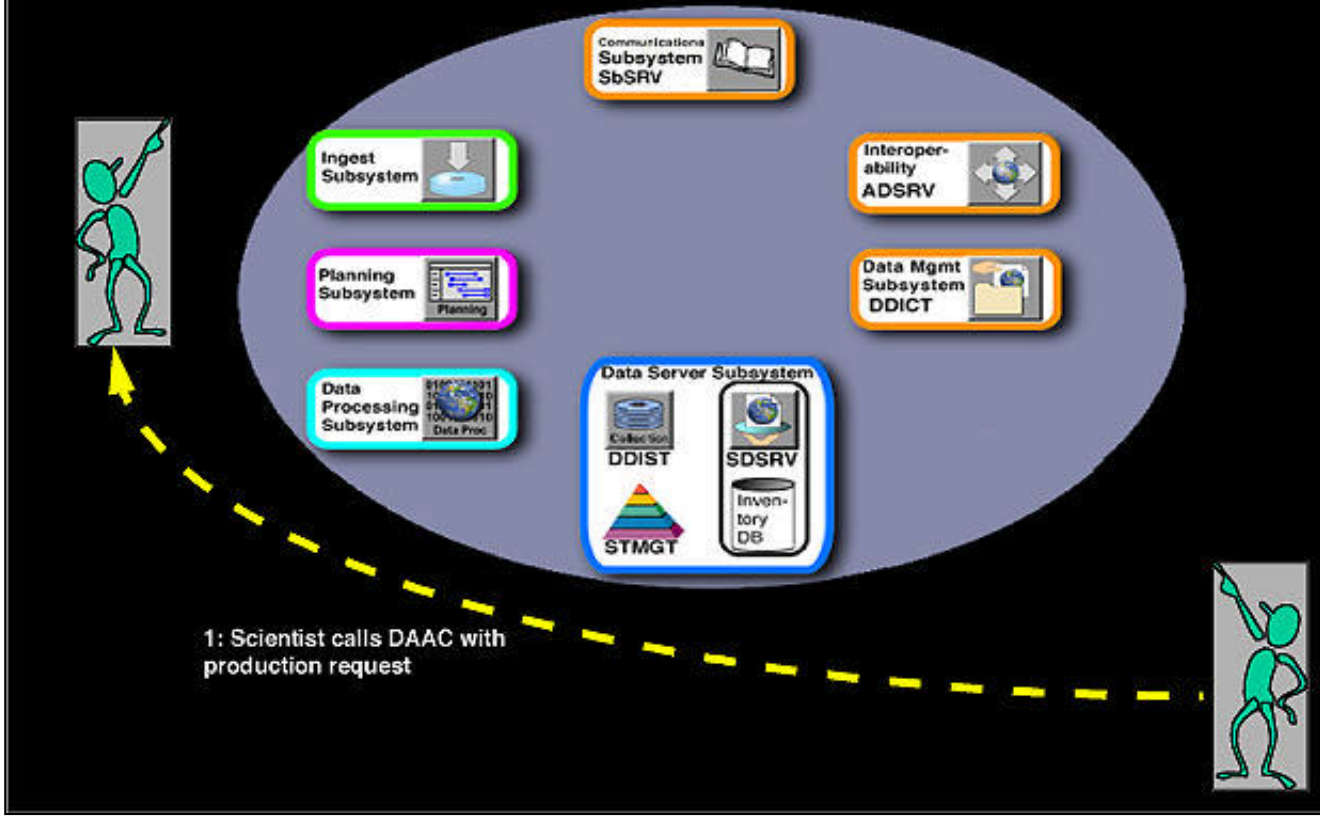
ASTER Scientist decides to check out the AST_L1BT(L1B TIR) granule that was received. First, the scientist searches for the granule.



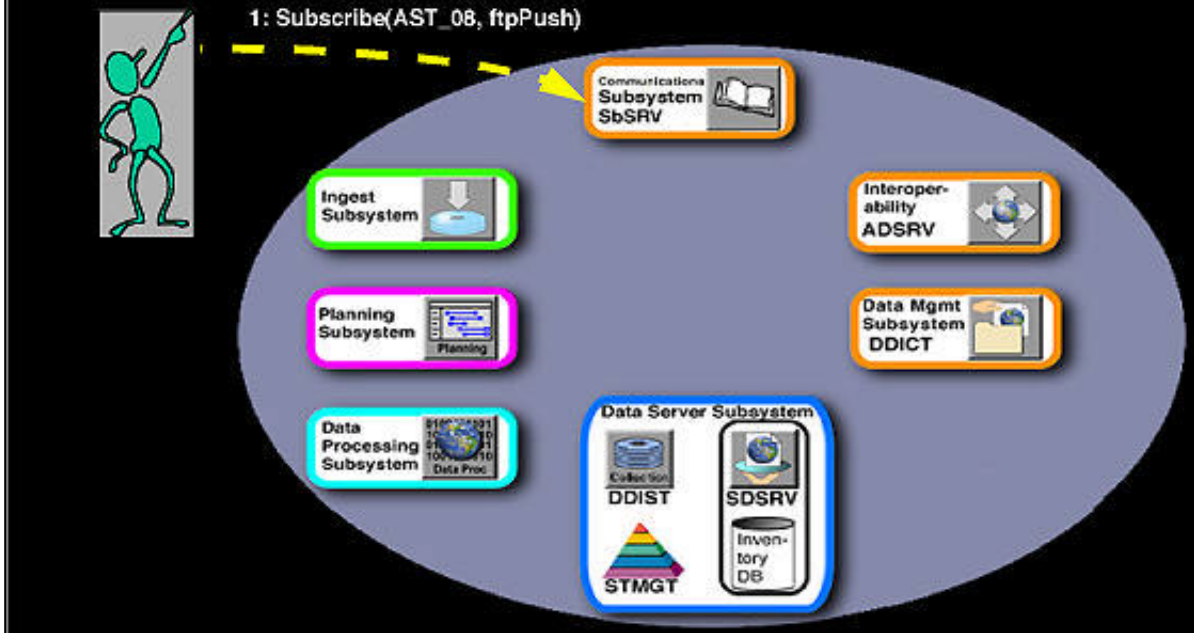
SDSRV queries Sybase/SQS database for AST_L1BT(L1B TIR) granules meeting search criteria



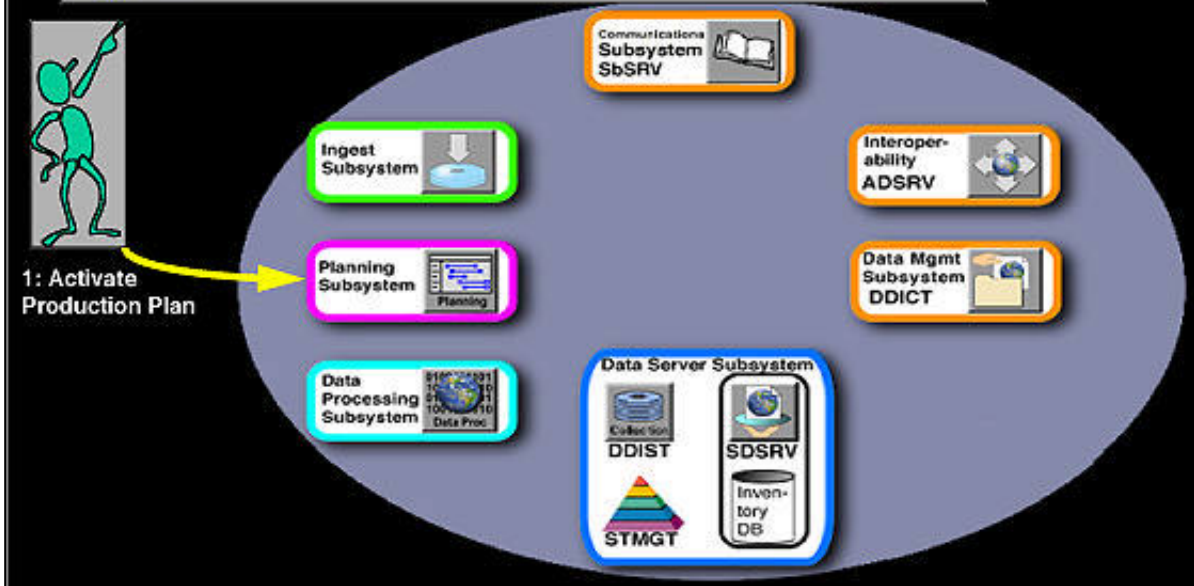
Scientist calls DAAC, requesting AST_L1BT(L1B TIR) be generated into an AST_08 (L2 Surface Temperature) product, using ETS algorithm.



