Gasperini P. and Vannucci G., FPSPACK: a package of simple Fortran subroutines
to manage earthquake focal mechanism data, Computers & Geosciences (2003)

The kit includes 6 files:

FPSPACK.FOR	Fortran 77 source file of the subroutine package
TESTHARV.FOR	Fortran 77 source file of the main program to test the package using Harvard CMT data
TESTSYNT.FOR	Fortran 77 source file of the main program to test the package using synthetic data
outerr.dat	output (null) file of TESTSYNT program
outerr1.dat	output file of TESTHARV program including CMT solutions exceeding tolerance (3 degrees) on focal plane parameters
outerr2.dat	output file of TESTHARV program including CMT solutions exceeding tolerance (3 degrees) on deformation axes parameters

The file below (required to run program TESTHARV.FOR) is not included in the
kit. It can be downloaded from Harvard CMT site:
http://www.seismology.harvard.edu/CMTsearch.html

CMT.DEK	Ascii file containing the Harvard CMT Catalog from 01/1976 to 04/2001

Usage:
Include the FPSPACK source into the user program file then compile and link them
together.

Note:
Routines AR2PT and AR2PLP make use of the IMSL Fortran 77 Library subroutine
EVCSF, computing eigenvalues and eigenvectors of a real symmetric matrix, which
is not supplied with the kit. In case the IMSL library is not available (it is included
for example in the COMPAQ Visual Fortran package), the call to EVCSF can be
replaced, with minimum adjustments, by a similar one (e.g. subroutine JACOBI
from Press et al., 1989, Numerical Recipes, Cambridge University Press).

Comments, suggestions, notices of malfunctioning are welcome to the authors' e-mail
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Disclaimer:
The software is furnished freely as it is. The consequences of its use are completely under

the responsibility of the user. Any warranty, either expressed or implied is excluded.

```
************************************************************************
*******
*
* Gasperini P. and Vannucci G., FPSPACK: a package of simple Fortran
subroutines
* to manage earthquake focal mechanism data
*
************************************************************************
*******
      program testharv
c
c     FPSPACK test program with Harvard CMT catalog
c
      character*80 rec1,rec2,rec3,rec4
      dimension am(3,3),av(3),ipl(3),itr(3),istr(3),idip(2),irak(2)
      dimension iplc(3),itrc(3),istrc(3),idipc(2),irakc(2)
      n=0
      tol1=3.
      tol2=6.
      open(11,file='outerr1.dat',status='unknown')
      open(12,file='outerr2.dat',status='unknown')
c
c     open CMT catalog
c
      open(1,file='cmt.dek',status='old')
1     read(1,'(a)',end=100) rec1
      read(1,'(a)') rec2
      read(1,'(a)') rec3
      read(1,'(a)') rec4
      n=n+1
      if(mod(n,1000).eq.0) write(*,*) n
c
c     read moment tensor components
c
      read(rec3,'(14x,6(f6.2,5x))') amrr,amss,amee,amrs,amre,amse
c
c     build moment tensor in harvard system
c
      call hatens(amrr,amss,amee,amrs,amre,amse,am)
c
c     read eigenvalues,eigenvector and nodal planes
c
      read(rec4,'(3(f7.2,i3,i4),f7.2,2(i4,i3,i5))')
     1(av(i),ipl(i),itr(i),i=1,3),am0r,(istr(j),idip(j),irak(j),j=1,2)
c
c     checks ha2ar, ar2pt, pt2nd, nd2pl and ca2ax
c
      call ha2plp(am,am0,am1,e,am0b,strika,dipa,rakea,slipa,
     1strikb,dipb,rakeb,slipb,trendp,plungp,trendt,plungt,
     2trendb,plungb,eta,ierr)
c
c     make integer
c
      istrc(1)=nint(strika)
      idipc(1)=nint(dipa)
      irakc(1)=nint(rakea)
      istrc(2)=nint(strikb)
      idipc(2)=nint(dipb)
      irakc(2)=nint(rakeb)
      iplc(3)=nint(plungp)
```

```
      itrc(3)=nint(trendp)
      iplc(1)=nint(plungt)
      itrc(1)=nint(trendt)
      iplc(2)=nint(plungb)
      itrc(2)=nint(trendb)
c
c     check planes
c
      ierr1=0
      ito2=0
      do i=1,2
         do j=1,2
            idifstr=mod(istr(i)-istrc(j)+720,360)
            idifrak=mod(irak(i)-irakc(j)+720,360)
c
c           difference between strikes dips and rakes < 3 degrees
c
            if((idifstr.le.tol1.or.idifstr.ge.360-tol1).and.
     1      abs(idip(i)-idipc(j)).le.tol1.and.
     1      (idifrak.le.tol1.or.idifrak.ge.360-tol1)) goto 11
c
c           difference between strikes < 3 degrees
c           for vertical planes
c
            if(idip(i).eq.90.or.idipc(j).eq.90.and.
     1      abs(idifstr-180).le.tol1) goto 11
c
c           difference between strikes dips and rakes < 6 degrees
c
            if((idifstr.le.tol2.or.idifstr.ge.360-tol2).and.
     1      abs(idip(i)-idipc(j)).le.tol2.and.
     1      (idifrak.le.tol2.or.idifrak.ge.360-tol2)) goto 111
c
c           difference between strikes < 3 degrees
c           for vertical planes
c
            if(idip(i).eq.90.or.idipc(j).eq.90.and.
     1      abs(idifstr-180).le.tol2) goto 111
         enddo
         ierr1=1
         goto 11
111      ito2=1
11    enddo
      if(ierr1.eq.0) then
         if(ito2.eq.0) then
            nokp=nokp+1
         else
            nko1p=nko1p+1
         endif
      else
         nerp=nerp+1
      endif
c
c     check axes
c
      ierr2=0
      ito2=0
      do i=1,3
            idiftr=mod(itr(i)-itrc(i)+720,360)
c
```

```
c           difference between plunges and trends < 3 degrees
c
            if(abs(ipl(i)-iplc(i)).le.tol1.and.
     1       (idiftr.le.tol1.or.idiftr.ge.360-tol1)) goto 12
c
c           difference between trends < 3 degrees
c           for horizontal axes
c
            if(ipl(i).eq.0.and.iplc(i).eq.0.and.
     1      abs(idiftr-180).le.tol1) goto 12
c
c           exclude case of vertical axe
c
            if(ipl(i).eq.90.or.iplc(i).eq.90) goto 12
c
c           difference between plunges and trends < 6 degrees
c
            if(abs(ipl(i)-iplc(i)).le.tol2.and.
