
Subject: Re: Distance between coordinates
Posted by [astr74323](#) on Mon, 18 May 2015 21:48:13 GMT
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> On Monday, May 18, 2015 at 2:49:42 PM UTC-4, astr...@gmail.com wrote:
>
>> Hello Wlandsman,
>>
>> Could you give me your email or Skype?
>>
>> Because I've many questions
>>
>> I look forward to hearing from you
>
> Sorry, I can't help you, except to point you to a document on how to ask questions on Usenet
>
> <http://www.catb.org/esr/faqs/smart-questions.html>

Ok, I have questions with regard to terms in gcirc.pro, Could you write comment at each command line if you can

```
On_error,2                                ;Return to caller

npar = N_params()
IF (npar ne 6) and (npar ne 5) THEN BEGIN
  print,'Calling sequence: GCIRC,U,RA1,DC1,RA2,DC2[,DIS]'
  print,' U = 0 ==> Everything in radians'
  print, $
  ' U = 1 ==> RAx decimal hours, DCx decimal degrees, DIS arc sec'
  print,' U = 2 ==> RAx, DCx decimal degrees, DIS arc sec'
  RETURN
ENDIF

d2r  = !DPI/180.0d0
as2r = !DPI/648000.0d0
h2r  = !DPI/12.0d0

; Convert input to double precision radians
CASE u OF
  0: BEGIN
    rarad1 = double(ra1)
    rarad2 = double(ra2)
    dcrad1 = double(dc1)
```

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        dcrad2 = double(dc2)
    END
1: BEGIN
    rarad1 = ra1*h2r
    rarad2 = ra2*h2r
    dcrad1 = dc1*d2r
    dcrad2 = dc2*d2r
    END
2: BEGIN
    rarad1 = ra1*d2r
    rarad2 = ra2*d2r
    dcrad1 = dc1*d2r
    dcrad2 = dc2*d2r
    END
ELSE: MESSAGE, $
    'U must be 0 (radians), 1 ( hours, degrees) or 2 (degrees)'
ENDCASE

```

```

deldec2 = (dcrad2-dcrad1)/2.0d
delra2 = (rarad2-rarad1)/2.0d
sindis = sqrt( sin(deldec2)*sin(deldec2) + $
    cos(dcrad1)*cos(dcrad2)*sin(delra2)*sin(delra2) )
dis = 2.0d*asin(sindis)

```

```

IF (u ne 0) THEN dis = dis/as2r

```

```

IF (npar eq 5) && (N_elements(dis) EQ 1) THEN BEGIN
    IF (u ne 0) && (dis ge 0.1) && (dis le 1000) $
        THEN fmt = '(F10.4)' $
        ELSE fmt = '(E15.8)'
    IF (u ne 0) THEN units = ' arcsec' ELSE units = ' radians'
    print,'Angular separation is ' + string(dis,format=fmt) + units
ENDIF

```

```

RETURN
END

```

Regards