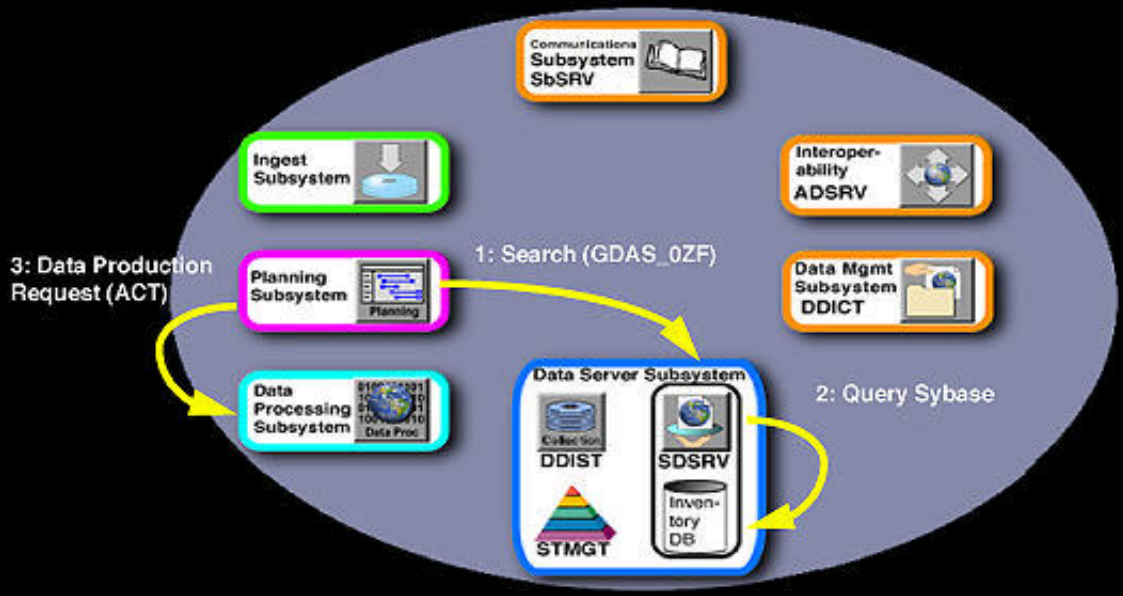
DAAC enters subscription, on behalf of scientist, for delivery of AST_08 (L2 Surface Temperature) product, via ftpPush, when product is generated.



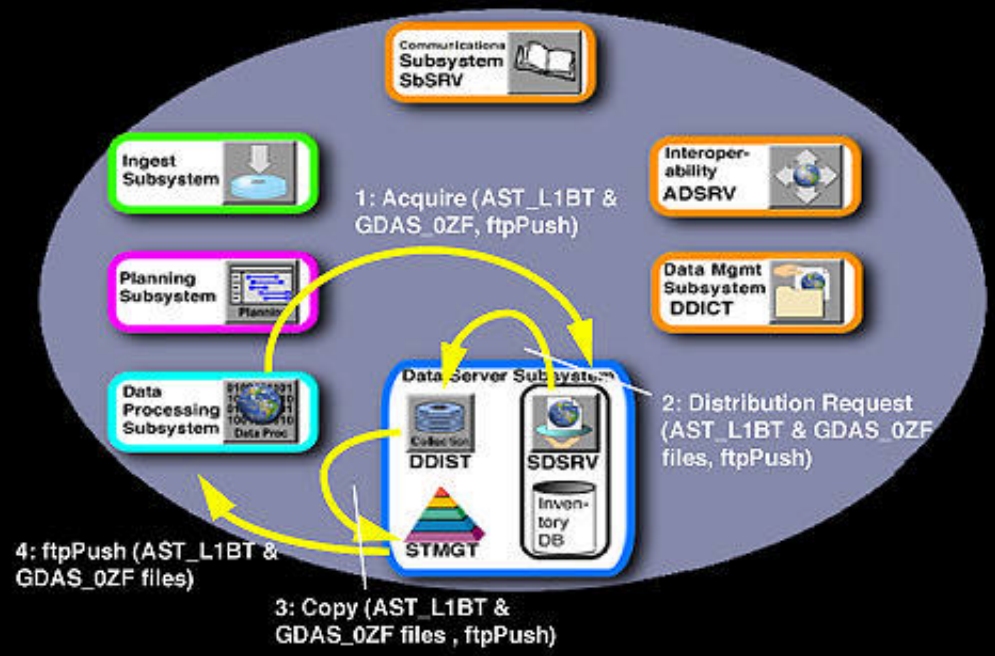
After determining that in order to run ETS algorithm on AST_L1BT(L1B TIR), first ACT algorithm must be run, operator activates a plan, which includes a DPR for the ACT, with the AST_09 (L2 Surface Radiance TIR) output feeding the ETS algorithm.



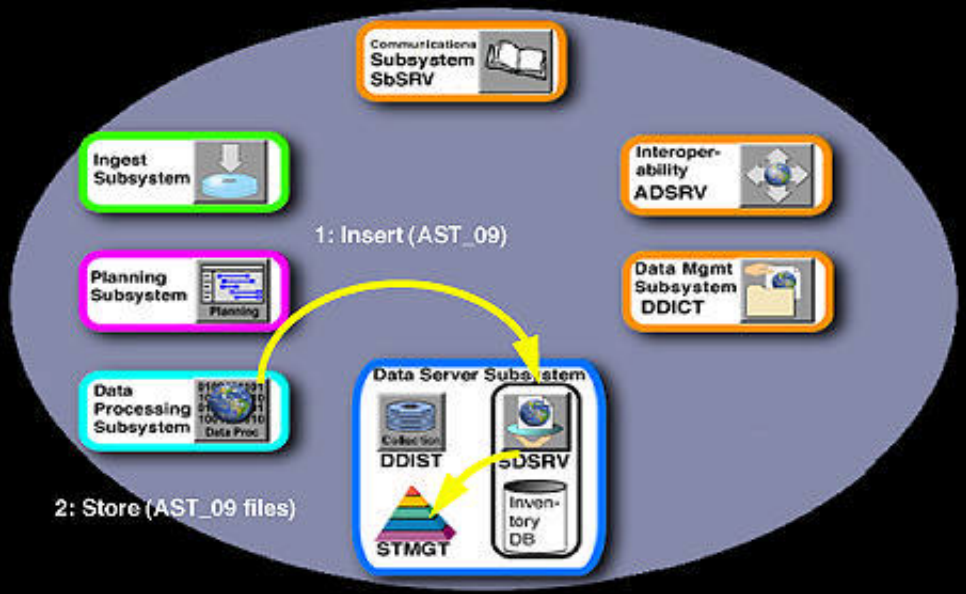
ACT production job locates required GDAS_0ZF (NCEP ancillary) input data granule. DPR for ACT is then released.



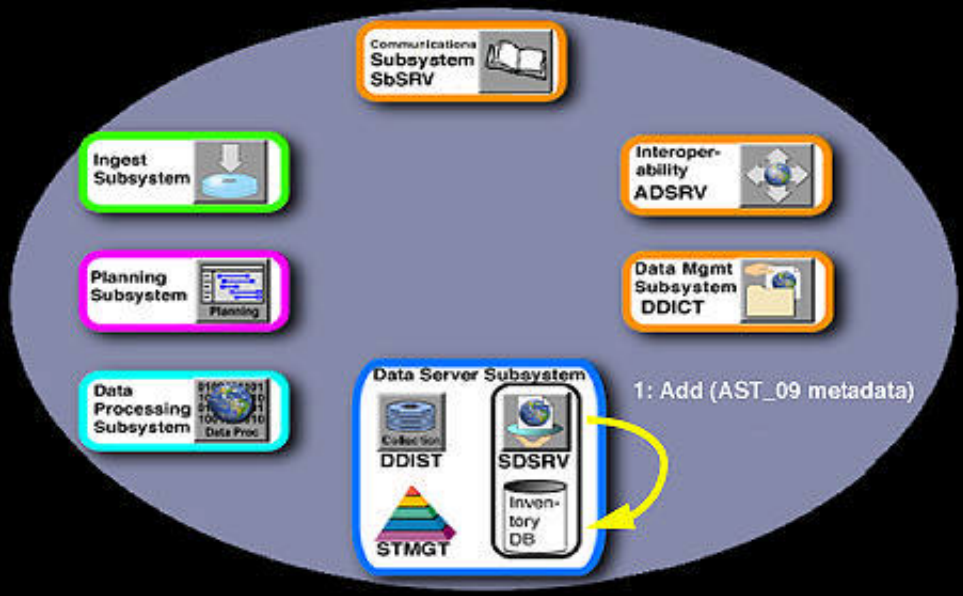
ACT production job retrieves required AST_L1BT(L1B TIR) and GDAS_0ZF (NCEP ancillary) input data granules.