     1       (idiftr.le.tol2.or.idiftr.ge.360-tol2)) goto 112
c
c           difference between trends < 6 degrees
c           for horizontal axes
c
            if(ipl(i).eq.0.or.iplc(i).eq.0.and.
     1      abs(idiftr-180).le.tol2) goto 112
               ierr2=i
            goto 12
112         ito2=i
12    enddo
      if(ierr2.eq.0) then
         if(ito2.eq.0) then
             noka=noka+1
         else
            nko1a=nko1a+1
         endif
      else
         nera=nera+1
      endif
      if(ierr1.ne.0) then
c
c        tolerance exceeded for planes
c
         write(11,'(1x,a)') rec1
         write(11,'(1x,a)') rec2
         write(11,'(1x,a)') rec3
         write(11,'(1x,a)') rec4
         write(11,*) 'Planes (Harvard)'
         do i=1,2
            write(11,*) istr(i),idip(i),irak(i)
         enddo
         write(11,*) 'Planes (Recomputed)'
         write(11,*) nint(strika),nint(dipa),nint(rakea)
         write(11,*) nint(strikb),nint(dipb),nint(rakeb)
         write(11,*) 'Axes            Harvard             Recomputed'
         write(11,*) 'p',ipl(1),itr(1),nint(plungt),nint(trendt)
         write(11,*) 'b',ipl(2),itr(2),nint(plungb),nint(trendb)
         write(11,*) 't',ipl(3),itr(3),nint(plungp),nint(trendp)
      else if(ierr2.ne.0) then
c
c        tolerance exceeded only for axes
```

```
c
         write(12,'(1x,a)') rec1
         write(12,'(1x,a)') rec2
         write(12,'(1x,a)') rec3
         write(12,'(1x,a)') rec4
         write(12,*) 'Axes            Harvard             Recomputed'
         write(12,*) 'p',ipl(1),itr(1),nint(plungt),nint(trendt)
         write(12,*) 'b',ipl(2),itr(2),nint(plungb),nint(trendb)
         write(12,*) 't',ipl(3),itr(3),nint(plungp),nint(trendp)
       endif
       goto 1
100    write(*,*) 'Planes'
       write(*,*) '    Total        <3        <6        >6       Sum'
       write(*,'(8i10)') n,nokp,nko1p,nerp,nokp+nko1p+nerp
       write(*,'(8f10.2)') 100.*n/n,100.*nokp/n,100.*nko1p/n,
      1100.*nerp/n,100.*(nokp+nko1p+nerp)/n
       write(*,*) 'Axes'
       write(*,*) '    Total        <3        <6        >6       Sum'
       write(*,'(8i10)') n,noka,nko1a,nera,noka+nko1a+nera
       write(*,'(8F10.2)') 100.*n/n,100.*noka/n,100.*nko1a/n,
      1100.*nera/n,100.*(noka+nko1a+nera)/n
       end
```

```
************************************************************************
*******
*
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subroutines
* to manage earthquake focal mechanism data
*
************************************************************************
*******
      program testsint
      dimension am(3,3)
c
c       FPSPACK testing program with sythetic data
c
c       tolerance of one degree
c
      tol=1.
        open(6,file='outerr.dat',status='unknown')
        do strike=0.,360.
         if(mod(strike,1.).eq.0.) write(*,*) strike
c
c     exclude critical cases with dip=0 or dip=90
c
            do dip=1.,89.
               do rake=-180.,180.,10.
c
c       check pl2nd vs nd2pl
c
                  call pl2pl(strike,dip,rake,strikb,dipb,rakeb,dipdib,
     1            ierr)
                  call pl2pl(strikb,dipb,rakeb,strika,dipa,rakea,dipdia,
     1            ierr)
                difs=mod(strike-strika+720.,360.)
                difd=abs(dip-dipa)
                difr=mod(rake-rakea+720.,360.)
                  ierr=0
                if(difs.gt.tol.and.difs.lt.360.-tol) ierr=1
                if(difd.gt.tol.and.difd.lt.90.-tol) ierr=1
                if(difr.gt.tol.and.difr.lt.360.-tol) ierr=1
                if(ierr.ne.0) then
                   write(6,*) 'pl2pl'
                     write(6,'(6f10.2)') strike,dip,rake,strika,dipa,
     1                   rakea
                     write(6,'(6f10.2)') difs,difd,difr
                endif
c
c     check pl2pt vs pt2pl and ax2ca vs ca2ax
c
                  call pl2pt(strike,dip,rake,trendp,plungp,trendt,plungt,
     1            trendb,plungb,ierr)
                  call pt2pl(trendp,plungp,trendt,plungt,strika,dipa,
     1            rakea,dipdia,strikb,dipb,rakeb,dipdib,ierr)
                  ierra=0
                difsa=mod(strike-strika+720.,360.)
                difda=abs(dip-dipa)
                difra=mod(rake-rakea+720.,360.)
                if(difsa.gt.tol.and.difsa.lt.360.-tol) ierra=1
                if(difda.gt.tol.and.difda.lt.90.-tol) ierra=1
                if(difra.gt.tol.and.difra.lt.360.-tol) ierra=1
                  ierrb=0
```

```
               difsb=mod(strike-strikb+720.,360.)
               difdb=abs(dip-dipb)
               difrb=mod(rake-rakeb+720.,360.)
               if(difsb.gt.tol.and.difsb.lt.360.-tol) ierrb=1
               if(difdb.gt.tol.and.difdb.lt.90.-tol) ierrb=1
               if(difrb.gt.tol.and.difrb.lt.360.-tol) ierrb=1
               if(ierra.ne.0.and.ierrb.ne.0) then
                  write(6,*) 'pl2pt'
                    write(6,'(6f10.2)') strike,dip,rake,strika,dipa,
     1                 rakea
                    write(6,'(6f10.2)') difsa,difda,difra
                    write(6,'(6f10.2)') strike,dip,rake,strikb,dipb,
     1                 rakeb
                    write(6,'(6f10.2)') difsb,difdb,difrb
               endif
c
c     check pl2ar vs ar2pt
c
               am0=1.
                 call pl2ar(strike,dip,rake,am0,am,ierr)
                 call ar2plp(am,am0r,am1r,e,am0b,strika,dipa,rakea,
     1           dipdia,strikb,dipb,rakeb,dipdib,trendp,plungp,trendt,
     1           plungt,trendb,plungb,eta,ierr)
                 ierra=0
               difsa=mod(strike-strika+720.,360.)
