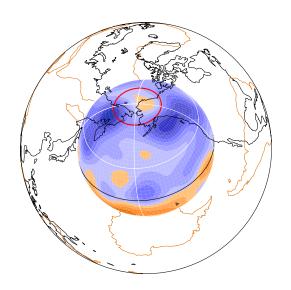
# **LEOPACK**



# cicmsvpnsmap

 $\begin{array}{c} \textbf{C} onducting \ \textbf{I}nner \ \textbf{C} ore \ and \ \textbf{M} antle \ \textbf{S} olution \ \textbf{V} ector: \\ \textbf{P} erturbation \ and \ \textbf{N} ew \ \textbf{S} patial \ \textbf{M} esh \ \textbf{A} daption \ \textbf{P} rogram \end{array}$ 

Steven J. Gibbons, Oslo Original document: November  $21^{\rm st},$  2001. Updated: October  $30^{\rm th},$  2022.

## 1 cicmsvpnsmap

Conducting Inner Core and Mantle Solution Vector: Perturbation and New Spatial Mesh Adaption Program

Essentially identical to cicsvpnsmap but has one extra line in the input file containing the numbers RCM NRCM ISPCM (see example).

## 1.1 Subprograms required for cicmsvpnsmap

#### SUBS subroutines

```
hmfrd.f svfrd.f xarrrd.f hminda.f esnaas.f zcpaas.f zcpaa2.f svrint.f hmfwt.f xarrwt.f svfwt.f fopen.f fclose.f gfdcfd.f fnamer.f matop.f
```

### SUBS integer function

indfun.f

### **BLAS** integer function

idamax.f

#### **BLAS** subroutines

```
dgemv.f dgemm.f dtrsm.f dswap.f dger.f dscal.f
dtrmm.f dtrmv.f
```

#### LAPACK subroutines

```
xerbla.f dgetrf.f dgetri.f dgetf2.f dlaswp.f dtrtri.f
dtrti2.f
```

### LAPACK integer function

ilaenv.f

#### LAPACK logical function

lsame.f

The input file is as follows:

40 2 20 3 4 4 0.00001 : NRVNW ISPV NRICNW ISPIC IFORMF NNDS DMAG 2.0 15 3 : RCM NRCM ISPCM \*\*\* (THIS LINE IS DIFFE

36 36 36 36 : LH1 LH2 LH3 LH4 LH5

1 2 4 20 : ISV ISM MINC MMAX

# References