

---

Subject: WRONG RESULTS WITH IDL

Posted by [loewenthal](#) on Tue, 05 May 1998 07:00:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Hi Folks

For calculation of beam-propagation I use IDL. But now I realize that for large arguments, even with double-precision, IDL gives wrong results:

For example:

$\sin(12345678901.12345678901) = -03727\ 9004\ 9960\ 8007$

where IDL get:

```
IDL> x = double(12345678901.12345678901)
IDL> print, sin(x)
    0.098761418
```

Can somebody confirm this result, and does anybody know the solution to overcome this problem?

Best regards

Frank

---

---

Subject: Re: WRONG RESULTS WITH IDL

Posted by [Anders Johannesson](#) on Thu, 14 May 1998 07:00:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Frank Loewenthal wrote in message <354ef5cc.356842983@news>...

> Hi Folks

>

> For calculation of beam-propagation I use IDL. But now I realize that

> for large arguments, even with double-precision, IDL gives wrong

> results:

> For example:

>

>  $\sin(12345678901.12345678901) = -03727\ 9004\ 9960\ 8007$

>

> where IDL get:

>

> IDL> x = double(12345678901.12345678901)

> IDL> print, sin(x)

> 0.098761418

>

> Can somebody confirm this result, and does anybody know the solution

> to overcome this problem?

#####

You are not using double. Try it this way: (Note the d for double)

print,sin(12345678901.12345678901d)

Anders Johannesson

#####

>

> Best regards

>

> Frank

---