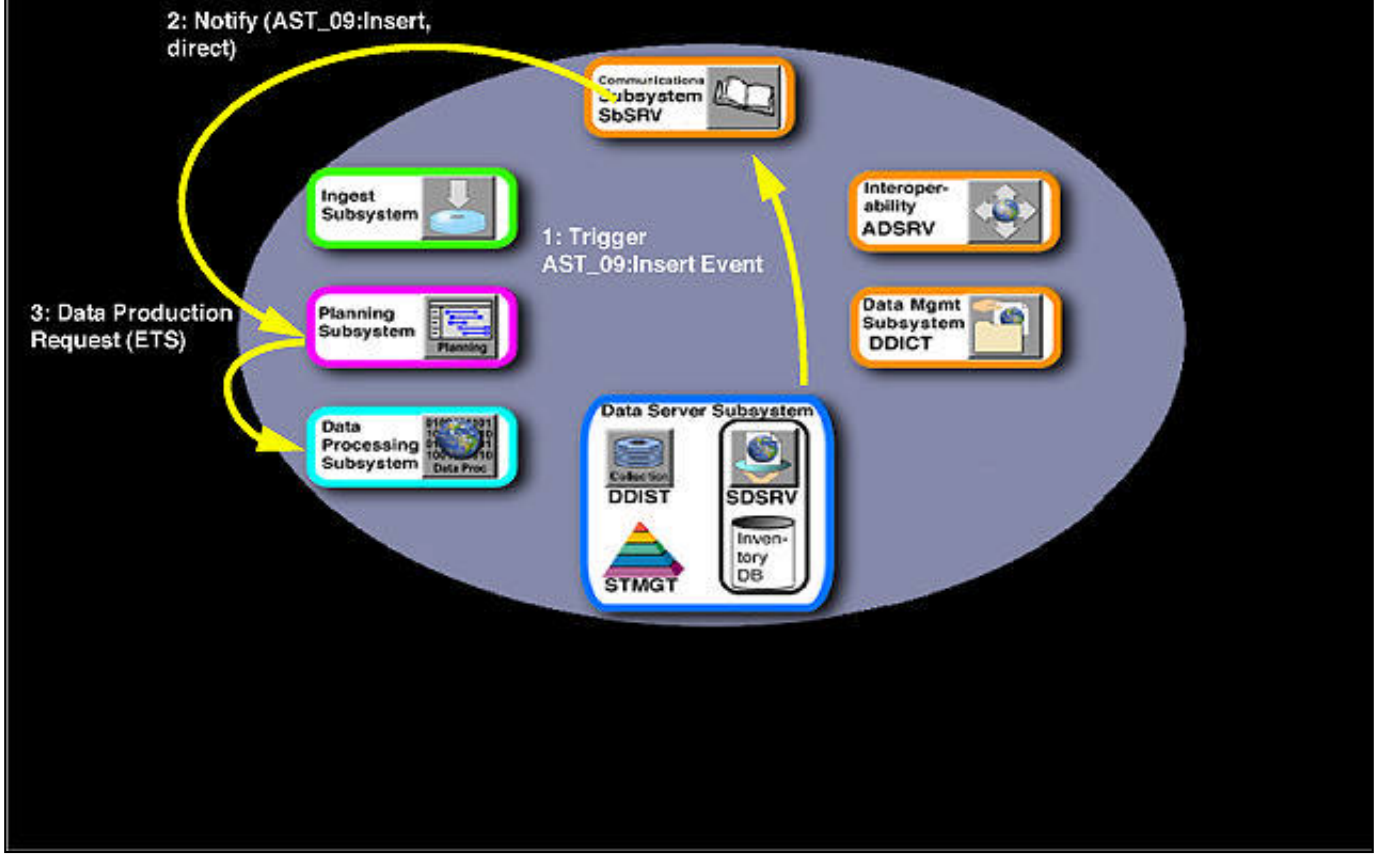
After sucessful execution of ACT PGE, archive newly created AST_09 (L2 Surface Radiance TIR) granule.



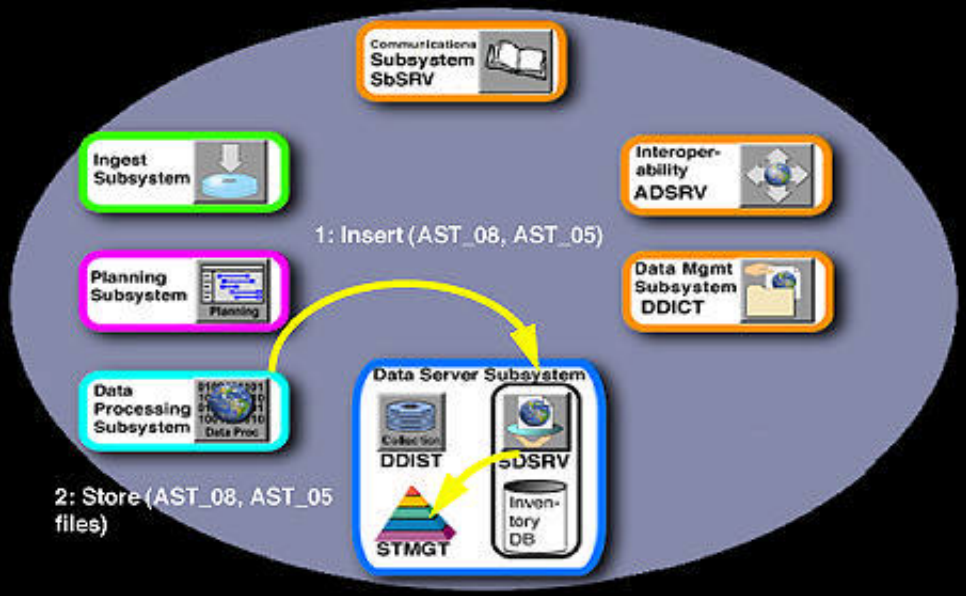
Add metadata for newly created AST_09 (L2 Surface Radiance TIR) granule to the Sybase/SQS database.



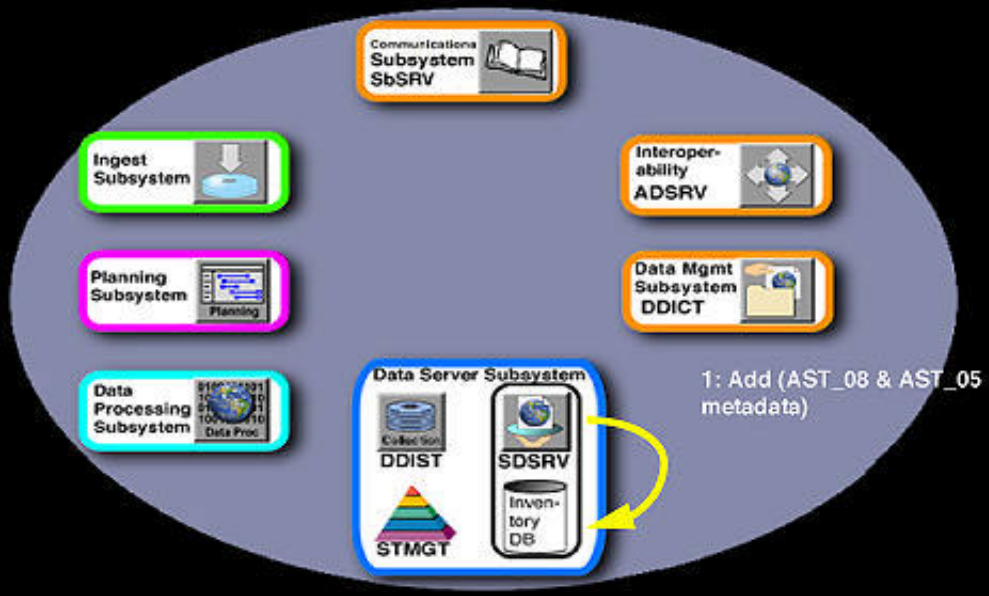
Notify all AST_09:Insert event subscribers. This will include notification of the Planning subsystem, for chained processing.



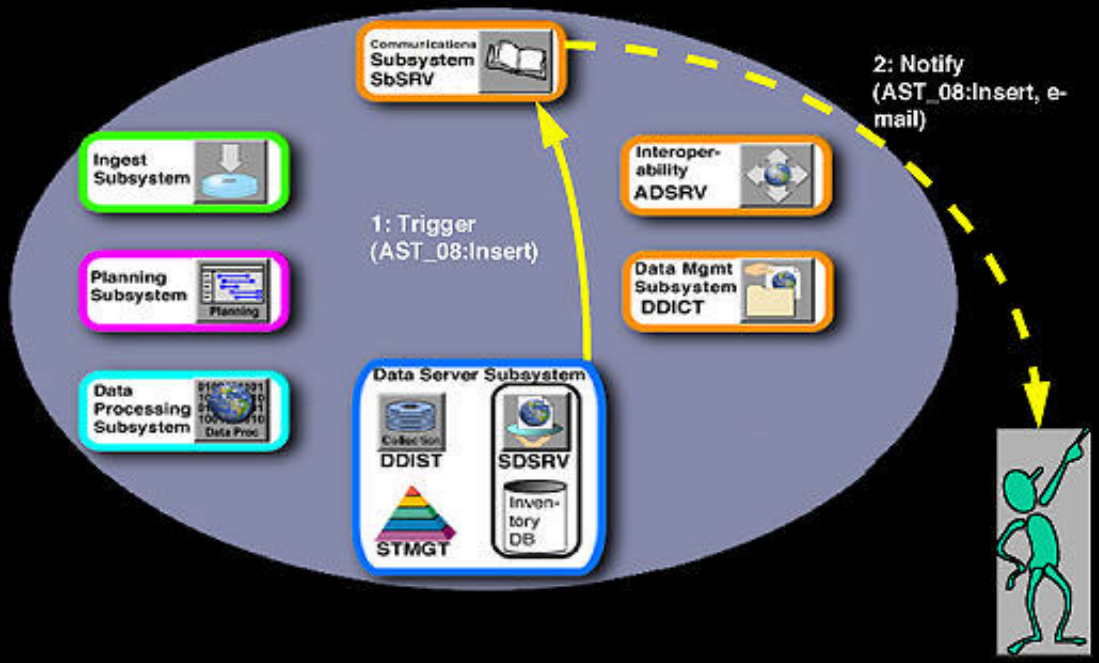
After PGE completes, archive newly created AST_08 (L2 Surface Temperature) and AST_05 (L2 Surface Emissivity) granules.