               difda=abs(dip-dipa)
               difra=mod(rake-rakea+720.,360.)
               if(difsa.gt.tol.and.difsa.lt.360.-tol) ierra=1
               if(difda.gt.tol.and.difda.lt.90.-tol) ierra=1
               if(difra.gt.tol.and.difra.lt.360.-tol) ierra=1
                 ierrb=0
               difsb=mod(strike-strikb+720.,360.)
               difdb=abs(dip-dipb)
               difrb=mod(rake-rakeb+720.,360.)
               if(difsb.gt.tol.and.difsb.lt.360.-tol) ierrb=1
               if(difdb.gt.tol.and.difdb.lt.90.-tol) ierrb=1
               if(difrb.gt.tol.and.difrb.lt.360.-tol) ierrb=1
               if(ierra.ne.0.and.ierrb.ne.0) then
                  write(6,*) 'pl2ar'
                    write(6,'(6f10.2)') strike,dip,rake,strika,dipa,
     1                 rakea
                    write(6,'(6f10.2)') difsa,difda,difra
                    write(6,'(6f10.2)') strike,dip,rake,strikb,dipb,
     1                 rakeb
                    write(6,'(6f10.2)') difsb,difdb,difrb
               endif
            enddo
         enddo
       enddo
       end
```

```
 B052983A 05/29/83 02:14:22.0   4.23  122.62 611.05.50.0CELEBES SEA
 PDE BW:11 29  45 MW: 0  0   0 DT=   4.7 0.9   4.37 0.07  122.82 0.13
594.0  8.5
  DUR 3.0 EX 23 -3.08 0.74  4.05 0.56 -0.97 0.71  0.38 0.75 -9.90 0.93
0.24 0.58
    7.93 42  90   4.06  1 359 -11.99 48 268   9.96 200  3  -69 359 87  -
91
 Planes (Harvard)
         200           3         -69
         359          87         -91
 Planes (Recomputed)
         186           3         -82
         358          87         -90
 Axes            Harvard             Recomputed
 p          42          90          42          88
 b           1         359           0         358
 t          48         268          48         268
 B042484C 04/24/84 21:15:19.0  37.32 -121.70   8.05.86.1CENTRAL
CALIFORNIA
 PDE BW:11 29  45 MW: 0  0   0 DT=   9.8 0.3  37.59 0.03 -122.16 0.03
10.0  0.0
  DUR 4.7 EX 25 -0.14 0.03 -1.58 0.04  1.72 0.03  0.42 0.10  0.31 0.10
1.19 0.00
    2.18 10 289  -0.17 76  66  -2.02  9 197   2.10 333 76  179  63 89
0
 Planes (Harvard)
         333          76         179
          63          89           0
 Planes (Recomputed)
         333          76         179
          63          89          14
 Axes            Harvard             Recomputed
 p          10         289          10         289
 b          76          66          76          66
 t           9         197           9         197
 B031587C 03/15/87 11:35:22.2  18.83  146.95  33.05.20.0MARIANA ISLANDS
 PDE BW:12 23  45 MW: 0  0   0 DT=   3.3 0.8  18.79 0.11  146.72 0.16
15.0 -1.0
  DUR 1.7 EX 23 -0.84 0.49  0.67 0.50  0.17 0.64  7.24 1.12  8.35 1.09 -
2.53 0.53
    9.59 47 310   2.96  0  41 -12.55 43 131  11.07 236  2  105  41 88
90
 Planes (Harvard)
         236           2         105
          41          88          90
 Planes (Recomputed)
         243           2         112
          41          88          89
 Axes            Harvard             Recomputed
 p          47         310          47         310
 b           0          41           1          41
 t          43         131          43         131
 B031687D 03/16/87 14:35:45.5 -14.60  167.24 188.05.00.0VANUATU ISLANDS
 PDE BW: 8 13  45 MW: 0  0   0 DT=  -5.3 2.6 -14.79 0.23  167.44 0.21
162.6  4.7
  DUR 1.4 EX 23  5.55 0.67 -2.64 1.27 -2.91 1.30 -0.99 0.91 -0.47 0.81
0.11 1.22
    5.69 83 155  -2.75  7   0  -2.94  3 270   4.31 352 42   80 186 49
99
 Planes (Harvard)
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```
         352          42          80
         186          49          99
 Planes (Recomputed)
         337          44          79
         171          47         100
 Axes            Harvard             Recomputed
 p          83         155          82         155
 b           7           0           7         344
 t           3         270           1         254
 B021591A 02/15/91 10:48:12.9 -42.10  171.56  33.05.45.1S ISLAND, NEW
ZEALAND
 PDE BW:14 27  45 MW: 0  0   0 DT=   0.7 0.4 -41.90 0.08  171.43 0.10
15.0 -1.0
  DUR 2.0 EX 24  0.95 0.08  0.11 0.10 -1.06 0.09  0.24 0.24  0.37 0.26 -
1.35 0.08
    1.02 82 303   0.99  0 213  -2.01  8 123   1.52 213 37   90  33 53
90
 Planes (Harvard)
         213          37          90
          33          53          90
 Planes (Recomputed)
         221          37         102
          27          54          81
 Axes            Harvard             Recomputed
 p          82         303          79         264
 b           0         213           7          32
 t           8         123           8         123
 B082091B 08/20/91 08:46:40.5  37.64   72.18 135.05.30.0TAJIK SSR
 PDE BW:13 21  45 MW: 0  0   0 DT=   3.6 1.0  37.46 0.12   72.08 0.09
141.7  3.5
  DUR 1.6 EX 23  1.05 0.56 -0.49 0.89 -0.57 0.82 -6.34 0.66 -7.03 0.65 -
0.05 0.94
    9.74 47 132  -0.47  0 222  -9.27 43 313   9.51  45  2   93 222 88
90
 Planes (Harvard)
          45           2          93
         222          88          90
 Planes (Recomputed)
          37           2          85
         222          88          90
 Axes            Harvard             Recomputed
 p          47         132          47         132
 b           0         222           0          42
 t          43         313          43         312
 B083192D 08/31/92 20:27:27.0  51.69 -176.08  63.04.80.0ANDREANOF ISLANDS
 PDE BW: 9 13  45 MW: 0  0   0 DT=  -1.1 2.4  51.89 0.30 -176.31 0.31
73.7 18.8
  DUR 0.6 EX 23  0.86 0.60  0.30 0.93 -1.15 0.45  3.61 0.44  1.18 0.63
0.40 0.85
    4.43 46 343  -1.25  2 251  -3.19 44 159   3.81 185  3   24  71 89
92
 Planes (Harvard)
         185           3          24
          71          89          92
 Planes (Recomputed)
         201           3          40
          71          88          92
 Axes            Harvard             Recomputed
 p          46         343          47         343
 b           2         251           2         251
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 t          44         159          43         159
 B040893D 04/08/93 19:13:14.4  18.37  -71.15  33.05.14.7DOMINICAN
REPUBLIC REG.
 PDE BW:15 18  45 MW: 0  0   0 DT=   1.4 1.1  18.40 0.11  -71.46 0.12
15.0  0.0
  DUR 1.0 EX 23 -0.47 0.25 -3.17 0.31  3.64 0.29 -5.84 1.11  1.22 1.50
1.62 0.33
    4.17 52 180   3.99  6 278  -8.16 38  12   6.16 139  9  131 277 83
84
 Planes (Harvard)
         139           9         131
         277          83          84
 Planes (Recomputed)
         162          18         165
         267          85          72
 Axes            Harvard             Recomputed
 p          52         180          47         158
 b           6         278          18         268
 t          38          12          38          12
 B043093F 04/30/93 14:16:35.0  -6.04  130.30 110.05.10.0BANDA SEA
 PDE BW:10 12  45 MW: 0  0   0 DT=   0.0 1.1  -6.04 0.00  130.30 0.00
118.7  7.1
  DUR 1.0 EX 23  1.16 0.67 -2.70 0.66  1.53 1.23  1.89 0.42  0.35 1.04 -
1.12 0.75
    1.94 68   0   1.79  5 258  -3.73 22 167   2.83 248 24   78  80 67
95
 Planes (Harvard)
         248          24          78
          80          67          95
 Planes (Recomputed)
         216          35          31
         100          73         121
 Axes            Harvard             Recomputed
 p          68           0          52          46
 b           5         258          30         269
 t          22         167          21         167
 B051393F 05/13/93 23:41:38.3  55.02 -160.18  33.05.34.6ALASKA PENINSULA
 PDE BW: 9 10  45 MW: 0  0   0 DT=   4.8 1.7  54.89 0.17 -159.84 0.21
40.8 10.3
  DUR 1.0 EX 23  2.58 0.39 -2.22 0.42 -0.37 0.50  1.94 0.95  1.63 1.96 -
3.76 0.78
    3.34 73 322   2.58  0 232  -5.92 17 142   4.63 232 28   90  52 62
90
 Planes (Harvard)
         232          28          90
          52          62          90
 Planes (Recomputed)
         241          29         102
          47          62          83
 Axes            Harvard             Recomputed
 p          73         322          72         301
 b           0         232           6          50
 t          17         142          17         142
 B032494C 03/24/94 18:40:53.4   8.12  126.61  33.05.14.2MINDANAO,
PHILIPPINE ISL
 PDE BW:10 15  45 MW: 0  0   0 DT=   6.4 0.8   8.31 0.09  126.36 0.15
33.3 11.3
  DUR 1.4 EX 23 -3.93 1.15  2.36 0.63  1.58 1.58 -1.92 1.82  2.30 1.37
0.80 0.83
```

```
    2.92 14 175   2.41 20 270  -5.33 65  52   4.12 239 35 -126 101 62  -
67
 Planes (Harvard)
         239          35        -126
         101          62         -67
 Planes (Recomputed)
         230          40        -127
          94          59         -64
 Axes            Harvard             Recomputed
 p          14         175          10         165
 b          20         270          22         259
 t          65          52          65          52
 B121197F 12/11/97 18:47:09.8  -6.20  101.01  33.05.04.6SOUTHWEST OF
SUMATERA
 PDE BW:15 21  45 MW: 0  0   0 DT=   1.1 0.7  -6.28 0.13  100.66 0.09
21.3  7.7
  DUR 1.0 EX 23 -2.87 0.42  1.22 0.38  1.64 0.46  0.42 1.30 -0.49 1.21 -
4.22 0.62
    5.70  4  46  -2.79  0 136  -2.91 86 226   4.31 136 41  -90 316 49  -
90
 Planes (Harvard)
         136          41         -90
         316          49         -90
 Planes (Recomputed)
         122          43        -111
         329          51         -72
 Axes            Harvard             Recomputed
 p           4          46           4          46
 b           0         136          14         138
 t          86         226          75         300
 B040498B  4/ 4/98 14:42:52.5  -3.72  -77.39 114.24.90.0PERU-ECUADOR
BORDER REGI
 PDE BW:13 13  45 MW: 0  0   0 DT=   4.7 0.8  -3.76 0.16  -77.10 0.09
117.4  6.7
  DUR 1.0 EX 23 -3.32 0.59 -1.52 1.16  4.84 0.93 -1.00 1.97  2.04 1.59 -
3.79 0.90
    7.10 12 245  -3.28  0 155  -3.82 78  65   5.46 335 33  -90 155 57  -
90
 Planes (Harvard)
         335          33         -90
         155          57         -90
 Planes (Recomputed)
         341          33         -82
         151          57         -95
 Axes            Harvard             Recomputed
 p          12         245          12         245
 b           0         155           5         154
 t          78          65          77          44
 B091599B  9/15/99 19:38:56.2  44.36  149.43  33.05.04.4KURIL ISLANDS
 PDE BW: 9 12  45 MW: 0  0   0 DT=   3.4 1.4  44.69 0.22  149.69 0.34
33.0  0.0
  DUR 1.0 EX 23  2.76 0.58 -1.85 0.59 -0.91 0.82  0.50 2.22  2.39 1.19
0.21 0.72
    3.99 63 282  -1.90  5 182  -2.09 26  90   3.04 169 19   76   4 71
95
 Planes (Harvard)
         169          19          76
           4          71          95
 Planes (Recomputed)
         189          18          88
```

	11	72	91	
Axes	Harvard		Recomputed	
p	63	282	63	282
b	5	182	0	191
t	26	90	27	101

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 C041476A 04/14/76 15:26:16.8 -51.90  139.47  33.05.46.2SOUTH OF
AUSTRALIA
 MLI BW:13 34  45 MW:14 25 135 DT=   2.1 0.2 -52.10 0.02  139.46 0.03
15.0  0.0
  DUR 2.6 EX 25 -0.12 0.02  0.05 0.02  0.07 0.02  0.02 0.06  0.00 0.06 -
1.40 0.02
