
Subject: Re: Problem with dist function in IDL

Posted by [Michael Galloy](#) on Mon, 13 Aug 2007 00:48:07 GMT

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

On Aug 12, 8:41 am, ATKT <ankur.trigun...@gmail.com> wrote:

> Can somebody tell what exactly dist function is doing in IDL

> e.g x=dist(2,2)

> 0.000000 1.00000

> 1.00000 1.41421

> What is the meaning of this output

> x=dist(4,4)

> 0.000000 1.00000 2.00000 1.00000

> 1.00000 1.41421 2.23607 1.41421

> 2.00000 2.23607 2.82843 2.23607

> 1.00000 1.41421 2.23607 1.41421

>

> I am unable to understand the output which is being generated.

The online help says this:

"The DIST function creates an array in which each array element value is proportional to its frequency. This array may be used for a variety of purposes, including frequency-domain filtering."

But I think about it in terms of plain Euclidean distance. Each array element's value is the shortest distance to (0, 0) allowing for wrapping around the edges. This has applications in creating kernels for image processing filters (and is a simple dataset for examples).

Mike

--

www.michaelgalloy.com
