
Subject: Re: Can't pass data with CALL_EXTERNAL to C function
Posted by [Brian Larsen](#) on Thu, 19 Jun 2008 18:46:41 GMT
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I have had these same issues and they are maddening. The issue is with pass by reference, pass by value.

The key ends up being in the VALUE keyword to CALL_EXTERNAL. I am trying to get ready for a meeting next week so I can't type more but I will point you to a working example.

On this page I have a bit of explanation on how I did this as well as the c and idl codes.

http://people.bu.edu/balarsen/Home/IDL/Entries/2008/4/15_Generating_Sobol_Sequence_with_GSL_in_IDL.html

What I did there was write a C wrapper for the C routine I wanted to run to handle the array passing. Since the C routine needs to be called N times and IDL-C calls are slow I reduced that number of calls to 1 IDL-C call using the wrapper. Then there is an IDL code that calls the wrapper and gives the answer. Seems to work well.

Let me know what you learn as this always drives me crazy and I have to figure it out each time.

Cheers,

Brian

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