    1.47  1  45  -0.12 89 261  -1.34  0 135   1.40 180 89    0  90 90
179
 Axes            Harvard             Recomputed
 p           1          45           1          45
 b          89         261          89         278
 t           0         135           1         135
 B041682A 04/16/82 08:14:29.8  -7.41  128.59 148.05.40.0BANDA SEA
 PDE BW: 8 12  45 MW: 0  0   0 DT=  -3.4 1.3  -7.48 0.10  128.51 0.17
144.6  6.8
  DUR 1.0 EX 23  3.01 0.49 -1.55 0.70 -1.47 0.86 -1.16 0.61  1.05 0.71
3.50 0.74
    3.31 79 225   1.99  0 135  -5.30 11  45   4.30 135 34   90 315 56
90
 Axes            Harvard             Recomputed
 p          79         225          79         209
 b           0         135           3         314
 t          11          45          11          45
 B120482A 12/04/82 12:54:03.9   8.73  -39.49  10.05.15.0CEN. MID-ATLANTIC
RIDGE*
 MLI BW: 8 16  45 MW: 0  0   0 DT=  49.2 0.3   8.70 0.06  -39.72 0.06
15.0 -1.0
  DUR 1.9 EX 24 -1.28 0.04  0.04 0.06  1.25 0.08 -0.02 0.14 -0.03 0.19
0.43 0.04
    1.38  1 108  -0.10  1 198  -1.28 89 334   1.33 197 44  -91  18 46  -
89
 Axes            Harvard             Recomputed
 p           1         108           1         108
 b           1         198           0         198
 t          89         334          89         321
 B100584C 10/05/84 15:46:27.1  51.89 -176.05  65.05.20.0ANDREANOF IS.,
ALEUTIANS
 PDE BW:10 21  45 MW: 0  0   0 DT=   1.5 0.8  52.00 0.08 -175.74 0.12
65.1  5.3
  DUR 1.4 EX 23  4.51 0.35 -3.22 0.43 -1.29 0.39  1.40 0.40  0.86 0.39 -
2.54 0.53
    4.78 80 325   0.46  0 235  -5.24 10 145   5.01 235 35   90  55 55
90
 Axes            Harvard             Recomputed
 p          80         325          80         332
 b           0         235           1         236
 t          10         145          10         146
 B060585C 06/05/85 14:58:14.4 -14.97 -177.67 391.05.10.0FIJI ISLANDS
REGION
 PDE BW:12 18  45 MW: 0  0   0 DT=  10.1 1.3 -15.47 0.11 -177.83 0.11
380.3  4.0
  DUR 1.4 EX 23 -5.50 0.55 -1.07 1.10  6.57 0.83  0.61 0.86  1.06 0.87
5.74 0.87
    9.74  5 298  -4.15  0  28  -5.60 85 118   7.67  28 40  -90 208 50  -
90
 Axes            Harvard             Recomputed
 p           5         298           5         298
 b           0          28           1          28
 t          85         118          85         136
 B022686A 02/26/86 11:05:03.9  -1.91  134.18  33.05.44.9WEST IRIAN REGION
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 PDE BW:14 25  45 MW: 0  0   0 DT=  -3.2 1.1  -1.84 0.11  134.56 0.11
17.9 12.8
  DUR 1.5 EX 23  0.54 0.56 -6.27 0.70  5.73 0.86 -0.11 1.61 -0.16 1.80
4.16 0.62
    7.04  2 107   0.53 88 287  -7.57  0  17   7.30 152 89  179 242 89
1
 Axes            Harvard             Recomputed
 p           2         107           2         107
 b          88         287          88         273
 t           0          17           0          17
 B020987C 02/09/87 14:25:29.7  -6.14  147.71  33.05.55.0EAST PAPUA NEW
GUINEA
 PDE BW:14 35  45 MW: 0  0   0 DT=   4.6 0.3  -6.21 0.03  147.85 0.03
44.3  3.4
  DUR 2.4 EX 24  0.62 0.06 -0.05 0.07 -0.57 0.09  0.04 0.12 -0.05 0.11
2.69 0.07
    2.39  0 138   0.62 89  48  -3.01  1 228   2.70 273 89   -1   3 89 -
179
 Axes            Harvard             Recomputed
 p           0         138           0         138
 b          89          48          89          40
 t           1         228           1         228
 B070887B 07/08/87 16:16:40.6  -5.76  129.79  33.05.24.6BANDA SEA
 PDE BW:16 39  45 MW: 0  0   0 DT=   3.0 0.5  -5.51 0.05  130.02 0.05
33.0  0.0
  DUR 2.1 EX 24 -0.30 0.07 -1.25 0.07  1.55 0.10 -0.04 0.15 -0.03 0.16
1.09 0.08
    1.92  1 109  -0.30 89 248  -1.62  1  19   1.77 154 89  180 244 90
1
 Axes            Harvard             Recomputed
 p           1         109           1         109
 b          89         248          88         240
 t           1          19           1          19
 B020288A 02/02/88 15:58:50.1  45.27  150.07  51.05.20.0KURIL ISLANDS
 PDE BW:12 22  45 MW: 0  0   0 DT=  -3.1 2.0  45.02 0.11  150.73 0.20
62.1  7.4
  DUR 1.3 EX 23  2.87 0.27 -0.71 0.51 -2.16 0.39 -0.12 0.44 -0.22 0.52 -
2.52 0.54
    2.88 88 127   1.19  0 217  -4.07  2 307   3.47  37 43   90 217 47
90
 Axes            Harvard             Recomputed
 p          88         127          88          96
 b           0         217           1         217
 t           2         307           2         307
 B091688C 09/16/88 08:11:56.1  13.92  -91.55  49.05.24.4NEAR GUATEMALA
COAST
 PDE BW: 8 19  45 MW: 0  0   0 DT=  -4.0 4.1  13.66 0.28  -92.22 0.15
58.8  7.9
  DUR 1.6 EX 23  5.16 1.76 -7.60 1.75  2.43 3.37 -1.06 1.38  0.41 1.00
3.94 1.12
    5.25 85 199   3.80  0 109  -9.05  5  19   7.15 109 40   90 289 50
90
 Axes            Harvard             Recomputed
 p          85         199          85         218
 b           0         109           2         109
 t           5          19           5          19
 B102788A 10/27/88 00:31:08.9  35.17  -35.19  10.05.14.6NORTH ATLANTIC
