Subject: Re: From Bytes to Doubles, etc.
Posted by csaute3 on Wed, 17 Jun 1998 07:00:00 GMT

Justin,

You posted asking how to convert binary data
back to the original numbers. you said there are only a few numbers
that you want to convert and you know where they exist in the array.
This is what I do:

```
; getblock in function which reads the data and returns a byte array
data = getblock(arg1, arg2)

; to convert to long where 0 is my offset in the byte array
number = long(data, 0)

; to convert to float where 16 is my offset in the byte array
a = float(data, 16)

; to convert a structure where 20 is my offset in the byte array
; to the beginning of the structure
structure = {gridstruct, usage:long(0), r:float(0.0), z:float(0.0)}
grid = {gridstruct}
grid.usage = long(data, 20)
grid.r = float(data, 24)
grid.z = float(data, 28)

; to convert a string where 32 is my offset in the byte array
; and my string is length 20 characters. this must be known.
; i often store the length as a long in my byte array and read
; it first.
name = ''
namelength = 20 ; number of characters
tmp = bytarr(namelength)
tmp = data(32:32+namelength-1)
name = string(tmp)
```

I hope this helps. Look up in the IDL help about long, float, double.

Cathy