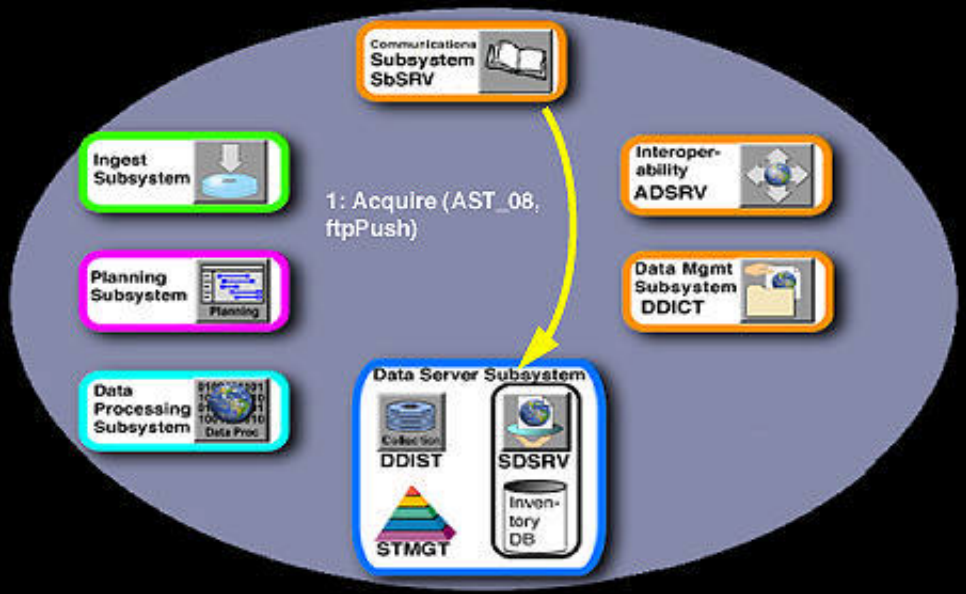
Add metadata for newly created AST_08 (L2 Surface Temperature) and AST_05 (L2 Surface Emissivity) granules to the Sybase/SQS database.



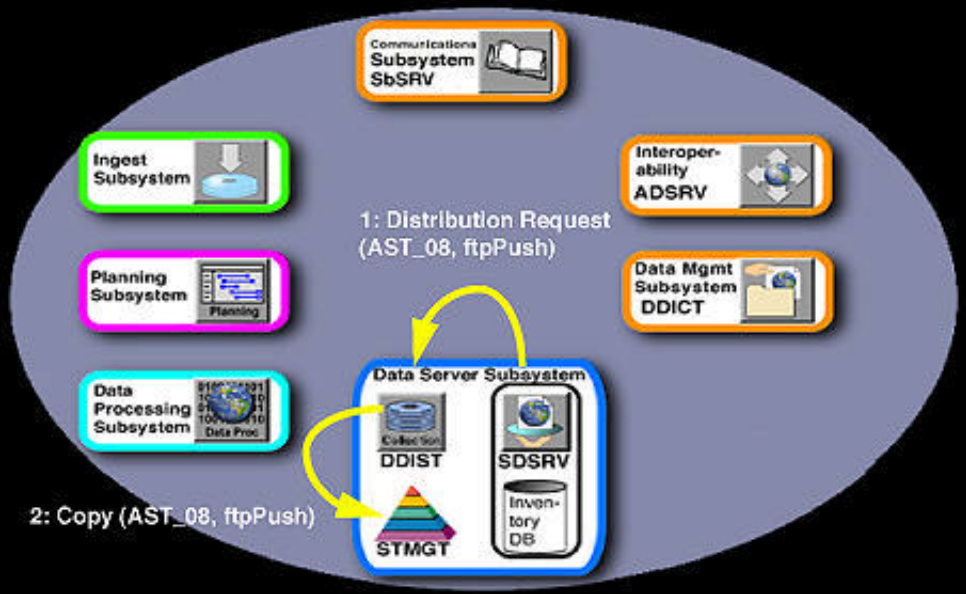
With insertion of the AST_08 (L2 Surface Temperature) granule, the ASTER Scientist Standing Order Processing will begin.



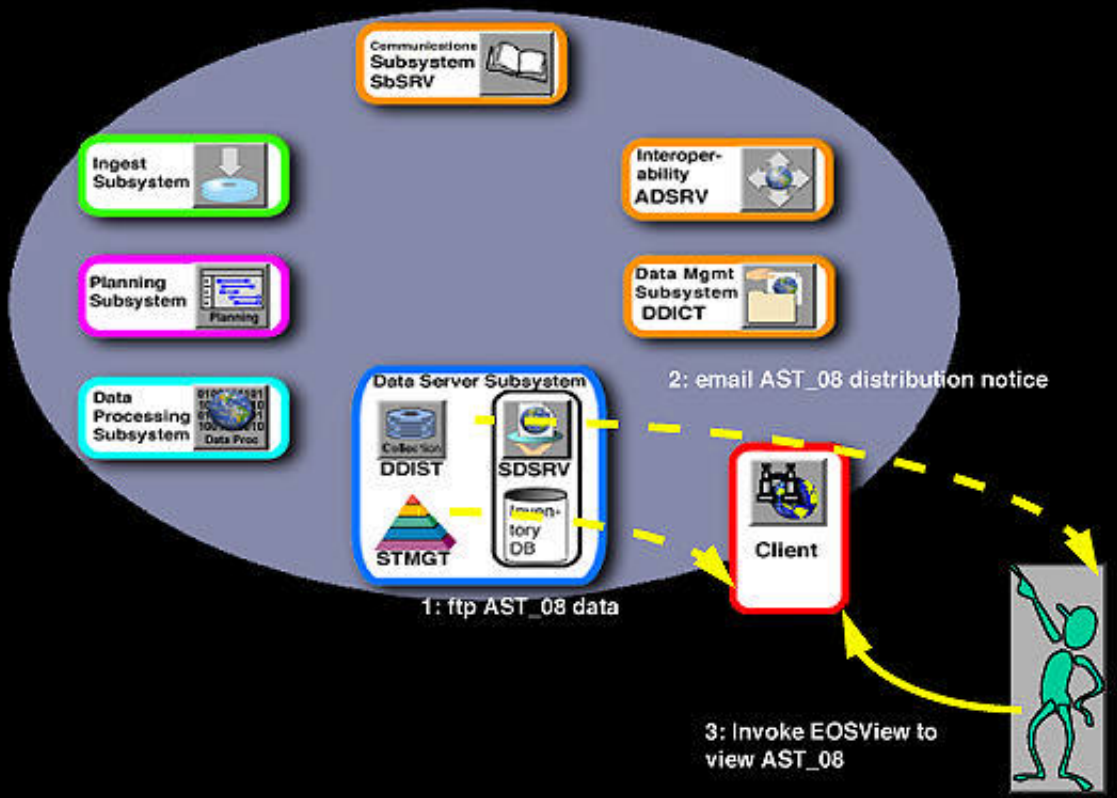
Subscription Server submits order for AST_08 (L2 Surface Temperature) data, via ftpPush, on behalf of Science User.



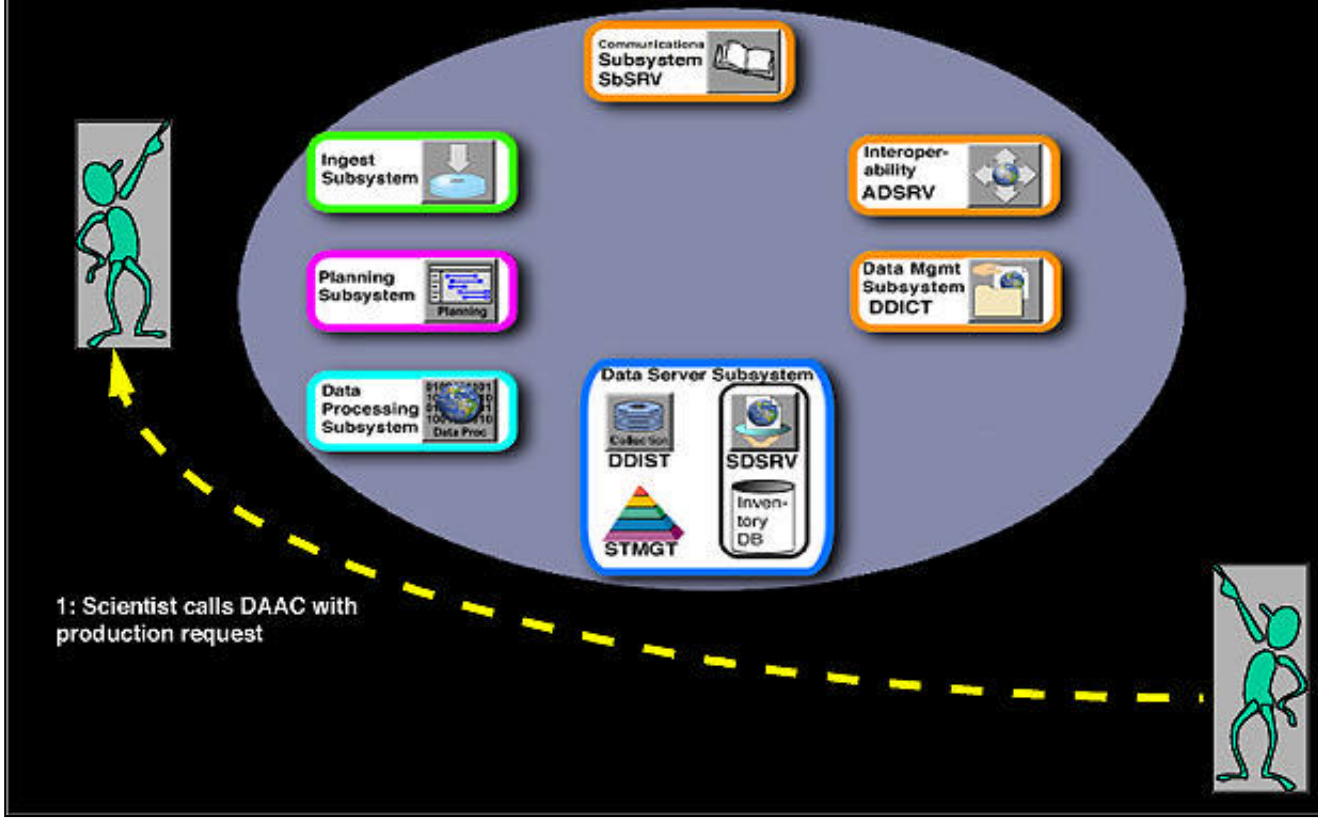
Retrieve newly created AST_08 (L2 Surface Temperature) granule from Archive.



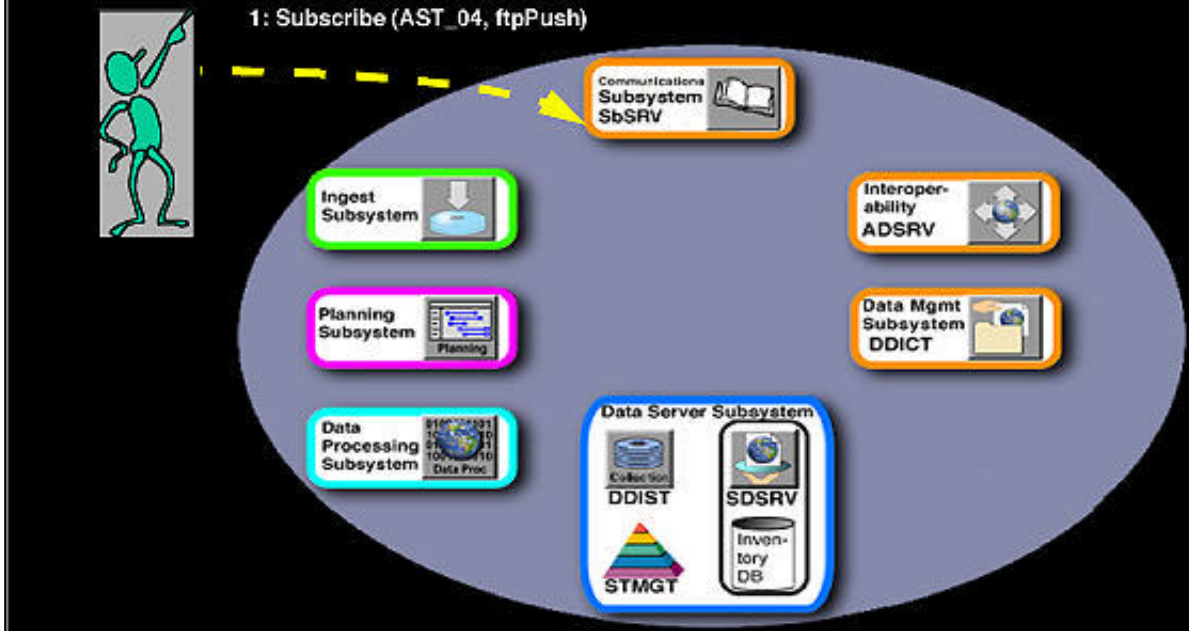
ftp AST_08 (L2 Surface Temperature) granule to ASTER Scientist's workstation.



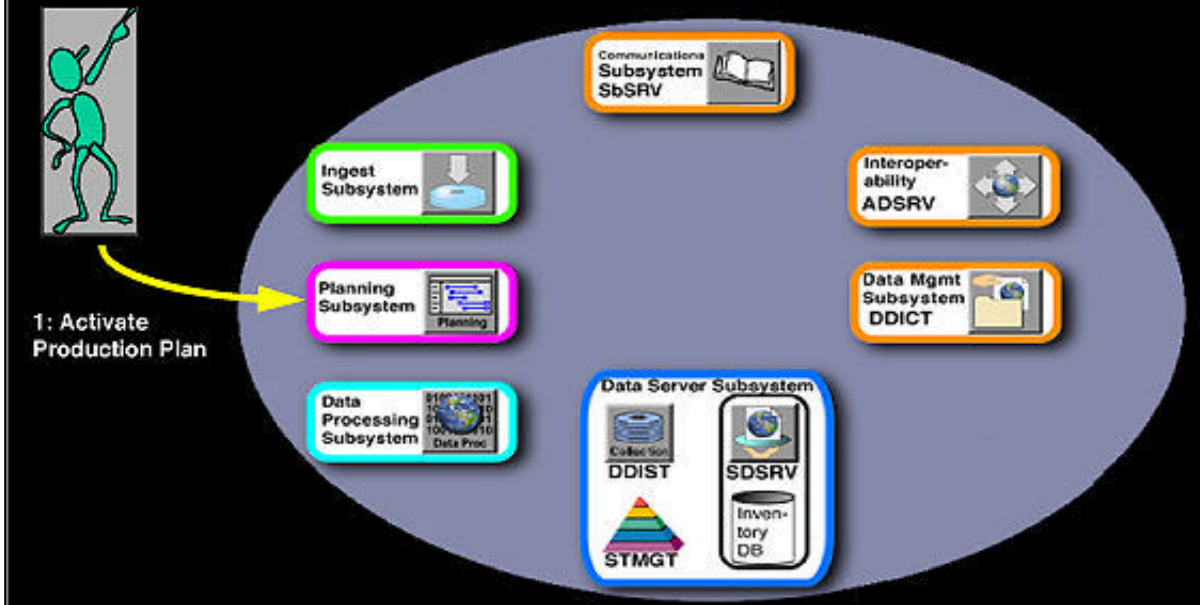
Scientist calls DAAC, requesting AST_L1BT (L1B TIR) be generated into an AST_04 (L2 Brightness Temperature) product, using BTS algorithm.