RIDGE
 PDE BW:14 34  45 MW: 0  0   0 DT=   8.5 0.4  35.48 0.05  -35.26 0.06
15.0  0.0
```

```
  DUR 2.0 EX 24 -0.32 0.05  0.82 0.05 -0.51 0.06  0.02 0.15  0.02 0.19
1.30 0.05
    1.62  1 329  -0.32 89 149  -1.31  0  59   1.46 104 89    1  14 89
179
 Axes            Harvard             Recomputed
 p           1         329           1         329
 b          89         149          89         174
 t           0          59           0          59
 B110890E 11/08/90 16:49:22.1 -14.03  170.54  33.05.14.8VANUATU ISLANDS
REGION
 PDE BW:17 27  45 MW: 0  0   0 DT=   3.5 0.7 -14.11 0.08  170.25 0.07
15.0  0.0
  DUR 1.8 EX 23 -2.88 0.45  4.10 0.71 -1.22 0.62  0.39 1.88  0.34 1.72
8.90 0.43
   10.75  2 323  -2.90 88 143  -7.85  0  53   9.30  98 88    2   8 88
178
 Axes            Harvard             Recomputed
 p           2         323           2         323
 b          88         143          88         155
 t           0          53           0          53
 B052391A 05/23/91 06:44:17.8 -14.86  166.88  33.05.14.5VANUATU ISLANDS
 PDE BW:12 22  45 MW: 0  0   0 DT=   2.6 0.9 -15.33 0.11  166.92 0.10
57.3  8.2
  DUR 1.5 EX 23  4.80 0.43  1.74 1.22 -6.55 1.24 -0.22 0.77 -1.90 0.87 -
0.78 0.58
    5.11 81  90   1.82  1 185  -6.93  9 275   6.02   6 36   91 185 54
89
 Axes            Harvard             Recomputed
 p          81          90          81         100
 b           1         185           1           5
 t           9         275           9         275
 B032892D 03/28/92 10:17:42.0  26.61   67.34  10.05.04.3PAKISTAN
 PDE BW:17 29  45 MW: 0  0   0 DT=   3.1 0.9  26.75 0.16   67.36 0.12
15.0  0.0
  DUR 1.3 EX 23  2.55 0.22  0.34 0.37 -2.89 0.28 -0.09 1.00 -1.26 1.47 -
0.12 0.22
    2.83 78  90   0.35  0 182  -3.18 12 272   3.00   3 33   91 182 57
89
 Axes            Harvard             Recomputed
 p          78          90          78          97
 b           0         182           1           2
 t          12         272          12         272
 B050592A 05/05/92 00:33:25.0  52.86  159.37  51.05.00.0OFF E COAST OF
KAMCHATKA
 PDE BW:15 20  45 MW: 0  0   0 DT=   3.2 1.1  52.54 0.10  160.08 0.15
50.4  6.8
  DUR 1.5 EX 23  3.58 0.33 -0.53 0.55 -3.05 0.47  0.71 0.54  0.90 0.71 -
3.14 0.60
    3.73 83 304   1.59  0 214  -5.32  7 124   4.52 214 38   90  34 52
90
 Axes            Harvard             Recomputed
 p          83         304          82         321
 b           0         214           2         214
 t           7         124           7         124
 B081092F 08/10/92 13:42:34.9  36.05   69.71 111.05.30.0HINDU KUSH REGION
 PDE BW:15 24  45 MW: 0  0   0 DT=   1.3 1.1  35.28 0.11   69.52 0.07
132.2  2.7
  DUR 1.2 EX 23  7.66 0.52 -2.88 0.78 -4.78 0.66 -0.14 0.51  0.13 0.57
2.22 0.69
```

```
    7.67 89 237  -1.41  0 147  -6.25  1  57   6.96 147 44   90 327 46
90
 Axes            Harvard             Recomputed
 p          89         237          89         216
 b           0         147           0         327
 t           1          57           1          57
 C081992A 08/19/92 00:57:43.6  50.48 -174.85  33.06.15.7ANDREANOF ISLANDS
 PDE BW:28 65  45 MW: 8 13 135 DT=   0.5 0.2  50.45 0.02 -174.78 0.04
15.0 -1.0
  DUR 2.7 EX 25 -1.57 0.02  1.71 0.03 -0.14 0.02 -0.03 0.09  0.01 0.08
0.23 0.03
    1.74  0 173  -0.16  0 263  -1.57 89  34   1.66 263 45  -91  83 45  -
89
 Axes            Harvard             Recomputed
 p           0         173           0         173
 b           0         263           1         263
 t          89          34          89          41
 B011594G 01/15/94 23:07:09.9   0.07  123.66 137.05.30.0MINAHASSA
PENINSULA
 PDE BW:12 18  45 MW: 0  0   0 DT=   3.3 0.6   0.17 0.07  123.84 0.07
116.2  3.6
  DUR 1.3 EX 23  7.27 0.52 -2.25 0.79 -5.01 1.04  0.10 0.52  0.19 0.53 -
1.06 0.69
    7.27 89 289  -1.89  0 199  -5.38  1 109   6.32 199 44   90  19 46
90
 Axes            Harvard             Recomputed
 p          89         289          89         301
 b           0         199           0         199
 t           1         109           1         109
 B062794D 06/27/94 09:49:51.4 -13.64  167.23 194.04.90.0VANUATU ISLANDS
 PDE BW:11 11  45 MW: 0  0   0 DT=   6.5 0.9 -13.36 0.10  167.16 0.09
208.4  5.6
  DUR 1.2 EX 23  6.25 0.68  1.78 1.65 -8.03 2.04 -0.13 1.09 -0.93 1.36 -
0.61 1.10
    6.31 86  90   1.82  0 184  -8.13  4 274   7.22   4 41   90 183 49
90
 Axes            Harvard             Recomputed
 p          86          90          86         107
 b           0         184           1           4
 t           4         274           4         274
 B121194C 12/11/94 14:03:46.2  -3.41  149.50  33.05.04.9BISMARCK SEA
 PDE BW:34 48  45 MW: 0  0   0 DT=   1.3 0.4  -3.59 0.04  149.70 0.05
15.0  0.0
  DUR 1.2 EX 24  0.06 0.04  0.78 0.05 -0.84 0.06  0.03 0.19  0.03 0.13
1.02 0.04
    1.28  2 334   0.06 88 154  -1.33  0  64   1.30 109 89    1  19 89
179
 Axes            Harvard             Recomputed
 p           2         334           2         334
