In [1]:

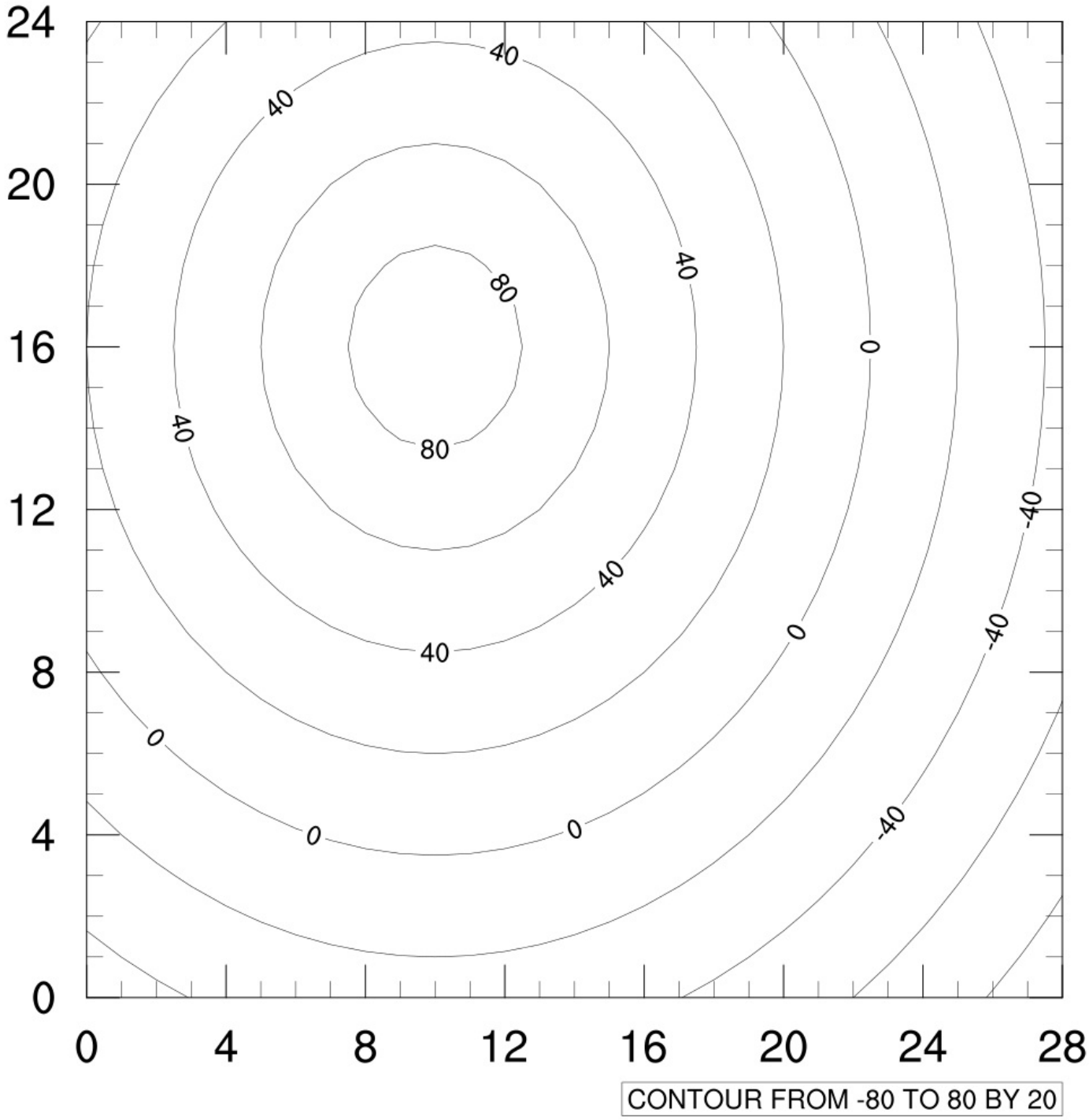
```
#
#   File:
#     cn01p.py
#
#   Synopsis:
#     Draws a simple contour using all defaults.
#
#   Category:
#     Contouring
#
#   Author:
#     Fred Clare (based on an example of Dave Brown)
#
#   Date of initial publication:
#     November, 2004
#
#   Description:
#     Given a simple mathematically generated data set,
#     demonstrates Ngl.contour with all resources set
#     to their defaults.
#
#  Effects illustrated:
#     Drawing a contour visualization using all defaults.
#
#  Output:
#     A single visualization is produced.
#
#
from __future__ import print_function
import Ngl
import numpy

M=29
N=25
T = numpy.zeros([N,M])

#
# create a mound as a test data set
#
jspn = numpy.power(range(-M//2+5,M//2+5),2)
ispn = numpy.power(range(-N//2-3,N//2-3),2)
for i in range(len(ispn)):
    T[i,:] = ispn[i] + jspn
T = 100. - 8.*numpy.sqrt(T)

#
#  Open a workstation and draw the contour plot.
#
wks_type = "png"
wks = Ngl.open_wks(wks_type,"cn01p")
Ngl.contour(wks,T)

Ngl.end()
```


24
20
16
12
8
4
0
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4
8
12
16
20
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28
40
40
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40
40
80
80
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0
0
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-40
-40
-40
CONTOUR FROM -80 TO 80 BY 20

In [ ]: