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ナトリウム燃焼解析コード(ASSCOPS)のEWS版の整備

(動力炉・核燃料開発事業団　契約業務報告書)

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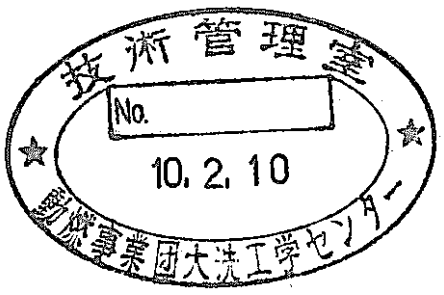

三菱重工業株式会社

動力炉・核燃料開発事業団（Power Reactor and Nuclear Fuel Development Corporation）

PNC-TJ9216 97-009
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ナトリウム燃焼解析コード(ASSCOPS)のEWS版の整備

緒方　潤司*

要　旨

大型計算機FACOMにて開発されたナトリウム燃焼解析コード(ASSCOPS)をエンジニアリングワークステーション(EWS)で作動させるための互換性障害となる文法やコンパイラ等のチェックを行った。使用したEWSは、DEC ALPHA OSF/1 Ver.3.2でプログラムを修正することによってFACOMで得られた計算結果と一致することを確認した。

なお、EWSはHPの機種でも正常に作動することを確認済である。

本報告書は、三菱重工業株式会社が動力炉・核燃料開発事業団との契約により実施した業務の成果である。

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1. 概要

現在ナトリウム漏洩・燃焼解析を行うことを目的としてナトリウム燃焼解析コードASSCOPSの改良が進められている。
ASSCOPSは汎用計算機FACOM上で開発中であるが、解析段階に入りプラットフォームをより広げることでコードの汎用性を高める必要が出てきた。コードの挙動はプラットフォームの機種等に依存し、その違いにより解析結果が大きく異なることが懸念される。
本作業においては、FACOMにより開発されたコードをEWSであるDEC UNIXに移植したが、その際にプラットフォームおよびコンパイラの違いにより実行形ファイルの作成が不可になったり、可能であったとしても解析結果が異なるなどコードの信頼性が問われる危険性があることが明確になった。
本報告書はASSCOPS新バージョンN3.1VD(FACOM版)のUNIX(DEC ALPHA OSF/1 Ver3.2B)への移植作業および移植コードのHP上での取り扱いについて検討し、FACOMと同等の解析結果を出せるように修正し、確認を行った。

2. 移植手順・改修項目

大型計算機FACOMにおけるASSCOPSｺｰﾄﾞﾌﾟﾛｸﾞﾗﾑをDEC_Ver3に移植するにあたり、次ページに示すフローのように3段階を経ておこなった。
各段階についてはおのおの以下のチェックを行っている。

第1段階 (Phase I)
コンパイル・リンク時のチェック

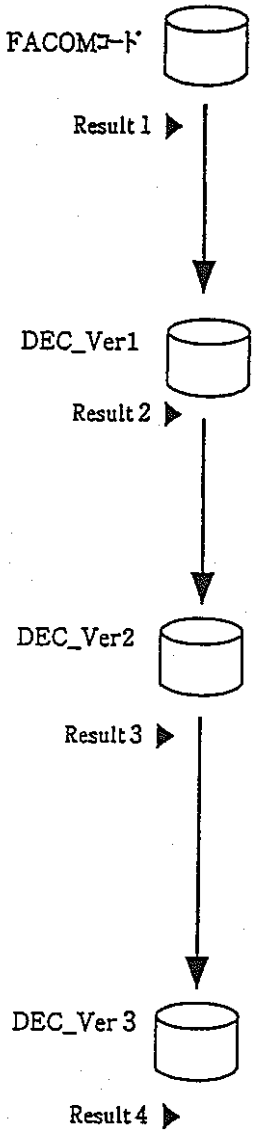
第2段階(Phase II)
入出力時のチェック

第3段階(Phase III)
ｻﾌﾞﾙｰﾁﾝ間の引数の型式等のチェック

また、おのおののチェックにより摘出された改修すべき個所と項目についてまとめた。

移植手順・改修項目

移植は大きく分けて3段階で行った。移植手順と各Phaseにおける改修項目を以下に示す。



Phase 1
(ｺﾝﾊﾟｲﾙ・ﾘﾝｸ)

1.1 ﾗﾍﾞﾙｺﾓﾝ名に”￥”を使用
1.2 変数名に”￥”を使用
1.3 Entry文の引数が、そのEntry文よるも前にある実行文に存在
1.4 UNIXでは使えない関数を使用

Phase 2
(I/O)

2.1 入力ﾌｧｲﾙのﾕﾆｯﾄNo.に”5”を使用
2.2 OPEN文が無い

Phase 3

3.1 ｻﾌﾞﾙｰﾁﾝ副ﾌﾟﾛｸﾞﾗﾑの引数がEntory文内でﾛｰｶﾙ変数として使用
3.2 Entry文の引数と引用する際の引数の型が異なる
3.3 引数で用いる定数の型と、対応するｻﾌﾞﾙｰﾁﾝの型が異なる

各Phaseにおける実行結果を以下に示す。

Result1-1　(FACOM版ｺﾝﾊﾟｲﾙ)

```
fort: Severe: mod6.f, line 117: Missing operator or delimiter symbol
    COMMON /F¥COM/ F¥TI  ,F¥DTI ,F¥TIM0,F¥DWGS,F¥DQGS,
------------^                                          ← Phase 1　1.1にて対応

fort: Severe: mod6.f, line 126: Missing operator or delimiter symbol
    COMMON /S¥COM/ S¥TIME,S¥DT  ,S¥TMAX,S¥FNA ,S¥TNA ,S¥NAIN,S¥QSTR,
------------^                                          ← Phase 1　1.1にて対応
fort: Severe: mod6.f, line 131: Multiple declaration of name
    COMMON /V11C/  T¥POL2,FIWGO,FIPGO,ISSOPT,T2PINT
----------------^                                      ← Phase 1　1.1関連
fort: Severe: mod6.f, line 323: Undimensioned array or statement function definition out of order
        TWI(I,J) = TWO(I,J,2)
--------^                                              ← Phase 1　1.1関連
fort: Severe: mod6.f, line 329: Missing operator or delimiter symbol
    F¥K = S
------^                                                ← Phase 1　1.2にて対応
fort: Severe: mod6.f, line 330: Missing operator or delimiter symbol
    AK = 2 * F¥K / (1+F¥K)
------------^                                          ← Phase 1　1.2にて対応
     :
     :
```

Result1-2　(項目1.1・1.2対応済ｺﾝﾊﾟｲﾙ)

```
fort: Severe: mod6.f, line 1339: Multiple declaration of name
    ENTRY    DETAK2(CC,AK,O2SNA,XO22,XO21)
----------------^                                      ← Phase 1　1.3にて対応
```

Result1-3　(項目1.3対応済ｺﾝﾊﾟｲﾙ)

```
fort: Info: mod6.f, line 5598: Statement function FUNCF is never called
    FUNCF(X) = 1.8*X + 32.
^
fort: Warning: mod6.f, line 1667: No entry point leading to this statement defines dummy argument
M
    DO 400  M=1,IPMAX
------------^                                          ← Phase 3　3.1にて対応
fort: Warning: mod6.f, line 7847: Variable TEMPNA is used before its value has been defined
    RETURN
--------^                                              ← 5．その他
fort: Warning: mod6.f, line 7825: Variable FSOD is used before its value has been defined
    RETURN
--------^                                              ← 5．その他
fort: Info: mod6.f, line 6437: No path to this statement
 305 CONTINUE
--^
ld:
Unresolved:
errset_                                                ← Phase 1　1.4にて対応
```

Result1-4　(Phase1改修後コンパイル)

```
fort: Info: mod6.f, line 5598: Statement function FUNCF is never called
    FUNCF(X) = 1.8*X + 32.
^
fort: Warning: mod6.f, line 1667: No entry point leading to this statement defines dummy
argument M
    DO 400  M=1,IPMAX                          ← Phase 3　3.1にて対応
————————^
fort: Warning: mod6.f, line 7847: Variable TEMPNA is used before its value has been
defined
    RETURN
————————^                                      ← 5．その他
fort: Warning: mod6.f, line 7825: Variable FSOD is used before its value has been defined
    RETURN
————————^                                      ← 5．その他
fort: Info: mod6.f, line 6437: No path to this statement
 305 CONTINUE
—^
```

Result2 (Phase1-RUN) .

```
**********************************************************
**********************************************************

              ASSCOPS (SPRAY PART)

**********************************************************
**********************************************************
Unaligned access pid=26132 <a.out> va=14002e484 pc=12000d00c ra=12000e414 type=stt
Unaligned access pid=26132 <a.out> va=140019c0c pc=12000d018 ra=12000e414 type=stt
Unaligned access pid=26132 <a.out> va=140019b34 pc=12000d01c ra=12000e414 type=stt
      ....+....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8

```

← 入力待機状態

Result3 (Phase2-RUN)

```
Unaligned access pid=26695 <asscops> va=14002f9b4 pc=12000d0c4 ra=12000e6b0 type=stt
Unaligned access pid=26695 <asscops> va=14000866c pc=12000d0d0 ra=12000e6b0 type=stt
Unaligned access pid=26695 <asscops> va=140008594 pc=12000d0d4 ra=12000e6b0 type=stt
forrtl: error (73): floating divide by zero
Abort process
msscalp1%
```

Result4 (Phase3-RUN)

4. 移植結果参照

3. 改修詳細

ASSCOPS のプログラムにおいて、修正した個所を次ページ以降の各表に示す。
各表には、改修項目、改修プログラム（ｻﾌﾞﾙｰﾁﾝ名）および改修内容を改修前後について記載する。

改修項目については第 2 章に示す移植過程で摘出されたものである。

改修詳細

1.1

改修項目	ﾗﾍﾞﾙｺﾓﾝ名に" ¥" を使用
改修ﾌﾟﾛｸﾞﾗﾑ	MAINおよびﾗﾍﾞﾙｺﾓﾝ名に" ¥" を含むｻﾌﾞﾙｰﾁﾝ
改修内容	改修例) MAIN

<<Before>>

```
C   SUBROUTINE ASCOPS
          :
          :
          :
    COMMON /F¥COM/ F¥TI  ,F¥DTI ,F¥TIM0,F¥DWGS,F¥DQGS,
   1          F¥DWO2,F¥DWH ,F¥TGAS,F¥PGAS,F¥WGAS,
   2          F¥WO2 ,F¥WH2O,F¥VOL ,F¥RHOG,F¥CO2 ,
   3          F¥CH2O,¥PPGS1,¥PPGS2,I¥RSET,TMOLD,F¥TWAL(20,6),
   4         ¥DLWO2(3),¥DLWHO(3),¥TTW(20,6),OLDTTW(20,6),TWI(20,6)
   5          ,F¥AREW,F¥AREU,F¥K,F¥DSMM(20,3),F¥RAMM(20,3),
   6          F¥TMPM(20,3),F¥DGAP(20,3),F¥RHOM(20,3),
   7          F¥CPMM(20,3),F¥GAPE(20,3),I¥MSN(3)
   8          ,F¥STGS,F¥STO2,F¥STHO
          :
          :
```

<<After>>

```
C   SUBROUTINE ASCOPS
          :
          :
          :
    COMMON /FQCOM/ FQTI  ,FQDTI ,FQTIM0,FQDWGS,FQDQGS,
   1          FQDWO2,FQDWH ,FQTGAS,FQPGAS,FQWGAS,
   2          FQWO2 ,FQWH2O,FQVOL ,FQRHOG,FQCO2 ,
   3          FQCH2O,QPPGS1,QPPGS2,IQRSET,TMOLD,FQTWAL(20,6),
   4         QDLWO2(3),QDLWHO(3),QTTW(20,6),OLDTTW(20,6),TWI(20,6)
   5          ,FQAREW,FQAREU,FQK,FQDSMM(20,3),FQRAMM(20,3),
   6          FQTMPM(20,3),FQDGAP(20,3),FQRHOM(20,3),
   7          FQCPMM(20,3),FQGAPE(20,3),IQMSN(3)
   8          ,FQSTGS,FQSTO2,FQSTHO
          :
          :
```

1.2

改修項目	変数名に" ¥" を使用
改修ﾌﾟﾛｸﾞﾗﾑ	MAINおよび変数名に" ¥" を含むｻﾌﾞﾙｰﾁﾝ
改修内容	改修例) MAIN

<<Before>>

```
C    SUBROUTINE ASCOPS
           :
           :
           :
     COMMON /F¥COM/ F¥TI  ,F¥DTI ,F¥TIMO,F¥DWGS,F¥DOGS,
    1          F¥DWO2,F¥DWH ,F¥TGAS,F¥PGAS,F¥WGAS,
    2          F¥WO2 ,F¥WH2O,F¥VOL ,F¥RHOG,F¥CO2 ,
    3          F¥CH2O,¥PPGS1,¥PPGS2,I¥RSET,TMOLD,F¥TWAL(20,6),
    4         ¥DLWO2(3),¥DLWHO(3),¥TTW(20,6),OLDTTW(20,6),TWI(20,6)
    5          ,F¥AREW,F¥AREU,F¥K,F¥DSMM(20,3),F¥RAMM(20,3),
    6          F¥TMPM(20,3),F¥DGAP(20,3),F¥RHOM(20,3),
    7          F¥CPMM(20,3),F¥GAPE(20,3),I¥MSN(3)
    8          ,F¥STGS,F¥STO2,F¥STHO
           :
           :

C
C... SET PARAMETER FOR SODIUM COMBUSTION CALC. .....
C
     F¥K = S
     AK = 2 * F¥K / (1+F¥K)
     S = (1.-AK)*2.88 + AK*1.44
     IF (QC.EQ.0.)  QC =((1.-AK)*2.88*2261.+ AK*1.44*2696.)/S
C
           :
           :
           :
```

<<After>>

```
C    SUBROUTINE ASCOPS
           :
           :
           :
     COMMON /FQCOM/ FQTI  ,FQDTI ,FQTIMO,FQDWGS,FQDOGS,
    1          FQDWO2,FQDWH ,FQTGAS,FQPGAS,FQWGAS,
    2          FQWO2 ,FQWH2O,FQVOL ,FQRHOG,FQCO2 ,
    3          FQCH2O,QPPGS1,QPPGS2,IQRSET,TMOLD,FQTWAL(20,6),
    4         QDLWO2(3),QDLWHO(3),QTTW(20,6),OLDTTW(20,6),TWI(20,6)
    5          ,FQAREW,FQAREU,FQK,FQDSMM(20,3),FQRAMM(20,3),
    6          FQTMPM(20,3),FQDGAP(20,3),FQRHOM(20,3),
    7          FQCPMM(20,3),FQGAPE(20,3),IQMSN(3)
    8          ,FQSTGS,FQSTO2,FQSTHO
           :
           :

C
C... SET PARAMETER FOR SODIUM COMBUSTION CALC. .....
C
     FQK = S
     AK = 2 * FQK / (1+FQK)
     S = (1.-AK)*2.88 + AK*1.44
     IF (QC.EQ.0.)  QC =((1.-AK)*2.88*2261.+ AK*1.44*2696.)/S
C
           :
           :
```

1.3

改修項目	Entry文の引数が、そのEntry文よるも前にある実行文に存在
改修ﾌﾟﾛｸﾞﾗﾑ	DETAK1
改修内容	

<<Before>>

```
C
   SUBROUTINE DETAK1(CC,SS,QQ)
         :
         :
3000 AK   = 2*FNA2O2 / (FNA2O2+1.)
C3000 SS   = (1.0-AK)*2.88 + AK*1.44
   SS   = (1.0-AK)*2.88 + AK*1.44
   QQ   = ((1.0-AK)*2.88*2261.0 + AK*1.44*2696.0)/SS
C-----------------------------------------------------------------
C
   RETURN
C
   ENTRY    DETAK2(CC,AK,O2SNA,XO22,XO21)
         :
         :
6000 RATIO = (CC-CRCTB2(IA-1))/(CRCTB2(IA)-CRCTB2(IA-1))
   AK   = AKTB2(IA-1)+RATIO*(AKTB2(IA)-AKTB2(IA-1))
   GO TO 7000
6100 AK   = AKTB2(1)
   GO TO 7000
6200 AK   = AKTB2(IIRCT)
         :
         :
7000 XRAT = 1.0-AK
   O2SNA = 0.5-0.25*XRAT
   XO22 = (1.0-XRAT)/(1.0-0.5*XRAT)
   XO21 = 1.0-XO22
C
   RETURN
C
   END
```

<<After>>

```
C
   SUBROUTINE DETAK1(CC,SS,QQ)
         :
         :
3000 AK   = 2*FNA2O2 / (FNA2O2+1.)
C3000 SS   = (1.0-AK)*2.88 + AK*1.44
   SS   = (1.0-AK)*2.88 + AK*1.44
   QQ   = ((1.0-AK)*2.88*2261.0 + AK*1.44*2696.0)/SS
C-----------------------------------------------------------------
C
   RETURN
C
   ENTRY    DETAK2(CC,WAK,O2SNA,XO22,XO21)
         :
         :
6000 RATIO = (CC-CRCTB2(IA-1))/(CRCTB2(IA)-CRCTB2(IA-1))
   WAK   = AKTB2(IA-1)+RATIO*(AKTB2(IA)-AKTB2(IA-1))
   GO TO 7000
6100 WAK   = AKTB2(1)
   GO TO 7000
6200 WAK   = AKTB2(IIRCT)
         :
         :
7000 XRAT = 1.0-WAK
   O2SNA = 0.5-0.25*XRAT
   XO22 = (1.0-XRAT)/(1.0-0.5*XRAT)
   XO21 = 1.0-XO22
C
   RETURN
C
   END
```

1.4

改修項目	UNIXでは使えない関数を使用
改修ﾌﾟﾛｸﾞﾗﾑ	MAIN
改修内容	

<<Before>>

```
C   SUBROUTINE ASCOPS
          :
          :
          :
    CALL DATE(YMD)
CCCC  CALL DATE(IYMD)
    CALL TIME(ITIME)
    IHR   = ITIME/60/60/1000
    ITIME = ITIME-IHR*60*60*1000
    IMIN  = ITIME/60/1000
    ITIME = ITIME-IMIN*60*1000
    ISEC  = ITIME/1000
          :
          :
CMJ  CALL ERRSET(207,256,-1,1,0,208)
    CALL ERRSET( 11,256,-1,1,0, 12)
C
          :
          :
```

<<After>>

```
C   SUBROUTINE ASCOPS
CC                                    CC
CC                                    CC
          :
          :
          :
CMSS  CALL DATE(YMD)
CCCC  CALL DATE(IYMD)
CMSS  CALL TIME(ITIME)
CMSS  IHR   = ITIME/60/60/1000
CMSS  ITIME = ITIME-IHR*60*60*1000
CMSS  IMIN  = ITIME/60/1000
CMSS  ITIME = ITIME-IMIN*60*1000
CMSS  ISEC  = ITIME/1000
    IHR   = 0
    ITIME = 0
    IMIN  = 0
    ITIME = 0
    ISEC  = 0
          :
          :
          :
CMJ  CALL ERRSET(207,256,-1,1,0,208)
c    CALL ERRSET( 11,256,-1,1,0, 12)
c
          :
          :
```

2.1

改修項目	入力ﾌｧｲﾙのﾕﾆｯﾄNo.に" 5 " を使用
改修ﾌﾟﾛｸﾞﾗﾑ	SPMAIN・ECHO
改修内容	

<<Before>>

```
      SUBROUTINE SPMAIN
            :
            :
      READ(5,590,END=300) IIRST,IIREAD,IIRAD,IIMESH,ISSOPT,IIRCT,IIADD
            :
            :
      IIREST = IIIRST
      IF(IIREST.NE.0) READ (5,580) TMAX
            :
C
C     INPUT  (ORIGNAL)
C
      READ(5,500) Q,TITLE1
            :
            :
      SUBROUTINE ECHO
            :
            :
C
      REWIND 5
C
      WRITE (6,2000) (K, K=1,8)
C
   10 READ (5,1000,END=100) ICHR
      I = I + 1
      WRITE (6,2010) I, ICHR
      GO TO 10
C
  100 WRITE (6,2000) (K, K=1,8)
      REWIND 5
      RETURN
```

<<After>>

```
      SUBROUTINE SPMAIN
            :
            :
      READ(35,590,END=300) IIRST,IIREAD,IIRAD,IIMESH,ISSOPT,IIRCT,IIADD
            :
            :
      IIREST = IIIRST
      IF(IIREST.NE.0) READ (35,580) TMAX
            :
C
C     INPUT  (ORIGNAL)
C
      READ(35,500) Q,TITLE1
            :
            :
      SUBROUTINE ECHO
            :
            :
C
      REWIND 35
C
      WRITE (6,2000) (K, K=1,8)
C
   10 READ (35,1000,END=100) ICHR
      I = I + 1
      WRITE (6,2010) I, ICHR
      GO TO 10
C
  100 WRITE (6,2000) (K, K=1,8)
      REWIND 35
      RETURN
```

2.2

改修項目	OPEN文が無い
改修ﾌﾟﾛｸﾞﾗﾑ	MAIN・READLK・SPMAIN
改修内容	

<<Before>>

<<After>>

```
C   SUBROUTINE ASCOPS
CC                                          CC
CC                                          CC
          :
          :
CMSS -Insert "open" - 1996/10/30
    open( 15, file = 'fort.15', status = 'OLD' )
cmss end
    KASE    = 0
    GC      = 9.80665E 04 * 3600. * 3600.
          :
          :
    SUBROUTINE READLK
          :
          :
CMSS -Insert "open" - 1996/10/30
    open( 25, file = 'fort.25', status = 'OLD' )
cmss end
    DO 10 I=1,20
          :
          :
    SUBROUTINE SPMAIN
          :
          :
    FUNFC(X) = (X-32.)/1.8
    FUNCF(X) = 1.8*X + 32.
C
CMSS - Insert "open" - 1996/10/30
    open( 35, file = 'spray.in', status = 'OLD' )
cmss end
          :
          :
```

3.1

改修項目	ｻﾌﾞﾙｰﾁﾝ副ﾌﾟﾛｸﾞﾗﾑの引数がEntory文内でﾛｰｶﾙ変数として使用
改修ﾌﾟﾛｸﾞﾗﾑ	OPT1
改修内容	

<<Before>>

```
      SUBROUTINE OPT1( M , WGAS , WO2 ,WH2O)
      COMMON / INT / IND    ,IOPT1   ,IOPT2   ,KMAX    ,MMAX    ,
     1          NAMAX   ,IHEAT   ,ICOOL   ,IGAMMA  ,IFP     ,
            :
            :
CCCCC
      ENTRY   OPT3( IPMAX )
CCCCC
      DO 420  K=1,KMAXP
      WRITE(16,4001) K
      DO 400  M=1,IPMAX
      WRITE(16,4002) M,STI(M),STGAS(M,K),SPGAS(M,K),SCO2(M,K),
     1    SCH2O(M,K),( STW1(M,J,K),J=1,6 )
  400 CONTINUE
      WRITE(16,4003)
      DO 410  M=1,IPMAX
      WRITE(16,4004)
     1          M,STI(M),(STW1(M,J,K),STW2(M,J,K),STW3(M,J,K),J=1,6)
  410 CONTINUE
  420 CONTINUE
            :
            :
```

<<After>>

```
      SUBROUTINE OPT1( M , WGAS , WO2 ,WH2O)
      COMMON / INT / IND    ,IOPT1   ,IOPT2   ,KMAX    ,MMAX    ,
     1          NAMAX   ,IHEAT   ,ICOOL   ,IGAMMA  ,IFP     ,
            :
            :

CCCCC
      ENTRY   OPT3( IPMAX )
CCCCC
      DO 420  K=1,KMAXP
      WRITE(16,4001) K

cMSS - change "M" --> "Mmss" - 1996/10/30
      DO 400  Mmss=1,IPMAX
      WRITE(16,4002) Mmss,STI(Mmss),STGAS(Mmss,K),
     1    SPGAS(Mmss,K),SCO2(Mmss,K),
     1    SCH2O(Mmss,K),( STW1(Mmss,J,K),J=1,6 )
  400 CONTINUE
      WRITE(16,4003)
cMSS - change "M" --> "Mmss" - 1996/10/30
      DO 410  Mmss=1,IPMAX
      WRITE(16,4004)
     1          Mmss,STI(Mmss),(STW1(Mmss,J,K),
     1          STW2(Mmss,J,K),STW3(Mmss,J,K),J=1,6)
  410 CONTINUE
  420 CONTINUE
            :
            :
```

3.2

改修項目	Entry文の引数と引用する際の引数の型が異なる
改修ﾌﾟﾛｸﾞﾗﾑ	PCALC
改修内容	

<<Before>>

```
   SUBROUTINE PCALC ( PGAS ,TGAS ,VOL  ,WGAS ,WO2  ,WH2O  )
   REAL*8 WGAS , WO2 , WH2O
C
        :
        :
CCCCC
   ENTRY   PCALCO( PGAS,VOL,TGAS,CO2,WGAS,WO2,WH2O,CH2O)
CCCCC
   TGASK   = TGAS + 273.
   ST1     = RGAS * TGASK / VOL
   ANGAS   = PGAS / ST1
   WGAS    = ANGAS/((1.-CO2-CH2O)/AMN2 + CO2/AMO2 + CH2O/0.018)
   WO2     = WGAS * CO2
   WH2O    = WGAS * CH2O
   RETURN
C
   END
```

(参考)　　***** CALL SUBROUTINE *****

```
      SUBROUTINE   INIT( TGAS ,AMN  ,WGAS ,WO2  ,WFP ,WH2O    )
      C
        COMMON /ENP / ENP1,IENP,ENP2,TMASSO
        COMMON / INT / IND    ,IOPT1   ,IOPT2  ,KMAX   ,MMAX   ,
             :
             :   NO Define REAL*8
      C
        CALL    PCALCO( PGAS(K),VOL (K),TGAS(K),CO2 (K),WGASO(K),WO2(K),
       1          WH2O(K),CH2O(K) )
      C
             :
             :
```

<<After>>

```
   SUBROUTINE PCALC ( PGAS ,TGAS ,VOL  ,WGAS ,WO2  ,WH2O  )
   REAL*8 WGAS , WO2 , WH2O
C
        :
        :
CCCCC
   ENTRY   PCALCO( PGAS,VOL,TGAS,CO2,WWGAS,WWO2,WWH2O,CH2O)
CCCCC
   TGASK   = TGAS + 273.
   ST1     = RGAS * TGASK / VOL
   ANGAS   = PGAS / ST1
   WWGAS   = ANGAS/((1.-CO2-CH2O)/AMN2 + CO2/AMO2 + CH2O/0.018)
   WWO2    = WWGAS * CO2
   WWH2O   = WWGAS * CH2O
   RETURN
C
   END
```

3.3

改修項目	引数で用いる定数の型と、対応するｻﾌﾞﾙｰﾁﾝの型が異なる
改修ﾌﾟﾛｸﾞﾗﾑ	LOOP
改修内容	

<<Before>>

```
      SUBROUTINE LOOP(SQTGSV)
C
          :
          :
C
       CALL  CONVEC ( STGAS,STNA2,0.14D0,SAREA,QCV,SRHOG )
      HCP    = ABS ( (CCB*QCV)/APOOL/(TPOOL-TGOUT) )
C
          :
          :
```

(参考)　　***** Called SUBROUTINE *****

```
          SUBROUTINE   CONVEC( TGAS ,T    ,HK   ,AREA ,QCV  ,RHOG )
        C   GIN    = 32.2            ( FT/SEC**2 )
        C   C      = 32.2*( 3600.**2 )    ( FT/HR **2 )
        C          = 4.17312E 08          ( FT/HR **2 )
          DATA       GIN  / 4.17312E 08 /
```

<<After>>

```
      SUBROUTINE LOOP(SQTGSV)
C
          :
          :
C
       CALL  CONVEC ( STGAS,STNA2,0.14E0,SAREA,QCV,SRHOG )
      HCP    = ABS ( (CCB*QCV)/APOOL/(TPOOL-TGOUT) )
C
          :
          :
```

※ｻﾌﾞﾙｰﾁﾝCONVECは記載箇所以外からもCallされており、
その際の第３引数の型は単精度となっている。

4. 移植結果

大型計算機FACOMからEWSへの移植結果として、
4.1 使用した試入力ﾃﾞｰﾀ
によって解析した場合の

4.2 DEC機による解析結果
4.3 大型計算機FACOMによる解析結果

を示す。

4.1 試入力データ

```
===  fort.15  ================================================
       1STEL 7.83000E+03 3.80000E+01 1.40000E-01
       2CONC 2.30000E+03 1.50000E+00 2.30000E-01
       3SODU 8.31000E+02 5.30000E+01 3.00000E-01
       4ISOL 8.00000E+01 6.90000E-02 2.00000E-01
       5SSUS 7.90000E+03 1.40000E+01 1.30000E-01
       6PCON 1.80000E+02 5.80000E-02 3.10000E-01
1      7COND 1.00000D+10 1.00000E+00 2.10000E-01
    MONJU SH-ROOM NA LEAK SPRAY & POOL FIRE
1      S&P.S001A(P.125M2)/NEWDATA
     1    15
                1 999   1   2   0   2   0   0   0   0   0   0   1  -1   1
    16    30
                1   1   1   1   1   1   1   1   1   1   1   1   1   1   1
    31    40
                1   1   0   1   0   0   0   1   0   0
    41    46
                3   3   1   1   6   6
    47    53
                2   2   2   2   2   2   2
    67    73
                2   2   2   2   2   2   2
    87    93
                2   2   2   2   2   2   2
   107   112
                2   2   2   2   2   2
   127   132
                2   2   2   2   2   2
   147   152
                2   2   2   2   2   2
   167   178
```

```
                1   6   6   2   2   2   2   2   2   2   2   2
  187   196
                7   7   7   7   7   7   7   7   7   7
  207   214
                2   2   2   2   2   2   2   2
 1127  1132
                7   7   7   6   6   6
 1133  1135
               12  10   8
 1181  1186
                0   0   0   0   0   0
 1187  1189
1               0   0   0
    1     5
                5.50000E+01 5.50000E+01 5.50000E+01 5.50000E+01 5.50000E+01
    6     7
                5.50000E+01 5.50000E+01
   21    25
                5.50000E+01 5.50000E+01 5.50000E+01 5.50000E+01 5.50000E+01
   26    27
                5.50000E+01 5.50000E+01
   41    45
                5.50000E+01 5.50000E+01 5.50000E+01 5.50000E+01 5.50000E+01
   46    47
                5.50000E+01 5.50000E+01
   61    65
                5.50000E+01 5.50000E+01 5.50000E+01 5.50000E+01 5.50000E+01
   66    66
                5.50000E+01
   81    85
                5.50000E+01 5.50000E+01 5.50000E+01 5.50000E+01 5.50000E+01
   86    86
                5.50000E+01
```

```
 101   105
          5.50000E+01 5.50000E+01 5.50000E+01 5.50000E+01 5.50000E+01
 106   106
          5.50000E+01
 121   125
          5.50000E+01 5.50000E+01 5.50000E+01 5.50000E+01 5.50000E+01
 126   130
          5.50000E+01 5.50000E+01 5.50000E+01 5.50000E+01 5.50000E+01
 131   132
          5.50000E+01 5.50000E+01
 141   145
          5.07400E+02 5.07400E+02 5.07400E+02 5.07400E+02 5.07400E+02
 146   150
          5.07400E+02 5.07400E+02 5.07400E+02 5.07400E+02 5.07400E+02
 161   165
          5.50000E+01 5.50000E+01 5.50000E+01 5.50000E+01 5.50000E+01
 166   168
          5.50000E+01 5.50000E+01 5.50000E+01
1081  1085
          2.00000E-02 4.00000E-02 6.00000E-02 8.00000E-02 1.00000E-01
1086  1087
          1.20000E-01 1.80000E-01
1101  1105
          2.00000E-02 4.00000E-02 6.00000E-02 8.00000E-02 1.00000E-01
1106  1107
          1.20000E-01 1.80000E-01
1121  1125
          2.00000E-02 4.00000E-02 6.00000E-02 8.00000E-02 1.00000E-01
1126  1127
          1.20000E-01 1.80000E-01
1141  1145
          2.00000E-02 4.00000E-02 6.00000E-02 8.00000E-02 1.00000E-01
1146  1146
```

```
          1.00000E-01
1161  1165
          2.00000E-02 4.00000E-02 6.00000E-02 8.00000E-02 1.00000E-01
1166  1166
          1.00000E-01
1181  1185
          2.00000E-02 4.00000E-02 6.00000E-02 8.00000E-02 1.00000E-01
1186  1186
          1.00000E-01
1201  1205
          6.00000E-03 1.00000E-02 1.50000E-02 2.00000E-02 4.00000E-02
1206  1210
          6.00000E-02 8.00000E-02 1.00000E-01 1.20000E-01 1.80000E-01
1211  1212
          2.00000E-01 2.00000E-01
1221  1225
          2.00000E-02 4.00000E-02 6.00000E-02 8.00000E-02 1.00000E-01
1226  1230
          1.20000E-01 1.80000E-01 2.00000E-01 2.00000E-01 2.00000E-01
1241  1245
          2.00000E-02 4.00000E-02 6.00000E-02 8.00000E-02 1.00000E-01
1246  1248
          1.20000E-01 1.80000E-01 2.00000E-01
3241  3245
          6.70000E+01 9.70000E+02 7.52000E+02 1.52610E+03 8.68700E+02
3246  3246
          8.47800E+02
3247  3249
          0.125       4.00000E+00 2.41000E+02
9775  9779
          0.00000E+00 55.0        5.50000E+01 5.50000E+01 5.50000E+01
9780  9780
          5.50000E+01
```

```
9781  9785
          0.00000E+00 0.00000E+00 6.00000E-03 6.00000E-03 2.50000E-02
9786  9786
          2.50000E-02
9788  9792
          0.1         0.1         0.00000E+00 0.1         0.0
9794  9794
          0.1
9800  9804
          9.70000E+02 7.52000E+02 1.52610E+03 8.68700E+02 8.47800E+02
9823  9827
          0.00000E+00 0.00000E+0  0.0         0.0         0.0
9828  9828
          0.0
9873  9873
          9.00000E-01
9877  9877
          9.00000E-01
9880  9880
          9.00000E-01
9882  9882
          9.00000E-01
9883  9883
          9.00000E-01
9885  9889
          0.0         0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
9890  9894
          0.00000E+00 1.40000E-01 1.29000E-01 1.29000E-01 1.29000E-01
9895  9895
          1.29000E-01
9897  9901
          0.00000E+00 0.1         0.00000E+00 0.00000E+00 0.0
9911  9911
```

```
           0.0
 9947  9948
           0.1          0.1
 9959  9961
           0.0          0.0          0.0
 9962  9965
           0.0          2.90000E+01 2.40000E-01 1.00000E+00
 9967  9968
           1.03300      1.03300
 9976  9977
           5.50000E+01 5.50000E+01
 9985  9986
           2.33000E-01 2.33000E-01
 9994  9995
           7.35700E+03 3.96000E+02
10074 10074
           0.00000E+00
10079 10079
           0.00000E+00
10083 10083
           9.00000E-01
10237 10239
           0.00000E+00 0.00000E+00 1.29000E-01
10243 10243
           0.00000E+00
10265 10265
           2.0000E+00
10310 10310
           2.26000E+00
10355 10355
           0.80000E+00
10453 10453
           1.00000E-02
```

```
10498 10498
          9.19630E+04
10537 10541
          3.30000E-02 1.07600E+00 1.03323E+00 5.50000E+01 2.33000E-01
10544 10548
          3.00000E-06 1.00000E+00 6.00000E-07 5.00000E-03 5.00000E-04
10549 10550
          7.50000E-01 2.5
10552 10554
          5.00000E-01 1.00000E+03 2.50000E+01
10555 10559
          2.00000E+02 2.00000E+02 2.00000E+02 2.00000E+02 2.00000E+02
10560 10563
          2.00000E+02 5.00000E+02 1.00000E+03 2.00000E+02
10567 10571
          1.00000E-02 5.00000E-01 1.00000E+00 1.50000E+00 1.00000E+01
10577 10581
1         2.00000E-03 1.00000E-02 2.50000E-02 5.00000E-02 5.00000E-02
    1     2
          3.00000E-02 3.00000E-02

          3.00000E-02 0.0         0.00000E+00           1 7.24450E+02

            0   0

            0
          NA2O2  RATIO
            2
               O2  CONCENTRATION
           1.11000E-01 1.11100E-01
              NA2O2  CONCENTRATION
1          0.0         4.00000E-01
```

```
===  fort.25  ==========================================
&TBLOPD
 ILKOPT=1,
&END
&TBLLKD
 TIMELK=0.,0.1667,10.0,
 PD12  =0.,
 PD13  =0.,
 PD1A  =0.01,0.01,
 PD23  =0.,
 PD2A  =0.01,0.01,
 PD3A  =0.,
 RL12  =0.,
 RL13  =0.,
 RL1A  =183926.,91963.,
 RL23  =0.,
 RL2A  =0.,0.,
 RL3A  =0.,
&END
&TBLVTD
 TIMEVT =0.,0.1667,10.0,
 VNT1 =81300.,0.,
 VNT2 =9820.,0.,
&END
```

```
=== spray.in =======================================
         0        30         1         1         1         2         0
Q  MONJU SH-ROOM SPRAY(S001A(P.125M2))/NEWDATA
   0.4572                                    507.4                              5.46
  0.00278    10800.     10800.      2.0     0.349                 0.399         5.6
    8.578                          999999.
       10       500        500       -1         4                    -1
       0.      2.78      507.4
    7200.      2.78      507.4
    7201.       0.5      507.4
   10800.       0.5      507.4
       0.       0.9       0.65
       0.
       0.
       0.
       0.
       0.
       0.
       0.
       0.
       0.
       0.
        0         0          0
      0.0       0.0        0.0        0.0       0.0
    0.111     .1111
      0.0       0.4
        2         0          0          0       500         0         0       0.0
```

4.2 DEC解析結果（※全結果はＦＤにて納入）

SOFIRE PART（最終結果）

1 ***** ROOM NUMBER IS 1 *****

I	TIME(MIN)	TGAS(D-C)	PGAS(KG/CM2)	CO2(V/O)	CH2O(V/O)	TWD1(D-C)	TWU1(D-C)	TWE1(D-C)	TWW1(D-C)	TWS1(D-C)	TWN1(D-C)
1	0.000E+00	55.000	-2.2995E-04	20.64	4.726	55.000	55.000	55.000	55.000	55.000	55.000
2	0.120	55.000	2.5368E-03	20.64	4.726	55.000	55.000	55.000	55.000	55.000	55.000
3	0.240	55.000	2.5507E-03	20.64	4.726	55.000	55.000	55.000	55.000	55.000	55.000
4	0.360	55.000	2.5513E-03	20.64	4.726	55.000	55.000	55.000	55.000	55.000	55.000
5	0.480	55.000	2.5513E-03	20.64	4.726	55.000	55.000	55.000	55.000	55.000	55.000
6	0.600	55.000	2.5519E-03	20.64	4.726	55.000	55.000	55.000	55.000	55.000	55.000
7	1.20	55.020	2.5554E-03	20.64	4.725	55.000	55.000	55.000	55.000	55.000	55.000
8	1.80	55.045	2.5551E-03	20.64	4.725	55.000	55.000	55.000	55.000	55.000	55.000
9	2.40	55.071	2.5548E-03	20.64	4.725	55.000	55.001	55.001	55.001	55.001	55.001
10	3.00	55.091	2.5539E-03	20.64	4.725	55.000	55.001	55.001	55.001	55.001	55.001
11	3.60	55.108	2.5531E-03	20.64	4.725	55.000	55.002	55.002	55.002	55.002	55.002
12	4.20	55.123	2.5532E-03	20.64	4.725	55.000	55.002	55.002	55.002	55.002	55.002
13	4.80	55.136	2.5529E-03	20.64	4.725	55.000	55.003	55.003	55.003	55.003	55.003
14	5.40	55.148	2.5530E-03	20.64	4.725	55.000	55.004	55.004	55.004	55.004	55.004
15	6.00	55.157	2.5520E-03	20.64	4.725	55.000	55.005	55.005	55.005	55.005	55.005
16	6.60	55.166	2.5524E-03	20.64	4.725	55.000	55.005	55.005	55.005	55.005	55.005
17	7.20	55.174	2.5526E-03	20.64	4.725	55.000	55.006	55.006	55.006	55.006	55.006
18	7.80	55.181	2.5526E-03	20.64	4.725	55.000	55.007	55.007	55.007	55.007	55.007
19	8.40	55.188	2.5517E-03	20.64	4.725	55.000	55.008	55.008	55.008	55.008	55.008
20	9.00	55.193	2.5512E-03	20.64	4.725	55.000	55.009	55.009	55.009	55.009	55.009
21	9.60	55.197	2.5514E-03	20.64	4.725	55.000	55.010	55.009	55.009	55.009	55.009
22	10.2	55.192	0.0000E+00	20.64	4.725	55.000	55.010	55.010	55.010	55.010	55.010
23	10.8	55.168	4.7684E-07	20.64	4.725	55.000	55.011	55.011	55.011	55.011	55.011

24	11.4	55.145	5.9605E-07	20.64	4.725	55.000	55.012	55.011	55.011	55.011
55.011										
25	12.0	55.138	-1.1921E-07	20.64	4.725	55.000	55.012	55.012	55.012	55.012
55.012										
26	12.6	55.138	3.5763E-07	20.64	4.725	55.000	55.012	55.012	55.012	55.012
55.012										
27	13.2	55.138	-1.1921E-07	20.64	4.725	55.000	55.013	55.013	55.013	55.013
55.013										
28	13.8	55.138	4.7684E-07	20.64	4.725	55.000	55.013	55.013	55.013	55.013
55.013										
29	14.4	55.138	0.0000E+00	20.64	4.725	55.000	55.013	55.013	55.013	55.013
55.013										
30	15.0	55.139	0.0000E+00	20.64	4.725	55.000	55.014	55.013	55.013	55.013
55.013										
31	15.6	55.140	0.0000E+00	20.64	4.725	55.000	55.014	55.014	55.014	55.014
55.014										
32	16.2	55.141	-1.1921E-07	20.64	4.725	55.000	55.014	55.014	55.014	55.014
55.014										
33	16.8	55.142	-2.3842E-07	20.64	4.725	55.000	55.015	55.014	55.014	55.014
55.014										
34	17.4	55.143	2.3842E-07	20.64	4.725	55.000	55.015	55.015	55.015	55.015
55.015										
35	18.0	55.144	1.1921E-07	20.64	4.725	55.000	55.015	55.015	55.015	55.015
55.015										
36	18.6	55.145	-1.1921E-07	20.64	4.725	55.000	55.015	55.015	55.015	55.015
55.015										
37	19.2	55.146	0.0000E+00	20.64	4.725	55.000	55.016	55.016	55.016	55.016
55.016										
38	19.8	55.147	1.1921E-07	20.64	4.725	55.000	55.016	55.016	55.016	55.016
55.016										
39	20.4	55.148	3.5763E-07	20.64	4.725	55.000	55.016	55.016	55.016	55.016

55	30.0	55.164	3.5763E-07	20.63	4.724	55.000	55.021	55.021	55.021	55.021
55.021										
56	31.5	55.167	-2.3842E-07	20.63	4.724	55.000	55.022	55.022	55.022	55.022
55.022										
57	33.0	55.169	-1.1921E-07	20.63	4.724	55.000	55.023	55.023	55.023	55.023
55.023										
58	34.5	55.171	-2.3842E-07	20.63	4.724	55.000	55.024	55.024	55.024	55.024
55.024										
59	36.0	55.173	3.5763E-07	20.63	4.724	55.000	55.025	55.024	55.024	55.024
55.024										
60	37.5	55.175	-3.5763E-07	20.63	4.723	55.000	55.025	55.025	55.025	55.025
55.025										
61	39.0	55.177	-1.1921E-07	20.63	4.723	55.000	55.026	55.026	55.026	55.026
55.026										
62	40.5	55.178	2.3842E-07	20.63	4.723	55.000	55.027	55.027	55.027	55.027
55.027										
63	42.0	55.180	-1.1921E-07	20.63	4.723	55.000	55.028	55.027	55.027	55.027
55.027										
64	43.5	55.181	-2.3842E-07	20.63	4.723	55.000	55.028	55.028	55.028	55.028
55.028										
65	45.0	55.182	4.7684E-07	20.62	4.723	55.000	55.029	55.029	55.029	55.029
55.029										
66	46.5	55.183	-2.3842E-07	20.62	4.723	55.000	55.030	55.029	55.029	55.029
55.029										
67	48.0	55.184	1.1921E-07	20.62	4.722	55.000	55.030	55.030	55.030	55.030
55.030										
68	49.5	55.185	3.5763E-07	20.62	4.722	55.000	55.031	55.031	55.031	55.031
55.031										
69	51.0	55.186	0.0000E+00	20.62	4.722	55.000	55.032	55.031	55.031	55.031
55.031										
70	52.5	55.187	0.0000E+00	20.62	4.722	55.000	55.032	55.032	55.032	55.032

86	93.0	55.214	2.3842E-07	20.59	4.718	55.000	55.048	55.047	55.047	55.047
55.047										
87	96.0	55.216	2.3842E-07	20.59	4.718	55.000	55.049	55.048	55.048	55.048
55.048										
88	99.0	55.217	-2.3842E-07	20.58	4.717	55.000	55.050	55.049	55.049	55.049
55.049										
89	102.	55.219	-1.1921E-07	20.58	4.717	55.000	55.051	55.050	55.050	55.050
55.050										
90	105.	55.220	0.0000E+00	20.58	4.717	55.000	55.052	55.051	55.051	55.051
55.051										
91	108.	55.222	-1.1921E-07	20.58	4.716	55.000	55.053	55.052	55.052	55.052
55.052										
92	111.	55.223	2.3842E-07	20.58	4.716	55.000	55.053	55.053	55.053	55.053
55.053										
93	114.	55.225	0.0000E+00	20.57	4.716	55.000	55.054	55.054	55.054	55.054
55.054										
94	117.	55.227	1.1921E-07	20.57	4.716	55.000	55.055	55.055	55.055	55.055
55.055										
95	120.	55.228	3.5763E-07	20.57	4.715	55.000	55.056	55.056	55.056	55.056
55.056										
96	123.	55.206	-1.1921E-07	20.57	4.715	55.000	55.057	55.057	55.057	55.057
55.057										
97	126.	55.199	0.0000E+00	20.56	4.715	55.000	55.057	55.057	55.057	55.057
55.057										
98	129.	55.195	1.1921E-07	20.56	4.714	55.000	55.057	55.057	55.057	55.057
55.057										
99	132.	55.193	1.1921E-07	20.56	4.714	55.000	55.058	55.057	55.057	55.057
55.057										
100	135.	55.191	0.0000E+00	20.56	4.714	55.000	55.058	55.057	55.057	55.057
55.057										
101	138.	55.189	0.0000E+00	20.56	4.714	55.000	55.058	55.058	55.058	55.058

10	3.00	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
11	3.60	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
12	4.20	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
13	4.80	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
14	5.40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
15	6.00	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
16	6.60	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
17	7.20	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
18	7.80	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
19	8.40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
20	9.00	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
21	9.60	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
22	10.2	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
23	10.8	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
24	11.4	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
25	12.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0

41	21.6	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
42	22.2	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
43	22.8	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
44	23.4	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
45	24.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
46	24.6	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
47	25.2	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
48	25.8	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
49	26.4	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
50	27.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
51	27.6	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
52	28.2	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
53	28.8	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
54	29.4	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
55	30.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
56	31.5	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0

72	55.5	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
73	57.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
74	58.5	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
75	60.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
76	63.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
77	66.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
78	69.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
79	72.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
80	75.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
81	78.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
82	81.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
83	84.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
84	87.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
85	90.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
86	93.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
87	96.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
88	99.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
89	102.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
90	105.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
91	108.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
92	111.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
93	114.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
94	117.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
95	120.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
96	123.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
97	126.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
98	129.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
99	132.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
100	135.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
101	138.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
102	141.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0

103	144.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
104	147.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
105	150.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0

1 ***** ROOM NUMBER IS 2 *****

I	TIME(MIN)	TGAS(D-C)	PGAS(KG/CM2)	CO2(V/O)	CH2O(V/O)	TWD1(D-C)	TWU1(D-C)	TWE1(D-C)	TWW1(D-C)	TWS1(D-C)	TWN1(D-C)
1	0.000E+00	55.000	-2.2995E-04	20.64	4.726	55.000	507.400	55.000	0.000	0.000	0.000
2	0.120	55.316	2.5368E-03	20.64	4.724	83.746	507.400	55.001	0.000	0.000	0.000
3	0.240	55.418	2.5507E-03	20.64	4.724	118.608	507.400	55.002	0.000	0.000	0.000
4	0.360	55.528	2.5513E-03	20.64	4.724	153.384	507.400	55.003	0.000	0.000	0.000
5	0.480	55.645	3.5241E-03	20.64	4.724	187.340	507.400	55.004	0.000	0.000	0.000
6	0.600	55.766	2.5519E-03	20.63	4.724	219.940	507.400	55.005	0.000	0.000	0.000
7	1.20	56.385	2.5554E-03	20.63	4.723	371.058	507.400	55.014	0.000	0.000	0.000
8	1.80	56.936	2.5551E-03	20.63	4.723	501.057	507.400	55.026	0.000	0.000	0.000
9	2.40	57.407	2.5548E-03	20.62	4.723	610.262	507.400	55.041	0.000	0.000	0.000
10	3.00	57.801	2.5539E-03	20.62	4.723	699.757	507.400	55.058	0.000	0.000	0.000
11	3.60	58.160	2.5531E-03	20.62	4.723	771.322	507.400	55.077	0.000	0.000	0.000
12	4.20	58.454	2.5532E-03	20.62	4.723	827.609	507.400	55.098	0.000	0.000	0.000
13	4.80	58.732	2.5529E-03	20.62	4.722	871.173	507.400	55.120	0.000	0.000	0.000
14	5.40	58.961	2.5530E-03	20.62	4.722	904.581	507.400	55.142	0.000	0.000	0.000
15	6.00	59.145	2.5520E-03	20.62	4.722	929.967	507.400	55.166	0.000	0.000	0.000
16	6.60	59.315	2.5524E-03	20.62	4.722	949.337	507.400	55.191	0.000	0.000	0.000
17	7.20	59.461	2.5526E-03	20.62	4.722	964.054	507.400	55.215	0.000	0.000	0.000
18	7.80	59.591	2.5526E-03	20.62	4.722	975.252	507.400	55.239	0.000	0.000	0.000
19	8.40	59.666	2.5517E-03	20.62	4.722	983.805	507.400	55.263	0.000	0.000	0.000
20	9.00	59.738	3.5311E-03	20.62	4.722	990.392	507.400	55.286	0.000	0.000	0.000
21	9.60	59.797	2.5514E-03	20.62	4.722	995.468	507.400	55.308	0.000	0.000	0.000
22	10.2	60.079	0.0000E+00	20.62	4.722	999.369	507.400	55.330	0.000	0.000	0.000
23	10.8	60.921	4.7684E-07	20.61	4.721	1001.960	507.400	55.356	0.000	0.000	0.000
24	11.4	61.488	5.9605E-07	20.60	4.721	1003.753	507.400	55.388	0.000	0.000	0.000
25	12.0	61.865	-1.1921E-07	20.60	4.720	1005.015	507.400	55.422	0.000	0.000	0.000
26	12.6	62.140	3.5763E-07	20.59	4.719	1005.920	507.400	55.458	0.000	0.000	0.000

27	13.2	62.307	-1.1921E-07	20.58	4.719	1006.573	507.400	55.493	0.000	0.000	0.000
28	13.8	62.432	4.7684E-07	20.58	4.718	1007.052	507.400	55.529	0.000	0.000	0.000
29	14.4	62.525	0.0000E+00	20.57	4.717	1007.403	507.400	55.564	0.000	0.000	0.000
30	15.0	62.600	0.0000E+00	20.57	4.717	1007.659	507.400	55.597	0.000	0.000	0.000
31	15.6	62.652	0.0000E+00	20.56	4.716	1007.843	507.400	55.630	0.000	0.000	0.000
32	16.2	62.703	-1.1921E-07	20.56	4.716	1007.973	507.400	55.663	0.000	0.000	0.000
33	16.8	62.752	9.8145E-04	20.55	4.715	1008.059	507.400	55.694	0.000	0.000	0.000
34	17.4	62.790	2.3842E-07	20.55	4.715	1008.105	507.400	55.724	0.000	0.000	0.000
35	18.0	62.825	1.1921E-07	20.55	4.714	1008.132	507.400	55.755	0.000	0.000	0.000
36	18.6	62.859	-1.1921E-07	20.54	4.714	1008.132	507.400	55.783	0.000	0.000	0.000
37	19.2	62.891	0.0000E+00	20.54	4.713	1008.113	507.400	55.811	0.000	0.000	0.000
38	19.8	62.925	1.1921E-07	20.54	4.713	1008.076	507.400	55.840	0.000	0.000	0.000
39	20.4	62.956	3.5763E-07	20.53	4.712	1008.033	507.400	55.866	0.000	0.000	0.000
40	21.0	62.965	-1.1921E-07	20.53	4.712	1007.978	507.400	55.892	0.000	0.000	0.000
41	21.6	62.982	2.3842E-07	20.52	4.712	1007.920	507.400	55.918	0.000	0.000	0.000
42	22.2	62.996	0.0000E+00	20.52	4.711	1007.854	507.400	55.943	0.000	0.000	0.000
43	22.8	63.018	1.1921E-07	20.52	4.711	1007.780	507.400	55.966	0.000	0.000	0.000
44	23.4	63.036	-1.1921E-07	20.52	4.711	1007.705	507.400	55.990	0.000	0.000	0.000
45	24.0	63.056	0.0000E+00	20.51	4.710	1007.629	507.400	56.013	0.000	0.000	0.000
46	24.6	63.083	3.5763E-07	20.51	4.710	1007.554	507.400	56.037	0.000	0.000	0.000
47	25.2	63.105	2.3842E-07	20.51	4.710	1007.473	507.400	56.059	0.000	0.000	0.000
48	25.8	63.126	2.3842E-07	20.50	4.709	1007.389	507.400	56.081	0.000	0.000	0.000
49	26.4	63.149	-2.3842E-07	20.50	4.709	1007.299	507.400	56.102	0.000	0.000	0.000
50	27.0	63.171	-2.3842E-07	20.50	4.709	1007.208	507.400	56.123	0.000	0.000	0.000
51	27.6	63.196	-1.1921E-07	20.50	4.708	1007.114	507.400	56.144	0.000	0.000	0.000
52	28.2	63.214	1.1921E-07	20.50	4.708	1007.020	507.400	56.165	0.000	0.000	0.000
53	28.8	63.232	1.1921E-07	20.49	4.708	1006.926	507.400	56.186	0.000	0.000	0.000
54	29.4	63.252	0.0000E+00	20.49	4.708	1006.832	507.400	56.207	0.000	0.000	0.000
55	30.0	63.271	3.5763E-07	20.49	4.707	1006.738	507.400	56.226	0.000	0.000	0.000
56	31.5	63.308	-2.3842E-07	20.48	4.707	1006.493	507.400	56.273	0.000	0.000	0.000
57	33.0	63.351	-1.1921E-07	20.48	4.706	1006.258	507.400	56.320	0.000	0.000	0.000

58	34.5	63.396	-2.3842E-07	20.48	4.706	1006.029	507.400	56.367	0.000	0.000	0.000
59	36.0	63.433	3.5763E-07	20.47	4.705	1005.809	507.400	56.412	0.000	0.000	0.000
60	37.5	63.463	-3.5763E-07	20.47	4.705	1005.598	507.400	56.453	0.000	0.000	0.000
61	39.0	63.503	-1.1921E-07	20.47	4.705	1005.397	507.400	56.494	0.000	0.000	0.000
62	40.5	63.541	2.3842E-07	20.46	4.704	1005.197	507.400	56.535	0.000	0.000	0.000
63	42.0	63.569	-1.1921E-07	20.46	4.704	1005.002	507.400	56.576	0.000	0.000	0.000
64	43.5	63.601	-2.3842E-07	20.46	4.704	1004.806	507.400	56.611	0.000	0.000	0.000
65	45.0	63.628	4.7684E-07	20.46	4.703	1004.618	507.400	56.646	0.000	0.000	0.000
66	46.5	63.645	-2.3842E-07	20.45	4.703	1004.430	507.400	56.681	0.000	0.000	0.000
67	48.0	63.678	1.1921E-07	20.45	4.703	1004.242	507.400	56.716	0.000	0.000	0.000
68	49.5	63.702	3.5763E-07	20.45	4.703	1004.055	507.400	56.752	0.000	0.000	0.000
69	51.0	63.726	0.0000E+00	20.45	4.702	1003.874	507.400	56.787	0.000	0.000	0.000
70	52.5	63.761	0.0000E+00	20.45	4.702	1003.699	507.400	56.821	0.000	0.000	0.000
71	54.0	63.792	3.5763E-07	20.44	4.702	1003.526	507.400	56.851	0.000	0.000	0.000
72	55.5	63.809	-1.1921E-07	20.44	4.702	1003.360	507.400	56.880	0.000	0.000	0.000
73	57.0	63.834	2.3842E-07	20.44	4.701	1003.200	507.400	56.910	0.000	0.000	0.000
74	58.5	63.858	3.5763E-07	20.44	4.701	1003.038	507.400	56.939	0.000	0.000	0.000
75	60.0	63.879	-1.1921E-07	20.44	4.701	1002.880	507.400	56.968	0.000	0.000	0.000
76	63.0	64.054	3.5763E-07	20.43	4.701	1002.510	507.400	57.038	0.000	0.000	0.000
77	66.0	64.116	2.3842E-07	20.43	4.700	1002.135	507.400	57.101	0.000	0.000	0.000
78	69.0	64.171	1.1921E-07	20.43	4.700	1001.761	507.400	57.160	0.000	0.000	0.000
79	72.0	64.224	3.5763E-07	20.43	4.699	1001.385	507.400	57.218	0.000	0.000	0.000
80	75.0	64.268	-2.3842E-07	20.42	4.699	1001.025	507.400	57.277	0.000	0.000	0.000
81	78.0	64.317	-2.3842E-07	20.42	4.699	1000.697	507.400	57.336	0.000	0.000	0.000
82	81.0	64.365	-2.3842E-07	20.42	4.698	1000.379	507.400	57.385	0.000	0.000	0.000
83	84.0	64.406	1.1921E-07	20.42	4.698	1000.077	507.400	57.432	0.000	0.000	0.000
84	87.0	64.438	0.0000E+00	20.41	4.698	999.797	507.400	57.479	0.000	0.000	0.000
85	90.0	64.485	0.0000E+00	20.41	4.698	999.552	507.400	57.526	0.000	0.000	0.000
86	93.0	64.535	2.3842E-07	20.41	4.697	999.286	507.400	57.573	0.000	0.000	0.000
87	96.0	64.575	2.3842E-07	20.41	4.697	999.012	507.400	57.620	0.000	0.000	0.000
88	99.0	64.607	-2.3842E-07	20.40	4.697	998.738	507.400	57.667	0.000	0.000	0.000

89	102.	64.644	-1.1921E-07	20.40	4.696	998.469	507.400	57.714	0.000	0.000	0.000
90	105.	64.688	0.0000E+00	20.40	4.696	998.193	507.400	57.761	0.000	0.000	0.000
91	108.	64.727	-1.1921E-07	20.40	4.696	997.911	507.400	57.808	0.000	0.000	0.000
92	111.	64.770	2.3842E-07	20.40	4.696	997.629	507.400	57.855	0.000	0.000	0.000
93	114.	64.821	0.0000E+00	20.39	4.695	997.348	507.400	57.902	0.000	0.000	0.000
94	117.	64.866	1.1921E-07	20.39	4.695	997.066	507.400	57.949	0.000	0.000	0.000
95	120.	64.895	3.5763E-07	20.39	4.695	996.785	507.400	57.996	0.000	0.000	0.000
96	123.	63.364	-1.1921E-07	20.42	4.698	934.810	507.400	58.001	0.000	0.000	0.000
97	126.	62.853	0.0000E+00	20.44	4.700	881.987	507.400	57.980	0.000	0.000	0.000
98	129.	62.557	1.1921E-07	20.46	4.702	839.529	507.400	57.956	0.000	0.000	0.000
99	132.	62.380	1.1921E-07	20.47	4.703	804.652	507.400	57.933	0.000	0.000	0.000
100	135.	62.192	0.0000E+00	20.49	4.704	775.466	507.400	57.915	0.000	0.000	0.000
101	138.	62.024	0.0000E+00	20.49	4.705	750.705	507.400	57.900	0.000	0.000	0.000
102	141.	61.912	-1.1921E-07	20.50	4.705	729.461	507.400	57.888	0.000	0.000	0.000
103	144.	61.821	-1.1921E-07	20.51	4.706	711.114	507.400	57.876	0.000	0.000	0.000
104	147.	61.747	0.0000E+00	20.51	4.706	695.134	507.400	57.864	0.000	0.000	0.000
105	150.	61.687	0.0000E+00	20.52	4.707	681.177	507.400	57.852	0.000	0.000	0.000

I	TIME(MIN)	TWD1	TWD2	TWD3	TWU1	TWU2	TWU3	TWE1	TWE2	TWE3	TWW1	TWW2	TWW3	TWS1	TWS2	TWS3	TWN1	TWN2	TWN3
1	0.000E+00	55.0	55.0	55.0	507.4	507.4	507.4	55.0	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.120	83.7	55.5	55.0	507.4	507.4	507.4	55.0	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.240	118.6	57.3	55.0	507.4	507.4	507.4	55.0	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.360	153.4	60.4	55.1	507.4	507.4	507.4	55.0	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.480	187.3	64.8	55.1	507.4	507.4	507.4	55.0	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.600	219.9	70.2	55.3	507.4	507.4	507.4	55.0	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	1.20	371.1	110.8	57.0	507.4	507.4	507.4	55.0	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	1.80	501.1	166.5	61.0	507.4	507.4	507.4	55.0	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	2.40	610.3	230.0	67.6	507.4	507.4	507.4	55.0	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	3.00	699.8	295.9	76.7	507.4	507.4	507.4	55.1	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	3.60	771.3	360.2	88.0	507.4	507.4	507.4	55.1	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	4.20	827.6	420.7	101.0	507.4	507.4	507.4	55.1	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

13	4.80	871.2	475.8	115.3	507.4	507.4	507.4	55.1	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	5 40	904.6	525.0	130.4	507.4	507.4	507.4	55.1	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	6.00	930.0	567.9	145.9	507.4	507.4	507.4	55.2	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	6.60	949.3	605.3	161.4	507.4	507.4	507.4	55.2	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	7.20	964.1	637.3	176.8	507.4	507.4	507.4	55.2	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	7.80	975.3	664.6	191.6	507.4	507.4	507.4	55.2	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	8.40	983.8	687.9	205.8	507.4	507.4	507.4	55.3	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	9.00	990.4	707.6	219.3	507.4	507.4	507.4	55.3	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	9.60	995.5	724.3	232.0	507.4	507.4	507.4	55.3	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	10.2	999.4	738.5	243.9	507.4	507.4	507.4	55.3	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	10.8	1002.0	750.5	255.0	507.4	507.4	507.4	55.4	55.1	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	11.4	1003.8	760.7	265.2	507.4	507.4	507.4	55.4	55.1	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	12.0	1005.0	769.2	274.6	507.4	507.4	507.4	55.4	55.1	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	12.6	1005.9	776.4	283.2	507.4	507.4	507.4	55.5	55.1	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	13.2	1006.6	782.6	291.2	507.4	507.4	507.4	55.5	55.1	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	13.8	1007.1	787.8	298.4	507.4	507.4	507.4	55.5	55.1	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	14.4	1007.4	792.3	305.0	507.4	507.4	507.4	55.6	55.1	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	15.0	1007.7	796.2	311.0	507.4	507.4	507.4	55.6	55.1	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	15.6	1007.8	799.5	316.5	507.4	507.4	507.4	55.6	55.1	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	16.2	1008.0	802.4	321.6	507.4	507.4	507.4	55.7	55.1	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	16.8	1008.1	805.0	326.1	507.4	507.4	507.4	55.7	55.1	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	17.4	1008.1	807.2	330.3	507.4	507.4	507.4	55.7	55.2	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	18.0	1008.1	809.1	334.1	507.4	507.4	507.4	55.8	55.2	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	18.6	1008.1	810.8	337.6	507.4	507.4	507.4	55.8	55.2	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	19.2	1008.1	812.4	340.7	507.4	507.4	507.4	55.8	55.2	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	19.8	1008.1	813.7	343.6	507.4	507.4	507.4	55.8	55.2	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	20.4	1008.0	814.9	346.3	507.4	507.4	507.4	55.9	55.2	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	21.0	1008.0	816.0	348.7	507.4	507.4	507.4	55.9	55.2	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	21.6	1007.9	817.0	351.0	507.4	507.4	507.4	55.9	55.2	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	22.2	1007.9	817.8	353.0	507.4	507.4	507.4	55.9	55.3	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	22.8	1007.8	818.6	354.9	507.4	507.4	507.4	56.0	55.3	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

44	23.4	1007.7	819.3	356.7	507.4	507.4	507.4	56.0	55.3	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	24.0	1007.6	819.9	358.3	507.4	507.4	507.4	56.0	55.3	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	24.6	1007.6	820.5	359.9	507.4	507.4	507.4	56.0	55.3	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	25.2	1007.5	821.0	361.3	507.4	507.4	507.4	56.1	55.3	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	25.8	1007.4	821.5	362.6	507.4	507.4	507.4	56.1	55.3	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	26.4	1007.3	821.9	363.8	507.4	507.4	507.4	56.1	55.4	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	27.0	1007.2	822.3	365.0	507.4	507.4	507.4	56.1	55.4	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	27.6	1007.1	822.7	366.0	507.4	507.4	507.4	56.1	55.4	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	28.2	1007.0	823.0	367.1	507.4	507.4	507.4	56.2	55.4	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	28.8	1006.9	823.3	368.0	507.4	507.4	507.4	56.2	55.4	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	29.4	1006.8	823.6	368.9	507.4	507.4	507.4	56.2	55.4	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	30.0	1006.7	823.8	369.8	507.4	507.4	507.4	56.2	55.4	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	31.5	1006.5	824.3	371.7	507.4	507.4	507.4	56.3	55.5	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	33.0	1006.3	824.8	373.5	507.4	507.4	507.4	56.3	55.5	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	34.5	1006.0	825.2	375.1	507.4	507.4	507.4	56.4	55.5	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	36.0	1005.8	825.5	376.5	507.4	507.4	507.4	56.4	55.6	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	37.5	1005.6	825.8	377.8	507.4	507.4	507.4	56.5	55.6	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	39.0	1005.4	826.0	379.0	507.4	507.4	507.4	56.5	55.6	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	40.5	1005.2	826.2	380.2	507.4	507.4	507.4	56.5	55.7	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	42.0	1005.0	826.4	381.3	507.4	507.4	507.4	56.6	55.7	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	43.5	1004.8	826.6	382.3	507.4	507.4	507.4	56.6	55.7	55.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	45.0	1004.6	826.8	383.3	507.4	507.4	507.4	56.6	55.8	55.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	46.5	1004.4	826.9	384.3	507.4	507.4	507.4	56.7	55.8	55.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67	48.0	1004.2	827.0	385.2	507.4	507.4	507.4	56.7	55.8	55.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68	49.5	1004.1	827.2	386.1	507.4	507.4	507.4	56.8	55.8	55.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
69	51.0	1003.9	827.3	386.9	507.4	507.4	507.4	56.8	55.9	55.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	52.5	1003.7	827.4	387.7	507.4	507.4	507.4	56.8	55.9	55.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71	54.0	1003.5	827.5	388.5	507.4	507.4	507.4	56.9	55.9	55.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72	55.5	1003.4	827.6	389.3	507.4	507.4	507.4	56.9	56.0	55.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73	57.0	1003.2	827.8	390.1	507.4	507.4	507.4	56.9	56.0	55.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74	58.5	1003.0	827.9	390.9	507.4	507.4	507.4	56.9	56.0	55.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

75	60.0	1002.9	828.0	391.6	507.4	507.4	507.4	57.0	56.0	55.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76	63.0	1002.5	828.1	393.0	507.4	507.4	507.4	57.0	56.1	55.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	66.0	1002.1	828.3	394.4	507.4	507.4	507.4	57.1	56.2	55.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	69.0	1001.8	828.4	395.7	507.4	507.4	507.4	57.2	56.2	55.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79	72.0	1001.4	828.5	397.0	507.4	507.4	507.4	57.2	56.3	55.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	75.0	1001.0	828.6	398.2	507.4	507.4	507.4	57.3	56.3	55.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	78.0	1000.7	828.7	399.4	507.4	507.4	507.4	57.3	56.4	55.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82	81.0	1000.4	828.8	400.6	507.4	507.4	507.4	57.4	56.4	55.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83	84.0	1000.1	828.9	401.7	507.4	507.4	507.4	57.4	56.5	55.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84	87.0	999.8	829.0	402.8	507.4	507.4	507.4	57.5	56.5	55.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	90.0	999.6	829.1	403.9	507.4	507.4	507.4	57.5	56.5	55.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	93.0	999.3	829.3	404.9	507.4	507.4	507.4	57.6	56.6	55.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87	96.0	999.0	829.4	405.9	507.4	507.4	507.4	57.6	56.6	55.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	99.0	998.7	829.5	407.0	507.4	507.4	507.4	57.7	56.7	55.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89	102.	998.5	829.5	407.9	507.4	507.4	507.4	57.7	56.7	55.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	105.	998.2	829.6	408.9	507.4	507.4	507.4	57.8	56.8	55.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91	108.	997.9	829.7	409.8	507.4	507.4	507.4	57.8	56.8	55.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	111.	997.6	829.8	410.8	507.4	507.4	507.4	57.9	56.9	55.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93	114.	997.3	829.9	411.7	507.4	507.4	507.4	57.9	56.9	55.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94	117.	997.1	829.9	412.6	507.4	507.4	507.4	57.9	57.0	55.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	120.	996.8	830.0	413.4	507.4	507.4	507.4	58.0	57.0	55.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	123.	934.8	809.4	412.6	507.4	507.4	507.4	58.0	57.0	55.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	126.	882.0	771.9	406.1	507.4	507.4	507.4	58.0	57.1	56.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	129.	839.5	735.9	395.8	507.4	507.4	507.4	58.0	57.1	56.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	132.	804.7	704.5	384.4	507.4	507.4	507.4	57.9	57.1	56.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	135.	775.5	677.6	373.3	507.4	507.4	507.4	57.9	57.1	56.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101	138.	750.7	654.5	363.0	507.4	507.4	507.4	57.9	57.1	56.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102	141.	729.5	634.7	353.8	507.4	507.4	507.4	57.9	57.2	56.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103	144.	711.1	617.6	345.7	507.4	507.4	507.4	57.9	57.2	56.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104	147.	695.1	602.7	338.5	507.4	507.4	507.4	57.9	57.2	56.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105	150.	681.2	589.8	332.3	507.4	507.4	507.4	57.9	57.2	56.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

I	TT1(D/H)	TTN(D/H)	TTW-FLOOR	TTW-ROOF	TTW-WALLE	TTW-WALLW	TTW-WALLS	TTW-WALLN
1	0.00000E+00	456.02	0.00000E+00	5.90571E-02	5.87418E-02	5.87418E-02	5.87418E-02	5.87418E-02
2	456.02	313.62	0.00000E+00	4.27493E-02	4.25119E-02	4.25118E-02	4.25118E-02	4.25118E-02
3	240.87	0.00000E+00	0.00000E+00	2.15977E-02	2.14786E-02	2.14783E-02	2.14783E-02	2.14783E-02
4	0.00000E+00	0.00000E+00	0.00000E+00	6.70487E-03	6.67191E-03	6.67067E-03	6.67067E-03	6.67067E-03
5	199.13	0.00000E+00	0.00000E+00	1.21212E-03	1.20558E-03	1.19738E-03	1.19738E-03	1.19738E-03
6	0.00000E+00	0.00000E+00	0.00000E+00	1.30779E-04	1.30074E-04	1.76671E-04	1.76671E-04	1.76671E-04
7		0.00000E+00	0.00000E+00	6.27501E-06	6.24272E-06	0.00000E+00	0.00000E+00	0.00000E+00

	***** ROOM NO IS 2 *****						*****ROOM NO IS 3 *****					
I	TTW-D	TTW-U	TTW-E	TTW-W	TTW-S	TTW-N	TTW-D	TTW-U	TTW-E	TTW-W	TTW-S	TTW-N
1	626.	0.000E+00	2.85	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	535.	0.000E+00	2.18	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	277.	0.000E+00	1.15	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	101.	0.000E+00	0.380	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	74.7	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	38.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	11.8	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
8	2.09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
9	0.204	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

SPRAY PART (最終TIMEStep)

1 TIME= 8967.288 SEC DELTA T= 0.12687 SEC

TS	517.97	554.12	591.01	627.80	662.19	691.63	713.74	727.53	734.32	736.80
TG	140.96	69.029	68.699	68.226	67.642	66.944	66.119	65.153	64.051	62.844
TB	1450.1	1370.7	1380.5	1380.9	1374.2	1358.6	1335.7	1311.1	1291.5	1279.8
RE	238.80	396.55	540.72	667.84	771.20	849.96	905.43	940.30	958.22	963.22
HM	287.65	382.06	424.18	460.26	488.35	510.04	526.57	539.15	548.94	556.91
RB	0.14550	0.14556	0.14633	0.14806	0.15130	0.15635	0.16269	0.16869	0.17247	0.17334
D	0.28939	0.28852	0.28743	0.28610	0.28454	0.28269	0.28044	0.27772	0.27452	0.27093
VDRO	59.015	175.21	282.43	378.26	457.80	520.52	567.45	600.70	622.86	636.56
NDRO	6	6	6	6	6	6	6	6	6	6

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DMO    7.45800E-03 2.11266E-03 3.42680E-03 4.63218E-03 5.68929E-03 6.58437E-03 7.31955E-03 7.90828E-03 8.37176E-03 8.74098E-03

  PG= 1.45677E-03   TGIN=  76.127       YO= 0.20516       TSTEEL=  57.854       SORATE= 0.22657       DELTA= 0.14711
  SUMIN=  21233.       SUMNA=  6100.3       TGOUT=  61.679      AVG GAS TEMP=  61.707      GAS VELOCITY=  115.54
  TURB      FREE      CONVECTION AT WALL, H=  1.5636 GR= 5.10746E+10 RE=  626.59      TPLATE=  507.40
  TFLOOR=  683.58      TPOOL=  682.98      YH2O= 4.70658E-02  PH2O= 4.85666E-02   YH2= 2.57681E-04   PH2= 3.79094E-03
  GIN=6.13969E-02 GOUT= 31.730     GASMOL= 31.793     G2=0.00000E+00 GT= 31.793     O2M= 6.5224     H2OM= 1.4963     H2M=8.19233E-03
  POOL  = 14.953     APOOL =0.12506     AFLOOR=0.31828     CPOOL = 4.4860
  SQRAD5= 22951.     SIGBRN= 27379.     SIGNAB= 13.426


1
      HEAT TRANSFER RATE KCAL /SEC  -


                QCONV1=-0.14268         CONVECTION FROM DROPLET TO BURN ZONE
0               QRAD1 =-1.17370E-02     RADIATION FROM DROPLET TO BURN ZONE
0               QCONV2= 0.30712         CONVECTION FROM BURN ZONE TO INNERGAS
0               QRAD2 = 0.00000E+00     RADIATION FROM BURN ZONE TO WALL
0               QCONV3= 1.58696E-02     CONVECTION FROM INNERGAS TO OUTERGAS
0               QCONV4= 0.40707         CONVECTION FROM OUTERGAS TO WALL
0               QPLATE= -2.7639         HEAT INTO IMPACT PLATE
0               QCONV5= 0.23740         HEAT FROM SODIUM POOL TO GAS
0               QCONV6=-6.24329E-02     HEAT FROM SODIUM POOL TO FLOOR
0               QCONV1 + QRAD1-0.15442        TOTAL FROM TA TO TB
0               QCONV2 + QRAD2 0.30712        TOTAL FROM TB TO TC AND TV
0               QRAD3 = 0.00000E+00     RADIATION FROM INNERGAS TO WALL
0               QRAD4 = 0.00000E+00     RADIATION FROM POOL TO WALL
0               QRAD5 = 0.90689         RADIATION FROM POOL TO OUTERGAS
0               QRAD6 = -1.6878         RADIATION FROM WALL TO OUTERGAS
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1

HEAT TRANSFER TOTL KCAL -

	QCONV1= -6218.0	CONVECTION FROM DROPLET TO BURN ZONE
0	QRAD1 = -501.59	RADIATION FROM DROPLET TO BURN ZONE
0	QCONV2= 13586.	CONVECTION FROM BURN ZONE TO INNERGAS
0	QRAD2 = 0.00000E+00	RADIATION FROM BURN ZONE TO WALL
0	QCONV3= 951.95	CONVECTION FROM INNERGAS TO OUTERGAS
0	QCONV4= 7153.4	CONVECTION FROM OUTERGAS TO WALL
0	QPLATE= -23773.	HEAT INTO IMPACT PLATE
0	QCONV5= 3375.1	HEAT FROM SODIUM POOL TO GAS
0	QCONV6= 1243.8	HEAT FROM SODIUM POOL TO FLOOR
0	QCONV1 + QRAD1 -6712.0	TOTAL FROM TA TO TB
0	QCONV2 + QRAD2 13586.	TOTAL FROM TB TO TC AND TV
0	QRAD3 = 0.00000E+00	RADIATION FROM INNERGAS TO WALL
0	QRAD4 = 0.00000E+00	RADIATION FROM POOL TO WALL
0	QSOD = 0.00000E+00	HEAT GAIN BY SODIUM
0	QVAP = 5790.4	HEAT ABSORTED IN VAPORIZATION

1 THE DISTRIBUTION OF TEMPERATURE

0 NO.	TPLATE	TSTEEL	TFLOOR
1	507.40	57.854	683.58
2	507.40	57.183	592.01
3	507.40	56.148	333.36
4	507.40	55.378	156.46
5	507.40	55.000	129.58
6	507.40	55.000	92.872
7	507.40	55.000	66.693

8	507.40	55.000	57.070
9	507.40	0.00000E+00	55.200
10	507.40	0.00000E+00	55.000
11	0.00000E+00	0.00000E+00	55.000
12	0.00000E+00	0.00000E+00	55.000

4．3 FACOM解析結果

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SOFIRE PART（最終結果）

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***** ROOM NUMBER IS 1 *****

I	TIME(MIN)	TGAS(D-C)	PGAS(KG/CM2)	CO2(V/O)	CH2O(V/O)	TW01(D-C)	TW11(D-C)	TWE1(D-C)	TWW1(D-C)	TWS1(D-C)	TWN1(D-C)
1	0.0000E+00	55.000	-2.3000E-04	20.64	4.726	55.000	55.000	55.000	55.000	55.000	55.000
2	0.120	55.001	2.5372E-03	20.64	4.726	55.000	55.000	55.000	55.000	55.000	55.000
3	0.240	55.002	2.5314E-03	20.64	4.726	55.000	55.000	55.000	55.000	55.000	55.000
4	0.360	55.003	2.5320E-03	20.64	4.726	55.000	55.000	55.000	55.000	55.000	55.000
5	0.480	55.004	2.5322E-03	20.64	4.726	55.000	55.000	55.000	55.000	55.000	55.000
6	0.600	55.006	2.5328E-03	20.64	4.726	55.000	55.000	55.000	55.000	55.000	55.000
7	1.20	55.018	2.5337E-03	20.64	4.725	55.000	55.000	55.000	55.000	55.000	55.000
8	1.80	55.034	2.5338E-03	20.64	4.725	55.000	55.000	55.000	55.000	55.000	55.000
9	2.40	55.052	2.5336E-03	20.64	4.725	55.000	55.000	55.000	55.000	55.000	55.000
10	3.00	55.071	2.5335E-03	20.64	4.725	55.000	55.001	55.001	55.001	55.001	55.001
11	3.60	55.089	2.5331E-03	20.64	4.725	55.000	55.001	55.001	55.001	55.001	55.001
12	4.20	55.108	2.5332E-03	20.64	4.725	55.000	55.002	55.002	55.002	55.002	55.002
13	4.80	55.125	2.5332E-03	20.64	4.725	55.000	55.002	55.002	55.002	55.002	55.002
14	5.40	55.142	2.5333E-03	20.64	4.725	55.000	55.003	55.003	55.003	55.003	55.003
15	6.00	55.156	2.5324E-03	20.64	4.725	55.000	55.004	55.004	55.004	55.004	55.004
16	6.60	55.170	2.5326E-03	20.64	4.725	55.000	55.005	55.005	55.005	55.005	55.005
17	7.20	55.182	2.5327E-03	20.64	4.725	55.000	55.006	55.006	55.006	55.006	55.006
18	7.80	55.192	2.5325E-03	20.64	4.725	55.000	55.007	55.007	55.007	55.007	55.007
19	8.40	55.201	2.5321E-03	20.64	4.725	55.000	55.008	55.008	55.008	55.008	55.008
20	9.00	55.209	2.5325E-03	20.64	4.725	55.000	55.009	55.009	55.009	55.009	55.009
21	9.60	55.216	2.5316E-03	20.64	4.725	55.000	55.010	55.009	55.009	55.009	55.009
22	10.2	55.211	-7.0602E-06	20.64	4.725	55.000	55.011	55.010	55.010	55.010	55.010
23	10.8	55.185	1.3016E-07	20.64	4.725	55.000	55.011	55.011	55.011	55.011	55.011
24	11.4	55.166	1.4368E-07	20.64	4.725	55.000	55.012	55.012	55.012	55.012	55.012
25	12.0	55.151	4.7875E-07	20.64	4.725	55.000	55.012	55.012	55.012	55.012	55.012
26	12.6	55.140	2.8975E-08	20.64	4.725	55.000	55.013	55.013	55.013	55.013	55.013
27	13.2	55.131	-8.3614E-06	20.64	4.725	55.000	55.013	55.013	55.013	55.013	55.013
28	13.8	55.125	2.4055E-07	20.64	4.725	55.000	55.013	55.013	55.013	55.013	55.013
29	14.4	55.119	-1.1110E-07	20.64	4.725	55.000	55.013	55.013	55.013	55.013	55.013
30	15.0	55.115	-3.6213E-08	20.64	4.725	55.000	55.014	55.014	55.014	55.014	55.014
31	15.6	55.112	-6.7661E-08	20.64	4.725	55.000	55.014	55.014	55.014	55.014	55.014
32	16.2	55.109	-1.4143E-07	20.64	4.725	55.000	55.014	55.014	55.014	55.014	55.014
33	16.8	55.107	3.1065E-07	20.64	4.725	55.000	55.014	55.014	55.014	55.014	55.014
34	17.4	55.106	-6.2276E-08	20.64	4.725	55.000	55.014	55.014	55.014	55.014	55.014
35	18.0	55.105	-5.7547E-08	20.64	4.725	55.000	55.014	55.014	55.014	55.014	55.014
36	18.6	55.104	-5.3088E-08	20.64	4.725	55.000	55.014	55.014	55.014	55.014	55.014
37	19.2	55.103	-6.9701E-08	20.64	4.725	55.000	55.014	55.014	55.014	55.014	55.014
38	19.8	55.103	-1.2206E-07	20.64	4.725	55.000	55.015	55.014	55.014	55.014	55.014
39	20.4	55.103	5.0985E-08	20.64	4.725	55.000	55.015	55.015	55.015	55.015	55.015
40	21.0	55.103	-5.1663E-08	20.64	4.725	55.000	55.015	55.015	55.015	55.015	55.015
41	21.6	55.103	-7.4168E-08	20.64	4.725	55.000	55.015	55.015	55.015	55.015	55.015
42	22.2	55.103	4.6178E-07	20.64	4.725	55.000	55.015	55.015	55.015	55.015	55.015
43	22.8	55.103	-8.0014E-08	20.64	4.725	55.000	55.015	55.015	55.015	55.015	55.015
44	23.4	55.103	-6.7370E-08	20.64	4.725	55.000	55.015	55.015	55.015	55.015	55.015
45	24.0	55.104	3.7249E-07	20.64	4.724	55.000	55.015	55.015	55.015	55.015	55.015
46	24.6	55.104	1.5984E-07	20.64	4.724	55.000	55.015	55.015	55.015	55.015	55.015
47	25.2	55.104	-4.6654E-08	20.64	4.724	55.000	55.016	55.015	55.015	55.015	55.015
48	25.8	55.104	-1.1776E-07	20.64	4.724	55.000	55.016	55.016	55.016	55.016	55.016
49	26.4	55.105	-8.6265E-08	20.64	4.724	55.000	55.016	55.016	55.016	55.016	55.016
50	27.0	55.105	-5.6145E-08	20.64	4.724	55.000	55.016	55.016	55.016	55.016	55.016
51	27.6	55.106	-5.6126E-08	20.64	4.724	55.000	55.016	55.016	55.016	55.016	55.016
52	28.2	55.106	-8.5094E-08	20.64	4.724	55.000	55.016	55.016	55.016	55.016	55.016
53	28.8	55.106	-6.3311E-08	20.64	4.724	55.000	55.016	55.016	55.016	55.016	55.016
54	29.4	55.107	-7.0970E-08	20.64	4.724	55.000	55.016	55.016	55.016	55.016	55.016
55	30.0	55.107	-4.4196E-08	20.64	4.724	55.000	55.017	55.016	55.016	55.016	55.016
56	31.5	55.108	-7.0462E-08	20.63	4.724	55.000	55.017	55.017	55.017	55.017	55.017
57	33.0	55.109	-6.9445E-08	20.63	4.724	55.000	55.017	55.017	55.017	55.017	55.017
58	34.5	55.110	-4.4093E-08	20.63	4.724	55.000	55.018	55.018	55.018	55.018	55.018
59	36.0	55.111	5.4478E-08	20.63	4.724	55.000	55.018	55.018	55.018	55.018	55.018
60	37.5	55.112	1.3857E-07	20.63	4.723	55.000	55.018	55.018	55.018	55.018	55.018
61	39.0	55.113	-5.2409E-08	20.63	4.723	55.000	55.019	55.019	55.019	55.019	55.019
62	40.5	55.114	-5.6056E-08	20.63	4.723	55.000	55.019	55.019	55.019	55.019	55.019
63	42.0	55.115	-4.1710E-08	20.63	4.723	55.000	55.020	55.019	55.019	55.019	55.019

64	43.5	55.116	1.3453E-07	20.63	4.723	55.000	55.020	55.020	55.020	55.020	55.020
65	45.0	55.117	-5.4168E-08	20.63	4.723	55.000	55.020	55.020	55.020	55.020	55.020
66	46.5	55.118	-6.2425E-08	20.63	4.723	55.000	55.021	55.021	55.021	55.021	55.021
67	48.0	55.119	5.5124E-08	20.63	4.722	55.000	55.021	55.021	55.021	55.021	55.021
68	49.5	55.120	3.7594E-07	20.62	4.722	55.000	55.021	55.021	55.021	55.021	55.021
69	51.0	55.120	-6.4489E-08	20.62	4.722	55.000	55.022	55.022	55.022	55.022	55.022
70	52.5	55.121	-4.0326E-08	20.62	4.722	55.000	55.022	55.022	55.022	55.022	55.022
71	54.0	55.122	1.5881E-07	20.62	4.722	55.000	55.023	55.022	55.022	55.022	55.022
72	55.5	55.123	-5.2621E-08	20.62	4.722	55.000	55.023	55.023	55.023	55.023	55.023
73	57.0	55.124	-1.0516E-07	20.62	4.722	55.000	55.023	55.023	55.023	55.023	55.023
74	58.5	55.125	1.3194E-07	20.62	4.721	55.000	55.024	55.024	55.024	55.024	55.024
75	60.0	55.125	4.6941E-07	20.62	4.721	55.000	55.024	55.024	55.024	55.024	55.024
76	63.0	55.127	5.5434E-08	20.62	4.721	55.000	55.025	55.025	55.025	55.025	55.025
77	66.0	55.129	-7.7478E-08	20.61	4.721	55.000	55.026	55.025	55.025	55.025	55.025
78	69.0	55.130	4.6997E-07	20.61	4.720	55.000	55.026	55.026	55.026	55.026	55.026
79	72.0	55.132	5.5721E-08	20.61	4.720	55.000	55.027	55.027	55.027	55.027	55.027
80	75.0	55.133	-7.6446E-08	20.61	4.720	55.000	55.028	55.028	55.028	55.028	55.028
81	78.0	55.135	4.7059E-07	20.61	4.719	55.000	55.029	55.028	55.028	55.028	55.028
82	81.0	55.136	1.3545E-07	20.60	4.719	55.000	55.029	55.029	55.029	55.029	55.029
83	84.0	55.138	-6.1716E-08	20.60	4.719	55.000	55.030	55.030	55.030	55.030	55.030
84	87.0	55.139	-5.4477E-08	20.60	4.719	55.000	55.031	55.030	55.030	55.030	55.030
85	90.0	55.140	1.3588E-07	20.60	4.718	55.000	55.031	55.031	55.031	55.031	55.031
86	93.0	55.142	+1.2457E-07	20.60	4.718	55.000	55.032	55.032	55.032	55.032	55.032
87	96.0	55.143	-5.3860E-08	20.59	4.718	55.000	55.033	55.033	55.033	55.033	55.033
88	99.0	55.144	3.2099E-07	20.59	4.717	55.000	55.033	55.033	55.033	55.033	55.033
89	102.	55.146	5.6605E-08	20.59	4.717	55.000	55.034	55.034	55.034	55.034	55.034
90	105.	55.147	-9.6330E-08	20.59	4.717	55.000	55.035	55.035	55.035	55.035	55.035
91	108.	55.148	-5.4024E-08	20.59	4.716	55.000	55.035	55.035	55.035	55.035	55.035
92	111.	55.150	3.7863E-07	20.58	4.716	55.000	55.036	55.036	55.036	55.036	55.036
93	114.	55.151	1.5961E-07	20.58	4.716	55.000	55.037	55.037	55.037	55.037	55.037
94	117.	55.152	-7.3712E-08	20.58	4.715	55.000	55.037	55.037	55.037	55.037	55.037
95	120.	55.153	-7.9374E-08	20.58	4.715	55.000	55.038	55.038	55.038	55.038	55.038
96	123.	55.143	-3.8169E-08	20.58	4.715	55.000	55.039	55.038	55.038	55.038	55.038
97	126.	55.133	2.5601E-07	20.58	4.715	55.000	55.039	55.039	55.039	55.039	55.039
98	129.	55.125	1.5351E-07	20.57	4.714	55.000	55.039	55.039	55.039	55.039	55.039
99	132.	55.120	-5.2828E-08	20.57	4.714	55.000	55.039	55.038	55.038	55.038	55.038
100	135.	55.116	-7.9935E-09	20.57	4.714	55.000	55.038	55.038	55.038	55.038	55.038
101	138.	55.113	-1.0911E-08	20.57	4.714	55.000	55.038	55.038	55.038	55.038	55.038
102	141.	55.110	1.8980E-07	20.57	4.713	55.000	55.038	55.038	55.038	55.038	55.038
103	144.	55.109	+1.1192E-07	20.57	4.713	55.000	55.038	55.038	55.038	55.038	55.038
104	147.	55.107	-6.2770E-08	20.57	4.713	55.000	55.038	55.038	55.038	55.038	55.038
105	150.	55.106	1.5236E-07	20.57	4.713	55.000	55.038	55.038	55.038	55.038	55.038

I	TIME(MIN)	TVD1	TVD2	TVD3	TVU1	TVU2	TVU3	TVE1	TVE2	TVE3	TVW1	TVW2	TVW3	TVS1	TVS2	TVS3	TVR1	TVR2	TVR3
1	0.000E+00	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
2	0.120	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
3	0.240	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
4	0.360	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
5	0.480	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
6	0.600	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
7	1.20	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
8	1.80	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
9	2.40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
10	3.00	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
11	3.60	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
12	4.20	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
13	4.80	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
14	5.40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
15	6.00	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
16	6.60	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
17	7.20	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
18	7.80	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
19	8.40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
20	9.00	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
21	9.60	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
22	10.2	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
23	10.8	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
24	11.4	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
25	12.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
26	12.6	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
27	13.2	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
28	13.8	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
29	14.4	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
30	15.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
31	15.6	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
32	16.2	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
33	16.8	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
34	17.4	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
35	18.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
36	18.6	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
37	19.2	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
38	19.8	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
39	20.4	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	21.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
41	21.6	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
42	22.2	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
43	22.8	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
44	23.4	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
45	24.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
46	24.6	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
47	25.2	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
48	25.8	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
49	26.4	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
50	27.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
51	27.6	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
52	28.2	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
53	28.8	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
54	29.4	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
55	30.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
56	31.5	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
57	33.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
58	34.5	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
59	36.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
60	37.5	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
61	39.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
62	40.5	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
63	42.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
64	43.5	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0

