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# 「常陽」MK-III標準炉心における 原子炉容器内熱流動解析

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動力炉・核燃料開発事業団  
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## 「常陽」MK-Ⅲ標準炉心における原子炉容器内熱流動解析

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### 要 旨

高速実験炉「常陽」のMK-Ⅲ標準炉心における定格出力(140MW)運転時の原子炉容器内冷却材の流動状況を把握する目的で、単相多次元熱流動解析コード“AQUA”を用いて「常陽」MK-Ⅲ標準炉心における原子炉容器内熱流動解析を実施した。

本解析により、以下の結果が得られた。

- (1) 「常陽」MK-Ⅲ標準炉心における原子炉容器内の冷却材の流動状況が、MK-Ⅱ炉心の流動状況と同じであることがわかった。
- (2) 各集合体領域の流量が「「常陽」MK-Ⅲ炉心の熱流力設計に関する解析」<sup>3)</sup>で報告されている必要最小流量を満足していることを確認した。
- (3) 各集合体の炉心頂部と熱電対（集合体出口温度測定）位置の冷却材および原子炉容器内の冷却材温度分布が詳細に得られた。

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1) 原子力システム(株)

2) 大洗工学センター 実験炉部 技術課





## Thermal Hydraulic Analysis in Reactor Vessel of JOYO MK-III Standard Core

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### ABSTRACT

A thermal hydraulic analysis in the reactor vessel of the JOYO MK-III standard core was performed by Single-Phase Multi-Dimensional Thermal-Hydraulic Analysis Code "AQUA".

The major results are as follows:

- (1) The hydraulic characteristics in the reactor vessel of the MK-III standard core showed the same tendency as it of the MK-II core.
- (2) It was confirmed that the coolant flow rates in each subassembly were more than the minimum coolant flow rates which were described in a document, "Thermal Hydraulic Analysis of JOYO MK-III Core"<sup>3)</sup>.
- (3) The coolant temperature distribution was evaluated at the top of core, at the outlet of the subassemblies, and in the reactor vessel in detail.

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1. 概要

高速実験炉「常陽」のMK-Ⅲ標準炉心における定格出力運転時の原子炉容器内冷却材の流動状況を把握する目的で、単相多次元熱流動解析コード“AQUA version5”を用いて MK-Ⅲ標準炉心における原子炉容器内熱流動解析を実施した。

## 2. 解析方法

### 2.1 解析条件

MK-Ⅲ標準炉心における原子炉容器内熱流動解析の解析条件を表 2.1 に示す。

### 2.2 解析モデル

MK-Ⅲ標準炉心の炉心構成は図 2.1 に示すとおりである。また、この炉心構成に対応する領域モデルを図 2.2 に示す。

本解析では、冷却材の流路に関して MK-Ⅱ炉心における自然循環試験Ⅱ-E試験後解析<sup>1)</sup>(以下、Ⅱ-E試験後解析)と同様に以下のように仮定した。

(1) 高圧プレナムからの上部嵌合部リーク：制御棒近似

高圧プレナムから上部嵌合部を経て上部プレナムへの流れは、制御棒の内部を流れるものと仮定する。このため、本来は低圧プレナムに属する制御棒を高圧プレナムに属するものとした。

(2) 低圧プレナムからの上部嵌合部リーク：遮へい集合体近似

低圧プレナムから上部嵌合部を経て上部プレナムへの流れは、遮へい集合体の内部を流れるものと仮定する。

(3) 下部嵌合部：遮へい集合体スリット部近似

高圧プレナムから下部嵌合部を経て低圧プレナムへの流れは、遮へい集合体スリット部を流れるものと仮定する。

(4) 補助系逆流：炉容器側壁バルク近似

補助系逆流は、炉容器側壁と炉心支持板の間隙を流れるものと仮定する。

上記(1)については、高圧プレナムからの上部嵌合部リークの圧損評価式は集合体の種類に関係なく全て同じであり、また、下部案内管の変更がなければ体数はMK-Ⅱ炉心と同数であることから、Ⅱ-E試験後解析で使用した抵抗係数を用いた。

(2)は、Ⅱ-E試験後解析では外側反射体(B)近似としたが、本解析では遮へい体近似とすること、また、(3)は、下部嵌合部リークの圧損評価式が集合体の種類により異なり、炉心構成もMK-Ⅱ炉心と異なっていることから、以下の要領で抵抗係数を算出した。

- ① 各嵌合部の圧損評価式をもとに、圧損と流量との関係を求める。
- ② 近似する領域の圧損評価式をもとに、圧損と流量の関係を求める。
- ③ ①と②の流量の合計を求めて、これらが均等に近似する領域を流れるものとする。
- ④ ③をもとに、等価的な近似領域の圧損評価式を作成する。
- ⑤ ④をもとに、下式からAQUA入力用の抵抗係数 $\zeta$ を求める。

$$\Delta P = \zeta \cdot 1/2 \cdot \rho \cdot u^2$$

$\Delta P$  : 圧損(kg/m<sup>2</sup>)

$\rho$  : 密度(kg・s<sup>2</sup>/m<sup>4</sup>)

$u$  : 流速(m/s)

表 2.2～表 2.3 に(2)および(3)の領域の圧力差と流量の関係から算出した抵抗係数を示す。

(4)については、Ⅱ-E試験後解析で使用した抵抗係数を使用した。

### 2.3 メッシュ分割

モデル化した各要素の半径方向のメッシュ分割を表 2.4 に示す。また、図 2.3 に原子炉容器全体のメッシュ分割図を示す。

分割数は R 方向が 34、Z 方向が 90 である。

第3列のB型照射燃料集合体および材料照射用反射体(CMIR)については、解析体系が2次元であることからメッシュ分割幅が小さくなりすぎるためモデル化できず、それぞれ第3列内側燃料集合体、制御棒と仮定した。

### 2.4 発熱量

解析モデルの各セルにおける燃料の単位体積当たりの発熱量を表 2.5 に示す。

本発熱量は、「MK-III標準炉心の詳細核熱計算(II)」<sup>2)</sup>の MK-III標準炉心における集合体最大出力分布と軸方向出力分布をもとに、以下の要領で求めた。

- ① 集合体最大出力分布から、合計出力が定格出力(140MW)になるように比例計算し、定格時の集合体出力分布を求める。
- ② 定格時の集合体出力分布から、解析モデルの各領域の1体当たりの平均出力を求める。
- ③ 1体当たりの平均出力に各集合体の軸方向出力分布を掛け、軸方向の発熱量の分布を求める。
- ④ 軸方向発熱量分布から、各セルにおける燃料の単位体積当たりの発熱量を求める。

### 2.5 圧損評価式

本解析に使用した炉心部の圧損評価式を表 2.6 に、また、炉内構造物の圧損評価式を表 2.7 に示す。

これらの圧損評価式は、遮へい集合体のオリフィス抵抗係数および遮へい集合体スリット部の局所抵抗係数については、2.2 で示した近似式。遮へい集合体と制御棒を除いた集合体のオリフィス抵抗係数と燃料貯蔵ラックおよび高圧プレナムの局所抵抗係数は、「「常陽」MK-III炉心の熱流力設計に関する解析」<sup>3)</sup>で用いられた圧損係数。制御棒のオリフィス抵抗係数、残りの炉内構造物の局所抵抗係数と炉心部および炉内構造物の摩擦係数については、II-E 試験後解析で使用した値である。

また、本解析は、定格運転時の原子炉容器内の流動を求める解析であることから、オリフィス部抵抗係数および局所抵抗係数については層流域および乱流域の圧損評価式は同じとした。

### 2.6 燃料ピンギャップ熱伝達率

燃料ピンギャップ熱伝達率は、設計値の  $5677\text{W}/\text{m}^2\text{C}$  ( $1000\text{BTU}/\text{ft}^2\text{h}^\circ\text{F}$ ) を使用した。

### 2.7 径方向熱移行およびラップ管ギャップ熱伝達率

集合体で発生した熱は、冷却材とラップ管を介して隣接する集合体へ移行する。本解析モデルでは、隣接しあう領域のラップ管の伝熱面積が実際の伝熱面積と等しくなるように、隣接する集合体間のギャップの中心を基準とした等価な円筒としてモデル化し、集合体間の径方向の熱移行を考慮した。

また、ラップ管ギャップ熱伝達率は、MK-II 炉心自然循環試験解析全般で用いられた値を使用した。

表2.1 解析条件

項 目	条 件	備 考	図・表No.
解析コード	AQUA version5		
炉心構成	MK-III標準炉心		図2.1
解析モデル	2次元(R-Z)		図2.2
解析メッシュ数	R方向34 Z方向90		表2.4, 図2.3
原子炉熱出力	140 MW		
炉心内出力分布	「MK-III標準炉心の詳細核熱計算(II)」で得られた 集合体最大出力分布と軸方向出力分布より算出		表2.5
1次主循環流量	2700 ton/hour		
原子炉入口Na温度	350°C		
燃料ピンギャップ熱伝達率	5677 W/m <sup>2</sup> C (1000 Btu/ft <sup>2</sup> h° F)	設計値	
ラッパ管ギャップ熱伝達率	21715.03 W/m <sup>2</sup> C	自然循環試験II-E試験後解析で使用	
第3列B型照射燃料集合体	モデル化せず、内側燃料集合体と仮定		
第3列材料照射用集合体	モデル化せず、制御棒と仮定		
炉心径方向熱移行	考慮		

表2.2 遮へい集合体近似抵抗係数

	体数	圧損評価式		圧力差 ΔP(kg/m <sup>2</sup> )	2.E+00	2.E+01	2.E+02	2.E+03	2.E+04
		仮数部	指数部						
上部嵌合部	192	3.622E+05	2.0	体数分の流量(kg/s)	0.4512	1.4267	4.5117	14.2673	45.1172
遮へい集合体	96	2.049E+05	2.0	体数分の流量(kg/s)	0.2999	0.9484	2.9992	9.4843	29.9919
				合計流量(kg/s)	0.7511	2.3752	7.5109	23.7516	75.1091
遮へい集合体近似	96	3.267E+04	2.0	1体当りの流量(kg/s)	0.0078	0.0247	0.0782	0.2474	0.7824

$$\Delta P = \zeta \cdot \rho / 2 \cdot u^2 = 32673 \cdot W^2$$

$$\zeta = 32673 \cdot \gamma \cdot A^2 \cdot 2g =$$

$$\underline{\underline{0.1674}}$$

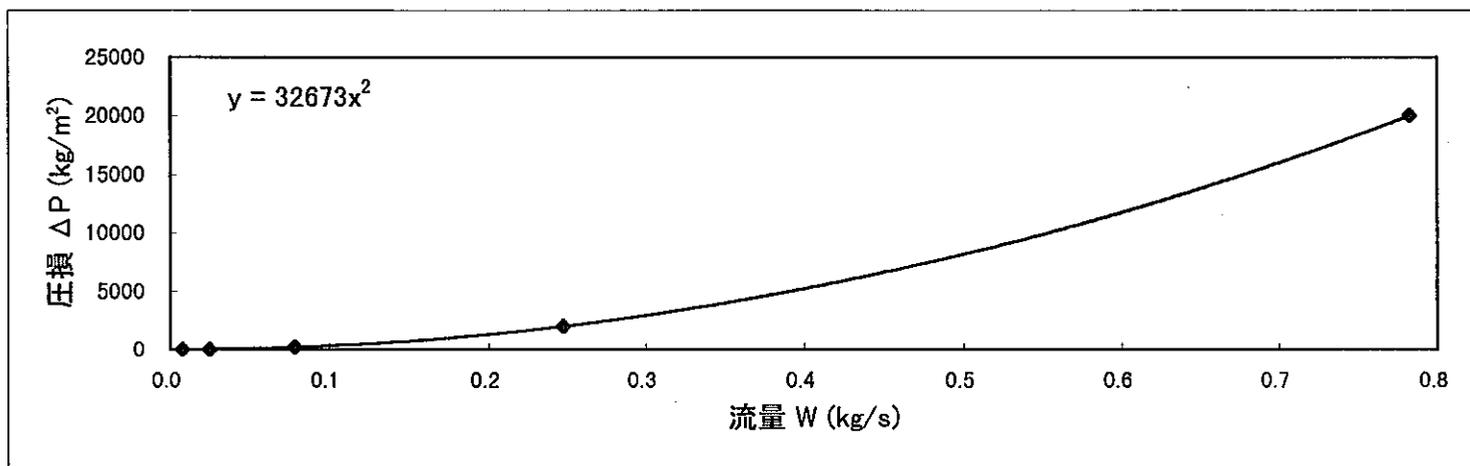


表2.3 遮へい集合体スリット部近似抵抗係数

項目	体数	圧損評価式		圧力差 ΔP(kg/m <sup>2</sup> )	2.E+00	2.E+01	2.E+02	2.E+03	2.E+04	リーク部面積(mm <sup>2</sup> )	
		仮数部	指数部							1体当り	合計
B型特殊燃料集合体	2	2.300E+05	1.701	体数分の流量(kg/s)	0.0021	0.0082	0.0317	0.1229	0.4758	13.82	27.64
1列内側燃料集合体	3	3.544E+05	1.75	体数分の流量(kg/s)	0.003	0.0112	0.0418	0.1557	0.5804	13.82	41.46
C型特殊燃料集合体	3	2.300E+05	1.701	体数分の流量(kg/s)	0.0032	0.0123	0.0476	0.1844	0.7138	13.82	41.46
2列内側燃料集合体	12	3.356E+05	1.69	体数分の流量(kg/s)	0.0097	0.038	0.1483	0.5791	2.2618	13.82	165.84
3列内側燃料集合体	4	3.288E+05	1.67	体数分の流量(kg/s)	0.003	0.012	0.0475	0.1884	0.7481	13.82	55.28
3列外側燃料集合体	8	3.288E+05	1.67	体数分の流量(kg/s)	0.006	0.0239	0.0949	0.3769	1.4963	13.82	110.56
4列外側燃料集合体	24	3.281E+05	1.64	体数分の流量(kg/s)	0.0159	0.0646	0.2629	1.0706	4.3589	13.82	331.68
5列外側燃料集合体	26	1.609E+05	0.96	体数分の流量(kg/s)	0.0002	0.0022	0.0245	0.2692	2.9629	13.82	359.32
制御棒	6	1.544E+04	1.993	体数分の流量(kg/s)	0.0672	0.2134	0.6777	2.1517	6.8319	20.71	124.26
CMIR	1	2.300E+05	1.701	体数分の流量(kg/s)	0.0011	0.0041	0.0159	0.0615	0.2379	13.82	13.82
内側反射体	32	3.635E+04	1.82	体数分の流量(kg/s)	0.1461	0.5179	1.8352	6.5033	23.0453	13.82	442.24
遮へい集合体	42	1.345E+05	1.99	体数分の流量(kg/s)	0.1575	0.5009	1.5933	5.0677	16.1185	13.03	547.26
# (スリット付)	6	1.011E+02	1.983	体数分の流量(kg/s)	0.8298	2.6502	8.4637	27.0301	86.3244	600.8	3604.8
遮へい集合体スリット部近似	1	1.327E+00	1.9334	合計流量(kg/s)	1.2449	4.0589	13.2849	43.7613	146.1558	合計	5865.62

$$\Delta P = \zeta \cdot \rho / 2 \cdot u^2 = 1.3271 \cdot W^{1.9334}$$

$$\zeta = 1.3271 \cdot \gamma^{0.9334} \cdot A^{1.9334} \cdot 2g = \underline{\underline{0.6971}}$$

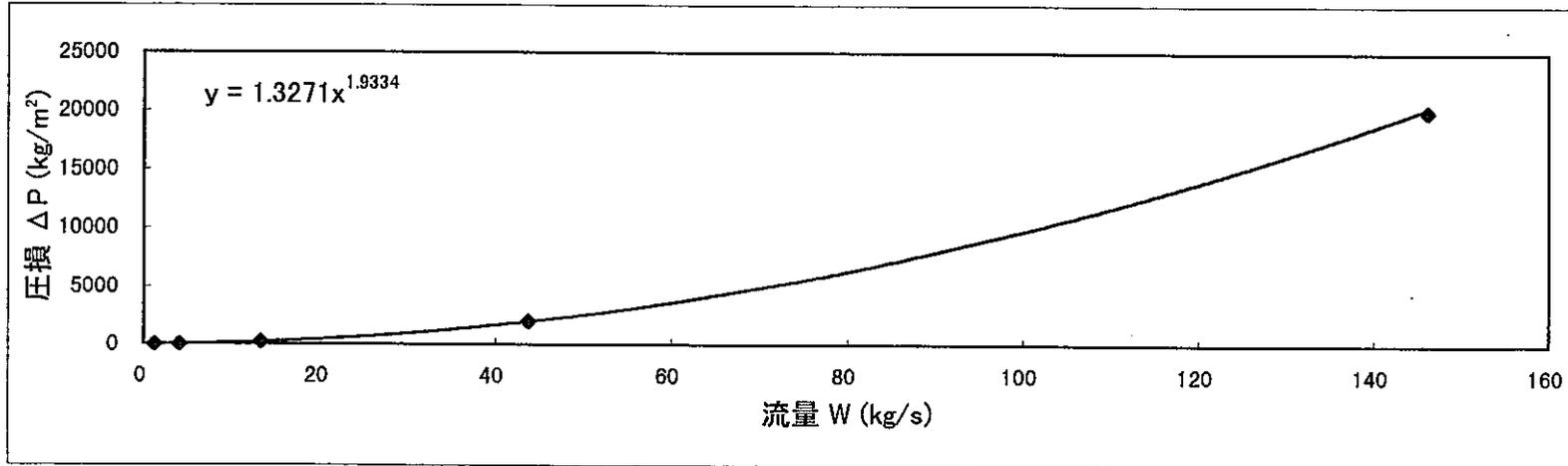


表2.4 半径方向メッシュ分割

列	要素名	入口プレナム	集合体数	メッシュ番号	備考	
0	B型照射燃料集合体	高圧プレナム	1	1		
1	内側燃料集合体		3	2		
	C型照射燃料集合体		3	3		
2	内側燃料集合体		12	4		
3	内側燃料集合体		4	5	5	内側燃料と仮定
	B型照射燃料集合体		1			
	制御棒		4	5	6	制御棒と仮定
	材料照射用集合体(CMIR)		1			
			外側燃料集合体	8	7	
4	外側燃料集合体		24	8		
5	制御棒	2	9			
	外側燃料集合体	26	10			
	内側反射体	2	32	11		
6	内側反射体	30				
	外側反射体(A)	6	48	12		
7	外側反射体(A)	42			低圧プレナム	
8	外側反射体(A)	48	13			
9	遮へい集合体	54	14			
10	遮へい集合体	42	15			
	内側熱遮へい体			16~17		
	燃料貯蔵ラック	30		18~20		
	外側熱遮へい体			21~22		
	炉容器内部			23~30		
	原子炉出口ノズル			31~34		

表2.5 各セルに与える単位体積当りの出力

(W/m<sup>3</sup>)

列	0	1		2	3		4	5
要素名	B型照射燃料	内側燃料	C型照射燃料	内側燃料	内側燃料	外側燃料	外側燃料	外側燃料
$\begin{matrix} i \\ \backslash \\ k \end{matrix}$	1	2	3	4	5	7	8	10
39	2.20390E+09	1.63763E+09	1.91645E+09	1.51097E+09	1.25047E+09	1.47417E+09	1.29999E+09	1.13633E+09
38	2.43500E+09	1.80936E+09	2.11741E+09	1.68916E+09	1.39858E+09	1.65579E+09	1.45619E+09	1.24511E+09
37	2.68053E+09	1.99180E+09	2.33091E+09	1.86403E+09	1.54376E+09	1.82968E+09	1.60832E+09	1.36649E+09
36	2.88468E+09	2.14349E+09	2.50843E+09	2.00591E+09	1.66227E+09	1.97108E+09	1.73141E+09	1.46690E+09
35	3.00463E+09	2.23263E+09	2.61274E+09	2.09014E+09	1.73237E+09	2.05464E+09	1.80462E+09	1.52711E+09
34	3.04167E+09	2.26015E+09	2.64495E+09	2.11603E+09	1.75445E+09	2.08119E+09	1.82808E+09	1.54709E+09
33	3.00099E+09	2.22992E+09	2.60957E+09	2.08894E+09	1.73252E+09	2.05551E+09	1.80650E+09	1.53047E+09
32	2.87817E+09	2.13866E+09	2.50278E+09	2.00418E+09	1.66348E+09	1.97382E+09	1.73607E+09	1.47476E+09
31	2.67362E+09	1.98667E+09	2.32491E+09	1.86375E+09	1.55527E+09	1.83732E+09	1.61820E+09	1.38179E+09
30	2.43779E+09	1.81143E+09	2.11983E+09	1.69840E+09	1.42261E+09	1.67825E+09	1.47909E+09	1.27615E+09
29	2.28485E+09	1.69779E+09	1.98684E+09	1.58618E+09	1.34224E+09	1.58126E+09	1.39412E+09	1.24338E+09

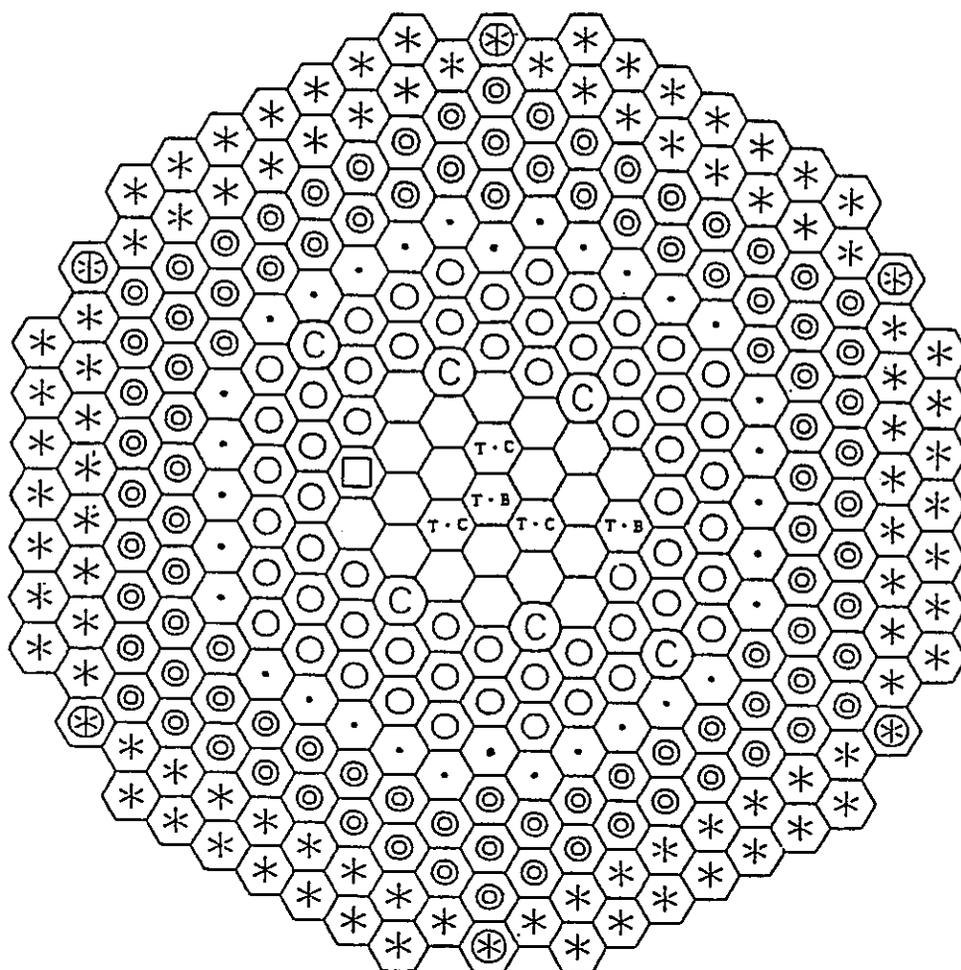
表2.6 炉心部の圧損評価式

要素名	メッシュ 番号	集合 体数	オリフィス抵抗係数	要素束部摩擦係数
B型照射燃料集合体	1	1	3.305	$f=1870.8Re^{-1.0}+0.7221$ $(Re \leq 8000)$  $f=6.1292Re^{-0.2067}$ $(Re > 8000)$  ただし、制御棒の摩擦係数は 反射体と同じ式を使用
内側燃料集合体	2	3	$1.303Re^{-0.001516}$	
C型照射燃料集合体	3	3	1.021	
内側燃料集合体	4	12	$1.747Re^{-0.0201}$	
	5	5	$2.41Re^{-0.0147}$	
制御棒	6	5	175.384	
外側燃料集合体	7	8	$2.41Re^{-0.0147}$	
外側燃料集合体	8	24	$2.921Re^{-0.006033}$	
制御棒	9	2	175.384	
外側燃料集合体	10	26	$5.012Re^{-0.004421}$	
内側反射体	11	32	$1.853Re^{-0.01025}$	$f=64.0Re^{-0.1}$ $(Re \leq 2000)$
外側反射体(A)	12	48	$2.615Re^{-0.04844}$	
	13	48		
遮へい集合体	14	52	0.1674	$f=0.3164Re^{-0.25}$ $(Re > 2000)$
	15	42		

表2.7 炉内構造物の圧損評価式

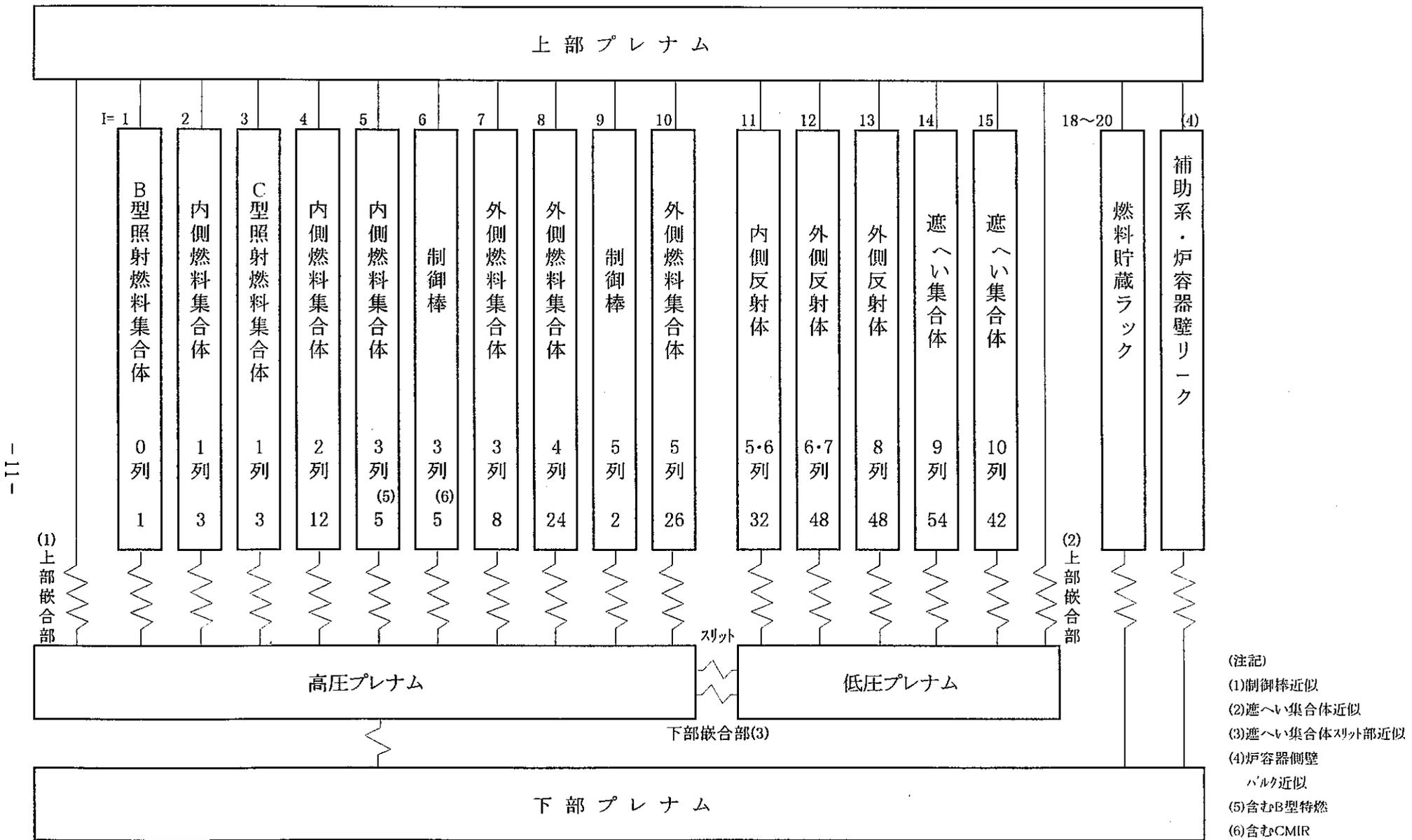
要素名	局所抵抗係数	摩擦係数 *1)	備考
遮へい集合体スリット部	0.6971		下部嵌合部リークを模擬
燃料貯蔵ラック入口	$41.08Re^{-0.2}$		
炉内構造物 支持板リーク部	$1.685 \times 10^5 Re^{-1.0}$		
高圧プレナム入口	2.105		
燃料集合体頂部～ 整流格子間制御棒	0.63		R方向
燃料集合体頂部～ 整流格子間制御棒		$64.0Re^{-1.0}$	Z方向
		$0.3164Re^{-0.25}$	
燃料集合体頂部～ 整流格子間流れ込み	1800.0		R方向 (中心～第1列間)
内側熱遮へい体		$64.0Re^{-1.0}$	Z方向
		$0.3164Re^{-0.25}$	
外側熱遮へい体		$64.0Re^{-1.0}$	Z方向
		$0.3164Re^{-0.25}$	
炉容器壁リーク部	$624.75Re^{-0.2}$		補助系逆流を含む