 b          88         154          88         171
 t           0          64           1          64
 B051995B 05/19/95 07:17:27.4 -26.66 -175.85  33.05.10.0SOUTH OF TONGA
ISLANDS
 PDE BW:20 27  45 MW: 0  0   0 DT=   1.8 0.5 -26.59 0.09 -175.01 0.07
15.0  0.0
  DUR 1.0 EX 23 -5.08 0.40  0.69 0.73  4.38 0.48  0.06 1.00 -0.59 1.00 -
0.25 0.38
    4.44  4  86   0.68  0 176  -5.11 86 270   4.78 176 41  -90 356 49  -
90
 Axes            Harvard             Recomputed
```

```
 p           4          86           4          86
 b           0         176           0         356
 t          86         270          86         263
 B052895A 05/28/95 02:02:53.5  52.90  142.86  33.05.04.7SAKHALIN ISLAND
 PDE BW:30 39  45 MW: 0  0   0 DT=   0.0 0.8  52.98 0.07  142.96 0.10
25.8  3.7
  DUR 1.0 EX 23  4.26 0.26 -0.78 0.36 -3.48 0.31  0.17 0.73  0.99 0.77 -
0.71 0.28
    4.39 83 270  -0.61  2  14  -3.78  7 104   4.08 196 38   93  12 52
88
 Axes            Harvard             Recomputed
 p          83         270          83         277
 b           2          14           1          14
 t           7         104           7         104
 B090495A 09/04/95 04:19:51.5 -15.14  167.43 124.05.20.0VANUATU ISLANDS
 PDE BW:18 20  45 MW: 0  0   0 DT=   0.5 0.8 -15.50 0.07  167.41 0.08
133.8  2.6
  DUR 1.0 EX 23  6.07 0.36 -2.71 0.92 -3.36 0.94 -0.34 0.43 -0.17 0.47
2.26 0.51
    6.09 87 139  -0.77  3 319  -5.32  0  49   5.71 142 45   94 316 45
86
 Axes            Harvard             Recomputed
 p          87         139          87         148
 b           3         319           3         319
 t           0          49           0          49
 B071097H 07/10/97 23:41:42.9 -34.69   54.61  10.05.35.0ATLANTIC-INDIAN
RISE
 PDE BW:42 74  45 MW: 0  0   0 DT=   3.7 0.2 -34.58 0.03   54.69 0.04
15.0  0.0
  DUR 1.2 EX 24 -1.37 0.04  1.46 0.04 -0.10 0.06  0.04 0.16  0.01 0.12 -
0.36 0.04
    1.54  1  12  -0.18  1 282  -1.37 89 135   1.45 103 44  -89 281 46  -
91
 Axes            Harvard             Recomputed
 p           1          12           1          12
 b           1         282           1         282
 t          89         135          89         142
 B082697F 08/26/97 13:17:26.7   6.45   94.60 114.24.90.0NICOBAR ISLANDS
REGION
 PDE BW:11 13  45 MW: 0  0   0 DT=   2.0 1.6   6.55 0.12   94.74 0.15
119.8  7.2
  DUR 1.0 EX 23 -0.69 0.32 -1.82 0.47  2.50 0.63  0.32 0.46 -0.42 0.54 -
3.48 0.52
    4.49  6  61  -0.74 84 241  -3.75  0 151   4.12 196 86    4 106 86
176
 Axes            Harvard             Recomputed
 p           6          61           6          61
 b          84         241          84         255
 t           0         151           1         151
 C011298J 01/12/98 16:36:20.2 -15.85 -179.38  23.45.86.7FIJI ISLANDS
REGION
 PDE BW:51124  45 MW:47123 135 DT=   8.7 0.1 -15.78 0.01 -179.19 0.01
15.0 -1.0
  DUR 5.2 EX 26  0.10 0.00 -0.64 0.00  0.54 0.01 -0.04 0.02  0.00 0.02
1.03 0.00
    1.13  1 120   0.11 88 240  -1.24  2  30   1.19 165 88 -180  75 90   -
2
 Axes            Harvard             Recomputed
 p           1         120           1         120
 b          88         240          88         247
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 t           2          30           1          30
 C040198D  4/ 1/98 22:42:56.9 -40.32  -74.87   9.06.26.0OFF COAST OF
SOUTHERN CH
 PDE BW:58134  45 MW:62153 135 DT=   9.0 0.1 -40.64 0.01  -75.37 0.01
15.0 -1.0
  DUR 4.5 EX 26 -1.18 0.00  0.08 0.00  1.10 0.00  0.01 0.02 -0.04 0.02
0.37 0.00
    1.22  1 108  -0.04  1  18  -1.18 89 227   1.20 199 44  -88  17 46  -
92
 Axes            Harvard             Recomputed
 p           1         108           1         108
 b           1          18           1          18
 t          89         227          89         235
 B090398B  9/ 3/98  6:43: 3.7  39.54   77.26  33.05.14.2SOUTHERN
XINJIANG, CHINA
 PDE BW:20 26  45 MW: 0  0   0 DT=   2.9 1.2  39.47 0.16   77.30 0.15
31.7  6.5
  DUR 1.0 EX 23 -2.52 0.30  1.93 0.35  0.59 0.46 -1.26 0.99 -0.81 0.94
2.06 0.44
    3.78 13 144  -0.91  0  54  -2.87 77 324   3.33 234 32  -90  54 58  -
90
 Axes            Harvard             Recomputed
 p          13         144          13         144
 b           0          54           2         235
 t          77         324          76         334
 B121298B 12/12/98  9:50:48.8  -7.61  107.86  85.74.90.0JAVA
 PDE BW:12 12  45 MW: 0  0   0 DT=   3.0 1.5  -7.72 0.12  107.74 0.16
88.1 10.5
  DUR 1.0 EX 23  2.87 0.48 -2.61 0.61 -0.26 0.78 -0.10 0.79 -0.18 1.14 -
2.52 0.88
    2.87 89 147   1.35  0 237  -4.22  1 327   3.55  57 44   90 237 46
90
 Axes            Harvard             Recomputed
 p          89         147          86          79
 b           0         237           4         237
 t           1         327           1         327
 B030999D  3/ 9/99 21:32:43.8  -0.27  129.10  33.04.94.3HALMAHERA
 PDE BW:15 21  45 MW: 0  0   0 DT=   0.3 1.0   0.11 0.13  129.24 0.12
33.0  0.0
  DUR 1.0 EX 23 -2.62 0.82  1.90 0.50  0.71 1.24  0.55 1.67  0.46 0.94
