```
10000001
                     SUBROUTINE SOLVED (IE, ISWF, ALF, STGF, FRRF, F, FO)
                                                                                                       792
    3030041
                    DIMENSION F(21,18,10), F1(21,18,10), F0(21,18,10)
                                                                                                       793
    0000041
                    COMMON
 3
                                                                                                       794
                    1/VAR/U(21,18,10),V(21,18,10),P(21,18,10),GK(21,18,10),
                                                                                                       795
                    2 DE(21,18,10), ERRU, ERRV, ERRM, ERRK, ERRE, ERRW,
                                                                                                       796
                    3 PP(21,18,10),W(21,18,10),TM(21,18,10)
                                                                                                       797
                    1/PRCP/ VISE(21,18,10), DEN(21,18,10), VISC, DENIN, FLOWIN
                                                                                                       798
                    1/PCCR/ CU(21,18,10),DV(21,18,1C),DW(21,18,10)
                                                                                                       799
                    1/TUR/ SIGK/SIGE/CMU/C1/C2/CMU1/CMU2/E/CK/HINUM/SMNUM/ANV1(800)/
                                                                                                       800
                    2 YN(80C), YN1(800), SINX(800), SINY(800), SINZ(800), ANW1(800),
                                                                                                       801
11
                    3 YPLN(8C0), TAUN(800), IBC(800), JBC(800), KBC(800), IITY(800),
                                                                                                       802
12
                    4 TAUW(8CO),GEN(21,18,10),MC(21,18,10),IULO(21,18,10),IITO
                                                                                                       803
13
                    1/COEF/ AP(21,18,10),SU(21,18,10),SP(21,18,10),SUK(21,18,10),
                                                                                                       804
14
                    2 SPK(21,18,10),AE(21,18,10),AW(21,18,10),AN(21,18,10),
                                                                                                       805
15
                        AS(21,13,10),AT(21,18,10),AB(21,18,10),AP(21,18,10)
                                                                                                       806
16
    0000041
                                                                                                       807
17
                    1/TRAN/ X(21,18,10),Y(21,18,10),Z(21,18,10),TJ0(21,18,10),
                                                                                                       808
18
                    2 CX(21,18,10),CY(21,18,10),CZ(21,18,10),
                                                                                                       809
19
                    3 EX(21,18,10), EY(21,18,10), EZ(21,18,10),
                                                                                                       810
20
                    5 = SX(21,18,10), SY(21,18,10), SZ(21,18,10)
                                                                                                       811
21
                    1/LIMT/ L,M,LT,MT,L1,L2,M1,M2,LC,M0,ISWU7ISWV,ISWP,ISWK,ISWE,
                                                                                                       812
                    2 ALU, ALV, ALP, ALK, ALE, ALVIS, ALW, N, N1, N2, NC, ISHW, IG, NT, ALC, DTT
22
                                                                                                       813
23
    0000041
                                                                                                       814
24
                    1/TTRAN/TXXE(21,18,10),TXXW(21,18,10),TYYN(21,18,10),
                                                                                                       815
25
                    2 TYYS(21,13,1G),TZZT(21,18,1C),TZZ8(21,18,1O),
                                                                                                       816
26
                        TYXE(21,18,10), TYXW(21,18,10), TYZT(21,18,10),
                                                                                                       817
27
                        TYZ8(21,18,10),TXYN(21,18,10),TXYS(21,18,10),
                                                                                                       818
28
                        TXZT(21,18,10),TXZS(21,18,10),TZXE(21,18,10),
                                                                                                       819
29
                       TZXW(21,18,10),TZYN(21,18,10),TZYS(21,18,10)
                                                                                                       820
              C----TRANSPORT EQUATIONS LINERALZATION AND SOLVER
30
                                                                                                       821
31
    0000041
                     ERRF=0.C
                                                                                                       822
                                                                                                                  1
32
    0033301
                     PI=3.141592654
                                                                                                       823
                                                                                                                  2
               C----PRESSURE CORRECTION SOLVER STARTS FROM 10
33
                                                                                                       824
    00383CI
                     IF(IE .EQ. C) GO TO 10
34
                                                                                                       825
                                                                                                                  3
35
              C----U, V, W, TM, K & E EQUATIONS
                                                                                                       826
36 0038521
                    IS=2
                                                                                                       827
                                                                                                                  5
37 00385AI
                    IT=LT
                                                                                                       828
                                                                                                                  6
38
   0033661
                     JS=2
                                                                                                       829
                                                                                                                  7
39
    00386EI
                     JT=MT
                                                                                                       830
                                                                                                                  8
40
    003B7AI
                     K S = 2
                                                                                                       831
                                                                                                                  9
    0033821
41
                     KT = NT
                                                                                                       832
                                                                                                                 10
42
    0038851
                     GO TO T21,29,29,29,29,21,21,21), IE
                                                                                                       833
                                                                                                                 11
43
   003BCAI
                 21 CONTINUE
                                                                                                       834
                                                                                                                 12
    OO38CAI
44
                     DO 22 I=IS,IT
                                                                                                       835
                                                                                                                 13
45
    003BE2I
                     TL, 2L=L SS 00
                                                                                                       836
                                                                                                                 14
46
    0038FAI
                     DO 22 K=KS.KT
                                                                                                       837
                                                                                                                 15
47
    0030121
                22 F1(I,J,K)=VISE(I,J,K)/SIGF
                                                                                                       838
                                                                                                                 16
48
              C----EVALUATE LINK COEFF. AND SOURCE TERMS
                                                                                                       839
49 003CACI
                    DO 20 I=IS,IT
                                                                                                       840
                                                                                                                 17
   0030041
50
                    TL, 2L=L 05 00
                                                                                                       841
                                                                                                                 18
51
   OO3CDCI
                    00 20 K=KS.KT
                                                                                                       842
                                                                                                                 19
                    GAE=0.5*(F1(I+1,J,K)+F1(I,J,K))
52
   003CF4I
                                                                                                       843
                                                                                                                 20
53
   0030501
                    GAW=0.5*(F1(I-1,J,K)+F1(I,J,K))
                                                                                                       844
                                                                                                                 21
54
   OG3DACI
                    GAN=0.5*(F1(I,J+1,K)+F1(I,J,K))
                                                                                                       845
                                                                                                                 22
55
   003E08I
                    GAS=0.5*(F1(I,J-1,K)+F1(I,J,K))
                                                                                                       846
                                                                                                                 23
56
   0035641
                    GAT=0.5*(F1(I)JK+1)+F1(I)JK)
                                                                                                       847
                                                                                                                 24
57 003E3EI
                    GAB=0.5*(F1(I_{2}J_{2}K+1)+F1(I_{2}J_{2}K))
                                                                                                       848
                                                                                                                 25
```