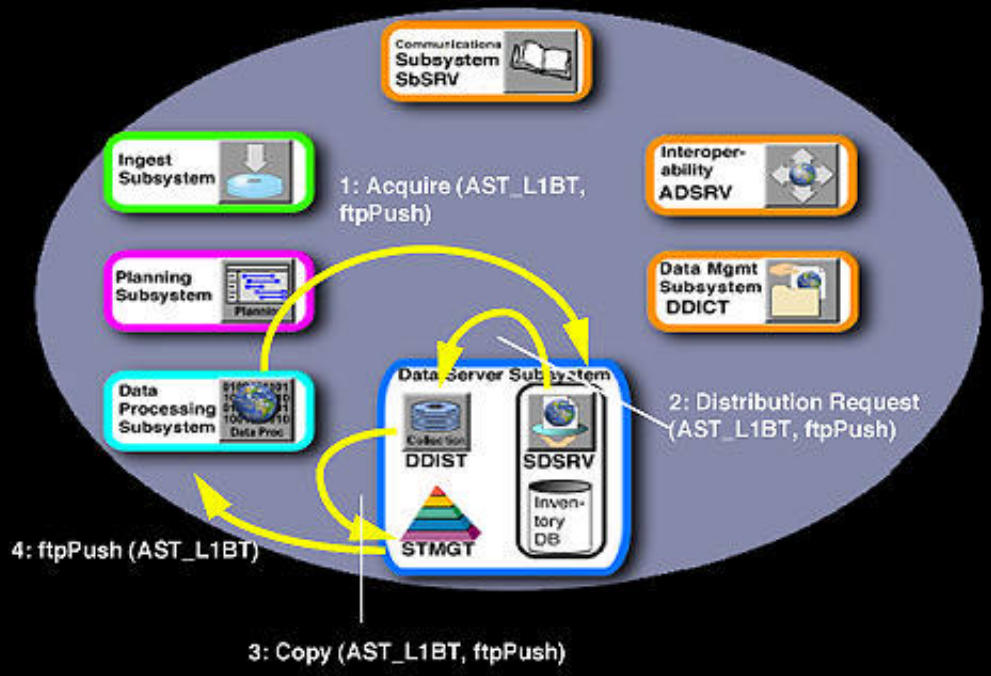
DAAC enters subscription, on behalf of scientist, for delivery of AST_04 (L2 Brightness Temperature) product, via ftpPush, when product is generated.



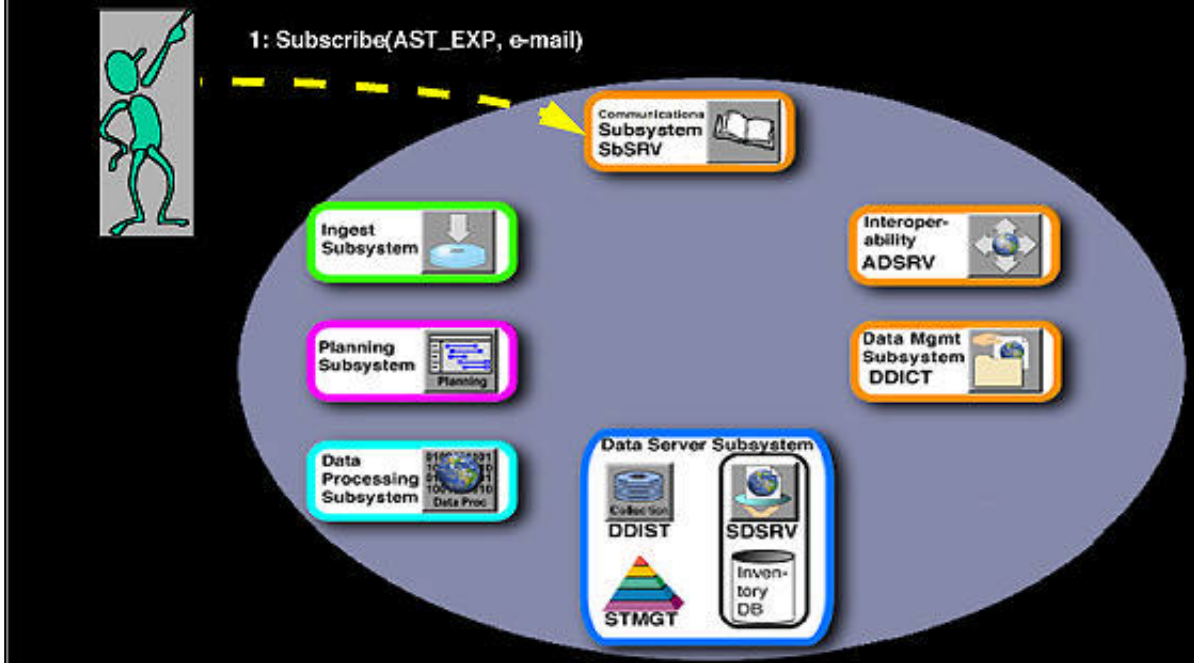
Operator activates a plan, which includes a DPR for the BTS, with the AST_09 (L2 Surface Radiance TIR) output feeding the BTS algorithm.



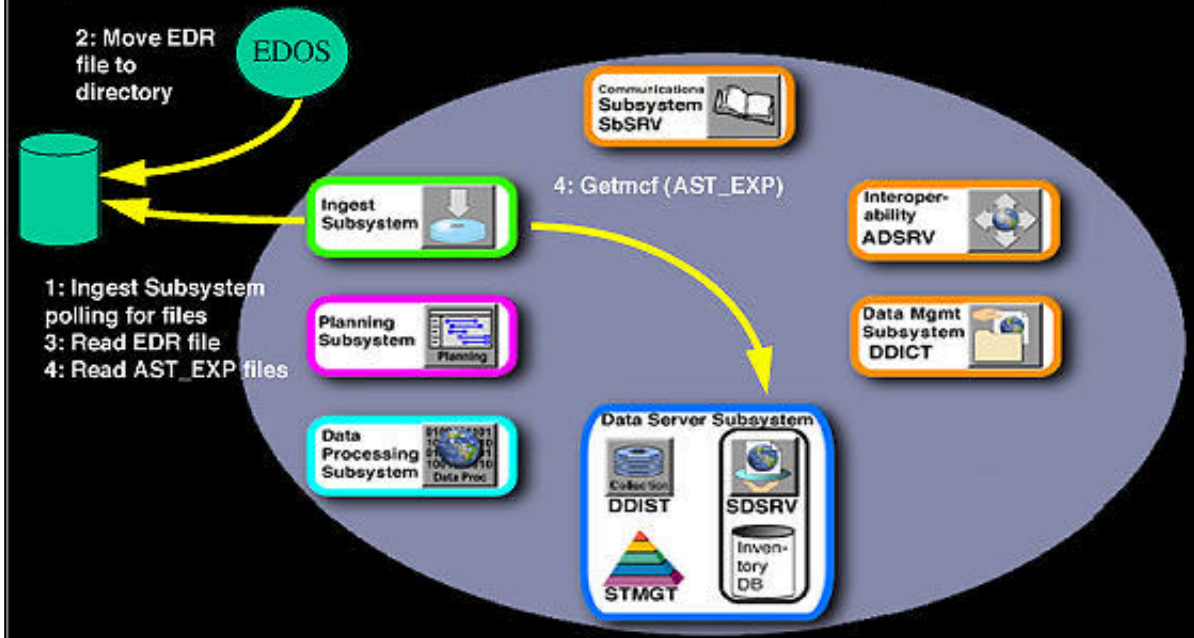
BTS production job retrieves required AST_L1BT(L1B TIR) input data granule



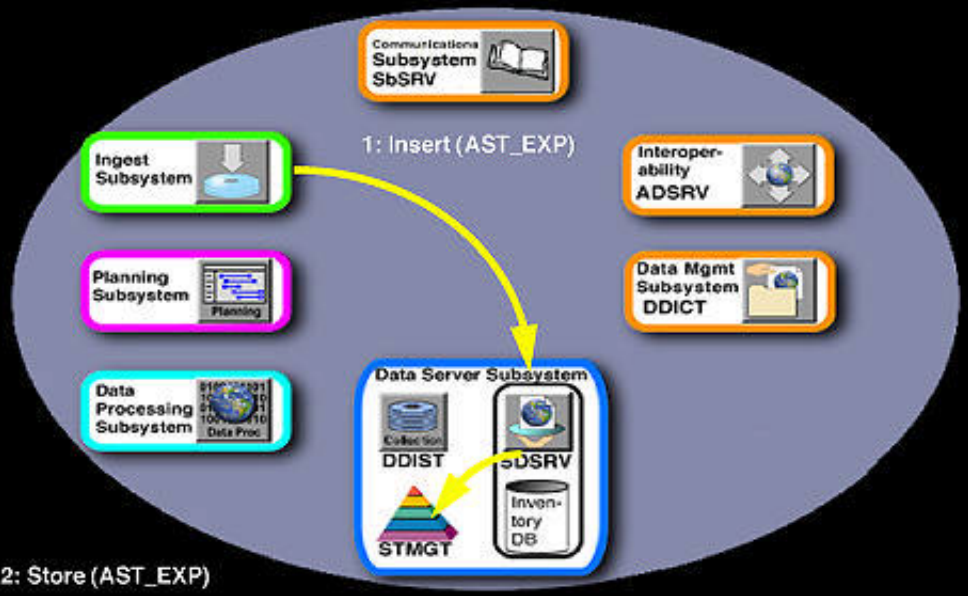
DAAC enters subscription, on behalf of scientist, for email notification of newly inserted ASTER Expedited data product.