65	45.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
66	46.5	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
67	48.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
68	49.5	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
69	51.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
70	52.5	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
71	54.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
72	55.5	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
73	57.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
74	58.5	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
75	60.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
76	63.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
77	66.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
78	69.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
79	72.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
80	75.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
81	78.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
82	81.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
83	84.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
84	87.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
85	90.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
86	93.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
87	96.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
88	99.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
89	102.	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
90	105.	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
91	108.	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
92	111.	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
93	114.	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
94	117.	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
95	120.	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
96	123.	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
97	126.	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
98	129.	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
99	132.	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
100	135.	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
101	138.	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
102	141.	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
103	144.	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
104	147.	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
105	150.	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0

1 ***** ROOM NUMBER IS 2 *****

I	TIME(MIN)	TGAS(D-C)	PGAS(KG/CM2)	CO2(V/D)	CH2O(V/D)	TVD1(D-C)	TVU1(D-C)	TVE1(D-C)	TVV1(D-C)	TVS1(D-C)	TVN1(D-C)
1	0.000E+00	55.000	-2.3000E-04	20.64	4.726	55.000	507.400	55.000	0.000	0.000	0.000
2	0.120	55.313	2.5372E-03	20.64	4.724	83.699	507.400	55.001	0.000	0.000	0.000
3	0.240	55.413	2.5514E-03	20.64	4.724	121.348	507.400	55.002	0.000	0.000	0.000
4	0.360	55.520	2.5520E-03	20.64	4.724	156.975	507.400	55.003	0.000	0.000	0.000
5	0.480	55.635	3.5245E-03	20.64	4.724	191.784	507.400	55.004	0.000	0.000	0.000
6	0.600	55.754	2.5528E-03	20.64	4.724	225.247	507.400	55.006	0.000	0.000	0.000
7	1.20	56.357	2.5537E-03	20.63	4.723	381.323	507.400	55.014	0.000	0.000	0.000
8	1.80	56.895	2.5538E-03	20.63	4.723	516.356	507.400	55.026	0.000	0.000	0.000
9	2.40	57.352	2.5536E-03	20.63	4.723	630.011	507.400	55.040	0.000	0.000	0.000
10	3.00	57.754	2.5535E-03	20.63	4.723	722.649	507.400	55.057	0.000	0.000	0.000
11	3.60	58.110	2.5531E-03	20.63	4.723	795.700	507.400	55.076	0.000	0.000	0.000
12	4.20	58.431	2.5532E-03	20.62	4.723	851.905	507.400	55.097	0.000	0.000	0.000
13	4.80	58.719	2.5532E-03	20.62	4.722	894.193	507.400	55.119	0.000	0.000	0.000
14	5.40	58.966	2.5533E-03	20.62	4.722	923.588	507.400	55.142	0.000	0.000	0.000
15	6.00	59.172	3.5315E-03	20.62	4.722	948.702	507.400	55.165	0.000	0.000	0.000
16	6.60	59.333	2.5526E-03	20.62	4.722	965.615	507.400	55.189	0.000	0.000	0.000
17	7.20	59.473	2.5527E-03	20.62	4.722	978.084	507.400	55.213	0.000	0.000	0.000
18	7.80	59.586	2.5525E-03	20.62	4.722	987.270	507.400	55.237	0.000	0.000	0.000
19	8.40	59.676	2.5521E-03	20.62	4.722	994.073	507.400	55.260	0.000	0.000	0.000
20	9.00	59.757	2.5525E-03	20.62	4.722	999.161	507.400	55.284	0.000	0.000	0.000
21	9.60	59.819	2.5516E-03	20.62	4.722	1002.984	507.400	55.306	0.000	0.000	0.000
22	10.2	60.101	-7.0602E-08	20.62	4.722	1005.790	507.400	55.329	0.000	0.000	0.000
23	10.8	60.944	1.5016E-07	20.62	4.721	1007.450	507.400	55.356	0.000	0.000	0.000
24	11.4	61.505	1.4568E-07	20.61	4.721	1006.492	507.400	55.388	0.000	0.000	0.000
25	12.0	61.885	4.7873E-07	20.60	4.720	1009.151	507.400	55.422	0.000	0.000	0.000
26	12.6	62.140	2.8975E-08	20.60	4.719	1009.568	507.400	55.457	0.000	0.000	0.000
27	13.2	62.319	-8.3614E-08	20.60	4.718	1009.831	507.400	55.493	0.000	0.000	0.000
28	13.8	62.450	2.4033E-07	20.59	4.718	1009.993	507.400	55.528	0.000	0.000	0.000
29	14.4	62.543	-1.1110E-07	20.59	4.717	1010.086	507.400	55.563	0.000	0.000	0.000
30	15.0	62.617	-5.6213E-08	20.58	4.717	1010.132	507.400	55.597	0.000	0.000	0.000
31	15.6	62.677	-6.7661E-08	20.58	4.716	1010.144	507.400	55.631	0.000	0.000	0.000
32	16.2	62.729	-1.4143E-07	20.57	4.716	1010.131	507.400	55.663	0.000	0.000	0.000
33	16.8	62.776	3.1065E-07	20.57	4.715	1010.099	507.400	55.695	0.000	0.000	0.000
34	17.4	62.812	-6.2276E-08	20.57	4.715	1010.052	507.400	55.725	0.000	0.000	0.000
35	18.0	62.847	-5.7547E-08	20.56	4.714	1009.994	507.400	55.755	0.000	0.000	0.000
36	18.6	62.879	-5.3088E-08	20.56	4.714	1009.925	507.400	55.785	0.000	0.000	0.000
37	19.2	62.910	-6.9701E-08	20.56	4.713	1009.850	507.400	55.813	0.000	0.000	0.000
38	19.8	62.941	-1.2206E-07	20.55	4.713	1009.767	507.400	55.841	0.000	0.000	0.000
39	20.4	62.971	5.0985E-08	20.55	4.712	1009.680	507.400	55.868	0.000	0.000	0.000
40	21.0	63.000	9.8104E-04	20.55	4.712	1009.588	507.400	55.894	0.000	0.000	0.000
41	21.6	63.021	-7.4168E-08	20.55	4.711	1009.494	507.400	55.920	0.000	0.000	0.000
42	22.2	63.047	4.6178E-07	20.54	4.711	1009.399	507.400	55.945	0.000	0.000	0.000
43	22.8	63.067	-8.0014E-08	20.54	4.711	1009.301	507.400	55.969	0.000	0.000	0.000
44	23.4	63.088	-6.7370E-08	20.54	4.710	1009.201	507.400	55.993	0.000	0.000	0.000
45	24.0	63.114	3.7249E-07	20.54	4.710	1009.100	507.400	56.017	0.000	0.000	0.000
46	24.6	63.134	1.5984E-07	20.53	4.710	1008.997	507.400	56.040	0.000	0.000	0.000
47	25.2	63.154	-4.6654E-08	20.53	4.709	1008.894	507.400	56.063	0.000	0.000	0.000
48	25.8	63.174	-1.1776E-07	20.53	4.709	1008.790	507.400	56.085	0.000	0.000	0.000
49	26.4	63.193	-8.8265E-08	20.53	4.709	1008.685	507.400	56.107	0.000	0.000	0.000
50	27.0	63.213	-5.6145E-08	20.53	4.709	1008.580	507.400	56.128	0.000	0.000	0.000
51	27.6	63.232	-5.6126E-08	20.52	4.708	1008.475	507.400	56.149	0.000	0.000	0.000
52	28.2	63.251	-8.5094E-08	20.52	4.708	1008.371	507.400	56.170	0.000	0.000	0.000
53	28.8	63.269	-6.3311E-08	20.52	4.708	1008.266	507.400	56.190	0.000	0.000	0.000
54	29.4	63.287	-7.0970E-08	20.52	4.707	1008.161	507.400	56.210	0.000	0.000	0.000
55	30.0	63.306	-4.4196E-08	20.52	4.707	1008.058	507.400	56.230	0.000	0.000	0.000
56	31.5	63.347	-7.0462E-08	20.51	4.707	1007.800	507.400	56.278	0.000	0.000	0.000
57	33.0	63.388	-6.9445E-08	20.51	4.706	1007.546	507.400	56.324	0.000	0.000	0.000
58	34.5	63.427	-4.4093E-08	20.51	4.706	1007.296	507.400	56.369	0.000	0.000	0.000
59	36.0	63.465	5.4478E-08	20.50	4.705	1007.051	507.400	56.413	0.000	0.000	0.000
60	37.5	63.503	1.3857E-07	20.50	4.705	1006.810	507.400	56.455	0.000	0.000	0.000
61	39.0	63.539	9.8040E-04	20.50	4.704	1006.573	507.400	56.496	0.000	0.000	0.000
62	40.5	63.568	-5.6056E-08	20.49	4.704	1006.341	507.400	56.536	0.000	0.000	0.000
63	42.0	63.603	-4.1710E-08	20.49	4.704	1006.114	507.400	56.575	0.000	0.000	0.000
64	43.5	63.637	1.3453E-07	20.49	4.703	1005.890	507.400	56.614	0.000	0.000	0.000
65	45.0	63.663	-5.4168E-08	20.49	4.703	1005.670	507.400	56.651	0.000	0.000	0.000

64	46.5	63.696	-6.2425E-08	20.49	4.703	1005.454	507.400	56.688	0.000	0.000	0.000
67	48.0	63.728	5.5124E-08	20.48	4.703	1005.240	507.400	56.724	0.000	0.000	0.000
68	49.5	63.760	3.7594E-07	20.48	4.702	1005.030	507.400	56.759	0.000	0.000	0.000
69	51.0	63.784	-6.4489E-08	20.48	4.702	1004.824	507.400	56.794	0.000	0.000	0.000
70	52.5	63.814	-4.0326E-08	20.48	4.702	1004.619	507.400	56.828	0.000	0.000	0.000
71	54.0	63.844	1.5881E-07	20.48	4.702	1004.418	507.400	56.861	0.000	0.000	0.000
72	55.5	63.867	-5.2621E-08	20.48	4.702	1004.218	507.400	56.894	0.000	0.000	0.000
73	57.0	63.896	-1.0516E-07	20.48	4.701	1004.021	507.400	56.926	0.000	0.000	0.000
74	58.5	63.924	1.3194E-07	20.47	4.701	1003.826	507.400	56.958	0.000	0.000	0.000
75	60.0	63.952	4.6943E-07	20.47	4.701	1003.633	507.400	56.990	0.000	0.000	0.000
76	63.0	64.001	5.5434E-08	20.47	4.701	1003.253	507.400	57.051	0.000	0.000	0.000
77	66.0	64.048	-7.7478E-08	20.47	4.700	1002.878	507.400	57.111	0.000	0.000	0.000
78	69.0	64.101	4.6997E-07	20.47	4.700	1002.509	507.400	57.169	0.000	0.000	0.000
79	72.0	64.146	5.5721E-08	20.47	4.700	1002.144	507.400	57.225	0.000	0.000	0.000
80	75.0	64.189	-7.6446E-08	20.46	4.700	1001.784	507.400	57.280	0.000	0.000	0.000
81	78.0	64.239	4.7059E-07	20.46	4.699	1001.428	507.400	57.334	0.000	0.000	0.000
82	81.0	64.280	1.3545E-07	20.46	4.699	1001.075	507.400	57.387	0.000	0.000	0.000
83	84.0	64.321	-6.1716E-08	20.46	4.699	1000.724	507.400	57.438	0.000	0.000	0.000
84	87.0	64.360	-5.4477E-08	20.46	4.699	1000.377	507.400	57.489	0.000	0.000	0.000
85	90.0	64.406	1.3588E-07	20.46	4.698	1000.031	507.400	57.538	0.000	0.000	0.000
86	93.0	64.444	-1.2457E-07	20.45	4.698	999.688	507.400	57.587	0.000	0.000	0.000
87	96.0	64.481	-5.3860E-08	20.45	4.698	999.346	507.400	57.634	0.000	0.000	0.000
88	99.0	64.525	3.2099E-07	20.45	4.698	999.006	507.400	57.681	0.000	0.000	0.000
89	102.	64.561	5.6605E-08	20.45	4.697	998.669	507.400	57.727	0.000	0.000	0.000
90	105.	64.596	-9.6330E-08	20.45	4.697	998.332	507.400	57.772	0.000	0.000	0.000
91	108.	64.631	-5.4024E-08	20.44	4.697	997.997	507.400	57.816	0.000	0.000	0.000
92	111.	64.672	3.7863E-07	20.44	4.696	997.663	507.400	57.859	0.000	0.000	0.000
93	114.	64.705	1.5961E-07	20.44	4.696	997.331	507.400	57.902	0.000	0.000	0.000
94	117.	64.739	-7.3712E-08	20.44	4.696	996.999	507.400	57.944	0.000	0.000	0.000
95	120.	64.771	-7.9374E-08	20.44	4.696	996.669	507.400	57.986	0.000	0.000	0.000
96	123.	63.432	-3.8169E-08	20.46	4.698	938.340	507.400	57.993	0.000	0.000	0.000
97	126.	62.988	2.5601E-07	20.47	4.700	884.880	507.400	57.978	0.000	0.000	0.000
98	129.	62.691	1.5351E-07	20.48	4.702	841.969	507.400	57.959	0.000	0.000	0.000
99	132.	62.470	-5.2828E-08	20.49	4.703	806.696	507.400	57.940	0.000	0.000	0.000
100	135.	62.299	-7.9935E-09	20.50	4.704	777.180	507.400	57.923	0.000	0.000	0.000
101	138.	62.167	-1.0911E-08	20.51	4.705	752.145	507.400	57.908	0.000	0.000	0.000
102	141.	62.063	1.8980E-07	20.51	4.705	730.686	507.400	57.895	0.000	0.000	0.000
103	144.	61.974	-1.1192E-07	20.51	4.706	712.147	507.400	57.885	0.000	0.000	0.000
104	147.	61.905	9.7437E-04	20.52	4.706	695.986	507.400	57.876	0.000	0.000	0.000
105	150.	61.847	1.5236E-07	20.52	4.706	681.877	507.400	57.868	0.000	0.000	0.000

I	TIME(MIN)	TW01	TW02	TW03	TW11	TW12	TW13	TW21	TW22	TW23	TWW1	TWW2	TWW3	TWS1	TWS2	TWS3	TWR1	TWR2	TWR3
1	0.000E+00	55.0	55.0	55.0	507.4	507.4	507.4	55.0	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.120	85.7	55.5	55.0	507.4	507.4	507.4	55.0	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.240	121.3	57.5	55.0	507.4	507.4	507.4	55.0	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.360	157.0	60.7	55.1	507.4	507.4	507.4	55.0	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.480	191.8	65.3	55.1	507.4	507.4	507.4	55.0	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.600	225.2	70.9	55.3	507.4	507.4	507.4	55.0	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	1.20	381.3	112.7	57.1	507.4	507.4	507.4	55.0	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	1.80	516.4	170.3	61.3	507.4	507.4	507.4	55.0	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	2.40	630.0	236.0	68.1	507.4	507.4	507.4	55.0	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	3.00	722.6	304.3	77.5	507.4	507.4	507.4	55.1	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	3.60	795.7	370.9	89.1	507.4	507.4	507.4	55.1	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	4.20	851.9	433.2	102.6	507.4	507.4	507.4	55.1	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	4.80	894.2	489.5	117.4	507.4	507.4	507.4	55.1	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	5.40	925.6	539.4	133.0	507.4	507.4	507.4	55.1	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	6.00	948.7	582.6	148.9	507.4	507.4	507.4	55.2	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	6.60	965.6	619.5	164.7	507.4	507.4	507.4	55.2	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	7.20	978.1	650.9	180.3	507.4	507.4	507.4	55.2	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	7.80	987.3	677.4	195.4	507.4	507.4	507.4	55.2	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	8.40	994.1	699.7	209.8	507.4	507.4	507.4	55.3	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	9.00	999.2	718.4	223.3	507.4	507.4	507.4	55.3	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	9.60	1003.0	734.1	236.0	507.4	507.4	507.4	55.3	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	10.2	1005.8	747.4	247.9	507.4	507.4	507.4	55.3	55.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	10.8	1007.5	758.5	258.9	507.4	507.4	507.4	55.4	55.1	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	11.4	1008.5	767.8	269.0	507.4	507.4	507.4	55.4	55.1	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	12.0	1009.2	775.6	278.3	507.4	507.4	507.4	55.4	55.1	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	12.6	1009.6	782.2	286.7	507.4	507.4	507.4	55.5	55.1	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	13.2	1009.8	787.8	294.5	507.4	507.4	507.4	55.5	55.1	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	13.8	1010.0	792.5	301.6	507.4	507.4	507.4	55.5	55.1	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	14.4	1010.1	796.5	308.0	507.4	507.4	507.4	55.6	55.1	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	15.0	1010.1	800.0	313.9	507.4	507.4	507.4	55.6	55.1	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	15.6	1010.1	803.0	319.2	507.4	507.4	507.4	55.6	55.1	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	16.2	1010.1	805.6	324.1	507.4	507.4	507.4	55.7	55.1	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	16.8	1010.1	807.9	328.5	507.4	507.4	507.4	55.7	55.1	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	17.4	1010.1	809.9	332.5	507.4	507.4	507.4	55.7	55.2	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	18.0	1010.0	811.7	336.2	507.4	507.4	507.4	55.8	55.2	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	18.6	1009.9	813.2	339.5	507.4	507.4	507.4	55.8	55.2	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	19.2	1009.8	814.6	342.6	507.4	507.4	507.4	55.8	55.2	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	19.8	1009.8	815.8	345.4	507.4	507.4	507.4	55.8	55.2	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	20.4	1009.7	816.9	347.9	507.4	507.4	507.4	55.9	55.2	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	21.0	1009.6	817.9	350.3	507.4	507.4	507.4	55.9	55.2	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	21.6	1009.5	818.8	352.4	507.4	507.4	507.4	55.9	55.2	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	22.2	1009.4	819.6	354.4	507.4	507.4	507.4	55.9	55.3	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	22.8	1009.3	820.3	356.3	507.4	507.4	507.4	56.0	55.3	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	23.4	1009.2	820.9	358.0	507.4	507.4	507.4	56.0	55.3	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	24.0	1009.1	821.5	359.5	507.4	507.4	507.4	56.0	55.3	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	24.6	1009.0	822.0	361.0	507.4	507.4	507.4	56.0	55.3	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	25.2	1008.9	822.5	362.3	507.4	507.4	507.4	56.1	55.3	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	25.8	1008.8	822.9	363.6	507.4	507.4	507.4	56.1	55.3	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	26.4	1008.7	823.3	364.8	507.4	507.4	507.4	56.1	55.3	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	27.0	1008.6	823.7	365.9	507.4	507.4	507.4	56.1	55.4	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	27.6	1008.5	824.0	367.0	507.4	507.4	507.4	56.1	55.4	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	28.2	1008.4	824.3	367.9	507.4	507.4	507.4	56.2	55.4	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	28.8	1008.3	824.6	368.9	507.4	507.4	507.4	56.2	55.4	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	29.4	1008.2	824.8	369.8	507.4	507.4	507.4	56.2	55.4	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	30.0	1008.1	825.0	370.6	507.4	507.4	507.4	56.2	55.4	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	31.5	1007.8	825.5	372.5	507.4	507.4	507.4	56.3	55.5	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	33.0	1007.5	826.0	374.2	507.4	507.4	507.4	56.3	55.5	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	34.5	1007.3	826.3	375.7	507.4	507.4	507.4	56.4	55.5	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	36.0	1007.1	826.6	377.1	507.4	507.4	507.4	56.4	55.6	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	37.5	1006.8	826.8	378.4	507.4	507.4	507.4	56.5	55.6	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	39.0	1006.6	827.1	379.7	507.4	507.4	507.4	56.5	55.6	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	40.5	1006.3	827.2	380.8	507.4	507.4	507.4	56.5	55.7	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	42.0	1006.1	827.4	381.9	507.4	507.4	507.4	56.6	55.7	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	43.5	1005.9	827.6	382.9	507.4	507.4	507.4	56.6	55.7	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	45.0	1005.7	827.7	383.9	507.4	507.4	507.4	56.7	55.8	55.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	46.5	1005.5	827.8	384.8	507.4	507.4	507.4	56.7	55.8	55.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

67	48.0	1005.2	828.0	385.7	507.4	507.4	507.4	56.7	55.8	55.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68	49.5	1005.0	828.1	386.6	507.4	507.4	507.4	56.8	55.9	55.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
69	51.0	1004.8	828.2	387.4	507.4	507.4	507.4	56.8	55.9	55.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	52.5	1004.6	828.3	388.2	507.4	507.4	507.4	56.8	55.9	55.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71	54.0	1004.4	828.4	389.0	507.4	507.4	507.4	56.9	55.9	55.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72	55.5	1004.2	828.4	389.8	507.4	507.4	507.4	56.9	56.0	55.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73	57.0	1004.0	828.5	390.6	507.4	507.4	507.4	56.9	56.0	55.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74	58.5	1003.8	828.6	391.3	507.4	507.4	507.4	57.0	56.0	55.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	60.0	1003.6	828.7	392.0	507.4	507.4	507.4	57.0	56.1	55.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76	63.0	1003.3	828.8	393.4	507.4	507.4	507.4	57.1	56.1	55.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	66.0	1002.9	828.9	394.8	507.4	507.4	507.4	57.1	56.2	55.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	69.0	1002.5	829.1	396.1	507.4	507.4	507.4	57.2	56.2	55.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79	72.0	1002.1	829.2	397.4	507.4	507.4	507.4	57.2	56.3	55.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	75.0	1001.8	829.3	398.6	507.4	507.4	507.4	57.3	56.3	55.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	78.0	1001.4	829.4	399.8	507.4	507.4	507.4	57.3	56.4	55.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82	81.0	1001.1	829.4	400.9	507.4	507.4	507.4	57.4	56.4	55.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83	84.0	1000.7	829.5	402.0	507.4	507.4	507.4	57.4	56.5	55.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84	87.0	1000.4	829.6	403.1	507.4	507.4	507.4	57.5	56.5	55.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	90.0	1000.0	829.6	404.2	507.4	507.4	507.4	57.5	56.6	55.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	93.0	999.7	829.7	405.2	507.4	507.4	507.4	57.6	56.6	55.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87	96.0	999.3	829.7	406.2	507.4	507.4	507.4	57.6	56.7	55.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	99.0	999.0	829.8	407.2	507.4	507.4	507.4	57.7	56.7	55.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89	102.	998.7	829.8	408.2	507.4	507.4	507.4	57.7	56.7	55.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	105.	998.3	829.9	409.1	507.4	507.4	507.4	57.8	56.8	55.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91	108.	998.0	829.9	410.0	507.4	507.4	507.4	57.8	56.8	55.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	111.	997.7	829.9	410.9	507.4	507.4	507.4	57.9	56.9	55.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93	114.	997.3	829.9	411.8	507.4	507.4	507.4	57.9	56.9	55.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94	117.	997.0	829.9	412.7	507.4	507.4	507.4	57.9	56.9	55.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	120.	996.7	829.9	413.5	507.4	507.4	507.4	58.0	57.0	55.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	123.	938.3	811.2	412.9	507.4	507.4	507.4	58.0	57.0	55.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	126.	884.9	774.2	406.7	507.4	507.4	507.4	58.0	57.1	55.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	129.	842.0	738.0	396.6	507.4	507.4	507.4	58.0	57.1	56.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	132.	806.7	706.4	385.2	507.4	507.4	507.4	57.9	57.1	56.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	135.	777.2	679.2	374.1	507.4	507.4	507.4	57.9	57.1	56.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101	138.	752.1	655.9	363.7	507.4	507.4	507.4	57.9	57.1	56.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102	141.	730.7	635.9	354.5	507.4	507.4	507.4	57.9	57.2	56.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103	144.	712.1	618.6	346.3	507.4	507.4	507.4	57.9	57.2	56.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104	147.	696.0	603.6	339.1	507.4	507.4	507.4	57.9	57.2	56.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105	150.	681.9	590.5	332.7	507.4	507.4	507.4	57.9	57.2	56.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

