

HANDLING OF DISK ASSIGNMENTS IN THE PIPELINE

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I disagree with Ed Fomalont's suggestion that the pipeline users should be allowed (forced?) to specify a particular disk drive for data (does he mean maps??). In particular, the suggestion would essentially override the carefully constructed scheme of assigning each disk pack a unique name and accessing maps by specifying the pack name to search. I believe that access to maps should be very transparent to the user; i.e. he should simply be required to specify a map name, in its full blown general sense as defined by the Ekers memo on map names, and not have to worry about where his map actually resides. The system should be smart enough to go and find his map, if it can, or tell him it's not available, if it can't find it. Anyway, all this was decided long ago; see the Pipeline Review document, SGP 33, sections 3.10.1 and 7.5.

I object rather strongly to the concept of removable packs on the Display system. By this, I mean removable packs as they are presently used in AIPS. There are a number of operational and maintenance problems with removable packs, even in the AIPS "stand-alone" environment. To assume that using such removable packs in the Display case (shared disks, multiple pipeline users) will be as easy as in AIPS is not very realistic. In addition, of course, we would incur yet another cost of 20 to 30 thousand dollars to provide a sufficient number of packs to meet the demand (wouldn't it be nice to be able to make maps on the pipeline, write them to a disk pack, carry that pack to AIPS and begin work there? Alas! The packs will not be compatible.)

I see no need for users to be able to specify a particular physical disk drive for output. With sufficient spares, properly written disk output (MAPIO) routines and routine disk space management, there could easily be no "bad" disks. Removable packs have been discussed above. MAPIO itself will avoid disk I/O conflicts.

I propose, as an alternative to Ed's suggestion, that the user have a keyword "PACK" or "PACNAM" (not PACMAN!) with suitably defined defaults depending on where, and which program, he is running. Wild cards for pack names could be implemented. MAPIO would, presumably, default on the first try to the pack where the current user's maps already exist (found from the catalog file).

also SGP memo #28