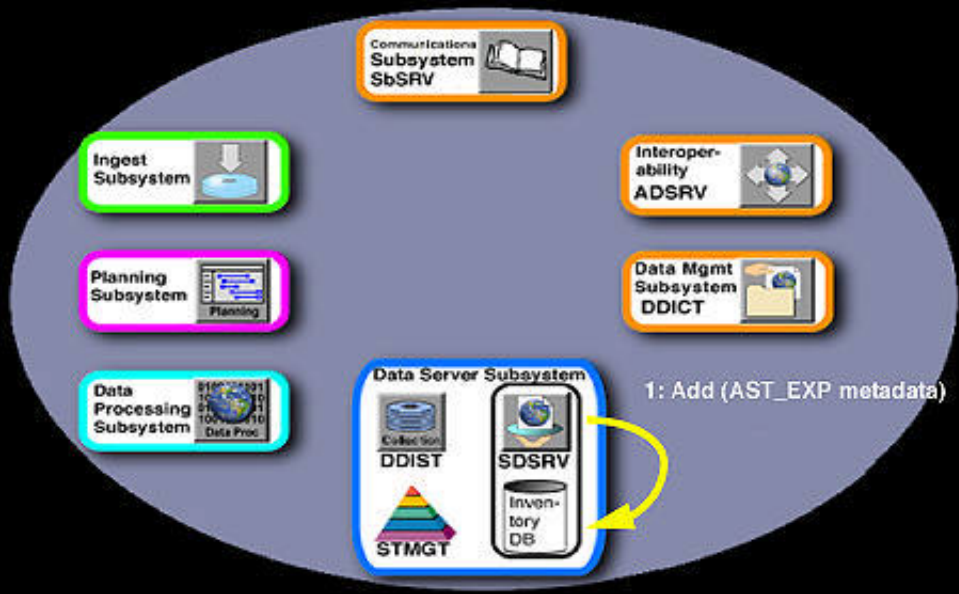
Ingest begins polling directory, looking for a EDR. Simulating EDOS, an EDR will be manually copied to the directory, stimulating Ingest sequence.



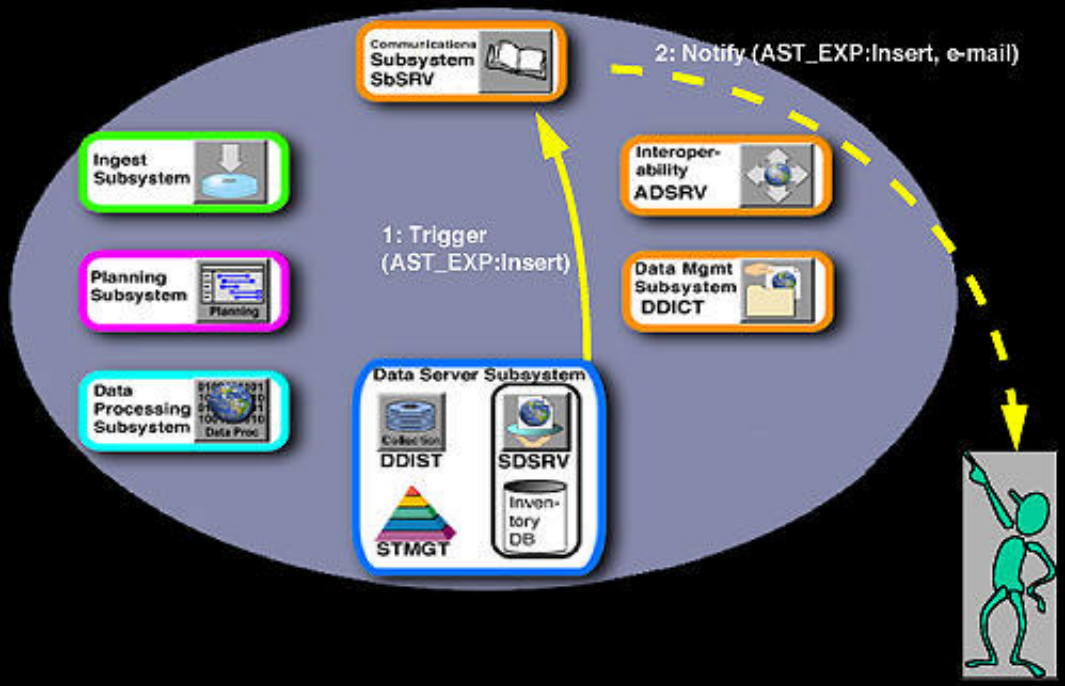
Archive AST_EXP (ASTER Expedited Data Set) data granules.



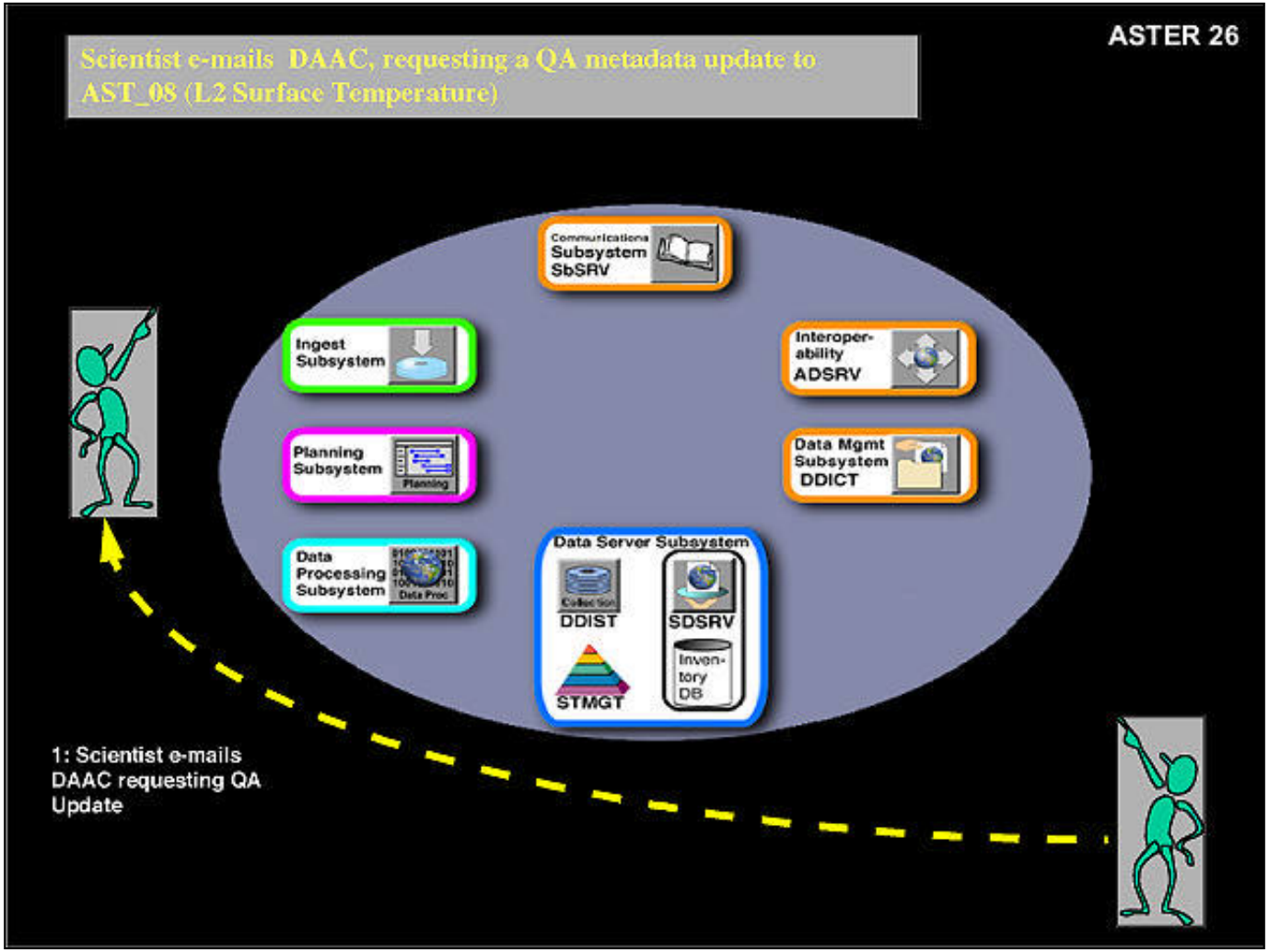
Add metadata for AST_EXP (ASTER Expedited Data Set) granules to the Sybase/SQS database.