2.12 0.73
    3.59  7 323  -0.89  0  53  -2.70 83 143   3.14  53 38  -90 233 52  -
90
 Axes            Harvard             Recomputed
 p           7         323           7         323
 b           0          53           1         233
 t          83         143          83         133
 B053099C  5/30/99 13:23:56.8  -2.14  125.12  33.05.00.0CERAM SEA
 PDE BW:15 17  45 MW: 0  0   0 DT=   1.5 1.5  -1.97 0.13  125.25 0.11
63.2  9.6
  DUR 1.0 EX 23  2.38 0.49 -2.86 0.49  0.47 0.86  2.43 1.36 -1.76 0.78
4.84 0.78
    3.93  0 126   3.32 73  36  -7.25 17 216   5.59 259 78  -12 352 78 -
168
 Axes            Harvard             Recomputed
 p           0         126           2         125
 b          73          36          73          29
 t          17         216          17         216
 B090899C  9/ 8/99  8:28: 4.5 -10.74  166.17 200.34.90.0SANTA CRUZ
ISLANDS
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 PDE BW:18 20  45 MW: 0  0   0 DT=   2.8 1.0 -10.83 0.09  166.13 0.06
200.5  4.0
  DUR 1.0 EX 23  4.16 0.43  2.01 0.90 -6.16 0.81  0.19 0.57 -1.37 0.55
0.92 0.71
    4.34 83  90   2.11  1 354  -6.45  7 264   5.39 353 38   89 174 52
91
 Axes            Harvard             Recomputed
 p          83          90          83          76
 b           1         354           1         173
 t           7         264           7         264
 B092199G  9/21/99 18:18:40.0  24.06  121.15  33.04.90.0TAIWAN
 PDE BW: 7  7  45 MW: 0  0   0 DT=   2.3 2.3  24.12 0.21  120.71 0.46
33.0  0.0
  DUR 1.0 EX 23 -2.85 1.57 -4.20 1.04  7.05 2.50  0.97 1.87 -3.62 2.61 -
3.27 0.82
    9.11 18  75  -4.03 72 270  -5.08  4 166   7.10 212 74    9 119 81
164
 Axes            Harvard             Recomputed
 p          18          75          17          75
 b          72         270          73         254
 t           4         166           0         345
 B122299A 12/22/99 09:06:11.8  41.85   20.53  10.04.84.7ALBANIA
 PDE BW:22 28  45 MW: 0  0   0 DT=   5.3 0.8  41.61 0.13   20.83 0.11
15.0  0.0
  DUR 1.1 EX 23 -5.08 0.58 -0.20 0.93  5.28 0.55 -0.11 1.54 -0.16 1.95
0.91 0.46
    5.43  1  99  -0.35  0   9  -5.08 89 279   5.26 189 44  -90   9 46  -
90
 Axes            Harvard             Recomputed
 p           1          99           1          99
 b           0           9           1         189
 t          89         279          89         326
 B021700C 02/17/00 22:00:30.3  -5.03  153.10  65.45.14.8NEW IRELAND
REGION
 PDE BW:27 43  45 MW: 0  0   0 DT=   0.2 0.5  -4.73 0.08  153.56 0.04
65.0  0.0
  DUR 1.0 EX 23  4.57 0.45  5.21 0.94 -9.77 0.69  0.13 0.70  1.52 0.71 -
1.77 0.49
    5.41  0 187   4.73 84 277 -10.14  6  97   7.78 232 86 -176 142 86   -
4
 Axes            Harvard             Recomputed
 p           0         187           4         187
 b          84         277          83         310
 t           6          97           6          97
 B032000C 03/20/00 08:42:13.7 -36.51  -97.23  10.04.84.8WEST CHILE RISE
 PDE BW:27 35  45 MW: 0  0   0 DT=   3.0 0.5 -36.67 0.07  -97.03 0.09
15.0  0.0
  DUR 1.1 EX 23 -2.24 0.41 -1.88 0.58  4.12 0.51 -0.35 1.88  0.64 1.64 -
8.67 0.49
   10.34  3 235  -2.28 87  55  -8.06  0 145   9.20 280 88  178  10 88
2
 Axes            Harvard             Recomputed
 p           3         235           3         235
 b          87          55          87          40
 t           0         145           1         145
 B080100F 08/01/00 10:18:59.9   4.08   93.27  33.05.35.0OFF W COAST OF
NORTHERN
 PDE BW:23 41  45 MW: 0  0   0 DT=  -0.3 0.5   4.07 0.08   92.99 0.06
34.9  4.8
```

```
  DUR 1.1 EX 23 -4.16 0.73 -2.33 0.67  6.49 0.90  1.09 1.26 -1.54 1.51 -
9.71 0.83
   12.95  6  57  -4.36 84 237  -8.59  0 147  10.77 192 86    4 102 86
176
 Axes            Harvard             Recomputed
 p           6          57           6          57
 b          84         237          84         247
 t           0         147           1         147
 B080400E 08/04/00 05:05:17.6 -22.98  169.75  33.05.04.4LOYALTY ISLANDS
REGION
 PDE BW:28 40  45 MW: 0  0   0 DT=   6.3 1.5 -22.70 0.12  169.12 0.08
40.7  5.5
  DUR 1.0 EX 23 -3.79 0.24  3.16 0.43  0.63 0.53 -0.23 0.65  0.06 0.56
0.18 0.28
    3.18  2 176   0.62  0 266  -3.80 88   0   3.49 266 43  -90  86 47  -
90
 Axes            Harvard             Recomputed
 p           2         176           2         176
 b           0         266           1         266
 t          88           0          88          24
 B031101B 03/11/01 07:06:03.5  -4.26   89.08  10.04.94.9SOUTH INDIAN
OCEAN
 PDE BW:18 24  45 MW: 0  0   0 DT=   2.9 0.9  -3.96 0.12   88.80 0.15
15.0  0.0
  DUR 1.0 EX 23  1.92 0.47 -0.17 0.51 -1.75 0.78  2.80 1.32  3.33 1.73 -
5.05 0.38
    4.15  0 221   3.83 66 311  -7.98 24 131   6.06 268 73 -163 173 73  -
17
 Axes            Harvard             Recomputed
 p           0         221           6         223
 b          66         311          66         325
 t          24         131          24         130
```