I	TT1(D/H)	TTH(D/H)	TTV-FLOOR	TTV-ROOF	TTV-VALLE	TTV-VALLV	TTV-VALLS	TTV-VALLN
1	0.00000E+00	458.87	0.00000E+00	3.78594E-02	3.76615E-02	3.76615E-02	3.76615E-02	3.76615E-02
2	458.87	315.68	0.00000E+00	2.83810E-02	2.82232E-02	2.82231E-02	2.82231E-02	2.82231E-02
3	242.68	0.00000E+00	0.00000E+00	1.47425E-02	1.46560E-02	1.46558E-02	1.46558E-02	1.46558E-02
4	0.00000E+00	0.00000E+00	0.00000E+00	4.70800E-03	4.67929E-03	4.67832E-03	4.67832E-03	4.67832E-03
5	200.71	0.00000E+00	0.00000E+00	8.81828E-04	8.76271E-04	8.70335E-04	8.70335E-04	8.70335E-04
6	0.00000E+00	0.00000E+00	0.00000E+00	9.87988E-05	9.81588E-05	1.33419E-04	1.33419E-04	1.33419E-04
7		0.00000E+00	0.00000E+00	4.90059E-06	4.86808E-06	0.00000E+00	0.00000E+00	0.00000E+00

***** ROOM NO IS 2 *****

I	TTV-D	TTV-U	TTV-E	TTV-V	TTV-S	TTV-N
1	627.	-1.833E-04	2.87	0.000E+00	0.000E+00	0.000E+00
2	536.	-1.137E-13	2.18	0.000E+00	0.000E+00	0.000E+00
3	278.	-1.137E-13	1.15	0.000E+00	0.000E+00	0.000E+00
4	102.	-1.137E-13	0.365	0.000E+00	0.000E+00	0.000E+00
5	74.8	-1.137E-13	6.634E-02	0.000E+00	0.000E+00	0.000E+00
6	38.1	-1.137E-13	7.116E-03	0.000E+00	0.000E+00	0.000E+00
7	11.8	-1.137E-13	3.261E-04	0.000E+00	0.000E+00	0.000E+00
8	2.11	-1.137E-13	9.170E-06	0.000E+00	0.000E+00	0.000E+00
9	0.222	-1.137E-13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
10	9.956E-03	-1.137E-13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
11	2.685E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
12	6.016E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

*****ROOM NO IS 3 *****

TTV-D	TTV-U	TTV-E	TTV-V	TTV-S	TTV-N
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

***** CASE 1 IS OVER *****

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1  TIME= 6909.681 SEC     DELTA T= 0.12686 SEC

 TS      517.99      554.16      591.07      627.84      662.29      691.74      713.84      727.63      734.41      736.88

 TG      141.09      69.204      68.873      68.401      67.816      67.119      66.293      65.327      64.225      63.017

 TB      1450.3      1371.0      1380.6      1381.1      1374.4      1358.8      1335.9      1311.2      1291.6      1279.9

 RE      238.67      396.33      540.41      667.47      778.77      849.51      904.95      939.82      957.73      962.74

 HH      287.67      382.08      424.19      460.27      488.37      510.06      526.60      539.18      548.97      556.93

 RB     0.14550     0.14556     0.14633     0.14806     0.15131     0.15637     0.16271     0.16873     0.17250     0.17337

 O      0.28939     0.28852     0.28742     0.28610     0.28454     0.28268     0.28043     0.27772     0.27451     0.27092

 VORO    59.012      175.20      282.41      378.25      457.80      520.53      567.48      600.74      622.91      636.67

 NORO         6           6           6           6           6           6           6           6           6           6

 DMO    7.45011E-03 2.11162E-03 3.42321E-03 4.62775E-03 5.68364E-03 6.57665E-03 7.31157E-03 7.90284E-03 8.36991E-03 8.73352E-03

   PG= 1.43616E-03   TGIN=  76.251       YO= 0.20518       TSTEEL=  37.872       SORATE= 0.22664       DELTA= 0.14711
   SUMIN=  21188.      -SUMMA=  6099.5       TGOUT=  61.851       AVG GAS TEMP=  61.879       GAS VELOCITY=  115.36
   TURB      FREE      CONVECTION AT WALL, H=  1.5879 GR= 5.30367E+10 RE=  626.23       TPLATE=  507.40
   TFLOOR=  688.75       TPOOL=  687.51       YH2O= 4.70605E-02  PH2O= 4.85613E-02   YH2= 2.57314E-04   PH2= 2.78561E-03
   GIN=6.13745E-02 GOUT= 31.713      GASMOL= 31.776      G2=0.00000E+00 GT= 31.776      O2M= 6.5198      H2OM= 1.4954      H2M=8.17662E-03
   POOL  = 14.911      APOOL =0.12506      AFLOOR=0.31773      CPOOL = 4.4732
   SORADS= 22933.      SIGSRM= 27373.      SIGMAB= 13.416


T
      HEAT TRANSFER RATE KCAL /SEC  -

                 QCONV1=-0.14272         CONVECTION FROM DROPLET TO BURN ZONE
0                RRAD1 =-1.17423E-02     RADIATION FROM DROPLET TO BURN ZONE
0                QCONV2= 0.30721         CONVECTION FROM BURN ZONE TO INNERGAS
0                RRAD2 = 0.00000E+00     RADIATION FROM BURN ZONE TO WALL
0                QCONV3= 1.58799E-02     CONVECTION FROM INNERGAS TO OUTERGAS
0                QCONV4= 0.43009         CONVECTION FROM OUTERGAS TO WALL
0                QPLATE= -2.7625         HEAT INTO IMPACT PLATE
0                QCONV5= 0.23952         HEAT FROM SODIUM POOL TO GAS
0                QCONV6=-7.03583E-02     HEAT FROM SODIUM POOL TO FLOOR
0                QCONV1 + QRAD1=0.15447          TOTAL FROM TA TO TB
0                QCONV2 + QRAD2 0.30721          TOTAL FROM TB TO TC AND TV
0                RRAD3 = 0.00000E+00     RADIATION FROM INNERGAS TO WALL
0                RRAD4 = 0.00000E+00     RADIATION FROM POOL TO WALL
0                RRAD5 = 0.92445         RADIATION FROM POOL TO OUTERGAS
0                RRAD6 = -1.7575         RADIATION FROM WALL TO OUTERGAS


1
      HEAT TRANSFER TOTL KCAL       -

                 QCONV1= -6214.8         CONVECTION FROM DROPLET TO BURN ZONE
0                RRAD1 = -502.43         RADIATION FROM DROPLET TO BURN ZONE
0                QCONV2=  13394.         CONVECTION FROM BURN ZONE TO INNERGAS
0                RRAD2 = 0.00000E+00     RADIATION FROM BURN ZONE TO WALL
0                QCONV3=  952.84         CONVECTION FROM INNERGAS TO OUTERGAS
0                QCONV4=  7116.6         CONVECTION FROM OUTERGAS TO WALL
0                QPLATE= -23601.         HEAT INTO IMPACT PLATE
0                QCONV5=  3339.9         HEAT FROM SODIUM POOL TO GAS
0                QCONV6=  1247.3         HEAT FROM SODIUM POOL TO FLOOR
0                QCONV1 + QRAD1 -6717.3          TOTAL FROM TA TO TB
0                QCONV2 + QRAD2  13394.          TOTAL FROM TB TO TC AND TV
0                RRAD3 = 0.00000E+00     RADIATION FROM INNERGAS TO WALL
0                RRAD4 = 0.00000E+00     RADIATION FROM POOL TO WALL

0                QSOD  = 0.00000E+00     HEAT GAIN BY SODIUM
0                QVAP  =  3794.6         HEAT ABSORBED IN VAPORIZATION
1     THE DISTRIBUTION OF TEMPERATURE
0              NO.      TPLATE           TSTEEL           TFLOOR

                1       507.40           37.872           688.75
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SPRAY PART (最終結果)

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1  TIME= 8973.108 SEC     DELTA T= 0.12683 SEC
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TS      517.99      534.16      591.07      627.87      662.28      691.73      713.84      727.63      734.41      736.88

TG      141.17      69.193      68.861      68.368      67.804      67.105      66.279      65.311      64.208      62.998

TB      1450.4      1371.0      1380.8      1381.2      1374.4      1358.8      1335.9      1311.3      1291.6      1279.9

RE      238.47      396.12      540.20      667.27      770.59      849.36      904.83      939.72      957.65      962.67

HK      287.59      382.03      424.14      460.24      488.34      510.04      526.58      539.17      548.97      556.94

RB     0.14550     0.14555     0.14633     0.14805     0.15131     0.15636     0.16271     0.16872     0.17250     0.17337

O      0.28938     0.28851     0.28741     0.28609     0.28453     0.28267     0.28043     0.27771     0.27451     0.27091

VDRO    59.015      175.20      282.42      378.26      457.83      520.58      567.54      600.82      623.01      636.73

MDRO            6           6           6           6           6           6           6           6           6           6

DHO    7.45072E-03 2.11199E-03 3.42349E-03 4.62813E-03 5.68411E-03 6.57719E-03 7.31217E-03 7.90349E-03 8.37060E-03 8.73424E-03

  PG= 1.45610E-03   TGIN=  76.249       YO= 0.20519       TSTEEL=  37.869       SORATE= 0.22664       DELTA= 0.14710
  SUMIN=  21224.       SUMMA=  6109.2       TGOUT=  61.831       AVG GAS TEMP=  61.859       GAS VELOCITY=  115.41
  TURB      FREE       CONVECTION AT WALL, H=  1.5852 GR= 5.28145E+10 RE=  625.48       TPLATE=  507.40
  TFLOOR=  683.88       TPOOL=  682.76       YH2O= 4.70613E-02  PH2O= 4.85621E-02   YH2= 2.57642E-04   PH2= 3.79036E-03
  GIN=6.13782E-02 GOUT= 31.717      GASHOL= 31.778      G2=0.00000E+00 GT= 31.778      O2M= 6.5204      H2OM= 1.4955      H2M=8.18737E-03
  POOL  = 14.934      APOOL =0.12506      AFLOOR=0.31803      CPOOL = 4.4802
  SQRADS= 22991.      SIGBRN= 27420.      SIGWAB= 13.439


1
      HEAT TRANSFER RATE KCAL /SEC  -

                QCONV1=-0.14272         CONVECTION FROM DROPLET TO BURN ZONE
0               QRAD1 =-1.17430E-02     RADIATION FROM DROPLET TO BURN ZONE
0               QCONV2= 0.30718         CONVECTION FROM BURN ZONE TO INNERGAS
0               QRAD2 = 0.00000E+00     RADIATION FROM BURN ZONE TO WALL
0               QCONV3= 1.59045E-02     CONVECTION FROM INNERGAS TO OUTERGAS
0               QCONV4= 0.42745         CONVECTION FROM OUTERGAS TO WALL
0               QPLATE= -2.7618         HEAT INTO IMPACT PLATE
0               QCONV5= 0.23714         HEAT FROM SODIUM POOL TO GAS
0               QCONV6=-6.35242E-02     HEAT FROM SODIUM POOL TO FLOOR
0               QCONV1 + QRAD1=0.15446          TOTAL FROM TA TO TB
0               QCONV2 + QRAD2 0.30718          TOTAL FROM TB TO TC AND TV
0               QRAD3 = 0.00000E+00     RADIATION FROM INNERGAS TO WALL
0               QRAD4 = 0.00000E+00     RADIATION FROM POOL TO WALL
0               QRAD5 = 0.90600         RADIATION FROM POOL TO OUTERGAS
0               QRAD6 = -1.7496         RADIATION FROM WALL TO OUTERGAS


1
      HEAT TRANSFER TOTL KCAL       -

                QCONV1= -6223.1         CONVECTION FROM DROPLET TO BURN ZONE
0               QRAD1 = -503.11         RADIATION FROM DROPLET TO BURN ZONE
/               QCONV2=  13611.         CONVECTION FROM BURN ZONE TO INNERGAS
L               QRAD2 = 0.00000E+00     RADIATION FROM BURN ZONE TO WALL
0               QCONV3=  953.72         CONVECTION FROM INNERGAS TO OUTERGAS
0               QCONV4=  7142.8         CONVECTION FROM OUTERGAS TO WALL
0               QPLATE= -23773.         HEAT INTO IMPACT PLATE
0               QCONV5=  3374.6         HEAT FROM SODIUM POOL TO GAS
0               QCONV6=  1242.9         HEAT FROM SODIUM POOL TO FLOOR
0               QCONV1 + QRAD1 -6726.2          TOTAL FROM TA TO TB
0               QCONV2 + QRAD2  13611.          TOTAL FROM TB TO TC AND TV
0               QRAD3 = 0.00000E+00     RADIATION FROM INNERGAS TO WALL
0               QRAD4 = 0.00000E+00     RADIATION FROM POOL TO WALL

0               QSOD  = 0.00000E+00     HEAT GAIN BY SODIUM
0               QVAP  =  5802.2         HEAT ABSORTED IN VAPORIZATION
1     THE DISTRIBUTION OF TEMPERATURE
0             NO.     TPLATE          TSTEEL          TFLOOR

              1       507.40          37.869          683.88
              2       507.40          37.181          592.36
              3       507.40          36.150          333.64
              4       507.40          35.363          156.63
              5       507.40          35.066          129.72
              6       507.40          35.007          92.971
              7       507.40          35.000          66.740
              8       507.40          35.000          37.086
              9       507.40        0.00000E+00       35.219
             10       507.40        0.00000E+00       35.010
             11     0.00000E+00     0.00000E+00       35.000
             12     0.00000E+00     0.00000E+00       35.000
ERROR SUMMARY (FORTRAN77 EX)
ERROR NUMBER  ERROR LEVEL  ERROR COUNT
  JVE03051        W             1
TOTAL ERROR COUNT =     1
```

4.4 FACOM及びDECでの計算結果の比較のまとめ

試入力データを用いてFACOM上とEWS上で解析を行った結果、着目している"TFLLOR"を初め、全ての変数の値は有効数字3桁までは一致し、4桁目に若干の違いが見られた程度であり、両者の結果はほとんど一致していると判断できる。

以上より、計算機種によるASSCOPSコードの計算結果に差異は生じないと考えられる。

5. その他

これまでに記載したもの以外に

・コンパイル時のWarning
・有効桁数（実定数の有効桁数　7桁との整合）

について検討を行った。

5.1 ｺﾝﾊﾟｲﾙ時Warning

FUNCTION TEMPNA

```
      FUNCTION TEMPNA(T)
C
      COMMON /IDATA/ NV,NPRT,ND,J,MSN(3),IIRAD,IIMESH,IIREST,
     1           III,ITABL,ITANI
      COMMON /TABLS/ TYM(50),QUAN(50),QUANT(50)
C
CCCC  DEFINE TEMPERATURE OF SODIUM
C
      IF( T.LT.TYM(1) ) PRINT 600
      DO 100 J=2,ITABL
      IF( T.GE.TYM(J) ) GO TO 100
      TEMPNA = ( T-TYM(J-1) ) / ( TYM(J)-TYM(J-1) )
     1     * ( QUANT(J)-QUANT(J-1) ) + QUANT(J-1)
      RETURN
C
  100 CONTINUE
      PRINT 610
      RETURN
C
  600 FORMAT(1H ,10X,'BELOW TABLE RANGE (TEMPNA)')
  610 FORMAT(1H ,10X,'ABOVE TABLE RANGE (TEMPNA)')
      END
```

FUNCTION FSOD

```
      FUNCTION FSOD(T)
C
      COMMON /IDATA/ NV,NPRT,ND,J,MSN(3),IIRAD,IIMESH,IIREST
     1           ,III,ITABL,ITANI
      COMMON /TABLS/ TYM(50),QUAN(50),QUANT(50)
C
      IF(T.LT.TYM(1)) PRINT 600
      DO 100 J=2,ITABL
      IF(T.GE.TYM(J)) GO TO 100
      FSOD = QUAN(J-1)
     1    + (QUAN(J)-QUAN(J-1))*(T-TYM(J-1))/(TYM(J)-TYM(J-1))
      RETURN
C
  100 CONTINUE
      PRINT 610
      RETURN
C
  600 FORMAT(/10X,'BELOW TABLE RANGE')
  610 FORMAT(/10X,'ABOVE TABLE RANGE')
      END
```

※上記2 FUNCTIONは、変数Tの値がTABEL RANGEの範囲外の場合、関数TEMPNAおよびFSODが値を持たずにSUBROUTINEに戻ることになる。

5.2 有効桁数

SUBROUTINE HSS