\*1) 層流  $Re \leq 2000$   
 乱流  $Re > 2000$



- |  |  |
|--|--|
|  : 内側燃料集合体  |  : 遮へい集合体         |
|  : 外側燃料集合体  |  : 遮へい集合体(スリット付き) |
|  : 制御棒      |  : B型特殊燃料集合体      |
|  : 内側反射体    |  : C型特殊燃料集合体      |
|  : 外側反射体(A) |  : 材料照射用集合体(CMIR) |

図 2.1 MK-III 標準炉心構成



(注記)  
 (1) 制御棒近似  
 (2) 遮へい集合体近似  
 (3) 遮へい集合体スリット部近似  
 (4) 炉容器側壁バルク近似  
 (5) 含むB型特燃  
 (6) 含むCMIR

図2.2 領域モデル図



### 3. 解析結果

#### 3.1 原子炉容器内の冷却材流動状況

図 3.1 に原子炉容器全体の流動状況の概略を示す。

本文および図中の括弧内の値は、II-E 試験後解析の定常状態(100MW)における流速である。

また、図 3.2 に下部プレナム、図 3.3 に集合体レベル、図 3.4 に上部プレナムの流動状況図を示す。

##### (1) 下部プレナムの流動状況

原子炉入口ノズルから流入した冷却材は、扇状に広がりながら炉内構造物まで達し、主流は高圧プレナムや燃料貯蔵ラック方向へ向かうが、一部は炉内構造物下面に沿って原子炉容器の中心に向かって下部プレナム内で反時計回りの渦を形成している。

##### (2) 集合体レベルの流動状況

各集合体および燃料貯蔵ラックでは上昇流のみを形成している。

外側熱遮へい体のさらに外側の領域では、原子炉容器の壁に沿って下降する流れがコアサポートまで達した後、外側熱遮へい体に沿って上昇して時計回りの渦を形成している。この原子炉容器壁の下降流の流速は、最も速いところで約 0.70m/s(0.55)である。

##### (3) 集合体出口から上部プレナムの流動状況

集合体から出た冷却材は、炉心上部機構にぶつかった後、原子炉容器の外側方向へ向かい原子炉容器壁へ達する。原子炉容器壁へ達した冷却材は原子炉容器壁で二分され、一方は前述した原子炉容器壁に沿った下降流となり、もう一方は原子炉容器壁に沿って原子炉出口へ向かう上昇流となる。ここで、原子炉出口までの上昇流での最速は約 0.94m/s(0.78)である。

原子炉容器壁に沿った上昇流は、原子炉出口ノズルから一次系主配管へと流れ出る流れと、原子炉出口ノズルを超えてさらに上昇する流れに分かれる。原子炉出口ノズルを超えて上昇した流れは液面付近で内側に向きを変えた後、炉心上部機構に沿った下降流となり再び集合体出口からの流れに合流することで、上部プレナムに反時計回りの渦を形成している。この炉心上部機構に沿った下降流の最速は約 0.59m/s(0.49)である。

以上のような原子炉容器内冷却材の流況は、II-E 試験後解析の定常状態(100MW)の流況と同じである。また、MK-III 炉心での冷却材流量 2700t/h は MK-II 炉心での冷却材流量 2200t/h の約 1.23 倍であり、上記の各部の流速も MK-II 炉心の約 1.2 倍強とほぼ比例して増加している。

#### 3.2 冷却材流量配分

各領域の流量、冷却材温度等の解析結果を表 3.1 に示す。また、同表に、「常陽」MK-III 炉心の熱流設計に関する解析<sup>3)</sup>に記載されている必要最小流量も合わせて示す。

本解析結果では、C 型照射燃料集合体の流量が他の集合体よりかなり多く、約 11kg/s となった。また、炉心燃料集合体では、第 1 列内側燃料集合体の流量が最も多く、約 8.6kg/s となった。

併記した必要最小流量と比較すると、各領域の燃料集合体流量は必要最小流量の約 1.02~1.09 倍である。

解析結果の各領域の流量配分は、中心に近い内側燃料集合体が最も多く、第 2 列、第 3 列と外側になるにつれて流量が少なくなり、また、第 3 列外側燃料集合体は同じ第 3 列の内側燃料集合体より流量が多く、第 4 列、第 5 列と外側が少なくなるという傾向となり、必要最小流量の傾向と一致した。

制御棒、反射体等の流量は、必要最小流量の約 1.5~2.9 倍となった。

これらの結果から、本解析においても、各集合体の流量が必要最小流量を満足していることが確認できた。

### 3.3 冷却材温度

表 3.1 に各集合体領域の炉心頂部および熱電対位置の冷却材温度を示す。

また、図 3.5 に下部プレナム、図 3.6 に集合体レベル、図 3.7 に上部プレナムの冷却材温度分布を示す。

冷却材の燃料集合体の炉心頂部位置での冷却材温度は、第 1 列内側燃料集合体の約 543°C が最高温度となった。また、最低温度は第 3 列内側燃料集合体の約 518°C であるが、この領域には、B 型照射燃料集合体 1 体を含めているため、本来より多少低めの温度となっていると考えられる。照射燃料集合体では、中心の B 型照射燃料集合体が約 441°C、第 1 列 C 型照射燃料集合体が約 481°C となった。

原子炉容器内の冷却材温度分布は、以下のような傾向となった。

- (1) 下部プレナムから燃料集合体の炉心部下端、遮へい集合体および燃料貯蔵ラックは約 350°C 均一である。
- (2) 内側反射体および外側反射体(A)は、径方向熱移行の効果により集合体出口部に近づくにしたがって温度分布が生じている。
- (3) 上部プレナムおよび外側熱遮へい体の外側の領域は、燃料集合体で暖められた冷却材がミキシングされ、496~497°C でほぼ均一となっている。

表3.1 各領域の流量および温度の解析結果

領域	体数 体	集合体流量 kg/s	領域流量 kg/s	要素		面積 m <sup>2</sup>	温度		流速 m/s	流量合計 kg/s	必要最小流量 *1) kg/s		
				I	K		炉心頂部 *2)	熱電対位置					
							°C	°C					
高圧 プレナム	0列	B型照射燃料集合体	1	8.861	8.861	1	39	2.945E-03	441.431	471.457	3.555	621.797	-
	1列	内側燃料集合体	3	8.598	25.793	2	39	1.734E-03	543.457	535.058	6.033		7.870
		C型照射燃料集合体	3	11.191	33.573	3	39	2.402E-03	480.591	497.684	5.566		-
	2列	内側燃料集合体	12	8.233	98.793	4	39	1.734E-03	536.859	525.910	5.766		7.710
	3列	内側燃料集合体(B特)	5	7.779	38.896	5	39	1.734E-03	518.173	520.418	5.419		7.240
		外側燃料集合体	8	8.005	64.038	7	39	1.734E-03	542.757	539.173	5.616		7.620
	4列	外側燃料集合体	24	7.537	180.879	8	39	1.734E-03	529.376	526.551	5.267		7.280
	5列	外側燃料集合体	26	6.576	170.965	10	39	1.734E-03	523.585	510.472	4.588		6.470
	3列	制御棒(CMIR)	5	5.876	29.381	6	39	3.595E-03	357.451	418.662	1.887		41.101
5列	制御棒	2	5.860	11.720	9	39	3.595E-03	354.091	471.003	1.880			
低圧 プレナム	32	内側反射体	32	0.442	14.147	11	39	1.116E-03	381.817	448.109	0.460	70.411	0.158
		外側反射体(A)	48	0.226	10.861	12	39	7.069E-04	358.489	390.315	0.370		0.125
	48	遮へい集合体	48	0.192	9.230	13	39	7.069E-04	352.020	404.543	0.314		0.374
			42	0.348	14.614	15	39	1.229E-03	350.278	436.028	0.326		0.136
	54	燃料貯蔵ラック	54	0.399	21.558	14	39	1.229E-03	350.471	404.162	0.374		
バイパス	R/V側壁バルククリーク	42	0.348	14.614	15	39	1.229E-03	350.278	436.028	0.326	19.170	-	
	燃料貯蔵ラック		10.021	10.021	19	39	2.272E-01	350.246	-	0.051			
合計			313								752.479		

原子炉入口温度	350.0 °C
原子炉出口温度	497.2 °C
原子炉入口流量	750.0 kg/s
原子炉出口流量	750.0 kg/s
出力	140.4 MW

MK-III定格流量 2700 t/h

\*1) 「「常陽」MK-III炉心の熱流体力設計に関する解析」(ZN9410 96-230)による

\*2) 低圧プレナムの集合体は、炉心頂部相当。バイパスは、当該部の温度。

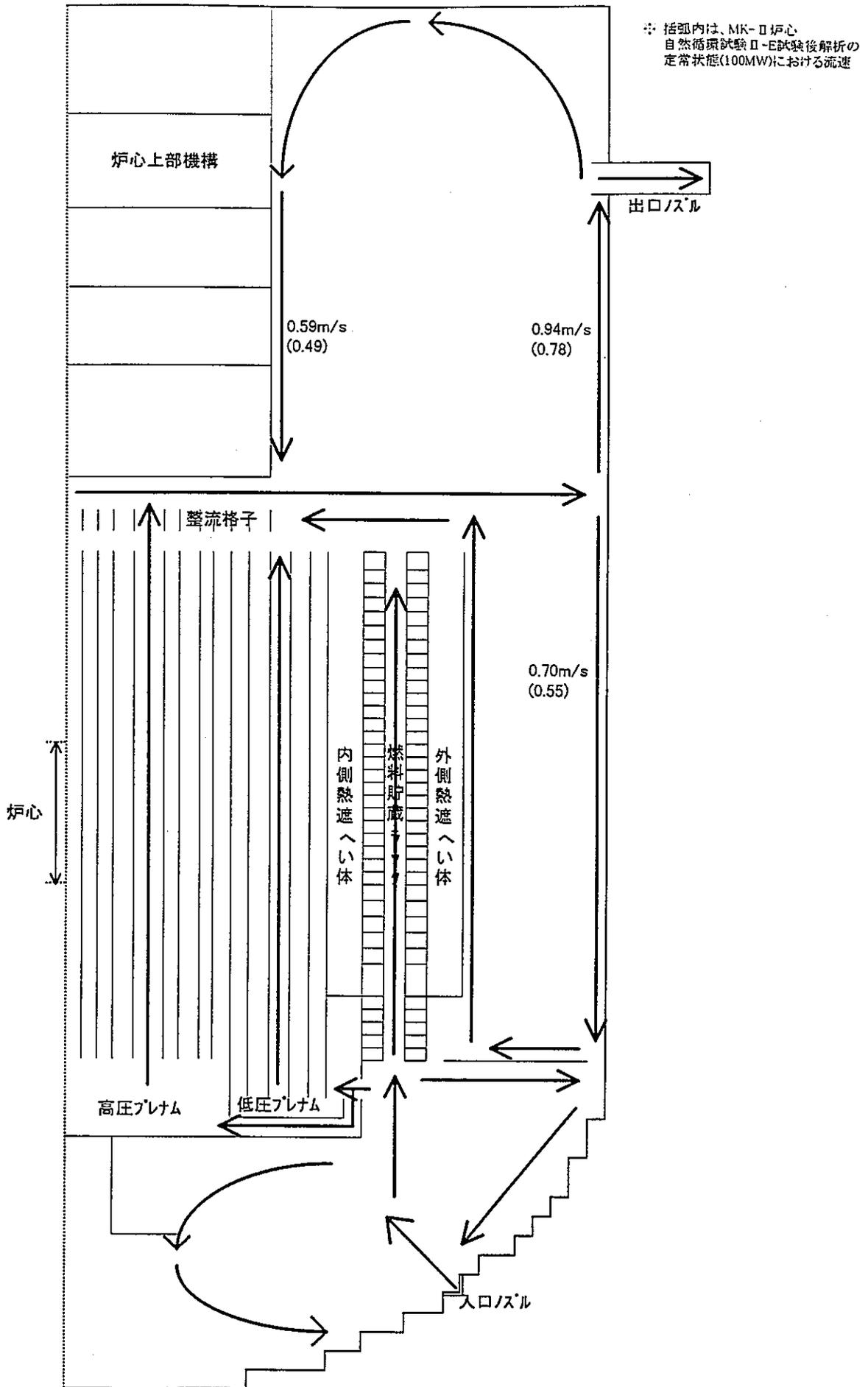


図3.1 原子炉容器内冷却材流況概略図

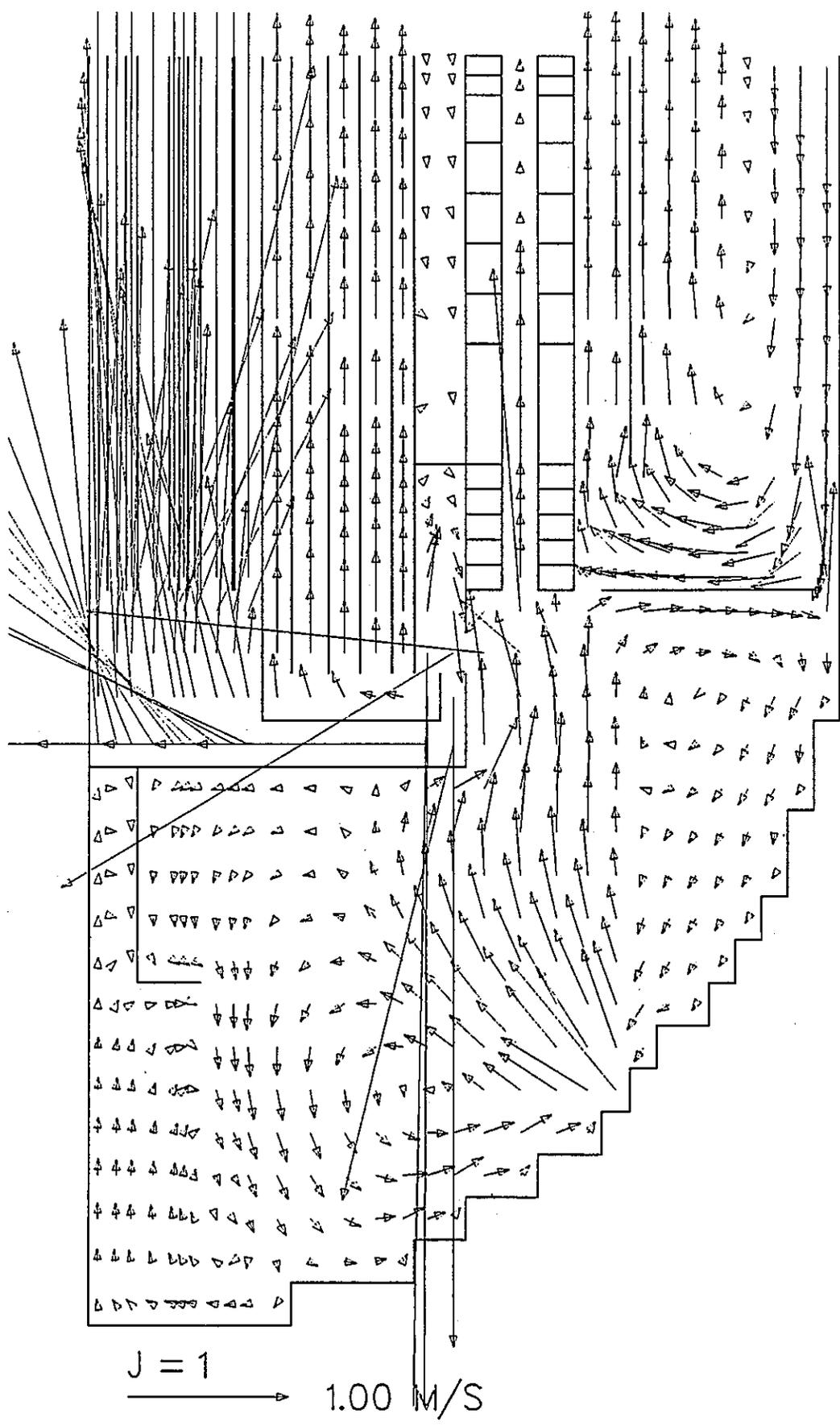


図 3.2 下部プレナムの冷却材流況

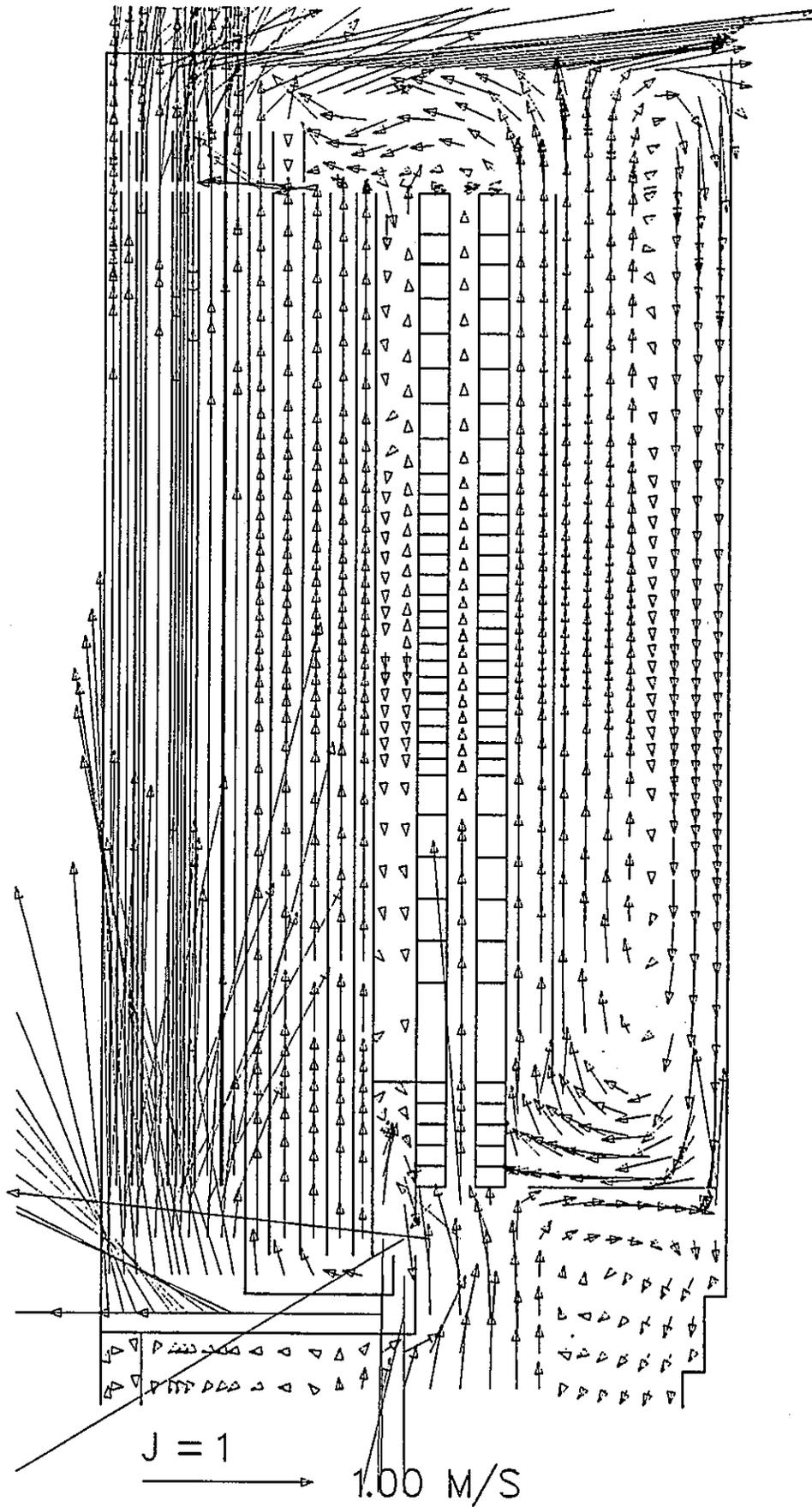


図 3.3 集合体レベルの冷却材流況

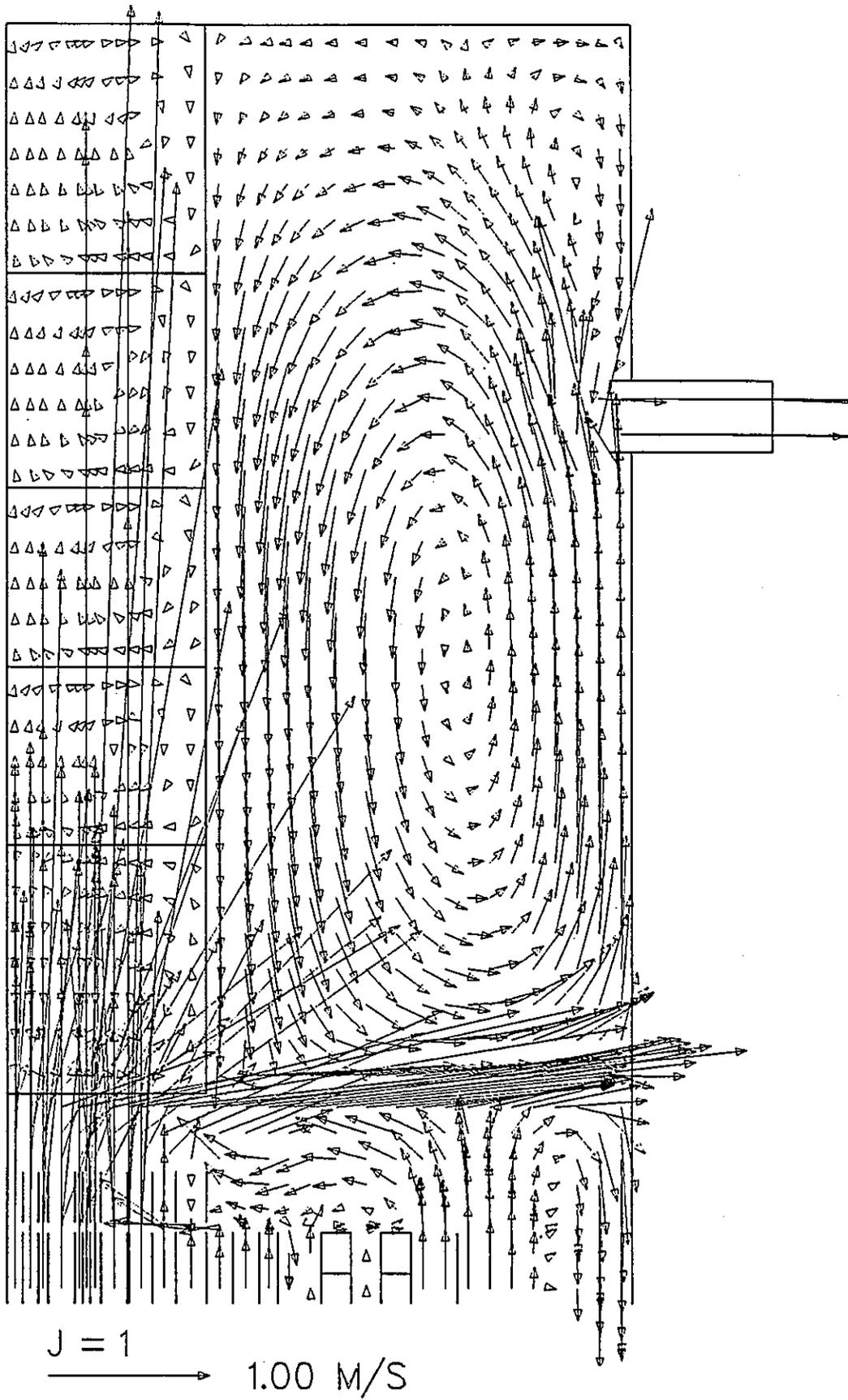


図 3.4 上部プレナムの冷却材流況

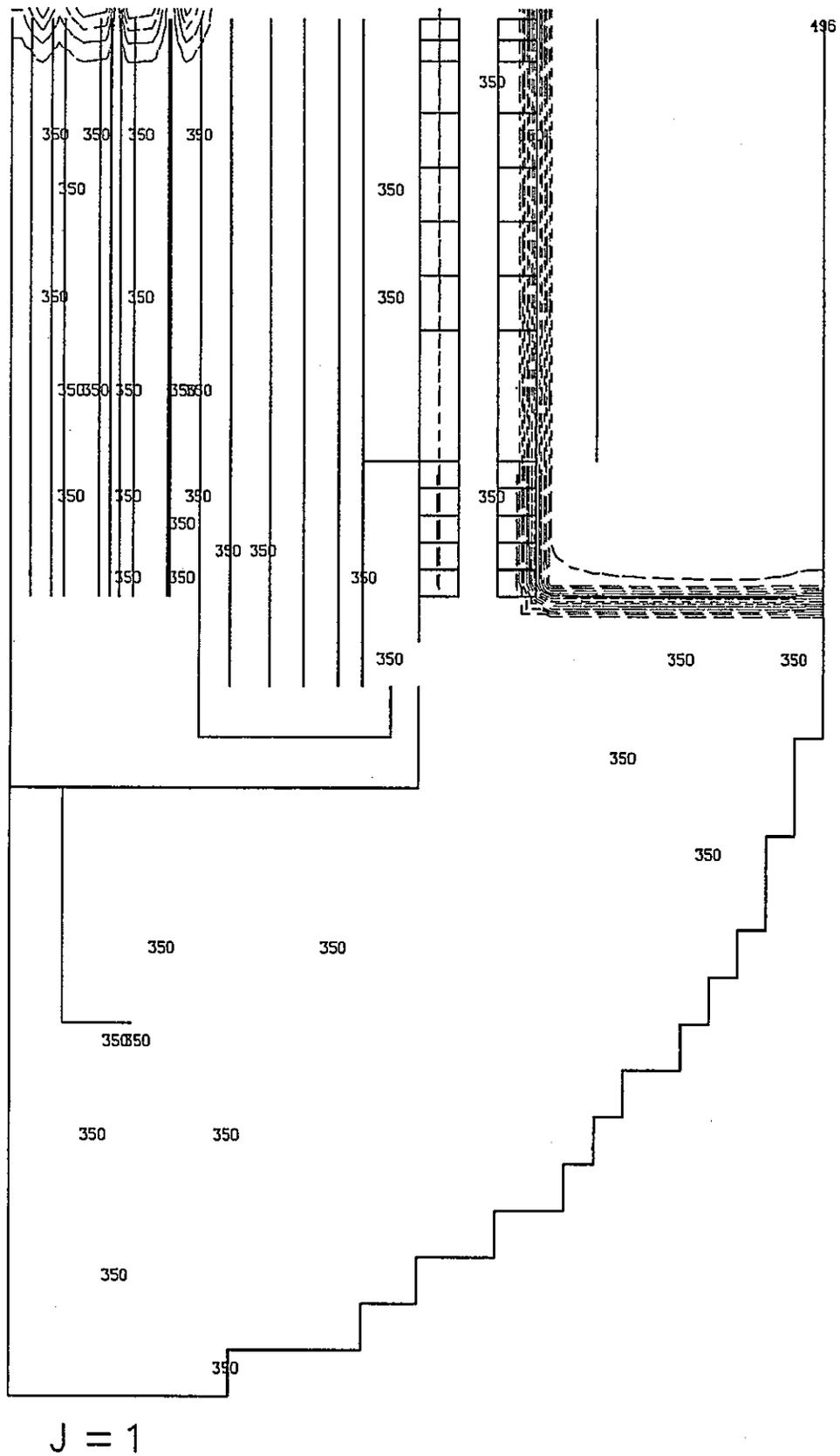


図 3.5 下部プレナムの冷却材温度分布

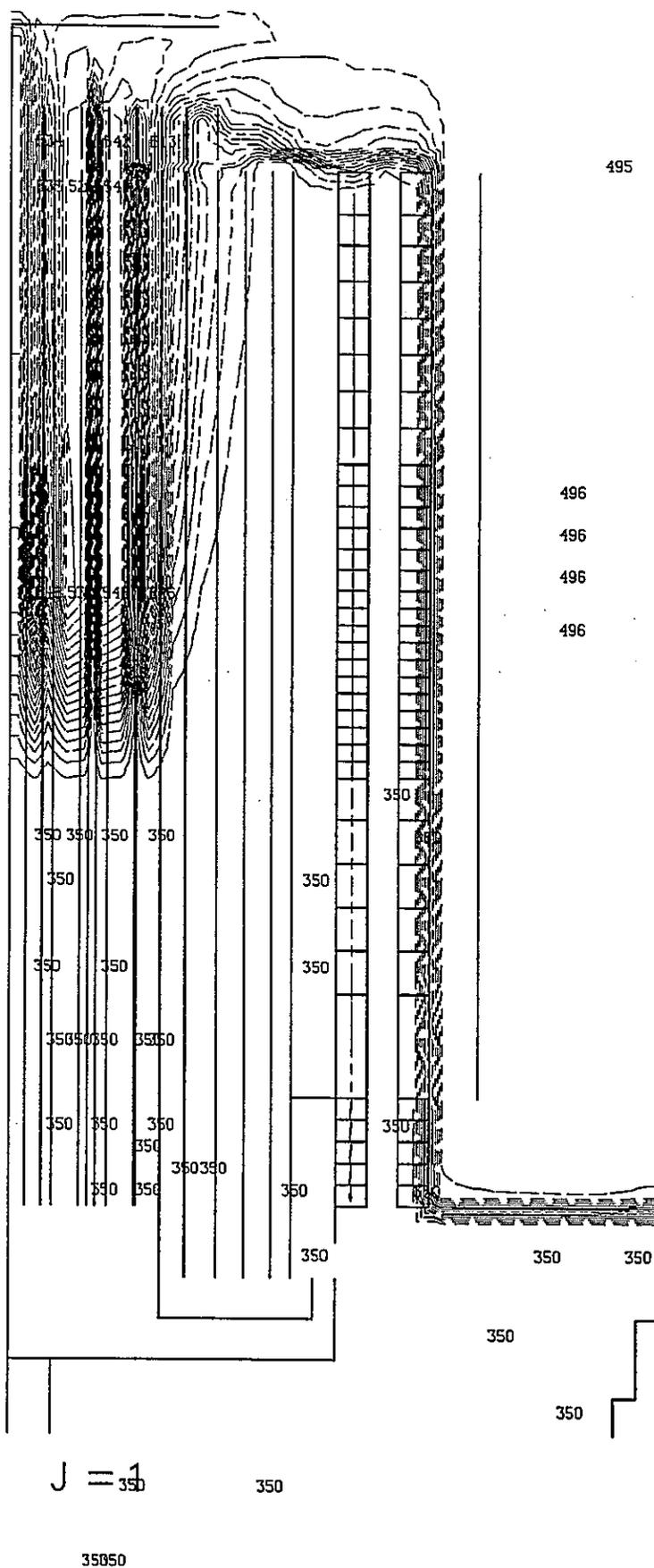


図 3.6 集合体レベルの冷却材温度分布

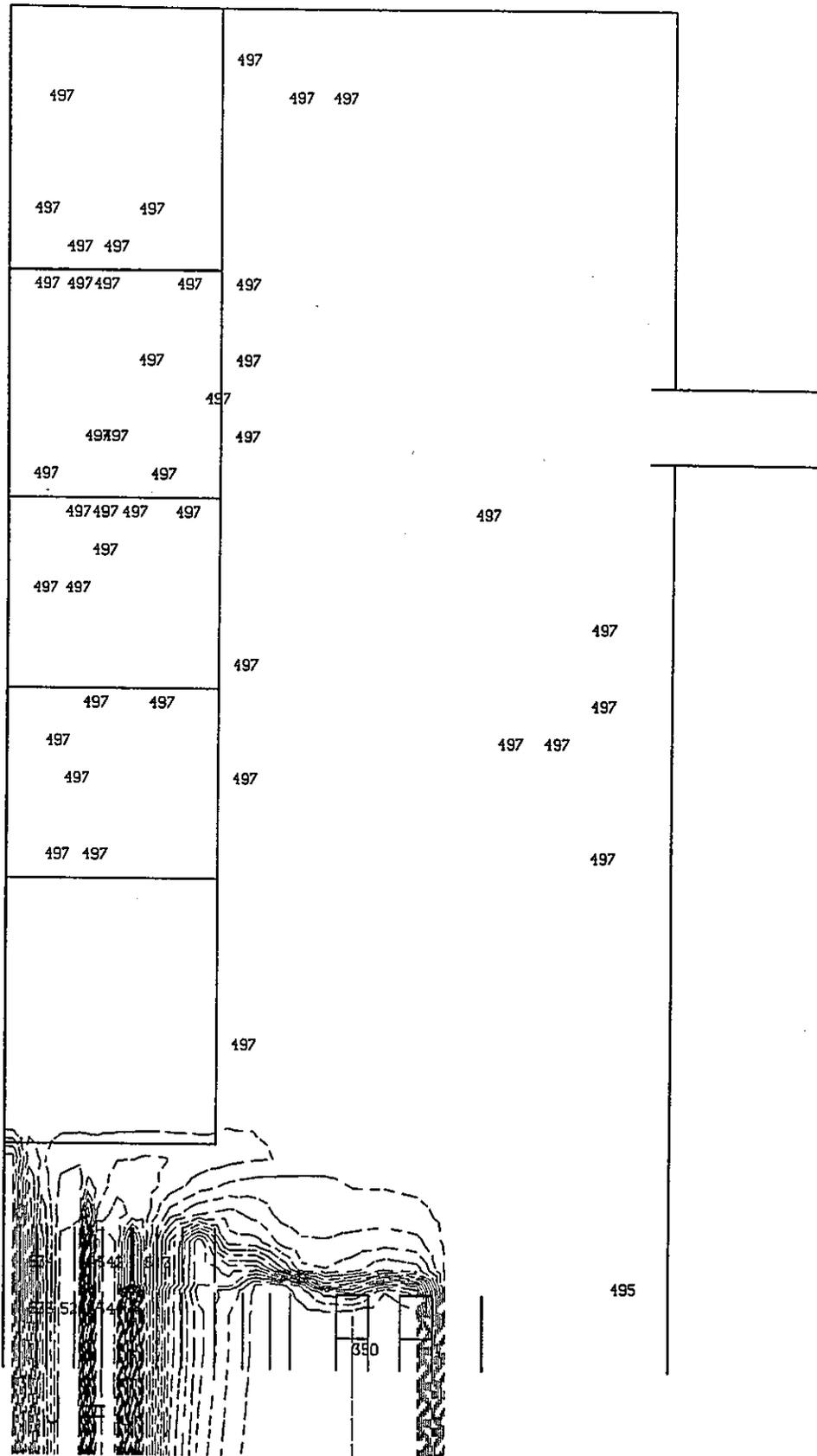


図 3.7 上部プレナムの冷却材温度分布

#### 4. まとめ

高速実験炉「常陽」の MK-Ⅲ 標準炉心における定格出力(140MW)運転時の原子炉容器内冷却材の流動状況を把握する目的で、単相多次元熱流動解析コード“AQUA”を用いて「常陽」MK-Ⅲ 標準炉心における原子炉容器内熱流動解析を実施した。

本解析により、以下の結果が得られた。

- (1) 「常陽」MK-Ⅲ 標準炉心における原子炉容器内の冷却材の流動状況が、MK-Ⅱ 炉心の流動状況と同じであることがわかった。
- (2) 各集合体領域の流量が「「常陽」MK-Ⅲ 炉心の熱流力設計に関する解析」<sup>3)</sup>で報告されている必要最小流量を満足していることを確認した。
- (3) 各集合体の炉心頂部と熱電対（集合体出口温度測定）位置の冷却材および原子炉容器内の冷却材温度分布が詳細に得られた。

<参考文献>

- 1) 沢田誠他, 高速実験炉「常陽」試験報告書 自然循環試験Ⅱ-E(100MW 過渡試験)結果報告 : PNC SN9410 88-049 (1988年5月)
- 2) 池田一三他, MK-Ⅲ標準炉心の詳細核計算(Ⅱ) : PNC ZJ9214 93-002 (1993年3月)
- 3) 福家賢他, 「常陽」MK-Ⅲ炉心の熱流力設計に関する解析 : PNC ZN9410 96-230 (1996年7月)

添付資料 1

入力データ

```

*****
**      'JOYO' MK-III STANDARD CORE
**  AQUA VERSIONS
*****

```

&GEOM

```

IGEOM=-1, IFRES=1, NL1=248, NM1=2608, IFREB=5216,
ISYMCH=3, IFITEN=3, NFORCE=26, ITURKE=0, ISTRUC=1, IFPCG=0,
IMAX=34, JMAX=1, KMAX=90, NSURF=7,
DX=2*0.04279, 0.02763, 0.07331, 0.02311, 0.0208, 0.02985, 0.07392,
0.00543, 0.06405, 0.06701, 0.08558, 0.07407, 0.07408, 0.05262,
2*0.06048, 3*0.084, 2*0.065, 8*0.06125, 4*0.1,
DY=6.283185307,
DZ=8*0.099375, 5*0.1005, 2*0.10875, 2*0.09625, 5*0.058,
0.2775, 3*0.116667, 0.119, 0.111, 11*0.0454545, 6*0.0561667,
6*0.0975, 0.084, 0.114, 2*0.015, 2*0.07, 3*0.0732,
19*0.10002, 11*0.1,
XNORML= 0.0, 0.0, 1.0, -1.0, 0.0, -1.0, -1.0,
YNORML= 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
ZNORML= 1.0, -1.0, 0.0, 0.0, 1.0, 0.0, 0.0,

```

&END

```

REG -1.0      1 11 1 1 1 1 1
REG -1.0     12 15 1 1 2 2 1
REG -1.0     16 17 1 1 3 3 1
REG -1.0     18 19 1 1 4 4 1
REG -1.0     20 21 1 1 5 5 1
REG -1.0     23 23 1 1 7 7 1
REG -1.0     24 25 1 1 8 8 1
REG -1.0     26 26 1 1 9 9 1
REG -1.0     27 27 1 1 10 10 1
REG -1.0     28 28 1 1 11 11 1
REG -1.0     29 29 1 1 13 13 1
REG -1.0     30 30 1 1 15 15 1
REG -1.0     31 34 1 1 79 79 1
REG -1.0      1 30 1 1 90 90 2
REG -1.0     31 34 1 1 80 80 2
REG -1.0      1 1 1 1 1 90 3
REG -1.0     11 11 1 1 1 1 4
REG -1.0     15 15 1 1 2 2 4
REG -1.0     17 17 1 1 3 3 4
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REG -1.0     21 21 1 1 5 5 4
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REG -1.0     29 29 1 1 13 14 4
REG -1.0     30 30 1 1 15 78 4
REG -1.0     30 30 1 1 81 90 4
REG 1.03664E-1 22 22 1 1 6 6 5
REG 1.03664E-1 22 22 1 1 6 6 6
REG 1.87805E-1 34 34 1 1 79 80 7
END

```

&DATA

```

ISTATE=0, IFENER=1, IDTIME=0, RDTIME=1.0,
NTHCON=-1, TREST =180., IT=1.1, DT(1) =100.0,

FCTL0=200.0, FCTHI=600.0,

VELOC=4*0.0, 2*4.16690, 0.0,

```

KFLOW=4\*-3, 2\*1, -5,  
 TEMP=4\*0.0, 2\*350.0, 0.0,  
 TEMPO=350.0, KTEMP=4\*400, 2\*1, 400,  
 PRES=7\*1.0135E5, PRES0=1.0135E5,  
 KPRES=6\*0.1,  
 GRAVZ=-9.807,  
 XPRES0=2.15, ZPRES0=6.765,

NTPRNT=200, 400, 600, 800, 1000, -9999,  
 NTHPR=12001, 32001, 52001,  
 NTSMRY=20,

NREBRT=13, IREBIT=9,  
 NREBM=168, 123, 204, 747, 368, 90, 6\*54, 216,  
 NREBX=12\*0, 2,  
 NREBZ=18, 12, 18, 2\*30, 7\*18, 0,

FORCEF=26\*0.5,  
 REYLEN= 2.467E-3, 1.2911E-2, 5.347E-3, 4.967E-3, 5.829E-3,  
 6\*3.4E-2, 5.8E-3, 5.6E-3, 2.7E-2, 3.4527E-4, 1.0E-2,  
 2.6E-4, 1.0E-4, 9.0E-2, 7.42E-2, 2.0E-2, 0.0, 6.5E-2,  
 0.0, 2\*2.0E-2,  
 CLENTH= 0.0, 1.2911E-2, 5.347E-3, 4.967E-3, 5.829E-3,  
 10\*0.0, 1.0E-2, 2.6E-4, 2\*0.0, 7.42E-2, 2.0E-2, 0.0,  
 6.5E-2, 3\*0.0,

NCORR= 20,  
 ICORR= 20, 4\*1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11,  
 12, 13, 14, 15, 2\*1, 16, 1, 17, 18, 19,  
 REYTRN= 2.E3, 9\*1.5E5, 1.E9, 3\*1.E5, 1.E9, 2\*1.E5, 2\*1.5E5, 8.E3,  
 ACORRL= 64.0, 1.303, 1.747, 0.0, 2.41, 2.921,  
 5.012, 1.853, 2.615,  
 2\*0.0, 41.08, 1.685E5, 624.75,  
 5\*0.0, 1.8708E3,  
 BCORRL= -1.0, -0.001518, -0.0201, 0.0, -0.0147, -0.006033,  
 -0.004421, -0.01025, -0.04844,  
 2\*0.0, -0.2, -1.0, -0.2,  
 5\*0.0, -1.0,  
 CCORRL= 3\*0.0, 175.384, 5\*0.0,  
 0.1672, 0.6971, 3\*0.0, 2.105,  
 1800.0, 0.63, 3.305, 1.021, 0.72221,  
 ACORRT= 0.3164, 1.303, 1.747, 0.0, 2.41, 2.921,  
 5.012, 1.853, 2.615,  
 2\*0.0, 41.08, 1.685E5, 624.75,  
 5\*0.0, 6.1292,  
 BCORRT= -0.25, -0.001518, -0.0201, 0.0, -0.0147, -0.006033,  
 -0.004421, -0.01025, -0.04844,  
 2\*0.0, -0.2, -1.0, -0.2,  
 5\*0.0, -0.2067,  
 CCORRT= 3\*0.0, 175.384, 5\*0.0,  
 0.1672, 0.6971, 3\*0.0, 2.105,  
 1800.0, 0.63, 3.305, 1.021, 0.0,

NMATER=3,  
 COK= 12.66, 1.2084957E-3, 13.54,  
 C1K= 0.01924, 1.3280173E-5, 1.57E-2,  
 C2K= -5.882E-6, 4.8645324E-8, 0.0,  
 COCP= 490.5, 253.3732, 499.1834,  
 C1CP= 8.8334E-2, 0.174344, 0.1338,  
 C2CP= 1.666E-4, -1.425539E-4, 0.0,

CORO= 8035. 5, 9630. 5, 7966. 4029,  
 C1R0= -0. 4049, 0. 0, -0. 44212,  
 C2R0= -5. 02E-5, 0. 0, -3. 8942E-5,  
 C01K= 0. 0, 0. 194137, 0. 0,  
 C02K= 0. 0, 2. 82881E-4, 0. 0,  
 C3K= 0. 0, 5. 9396E-11, 0. 0,  
 C3CP= 0. 0, 4. 737E-8, 0. 0.

NHEATC=2, PETRN=2\*47. 5,  
 HEAT1L= 3. 64, 5. 0,  
 HEAT2L= 0. 0, 0. 0,  
 HEAT3L= 0. 0, 0. 0,  
 HEAT4L= 0. 0, 0. 0,  
 HEAT1T= 5. 0, 5. 0,  
 HEAT2T= 0. 038, 0. 025,  
 HEAT3T= 0. 68, 0. 8,  
 HEAT4T= 0. 68, 0. 8,

&END

&TURB

TURBV=0. 0305656, TURBC=0. 06591333,  
 HYDIN = 0. 0,

&END

REBM 1 1 11 1 1 1 1  
 REBM 1 1 15 1 1 2 2  
 REBM 1 1 17 1 1 3 3  
 REBM 1 1 19 1 1 4 4  
 REBM 1 1 21 1 1 5 5  
 REBM 1 1 22 1 1 6 6  
 REBM 1 1 23 1 1 7 7  
 REBM 1 1 25 1 1 8 8  
 REBM 1 1 3 1 1 9 13  
 REBM 2 4 26 1 1 9 9  
 REBM 2 4 27 1 1 10 10  
 REBM 2 4 28 1 1 11 12  
 REBM 2 4 29 1 1 13 13  
 REBM 3 1 29 1 1 14 14  
 REBM 3 1 30 1 1 15 17  
 REBM 3 1 17 1 1 18 22  
 REBM 4 18 30 1 1 18 22  
 REBM 4 1 22 1 1 23 53  
 REBM 5 23 30 1 1 23 53  
 REBM 5 1 30 1 1 54 57  
 REBM 6 1 30 1 1 58 60  
 REBM 7 13 30 1 1 61 63  
 REBM 8 13 30 1 1 64 66  
 REBM 9 13 30 1 1 67 69  
 REBM 10 13 30 1 1 70 72  
 REBM 11 13 30 1 1 73 75  
 REBM 12 13 30 1 1 76 78  
 REBM 13 13 30 1 1 79 90  
 REBX 13 30 30 1 1 79 80  
 REBZ 1 8 25 1 1 8 8  
 REBZ 2 18 29 1 1 13 13  
 REBZ 3 1 15 1 1 22 22  
 REBZ 3 19 19 1 1 17 17  
 REBZ 3 21 21 1 1 17 17  
 REBZ 3 30 30 1 1 17 17  
 REBZ 4 1 22 1 1 53 53  
 REBZ 4 23 30 1 1 22 22  
 REBZ 5 1 30 1 1 57 57

REBZ 6 13 30 1 1 60 60  
 REBZ 7 13 30 1 1 63 63  
 REBZ 8 13 30 1 1 66 66  
 REBZ 9 13 30 1 1 69 69  
 REBZ 10 13 30 1 1 72 72  
 REBZ 11 13 30 1 1 75 75  
 REBZ 12 13 30 1 1 78 78

END

ZFOR 1 1 5 1 1 28 51  
 ZFOR 1 7 8 1 1 28 51  
 ZFOR 1 10 10 1 1 28 51  
 ZFOR 2 6 6 1 1 28 53  
 ZFOR 2 9 9 1 1 28 53  
 ZFOR 3 11 11 1 1 28 51  
 ZFOR 4 12 13 1 1 28 51  
 ZFOR 5 14 15 1 1 28 51  
 ZFOR 6 2 2 1 1 19 19  
 ZFOR 7 4 4 1 1 19 19  
 ZFOR 8 6 6 1 1 19 19  
 ZFOR 8 9 9 1 1 19 19  
 ZFOR 9 5 5 1 1 19 19  
 ZFOR 9 7 7 1 1 19 19  
 ZFOR 10 8 8 1 1 19 19  
 ZFOR 11 10 10 1 1 19 19  
 ZFOR 12 11 11 1 1 17 17  
 ZFOR 13 12 13 1 1 17 17  
 ZFOR 14 14 15 1 1 17 17  
 ZFOR 15 16 16 1 1 15 15  
 ZFOR 16 19 19 1 1 17 17  
 ZFOR 17 21 21 1 1 17 17  
 ZFOR 18 30 30 1 1 17 17  
 XFOR 19 17 17 1 1 16 16  
 ZFOR 20 16 17 1 1 23 53  
 ZFOR 21 21 22 1 1 23 53  
 XFOR 22 1 1 1 1 54 55  
 ZFOR 23 6 6 1 1 54 55  
 ZFOR 23 9 9 1 1 54 55  
 XFOR 24 6 6 1 1 54 55  
 XFOR 24 9 9 1 1 54 55  
 ZFOR 25 1 1 1 1 19 19  
 ZFOR 26 3 3 1 1 19 19

END

&STRUCT ITSBUG=0, &END

\* UCS \*

&T N= 1, IXYZ=3, NT= 0, RODFR= 0.5, OUTR=0.5250E 0, &END

&F IHT=1, HYD=3.913E-1, &END

&M MI=1, NP=1, DR=5.0E-3, Q=0.0, &END

&F IHT=1, HYD=1.215E 0, &END

\* FUEL ASSEMBLY (LOWER REF.) \* I=1, K=24 \*

&T N= 2, IXYZ=3, NT= 0, RODFR= 6.0, OUTR=1.7250E-2, &END

&F IHT=2, HYD=6.399E-3, &END

&M MI=3, NP=3, DR=1.264E-3, Q=0.0, &END

\* FUEL ASSEMBLY (LOWER REF.) \* I=1, K=25 \*

&T N= 3, IXYZ=3, NT= 0, RODFR= 6.0, OUTR=1.7250E-2, &END

&F IHT=2, HYD=6.399E-3, &END

&M MI=3, NP=3, DR=1.264E-3, Q=0.0, &END

\* FUEL ASSEMBLY (LOWER REF.) \* I=1, K=26 \*

&T N= 4, IXYZ=3, NT= 0, RODFR= 6.0, OUTR=1.7250E-2, &END

&F IHT=2, HYD=6.399E-3, &END

&M MI=3, NP=3, DR=1.264E-3, Q=0.0, &END

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      * FUEL ASSEMBLY (NA) * I=1, K=27 *
&T N= 5, IXYZ=3, NT= 0, RODFR= 6.0, OTR=4.9300E-2, &END
&F IHT=2, HYD=7.018E-3, &END
&M MI=3, NP=1, DR=3.249E-4, Q=0.0, &END
      * FUEL ASSEMBLY (INSULATOR) * I=1, K=28 *
&T N= 6, IXYZ=3, NT= 0, RODFR= 30.0, OTR=3.2500E-3, &END
&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=2, DR=1.625E-3, Q=0.0, &END
      * FUEL ASSEMBLY (FUEL) * I=1, K=29 *
&T N= 7, IXYZ=3, NT= 0, RODFR= 30.0, OTR=3.2500E-3, &END
&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=1, DR=4.7E-4, Q=0.0, SGAP=8.0E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.3500E-3, Q=2.28485E9, &END
      * FUEL ASSEMBLY (FUEL) * I=1, K=30 *
&T N= 8, IXYZ=3, NT= 0, RODFR= 30.0, OTR=3.2500E-3, &END
&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=1, DR=4.7E-4, Q=0.0, SGAP=8.0E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.3500E-3, Q=2.43779E9, &END
      * FUEL ASSEMBLY (FUEL) * I=1, K=31 *
&T N= 9, IXYZ=3, NT= 0, RODFR= 30.0, OTR=3.2500E-3, &END
&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=1, DR=4.7E-4, Q=0.0, SGAP=8.0E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.3500E-3, Q=2.67362E9, &END
      * FUEL ASSEMBLY (FUEL) * I=1, K=32 *
&T N= 10, IXYZ=3, NT= 0, RODFR= 30.0, OTR=3.2500E-3, &END
&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=1, DR=4.7E-4, Q=0.0, SGAP=8.0E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.3500E-3, Q=2.87817E9, &END
      * FUEL ASSEMBLY (FUEL) * I=1, K=33 *
&T N= 11, IXYZ=3, NT= 0, RODFR= 30.0, OTR=3.2500E-3, &END
&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=1, DR=4.7E-4, Q=0.0, SGAP=8.0E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.3500E-3, Q=3.00099E9, &END
      * FUEL ASSEMBLY (FUEL) * I=1, K=34 *
&T N= 12, IXYZ=3, NT= 0, RODFR= 30.0, OTR=3.2500E-3, &END
&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=1, DR=4.7E-4, Q=0.0, SGAP=8.0E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.3500E-3, Q=3.04167E9, &END
      * FUEL ASSEMBLY (FUEL) * I=1, K=35 *
&T N= 13, IXYZ=3, NT= 0, RODFR= 30.0, OTR=3.2500E-3, &END
&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=1, DR=4.7E-4, Q=0.0, SGAP=8.0E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.3500E-3, Q=3.00463E9, &END
      * FUEL ASSEMBLY (FUEL) * I=1, K=36 *
&T N= 14, IXYZ=3, NT= 0, RODFR= 30.0, OTR=3.2500E-3, &END
&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=1, DR=4.7E-4, Q=0.0, SGAP=8.0E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.3500E-3, Q=2.88468E9, &END
      * FUEL ASSEMBLY (FUEL) * I=1, K=37 *
&T N= 15, IXYZ=3, NT= 0, RODFR= 30.0, OTR=3.2500E-3, &END
&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=1, DR=4.7E-4, Q=0.0, SGAP=8.0E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.3500E-3, Q=2.68053E9, &END
      * FUEL ASSEMBLY (FUEL) * I=1, K=38 *
&T N= 16, IXYZ=3, NT= 0, RODFR= 30.0, OTR=3.2500E-3, &END
&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=1, DR=4.7E-4, Q=0.0, SGAP=8.0E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.3500E-3, Q=2.43500E9, &END
      * FUEL ASSEMBLY (FUEL) * I=1, K=39 *
&T N= 17, IXYZ=3, NT= 0, RODFR= 30.0, OTR=3.2500E-3, &END

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&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=1, DR=4.7E-4, Q=0.0, SGAP=8.0E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.3500E-3, Q=2.20390E9, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=1, K=40 *
&T N= 18, IXYZ=3, NT= 0, RODFR= 30.0, OUTFR=3.2500E-3, &END
&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=1, DR=4.7E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=1, K=41 *
&T N= 19, IXYZ=3, NT= 0, RODFR= 30.0, OUTFR=3.2500E-3, &END
&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=1, DR=4.7E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=1, K=42 *
&T N= 20, IXYZ=3, NT= 0, RODFR= 30.0, OUTFR=3.2500E-3, &END
&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=1, DR=4.7E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=1, K=43 *
&T N= 21, IXYZ=3, NT= 0, RODFR= 30.0, OUTFR=3.2500E-3, &END
&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=1, DR=4.7E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=1, K=44 *
&T N= 22, IXYZ=3, NT= 0, RODFR= 30.0, OUTFR=3.2500E-3, &END
&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=1, DR=4.7E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=1, K=45 *
&T N= 23, IXYZ=3, NT= 0, RODFR= 30.0, OUTFR=3.2500E-3, &END
&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=1, DR=4.7E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=1, K=46 *
&T N= 24, IXYZ=3, NT= 0, RODFR= 30.0, OUTFR=3.2500E-3, &END
&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=1, K=47 *
&T N= 25, IXYZ=3, NT= 0, RODFR= 30.0, OUTFR=3.2500E-3, &END
&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=1, K=48 *
&T N= 26, IXYZ=3, NT= 0, RODFR= 30.0, OUTFR=3.2500E-3, &END
&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=1, K=49 *
&T N= 27, IXYZ=3, NT= 0, RODFR= 30.0, OUTFR=3.2500E-3, &END
&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=1, K=50 *
&T N= 28, IXYZ=3, NT= 0, RODFR= 30.0, OUTFR=3.2500E-3, &END
&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=1, K=51 *
&T N= 29, IXYZ=3, NT= 0, RODFR= 30.0, OUTFR=3.2500E-3, &END
&F IHT=1, HYD=4.120E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (LOWER REF.) * I=2, K=24 *
&T N= 30, IXYZ=3, NT= 0, RODFR= 3.0, OUTFR=6.3340E-2, &END
&F IHT=2, HYD=1.644E-2, &END
&M MI=3, NP=5, DR=1.72E-3, Q=0.0, &END
      * FUEL ASSEMBLY (LOWER REF.) * I=2, K=25 *
&T N= 31, IXYZ=3, NT= 0, RODFR= 3.0, OUTFR=6.3340E-2, &END
&F IHT=2, HYD=1.644E-2, &END
&M MI=3, NP=5, DR=1.72E-3, Q=0.0, &END
      * FUEL ASSEMBLY (LOWER REF.) * I=2, K=26 *

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&T N= 32, IXYZ=3, NT= 0, RODFR= 3.0, OTR=6.3340E-2, &END
&F IHT=2, HYD=1.644E-2, &END
&M MI=3, NP=5, DR=1.72E-3, Q=0.0, &END
      * FUEL ASSEMBLY (NA) * I=2, K=27 *
&T N= 33, IXYZ=3, NT= 0, RODFR= 3.0, OTR=3.9363E-2, &END
&F IHT=2, HYD=7.141E-2, &END
&M MI=3, NP=1, DR=1.3E-3, Q=0.0, &END
      * FUEL ASSEMBLY (INSULATOR) * I=2, K=28 *
&T N= 34, IXYZ=3, NT= 0, RODFR= 381.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=2, DR=1.375E-3, Q=0.0, &END
      * FUEL ASSEMBLY (FUEL) * I=2, K=29 *
&T N= 35, IXYZ=3, NT= 0, RODFR= 381.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.69779E9, &END
      * FUEL ASSEMBLY (FUEL) * I=2, K=30 *
&T N= 36, IXYZ=3, NT= 0, RODFR= 381.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.81143E9, &END
      * FUEL ASSEMBLY (FUEL) * I=2, K=31 *
&T N= 37, IXYZ=3, NT= 0, RODFR= 381.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.98667E9, &END
      * FUEL ASSEMBLY (FUEL) * I=2, K=32 *
&T N= 38, IXYZ=3, NT= 0, RODFR= 381.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=2.13866E9, &END
      * FUEL ASSEMBLY (FUEL) * I=2, K=33 *
&T N= 39, IXYZ=3, NT= 0, RODFR= 381.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=2.22992E9, &END
      * FUEL ASSEMBLY (FUEL) * I=2, K=34 *
&T N= 40, IXYZ=3, NT= 0, RODFR= 381.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=2.26015E9, &END
      * FUEL ASSEMBLY (FUEL) * I=2, K=35 *
&T N= 41, IXYZ=3, NT= 0, RODFR= 381.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=2.23263E9, &END
      * FUEL ASSEMBLY (FUEL) * I=2, K=36 *
&T N= 42, IXYZ=3, NT= 0, RODFR= 381.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=2.14349E9, &END
      * FUEL ASSEMBLY (FUEL) * I=2, K=37 *
&T N= 43, IXYZ=3, NT= 0, RODFR= 381.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.99180E9, &END
      * FUEL ASSEMBLY (FUEL) * I=2, K=38 *
&T N= 44, IXYZ=3, NT= 0, RODFR= 381.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END