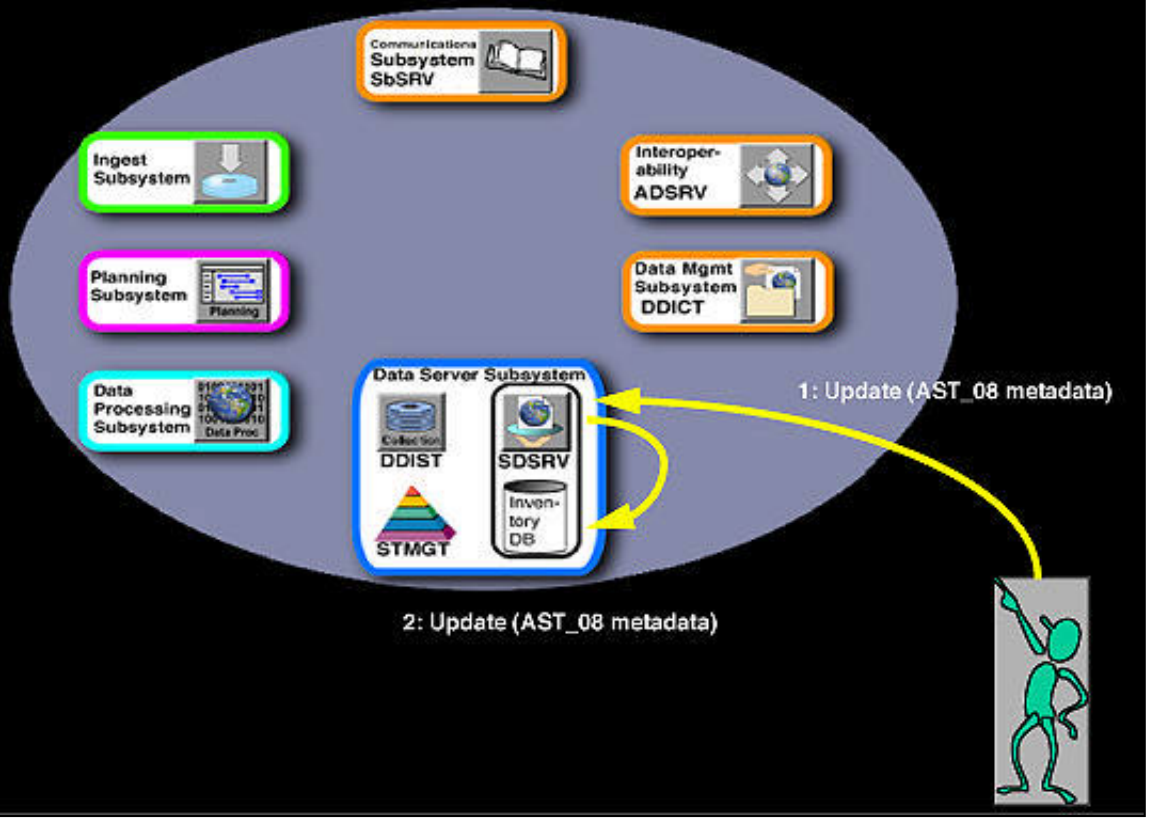
Notify all AST_EXP:Insert event subscribers.



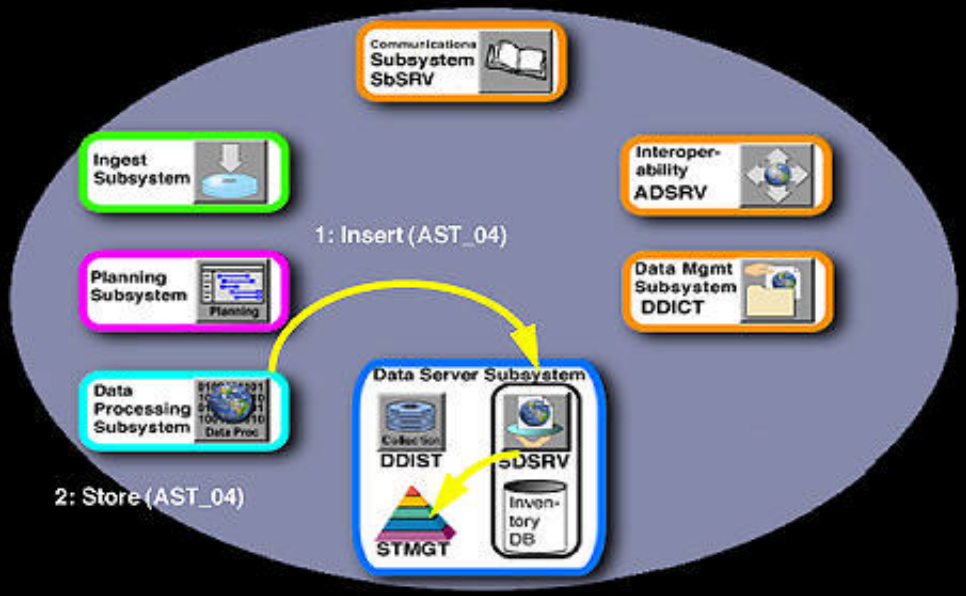
Scientist e-mails DAAC, requesting a QA metadata update to AST_08 (L2 Surface Temperature)



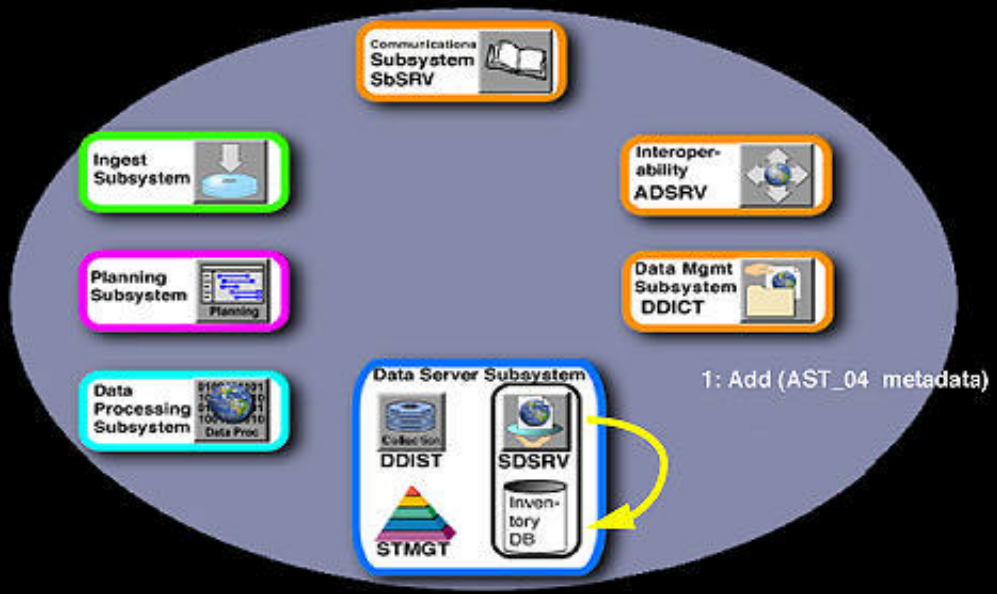
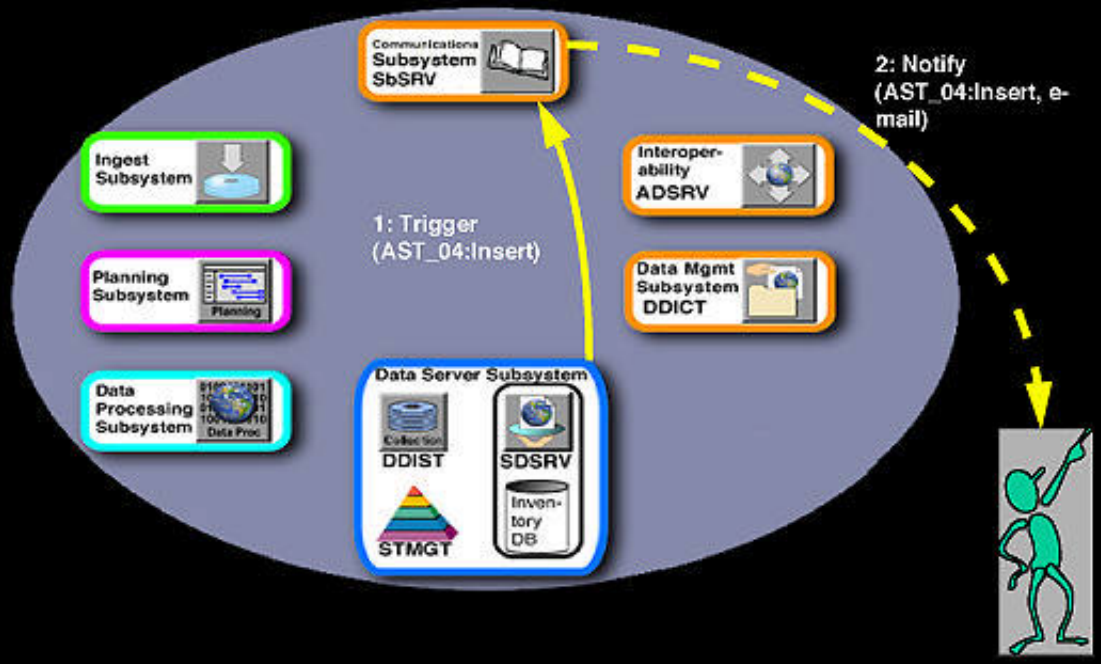
DAAC operator Updates metadata for AST_08 (L2 Surface Temperature) granule in the Sybase/SQS database.



After PGE completes, archive newly created AST_04 (L2 Brightness Temperature) granule.



Add metadata for newly created AST_04 (L2 Brightness Temperature) granule to the Sybase/SQS database.



Insertion of the AST_04 (L2 Brightness Temperature) granule triggers a notification to the ASTER Scientist.