```
      SUBROUTINE HSS(P,T,V,H,S)
C
      E1 = (T+459.688)/2.84378159
      E2 = 0.0862139787*E1
      E3 = ALOG(E2)
      E4 = -E3/0.048615207
      E5 = 0.73726439 - (0.0170952671*E4)
      E6 = 0.1286073*P
      E7 = ALOG(E6)
      E8 = E7/9.07243502
      E9 = 14.3582702 + (45.4653859*E8)
      E10 = (E2**2)/0.79836127
      E11 = 37.2999654E-4/E10
      E12 = 186210.0562*E11
      E13 = EXP(E12+E7-E3+4.3342998)
      E14 = E13 - E6
      E15 = E11*(E14**2)
      E16 = E15**2
      E17 = 3464.3764/E2
      E18 = -1.279514846*E17
      E19 = E15*(E18+41.273)
      E20 = E16*(E2-(.5*E17))
      E21 = 2.*(E19+(2.*E20))
      E22 = E15*((E17*E15)-E18)
      IF(E2.GT.18.8131323+(E9*E8)) GO TO 150
      E23 = (E16**3)*E14
      E24 = ((E11**2)/0.141431346E-10)**6
      E25 = -E23*(E24-6.71076923E-4)/24.
      E20 = E20 + E25
      E22 = E22 + E23*E24
      E21 = E21 + E25*13.
  150 CONTINUE
      V = 0.0302749643*(E21-E14+(83.47150448*E2))/E6
C
C     V MUST BE GREATER THAN .1603LB/CU.FT FOR FOREGOING TO BE VALID
C
      E26 = E13 + 2.*E13*E12
      E27 = E26*E21/E14 + E21 - E22 - E26
      H  = 835.417534-E4+E1+(0.04355685*(E19+E10-E14+E27))
      S  = E5-E8-(0.00132049845*(472.24937+E20-E27-(2.*E10))/E2)
C
      RETURN
C
      END
```

※実定数の有効桁数は７桁であるため、計算機による計算誤差が生じる。幾つかの数を加算するときの四捨五入による誤差や、大きな数から大きな数を引くときには、有効数字が減り、相対精度が悪くなることがある（桁落ち）。

6. HP解析

大型計算機FACOMのASSCOPSｺｰﾄﾞﾌﾟﾛｸﾞﾗﾑをEWSであるDECに移植し、同等の計算結果がでるようにﾌﾟﾛｸﾞﾗﾑ修正を行った。
この修正ﾌﾟﾛｸﾞﾗﾑがEWS機種間で互換性があるかどうかを確認するため、DEC機とは異なるHP機によって解析を行った。

6.1 留意点

DECへの移植ｺｰﾄﾞを以下のようなｵﾌﾟｼｮﾝを付けてｺﾝﾊﾟｲﾙすることにより、HP上においても正常に動作する。

ｺﾝﾊﾟｲﾙｵﾌﾟｼｮﾝ　：　－K

-K Automatically SAVE all local variables in all subprograms. This option forces static storage for these variables in order to provide a convenient path for importing FORTRAN 66 and FORTRAN 77 programs that were written to depend on static allocation of memory (that is, variables retaining their values between invocations of their containing program units). This option has two side-effects:

6.2 HP解析結果

SOFIRE PART（最終結果）

1 ***** ROOM NUMBER IS 1 *****

I	TIME(MIN)	TGAS(D-C)	PGAS(KG/CM2)	CO2(V/O)	CH2O(V/O)	TWD1(D-C)	TWU1(D-C)	TWE1(D-C)	TWW1(D-C)	TWS1(D-C)	TWN1(D-C)
1	.000E+00	55.000	-2.2995E-04	20.64	4.726	55.000	55.000	55.000	55.000	55.000	55.000
2	.120	55.000	2.5368E-03	20.64	4.726	55.000	55.000	55.000	55.000	55.000	55.000
3	.240	55.000	2.5507E-03	20.64	4.726	55.000	55.000	55.000	55.000	55.000	55.000
4	.360	55.000	2.5513E-03	20.64	4.726	55.000	55.000	55.000	55.000	55.000	55.000
5	.480	55.000	2.5513E-03	20.64	4.726	55.000	55.000	55.000	55.000	55.000	55.000
6	.600	55.000	2.5519E-03	20.64	4.726	55.000	55.000	55.000	55.000	55.000	55.000
7	1.20	55.020	2.5554E-03	20.64	4.725	55.000	55.000	55.000	55.000	55.000	55.000
8	1.80	55.045	2.5551E-03	20.64	4.725	55.000	55.000	55.000	55.000	55.000	55.000
9	2.40	55.071	2.5547E-03	20.64	4.725	55.000	55.001	55.001	55.001	55.001	55.001
10	3.00	55.091	2.5539E-03	20.64	4.725	55.000	55.001	55.001	55.001	55.001	55.001
11	3.60	55.108	2.5531E-03	20.64	4.725	55.000	55.002	55.002	55.002	55.002	55.002
12	4.20	55.123	2.5530E-03	20.64	4.725	55.000	55.002	55.002	55.002	55.002	55.002
13	4.80	55.136	2.5531E-03	20.64	4.725	55.000	55.003	55.003	55.003	55.003	55.003
14	5.40	55.148	2.5527E-03	20.64	4.725	55.000	55.004	55.004	55.004	55.004	55.004
15	6.00	55.157	2.5520E-03	20.64	4.725	55.000	55.005	55.005	55.005	55.005	55.005
16	6.60	55.166	2.5524E-03	20.64	4.725	55.000	55.005	55.005	55.005	55.005	55.005
17	7.20	55.174	2.5526E-03	20.64	4.725	55.000	55.006	55.006	55.006	55.006	55.006
18	7.80	55.181	2.5526E-03	20.64	4.725	55.000	55.007	55.007	55.007	55.007	55.007
19	8.40	55.188	2.5517E-03	20.64	4.725	55.000	55.008	55.008	55.008	55.008	55.008
20	9.00	55.193	2.5511E-03	20.64	4.725	55.000	55.009	55.009	55.009	55.009	55.009
21	9.60	55.197	2.5513E-03	20.64	4.725	55.000	55.010	55.009	55.009	55.009	55.009
22	10.2	55.192	.0000E+00	20.64	4.725	55.000	55.010	55.010	55.010	55.010	55.010
23	10.8	55.168	-1.1921E-07	20.64	4.725	55.000	55.011	55.011	55.011	55.011	55.011
24	11.4	55.145	4.7684E-07	20.64	4.725	55.000	55.012	55.011	55.011	55.011	55.011
25	12.0	55.138	-2.3842E-07	20.64	4.725	55.000	55.012	55.012	55.012	55.012	55.012
26	12.6	55.138	1.1921E-07	20.64	4.725	55.000	55.012	55.012	55.012	55.012	55.012
27	13.2	55.138	2.3842E-07	20.64	4.725	55.000	55.013	55.013	55.013	55.013	55.013
28	13.8	55.138	-2.3842E-07	20.64	4.725	55.000	55.013	55.013	55.013	55.013	55.013
29	14.4	55.139	1.1921E-07	20.64	4.725	55.000	55.013	55.013	55.013	55.013	55.013

30	15.0	55.139	-2.3842E-07	20.64	4.725	55.000	55.014	55.013	55.013	55.013	55.013
31	15.6	55.140	.0000E+00	20.64	4.725	55.000	55.014	55.014	55.014	55.014	55.014
32	16.2	55.141	1.1921E-07	20.64	4.725	55.000	55.014	55.014	55.014	55.014	55.014
33	16.8	55.142	-3.5763E-07	20.64	4.725	55.000	55.015	55.014	55.014	55.014	55.014
34	17.4	55.143	.0000E+00	20.64	4.725	55.000	55.015	55.015	55.015	55.015	55.015
35	18.0	55.144	-1.1921E-07	20.64	4.725	55.000	55.015	55.015	55.015	55.015	55.015
36	18.6	55.145	-2.3842E-07	20.64	4.725	55.000	55.015	55.015	55.015	55.015	55.015
37	19.2	55.146	-2.3842E-07	20.64	4.725	55.000	55.016	55.016	55.016	55.016	55.016
38	19.8	55.147	-1.1921E-07	20.64	4.725	55.000	55.016	55.016	55.016	55.016	55.016
39	20.4	55.148	3.5763E-07	20.64	4.725	55.000	55.016	55.016	55.016	55.016	55.016
40	21.0	55.149	-1.1921E-07	20.64	4.725	55.000	55.017	55.017	55.017	55.017	55.017
41	21.6	55.150	-1.1921E-07	20.64	4.725	55.000	55.017	55.017	55.017	55.017	55.017
42	22.2	55.151	-1.1921E-07	20.64	4.725	55.000	55.017	55.017	55.017	55.017	55.017
43	22.8	55.152	2.3842E-07	20.64	4.725	55.000	55.018	55.018	55.018	55.018	55.018
44	23.4	55.153	1.1921E-07	20.64	4.725	55.000	55.018	55.018	55.018	55.018	55.018
45	24.0	55.154	-1.1921E-07	20.64	4.724	55.000	55.018	55.018	55.018	55.018	55.018
46	24.6	55.155	5.9605E-07	20.64	4.724	55.000	55.019	55.018	55.018	55.018	55.018
47	25.2	55.156	2.3842E-07	20.64	4.724	55.000	55.019	55.019	55.019	55.019	55.019
48	25.8	55.157	2.3842E-07	20.64	4.724	55.000	55.019	55.019	55.019	55.019	55.019
49	26.4	55.158	1.1921E-07	20.64	4.724	55.000	55.020	55.019	55.019	55.019	55.019
50	27.0	55.159	1.1921E-07	20.64	4.724	55.000	55.020	55.020	55.020	55.020	55.020
51	27.6	55.160	.0000E+00	20.64	4.724	55.000	55.020	55.020	55.020	55.020	55.020
52	28.2	55.161	.0000E+00	20.63	4.724	55.000	55.020	55.020	55.020	55.020	55.020
53	28.8	55.162	.0000E+00	20.63	4.724	55.000	55.021	55.021	55.021	55.021	55.021
54	29.4	55.163	2.3842E-07	20.63	4.724	55.000	55.021	55.021	55.021	55.021	55.021
55	30.0	55.164	3.5763E-07	20.63	4.724	55.000	55.021	55.021	55.021	55.021	55.021
56	31.5	55.167	-2.3842E-07	20.63	4.724	55.000	55.022	55.022	55.022	55.022	55.022
57	33.0	55.169	-2.3842E-07	20.63	4.724	55.000	55.023	55.023	55.023	55.023	55.023
58	34.5	55.171	1.1921E-07	20.63	4.724	55.000	55.024	55.024	55.024	55.024	55.024
59	36.0	55.173	2.3842E-07	20.63	4.724	55.000	55.025	55.024	55.024	55.024	55.024
60	37.5	55.175	.0000E+00	20.63	4.723	55.000	55.025	55.025	55.025	55.025	55.025
61	39.0	55.177	.0000E+00	20.63	4.723	55.000	55.026	55.026	55.026	55.026	55.026
62	40.5	55.178	3.5763E-07	20.63	4.723	55.000	55.027	55.027	55.027	55.027	55.027
63	42.0	55.180	-2.3842E-07	20.63	4.723	55.000	55.028	55.027	55.027	55.027	55.027
64	43.5	55.181	1.1921E-07	20.63	4.723	55.000	55.028	55.028	55.028	55.028	55.028
65	45.0	55.182	1.1921E-07	20.62	4.723	55.000	55.029	55.029	55.029	55.029	55.029
66	46.5	55.183	.0000E+00	20.62	4.723	55.000	55.030	55.029	55.029	55.029	55.029
67	48.0	55.184	-1.1921E-07	20.62	4.722	55.000	55.030	55.030	55.030	55.030	55.030

68	49.5	55.185	3.5763E-07	20.62	4.722	55.000	55.031	55.031	55.031	55.031	55.031
69	51.0	55.186	-2.3842E-07	20.62	4.722	55.000	55.032	55.031	55.031	55.031	55.031
70	52.5	55.187	-1.1921E-07	20.62	4.722	55.000	55.032	55.032	55.032	55.032	55.032
71	54.0	55.189	3.5763E-07	20.62	4.722	55.000	55.033	55.033	55.033	55.033	55.033
72	55.5	55.189	-1.1921E-07	20.62	4.722	55.000	55.034	55.033	55.033	55.033	55.033
73	57.0	55.190	-1.1921E-07	20.62	4.722	55.000	55.034	55.034	55.034	55.034	55.034
74	58.5	55.191	4.7684E-07	20.61	4.721	55.000	55.035	55.035	55.035	55.035	55.035
75	60.0	55.192	.0000E+00	20.61	4.721	55.000	55.035	55.035	55.035	55.035	55.035
76	63.0	55.196	2.3842E-07	20.61	4.721	55.000	55.037	55.036	55.036	55.036	55.036
77	66.0	55.198	1.1921E-07	20.61	4.721	55.000	55.038	55.038	55.038	55.038	55.038
78	69.0	55.200	.0000E+00	20.61	4.720	55.000	55.039	55.039	55.039	55.039	55.039
79	72.0	55.202	3.5763E-07	20.60	4.720	55.000	55.040	55.040	55.040	55.040	55.040
80	75.0	55.204	-2.3842E-07	20.60	4.720	55.000	55.041	55.041	55.041	55.041	55.041
81	78.0	55.206	-1.1921E-07	20.60	4.720	55.000	55.042	55.042	55.042	55.042	55.042
82	81.0	55.207	-2.3842E-07	20.60	4.719	55.000	55.043	55.043	55.043	55.043	55.043
83	84.0	55.209	1.1921E-07	20.60	4.719	55.000	55.044	55.044	55.044	55.044	55.044
84	87.0	55.211	-2.3842E-07	20.59	4.719	55.000	55.046	55.045	55.045	55.045	55.045
85	90.0	55.212	-1.1921E-07	20.59	4.718	55.000	55.047	55.046	55.046	55.046	55.046
86	93.0	55.214	1.1921E-07	20.59	4.718	55.000	55.048	55.047	55.047	55.047	55.047
87	96.0	55.216	3.5763E-07	20.59	4.718	55.000	55.049	55.048	55.048	55.048	55.048
88	99.0	55.217	.0000E+00	20.58	4.717	55.000	55.050	55.049	55.049	55.049	55.049
89	102.	55.219	-1.1921E-07	20.58	4.717	55.000	55.051	55.050	55.050	55.050	55.050
90	105.	55.220	-3.5763E-07	20.58	4.717	55.000	55.052	55.051	55.051	55.051	55.051
91	108.	55.222	-1.1921E-07	20.58	4.716	55.000	55.053	55.052	55.052	55.052	55.052
92	111.	55.223	1.1921E-07	20.58	4.716	55.000	55.053	55.053	55.053	55.053	55.053
93	114.	55.225	1.1921E-07	20.57	4.716	55.000	55.054	55.054	55.054	55.054	55.054
94	117.	55.227	3.5763E-07	20.57	4.716	55.000	55.055	55.055	55.055	55.055	55.055
95	120.	55.228	2.3842E-07	20.57	4.715	55.000	55.056	55.056	55.056	55.056	55.056
96	123.	55.206	.0000E+00	20.57	4.715	55.000	55.057	55.057	55.057	55.057	55.057
97	126.	55.199	-1.1921E-07	20.56	4.715	55.000	55.057	55.057	55.057	55.057	55.057
98	129.	55.195	1.1921E-07	20.56	4.714	55.000	55.057	55.057	55.057	55.057	55.057
99	132.	55.193	.0000E+00	20.56	4.714	55.000	55.058	55.057	55.057	55.057	55.057
100	135.	55.191	.0000E+00	20.56	4.714	55.000	55.058	55.057	55.057	55.057	55.057
101	138.	55.189	-1.1921E-07	20.56	4.714	55.000	55.058	55.058	55.058	55.058	55.058
102	141.	55.187	.0000E+00	20.56	4.713	55.000	55.058	55.058	55.058	55.058	55.058
103	144.	55.186	.0000E+00	20.56	4.713	55.000	55.059	55.058	55.058	55.058	55.058
104	147.	55.185	.0000E+00	20.56	4.713	55.000	55.059	55.058	55.058	55.058	55.058
105	150.	55.184	1.1921E-07	20.55	4.713	55.000	55.059	55.059	55.059	55.059	55.059

I	TIME(MIN)	TWD1	TWD2	TWD3	TWU1	TWU2	TWU3	TWE1	TWE2	TWE3	TWW1	TWW2	TWW3	TWS1	TWS2	TWS3	TWN1	TWN2	TWN3
1	.000E+00	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
2	.120	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
3	.240	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
4	.360	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
5	.480	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
6	.600	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
7	1.20	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
8	1.80	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
9	2.40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
10	3.00	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
11	3.60	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
12	4.20	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
13	4.80	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
14	5.40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
15	6.00	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
16	6.60	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
17	7.20	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
18	7.80	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
19	8.40	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
20	9.00	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
21	9.60	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
22	10.2	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
23	10.8	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
24	11.4	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
25	12.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
26	12.6	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
27	13.2	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
28	13.8	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
29	14.4	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
30	15.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
31	15.6	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
32	16.2	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
33	16.8	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
34	17.4	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
35	18.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
36	18.6	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0

37	19.2	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
38	19.8	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
39	20.4	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
40	21.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
41	21.6	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
42	22.2	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
43	22.8	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
44	23.4	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
45	24.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
46	24.6	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
47	25.2	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
48	25.8	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
49	26.4	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
50	27.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
51	27.6	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
52	28.2	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
53	28.8	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
54	29.4	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
55	30.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
56	31.5	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
57	33.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
58	34.5	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
59	36.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
60	37.5	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
61	39.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
62	40.5	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
63	42.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
64	43.5	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
65	45.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
66	46.5	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
67	48.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
68	49.5	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
69	51.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
70	52.5	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
71	54.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
72	55.5	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
73	57.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
74	58.5	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0

75	60.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
76	63.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
77	66.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
78	69.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
79	72.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
80	75.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
81	78.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
82	81.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
83	84.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
84	87.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
85	90.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
86	93.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
87	96.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
88	99.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
89	102.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
90	105.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
91	108.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
92	111.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
93	114.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
94	117.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
95	120.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
96	123.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
97	126.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
98	129.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
99	132.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
100	135.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
101	138.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
102	141.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
103	144.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
104	147.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0
105	150.	55.0	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0	55.1	55.0	55.0

1 ***** ROOM NUMBER IS 2 *****

I	TIME(MIN)	TGAS(D-C)	PGAS(KG/CM2)	CO2(V/O)	CH2O(V/O)	TWD1(D-C)	TWU1(D-C)	TWE1(D-C)	TWW1(D-C)	TWS1(D-C)	TWN1(D-C)
1	.000E+00	55.000	-2.2995E-04	20.64	4.726	55.000	507.400	55.000	.000	.000	.000
2	.120	55.316	2.5368E-03	20.64	4.724	83.746	507.400	55.001	.000	.000	.000
3	.240	55.418	2.5507E-03	20.64	4.724	118.608	507.400	55.002	.000	.000	.000
4	.360	55.528	2.5513E-03	20.64	4.724	153.384	507.400	55.003	.000	.000	.000
5	.480	55.645	3.5239E-03	20.64	4.724	187.340	507.400	55.004	.000	.000	.000

6	.600	55.766	2.5519E-03	20.63	4.724	219.940	507.400	55.005	.000	.000	.000
7	1.20	56.385	2.5554E-03	20.63	4.723	371.058	507.400	55.014	.000	.000	.000
8	1.80	56.937	2.5551E-03	20.63	4.723	501.057	507.400	55.026	.000	.000	.000
9	2.40	57.408	2.5547E-03	20.62	4.723	610.261	507.400	55.041	.000	.000	.000
10	3.00	57.801	2.5539E-03	20.62	4.723	699.756	507.400	55.058	.000	.000	.000
11	3.60	58.161	2.5531E-03	20.62	4.723	771.322	507.400	55.077	.000	.000	.000
12	4.20	58.454	2.5530E-03	20.62	4.723	827.609	507.400	55.098	.000	.000	.000
13	4.80	58.731	2.5531E-03	20.62	4.722	871.173	507.400	55.120	.000	.000	.000
14	5.40	58.961	2.5527E-03	20.62	4.722	904.580	507.400	55.142	.000	.000	.000
15	6.00	59.146	2.5520E-03	20.62	4.722	929.966	507.400	55.166	.000	.000	.000
16	6.60	59.316	2.5524E-03	20.62	4.722	949.336	507.400	55.191	.000	.000	.000
17	7.20	59.461	2.5526E-03	20.62	4.722	964.053	507.400	55.215	.000	.000	.000
18	7.80	59.590	2.5526E-03	20.62	4.722	975.252	507.400	55.239	.000	.000	.000
19	8.40	59.663	2.5517E-03	20.62	4.722	983.805	507.400	55.263	.000	.000	.000
20	9.00	59.735	3.5310E-03	20.62	4.722	990.395	507.400	55.286	.000	.000	.000
21	9.60	59.798	2.5513E-03	20.62	4.722	995.472	507.400	55.308	.000	.000	.000
22	10.2	60.080	.0000E+00	20.62	4.722	999.372	507.400	55.329	.000	.000	.000
23	10.8	60.921	9.8670E-04	20.61	4.721	1001.963	507.400	55.356	.000	.000	.000
24	11.4	61.489	4.7684E-07	20.60	4.721	1003.754	507.400	55.388	.000	.000	.000
25	12.0	61.866	-2.3842E-07	20.60	4.720	1005.015	507.400	55.422	.000	.000	.000
26	12.6	62.141	1.1921E-07	20.59	4.719	1005.920	507.400	55.457	.000	.000	.000
27	13.2	62.306	2.3842E-07	20.58	4.719	1006.573	507.400	55.493	.000	.000	.000
28	13.8	62.432	9.8097E-04	20.58	4.718	1007.053	507.400	55.529	.000	.000	.000
29	14.4	62.525	1.1921E-07	20.57	4.717	1007.404	507.400	55.564	.000	.000	.000
30	15.0	62.602	-2.3842E-07	20.57	4.717	1007.661	507.400	55.597	.000	.000	.000
31	15.6	62.654	.0000E+00	20.56	4.716	1007.843	507.400	55.630	.000	.000	.000
32	16.2	62.705	1.1921E-07	20.56	4.716	1007.973	507.400	55.663	.000	.000	.000
33	16.8	62.747	-3.5763E-07	20.55	4.715	1008.058	507.400	55.694	.000	.000	.000
34	17.4	62.790	.0000E+00	20.55	4.715	1008.104	507.400	55.724	.000	.000	.000
35	18.0	62.824	-1.1921E-07	20.55	4.714	1008.132	507.400	55.755	.000	.000	.000
36	18.6	62.858	-2.3842E-07	20.54	4.714	1008.132	507.400	55.783	.000	.000	.000
37	19.2	62.890	-2.3842E-07	20.54	4.713	1008.113	507.400	55.811	.000	.000	.000
38	19.8	62.923	-1.1921E-07	20.53	4.713	1008.077	507.400	55.840	.000	.000	.000
39	20.4	62.957	3.5763E-07	20.53	4.712	1008.034	507.400	55.866	.000	.000	.000
40	21.0	62.966	-1.1921E-07	20.53	4.712	1007.978	507.400	55.892	.000	.000	.000
41	21.6	62.983	-1.1921E-07	20.52	4.712	1007.920	507.400	55.918	.000	.000	.000
42	22.2	62.997	-1.1921E-07	20.52	4.711	1007.854	507.400	55.942	.000	.000	.000
43	22.8	63.018	2.3842E-07	20.52	4.711	1007.780	507.400	55.966	.000	.000	.000

44	23.4	63.036	1.1921E-07	20.52	4.711	1007.705	507.400	55.990	.000	.000	.000
45	24.0	63.056	-1.1921E-07	20.51	4.710	1007.629	507.400	56.013	.000	.000	.000
46	24.6	63.084	5.9605E-07	20.51	4.710	1007.554	507.400	56.037	.000	.000	.000
47	25.2	63.105	2.3842E-07	20.51	4.710	1007.474	507.400	56.059	.000	.000	.000
48	25.8	63.126	2.3842E-07	20.50	4.709	1007.391	507.400	56.081	.000	.000	.000
49	26.4	63.148	1.1921E-07	20.50	4.709	1007.301	507.400	56.102	.000	.000	.000
50	27.0	63.171	1.1921E-07	20.50	4.709	1007.209	507.400	56.123	.000	.000	.000
51	27.6	63.195	.0000E+00	20.50	4.708	1007.115	507.400	56.144	.000	.000	.000
52	28.2	63.214	.0000E+00	20.50	4.708	1007.021	507.400	56.165	.000	.000	.000
53	28.8	63.233	.0000E+00	20.49	4.708	1006.927	507.400	56.186	.000	.000	.000
54	29.4	63.252	2.3842E-07	20.49	4.708	1006.833	507.400	56.207	.000	.000	.000
55	30.0	63.273	3.5763E-07	20.49	4.707	1006.739	507.400	56.226	.000	.000	.000
56	31.5	63.308	-2.3842E-07	20.48	4.707	1006.493	507.400	56.273	.000	.000	.000
57	33.0	63.352	-2.3842E-07	20.48	4.706	1006.258	507.400	56.320	.000	.000	.000
58	34.5	63.395	1.1921E-07	20.48	4.706	1006.029	507.400	56.367	.000	.000	.000
59	36.0	63.432	2.3842E-07	20.47	4.705	1005.810	507.400	56.411	.000	.000	.000
60	37.5	63.462	.0000E+00	20.47	4.705	1005.599	507.400	56.452	.000	.000	.000
61	39.0	63.504	.0000E+00	20.47	4.705	1005.396	507.400	56.493	.000	.000	.000
62	40.5	63.541	3.5763E-07	20.46	4.704	1005.195	507.400	56.535	.000	.000	.000
63	42.0	63.568	-2.3842E-07	20.46	4.704	1005.000	507.400	56.575	.000	.000	.000
64	43.5	63.602	1.1921E-07	20.46	4.704	1004.805	507.400	56.611	.000	.000	.000
65	45.0	63.630	1.1921E-07	20.46	4.703	1004.616	507.400	56.646	.000	.000	.000
66	46.5	63.646	.0000E+00	20.45	4.703	1004.429	507.400	56.681	.000	.000	.000
67	48.0	63.677	-1.1921E-07	20.45	4.703	1004.241	507.400	56.716	.000	.000	.000
68	49.5	63.702	3.5763E-07	20.45	4.703	1004.054	507.400	56.751	.000	.000	.000
69	51.0	63.727	-2.3842E-07	20.45	4.702	1003.872	507.400	56.786	.000	.000	.000
70	52.5	63.760	-1.1921E-07	20.45	4.702	1003.698	507.400	56.821	.000	.000	.000
71	54.0	63.792	3.5763E-07	20.44	4.702	1003.525	507.400	56.851	.000	.000	.000
72	55.5	63.809	-1.1921E-07	20.44	4.702	1003.359	507.400	56.880	.000	.000	.000
73	57.0	63.834	-1.1921E-07	20.44	4.701	1003.198	507.400	56.910	.000	.000	.000
74	58.5	63.858	4.7684E-07	20.44	4.701	1003.034	507.400	56.939	.000	.000	.000
75	60.0	63.880	.0000E+00	20.44	4.701	1002.875	507.400	56.968	.000	.000	.000
76	63.0	64.056	2.3842E-07	20.43	4.701	1002.506	507.400	57.038	.000	.000	.000
77	66.0	64.116	1.1921E-07	20.43	4.700	1002.130	507.400	57.101	.000	.000	.000
78	69.0	64.171	.0000E+00	20.43	4.700	1001.757	507.400	57.160	.000	.000	.000
79	72.0	64.223	3.5763E-07	20.43	4.699	1001.381	507.400	57.218	.000	.000	.000
80	75.0	64.277	9.7871E-04	20.42	4.699	1001.019	507.400	57.277	.000	.000	.000
81	78.0	64.318	-1.1921E-07	20.42	4.699	1000.691	507.400	57.336	.000	.000	.000

82	81.0	64.363	-2.3842E-07	20.42	4.698	1000.376	507.400	57.385	.000	.000	.000
83	84.0	64.406	1.1921E-07	20.42	4.698	1000.074	507.400	57.432	.000	.000	.000
84	87.0	64.439	-2.3842E-07	20.41	4.698	999.781	507.400	57.479	.000	.000	.000
85	90.0	64.482	-1.1921E-07	20.41	4.698	999.538	507.400	57.526	.000	.000	.000
86	93.0	64.535	1.1921E-07	20.41	4.697	999.277	507.400	57.573	.000	.000	.000
87	96.0	64.577	3.5763E-07	20.41	4.697	999.006	507.400	57.620	.000	.000	.000
88	99.0	64.606	.0000E+00	20.40	4.697	998.733	507.400	57.667	.000	.000	.000
89	102.	64.643	-1.1921E-07	20.40	4.696	998.466	507.400	57.714	.000	.000	.000
90	105.	64.684	-3.5763E-07	20.40	4.696	998.193	507.400	57.761	.000	.000	.000
91	108.	64.726	-1.1921E-07	20.40	4.696	997.911	507.400	57.808	.000	.000	.000
92	111.	64.770	1.1921E-07	20.40	4.696	997.629	507.400	57.855	.000	.000	.000
93	114.	64.820	1.1921E-07	20.39	4.695	997.348	507.400	57.902	.000	.000	.000
94	117.	64.870	3.5763E-07	20.39	4.695	997.066	507.400	57.949	.000	.000	.000
95	120.	64.896	2.3842E-07	20.39	4.695	996.784	507.400	57.996	.000	.000	.000
96	123.	63.363	.0000E+00	20.42	4.698	934.811	507.400	58.001	.000	.000	.000
97	126.	62.852	-1.1921E-07	20.44	4.700	881.987	507.400	57.980	.000	.000	.000
98	129.	62.557	1.1921E-07	20.46	4.702	839.531	507.400	57.956	.000	.000	.000
99	132.	62.378	.0000E+00	20.47	4.703	804.654	507.400	57.932	.000	.000	.000
100	135.	62.192	.0000E+00	20.49	4.704	775.467	507.400	57.915	.000	.000	.000
101	138.	62.028	9.7477E-04	20.49	4.705	750.690	507.400	57.900	.000	.000	.000
102	141.	61.912	.0000E+00	20.50	4.705	729.462	507.400	57.888	.000	.000	.000
103	144.	61.820	.0000E+00	20.51	4.706	711.115	507.400	57.876	.000	.000	.000
104	147.	61.747	.0000E+00	20.51	4.706	695.135	507.400	57.864	.000	.000	.000
105	150.	61.686	1.1921E-07	20.52	4.707	681.178	507.400	57.852	.000	.000	.000

I	TIME(MIN)	TWD1	TWD2	TWD3	TWU1	TWU2	TWU3	TWE1	TWE2	TWE3	TWW1	TWW2	TWW3	TWS1	TWS2	TWS3	TWN1	TWN2	TWN3
1	.000E+00	55.0	55.0	55.0	507.4	507.4	507.4	55.0	55.0	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	.120	83.7	55.5	55.0	507.4	507.4	507.4	55.0	55.0	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3	.240	118.6	57.3	55.0	507.4	507.4	507.4	55.0	55.0	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	.360	153.4	60.4	55.1	507.4	507.4	507.4	55.0	55.0	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5	.480	187.3	64.8	55.1	507.4	507.4	507.4	55.0	55.0	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6	.600	219.9	70.2	55.3	507.4	507.4	507.4	55.0	55.0	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	1.20	371.1	110.8	57.0	507.4	507.4	507.4	55.0	55.0	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8	1.80	501.1	166.5	61.0	507.4	507.4	507.4	55.0	55.0	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9	2.40	610.3	230.0	67.6	507.4	507.4	507.4	55.0	55.0	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	3.00	699.8	295.9	76.7	507.4	507.4	507.4	55.1	55.0	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11	3.60	771.3	360.2	88.0	507.4	507.4	507.4	55.1	55.0	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	4.20	827.6	420.7	101.0	507.4	507.4	507.4	55.1	55.0	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

13	4.80	871.2	475.8	115.3	507.4	507.4	507.4	55.1	55.0	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14	5.40	904.6	525.0	130.4	507.4	507.4	507.4	55.1	55.0	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15	6.00	930.0	567.9	145.9	507.4	507.4	507.4	55.2	55.0	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16	6.60	949.3	605.3	161.4	507.4	507.4	507.4	55.2	55.0	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17	7.20	964.1	637.3	176.8	507.4	507.4	507.4	55.2	55.0	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18	7.80	975.3	664.6	191.6	507.4	507.4	507.4	55.2	55.0	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19	8.40	983.8	687.9	205.8	507.4	507.4	507.4	55.3	55.0	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20	9.00	990.4	707.6	219.3	507.4	507.4	507.4	55.3	55.0	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
21	9.60	995.5	724.3	232.0	507.4	507.4	507.4	55.3	55.0	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
22	10.2	999.4	738.5	243.9	507.4	507.4	507.4	55.3	55.0	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23	10.8	1002.0	750.5	255.0	507.4	507.4	507.4	55.4	55.1	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
24	11.4	1003.8	760.7	265.2	507.4	507.4	507.4	55.4	55.1	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
25	12.0	1005.0	769.2	274.6	507.4	507.4	507.4	55.4	55.1	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26	12.6	1005.9	776.4	283.2	507.4	507.4	507.4	55.5	55.1	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
27	13.2	1006.6	782.6	291.2	507.4	507.4	507.4	55.5	55.1	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
28	13.8	1007.1	787.8	298.4	507.4	507.4	507.4	55.5	55.1	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
29	14.4	1007.4	792.3	305.0	507.4	507.4	507.4	55.6	55.1	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
30	15.0	1007.7	796.2	311.0	507.4	507.4	507.4	55.6	55.1	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
31	15.6	1007.8	799.5	316.5	507.4	507.4	507.4	55.6	55.1	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
32	16.2	1008.0	802.4	321.6	507.4	507.4	507.4	55.7	55.1	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33	16.8	1008.1	804.9	326.1	507.4	507.4	507.4	55.7	55.1	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
34	17.4	1008.1	807.2	330.3	507.4	507.4	507.4	55.7	55.2	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
35	18.0	1008.1	809.1	334.1	507.4	507.4	507.4	55.8	55.2	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
36	18.6	1008.1	810.8	337.6	507.4	507.4	507.4	55.8	55.2	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
37	19.2	1008.1	812.4	340.7	507.4	507.4	507.4	55.8	55.2	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
38	19.8	1008.1	813.7	343.6	507.4	507.4	507.4	55.8	55.2	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
39	20.4	1008.0	814.9	346.3	507.4	507.4	507.4	55.9	55.2	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
40	21.0	1008.0	816.0	348.7	507.4	507.4	507.4	55.9	55.2	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41	21.6	1007.9	817.0	351.0	507.4	507.4	507.4	55.9	55.2	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
42	22.2	1007.9	817.8	353.0	507.4	507.4	507.4	55.9	55.3	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
43	22.8	1007.8	818.6	355.0	507.4	507.4	507.4	56.0	55.3	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
44	23.4	1007.7	819.3	356.7	507.4	507.4	507.4	56.0	55.3	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
45	24.0	1007.6	819.9	358.3	507.4	507.4	507.4	56.0	55.3	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
46	24.6	1007.6	820.5	359.9	507.4	507.4	507.4	56.0	55.3	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
47	25.2	1007.5	821.0	361.3	507.4	507.4	507.4	56.1	55.3	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
48	25.8	1007.4	821.5	362.6	507.4	507.4	507.4	56.1	55.3	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49	26.4	1007.3	821.9	363.8	507.4	507.4	507.4	56.1	55.4	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
50	27.0	1007.2	822.3	365.0	507.4	507.4	507.4	56.1	55.4	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

51	27.6	1007.1	822.7	366.0	507.4	507.4	507.4	56.1	55.4	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
52	28.2	1007.0	823.0	367.1	507.4	507.4	507.4	56.2	55.4	55.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
53	28.8	1006.9	823.3	368.0	507.4	507.4	507.4	56.2	55.4	55.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
54	29.4	1006.8	823.6	368.9	507.4	507.4	507.4	56.2	55.4	55.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
55	30.0	1006.7	823.8	369.8	507.4	507.4	507.4	56.2	55.4	55.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
56	31.5	1006.5	824.3	371.7	507.4	507.4	507.4	56.3	55.5	55.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
57	33.0	1006.3	824.8	373.5	507.4	507.4	507.4	56.3	55.5	55.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
58	34.5	1006.0	825.2	375.1	507.4	507.4	507.4	56.4	55.5	55.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
59	36.0	1005.8	825.5	376.5	507.4	507.4	507.4	56.4	55.6	55.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
60	37.5	1005.6	825.8	377.8	507.4	507.4	507.4	56.5	55.6	55.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
61	39.0	1005.4	826.0	379.0	507.4	507.4	507.4	56.5	55.6	55.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
62	40.5	1005.2	826.2	380.2	507.4	507.4	507.4	56.5	55.7	55.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
63	42.0	1005.0	826.4	381.3	507.4	507.4	507.4	56.6	55.7	55.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
64	43.5	1004.8	826.6	382.3	507.4	507.4	507.4	56.6	55.7	55.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
65	45.0	1004.6	826.8	383.3	507.4	507.4	507.4	56.6	55.8	55.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
66	46.5	1004.4	826.9	384.3	507.4	507.4	507.4	56.7	55.8	55.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
67	48.0	1004.2	827.0	385.2	507.4	507.4	507.4	56.7	55.8	55.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
68	49.5	1004.1	827.2	386.0	507.4	507.4	507.4	56.8	55.8	55.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
69	51.0	1003.9	827.3	386.9	507.4	507.4	507.4	56.8	55.9	55.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
70	52.5	1003.7	827.4	387.7	507.4	507.4	507.4	56.8	55.9	55.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
71	54.0	1003.5	827.5	388.5	507.4	507.4	507.4	56.9	55.9	55.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
72	55.5	1003.4	827.6	389.3	507.4	507.4	507.4	56.9	56.0	55.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
73	57.0	1003.2	827.8	390.1	507.4	507.4	507.4	56.9	56.0	55.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
74	58.5	1003.0	827.9	390.9	507.4	507.4	507.4	56.9	56.0	55.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
75	60.0	1002.9	827.9	391.6	507.4	507.4	507.4	57.0	56.0	55.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
76	63.0	1002.5	828.1	393.0	507.4	507.4	507.4	57.0	56.1	55.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
77	66.0	1002.1	828.3	394.4	507.4	507.4	507.4	57.1	56.2	55.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
78	69.0	1001.8	828.4	395.7	507.4	507.4	507.4	57.2	56.2	55.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
79	72.0	1001.4	828.5	397.0	507.4	507.4	507.4	57.2	56.3	55.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
80	75.0	1001.0	828.6	398.2	507.4	507.4	507.4	57.3	56.3	55.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
81	78.0	1000.7	828.7	399.4	507.4	507.4	507.4	57.3	56.4	55.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
82	81.0	1000.4	828.8	400.5	507.4	507.4	507.4	57.4	56.4	55.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
83	84.0	1000.1	828.9	401.7	507.4	507.4	507.4	57.4	56.5	55.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
84	87.0	999.8	829.0	402.8	507.4	507.4	507.4	57.5	56.5	55.6	.0	.0	.0	.0	.0	.0	.0	.0	.0
85	90.0	999.5	829.1	403.9	507.4	507.4	507.4	57.5	56.5	55.6	.0	.0	.0	.0	.0	.0	.0	.0	.0
86	93.0	999.3	829.3	404.9	507.4	507.4	507.4	57.6	56.6	55.6	.0	.0	.0	.0	.0	.0	.0	.0	.0
87	96.0	999.0	829.4	405.9	507.4	507.4	507.4	57.6	56.6	55.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
88	99.0	998.7	829.4	406.9	507.4	507.4	507.4	57.7	56.7	55.7	.0	.0	.0	.0	.0	.0	.0	.0	.0

89	102.	998.5	829.5	407.9	507.4	507.4	507.4	57.7	56.7	55.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
90	105.	998.2	829.6	408.9	507.4	507.4	507.4	57.8	56.8	55.8	.0	.0	.0	.0	.0	.0	.0	.0	.0
91	108.	997.9	829.7	409.8	507.4	507.4	507.4	57.8	56.8	55.8	.0	.0	.0	.0	.0	.0	.0	.0	.0
92	111.	997.6	829.8	410.8	507.4	507.4	507.4	57.9	56.9	55.8	.0	.0	.0	.0	.0	.0	.0	.0	.0
93	114.	997.3	829.9	411.7	507.4	507.4	507.4	57.9	56.9	55.9	.0	.0	.0	.0	.0	.0	.0	.0	.0
94	117.	997.1	829.9	412.6	507.4	507.4	507.4	57.9	57.0	55.9	.0	.0	.0	.0	.0	.0	.0	.0	.0
95	120.	996.8	830.0	413.4	507.4	507.4	507.4	58.0	57.0	55.9	.0	.0	.0	.0	.0	.0	.0	.0	.0
96	123.	934.8	809.4	412.6	507.4	507.4	507.4	58.0	57.0	55.9	.0	.0	.0	.0	.0	.0	.0	.0	.0
97	126.	882.0	771.9	406.1	507.4	507.4	507.4	58.0	57.1	56.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
98	129.	839.5	735.9	395.8	507.4	507.4	507.4	58.0	57.1	56.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
99	132.	804.7	704.5	384.4	507.4	507.4	507.4	57.9	57.1	56.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
100	135.	775.5	677.6	373.3	507.4	507.4	507.4	57.9	57.1	56.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
101	138.	750.7	654.5	363.0	507.4	507.4	507.4	57.9	57.1	56.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
102	141.	729.5	634.7	353.8	507.4	507.4	507.4	57.9	57.2	56.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
103	144.	711.1	617.6	345.7	507.4	507.4	507.4	57.9	57.2	56.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
104	147.	695.1	602.7	338.5	507.4	507.4	507.4	57.9	57.2	56.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
105	150.	681.2	589.8	332.3	507.4	507.4	507.4	57.9	57.2	56.2	.0	.0	.0	.0	.0	.0	.0	.0	.0

I	TT1(D/H)	TTN(D/H)	TTW-FLOOR	TTW-ROOF	TTW-WALLE	TTW-WALLW	TTW-WALLS	TTW-WALLN
1	.00000E+00	456.01	.00000E+00	5.90586E-02	5.87434E-02	5.87433E-02	5.87433E-02	5.87433E-02
2	456.01	313.61	.00000E+00	4.27505E-02	4.25131E-02	4.25130E-02	4.25130E-02	4.25130E-02
3	240.87	.00000E+00	.00000E+00	2.15982E-02	2.14795E-02	2.14791E-02	2.14791E-02	2.14791E-02
4	.00000E+00	.00000E+00	.00000E+00	6.70512E-03	6.67202E-03	6.67077E-03	6.67077E-03	6.67077E-03
5	199.12	.00000E+00	.00000E+00	1.21220E-03	1.20559E-03	1.19739E-03	1.19739E-03	1.19739E-03
6	.00000E+00	.00000E+00	.00000E+00	1.30790E-04	1.30074E-04	1.76672E-04	1.76672E-04	1.76672E-04
7		.00000E+00	.00000E+00	6.27561E-06	6.24272E-06	.00000E+00	.00000E+00	.00000E+00

***** ROOM NO IS 2 *****

I	TTW-D	TTW-U	TTW-E	TTW-W	TTW-S	TTW-N
1	626.	.000E+00	2.85	.000E+00	.000E+00	.000E+00
2	535.	.000E+00	2.18	.000E+00	.000E+00	.000E+00
3	277.	.000E+00	1.15	.000E+00	.000E+00	.000E+00
4	101.	.000E+00	.380	.000E+00	.000E+00	.000E+00
5	74.7	.000E+00	3.815E-06	.000E+00	.000E+00	.000E+00
6	38.0	.000E+00	3.815E-06	.000E+00	.000E+00	.000E+00
7	11.8	.000E+00	3.815E-06	.000E+00	.000E+00	.000E+00
8	2.09	.000E+00	3.815E-06	.000E+00	.000E+00	.000E+00
9	.204	.000E+00	.000E+00	.000E+00	.000E+00	.000E+00

*****ROOM NO IS 3 *****

TTW-D	TTW-U	TTW-E	TTW-W	TTW-S	TTW-N
.000E+00	.000E+00	.000E+00	.000E+00	.000E+00	.000E+00
.000E+00	.000E+00	.000E+00	.000E+00	.000E+00	.000E+00
.000E+00	.000E+00	.000E+00	.000E+00	.000E+00	.000E+00
.000E+00	.000E+00	.000E+00	.000E+00	.000E+00	.000E+00
.000E+00	.000E+00	.000E+00	.000E+00	.000E+00	.000E+00
.000E+00	.000E+00	.000E+00	.000E+00	.000E+00	.000E+00
.000E+00	.000E+00	.000E+00	.000E+00	.000E+00	.000E+00
.000E+00	.000E+00	.000E+00	.000E+00	.000E+00	.000E+00
.000E+00	.000E+00	.000E+00	.000E+00	.000E+00	.000E+00

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10 3.815E-06  .000E+00  .000E+00  .000E+00  .000E+00  .000E+00    .000E+00  .000E+00  .000E+00  .000E+00  .000E+00  .000E+00
11 3.815E-06  .000E+00  .000E+00  .000E+00  .000E+00  .000E+00    .000E+00  .000E+00  .000E+00  .000E+00  .000E+00  .000E+00
12 3.815E-06  .000E+00  .000E+00  .000E+00  .000E+00  .000E+00    .000E+00  .000E+00  .000E+00  .000E+00  .000E+00  .000E+00


***** CASE 1 IS OVER *****
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SPRAY PART（最終TIMEStep）

1 TIME= 8967.286 SEC DELTA T= .12686 SEC

TS	517.97	554.12	591.01	627.80	662.19	691.63	713.73	727.53	734.32	736.80
TG	140.97	69.029	68.698	68.226	67.641	66.944	66.118	65.153	64.051	62.843
TB	1450.1	1370.7	1380.5	1380.9	1374.2	1358.6	1335.7	1311.1	1291.5	1279.8
RE	238.78	396.54	540.71	667.83	771.18	849.95	905.42	940.30	958.21	963.22
HM	287.65	382.06	424.17	460.26	488.35	510.04	526.57	539.15	548.94	556.91
RB	.14550	.14556	.14633	.14806	.15130	.15635	.16268	.16869	.17247	.17334
D	.28939	.28852	.28743	.28610	.28454	.28268	.28044	.27772	.27452	.27092
VDRO	59.015	175.21	282.43	378.26	457.80	520.52	567.46	600.71	622.87	636.57
NDRO	6	6	6	6	6	6	6	6	6	6
DMO	7.45780E-03	2.11264E-03	3.42676E-03	4.63217E-03	5.68919E-03	6.58425E-03	7.31936E-03	7.90820E-03	8.37168E-03	8.74085E-03

PG= 1.45618E-03 TGIN= 76.126 YO= .20516 TSTEEL= 57.854 SORATE= .22657 DELTA= .14711
SUMIN= 21233. SUMNA= 6100.3 TGOUT= 61.678 AVG GAS TEMP= 61.706 GAS VELOCITY= 3.67186E-07
TURB FREE CONVECTION AT WALL, H= 1.5634 GR= 5.10655E+10 RE= 626.52 TPLATE= 507.40
TFLOOR= 683.58 TPOOL= 682.98 YH2O= 4.70656E-02 PH2O= 4.85664E-02 YH2= 2.57682E-04 PH2= 3.79095E-03
GIN=6.13972E-02 GOUT= 31.730 GASMOL= 31.793 G2= .00000E+00 GT= 31.793 O2M= 6.5225 H2OM= 1.4963 H2M=8.19236E-03
POOL = 14.953 APOOL = .12506 AFLOOR= .31828 CPOOL = 4.4860
SQRAD5= 22951. SIGBRN= 27379. SIGNAB= 13.426

1
HEAT TRANSFER RATE KCAL /SEC -

QCONV1= -.14268 CONVECTION FROM DROPLET TO BURN ZONE
0 QRAD1 =-1.17370E-02 RADIATION FROM DROPLET TO BURN ZONE
0 QCONV2= .30712 CONVECTION FROM BURN ZONE TO INNERGAS
0 QRAD2 = .00000E+00 RADIATION FROM BURN ZONE TO WALL
0 QCONV3= 1.58715E-02 CONVECTION FROM INNERGAS TO OUTERGAS
0 QCONV4= .40696 CONVECTION FROM OUTERGAS TO WALL
0 QPLATE= -2.7638 HEAT INTO IMPACT PLATE
0 QCONV5= .23740 HEAT FROM SODIUM POOL TO GAS
0 QCONV6=-6.24328E-02 HEAT FROM SODIUM POOL TO FLOOR
0 QCONV1 + QRAD1 -.15442 TOTAL FROM TA TO TB
0 QCONV2 + QRAD2 .30712 TOTAL FROM TB TO TC AND TV
0 QRAD3 = .00000E+00 RADIATION FROM INNERGAS TO WALL
0 QRAD4 = .00000E+00 RADIATION FROM POOL TO WALL
0 QRAD5 = .90690 RADIATION FROM POOL TO OUTERGAS
0 QRAD6 = -1.6875 RADIATION FROM WALL TO OUTERGAS

1
HEAT TRANSFER TOTL KCAL -

QCONV1= -6217.9 CONVECTION FROM DROPLET TO BURN ZONE
0 QRAD1 = -501.59 RADIATION FROM DROPLET TO BURN ZONE

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0                QCONV2=  13586.          CONVECTION FROM BURN ZONE TO INNERGAS
0                QRAD2 =  .00000E+00      RADIATION FROM BURN ZONE TO WALL
0                QCONV3=  951.99          CONVECTION FROM INNERGAS TO OUTERGAS
0                QCONV4=  7153.5          CONVECTION FROM OUTERGAS TO WALL
0                QPLATE= -23772.          HEAT INTO IMPACT PLATE
0                QCONV5=  3375.1          HEAT FROM SODIUM POOL TO GAS
0                QCONV6=  1243.8          HEAT FROM SODIUM POOL TO FLOOR
0                QCONV1 + QRAD1 -6712.0          TOTAL FROM TA TO TB
0                QCONV2 + QRAD2  13586.          TOTAL FROM TB TO TC AND TV
0                QRAD3 =  .00000E+00      RADIATION FROM INNERGAS TO WALL
0                QRAD4 =  .00000E+00      RADIATION FROM POOL TO WALL

0                QSOD  =  .00000E+00      HEAT GAIN BY SODIUM
0                QVAP  =  5790.4          HEAT ABSORTED IN VAPORIZATION
1    THE DISTRIBUTION OF TEMPERATURE
0              NO.     TPLATE            TSTEEL           TFLOOR

                1       507.40           57.854           683.58
                2       507.40           57.182           592.01
                3       507.40           56.148           333.36
                4       507.40           55.378           156.46
                5       507.40           55.000           129.58
                6       507.40           55.000           92.872
                7       507.40           55.000           66.693
                8       507.40           55.000           57.070
                9       507.40           .00000E+00       55.200
               10       507.40           .00000E+00       55.000
               11       .00000E+00       .00000E+00       55.000
               12       .00000E+00       .00000E+00       55.000
```