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&M MI=2, NP=2, DR=1.1575E-3, Q=1.80936E9, &END
      * FUEL ASSEMBLY (FUEL) * I=2, K=39 *
&T N= 45, IXYZ=3, NT= 0, RODFR= 381.0, OUTF=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.63763E9, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=2, K=40 *
&T N= 46, IXYZ=3, NT= 0, RODFR= 381.0, OUTF=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=2, K=41 *
&T N= 47, IXYZ=3, NT= 0, RODFR= 381.0, OUTF=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=2, K=42 *
&T N= 48, IXYZ=3, NT= 0, RODFR= 381.0, OUTF=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=2, K=43 *
&T N= 49, IXYZ=3, NT= 0, RODFR= 381.0, OUTF=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=2, K=44 *
&T N= 50, IXYZ=3, NT= 0, RODFR= 381.0, OUTF=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=2, K=45 *
&T N= 51, IXYZ=3, NT= 0, RODFR= 381.0, OUTF=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=2, K=46 *
&T N= 52, IXYZ=3, NT= 0, RODFR= 381.0, OUTF=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=2, K=47 *
&T N= 53, IXYZ=3, NT= 0, RODFR= 381.0, OUTF=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=2, K=48 *
&T N= 54, IXYZ=3, NT= 0, RODFR= 381.0, OUTF=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=2, K=49 *
&T N= 55, IXYZ=3, NT= 0, RODFR= 381.0, OUTF=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=2, K=50 *
&T N= 56, IXYZ=3, NT= 0, RODFR= 381.0, OUTF=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=2, K=51 *
&T N= 57, IXYZ=3, NT= 0, RODFR= 381.0, OUTF=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (LOWER REF.) * I=3, K=24 *
&T N= 58, IXYZ=3, NT= 0, RODFR= 3.0, OUTF=9.3209E-2, &END
&F IHT=2, HYD=1.953E-1, &END
&M MI=3, NP=1, DR=8.831E-4, Q=0.0, &END
      * FUEL ASSEMBLY (LOWER REF.) * I=3, K=25 *
&T N= 59, IXYZ=3, NT= 0, RODFR= 3.0, OUTF=9.3209E-2, &END

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&F IHT=2, HYD=1.953E-1, &END
&M MI=3, NP=1, DR=8.831E-4, Q=0.0, &END
      * FUEL ASSEMBLY (LOWER REF.) * I=3, K=26 *
&T N= 60, IXYZ=3, NT= 0, RODFR= 3.0, OUTR=9.3209E-2, &END
&F IHT=2, HYD=1.953E-1, &END
&M MI=3, NP=1, DR=8.831E-4, Q=0.0, &END
      * FUEL ASSEMBLY (LOWER REF.) * I=3, K=27 *
&T N= 61, IXYZ=3, NT= 0, RODFR= 3.0, OUTR=1.0084E-1, &END
&F IHT=2, HYD=2.814E-2, &END
&M MI=3, NP=1, DR=5.900E-4, Q=0.0, &END
      * FUEL ASSEMBLY (INSULATOR) * I=3, K=28 *
&T N= 62, IXYZ=3, NT= 0, RODFR= 183.0, OUTR=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=2, DR=2.250E-4, Q=0.0, &END
      * FUEL ASSEMBLY (FUEL) * I=3, K=29 *
&T N= 63, IXYZ=3, NT= 0, RODFR= 183.0, OUTR=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=1, DR=4.5E-4, Q=0.0, SGAP=1.15E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.3550E-3, Q=1.98684E9, &END
      * FUEL ASSEMBLY (FUEL) * I=3, K=30 *
&T N= 64, IXYZ=3, NT= 0, RODFR= 183.0, OUTR=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=1, DR=4.5E-4, Q=0.0, SGAP=1.15E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.3550E-3, Q=2.11983E9, &END
      * FUEL ASSEMBLY (FUEL) * I=3, K=31 *
&T N= 65, IXYZ=3, NT= 0, RODFR= 183.0, OUTR=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=1, DR=4.5E-4, Q=0.0, SGAP=1.15E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.3550E-3, Q=2.32491E9, &END
      * FUEL ASSEMBLY (FUEL) * I=3, K=32 *
&T N= 66, IXYZ=3, NT= 0, RODFR= 183.0, OUTR=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=1, DR=4.5E-4, Q=0.0, SGAP=1.15E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.3550E-3, Q=2.50278E9, &END
      * FUEL ASSEMBLY (FUEL) * I=3, K=33 *
&T N= 67, IXYZ=3, NT= 0, RODFR= 183.0, OUTR=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=1, DR=4.5E-4, Q=0.0, SGAP=1.15E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.3550E-3, Q=2.60957E9, &END
      * FUEL ASSEMBLY (FUEL) * I=3, K=34 *
&T N= 68, IXYZ=3, NT= 0, RODFR= 183.0, OUTR=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=1, DR=4.5E-4, Q=0.0, SGAP=1.15E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.3550E-3, Q=2.64495E9, &END
      * FUEL ASSEMBLY (FUEL) * I=3, K=35 *
&T N= 69, IXYZ=3, NT= 0, RODFR= 183.0, OUTR=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=1, DR=4.5E-4, Q=0.0, SGAP=1.15E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.3550E-3, Q=2.61274E9, &END
      * FUEL ASSEMBLY (FUEL) * I=3, K=36 *
&T N= 70, IXYZ=3, NT= 0, RODFR= 183.0, OUTR=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=1, DR=4.5E-4, Q=0.0, SGAP=1.15E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.3550E-3, Q=2.50843E9, &END
      * FUEL ASSEMBLY (FUEL) * I=3, K=37 *
&T N= 71, IXYZ=3, NT= 0, RODFR= 183.0, OUTR=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=1, DR=4.5E-4, Q=0.0, SGAP=1.15E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.3550E-3, Q=2.33091E9, &END
      * FUEL ASSEMBLY (FUEL) * I=3, K=38 *

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&T N= 72, IXYZ=3, NT= 0, RODFR= 183.0, OUTF=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=1, DR=4.5E-4, Q=0.0, SGAP=1.15E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.3550E-3, Q=2.11741E9, &END
      * FUEL ASSEMBLY (FUEL) * I=3, K=39 *
&T N= 73, IXYZ=3, NT= 0, RODFR= 183.0, OUTF=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=1, DR=4.5E-4, Q=0.0, SGAP=1.15E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.3550E-3, Q=1.91645E9, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=3, K=40 *
&T N= 74, IXYZ=3, NT= 0, RODFR= 183.0, OUTF=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=1, DR=4.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=3, K=41 *
&T N= 75, IXYZ=3, NT= 0, RODFR= 183.0, OUTF=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=1, DR=4.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=3, K=42 *
&T N= 76, IXYZ=3, NT= 0, RODFR= 183.0, OUTF=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=1, DR=4.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=3, K=43 *
&T N= 77, IXYZ=3, NT= 0, RODFR= 183.0, OUTF=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=1, DR=4.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=3, K=44 *
&T N= 78, IXYZ=3, NT= 0, RODFR= 183.0, OUTF=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=1, DR=4.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=3, K=45 *
&T N= 79, IXYZ=3, NT= 0, RODFR= 183.0, OUTF=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=1, DR=4.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=3, K=46 *
&T N= 80, IXYZ=3, NT= 0, RODFR= 183.0, OUTF=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=3, K=47 *
&T N= 81, IXYZ=3, NT= 0, RODFR= 183.0, OUTF=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=3, K=48 *
&T N= 82, IXYZ=3, NT= 0, RODFR= 183.0, OUTF=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.09, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=3, K=49 *
&T N= 83, IXYZ=3, NT= 0, RODFR= 183.0, OUTF=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=3, K=50 *
&T N= 84, IXYZ=3, NT= 0, RODFR= 183.0, OUTF=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=3, K=51 *
&T N= 85, IXYZ=3, NT= 0, RODFR= 183.0, OUTF=3.2750E-3, &END
&F IHT=1, HYD=5.087E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (LOWER REF.) * I=4, K=24 *
&T N= 86, IXYZ=3, NT= 0, RODFR= 12.0, OUTF=6.3340E-2, &END
&F IHT=2, HYD=1.644E-2, &END

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&M MI=3, NP=5, DR=1.72E-3, Q=0.0, &END
      * FUEL ASSEMBLY (LOWER REF.) * I=4, K=25 *
&T N= 87, IXYZ=3, NT= 0, RODFR= 12.0, OTR=6.3340E-2, &END
&F IHT=2, HYD=1.644E-2, &END
&M MI=3, NP=5, DR=1.72E-3, Q=0.0, &END
      * FUEL ASSEMBLY (LOWER REF.) * I=4, K=26 *
&T N= 88, IXYZ=3, NT= 0, RODFR= 12.0, OTR=6.3340E-2, &END
&F IHT=2, HYD=1.644E-2, &END
&M MI=3, NP=5, DR=1.72E-3, Q=0.0, &END
      * FUEL ASSEMBLY (NA) * I=4, K=27 *
&T N= 89, IXYZ=3, NT= 0, RODFR= 12.0, OTR=3.9363E-2, &END
&F IHT=2, HYD=7.141E-2, &END
&M MI=3, NP=1, DR=1.3E-3, Q=0.0, &END
      * FUEL ASSEMBLY (INSULATOR) * I=4, K=28 *
&T N= 90, IXYZ=3, NT= 0, RODFR=1524.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=2, DR=1.375E-3, Q=0.0, &END
      * FUEL ASSEMBLY (FUEL) * I=4, K=29 *
&T N= 91, IXYZ=3, NT= 0, RODFR=1524.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.58618E9, &END
      * FUEL ASSEMBLY (FUEL) * I=4, K=30 *
&T N= 92, IXYZ=3, NT= 0, RODFR=1524.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.69840E9, &END
      * FUEL ASSEMBLY (FUEL) * I=4, K=31 *
&T N= 93, IXYZ=3, NT= 0, RODFR=1524.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.86375E9, &END
      * FUEL ASSEMBLY (FUEL) * I=4, K=32 *
&T N= 94, IXYZ=3, NT= 0, RODFR=1524.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=2.00418E9, &END
      * FUEL ASSEMBLY (FUEL) * I=4, K=33 *
&T N= 95, IXYZ=3, NT= 0, RODFR=1524.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=2.08894E9, &END
      * FUEL ASSEMBLY (FUEL) * I=4, K=34 *
&T N= 96, IXYZ=3, NT= 0, RODFR=1524.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=2.11603E9, &END
      * FUEL ASSEMBLY (FUEL) * I=4, K=35 *
&T N= 97, IXYZ=3, NT= 0, RODFR=1524.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=2.09014E9, &END
      * FUEL ASSEMBLY (FUEL) * I=4, K=36 *
&T N= 98, IXYZ=3, NT= 0, RODFR=1524.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=2.00591E9, &END
      * FUEL ASSEMBLY (FUEL) * I=4, K=37 *
&T N= 99, IXYZ=3, NT= 0, RODFR=1524.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END

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&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.86403E9, &END
      * FUEL ASSEMBLY (FUEL) * I=4, K=38 *
&T N=100, IXYZ=3, NT= 0, RODFR=1524.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.68916E9, &END
      * FUEL ASSEMBLY (FUEL) * I=4, K=39 *
&T N=101, IXYZ=3, NT= 0, RODFR=1524.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.51097E9, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=4, K=40 *
&T N=102, IXYZ=3, NT= 0, RODFR=1524.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=4, K=41 *
&T N=103, IXYZ=3, NT= 0, RODFR=1524.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=4, K=42 *
&T N=104, IXYZ=3, NT= 0, RODFR=1524.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=4, K=43 *
&T N=105, IXYZ=3, NT= 0, RODFR=1524.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=4, K=44 *
&T N=106, IXYZ=3, NT= 0, RODFR=1524.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=4, K=45 *
&T N=107, IXYZ=3, NT= 0, RODFR=1524.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=4, K=46 *
&T N=108, IXYZ=3, NT= 0, RODFR=1524.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=4, K=47 *
&T N=109, IXYZ=3, NT= 0, RODFR=1524.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=4, K=48 *
&T N=110, IXYZ=3, NT= 0, RODFR=1524.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=4, K=49 *
&T N=111, IXYZ=3, NT= 0, RODFR=1524.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=4, K=50 *
&T N=112, IXYZ=3, NT= 0, RODFR=1524.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=4, K=51 *
&T N=113, IXYZ=3, NT= 0, RODFR=1524.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END

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      * FUEL ASSEMBLY (LOWER REF.) * I=5, K=24 *
&T N=114, IXYZ=3, NT= 0, RODFR= 5.0, OTR=6.3340E-2, &END
&F IHT=2, HYD=1.644E-2, &END
&M MI=3, NP=5, DR=1.72E-3, Q=0.0, &END
      * FUEL ASSEMBLY (LOWER REF.) * I=5, K=25 *
&T N=115, IXYZ=3, NT= 0, RODFR= 5.0, OTR=6.3340E-2, &END
&F IHT=2, HYD=1.644E-2, &END
&M MI=3, NP=5, DR=1.72E-3, Q=0.0, &END
      * FUEL ASSEMBLY (LOWER REF.) * I=5, K=26 *
&T N=116, IXYZ=3, NT= 0, RODFR= 5.0, OTR=6.3340E-2, &END
&F IHT=2, HYD=1.644E-2, &END
&M MI=3, NP=5, DR=1.72E-3, Q=0.0, &END
      * FUEL ASSEMBLY (NA) * I=5, K=27 *
&T N=117, IXYZ=3, NT= 0, RODFR= 5.0, OTR=3.9363E-2, &END
&F IHT=2, HYD=7.141E-2, &END
&M MI=3, NP=1, DR=1.3E-3, Q=0.0, &END
      * FUEL ASSEMBLY (INSULATOR) * I=5, K=28 *
&T N=118, IXYZ=3, NT= 0, RODFR= 635.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=2, DR=1.375E-3, Q=0.0, &END
      * FUEL ASSEMBLY (FUEL) * I=5, K=29 *
&T N=119, IXYZ=3, NT= 0, RODFR= 635.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.34224E9, &END
      * FUEL ASSEMBLY (FUEL) * I=5, K=30 *
&T N=120, IXYZ=3, NT= 0, RODFR= 635.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.42261E9, &END
      * FUEL ASSEMBLY (FUEL) * I=5, K=31 *
&T N=121, IXYZ=3, NT= 0, RODFR= 635.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.55527E9, &END
      * FUEL ASSEMBLY (FUEL) * I=5, K=32 *
&T N=122, IXYZ=3, NT= 0, RODFR= 635.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.66348E9, &END
      * FUEL ASSEMBLY (FUEL) * I=5, K=33 *
&T N=123, IXYZ=3, NT= 0, RODFR= 635.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.73252E9, &END
      * FUEL ASSEMBLY (FUEL) * I=5, K=34 *
&T N=124, IXYZ=3, NT= 0, RODFR= 635.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.75445E9, &END
      * FUEL ASSEMBLY (FUEL) * I=5, K=35 *
&T N=125, IXYZ=3, NT= 0, RODFR= 635.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.73237E9, &END
      * FUEL ASSEMBLY (FUEL) * I=5, K=36 *
&T N=126, IXYZ=3, NT= 0, RODFR= 635.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.66227E9, &END

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      * FUEL ASSEMBLY (FUEL) * I=5, K=37 *
&T N=127, IXYZ=3, NT= 0, RODFR= 635.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.54376E9, &END
      * FUEL ASSEMBLY (FUEL) * I=5, K=38 *
&T N=128, IXYZ=3, NT= 0, RODFR= 635.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.39858E9, &END
      * FUEL ASSEMBLY (FUEL) * I=5, K=39 *
&T N=129, IXYZ=3, NT= 0, RODFR= 635.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.25047E9, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=5, K=40 *
&T N=130, IXYZ=3, NT= 0, RODFR= 635.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=5, K=41 *
&T N=131, IXYZ=3, NT= 0, RODFR= 635.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=5, K=42 *
&T N=132, IXYZ=3, NT= 0, RODFR= 635.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=5, K=43 *
&T N=133, IXYZ=3, NT= 0, RODFR= 635.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=5, K=44 *
&T N=134, IXYZ=3, NT= 0, RODFR= 635.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=5, K=45 *
&T N=135, IXYZ=3, NT= 0, RODFR= 635.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=5, K=46 *
&T N=136, IXYZ=3, NT= 0, RODFR= 635.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=5, K=47 *
&T N=137, IXYZ=3, NT= 0, RODFR= 635.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=5, K=48 *
&T N=138, IXYZ=3, NT= 0, RODFR= 635.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=5, K=49 *
&T N=139, IXYZ=3, NT= 0, RODFR= 635.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=5, K=50 *
&T N=140, IXYZ=3, NT= 0, RODFR= 635.0, OTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=5, K=51 *

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&T N=141, IXYZ=3, NT= 0, RODFR= 635.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=24 *
&T N=142, IXYZ=3, NT= 0, RODFR= 5.0, OUTR=3.2350E-2, &END
&F IHT=2, HYD=4.249E-2, &END
&M MI=3, NP=1, DR=6.58E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=25 *
&T N=143, IXYZ=3, NT= 0, RODFR= 5.0, OUTR=3.2350E-2, &END
&F IHT=2, HYD=4.249E-2, &END
&M MI=3, NP=1, DR=6.58E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=26 *
&T N=144, IXYZ=3, NT= 0, RODFR= 5.0, OUTR=3.2350E-2, &END
&F IHT=2, HYD=4.249E-2, &END
&M MI=3, NP=1, DR=6.58E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=27 *
&T N=145, IXYZ=3, NT= 0, RODFR= 5.0, OUTR=3.2350E-2, &END
&F IHT=2, HYD=1.878E-2, &END
&M MI=3, NP=2, DR=7.995E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=28 *
&T N=146, IXYZ=3, NT= 0, RODFR= 35.0, OUTR=9.6060E-3, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=9.606E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=29 *
&T N=147, IXYZ=3, NT= 0, RODFR= 35.0, OUTR=9.4950E-3, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=9.495E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=30 *
&T N=148, IXYZ=3, NT= 0, RODFR= 35.0, OUTR=9.4950E-3, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=9.495E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=31 *
&T N=149, IXYZ=3, NT= 0, RODFR= 35.0, OUTR=9.4950E-3, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=9.495E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=32 *
&T N=150, IXYZ=3, NT= 0, RODFR= 35.0, OUTR=9.4950E-3, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=9.495E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=33 *
&T N=151, IXYZ=3, NT= 0, RODFR= 35.0, OUTR=9.4950E-3, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=9.495E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=34 *
&T N=152, IXYZ=3, NT= 0, RODFR= 35.0, OUTR=9.4950E-3, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=9.495E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=35 *
&T N=153, IXYZ=3, NT= 0, RODFR= 35.0, OUTR=9.4950E-3, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=9.495E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=36 *
&T N=154, IXYZ=3, NT= 0, RODFR= 35.0, OUTR=9.4950E-3, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=9.495E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=37 *
&T N=155, IXYZ=3, NT= 0, RODFR= 35.0, OUTR=9.4950E-3, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=9.495E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=38 *

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&T N=156, IXYZ=3, NT= 0, RODFR= 35.0, OUTR=9.4950E-3, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=9.495E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=39 *
&T N=157, IXYZ=3, NT= 0, RODFR= 35.0, OUTR=9.4950E-3, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=9.495E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=40 *
&T N=158, IXYZ=3, NT= 0, RODFR= 35.0, OUTR=1.8100E-2, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=2.9E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=41 *
&T N=159, IXYZ=3, NT= 0, RODFR= 35.0, OUTR=1.8100E-2, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=2.9E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=42 *
&T N=160, IXYZ=3, NT= 0, RODFR= 35.0, OUTR=1.8100E-2, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=2.9E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=43 *
&T N=161, IXYZ=3, NT= 0, RODFR= 35.0, OUTR=1.8100E-2, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=2.9E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=44 *
&T N=162, IXYZ=3, NT= 0, RODFR= 35.0, OUTR=1.8100E-2, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=2.9E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=45 *
&T N=163, IXYZ=3, NT= 0, RODFR= 35.0, OUTR=1.8100E-2, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=2.9E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=46 *
&T N=164, IXYZ=3, NT= 0, RODFR= 5.0, OUTR=6.4700E-2, &END
&F IHT=2, HYD=3.073E-2, &END
&M MI=3, NP=2, DR=1.183E-2, Q=0.0, &END
      * CONTROL ROD * I=6, K=47 *
&T N=165, IXYZ=3, NT= 0, RODFR= 5.0, OUTR=6.4700E-2, &END
&F IHT=2, HYD=3.073E-2, &END
&M MI=3, NP=2, DR=1.183E-2, Q=0.0, &END
      * CONTROL ROD * I=6, K=48 *
&T N=166, IXYZ=3, NT= 0, RODFR= 5.0, OUTR=6.4700E-2, &END
&F IHT=2, HYD=3.073E-2, &END
&M MI=3, NP=2, DR=1.183E-2, Q=0.0, &END
      * CONTROL ROD * I=6, K=49 *
&T N=167, IXYZ=3, NT= 0, RODFR= 5.0, OUTR=6.4700E-2, &END
&F IHT=2, HYD=3.073E-2, &END
&M MI=3, NP=2, DR=1.183E-2, Q=0.0, &END
      * CONTROL ROD * I=6, K=50 *
&T N=168, IXYZ=3, NT= 0, RODFR= 5.0, OUTR=6.4700E-2, &END
&F IHT=2, HYD=3.073E-2, &END
&M MI=3, NP=2, DR=1.183E-2, Q=0.0, &END
      * CONTROL ROD * I=6, K=51 *
&T N=169, IXYZ=3, NT= 0, RODFR= 5.0, OUTR=6.4700E-2, &END
&F IHT=2, HYD=3.073E-2, &END
&M MI=3, NP=2, DR=1.183E-2, Q=0.0, &END
      * CONTROL ROD * I=6, K=52 *
&T N=170, IXYZ=3, NT= 0, RODFR= 5.0, OUTR=6.4700E-2, &END
&F IHT=2, HYD=3.073E-2, &END
&M MI=3, NP=1, DR=1.5E-3, Q=0.0, &END
      * CONTROL ROD * I=6, K=53 *

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&T N=171, IXYZ=3, NT= 0, RODFR= 5.0, OUTR=7.8000E-2, &END
&F IHT=2, HYD=5.600E-2, &END
&M MI=3, NP=1, DR=1.1E-2, Q=0.0, &END
      * FUEL ASSEMBLY (LOWER REF.) * I=7, K=24 *
&T N=172, IXYZ=3, NT= 0, RODFR= 8.0, OUTR=6.3340E-2, &END
&F IHT=2, HYD=1.644E-2, &END
&M MI=3, NP=5, DR=1.72E-3, Q=0.0, &END
      * FUEL ASSEMBLY (LOWER REF.) * I=7, K=25 *
&T N=173, IXYZ=3, NT= 0, RODFR= 8.0, OUTR=6.3340E-2, &END
&F IHT=2, HYD=1.644E-2, &END
&M MI=3, NP=5, DR=1.72E-3, Q=0.0, &END
      * FUEL ASSEMBLY (LOWER REF.) * I=7, K=26 *
&T N=174, IXYZ=3, NT= 0, RODFR= 8.0, OUTR=6.3340E-2, &END
&F IHT=2, HYD=1.644E-2, &END
&M MI=3, NP=5, DR=1.72E-3, Q=0.0, &END
      * FUEL ASSEMBLY (NA) * I=7, K=27 *
&T N=175, IXYZ=3, NT= 0, RODFR= 8.0, OUTR=3.9363E-2, &END
&F IHT=2, HYD=7.141E-2, &END
&M MI=3, NP=1, DR=1.3E-3, Q=0.0, &END
      * FUEL ASSEMBLY (INSULATOR) * I=7, K=28 *
&T N=176, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=2, DR=1.375E-3, Q=0.0, &END
      * FUEL ASSEMBLY (FUEL) * I=7, K=29 *
&T N=177, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.58126E9, &END
      * FUEL ASSEMBLY (FUEL) * I=7, K=30 *
&T N=178, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.67825E9, &END
      * FUEL ASSEMBLY (FUEL) * I=7, K=31 *
&T N=179, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.83732E9, &END
      * FUEL ASSEMBLY (FUEL) * I=7, K=32 *
&T N=180, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.97382E9, &END
      * FUEL ASSEMBLY (FUEL) * I=7, K=33 *
&T N=181, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=2.05551E9, &END
      * FUEL ASSEMBLY (FUEL) * I=7, K=34 *
&T N=182, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=2.08119E9, &END
      * FUEL ASSEMBLY (FUEL) * I=7, K=35 *
&T N=183, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=2.05464E9, &END
      * FUEL ASSEMBLY (FUEL) * I=7, K=36 *
&T N=184, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END

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&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.97108E9, &END
    * FUEL ASSEMBLY (FUEL) * I=7, K=37 *
&T N=185, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.82968E9, &END
    * FUEL ASSEMBLY (FUEL) * I=7, K=38 *
&T N=186, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.65579E9, &END
    * FUEL ASSEMBLY (FUEL) * I=7, K=39 *
&T N=187, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.47417E9, &END
    * FUEL ASSEMBLY (UPPER REF.) * I=7, K=40 *
&T N=188, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
    * FUEL ASSEMBLY (UPPER REF.) * I=7, K=41 *
&T N=189, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
    * FUEL ASSEMBLY (UPPER REF.) * I=7, K=42 *
&T N=190, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
    * FUEL ASSEMBLY (UPPER REF.) * I=7, K=43 *
&T N=191, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
    * FUEL ASSEMBLY (UPPER REF.) * I=7, K=44 *
&T N=192, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
    * FUEL ASSEMBLY (UPPER REF.) * I=7, K=45 *
&T N=193, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
    * FUEL ASSEMBLY (UPPER REF.) * I=7, K=46 *
&T N=194, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
    * FUEL ASSEMBLY (UPPER REF.) * I=7, K=47 *
&T N=195, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
    * FUEL ASSEMBLY (UPPER REF.) * I=7, K=48 *
&T N=196, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
    * FUEL ASSEMBLY (UPPER REF.) * I=7, K=49 *
&T N=197, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
    * FUEL ASSEMBLY (UPPER REF.) * I=7, K=50 *
&T N=198, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END

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&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=7, K=51 *
&T N=199, IXYZ=3, NT= 0, RODFR=1016.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (LOWER REF.) * I=8, K=24 *
&T N=200, IXYZ=3, NT= 0, RODFR= 24.0, OUTR=6.3340E-2, &END
&F IHT=2, HYD=1.644E-2, &END
&M MI=3, NP=5, DR=1.72E-3, Q=0.0, &END
      * FUEL ASSEMBLY (LOWER REF.) * I=8, K=25 *
&T N=201, IXYZ=3, NT= 0, RODFR= 24.0, OUTR=6.3340E-2, &END
&F IHT=2, HYD=1.644E-2, &END
&M MI=3, NP=5, DR=1.72E-3, Q=0.0, &END
      * FUEL ASSEMBLY (LOWER REF.) * I=8, K=26 *
&T N=202, IXYZ=3, NT= 0, RODFR= 24.0, OUTR=6.3340E-2, &END
&F IHT=2, HYD=1.644E-2, &END
&M MI=3, NP=5, DR=1.72E-3, Q=0.0, &END
      * FUEL ASSEMBLY (NA) * I=8, K=27 *
&T N=203, IXYZ=3, NT= 0, RODFR= 24.0, OUTR=3.9363E-2, &END
&F IHT=2, HYD=7.141E-2, &END
&M MI=3, NP=1, DR=1.3E-3, Q=0.0, &END
      * FUEL ASSEMBLY (INSULATOR) * I=8, K=28 *
&T N=204, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=2, DR=1.375E-3, Q=0.0, &END
      * FUEL ASSEMBLY (FUEL) * I=8, K=29 *
&T N=205, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.39412E9, &END
      * FUEL ASSEMBLY (FUEL) * I=8, K=30 *
&T N=206, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.47909E9, &END
      * FUEL ASSEMBLY (FUEL) * I=8, K=31 *
&T N=207, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.61820E9, &END
      * FUEL ASSEMBLY (FUEL) * I=8, K=32 *
&T N=208, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.73607E9, &END
      * FUEL ASSEMBLY (FUEL) * I=8, K=33 *
&T N=209, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.80650E9, &END
      * FUEL ASSEMBLY (FUEL) * I=8, K=34 *
&T N=210, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.82808E9, &END
      * FUEL ASSEMBLY (FUEL) * I=8, K=35 *
&T N=211, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END

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&M MI=2, NP=2, DR=1.1575E-3, Q=1.80462E9, &END
      * FUEL ASSEMBLY (FUEL) * I=8, K=36 *
&T N=212, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.73141E9, &END
      * FUEL ASSEMBLY (FUEL) * I=8, K=37 *
&T N=213, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.60832E9, &END
      * FUEL ASSEMBLY (FUEL) * I=8, K=38 *
&T N=214, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.45619E9, &END
      * FUEL ASSEMBLY (FUEL) * I=8, K=39 *
&T N=215, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.29999E9, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=8, K=40 *
&T N=216, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=8, K=41 *
&T N=217, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=8, K=42 *
&T N=218, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=8, K=43 *
&T N=219, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=8, K=44 *
&T N=220, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=8, K=45 *
&T N=221, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=8, K=46 *
&T N=222, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=8, K=47 *
&T N=223, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=8, K=48 *
&T N=224, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=8, K=49 *
&T N=225, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END

