Subject: Re: Is there a work around to save multiple variables with same head but different tails without listing all of them?
Posted by d.poreh on Thu, 29 Sep 2011 12:03:18 GMT
View Forum Message <> Reply to Message

On Sep 29, 4:50 am, "Brian J. Daniel" <Daniels...@yahoo.com> wrote:
> On Sep 29, 5:10 am, voidspace <jhkim...@gmail.com> wrote:
>
>
>
>
>
>
>
>
>
>
>> Hello folks,
>
>> I have a question at beginner's level. When I saved multiple variables
>> with same head but different tails in IDL, I found it is tedious to
>> type all of them in as follows.
>
>> SAVE, sst_cccma_cgcm3_1, sst_cnrm_cm3, sst_csiro_mk3_0,
>> sst_gfdl_cm2_0, sst_gfdl_cm2_1, $
>>   sst_iap_fgoals1_0_g, sst_inmcm3_0, sst_ipsl_cm4,
>> sst_miroc3_2_medres, sst_mpi_echam5, $
>>   sst_mri_cgcm2_3_2a, sst_ncar_ccsm3_0, sst_ncar_pcm1,
>> sst_ukmo_hadcm3, sst_ukmo_hadgem1, $
>>   FILENAME='sst_cmip3_20c3m.sav'
>
>> The '/All' keyword may help, but there are more variables that I don't
>> want to save in. This aroused my curiosity, so I post my question here
>> to know whether there is a workaround.
>
>> In fact, I tried to find an advanced way by myself, but found it's
>> difficult to know without an expert's guidance.
>
>> An attempt with my best knowledge is as follows. As all model names
>> from 'cccma_cgcm3_1' to 'ukmo_hadgem1' are saved in a string array
>> 'model', I considered the 'EXECUTE' command.
>
>> One prior step I did was saving 15 variable names in one single string
>> array 'sst'.
>
>> IDL> sst=STRARR(N_elements(model))
>> IDL> FOR i=0, N_elements(model)-1 DO sst[i]='sst_'+model[i]
>
>> Now, 'sst' contains 15 different variable names that I want to save

>> in. Then, tried the following
>
>> IDL> result=EXECUTE("SAVE, FILENAME='sst_cmip3_20c3m.sav', "+sst[i])
>
>> but in stuck because I have no idea how to make an implicit loop for
>> 'sst[i]'.
>
>> My attempt seems not a right way. I also thought it would be
>> convenient if there is implicit do-loop like (sst(i),i=1,15) in
>> Fortran, but I immediately got that it's nothing but a stupid idea.
>
>> I thought over and googled as well but all were in vain.
>
>> Can anybody suggest me a nice way to simplify the tedious command
>> aforementioned?
>
>> Best,
>> John
>
> You've already done the hard part, which is the string manipulation to
> create your 'sst' array. The final step is to use StrJoin to bring
> the array into one string joined by ', '. See below (UNTESTED).
>
> result=EXECUTE("SAVE, FILENAME='sst_cmip3_20c3m.sav', strJoin(sst,',
> ',/Single))

Can you prepare a simple example? method seems quite good for me!
Cheers,
Dave