7. 今後の課題

大型計算機FACOM上で動作していたASSCOPSｺｰﾄﾞのUNIXのEWS機への移植作業を行った。
UNIX(DEC ALPHA OSF/1 Ver3.2B)への移植ｺｰﾄﾞを用いた解析結果と大型計算機の結果を比較した結果、ほぼ同等の計算結果となり移植作業はほぼ完了したと判断できる。
EWS機種間の互換性を確認するためにDECへの移植ｺｰﾄﾞをHP上で使用してみた。その結果、コンパイルオプションを付加することによって正しい解析結果が得られることが分かった。

本作業において移植したｺｰﾄﾞを用いて、他のUNIXマシンにおいて解析を行う場合、ﾌﾟﾗｯﾄﾎｰﾑおよびそのﾏｼﾝ上で使用するｺﾝﾊﾟｲﾗの特性を充分に把握して使用することが必要であることが分かった。
また、ｺｰﾄﾞの改良段階においても上記の点に留意することでｺｰﾄﾞの汎用性または信頼性を高める必要がある。

8. まとめ

FACOM で開発されたﾅﾄﾘｳﾑ燃焼解析に使用中の解析ｺｰﾄﾞASSCOPSｺｰﾄﾞを EWS に移植した場合のﾌﾟﾛｸﾞﾗﾑ上の問題点を明らかにし、修正することによって大型計算機である FACOM 及び EWS の解析結果がよく一致することを確認した。
今後とも、汎用性を重視する場合、ﾌﾟﾗｯﾄﾎｰﾑおよびｺﾝﾊﾟｲﾗの特性に依存しないｺｰﾄﾞ開発が望まれる。