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&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=8, K=50 *
&T N=226, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=8, K=51 *
&T N=227, IXYZ=3, NT= 0, RODFR=3048.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=24 *
&T N=228, IXYZ=3, NT= 0, RODFR= 2.0, OUTR=3.2350E-2, &END
&F IHT=2, HYD=4.249E-2, &END
&M MI=3, NP=1, DR=6.58E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=25 *
&T N=229, IXYZ=3, NT= 0, RODFR= 2.0, OUTR=3.2350E-2, &END
&F IHT=2, HYD=4.249E-2, &END
&M MI=3, NP=1, DR=6.58E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=26 *
&T N=230, IXYZ=3, NT= 0, RODFR= 2.0, OUTR=3.2350E-2, &END
&F IHT=2, HYD=4.249E-2, &END
&M MI=3, NP=1, DR=6.58E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=27 *
&T N=231, IXYZ=3, NT= 0, RODFR= 2.0, OUTR=3.2350E-2, &END
&F IHT=2, HYD=1.878E-2, &END
&M MI=3, NP=2, DR=7.995E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=28 *
&T N=232, IXYZ=3, NT= 0, RODFR= 14.0, OUTR=9.6060E-3, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=9.606E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=29 *
&T N=233, IXYZ=3, NT= 0, RODFR= 14.0, OUTR=9.4950E-3, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=9.495E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=30 *
&T N=234, IXYZ=3, NT= 0, RODFR= 14.0, OUTR=9.4950E-3, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=9.495E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=31 *
&T N=235, IXYZ=3, NT= 0, RODFR= 14.0, OUTR=9.4950E-3, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=9.495E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=32 *
&T N=236, IXYZ=3, NT= 0, RODFR= 14.0, OUTR=9.4950E-3, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=9.495E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=33 *
&T N=237, IXYZ=3, NT= 0, RODFR= 14.0, OUTR=9.4950E-3, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=9.495E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=34 *
&T N=238, IXYZ=3, NT= 0, RODFR= 14.0, OUTR=9.4950E-3, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=9.495E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=35 *
&T N=239, IXYZ=3, NT= 0, RODFR= 14.0, OUTR=9.4950E-3, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=9.495E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=36 *
&T N=240, IXYZ=3, NT= 0, RODFR= 14.0, OUTR=9.4950E-3, &END
&F IHT=2, HYD=1.208E-2, &END

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&M MI=3, NP=1, DR=9.495E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=37 *
&T N=241, IXYZ=3, NT= 0, RODFR= 14.0, OUTF=9.4950E-3, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=9.495E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=38 *
&T N=242, IXYZ=3, NT= 0, RODFR= 14.0, OUTF=9.4950E-3, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=9.495E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=39 *
&T N=243, IXYZ=3, NT= 0, RODFR= 14.0, OUTF=9.4950E-3, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=9.495E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=40 *
&T N=244, IXYZ=3, NT= 0, RODFR= 14.0, OUTF=1.8100E-2, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=2.9E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=41 *
&T N=245, IXYZ=3, NT= 0, RODFR= 14.0, OUTF=1.8100E-2, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=2.9E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=42 *
&T N=246, IXYZ=3, NT= 0, RODFR= 14.0, OUTF=1.8100E-2, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=2.9E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=43 *
&T N=247, IXYZ=3, NT= 0, RODFR= 14.0, OUTF=1.8100E-2, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=2.9E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=44 *
&T N=248, IXYZ=3, NT= 0, RODFR= 14.0, OUTF=1.8100E-2, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=2.9E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=45 *
&T N=249, IXYZ=3, NT= 0, RODFR= 14.0, OUTF=1.8100E-2, &END
&F IHT=2, HYD=1.208E-2, &END
&M MI=3, NP=1, DR=2.9E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=46 *
&T N=250, IXYZ=3, NT= 0, RODFR= 2.0, OUTF=6.4700E-2, &END
&F IHT=2, HYD=3.073E-2, &END
&M MI=3, NP=2, DR=1.183E-2, Q=0.0, &END
      * CONTROL ROD * I=9, K=47 *
&T N=251, IXYZ=3, NT= 0, RODFR= 2.0, OUTF=6.4700E-2, &END
&F IHT=2, HYD=3.073E-2, &END
&M MI=3, NP=2, DR=1.183E-2, Q=0.0, &END
      * CONTROL ROD * I=9, K=48 *
&T N=252, IXYZ=3, NT= 0, RODFR= 2.0, OUTF=6.4700E-2, &END
&F IHT=2, HYD=3.073E-2, &END
&M MI=3, NP=2, DR=1.183E-2, Q=0.0, &END
      * CONTROL ROD * I=9, K=49 *
&T N=253, IXYZ=3, NT= 0, RODFR= 2.0, OUTF=6.4700E-2, &END
&F IHT=2, HYD=3.073E-2, &END
&M MI=3, NP=2, DR=1.183E-2, Q=0.0, &END
      * CONTROL ROD * I=9, K=50 *
&T N=254, IXYZ=3, NT= 0, RODFR= 2.0, OUTF=6.4700E-2, &END
&F IHT=2, HYD=3.073E-2, &END
&M MI=3, NP=2, DR=1.183E-2, Q=0.0, &END
      * CONTROL ROD * I=9, K=51 *
&T N=255, IXYZ=3, NT= 0, RODFR= 2.0, OUTF=6.4700E-2, &END
&F IHT=2, HYD=3.073E-2, &END

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&M MI=3, NP=2, DR=1.183E-2, Q=0.0, &END
      * CONTROL ROD * I=9, K=52 *
&T N=256, IXYZ=3, NT= 0, RODFR= 2.0, OUTR=6.4700E-2, &END
&F IHT=2, HYD=3.073E-2, &END
&M MI=3, NP=1, DR=1.5E-3, Q=0.0, &END
      * CONTROL ROD * I=9, K=53 *
&T N=257, IXYZ=3, NT= 0, RODFR= 2.0, OUTR=7.8000E-2, &END
&F IHT=2, HYD=5.600E-2, &END
&M MI=3, NP=1, DR=1.1E-2, Q=0.0, &END
      * FUEL ASSEMBLY (LOWER REF.) * I=10, K=24 *
&T N=258, IXYZ=3, NT= 0, RODFR= 26.0, OUTR=6.3340E-2, &END
&F IHT=2, HYD=1.644E-2, &END
&M MI=3, NP=5, DR=1.72E-3, Q=0.0, &END
      * FUEL ASSEMBLY (LOWER REF.) * I=10, K=25 *
&T N=259, IXYZ=3, NT= 0, RODFR= 26.0, OUTR=6.3340E-2, &END
&F IHT=2, HYD=1.644E-2, &END
&M MI=3, NP=5, DR=1.72E-3, Q=0.0, &END
      * FUEL ASSEMBLY (LOWER REF.) * I=10, K=26 *
&T N=260, IXYZ=3, NT= 0, RODFR= 26.0, OUTR=6.3340E-2, &END
&F IHT=2, HYD=1.644E-2, &END
&M MI=3, NP=5, DR=1.72E-3, Q=0.0, &END
      * FUEL ASSEMBLY (NA) * I=10, K=27 *
&T N=261, IXYZ=3, NT= 0, RODFR= 26.0, OUTR=3.9363E-2, &END
&F IHT=2, HYD=7.141E-2, &END
&M MI=3, NP=1, DR=1.3E-3, Q=0.0, &END
      * FUEL ASSEMBLY (INSULATOR) * I=10, K=28 *
&T N=262, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=2, DR=1.375E-3, Q=0.0, &END
      * FUEL ASSEMBLY (FUEL) * I=10, K=29 *
&T N=263, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.24338E9, &END
      * FUEL ASSEMBLY (FUEL) * I=10, K=30 *
&T N=264, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.27615E9, &END
      * FUEL ASSEMBLY (FUEL) * I=10, K=31 *
&T N=265, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.38179E9, &END
      * FUEL ASSEMBLY (FUEL) * I=10, K=32 *
&T N=266, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.47476E9, &END
      * FUEL ASSEMBLY (FUEL) * I=10, K=33 *
&T N=267, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.53047E9, &END
      * FUEL ASSEMBLY (FUEL) * I=10, K=34 *
&T N=268, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.54709E9, &END
      * FUEL ASSEMBLY (FUEL) * I=10, K=35 *

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&T N=269, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.52711E9, &END
      * FUEL ASSEMBLY (FUEL) * I=10, K=36 *
&T N=270, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.46690E9, &END
      * FUEL ASSEMBLY (FUEL) * I=10, K=37 *
&T N=271, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.36649E9, &END
      * FUEL ASSEMBLY (FUEL) * I=10, K=38 *
&T N=272, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.24511E9, &END
      * FUEL ASSEMBLY (FUEL) * I=10, K=39 *
&T N=273, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, SGAP=8.5E-5, HGAP=5677.0, &END
&M MI=2, NP=2, DR=1.1575E-3, Q=1.13633E9, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=10, K=40 *
&T N=274, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=10, K=41 *
&T N=275, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=10, K=42 *
&T N=276, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=10, K=43 *
&T N=277, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=10, K=44 *
&T N=278, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=10, K=45 *
&T N=279, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=3.5E-4, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=10, K=46 *
&T N=280, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=10, K=47 *
&T N=281, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=10, K=48 *
&T N=282, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END

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      * FUEL ASSEMBLY (UPPER REF.) * I=10, K=49 *
&T N=283, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=10, K=50 *
&T N=284, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * FUEL ASSEMBLY (UPPER REF.) * I=10, K=51 *
&T N=285, IXYZ=3, NT= 0, RODFR=3302.0, OUTR=2.7500E-3, &END
&F IHT=1, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.0E-3, Q=0.0, &END
      * INNER REFLECTOR * I=11, K=24 *
&T N=286, IXYZ=3, NT= 0, RODFR= 224.0, OUTR=1.3000E-2, &END
&F IHT=1, HYD=5.374E-3, &END
&M MI=1, NP=1, DR=1.3E-2, Q=0.0, &END
      * INNER REFLECTOR * I=11, K=25 *
&T N=287, IXYZ=3, NT= 0, RODFR= 224.0, OUTR=1.3000E-2, &END
&F IHT=1, HYD=5.374E-3, &END
&M MI=1, NP=1, DR=1.3E-2, Q=0.0, &END
      * INNER REFLECTOR * I=11, K=26 *
&T N=288, IXYZ=3, NT= 0, RODFR= 224.0, OUTR=1.3000E-2, &END
&F IHT=1, HYD=5.374E-3, &END
&M MI=1, NP=1, DR=1.3E-2, Q=0.0, &END
      * INNER REFLECTOR * I=11, K=27 *
&T N=289, IXYZ=3, NT= 0, RODFR= 224.0, OUTR=1.3000E-2, &END
&F IHT=1, HYD=5.374E-3, &END
&M MI=1, NP=1, DR=1.3E-2, Q=0.0, &END
      * INNER REFLECTOR * I=11, K=28 *
&T N=290, IXYZ=3, NT= 0, RODFR= 224.0, OUTR=1.3000E-2, &END
&F IHT=1, HYD=5.374E-3, &END
&M MI=1, NP=1, DR=1.3E-2, Q=0.0, &END
      * INNER REFLECTOR * I=11, K=29 *
&T N=291, IXYZ=3, NT= 0, RODFR= 224.0, OUTR=1.3000E-2, &END
&F IHT=1, HYD=5.374E-3, &END
&M MI=1, NP=1, DR=1.3E-2, Q=0.0, &END
      * INNER REFLECTOR * I=11, K=30 *
&T N=292, IXYZ=3, NT= 0, RODFR= 224.0, OUTR=1.3000E-2, &END
&F IHT=1, HYD=5.374E-3, &END
&M MI=1, NP=1, DR=1.3E-2, Q=0.0, &END
      * INNER REFLECTOR * I=11, K=31 *
&T N=293, IXYZ=3, NT= 0, RODFR= 224.0, OUTR=1.3000E-2, &END
&F IHT=1, HYD=5.374E-3, &END
&M MI=1, NP=1, DR=1.3E-2, Q=0.0, &END
      * INNER REFLECTOR * I=11, K=32 *
&T N=294, IXYZ=3, NT= 0, RODFR= 224.0, OUTR=1.3000E-2, &END
&F IHT=1, HYD=5.374E-3, &END
&M MI=1, NP=1, DR=1.3E-2, Q=0.0, &END
      * INNER REFLECTOR * I=11, K=33 *
&T N=295, IXYZ=3, NT= 0, RODFR= 224.0, OUTR=1.3000E-2, &END
&F IHT=1, HYD=5.374E-3, &END
&M MI=1, NP=1, DR=1.3E-2, Q=0.0, &END
      * INNER REFLECTOR * I=11, K=34 *
&T N=296, IXYZ=3, NT= 0, RODFR= 224.0, OUTR=1.3000E-2, &END
&F IHT=1, HYD=5.374E-3, &END
&M MI=1, NP=1, DR=1.3E-2, Q=0.0, &END
      * INNER REFLECTOR * I=11, K=35 *
&T N=297, IXYZ=3, NT= 0, RODFR= 224.0, OUTR=1.3000E-2, &END
&F IHT=1, HYD=5.374E-3, &END
&M MI=1, NP=1, DR=1.3E-2, Q=0.0, &END

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      * INNER REFLECTOR * I=11, K=36 *
&T N=298, IXYZ=3, NT= 0, RODFR= 224.0, OTR=1.3000E-2, &END
&F IHT=1, HYD=5.374E-3, &END
&M MI=1, NP=1, DR=1.3E-2, Q=0.0, &END
      * INNER REFLECTOR * I=11, K=37 *
&T N=299, IXYZ=3, NT= 0, RODFR= 224.0, OTR=1.3000E-2, &END
&F IHT=1, HYD=5.374E-3, &END
&M MI=1, NP=1, DR=1.3E-2, Q=0.0, &END
      * INNER REFLECTOR * I=11, K=38 *
&T N=300, IXYZ=3, NT= 0, RODFR= 224.0, OTR=1.3000E-2, &END
&F IHT=1, HYD=5.374E-3, &END
&M MI=1, NP=1, DR=1.3E-2, Q=0.0, &END
      * INNER REFLECTOR * I=11, K=39 *
&T N=301, IXYZ=3, NT= 0, RODFR= 224.0, OTR=1.3000E-2, &END
&F IHT=1, HYD=5.374E-3, &END
&M MI=1, NP=1, DR=1.3E-2, Q=0.0, &END
      * INNER REFLECTOR * I=11, K=40 *
&T N=302, IXYZ=3, NT= 0, RODFR= 224.0, OTR=1.3000E-2, &END
&F IHT=1, HYD=5.374E-3, &END
&M MI=1, NP=1, DR=1.3E-2, Q=0.0, &END
      * INNER REFLECTOR * I=11, K=41 *
&T N=303, IXYZ=3, NT= 0, RODFR= 224.0, OTR=1.3000E-2, &END
&F IHT=1, HYD=5.374E-3, &END
&M MI=1, NP=1, DR=1.3E-2, Q=0.0, &END
      * INNER REFLECTOR * I=11, K=42 *
&T N=304, IXYZ=3, NT= 0, RODFR= 224.0, OTR=1.3000E-2, &END
&F IHT=1, HYD=5.374E-3, &END
&M MI=1, NP=1, DR=1.3E-2, Q=0.0, &END
      * INNER REFLECTOR * I=11, K=43 *
&T N=305, IXYZ=3, NT= 0, RODFR= 224.0, OTR=1.3000E-2, &END
&F IHT=1, HYD=5.374E-3, &END
&M MI=1, NP=1, DR=1.3E-2, Q=0.0, &END
      * INNER REFLECTOR * I=11, K=44 *
&T N=306, IXYZ=3, NT= 0, RODFR= 224.0, OTR=1.3000E-2, &END
&F IHT=1, HYD=5.374E-3, &END
&M MI=1, NP=1, DR=1.3E-2, Q=0.0, &END
      * INNER REFLECTOR * I=11, K=45 *
&T N=307, IXYZ=3, NT= 0, RODFR= 224.0, OTR=1.3000E-2, &END
&F IHT=1, HYD=5.374E-3, &END
&M MI=1, NP=1, DR=1.3E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=12, K=24 *
&T N=308, IXYZ=3, NT= 0, RODFR= 48.0, OTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=12, K=25 *
&T N=309, IXYZ=3, NT= 0, RODFR= 48.0, OTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=12, K=26 *
&T N=310, IXYZ=3, NT= 0, RODFR= 48.0, OTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=12, K=27 *
&T N=311, IXYZ=3, NT= 0, RODFR= 48.0, OTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=12, K=28 *
&T N=312, IXYZ=3, NT= 0, RODFR= 48.0, OTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END

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      * OUTER REFLECTOR (A) * I=12, K=29 *
&T N=313, IXYZ=3, NT= 0, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=12, K=30 *
&T N=314, IXYZ=3, NT= 0, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=12, K=31 *
&T N=315, IXYZ=3, NT= 0, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=12, K=32 *
&T N=316, IXYZ=3, NT= 0, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=12, K=33 *
&T N=317, IXYZ=3, NT= 0, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=12, K=34 *
&T N=318, IXYZ=3, NT= 0, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=12, K=35 *
&T N=319, IXYZ=3, NT= 0, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=12, K=36 *
&T N=320, IXYZ=3, NT= 0, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=12, K=37 *
&T N=321, IXYZ=3, NT= 0, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=12, K=38 *
&T N=322, IXYZ=3, NT= 0, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=12, K=39 *
&T N=323, IXYZ=3, NT= 0, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=12, K=40 *
&T N=324, IXYZ=3, NT= 0, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=12, K=41 *
&T N=325, IXYZ=3, NT= 0, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=12, K=42 *
&T N=326, IXYZ=3, NT= 0, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=12, K=43 *
&T N=327, IXYZ=3, NT= 0, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END

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      * OUTER REFLECTOR (A) * I=12, K=44 *
&T N=328, IXYZ=3, NT= 0, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=12, K=45 *
&T N=329, IXYZ=3, NT= 0, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=13, K=24 *
&T N=330, IXYZ=3, NT= 9, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=13, K=25 *
&T N=331, IXYZ=3, NT= 9, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=13, K=26 *
&T N=332, IXYZ=3, NT= 9, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=13, K=27 *
&T N=333, IXYZ=3, NT= 9, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=13, K=28 *
&T N=334, IXYZ=3, NT= 9, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=13, K=29 *
&T N=335, IXYZ=3, NT= 9, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=13, K=30 *
&T N=336, IXYZ=3, NT= 9, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=13, K=31 *
&T N=337, IXYZ=3, NT= 9, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=13, K=32 *
&T N=338, IXYZ=3, NT= 9, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=13, K=33 *
&T N=339, IXYZ=3, NT= 9, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=13, K=34 *
&T N=340, IXYZ=3, NT= 9, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=13, K=35 *
&T N=341, IXYZ=3, NT= 9, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=13, K=36 *
&T N=342, IXYZ=3, NT= 9, RODFR= 48.0, OUTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END

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      * OUTER REFLECTOR (A) * I=13, K=37 *
&T N=343, IXYZ=3, NT= 9, RODFR= 48.0, OTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=13, K=38 *
&T N=344, IXYZ=3, NT= 9, RODFR= 48.0, OTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=13, K=39 *
&T N=345, IXYZ=3, NT= 9, RODFR= 48.0, OTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=13, K=40 *
&T N=346, IXYZ=3, NT= 9, RODFR= 48.0, OTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=13, K=41 *
&T N=347, IXYZ=3, NT= 9, RODFR= 48.0, OTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=13, K=42 *
&T N=348, IXYZ=3, NT= 9, RODFR= 48.0, OTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=13, K=43 *
&T N=349, IXYZ=3, NT= 9, RODFR= 48.0, OTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=13, K=44 *
&T N=350, IXYZ=3, NT= 9, RODFR= 48.0, OTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * OUTER REFLECTOR (A) * I=13, K=45 *
&T N=351, IXYZ=3, NT= 9, RODFR= 48.0, OTR=4.2633E-2, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=1, NP=2, DR=1.3052E-2, Q=0.0, &END
      * SHIELDING * I=14, K=24 *
&T N=352, IXYZ=3, NT=0, RODFR= 378.0, OTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=14, K=25 *
&T N=353, IXYZ=3, NT=0, RODFR= 378.0, OTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=14, K=26 *
&T N=354, IXYZ=3, NT=0, RODFR= 378.0, OTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=14, K=27 *
&T N=355, IXYZ=3, NT=0, RODFR= 378.0, OTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=14, K=28 *
&T N=356, IXYZ=3, NT=0, RODFR= 378.0, OTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=14, K=29 *
&T N=357, IXYZ=3, NT=0, RODFR= 378.0, OTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END

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      * SHIELDING * I=14, K=30 *
&T N=358, IXYZ=3, NT=0, RODFR= 378.0, OUTF=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=14, K=31 *
&T N=359, IXYZ=3, NT=0, RODFR= 378.0, OUTF=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=14, K=32 *
&T N=360, IXYZ=3, NT=0, RODFR= 378.0, OUTF=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=14, K=33 *
&T N=361, IXYZ=3, NT=0, RODFR= 378.0, OUTF=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=14, K=34 *
&T N=362, IXYZ=3, NT=0, RODFR= 378.0, OUTF=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=14, K=35 *
&T N=363, IXYZ=3, NT=0, RODFR= 378.0, OUTF=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=14, K=36 *
&T N=364, IXYZ=3, NT=0, RODFR= 378.0, OUTF=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=14, K=37 *
&T N=365, IXYZ=3, NT=0, RODFR= 378.0, OUTF=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=14, K=38 *
&T N=366, IXYZ=3, NT=0, RODFR= 378.0, OUTF=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=14, K=39 *
&T N=367, IXYZ=3, NT=0, RODFR= 378.0, OUTF=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=14, K=40 *
&T N=368, IXYZ=3, NT=0, RODFR= 378.0, OUTF=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=14, K=41 *
&T N=369, IXYZ=3, NT=0, RODFR= 378.0, OUTF=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=14, K=42 *
&T N=370, IXYZ=3, NT=0, RODFR= 378.0, OUTF=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=14, K=43 *
&T N=371, IXYZ=3, NT=0, RODFR= 378.0, OUTF=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=14, K=44 *
&T N=372, IXYZ=3, NT=0, RODFR= 378.0, OUTF=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END

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      * SHIELDING * I=14, K=45 *
&T N=373, IXYZ=3, NT=0, RODFR= 378.0, OTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=15, K=24 *
&T N=374, IXYZ=3, NT=0, RODFR= 294.0, OTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=15, K=25 *
&T N=375, IXYZ=3, NT=0, RODFR= 294.0, OTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=15, K=26 *
&T N=376, IXYZ=3, NT=0, RODFR= 294.0, OTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=15, K=27 *
&T N=377, IXYZ=3, NT=0, RODFR= 294.0, OTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=15, K=28 *
&T N=378, IXYZ=3, NT=0, RODFR= 294.0, OTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=15, K=29 *
&T N=379, IXYZ=3, NT=0, RODFR= 294.0, OTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=15, K=30 *
&T N=380, IXYZ=3, NT=0, RODFR= 294.0, OTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=15, K=31 *
&T N=381, IXYZ=3, NT=0, RODFR= 294.0, OTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=15, K=32 *
&T N=382, IXYZ=3, NT=0, RODFR= 294.0, OTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=15, K=33 *
&T N=383, IXYZ=3, NT=0, RODFR= 294.0, OTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=15, K=34 *
&T N=384, IXYZ=3, NT=0, RODFR= 294.0, OTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=15, K=35 *
&T N=385, IXYZ=3, NT=0, RODFR= 294.0, OTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=15, K=36 *
&T N=386, IXYZ=3, NT=0, RODFR= 294.0, OTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=15, K=37 *
&T N=387, IXYZ=3, NT=0, RODFR= 294.0, OTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END

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      * SHIELDING * I=15, K=38 *
&T N=388, IXYZ=3, NT=0, RODFR= 294.0, OUTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=15, K=39 *
&T N=389, IXYZ=3, NT=0, RODFR= 294.0, OUTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=15, K=40 *
&T N=390, IXYZ=3, NT=0, RODFR= 294.0, OUTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=15, K=41 *
&T N=391, IXYZ=3, NT=0, RODFR= 294.0, OUTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=15, K=42 *
&T N=392, IXYZ=3, NT=0, RODFR= 294.0, OUTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=15, K=43 *
&T N=393, IXYZ=3, NT=0, RODFR= 294.0, OUTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=15, K=44 *
&T N=394, IXYZ=3, NT=0, RODFR= 294.0, OUTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * SHIELDING * I=15, K=45 *
&T N=395, IXYZ=3, NT=0, RODFR= 294.0, OUTR=1.28E-2, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=1, NP=2, DR=6.4E-3, Q=0.0, &END
      * WRAPPER TUBE * I=1, 2 *
&T N=396, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=2.5039E-2, &END
&F IHT=2, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, &END
&F IHT=2, HYD=2.467E-3, &END
      * WRAPPER TUBE * I=1, 3 *
&T N=397, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=2.5039E-1, &END
&F IHT=2, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, &END
&F IHT=2, HYD=2.467E-3, &END
      * WRAPPER TUBE * I=2, 4 *
&T N=398, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=6.8317E-1, &END
&F IHT=2, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, &END
&F IHT=2, HYD=2.467E-3, &END
      * WRAPPER TUBE * I=3, 4 *
&T N=399, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=6.8317E-1, &END
&F IHT=2, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, &END
&F IHT=2, HYD=2.467E-3, &END
      * WRAPPER TUBE * I=4, 5 *
&T N=400, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=7.5530E-2, &END
&F IHT=2, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END

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&M MI=3, NP=1, DR=1.9E-3, Q=0.0, &END
&F IHT=2, HYD=2.467E-3, &END
      * WRAPPER TUBE * I=4, 6 *
&T N=401, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=7.5530E-2, &END
&F IHT=2, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, &END
&F IHT=2, HYD=9.495E-3, &END
      * WRAPPER TUBE * I=4, 7 *
&T N=402, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=7.5530E-2, &END
&F IHT=2, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, &END
&F IHT=2, HYD=2.467E-3, &END
      * WRAPPER TUBE * I=5, 8 *
&T N=403, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=7.5530E-2, &END
&F IHT=2, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, &END
&F IHT=2, HYD=2.467E-3, &END
      * WRAPPER TUBE * I=6, 8 *
&T N=404, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=7.5530E-2, &END
&F IHT=2, HYD=9.495E-3, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, &END
&F IHT=2, HYD=2.467E-3, &END
      * WRAPPER TUBE * I=7, 8 *
&T N=405, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=1.6209E-1, &END
&F IHT=2, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, &END
&F IHT=2, HYD=2.467E-3, &END
      * WRAPPER TUBE * I=8, 9 *
&T N=406, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=3.2252E-2, &END
&F IHT=2, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, &END
&F IHT=2, HYD=9.495E-3, &END
      * WRAPPER TUBE * I=8, 10 *
&T N=407, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=3.4962E-1, &END
&F IHT=2, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, &END
&F IHT=2, HYD=2.467E-3, &END
      * WRAPPER TUBE * I=8, 11 *
&T N=408, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=1.7826E-2, &END
&F IHT=2, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, &END
&F IHT=2, HYD=5.374E-3, &END
      * WRAPPER TUBE * I=9, 11 *
&T N=409, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=3.2252E-2, &END
&F IHT=2, HYD=9.495E-3, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, &END
&F IHT=2, HYD=5.374E-3, &END
      * WRAPPER TUBE * I=10, 11 *
&T N=410, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=4.0733E-1, &END
&F IHT=2, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END

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&M MI=3, NP=1, DR=1.9E-3, Q=0.0, &END
&F IHT=2, HYD=5.374E-3, &END
      * WRAPPER TUBE * I=10,12 *
&T N=411, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=3.2252E-2, &END
&F IHT=2, HYD=2.467E-3, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, &END
&F IHT=2, HYD=4.964E-3, &END
      * WRAPPER TUBE * I=11,12 *
&T N=412, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=5.3716E-1, &END
&F IHT=2, HYD=5.374E-3, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, &END
&F IHT=2, HYD=4.964E-3, &END
      * WRAPPER TUBE * I=12,13 *
&T N=413, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=6.5257E-1, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, &END
&F IHT=2, HYD=4.964E-3, &END
      * WRAPPER TUBE * I=13,14 *
&T N=414, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=7.3913E-1, &END
&F IHT=2, HYD=4.964E-3, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, &END
&F IHT=2, HYD=5.829E-3, &END
      * WRAPPER TUBE * I=14,15 *
&T N=415, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=6.0929E-1, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, &END
&F IHT=2, HYD=5.829E-3, &END
      * WRAPPER TUBE * I=15,16 *
&T N=416, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=7.5704E-1, &END
&F IHT=2, HYD=5.829E-3, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=1, DR=1.9E-3, Q=0.0, &END
&F IHT=2, HYD=3.000E-2, &END
      * WRAPPER TUBE * I=1,2 *
&T N=417, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=2.8889E-2, &END
&F IHT=2, HYD=6.700E-2, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, &END
&F IHT=2, HYD=6.700E-2, &END
      * WRAPPER TUBE * I=1,3 *
&T N=418, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=2.8889E-2, &END
&F IHT=2, HYD=6.700E-2, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, &END
&F IHT=2, HYD=6.700E-2, &END
      * WRAPPER TUBE * I=2,4 *
&T N=419, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=7.2167E-2, &END
&F IHT=2, HYD=6.700E-2, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, &END
&F IHT=2, HYD=6.700E-2, &END
      * WRAPPER TUBE * I=3,4 *
&T N=420, IXYZ=3, NT= 0, RODFR= 1.0, OUTR=7.2167E-2, &END
&F IHT=2, HYD=6.700E-2, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END

