Subject: 64 bit integer
Posted by Wayne Landsman on Thu, 05 Mar 1998 08:00:00 GMT
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A colleague of mine is using IDL for a project in which each pixel of an

astronomical detector is calibrated by a bootstrap method using offset pointings of the sky. (They can assume that each point on the sky should yield
the same flux when observed with different pixels, although the sky varies from
point to point, and the detector response varies from pixel to pixel.)

Anyway, by using the sparse matrix routines in IDL they have made the problem
tractable. What surprised me is that they are currently limited not by IDL
memory, but by the lack of a 64 bit integer type. They essentially need to
index a 256^4 array, and the IDL LONG integer is only able to index a 127*256^3 array. (In principle, they could use, say, two 32 bit integers,
but then they would no longer be able to use the IDL indexing notation, making
the software much, much, more complicated.) Their Alpha (Linux) architecture
would certainly be able to support a 64 bit integer.

Has anybody else found or anticipated a need for IDL to support 64 bit integer, or
maybe heard of plans to add one?

Thanks, --Wayne Landsman
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