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&M MI=3, NP=2, DR=2.875E-3, Q=0.0, &END
&F IHT=2, HYD=6.700E-2, &END
      * WRAPPER TUBE * I=4,5 *
&T N=421, IXYZ=3, NT= 0, RODFR= 1.0, OTR=7.9380E-2, &END
&F IHT=2, HYD=6.700E-2, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, &END
&F IHT=2, HYD=6.700E-2, &END
      * WRAPPER TUBE * I=4,6 *
&T N=422, IXYZ=3, NT= 0, RODFR= 1.0, OTR=7.9380E-2, &END
&F IHT=2, HYD=6.700E-2, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, &END
&F IHT=2, HYD=6.700E-2, &END
      * WRAPPER TUBE * I=4,7 *
&T N=423, IXYZ=3, NT= 0, RODFR= 1.0, OTR=7.9380E-2, &END
&F IHT=2, HYD=6.700E-2, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, &END
&F IHT=2, HYD=6.700E-2, &END
      * WRAPPER TUBE * I=5,8 *
&T N=424, IXYZ=3, NT= 0, RODFR= 1.0, OTR=7.9380E-2, &END
&F IHT=2, HYD=6.700E-2, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, &END
&F IHT=2, HYD=6.700E-2, &END
      * WRAPPER TUBE * I=6,8 *
&T N=425, IXYZ=3, NT= 0, RODFR= 1.0, OTR=7.9380E-2, &END
&F IHT=2, HYD=6.700E-2, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, &END
&F IHT=2, HYD=6.700E-2, &END
      * WRAPPER TUBE * I=7,8 *
&T N=426, IXYZ=3, NT= 0, RODFR= 1.0, OTR=1.6594E-1, &END
&F IHT=2, HYD=6.700E-2, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, &END
&F IHT=2, HYD=6.700E-2, &END
      * WRAPPER TUBE * I=8,9 *
&T N=427, IXYZ=3, NT= 0, RODFR= 1.0, OTR=3.6102E-2, &END
&F IHT=2, HYD=6.700E-2, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, &END
&F IHT=2, HYD=6.700E-2, &END
      * WRAPPER TUBE * I=8,10 *
&T N=428, IXYZ=3, NT= 0, RODFR= 1.0, OTR=3.5347E-1, &END
&F IHT=2, HYD=6.700E-2, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, &END
&F IHT=2, HYD=6.700E-2, &END
      * WRAPPER TUBE * I=8,11 *
&T N=429, IXYZ=3, NT= 0, RODFR= 1.0, OTR=2.1676E-2, &END
&F IHT=2, HYD=6.700E-2, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, &END
&F IHT=2, HYD=6.700E-2, &END
      * WRAPPER TUBE * I=9,11 *
&T N=430, IXYZ=3, NT= 0, RODFR= 1.0, OTR=3.6102E-2, &END
&F IHT=2, HYD=6.700E-2, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END

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&M MI=3, NP=2, DR=2.875E-3, Q=0.0, &END
&F IHT=2, HYD=6.700E-2, &END
      * WRAPPER TUBE * I=10, 11 *
&T N=431, IXYZ=3, NT= 0, RODFR= 1.0, OUTF=4.1118E-1, &END
&F IHT=2, HYD=6.700E-2, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, &END
&F IHT=2, HYD=6.700E-2, &END
      * WRAPPER TUBE * I=10, 12 *
&T N=432, IXYZ=3, NT= 0, RODFR= 1.0, OUTF=3.6102E-2, &END
&F IHT=2, HYD=6.700E-2, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, &END
&F IHT=2, HYD=6.700E-2, &END
      * WRAPPER TUBE * I=11, 12 *
&T N=433, IXYZ=3, NT= 0, RODFR= 1.0, OUTF=5.4101E-1, &END
&F IHT=2, HYD=6.700E-2, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, &END
&F IHT=2, HYD=6.700E-2, &END
      * WRAPPER TUBE * I=12, 13 *
&T N=434, IXYZ=3, NT= 0, RODFR= 1.0, OUTF=6.5642E-1, &END
&F IHT=2, HYD=6.700E-2, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, &END
&F IHT=2, HYD=6.700E-2, &END
      * WRAPPER TUBE * I=13, 14 *
&T N=435, IXYZ=3, NT= 0, RODFR= 1.0, OUTF=7.4298E-1, &END
&F IHT=2, HYD=6.700E-2, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, &END
&F IHT=2, HYD=6.700E-2, &END
      * WRAPPER TUBE * I=14, 15 *
&T N=436, IXYZ=3, NT= 0, RODFR= 1.0, OUTF=6.1314E-1, &END
&F IHT=2, HYD=6.700E-2, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, SGAP=3.0E-3, HGAP=2.171503E 4, &END
&M MI=3, NP=2, DR=2.875E-3, Q=0.0, &END
&F IHT=2, HYD=6.700E-2, &END
      * INNER SHIELDING * I=16, 20 *
&T N=437, IXYZ=3, RODFR= 0.5, OUTF=1.1550E 0, &END
&F IHT=1, HYD=1.283E-1, &END
&M MI=1, NP=1, DR=4.0E-2, Q=0.0, SGAP=0.252, HGAP=0.0, &END
&M MI=1, NP=1, DR=2.5E-2, Q=0.0, &END
&F IHT=1, HYD=2.000E-2, &END
      * OUTER SHIELDING * I=21, 22 *
&T N=438, IXYZ=3, RODFR= 0.5, OUTF=1.2600E 0, &END
&F IHT=1, HYD=2.000E-2, &END
&M MI=1, NP=1, DR=6.0E-2, Q=0.0, &END
&F IHT=1, HYD=4.900E-1, &END

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END

IN	1	12	12	1	1	61	90	UCS
OUT	1	13	13	1	1	61	90	UCS
OUT	2	1	1	1	1	24	24	FUEL ASSEMBLY (LOWER REF.)
OUT	3	1	1	1	1	25	25	FUEL ASSEMBLY (LOWER REF.)
OUT	4	1	1	1	1	26	26	FUEL ASSEMBLY (LOWER REF.)
OUT	5	1	1	1	1	27	27	FUEL ASSEMBLY (NA)
OUT	6	1	1	1	1	28	28	FUEL ASSEMBLY (INSULATOR)
OUT	7	1	1	1	1	29	29	FUEL ASSEMBLY (FUEL)
OUT	8	1	1	1	1	30	30	FUEL ASSEMBLY (FUEL)
OUT	9	1	1	1	1	31	31	FUEL ASSEMBLY (FUEL)

OUT	10	1	1	1	1	32	32	FUEL ASSEMBLY (FUEL)
OUT	11	1	1	1	1	33	33	FUEL ASSEMBLY (FUEL)
OUT	12	1	1	1	1	34	34	FUEL ASSEMBLY (FUEL)
OUT	13	1	1	1	1	35	35	FUEL ASSEMBLY (FUEL)
OUT	14	1	1	1	1	36	36	FUEL ASSEMBLY (FUEL)
OUT	15	1	1	1	1	37	37	FUEL ASSEMBLY (FUEL)
OUT	16	1	1	1	1	38	38	FUEL ASSEMBLY (FUEL)
OUT	17	1	1	1	1	39	39	FUEL ASSEMBLY (FUEL)
OUT	18	1	1	1	1	40	40	FUEL ASSEMBLY (UPPER REF.)
OUT	19	1	1	1	1	41	41	FUEL ASSEMBLY (UPPER REF.)
OUT	20	1	1	1	1	42	42	FUEL ASSEMBLY (UPPER REF.)
OUT	21	1	1	1	1	43	43	FUEL ASSEMBLY (UPPER REF.)
OUT	22	1	1	1	1	44	44	FUEL ASSEMBLY (UPPER REF.)
OUT	23	1	1	1	1	45	45	FUEL ASSEMBLY (UPPER REF.)
OUT	24	1	1	1	1	46	46	FUEL ASSEMBLY (UPPER REF.)
OUT	25	1	1	1	1	47	47	FUEL ASSEMBLY (UPPER REF.)
OUT	26	1	1	1	1	48	48	FUEL ASSEMBLY (UPPER REF.)
OUT	27	1	1	1	1	49	49	FUEL ASSEMBLY (UPPER REF.)
OUT	28	1	1	1	1	50	50	FUEL ASSEMBLY (UPPER REF.)
OUT	29	1	1	1	1	51	51	FUEL ASSEMBLY (UPPER REF.)
OUT	30	2	2	1	1	24	24	FUEL ASSEMBLY (LOWER REF.)
OUT	31	2	2	1	1	25	25	FUEL ASSEMBLY (LOWER REF.)
OUT	32	2	2	1	1	26	26	FUEL ASSEMBLY (LOWER REF.)
OUT	33	2	2	1	1	27	27	FUEL ASSEMBLY (NA)
OUT	34	2	2	1	1	28	28	FUEL ASSEMBLY (INSULATOR)
OUT	35	2	2	1	1	29	29	FUEL ASSEMBLY (FUEL)
OUT	36	2	2	1	1	30	30	FUEL ASSEMBLY (FUEL)
OUT	37	2	2	1	1	31	31	FUEL ASSEMBLY (FUEL)
OUT	38	2	2	1	1	32	32	FUEL ASSEMBLY (FUEL)
OUT	39	2	2	1	1	33	33	FUEL ASSEMBLY (FUEL)
OUT	40	2	2	1	1	34	34	FUEL ASSEMBLY (FUEL)
OUT	41	2	2	1	1	35	35	FUEL ASSEMBLY (FUEL)
OUT	42	2	2	1	1	36	36	FUEL ASSEMBLY (FUEL)
OUT	43	2	2	1	1	37	37	FUEL ASSEMBLY (FUEL)
OUT	44	2	2	1	1	38	38	FUEL ASSEMBLY (FUEL)
OUT	45	2	2	1	1	39	39	FUEL ASSEMBLY (FUEL)
OUT	46	2	2	1	1	40	40	FUEL ASSEMBLY (UPPER REF.)
OUT	47	2	2	1	1	41	41	FUEL ASSEMBLY (UPPER REF.)
OUT	48	2	2	1	1	42	42	FUEL ASSEMBLY (UPPER REF.)
OUT	49	2	2	1	1	43	43	FUEL ASSEMBLY (UPPER REF.)
OUT	50	2	2	1	1	44	44	FUEL ASSEMBLY (UPPER REF.)
OUT	51	2	2	1	1	45	45	FUEL ASSEMBLY (UPPER REF.)
OUT	52	2	2	1	1	46	46	FUEL ASSEMBLY (UPPER REF.)
OUT	53	2	2	1	1	47	47	FUEL ASSEMBLY (UPPER REF.)
OUT	54	2	2	1	1	48	48	FUEL ASSEMBLY (UPPER REF.)
OUT	55	2	2	1	1	49	49	FUEL ASSEMBLY (UPPER REF.)
OUT	56	2	2	1	1	50	50	FUEL ASSEMBLY (UPPER REF.)
OUT	57	2	2	1	1	51	51	FUEL ASSEMBLY (UPPER REF.)
OUT	58	3	3	1	1	24	24	FUEL ASSEMBLY (LOWER REF.)
OUT	59	3	3	1	1	25	25	FUEL ASSEMBLY (LOWER REF.)
OUT	60	3	3	1	1	26	26	FUEL ASSEMBLY (LOWER REF.)
OUT	61	3	3	1	1	27	27	FUEL ASSEMBLY (NA)
OUT	62	3	3	1	1	28	28	FUEL ASSEMBLY (INSULATOR)
OUT	63	3	3	1	1	29	29	FUEL ASSEMBLY (FUEL)
OUT	64	3	3	1	1	30	30	FUEL ASSEMBLY (FUEL)
OUT	65	3	3	1	1	31	31	FUEL ASSEMBLY (FUEL)
OUT	66	3	3	1	1	32	32	FUEL ASSEMBLY (FUEL)
OUT	67	3	3	1	1	33	33	FUEL ASSEMBLY (FUEL)
OUT	68	3	3	1	1	34	34	FUEL ASSEMBLY (FUEL)
OUT	69	3	3	1	1	35	35	FUEL ASSEMBLY (FUEL)

OUT 70	3	3	1	1	36	36	FUEL ASSEMBLY (FUEL)
OUT 71	3	3	1	1	37	37	FUEL ASSEMBLY (FUEL)
OUT 72	3	3	1	1	38	38	FUEL ASSEMBLY (FUEL)
OUT 73	3	3	1	1	39	39	FUEL ASSEMBLY (FUEL)
OUT 74	3	3	1	1	40	40	FUEL ASSEMBLY (UPPER REF.)
OUT 75	3	3	1	1	41	41	FUEL ASSEMBLY (UPPER REF.)
OUT 76	3	3	1	1	42	42	FUEL ASSEMBLY (UPPER REF.)
OUT 77	3	3	1	1	43	43	FUEL ASSEMBLY (UPPER REF.)
OUT 78	3	3	1	1	44	44	FUEL ASSEMBLY (UPPER REF.)
OUT 79	3	3	1	1	45	45	FUEL ASSEMBLY (UPPER REF.)
OUT 80	3	3	1	1	46	46	FUEL ASSEMBLY (UPPER REF.)
OUT 81	3	3	1	1	47	47	FUEL ASSEMBLY (UPPER REF.)
OUT 82	3	3	1	1	48	48	FUEL ASSEMBLY (UPPER REF.)
OUT 83	3	3	1	1	49	49	FUEL ASSEMBLY (UPPER REF.)
OUT 84	3	3	1	1	50	50	FUEL ASSEMBLY (UPPER REF.)
OUT 85	3	3	1	1	51	51	FUEL ASSEMBLY (UPPER REF.)
OUT 86	4	4	1	1	24	24	FUEL ASSEMBLY (LOWER REF.)
OUT 87	4	4	1	1	25	25	FUEL ASSEMBLY (LOWER REF.)
OUT 88	4	4	1	1	26	26	FUEL ASSEMBLY (LOWER REF.)
OUT 89	4	4	1	1	27	27	FUEL ASSEMBLY (NA)
OUT 90	4	4	1	1	28	28	FUEL ASSEMBLY (INSULATOR)
OUT 91	4	4	1	1	29	29	FUEL ASSEMBLY (FUEL)
OUT 92	4	4	1	1	30	30	FUEL ASSEMBLY (FUEL)
OUT 93	4	4	1	1	31	31	FUEL ASSEMBLY (FUEL)
OUT 94	4	4	1	1	32	32	FUEL ASSEMBLY (FUEL)
OUT 95	4	4	1	1	33	33	FUEL ASSEMBLY (FUEL)
OUT 96	4	4	1	1	34	34	FUEL ASSEMBLY (FUEL)
OUT 97	4	4	1	1	35	35	FUEL ASSEMBLY (FUEL)
OUT 98	4	4	1	1	36	36	FUEL ASSEMBLY (FUEL)
OUT 99	4	4	1	1	37	37	FUEL ASSEMBLY (FUEL)
OUT 100	4	4	1	1	38	38	FUEL ASSEMBLY (FUEL)
OUT 101	4	4	1	1	39	39	FUEL ASSEMBLY (FUEL)
OUT 102	4	4	1	1	40	40	FUEL ASSEMBLY (UPPER REF.)
OUT 103	4	4	1	1	41	41	FUEL ASSEMBLY (UPPER REF.)
OUT 104	4	4	1	1	42	42	FUEL ASSEMBLY (UPPER REF.)
OUT 105	4	4	1	1	43	43	FUEL ASSEMBLY (UPPER REF.)
OUT 106	4	4	1	1	44	44	FUEL ASSEMBLY (UPPER REF.)
OUT 107	4	4	1	1	45	45	FUEL ASSEMBLY (UPPER REF.)
OUT 108	4	4	1	1	46	46	FUEL ASSEMBLY (UPPER REF.)
OUT 109	4	4	1	1	47	47	FUEL ASSEMBLY (UPPER REF.)
OUT 110	4	4	1	1	48	48	FUEL ASSEMBLY (UPPER REF.)
OUT 111	4	4	1	1	49	49	FUEL ASSEMBLY (UPPER REF.)
OUT 112	4	4	1	1	50	50	FUEL ASSEMBLY (UPPER REF.)
OUT 113	4	4	1	1	51	51	FUEL ASSEMBLY (UPPER REF.)
OUT 114	5	5	1	1	24	24	FUEL ASSEMBLY (LOWER REF.)
OUT 115	5	5	1	1	25	25	FUEL ASSEMBLY (LOWER REF.)
OUT 116	5	5	1	1	26	26	FUEL ASSEMBLY (LOWER REF.)
OUT 117	5	5	1	1	27	27	FUEL ASSEMBLY (NA)
OUT 118	5	5	1	1	28	28	FUEL ASSEMBLY (INSULATOR)
OUT 119	5	5	1	1	29	29	FUEL ASSEMBLY (FUEL)
OUT 120	5	5	1	1	30	30	FUEL ASSEMBLY (FUEL)
OUT 121	5	5	1	1	31	31	FUEL ASSEMBLY (FUEL)
OUT 122	5	5	1	1	32	32	FUEL ASSEMBLY (FUEL)
OUT 123	5	5	1	1	33	33	FUEL ASSEMBLY (FUEL)
OUT 124	5	5	1	1	34	34	FUEL ASSEMBLY (FUEL)
OUT 125	5	5	1	1	35	35	FUEL ASSEMBLY (FUEL)
OUT 126	5	5	1	1	36	36	FUEL ASSEMBLY (FUEL)
OUT 127	5	5	1	1	37	37	FUEL ASSEMBLY (FUEL)
OUT 128	5	5	1	1	38	38	FUEL ASSEMBLY (FUEL)
OUT 129	5	5	1	1	39	39	FUEL ASSEMBLY (FUEL)

OUT 130	5	5	1	1	40	40	FUEL ASSEMBLY (UPPER REF.)
OUT 131	5	5	1	1	41	41	FUEL ASSEMBLY (UPPER REF.)
OUT 132	5	5	1	1	42	42	FUEL ASSEMBLY (UPPER REF.)
OUT 133	5	5	1	1	43	43	FUEL ASSEMBLY (UPPER REF.)
OUT 134	5	5	1	1	44	44	FUEL ASSEMBLY (UPPER REF.)
OUT 135	5	5	1	1	45	45	FUEL ASSEMBLY (UPPER REF.)
OUT 136	5	5	1	1	46	46	FUEL ASSEMBLY (UPPER REF.)
OUT 137	5	5	1	1	47	47	FUEL ASSEMBLY (UPPER REF.)
OUT 138	5	5	1	1	48	48	FUEL ASSEMBLY (UPPER REF.)
OUT 139	5	5	1	1	49	49	FUEL ASSEMBLY (UPPER REF.)
OUT 140	5	5	1	1	50	50	FUEL ASSEMBLY (UPPER REF.)
OUT 141	5	5	1	1	51	51	FUEL ASSEMBLY (UPPER REF.)
OUT 142	6	6	1	1	24	24	CONTROL ROD
OUT 143	6	6	1	1	25	25	CONTROL ROD
OUT 144	6	6	1	1	26	26	CONTROL ROD
OUT 145	6	6	1	1	27	27	CONTROL ROD
OUT 146	6	6	1	1	28	28	CONTROL ROD
OUT 147	6	6	1	1	29	29	CONTROL ROD
OUT 148	6	6	1	1	30	30	CONTROL ROD
OUT 149	6	6	1	1	31	31	CONTROL ROD
OUT 150	6	6	1	1	32	32	CONTROL ROD
OUT 151	6	6	1	1	33	33	CONTROL ROD
OUT 152	6	6	1	1	34	34	CONTROL ROD
OUT 153	6	6	1	1	35	35	CONTROL ROD
OUT 154	6	6	1	1	36	36	CONTROL ROD
OUT 155	6	6	1	1	37	37	CONTROL ROD
OUT 156	6	6	1	1	38	38	CONTROL ROD
OUT 157	6	6	1	1	39	39	CONTROL ROD
OUT 158	6	6	1	1	40	40	CONTROL ROD
OUT 159	6	6	1	1	41	41	CONTROL ROD
OUT 160	6	6	1	1	42	42	CONTROL ROD
OUT 161	6	6	1	1	43	43	CONTROL ROD
OUT 162	6	6	1	1	44	44	CONTROL ROD
OUT 163	6	6	1	1	45	45	CONTROL ROD
OUT 164	6	6	1	1	46	46	CONTROL ROD
OUT 165	6	6	1	1	47	47	CONTROL ROD
OUT 166	6	6	1	1	48	48	CONTROL ROD
OUT 167	6	6	1	1	49	49	CONTROL ROD
OUT 168	6	6	1	1	40	40	CONTROL ROD
OUT 169	6	6	1	1	51	51	CONTROL ROD
OUT 170	6	6	1	1	52	52	CONTROL ROD
OUT 171	6	6	1	1	53	53	CONTROL ROD
OUT 172	7	7	1	1	24	24	FUEL ASSEMBLY (LOWER REF.)
OUT 173	7	7	1	1	25	25	FUEL ASSEMBLY (LOWER REF.)
OUT 174	7	7	1	1	26	26	FUEL ASSEMBLY (LOWER REF.)
OUT 175	7	7	1	1	27	27	FUEL ASSEMBLY (NA)
OUT 176	7	7	1	1	28	28	FUEL ASSEMBLY (INSULATOR)
OUT 177	7	7	1	1	29	29	FUEL ASSEMBLY (FUEL)
OUT 178	7	7	1	1	30	30	FUEL ASSEMBLY (FUEL)
OUT 179	7	7	1	1	31	31	FUEL ASSEMBLY (FUEL)
OUT 180	7	7	1	1	32	32	FUEL ASSEMBLY (FUEL)
OUT 181	7	7	1	1	33	33	FUEL ASSEMBLY (FUEL)
OUT 182	7	7	1	1	34	34	FUEL ASSEMBLY (FUEL)
OUT 183	7	7	1	1	35	35	FUEL ASSEMBLY (FUEL)
OUT 184	7	7	1	1	36	36	FUEL ASSEMBLY (FUEL)
OUT 185	7	7	1	1	37	37	FUEL ASSEMBLY (FUEL)
OUT 186	7	7	1	1	38	38	FUEL ASSEMBLY (FUEL)
OUT 187	7	7	1	1	39	39	FUEL ASSEMBLY (FUEL)
OUT 188	7	7	1	1	40	40	FUEL ASSEMBLY (UPPER REF.)
OUT 189	7	7	1	1	41	41	FUEL ASSEMBLY (UPPER REF.)

OUT 190	7	7	1	1	42	42	FUEL ASSEMBLY (UPPER REF.)
OUT 191	7	7	1	1	43	43	FUEL ASSEMBLY (UPPER REF.)
OUT 192	7	7	1	1	44	44	FUEL ASSEMBLY (UPPER REF.)
OUT 193	7	7	1	1	45	45	FUEL ASSEMBLY (UPPER REF.)
OUT 194	7	7	1	1	46	46	FUEL ASSEMBLY (UPPER REF.)
OUT 195	7	7	1	1	47	47	FUEL ASSEMBLY (UPPER REF.)
OUT 196	7	7	1	1	48	48	FUEL ASSEMBLY (UPPER REF.)
OUT 197	7	7	1	1	49	49	FUEL ASSEMBLY (UPPER REF.)
OUT 198	7	7	1	1	50	50	FUEL ASSEMBLY (UPPER REF.)
OUT 199	7	7	1	1	51	51	FUEL ASSEMBLY (UPPER REF.)
OUT 200	8	8	1	1	24	24	FUEL ASSEMBLY (LOWER REF.)
OUT 201	8	8	1	1	25	25	FUEL ASSEMBLY (LOWER REF.)
OUT 202	8	8	1	1	26	26	FUEL ASSEMBLY (LOWER REF.)
OUT 203	8	8	1	1	27	27	FUEL ASSEMBLY (NA)
OUT 204	8	8	1	1	28	28	FUEL ASSEMBLY (INSULATOR)
OUT 205	8	8	1	1	29	29	FUEL ASSEMBLY (FUEL)
OUT 206	8	8	1	1	30	30	FUEL ASSEMBLY (FUEL)
OUT 207	8	8	1	1	31	31	FUEL ASSEMBLY (FUEL)
OUT 208	8	8	1	1	32	32	FUEL ASSEMBLY (FUEL)
OUT 209	8	8	1	1	33	33	FUEL ASSEMBLY (FUEL)
OUT 210	8	8	1	1	34	34	FUEL ASSEMBLY (FUEL)
OUT 211	8	8	1	1	35	35	FUEL ASSEMBLY (FUEL)
OUT 212	8	8	1	1	36	36	FUEL ASSEMBLY (FUEL)
OUT 213	8	8	1	1	37	37	FUEL ASSEMBLY (FUEL)
OUT 214	8	8	1	1	38	38	FUEL ASSEMBLY (FUEL)
OUT 215	8	8	1	1	39	39	FUEL ASSEMBLY (FUEL)
OUT 216	8	8	1	1	40	40	FUEL ASSEMBLY (UPPER REF.)
OUT 217	8	8	1	1	41	41	FUEL ASSEMBLY (UPPER REF.)
OUT 218	8	8	1	1	42	42	FUEL ASSEMBLY (UPPER REF.)
OUT 219	8	8	1	1	43	43	FUEL ASSEMBLY (UPPER REF.)
OUT 220	8	8	1	1	44	44	FUEL ASSEMBLY (UPPER REF.)
OUT 221	8	8	1	1	45	45	FUEL ASSEMBLY (UPPER REF.)
OUT 222	8	8	1	1	46	46	FUEL ASSEMBLY (UPPER REF.)
OUT 223	8	8	1	1	47	47	FUEL ASSEMBLY (UPPER REF.)
OUT 224	8	8	1	1	48	48	FUEL ASSEMBLY (UPPER REF.)
OUT 225	8	8	1	1	49	49	FUEL ASSEMBLY (UPPER REF.)
OUT 226	8	8	1	1	50	50	FUEL ASSEMBLY (UPPER REF.)
OUT 227	8	8	1	1	51	51	FUEL ASSEMBLY (UPPER REF.)
OUT 228	9	9	1	1	24	24	CONTROL ROD
OUT 229	9	9	1	1	25	25	CONTROL ROD
OUT 230	9	9	1	1	26	26	CONTROL ROD
OUT 231	9	9	1	1	27	27	CONTROL ROD
OUT 232	9	9	1	1	28	28	CONTROL ROD
OUT 233	9	9	1	1	29	29	CONTROL ROD
OUT 234	9	9	1	1	30	30	CONTROL ROD
OUT 235	9	9	1	1	31	31	CONTROL ROD
OUT 236	9	9	1	1	32	32	CONTROL ROD
OUT 237	9	9	1	1	33	33	CONTROL ROD
OUT 238	9	9	1	1	34	34	CONTROL ROD
OUT 239	9	9	1	1	35	35	CONTROL ROD
OUT 240	9	9	1	1	36	36	CONTROL ROD
OUT 241	9	9	1	1	37	37	CONTROL ROD
OUT 242	9	9	1	1	38	38	CONTROL ROD
OUT 243	9	9	1	1	39	39	CONTROL ROD
OUT 244	9	9	1	1	40	40	CONTROL ROD
OUT 245	9	9	1	1	41	41	CONTROL ROD
OUT 246	9	9	1	1	42	42	CONTROL ROD
OUT 247	9	9	1	1	43	43	CONTROL ROD
OUT 248	9	9	1	1	44	44	CONTROL ROD
OUT 249	9	9	1	1	45	45	CONTROL ROD

OUT 250	9	9	1	1	46	46	CONTROL ROD
OUT 251	9	9	1	1	47	47	CONTROL ROD
OUT 252	9	9	1	1	48	48	CONTROL ROD
OUT 253	9	9	1	1	49	49	CONTROL ROD
OUT 254	9	9	1	1	40	40	CONTROL ROD
OUT 255	9	9	1	1	51	51	CONTROL ROD
OUT 256	9	9	1	1	52	52	CONTROL ROD
OUT 257	9	9	1	1	53	53	CONTROL ROD
OUT 258	10	10	1	1	24	24	FUEL ASSEMBLY (LOWER REF.)
OUT 259	10	10	1	1	25	25	FUEL ASSEMBLY (LOWER REF.)
OUT 260	10	10	1	1	26	26	FUEL ASSEMBLY (LOWER REF.)
OUT 261	10	10	1	1	27	27	FUEL ASSEMBLY (NA)
OUT 262	10	10	1	1	28	28	FUEL ASSEMBLY (INSULATOR)
OUT 263	10	10	1	1	29	29	FUEL ASSEMBLY (FUEL)
OUT 264	10	10	1	1	30	30	FUEL ASSEMBLY (FUEL)
OUT 265	10	10	1	1	31	31	FUEL ASSEMBLY (FUEL)
OUT 266	10	10	1	1	32	32	FUEL ASSEMBLY (FUEL)
OUT 267	10	10	1	1	33	33	FUEL ASSEMBLY (FUEL)
OUT 268	10	10	1	1	34	34	FUEL ASSEMBLY (FUEL)
OUT 269	10	10	1	1	35	35	FUEL ASSEMBLY (FUEL)
OUT 270	10	10	1	1	36	36	FUEL ASSEMBLY (FUEL)
OUT 271	10	10	1	1	37	37	FUEL ASSEMBLY (FUEL)
OUT 272	10	10	1	1	38	38	FUEL ASSEMBLY (FUEL)
OUT 273	10	10	1	1	39	39	FUEL ASSEMBLY (FUEL)
OUT 274	10	10	1	1	40	40	FUEL ASSEMBLY (UPPER REF.)
OUT 275	10	10	1	1	41	41	FUEL ASSEMBLY (UPPER REF.)
OUT 276	10	10	1	1	42	42	FUEL ASSEMBLY (UPPER REF.)
OUT 277	10	10	1	1	43	43	FUEL ASSEMBLY (UPPER REF.)
OUT 278	10	10	1	1	44	44	FUEL ASSEMBLY (UPPER REF.)
OUT 279	10	10	1	1	45	45	FUEL ASSEMBLY (UPPER REF.)
OUT 280	10	10	1	1	46	46	FUEL ASSEMBLY (UPPER REF.)
OUT 281	10	10	1	1	47	47	FUEL ASSEMBLY (UPPER REF.)
OUT 282	10	10	1	1	48	48	FUEL ASSEMBLY (UPPER REF.)
OUT 283	10	10	1	1	49	49	FUEL ASSEMBLY (UPPER REF.)
OUT 284	10	10	1	1	50	50	FUEL ASSEMBLY (UPPER REF.)
OUT 285	10	10	1	1	51	51	FUEL ASSEMBLY (UPPER REF.)
OUT 286	11	11	1	1	24	24	INNER REFLECTOR
OUT 287	11	11	1	1	25	25	INNER REFLECTOR
OUT 288	11	11	1	1	26	26	INNER REFLECTOR
OUT 289	11	11	1	1	27	27	INNER REFLECTOR
OUT 290	11	11	1	1	28	28	INNER REFLECTOR
OUT 291	11	11	1	1	29	29	INNER REFLECTOR
OUT 292	11	11	1	1	30	30	INNER REFLECTOR
OUT 293	11	11	1	1	31	31	INNER REFLECTOR
OUT 294	11	11	1	1	32	32	INNER REFLECTOR
OUT 295	11	11	1	1	33	33	INNER REFLECTOR
OUT 296	11	11	1	1	34	34	INNER REFLECTOR
OUT 297	11	11	1	1	35	35	INNER REFLECTOR
OUT 298	11	11	1	1	36	36	INNER REFLECTOR
OUT 299	11	11	1	1	37	37	INNER REFLECTOR
OUT 300	11	11	1	1	38	38	INNER REFLECTOR
OUT 301	11	11	1	1	39	39	INNER REFLECTOR
OUT 302	11	11	1	1	40	40	INNER REFLECTOR
OUT 303	11	11	1	1	41	41	INNER REFLECTOR
OUT 304	11	11	1	1	42	42	INNER REFLECTOR
OUT 305	11	11	1	1	43	43	INNER REFLECTOR
OUT 306	11	11	1	1	44	44	INNER REFLECTOR
OUT 307	11	11	1	1	45	45	INNER REFLECTOR
OUT 308	12	12	1	1	24	24	OUTER REFLECTOR (A)
OUT 309	12	12	1	1	25	25	OUTER REFLECTOR (A)

OUT 310	12	12	1	1	26	26	OUTER REFLECTOR (A)
OUT 311	12	12	1	1	27	27	OUTER REFLECTOR (A)
OUT 312	12	12	1	1	28	28	OUTER REFLECTOR (A)
OUT 313	12	12	1	1	29	29	OUTER REFLECTOR (A)
OUT 314	12	12	1	1	30	30	OUTER REFLECTOR (A)
OUT 315	12	12	1	1	31	31	OUTER REFLECTOR (A)
OUT 316	12	12	1	1	32	32	OUTER REFLECTOR (A)
OUT 317	12	12	1	1	33	33	OUTER REFLECTOR (A)
OUT 318	12	12	1	1	34	34	OUTER REFLECTOR (A)
OUT 319	12	12	1	1	35	35	OUTER REFLECTOR (A)
OUT 320	12	12	1	1	36	36	OUTER REFLECTOR (A)
OUT 321	12	12	1	1	37	37	OUTER REFLECTOR (A)
OUT 322	12	12	1	1	38	38	OUTER REFLECTOR (A)
OUT 323	12	12	1	1	39	39	OUTER REFLECTOR (A)
OUT 324	12	12	1	1	40	40	OUTER REFLECTOR (A)
OUT 325	12	12	1	1	41	41	OUTER REFLECTOR (A)
OUT 326	12	12	1	1	42	42	OUTER REFLECTOR (A)
OUT 327	12	12	1	1	43	43	OUTER REFLECTOR (A)
OUT 328	12	12	1	1	44	44	OUTER REFLECTOR (A)
OUT 329	12	12	1	1	45	45	OUTER REFLECTOR (A)
OUT 330	13	13	1	1	24	24	OUTER REFLECTOR (A)
OUT 331	13	13	1	1	25	25	OUTER REFLECTOR (A)
OUT 332	13	13	1	1	26	26	OUTER REFLECTOR (A)
OUT 333	13	13	1	1	27	27	OUTER REFLECTOR (A)
OUT 334	13	13	1	1	28	28	OUTER REFLECTOR (A)
OUT 335	13	13	1	1	29	29	OUTER REFLECTOR (A)
OUT 336	13	13	1	1	30	30	OUTER REFLECTOR (A)
OUT 337	13	13	1	1	31	31	OUTER REFLECTOR (A)
OUT 338	13	13	1	1	32	32	OUTER REFLECTOR (A)
OUT 339	13	13	1	1	33	33	OUTER REFLECTOR (A)
OUT 340	13	13	1	1	34	34	OUTER REFLECTOR (A)
OUT 341	13	13	1	1	35	35	OUTER REFLECTOR (A)
OUT 342	13	13	1	1	36	36	OUTER REFLECTOR (A)
OUT 343	13	13	1	1	37	37	OUTER REFLECTOR (A)
OUT 344	13	13	1	1	38	38	OUTER REFLECTOR (A)
OUT 345	13	13	1	1	39	39	OUTER REFLECTOR (A)
OUT 346	13	13	1	1	40	40	OUTER REFLECTOR (A)
OUT 347	13	13	1	1	41	41	OUTER REFLECTOR (A)
OUT 348	13	13	1	1	42	42	OUTER REFLECTOR (A)
OUT 349	13	13	1	1	43	43	OUTER REFLECTOR (A)
OUT 350	13	13	1	1	44	44	OUTER REFLECTOR (A)
OUT 351	13	13	1	1	45	45	OUTER REFLECTOR (A)
OUT 352	14	14	1	1	24	24	OUTER REFLECTOR (A)
OUT 353	14	14	1	1	25	25	OUTER REFLECTOR (A)
OUT 354	14	14	1	1	26	26	OUTER REFLECTOR (A)
OUT 355	14	14	1	1	27	27	OUTER REFLECTOR (A)
OUT 356	14	14	1	1	28	28	OUTER REFLECTOR (A)
OUT 357	14	14	1	1	29	29	OUTER REFLECTOR (A)
OUT 358	14	14	1	1	30	30	OUTER REFLECTOR (A)
OUT 359	14	14	1	1	31	31	OUTER REFLECTOR (A)
OUT 360	14	14	1	1	32	32	OUTER REFLECTOR (A)
OUT 361	14	14	1	1	33	33	OUTER REFLECTOR (A)
OUT 362	14	14	1	1	34	34	OUTER REFLECTOR (A)
OUT 363	14	14	1	1	35	35	OUTER REFLECTOR (A)
OUT 364	14	14	1	1	36	36	OUTER REFLECTOR (A)
OUT 365	14	14	1	1	37	37	OUTER REFLECTOR (A)
OUT 366	14	14	1	1	38	38	OUTER REFLECTOR (A)
OUT 367	14	14	1	1	39	39	OUTER REFLECTOR (A)
OUT 368	14	14	1	1	40	40	OUTER REFLECTOR (A)
OUT 369	14	14	1	1	41	41	OUTER REFLECTOR (A)

OUT 370	14	14	1	1	42	42	OUTER REFLECTOR (A)
OUT 371	14	14	1	1	43	43	OUTER REFLECTOR (A)
OUT 372	14	14	1	1	44	44	OUTER REFLECTOR (A)
OUT 373	14	14	1	1	45	45	OUTER REFLECTOR (A)
OUT 374	15	15	1	1	24	24	OUTER REFLECTOR (B)
OUT 375	15	15	1	1	25	25	OUTER REFLECTOR (B)
OUT 376	15	15	1	1	26	26	OUTER REFLECTOR (B)
OUT 377	15	15	1	1	27	27	OUTER REFLECTOR (B)
OUT 378	15	15	1	1	28	28	OUTER REFLECTOR (B)
OUT 379	15	15	1	1	29	29	OUTER REFLECTOR (B)
OUT 380	15	15	1	1	30	30	OUTER REFLECTOR (B)
OUT 381	15	15	1	1	31	31	OUTER REFLECTOR (B)
OUT 382	15	15	1	1	32	32	OUTER REFLECTOR (B)
OUT 383	15	15	1	1	33	33	OUTER REFLECTOR (B)
OUT 384	15	15	1	1	34	34	OUTER REFLECTOR (B)
OUT 385	15	15	1	1	35	35	OUTER REFLECTOR (B)
OUT 386	15	15	1	1	36	36	OUTER REFLECTOR (B)
OUT 387	15	15	1	1	37	37	OUTER REFLECTOR (B)
OUT 388	15	15	1	1	38	38	OUTER REFLECTOR (B)
OUT 389	15	15	1	1	39	39	OUTER REFLECTOR (B)
OUT 390	15	15	1	1	40	40	OUTER REFLECTOR (B)
OUT 391	15	15	1	1	41	41	OUTER REFLECTOR (B)
OUT 392	15	15	1	1	42	42	OUTER REFLECTOR (B)
OUT 393	15	15	1	1	43	43	OUTER REFLECTOR (B)
OUT 394	15	15	1	1	44	44	OUTER REFLECTOR (B)
OUT 395	15	15	1	1	45	45	OUTER REFLECTOR (B)
IN 396	1	1	1	1	24	52	WRAPPER TUBE
OUT 396	2	2	1	1	24	52	WRAPPER TUBE
IN 397	1	1	1	1	24	52	WRAPPER TUBE
OUT 397	3	3	1	1	24	52	WRAPPER TUBE
IN 398	2	2	1	1	24	52	WRAPPER TUBE
OUT 398	4	4	1	1	24	52	WRAPPER TUBE
IN 399	3	3	1	1	24	52	WRAPPER TUBE
OUT 399	4	4	1	1	24	52	WRAPPER TUBE
IN 400	4	4	1	1	24	52	WRAPPER TUBE
OUT 400	5	5	1	1	24	52	WRAPPER TUBE
IN 401	4	4	1	1	24	52	WRAPPER TUBE
OUT 401	6	6	1	1	24	52	WRAPPER TUBE
IN 402	4	4	1	1	24	52	WRAPPER TUBE
OUT 402	7	7	1	1	24	52	WRAPPER TUBE
IN 403	5	5	1	1	24	52	WRAPPER TUBE
OUT 403	8	8	1	1	24	52	WRAPPER TUBE
IN 404	6	6	1	1	24	52	WRAPPER TUBE
OUT 404	8	8	1	1	24	52	WRAPPER TUBE
IN 405	7	7	1	1	24	52	WRAPPER TUBE
OUT 405	8	8	1	1	24	52	WRAPPER TUBE
IN 406	8	8	1	1	24	52	WRAPPER TUBE
OUT 406	9	9	1	1	24	52	WRAPPER TUBE
IN 407	8	8	1	1	24	52	WRAPPER TUBE
OUT 407	10	10	1	1	24	52	WRAPPER TUBE
IN 408	8	8	1	1	24	52	WRAPPER TUBE
OUT 408	11	11	1	1	24	52	WRAPPER TUBE
IN 409	9	9	1	1	24	52	WRAPPER TUBE
OUT 409	11	11	1	1	24	52	WRAPPER TUBE
IN 410	10	10	1	1	24	52	WRAPPER TUBE
OUT 410	11	11	1	1	24	52	WRAPPER TUBE
IN 411	10	10	1	1	24	52	WRAPPER TUBE
OUT 411	12	12	1	1	24	52	WRAPPER TUBE
IN 412	11	11	1	1	24	52	WRAPPER TUBE
OUT 412	12	12	1	1	24	52	WRAPPER TUBE

IN	413	12	12	1	1	24	52	WRAPPER TUBE
OUT	413	13	13	1	1	24	52	WRAPPER TUBE
IN	414	13	13	1	1	24	52	WRAPPER TUBE
OUT	414	14	14	1	1	24	52	WRAPPER TUBE
IN	415	14	14	1	1	24	52	WRAPPER TUBE
OUT	415	15	15	1	1	24	52	WRAPPER TUBE
IN	416	15	15	1	1	24	52	WRAPPER TUBE
OUT	416	16	16	1	1	24	52	WRAPPER TUBE
IN	417	1	1	1	1	24	52	WRAPPER TUBE
OUT	417	2	2	1	1	24	52	WRAPPER TUBE
IN	418	1	1	1	1	24	52	WRAPPER TUBE
OUT	418	3	3	1	1	24	52	WRAPPER TUBE
IN	419	2	2	1	1	24	52	WRAPPER TUBE
OUT	419	4	4	1	1	24	52	WRAPPER TUBE
IN	420	3	3	1	1	24	52	WRAPPER TUBE
OUT	420	4	4	1	1	24	52	WRAPPER TUBE
IN	421	4	4	1	1	24	52	WRAPPER TUBE
OUT	421	5	5	1	1	24	52	WRAPPER TUBE
IN	422	4	4	1	1	24	52	WRAPPER TUBE
OUT	422	6	6	1	1	24	52	WRAPPER TUBE
IN	423	4	4	1	1	24	52	WRAPPER TUBE
OUT	423	7	7	1	1	24	52	WRAPPER TUBE
IN	424	5	5	1	1	24	52	WRAPPER TUBE
OUT	424	8	8	1	1	24	52	WRAPPER TUBE
IN	425	6	6	1	1	24	52	WRAPPER TUBE
OUT	425	8	8	1	1	24	52	WRAPPER TUBE
IN	426	7	7	1	1	24	52	WRAPPER TUBE
OUT	426	8	8	1	1	24	52	WRAPPER TUBE
IN	427	8	8	1	1	24	52	WRAPPER TUBE
OUT	427	9	9	1	1	24	52	WRAPPER TUBE
IN	428	8	8	1	1	24	52	WRAPPER TUBE
OUT	428	10	10	1	1	24	52	WRAPPER TUBE
IN	429	8	8	1	1	24	52	WRAPPER TUBE
OUT	429	11	11	1	1	24	52	WRAPPER TUBE
IN	430	9	9	1	1	24	52	WRAPPER TUBE
OUT	430	11	11	1	1	24	52	WRAPPER TUBE
IN	431	10	10	1	1	24	52	WRAPPER TUBE
OUT	431	11	11	1	1	24	52	WRAPPER TUBE
IN	432	10	10	1	1	24	52	WRAPPER TUBE
OUT	432	12	12	1	1	24	52	WRAPPER TUBE
IN	433	11	11	1	1	24	52	WRAPPER TUBE
OUT	433	12	12	1	1	24	52	WRAPPER TUBE
IN	434	12	12	1	1	24	52	WRAPPER TUBE
OUT	434	13	13	1	1	24	52	WRAPPER TUBE
IN	435	13	13	1	1	24	52	WRAPPER TUBE
OUT	435	14	14	1	1	24	52	WRAPPER TUBE
IN	436	14	14	1	1	24	52	WRAPPER TUBE
OUT	436	15	15	1	1	24	52	WRAPPER TUBE
IN	437	16	16	1	1	23	53	INNER SHIELDING
OUT	437	20	20	1	1	23	53	INNER SHIELDING
IN	438	21	21	1	1	23	53	OUTER SHIELDING
OUT	438	22	22	1	1	23	53	OUTER SHIELDING
END								
END								
ALX 0.0			3	3	1	1	9	13
ALX 0.0			10	10	1	1	15	15
ALX 0.0			16	16	1	1	15	15
ALX 0.0			17	17	1	1	14	15
ALX 0.3594			17	17	1	1	16	16
ALX 0.0			1	9	1	1	18	53

ALX 0.0	10	15	1	1	16	53
ALX 0.0	17	17	1	1	17	53
ALX 0.0	18	20	1	1	18	53
ALX 0.0	22	22	1	1	23	53
ALX 0.0	1	12	1	1	56	57
ALX 0.7641	1	12	1	1	58	60
ALX 0.0	12	12	1	1	61	90
ALX 0.790584	6	6	1	1	54	55
ALX 0.73823	9	9	1	1	54	55
ALX 0.67277	29	29	1	1	79	79
ALX 0.67271	29	29	1	1	80	80
ALX 0.16836	30	30	1	1	79	79
ALX 0.1684	30	30	1	1	80	80
ALX 0.1593	31	31	1	1	79	80
ALX 0.1511	32	32	1	1	79	80
ALX 0.1437	33	33	1	1	79	79
ALX 0.1438	33	33	1	1	80	80
ALX 0.1370	34	34	1	1	79	79
ALX 0.1371	34	34	1	1	80	80
ALZ 0.0	4	7	1	1	8	8
ALZ 0.0	1	17	1	1	13	13
ALZ 0.4231	1	10	1	1	14	14
ALZ 0.4231	17	17	1	1	14	14
ALZ 0.0	11	16	1	1	14	14
ALZ 0.002056	21	21	1	1	17	17
ALZ 0.0	22	29	1	1	17	17
ALZ 0.007788	30	30	1	1	17	17
ALZ 0.9805	1	12	1	1	55	55
ALZ 0.9664	1	12	1	1	56	56
ALZ 0.9018	1	12	1	1	57	57
ALZ 0.7641	1	12	1	1	58	59
ALZ 0.0	1	12	1	1	60	60
ALZ 0.0	1	12	1	1	67	67
ALZ 0.0	1	12	1	1	72	72
ALZ 0.0	1	12	1	1	77	77
ALZ 0.0	1	12	1	1	83	83
ALZ 0.3468	29	29	1	1	78	78
ALZ 0.3468	29	29	1	1	80	80
ALZ 0.0	30	30	1	1	78	78
ALZ 0.0	30	30	1	1	80	80
ALZ 0.004465	19	19	1	1	17	17
ALZ 0.2055	19	19	1	1	18	22
ALZ 0.7518	19	19	1	1	23	23
ALZ 0.4287	19	19	1	1	24	45
ALZ 0.6897	19	19	1	1	51	51
ALZ 0.6678	19	19	1	1	53	53
ALZ 0.0	18	18	1	1	17	53
ALZ 0.0	20	20	1	1	17	53
ALZ 0.7673	21	22	1	1	22	53
ALZ 0.008433	16	16	1	1	15	15
ALZ 0.0	16	17	1	1	22	22
ALZ 0.6613	16	17	1	1	23	34
ALZ 0.001	16	17	1	1	35	35
ALZ 0.6613	16	17	1	1	36	52
ALZ 0.001	16	17	1	1	53	53
ALZ 0.158	1	1	1	1	18	19
ALZ 0.0595	1	1	1	1	20	22
ALZ 0.4669	1	1	1	1	23	23
ALZ 0.3331	1	1	1	1	24	26
ALZ 0.6869	1	1	1	1	27	27

ALZ 0. 512	1	1	1	1	28	50
ALZ 0. 4282	1	1	1	1	51	51
ALZ 0. 6313	1	1	1	1	52	52
ALZ 0. 4282	1	1	1	1	53	53
ALZ 0. 158	2	2	1	1	18	22
ALZ 0. 2295	2	2	1	1	23	23
ALZ 0. 2844	2	2	1	1	24	26
ALZ 0. 7675	2	2	1	1	27	27
ALZ 0. 3015	2	2	1	1	28	51
ALZ 0. 8401	2	2	1	1	52	52
ALZ 0. 4282	2	2	1	1	53	53
ALZ 0. 158	3	3	1	1	18	22
ALZ 0. 0667	3	3	1	1	23	26
ALZ 0. 7749	3	3	1	1	27	27
ALZ 0. 4176	3	3	1	1	28	51
ALZ 0. 8401	3	3	1	1	52	52
ALZ 0. 4282	3	3	1	1	53	53
ALZ 0. 158	4	5	1	1	18	22
ALZ 0. 2295	4	5	1	1	23	23
ALZ 0. 2844	4	5	1	1	24	26
ALZ 0. 7675	4	5	1	1	27	27
ALZ 0. 3015	4	5	1	1	28	51
ALZ 0. 8401	4	5	1	1	52	52
ALZ 0. 4282	4	5	1	1	53	53
ALZ 0. 6296	6	6	1	1	18	53
ALZ 0. 538512	6	6	1	1	54	54
ALZ 0. 158	7	8	1	1	18	22
ALZ 0. 2295	7	8	1	1	23	23
ALZ 0. 2844	7	8	1	1	24	26
ALZ 0. 7675	7	8	1	1	27	27
ALZ 0. 3015	7	8	1	1	28	51
ALZ 0. 8401	7	8	1	1	52	52
ALZ 0. 4282	7	8	1	1	53	53
ALZ 0. 6296	9	9	1	1	18	53
ALZ 0. 42314	9	9	1	1	54	54
ALZ 0. 158	10	10	1	1	18	22
ALZ 0. 2295	10	10	1	1	23	23
ALZ 0. 2844	10	10	1	1	24	26
ALZ 0. 7675	10	10	1	1	27	27
ALZ 0. 3015	10	10	1	1	28	51
ALZ 0. 8401	10	10	1	1	52	52
ALZ 0. 4282	10	10	1	1	53	53
ALZ 0. 1590	11	11	1	1	15	22
ALZ 0. 1954	11	11	1	1	23	52
ALZ 0. 1003	12	13	1	1	15	22
ALZ 0. 1238	12	13	1	1	23	52
ALZ 0. 1590	14	15	1	1	16	22
ALZ 0. 1954	14	15	1	1	23	52
ALZ 0. 4313	11	15	1	1	53	53
AL 0. 5428	6	6	1	1	54	55
AL 0. 4285	9	9	1	1	54	55
AL 0. 9664	1	12	1	1	56	57
AL 0. 7641	1	12	1	1	58	60
AL 0. 8938	29	29	1	1	79	80
AL 0. 5793	30	30	1	1	79	79
AL 0. 5794	30	30	1	1	80	80
AL 0. 1660	31	31	1	1	79	79
AL 0. 1661	31	31	1	1	80	80
AL 0. 1573	32	32	1	1	79	80
AL 0. 1494	33	33	1	1	79	79

AL 0. 1495	33	33	1	1	80	80
AL 0. 1423	34	34	1	1	79	80
AL 0. 2055	19	19	1	1	18	22
AL 0. 5286	19	19	1	1	23	23
AL 0. 4287	19	19	1	1	24	45
AL 0. 4688	19	19	1	1	46	51
AL 0. 9366	19	19	1	1	52	53
AL 0. 7673	21	22	1	1	23	53
AL 0. 6613	16	17	1	1	23	53
AL 0. 158	1	1	1	1	18	19
AL 0. 1153	1	1	1	1	20	22
AL 0. 3817	1	1	1	1	23	23
AL 0. 3331	1	1	1	1	24	26
AL 0. 6869	1	1	1	1	27	27
AL 0. 512	1	1	1	1	28	51
AL 0. 5557	1	1	1	1	52	52
AL 0. 6093	1	1	1	1	53	53
AL 0. 158	2	2	1	1	18	22
AL 0. 2484	2	2	1	1	23	23
AL 0. 2844	2	2	1	1	24	26
AL 0. 7675	2	2	1	1	27	27
AL 0. 3015	2	2	1	1	28	51
AL 0. 8401	2	2	1	1	52	52
AL 0. 5977	2	2	1	1	53	53
AL 0. 158	3	3	1	1	18	23
AL 0. 4971	3	3	1	1	24	26
AL 0. 7749	3	3	1	1	27	27
AL 0. 4176	3	3	1	1	28	51
AL 0. 8401	3	3	1	1	52	52
AL 0. 5977	3	3	1	1	53	53
AL 0. 158	4	5	1	1	18	19
AL 0. 1153	4	5	1	1	20	22
AL 0. 3817	4	5	1	1	23	23
AL 0. 3331	4	5	1	1	24	26
AL 0. 6869	4	5	1	1	27	27
AL 0. 5339	4	5	1	1	28	51
AL 0. 5557	4	5	1	1	52	52
AL 0. 6093	4	5	1	1	53	53
AL 0. 6296	6	6	1	1	18	23
AL 0. 6906	6	6	1	1	24	26
AL 0. 6106	6	6	1	1	27	27
AL 0. 5475	6	6	1	1	28	45
AL 0. 8606	6	6	1	1	46	52
AL 0. 5098	6	6	1	1	53	53
AL 0. 158	7	8	1	1	18	22
AL 0. 2484	7	8	1	1	23	23
AL 0. 2844	7	8	1	1	24	26
AL 0. 7675	7	8	1	1	27	27
AL 0. 3015	7	8	1	1	28	51
AL 0. 8401	7	8	1	1	52	52
AL 0. 5977	7	8	1	1	53	53
AL 0. 6296	9	9	1	1	18	23
AL 0. 6906	9	9	1	1	24	26
AL 0. 6106	9	9	1	1	27	27
AL 0. 5475	9	9	1	1	28	45
AL 0. 8606	9	9	1	1	46	52
AL 0. 5098	9	9	1	1	53	53
AL 0. 158	10	10	1	1	18	22
AL 0. 2484	10	10	1	1	23	23
AL 0. 2844	10	10	1	1	24	26

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AL	0.7675	10	10	1	1	27	27
AL	0.3015	10	10	1	1	28	51
AL	0.8401	10	10	1	1	52	52
AL	0.5977	10	10	1	1	53	53
AL	0.1590	11	11	1	1	16	22
AL	0.1954	11	11	1	1	23	52
AL	0.1003	12	13	1	1	16	22
AL	0.1238	12	13	1	1	23	52
AL	0.1590	14	15	1	1	16	22
AL	0.1954	14	15	1	1	23	52
AL	0.6103	10	15	1	1	53	53

END

添付資料 2

解析結果

\*\*\*\*\*

GLOBAL BALANCES AT TIME= 2.878E+05 SECONDS

SURFACE NUMBER	MASS CONVECTED (KG/SEC)	ENERGY CONVECTED (WATT)	ENERGY CONDUCTED (WATT)	AVERAGE VELOCITY (M/SEC)	AVERAGE ENTHALPY (J/KG)	AVERAGE TEMPERATURE (CELSIUS)	BULK TEMPERATURE (CELSIUS)	
N= 1	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	8.891744E+05	4.014495E+02	0.000000E+00	
N= 2	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	1.011003E+06	4.972511E+02	0.000000E+00	
N= 3	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	
N= 4	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	9.774564E+05	4.708541E+02	0.000000E+00	
N= 5	3.749878E+02	3.088941E+08	-4.201769E-02	4.166900E+00	8.237444E+05	3.500000E+02	3.500000E+02	←原子炉入口
N= 6	3.749878E+02	3.088941E+08	-4.201769E-02	4.166900E+00	8.237444E+05	3.500000E+02	3.500000E+02	←原子炉入口
N= 7	-7.499758E+02	-7.581811E+08	0.000000E+00	-2.397208E+00	1.010942E+06	4.972001E+02	4.971990E+02	←原子炉出口

\*\*\*\*\* MASS BALANCE \*\*\*\*\*

MASS ACCUMULATION RATE: DMASDT= 0.000000E+00 (KG/SEC)  
 NET MASS CONVECTED INTO CONFIGURATION: FLOSUM=-2.668835E-04 (KG/SEC)  
 GLOBAL CONSERVATION OF MASS: (DMASDT-FLOSUM)= 2.668835E-04 (KG/SEC) DLSUM= 2.667988E-04

\*\*\*\*\* ENERGY BALANCE \*\*\*\*\*

ENERGY ACCUMULATION RATE: DEDT= 0.000000E+00 (WATT)  
 NET ENERGY CONVECTED INTO CONFIGURATION: EINSUM=-1.403929E+08 (WATT)  
 NET ENERGY CONDUCTED INTO CONFIGURATION: QINSUM=-8.403538E-02 (WATT)  
 ENERGY GENERATED WITHIN CONFIGURATION: QSOURC= 1.403758E+08 (WATT) ←出力  
 ENERGY EXCESS DUE TO MASS RESIDUE: EDLSUM= 1.508252E+04 (WATT)  
 GLOBAL CONSERVATION OF ENERGY: (DEDT-EINSUM-QINSUM-QSOURC-EDLSUM)= 2.071105E+03 (WATT)

\*\*\*\*\*

UL (M/S) : VELOCITY IN X-DIRECTION AT TIME= 2.878E+05 SECONDS ... R 方向流速

\*\*\*\*\* CONSTANT J PLANE J= 1 \*\*\*\*\*

K	1-->	1	2	3	4	5	6	7	8	9	10
90		3.37251E-05	7.39538E-05	1.02046E-04	1.89820E-04	2.01130E-04	2.08376E-04	2.18037E-04	2.50302E-04	2.48342E-04	1.72496E-04
89		3.05562E-05	5.90514E-05	7.07332E-05	9.48053E-05	1.03997E-04	1.12765E-04	1.24421E-04	1.47708E-04	1.48547E-04	1.59354E-04
88		1.66332E-05	3.24678E-05	4.13640E-05	5.15702E-05	5.12831E-05	5.04215E-05	5.02467E-05	5.96028E-05	6.07921E-05	8.58082E-05
87		7.27416E-06	1.29389E-05	1.66996E-05	1.59987E-05	1.18823E-05	7.81816E-06	1.90144E-06	-1.14870E-05	-1.22140E-05	-8.87209E-06
86		9.53107E-07	-1.83499E-05	-2.92961E-05	-5.61986E-05	-5.74187E-05	-5.51848E-05	-5.80931E-05	-9.01197E-05	-9.09800E-05	-8.73372E-05
85		-3.24011E-05	-6.60664E-05	-8.60282E-05	-1.29388E-04	-1.30147E-04	-1.30643E-04	-1.33399E-04	-1.57674E-04	-1.56468E-04	-1.26566E-04
84		-6.40076E-05	-9.99789E-05	-1.22145E-04	-1.71439E-04	-1.85903E-04	-1.98794E-04	-2.08437E-04	-2.01464E-04	-2.00783E-04	-1.96541E-04
83		4.87548E-05	8.48140E-05	1.08729E-04	1.85082E-04	2.04635E-04	2.22944E-04	2.46693E-04	3.13670E-04	3.14721E-04	2.76121E-04
82		2.88945E-05	6.01253E-05	8.41374E-05	1.47029E-04	1.56513E-04	1.63844E-04	1.75632E-04	1.51660E-04	1.50276E-04	1.45554E-04
81		5.02322E-06	2.49528E-05	3.74041E-05	7.03233E-05	7.22187E-05	6.92753E-05	5.55855E-05	2.11894E-05	2.08305E-05	4.72360E-05
80		-1.41433E-05	-2.89993E-05	-3.98124E-05	-6.46502E-05	-7.13050E-05	-7.98539E-05	-8.94551E-05	-6.67705E-05	-6.63792E-05	-7.14537E-05
79		-3.65075E-05	-7.36127E-05	-9.85065E-05	-1.50739E-04	-1.62613E-04	-1.65017E-04	-1.55632E-04	-1.47835E-04	-1.47561E-04	-1.43183E-04
78		-3.36884E-05	-6.92088E-05	-9.43284E-05	-1.96635E-04	-2.03221E-04	-2.11523E-04	-2.32184E-04	-2.71701E-04	-2.71980E-04	-2.54359E-04
77		4.70364E-05	1.04267E-04	1.34292E-04	2.35503E-04	2.49208E-04	2.57866E-04	2.61669E-04	2.24621E-04	2.21009E-04	1.56995E-04
76		1.36736E-05	2.37774E-05	3.57295E-05	7.69302E-05	9.18296E-05	1.01275E-04	1.05544E-04	9.88981E-05	9.80564E-05	9.14251E-05
75		-9.18470E-06	-2.05456E-05	-2.25095E-05	-4.43460E-05	-4.20556E-05	-3.63365E-05	-2.62395E-05	-1.38056E-05	-1.19944E-05	2.28951E-05
74		-2.06468E-05	-4.65317E-05	-6.43938E-05	-1.20124E-04	-1.32047E-04	-1.39317E-04	-1.38120E-04	-1.00349E-04	-9.77408E-05	-6.33140E-05
73		-2.82806E-05	-5.88022E-05	-8.07793E-05	-1.46112E-04	-1.65024E-04	-1.81575E-04	-2.01032E-04	-2.08191E-04	-2.08375E-04	-2.07662E-04
72		4.10403E-05	8.31306E-05	1.04682E-04	1.46509E-04	1.59643E-04	1.70670E-04	1.85173E-04	2.22229E-04	2.23614E-04	2.26205E-04
71		8.27494E-06	1.72520E-05	2.95468E-05	7.20179E-05	8.17222E-05	9.04267E-05	1.00281E-04	1.20554E-04	1.19975E-04	9.71895E-05
70		-1.25653E-05	-2.48861E-05	-3.20653E-05	-4.64687E-05	-3.90952E-05	-3.00199E-05	-1.53692E-05	7.11832E-06	7.46164E-06	1.10006E-05
69		-3.09208E-05	-5.69601E-05	-6.60094E-05	-8.19672E-05	-8.79425E-05	-9.47443E-05	-1.03028E-04	-1.07152E-04	-1.06078E-04	-8.25441E-05
68		-5.95740E-06	-1.85388E-05	-3.61435E-05	-9.00168E-05	-1.14245E-04	-1.36330E-04	-1.67099E-04	-2.42689E-04	-2.44933E-04	-2.51889E-04
67		-3.32207E-04	-6.49124E-04	-8.35638E-04	-1.27760E-03	-1.35472E-03	-1.40306E-03	-1.44903E-03	-1.45769E-03	-1.43880E-03	-1.16180E-03
66		-4.05518E-04	-7.90162E-04	-1.01461E-03	-1.54058E-03	-1.66756E-03	-1.75901E-03	-1.84991E-03	-1.94679E-03	-1.93078E-03	-1.68510E-03
65		-3.70110E-04	-7.25443E-04	-9.40175E-04	-1.44521E-03	-1.59031E-03	-1.70615E-03	-1.83621E-03	-2.00976E-03	-2.00111E-03	-1.81816E-03
64		-2.07846E-04	-4.11175E-04	-5.41924E-04	-8.75688E-04	-9.91887E-04	-1.09803E-03	-1.24268E-03	-1.47575E-03	-1.48881E-03	-1.47661E-03
63		3.86089E-05	7.55481E-05	9.49077E-05	1.54491E-04	1.32162E-04	1.01153E-04	4.30570E-05	-4.57380E-05	-8.84383E-05	-3.06000E-04
62		3.70551E-04	7.39368E-04	9.64733E-04	1.56104E-03	1.69764E-03	1.79566E-03	1.90185E-03	2.08023E-03	2.06907E-03	1.79712E-03
61		9.07706E-04	1.76136E-03	2.27341E-03	3.42397E-03	3.77507E-03	4.07027E-03	4.43366E-03	4.85601E-03	4.87905E-03	4.65056E-03
60		3.81955E-01	7.22143E-01	1.04071E+00	1.55844E+00	1.71868E+00	1.86294E+00	2.06722E+00	2.47985E+00	2.51245E+00	2.79970E+00
59		2.10292E-01	4.38255E-01	6.11211E-01	9.39311E-01	1.02595E+00	1.10840E+00	1.21619E+00	1.53116E+00	1.55352E+00	1.71052E+00
58		1.02031E-01	2.10965E-01	2.97796E-01	4.47616E-01	4.76404E-01	5.25748E-01	5.76443E-01	7.69946E-01	7.78450E-01	8.50396E-01
57		0.00000E+00									
56		0.00000E+00									
55		1.58907E-02	4.32718E-02	2.93147E-01	3.33634E-01	4.25639E-01	5.57907E-02	2.17793E-01	4.18500E-01	3.62959E-01	6.80728E-01
54		1.38828E-02	3.44148E-02	1.38051E-01	1.64939E-01	1.58132E-01	5.32554E-02	1.06035E-01	1.68900E-01	2.90563E-01	3.58863E-01



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K I-->      1          2          3          4          5          6          7          8          9          10
13      1. 01860E-03 5. 05903E-04 0. 00000E+00-1. 68073E-02-2. 08839E-02-2. 40989E-02-2. 81053E-02-3. 61615E-02-3. 65090E-02-4. 03807E-02
12      8. 73223E-04 4. 16815E-04 0. 00000E+00-1. 19651E-02-1. 51456E-02-1. 78514E-02-2. 14872E-02-2. 95108E-02-2. 99073E-02-3. 43641E-02
11      9. 63312E-04 4. 71605E-04 0. 00000E+00-6. 19542E-03-8. 55599E-03-1. 10336E-02-1. 50474E-02-2. 57520E-02-2. 65546E-02-3. 54284E-02
10      1. 06247E-03 4. 62237E-04 0. 00000E+00 5. 87287E-03 6. 73918E-03 6. 61299E-03 4. 36909E-03-1. 49987E-02-1. 66242E-02-3. 41515E-02
9       1. 50669E-03 2. 15571E-03 0. 00000E+00 2. 90943E-02 3. 78453E-02 4. 63698E-02 6. 02697E-02 1. 91242E-02 1. 58384E-02-2. 21138E-02
8       5. 96671E-03 1. 57983E-02 2. 41950E-02 2. 29605E-02 2. 19150E-02 1. 96278E-02 1. 27244E-02 4. 69072E-03 3. 97947E-03-1. 64180E-02
7       4. 25096E-03 8. 85639E-03 1. 12247E-02 1. 72577E-02 1. 85585E-02 1. 89191E-02 1. 63079E-02 1. 68908E-02 1. 72566E-02 8. 84678E-03
6       3. 90940E-03 8. 17783E-03 1. 09833E-02 2. 26074E-02 2. 59486E-02 2. 88443E-02 3. 22652E-02 3. 73244E-02 3. 79159E-02 3. 83494E-02
5       3. 39858E-03 7. 28671E-03 1. 01342E-02 2. 15545E-02 2. 53167E-02 2. 89052E-02 3. 53163E-02 4. 70519E-02 4. 80382E-02 5. 78434E-02
4       9. 67003E-04 2. 16768E-03 3. 10462E-03 7. 35617E-03 8. 64648E-03 9. 45480E-03 9. 84396E-03 3. 90142E-02 4. 10635E-02 6. 07260E-02
3      -2. 95124E-03-6. 05031E-03-8. 24243E-03-1. 47335E-02-1. 77569E-02-1. 99203E-02-1. 88330E-02 2. 55544E-02 2. 63733E-02 4. 59337E-02
2      -7. 03173E-03-1. 38156E-02-1. 77656E-02-2. 72848E-02-2. 86792E-02-2. 92149E-02-2. 89432E-02-2. 46759E-02-2. 40874E-02 7. 06734E-03
1      -1. 39967E-02-2. 64809E-02-3. 36350E-02-4. 97187E-02-5. 39500E-02-5. 66170E-02-5. 86823E-02-5. 75653E-02-5. 57239E-02-3. 40282E-02

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\*\*\*\*\* CONSTANT J PLANE J= 1 \*\*\*\*\*

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K I-->      11          12          13          14          15          16          17          18          19          20
90      1. 15393E-04 0. 00000E+00-1. 63558E-02-3. 03554E-02-3. 83851E-02-4. 57358E-02-5. 06582E-02-5. 36792E-02-5. 03902E-02-3. 96880E-02
89      9. 10027E-05 0. 00000E+00-1. 80830E-02-3. 36876E-02-4. 28457E-02-5. 14778E-02-5. 76923E-02-6. 25332E-02-6. 12505E-02-5. 29286E-02
88      7. 32747E-05 0. 00000E+00-2. 16754E-02-4. 05713E-02-5. 20200E-02-6. 32326E-02-7. 20162E-02-8. 03986E-02-8. 28159E-02-7. 83842E-02
87      1. 44825E-05 0. 00000E+00-2. 65289E-02-4. 98519E-02-6. 43715E-02-7. 90432E-02-9. 12661E-02-1. 04392E-01-1. 11756E-01-1. 12758E-01
86      -4. 84649E-05 0. 00000E+00-3. 20155E-02-6. 03999E-02-7. 85599E-02-9. 73890E-02-1. 13808E-01-1. 32641E-01-1. 45731E-01-1. 51798E-01
85      -8. 58723E-05 0. 00000E+00-3. 66917E-02-6. 93011E-02-9. 04124E-02-1. 12538E-01-1. 32228E-01-1. 55564E-01-1. 73450E-01-1. 84716E-01
84      -1. 60443E-04 0. 00000E+00-3. 93931E-02-7. 43734E-02-9. 70939E-02-1. 21016E-01-1. 42546E-01-1. 68577E-01-1. 89688E-01-2. 04834E-01
83      2. 26467E-04 0. 00000E+00-3. 96123E-02-7. 46487E-02-9. 72781E-02-1. 20994E-01-1. 42239E-01-1. 67865E-01-1. 88724E-01-2. 04117E-01
82      7. 95659E-05 0. 00000E+00-3. 75860E-02-7. 06267E-02-9. 17046E-02-1. 13513E-01-1. 32657E-01-1. 55149E-01-1. 72432E-01-1. 84075E-01
81      2. 83105E-05 0. 00000E+00-3. 40053E-02-6. 37196E-02-8. 24291E-02-1. 01520E-01-1. 17900E-01-1. 36525E-01-1. 49636E-01-1. 56685E-01
80      -1. 59528E-05 0. 00000E+00-2. 95842E-02-5. 53343E-02-7. 14119E-02-8. 76976E-02-1. 01544E-01-1. 17171E-01-1. 28057E-01-1. 33772E-01
79      -1. 18407E-04 0. 00000E+00-2. 48122E-02-4. 63721E-02-5. 97896E-02-7. 33788E-02-8. 50007E-02-9. 84011E-02-1. 08587E-01-1. 15741E-01
78      -1. 99746E-04 0. 00000E+00-1. 99637E-02-3. 72952E-02-4. 80608E-02-5. 89690E-02-6. 83411E-02-7. 92965E-02-8. 80515E-02-9. 51777E-02
77      5. 66391E-05 0. 00000E+00-1. 52017E-02-2. 83802E-02-3. 65357E-02-4. 47669E-02-5. 17866E-02-5. 98456E-02-6. 58677E-02-6. 98059E-02
76      5. 29053E-05 0. 00000E+00-1. 06423E-02-1. 98452E-02-2. 55067E-02-3. 11770E-02-3. 59456E-02-4. 12540E-02-4. 48540E-02-4. 64896E-02
75      6. 16690E-05 0. 00000E+00-6. 36076E-03-1. 18333E-02-1. 51663E-02-1. 84594E-02-2. 11769E-02-2. 40965E-02-2. 60097E-02-2. 68567E-02
74      -9. 22390E-06 0. 00000E+00-2. 39717E-03-4. 40778E-03-5. 59457E-03-6. 68418E-03-7. 52284E-03-8. 16777E-03-8. 61714E-03-9. 07187E-03
73      -1. 62091E-04 0. 00000E+00 1. 25188E-03 2. 46205E-03 3. 25026E-03 4. 23550E-03 5. 15127E-03 6. 88359E-03 8. 08160E-03 8. 69589E-03
72      1. 50974E-04 0. 00000E+00 4. 67205E-03 8. 92456E-03 1. 15735E-02 1. 45352E-02 1. 71350E-02 2. 12264E-02 2. 41597E-02 2. 60784E-02
71      9. 50282E-05 0. 00000E+00 7. 97099E-03 1. 51620E-02 1. 96132E-02 2. 44731E-02 2. 86992E-02 3. 49829E-02 3. 95670E-02 4. 25626E-02
70      1. 32395E-05 0. 00000E+00 1. 12411E-02 2. 13467E-02 2. 75919E-02 3. 43095E-02 4. 01237E-02 4. 83948E-02 5. 44415E-02 5. 80737E-02
69      -7. 18092E-05 0. 00000E+00 1. 45655E-02 2. 76486E-02 3. 57441E-02 4. 43510E-02 5. 17792E-02 6. 19020E-02 6. 92619E-02 7. 31700E-02
68      -1. 87507E-04 0. 00000E+00 1. 80033E-02 3. 42113E-02 4. 42980E-02 5. 49414E-02 6. 41339E-02 7. 61549E-02 8. 48478E-02 8. 89517E-02
67      -7. 08126E-04 0. 00000E+00 2. 15293E-02 4. 10725E-02 5. 33970E-02 6. 64005E-02 7. 77075E-02 9. 19702E-02 1. 02293E-01 1. 06896E-01

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K	11	12	13	14	15	16	17	18	19	20
66	-1.15032E-03	0.00000E+00	2.48809E-02	4.79703E-02	6.29289E-02	7.89078E-02	9.29957E-02	1.10275E-01	1.22899E-01	1.28761E-01
65	-1.28645E-03	0.00000E+00	2.71261E-02	5.38909E-02	7.21920E-02	9.23495E-02	1.10427E-01	1.32069E-01	1.48086E-01	1.56542E-01
64	-1.11225E-03	0.00000E+00	2.52861E-02	5.59243E-02	7.92860E-02	1.06306E-01	1.30557E-01	1.58483E-01	1.79159E-01	1.92646E-01
63	-3.96672E-04	0.00000E+00	9.46951E-03	4.61572E-02	8.01779E-02	1.21070E-01	1.55129E-01	1.91308E-01	2.16306E-01	2.41277E-01
62	1.08363E-03	0.00000E+00	6.23904E-02	9.07470E-03	6.98158E-02	1.45597E-01	2.25469E-01	3.46740E-01	4.68454E-01	5.77359E-01
61	3.57016E-03	0.00000E+00	5.26463E-01	8.15119E-01	9.56133E-01	1.06381E+00	1.14381E+00	1.19186E+00	1.19398E+00	1.16004E+00
60	2.95990E+00	3.19596E+00	2.26443E+00	2.04827E+00	1.90169E+00	1.73527E+00	1.57961E+00	1.38197E+00	1.19846E+00	1.02604E+00
59	1.60645E+00	1.26771E+00	7.34519E-01	5.41511E-01	4.11480E-01	2.20476E-01	3.83026E-02	2.28233E-01	2.80451E-01	2.68466E-01
58	5.85164E-01	1.08085E-02	1.64124E-01	2.26100E-01	2.50833E-01	2.32996E-01	1.85354E-01	1.90643E-01	2.09865E-01	1.99286E-01
57	0.00000E+00	0.00000E+00	1.36114E-01	1.86395E-01	1.97963E-01	1.85741E-01	1.42025E-01	1.19901E-01	1.29457E-01	1.36088E-01
56	0.00000E+00	0.00000E+00	8.31413E-02	7.89360E-02	7.66841E-02	7.81053E-02	4.68385E-02	5.27406E-03	2.23489E-02	7.46561E-02
55	-3.88166E-01	4.00080E-01	8.42673E-02	1.27248E-02	4.17931E-02	1.39386E-02	2.89314E-02	3.45545E-02	9.67526E-02	1.30135E-02
54	-4.08801E-01	3.81628E-01	4.42644E-02	5.92736E-03	2.60960E-02	4.91083E-02	5.46075E-02	2.21699E-02	7.47222E-02	3.95923E-03
53	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	4.55622E-04	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
52	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	1.33828E-03	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
51	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	5.23960E-04	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
50	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	7.01036E-05	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
49	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	6.20685E-04	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
48	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	3.51877E-04	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
47	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	2.06429E-04	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
46	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	1.66382E-04	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
45	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	2.07215E-05	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
44	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	1.47903E-04	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
43	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	1.95460E-04	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
42	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	1.29339E-04	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
41	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	6.79960E-05	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
40	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	1.30203E-05	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
39	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	1.06675E-05	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
38	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	1.99581E-05	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
37	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	7.52919E-05	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
36	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	1.48661E-04	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
35	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	7.61943E-06	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
34	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	4.96261E-06	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
33	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	4.99522E-06	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
32	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	1.64637E-05	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
31	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	5.28918E-06	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
30	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	9.55324E-06	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
29	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	1.25513E-05	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
28	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	1.84502E-06	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
27	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	4.50112E-07	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

K	1-->	11	12	13	14	15	16	17	18	19	20
26		0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	-9.36852E-06	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
25		0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	-5.57202E-06	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
24		0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	6.28919E-06	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
23		0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	-7.52410E-06	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
22		0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	1.68748E-02	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
21		0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	3.29098E-02	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
20		0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	6.56912E-02	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
19		0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	1.15357E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
18		0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	1.60488E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
17		0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	1.04956E-01	0.00000E+00	-2.32928E-01	-1.05730E-01	9.29257E-02
16		0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	-4.98161E-01	-4.41131E+00	-5.48764E-01	-2.08674E-01	-4.15541E-02
15		-5.10301E-02	-7.63366E-02	-9.22332E-02	-1.29703E-01	-1.50444E-01	0.00000E+00	0.00000E+00	-1.81227E-01	-1.17418E-01	-4.62236E-02
14		-2.37550E+00	-2.01004E+00	-1.77384E+00	-1.58730E+00	-1.47697E+00	-1.36770E+00	0.00000E+00	-2.59831E-02	-2.63689E-02	-1.52128E-02
13		-4.06227E-02	-3.40983E-02	-1.67935E-02	1.91586E-02	6.90965E-02	1.50911E-01	2.72598E-01	1.45532E-01	5.35312E-02	1.56797E-02
12		-3.55540E-02	-3.06083E-02	-1.64312E-02	7.63535E-03	3.00494E-02	5.87109E-02	8.32763E-02	5.60795E-02	2.17726E-02	2.78656E-04
11		-4.21886E-02	-4.54499E-02	-4.09539E-02	-3.28803E-02	-2.63361E-02	-1.89183E-02	-1.44021E-02	-2.37329E-02	-3.48555E-02	-3.78901E-02
10		-4.99918E-02	-6.51380E-02	-7.27083E-02	-7.76761E-02	-8.09173E-02	-8.45358E-02	-8.89305E-02	-9.67711E-02	-9.98153E-02	-8.92858E-02
9		-5.07003E-02	-7.93334E-02	-1.00586E-01	-1.15775E-01	-1.26951E-01	-1.39426E-01	-1.51328E-01	-1.65168E-01	-1.69829E-01	-1.54341E-01
8		-4.18487E-02	-7.50021E-02	-1.06047E-01	-1.36059E-01	-1.53197E-01	-1.73504E-01	-1.94756E-01	-2.22417E-01	-2.41584E-01	-2.36579E-01
7		-7.76059E-03	-3.30703E-02	-6.37530E-02	-1.04996E-01	-1.37264E-01	-1.62332E-01	-1.95417E-01	-2.46004E-01	-2.98935E-01	-3.38223E-01
6		3.33825E-02	2.63608E-02	2.09059E-02	1.61255E-02	-2.91276E-03	-5.21612E-02	-1.00167E-01	-1.75699E-01	-2.81920E-01	-4.45897E-01
5		6.40541E-02	7.22715E-02	8.27135E-02	9.89404E-02	1.14881E-01	1.50650E-01	1.87505E-01	1.91711E-01	2.09496E-01	9.72650E-02
4		7.66515E-02	9.67997E-02	1.16785E-01	1.44360E-01	1.69422E-01	1.81436E-01	2.00474E-01	1.19804E-01	0.00000E+00	
3		6.63557E-02	9.50605E-02	1.15677E-01	1.31680E-01	1.45657E-01	8.95429E-02	0.00000E+00			
2		3.07009E-02	7.50881E-02	8.39902E-02	5.17442E-02	0.00000E+00					
1		0.00000E+00									

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K	1-->	21	22	23	24	25	26	27	28	29	30
90		-2.42359E-02	-3.11239E-03	2.28389E-02	5.11180E-02	7.76595E-02	9.44464E-02	9.41047E-02	7.73619E-02	4.56220E-02	0.00000E+00
89		-4.05347E-02	-2.35963E-02	-4.18557E-03	1.93557E-02	4.39468E-02	6.42783E-02	6.84080E-02	5.52146E-02	3.06607E-02	0.00000E+00
88		-6.95155E-02	-5.61465E-02	-3.97391E-02	-2.05120E-02	2.01664E-03	2.67210E-02	4.57681E-02	3.73339E-02	2.00342E-02	0.00000E+00
87		-1.07842E-01	-9.80520E-02	-8.41786E-02	-6.61605E-02	-4.46386E-02	-1.89419E-02	1.29072E-02	1.54429E-02	1.01277E-02	0.00000E+00
86		-1.50165E-01	-1.43865E-01	-1.32679E-01	-1.16050E-01	-9.38348E-02	-6.64197E-02	-3.42321E-02	1.66073E-02	7.96285E-03	0.00000E+00
85		-1.87315E-01	-1.84578E-01	-1.76137E-01	-1.61051E-01	-1.37943E-01	-1.05161E-01	-6.17341E-02	-1.13869E-02	-6.79340E-03	0.00000E+00
84		-2.10922E-01	-2.10777E-01	-2.05182E-01	-1.93122E-01	-1.72714E-01	-1.41382E-01	-9.73895E-02	-4.74170E-02	-2.13359E-02	0.00000E+00
83		-2.11007E-01	-2.12725E-01	-2.09244E-01	-2.00487E-01	-1.84760E-01	-1.58666E-01	-1.17009E-01	-6.04104E-02	-2.61626E-02	0.00000E+00
82		-1.88382E-01	-1.88567E-01	-1.84150E-01	-1.75392E-01	-1.61200E-01	-1.38794E-01	-1.01098E-01	-4.73472E-02	-2.21587E-02	0.00000E+00
81		-1.56977E-01	-1.53314E-01	-1.45154E-01	-1.31261E-01	-1.10326E-01	-8.10052E-02	-3.84205E-02	6.96066E-03	-3.79569E-02	0.00000E+00
80		-1.33424E-01	-1.28531E-01	-1.18318E-01	-9.97481E-02	-6.84999E-02	-1.77344E-02	6.21778E-02	1.88115E-01	6.84917E-01	2.60411E+00

K	1-->	21	22	23	24	25	26	27	28	29	30									
79	-1.	1.8548E-01	-1.	1.7765E-01	-1.	1.2628E-01	-1.	0.2300E-01	-8.	3.1161E-02	-4.	7.3563E-02	1.	4.7534E-02	1.	4.0850E-01	5.	7.6364E-01	2.	2.5873E+00
78	-9.	9.9714E-02	-1.	0.4180E-01	-1.	0.8040E-01	-1.	1.5564E-01	-1.	3.0693E-01	-1.	6.0044E-01	-2.	1.8216E-01	-3.	1.7114E-01	-3.	7.8651E-01	0.	0.0000E+00
77	-7.	1.2425E-02	-7.	2.7406E-02	-7.	6.8321E-02	-8.	5.2305E-02	-9.	9.6132E-02	-1.	1.9654E-01	-1.	4.1270E-01	-1.	5.2023E-01	-1.	1.9459E-01	0.	0.0000E+00
76	-4.	6.1840E-02	-4.	6.1089E-02	-4.	8.5426E-02	-5.	4.1061E-02	-6.	3.7759E-02	-7.	5.2987E-02	-8.	1.8889E-02	-7.	5.5852E-02	-4.	8.6966E-02	0.	0.0000E+00
75	-2.	6.6568E-02	-2.	6.4992E-02	-2.	7.6384E-02	-3.	0.2601E-02	-3.	5.8691E-02	-4.	2.8599E-02	-4.	5.3418E-02	-3.	9.0227E-02	-2.	2.9820E-02	0.	0.0000E+00
74	-1.	0.6078E-02	-1.	1.3059E-02	-1.	2.2029E-02	-1.	3.4052E-02	-1.	6.6556E-02	-2.	1.3586E-02	-2.	3.1893E-02	-1.	9.6634E-02	-1.	1.2317E-02	0.	0.0000E+00
73	5.	4.0924E-03	3.	3.7963E-03	1.	5.5545E-03	-2.	1.6041E-04	-3.	1.8734E-03	-7.	0.1642E-03	-9.	1.8750E-03	-8.	3.1325E-03	-4.	8.5105E-03	0.	0.0000E+00
72	2.	2.8623E-02	1.	9.3892E-02	1.	5.6435E-02	1.	1.6728E-02	7.	3.1694E-03	3.	2.9388E-03	4.	9.0867E-04	-8.	6.5526E-04	-8.	4.4009E-04	0.	0.0000E+00
71	4.	0.2102E-02	3.	5.7911E-02	3.	0.0350E-02	2.	3.3701E-02	2.	1.66907E-02	1.	1.4461E-02	7.	6.8947E-03	4.	5.8735E-03	2.	0.6490E-03	0.	0.0000E+00
70	5.	6.4420E-02	5.	1.4114E-02	4.	4.0444E-02	3.	4.9496E-02	2.	5.7267E-02	1.	8.7567E-02	1.	3.7339E-02	9.	1.3836E-03	4.	5.1874E-03	0.	0.0000E+00
69	7.	1.8249E-02	6.	6.1854E-02	5.	7.4006E-02	4.	6.1135E-02	3.	4.6776E-02	2.	6.3507E-02	2.	0.1490E-02	1.	3.9039E-02	7.	0.7163E-03	0.	0.0000E+00
68	8.	7.5884E-02	8.	1.2590E-02	7.	1.0861E-02	5.	7.7568E-02	4.	4.7458E-02	3.	5.7951E-02	2.	8.5484E-02	2.	0.2518E-02	1.	0.4805E-02	0.	0.0000E+00
67	1.	0.5528E-01	9.	8.5462E-02	8.	6.9940E-02	7.	1.9037E-02	5.	8.6875E-02	5.	0.2385E-02	4.	1.8762E-02	3.	0.4400E-02	1.	5.9628E-02	0.	0.0000E+00
66	1.	2.7832E-01	1.	2.0662E-01	1.	0.7967E-01	9.	2.5526E-02	8.	2.4753E-02	7.	6.0973E-02	6.	5.7996E-02	4.	8.6223E-02	2.	5.6913E-02	0.	0.0000E+00
65	1.	5.6902E-01	1.	5.0284E-01	1.	3.8217E-01	1.	2.9780E-01	1.	2.9575E-01	1.	2.6180E-01	1.	1.0770E-01	8.	2.0760E-02	4.	3.3667E-02	0.	0.0000E+00
64	1.	9.5566E-01	1.	9.1062E-01	1.	9.6234E-01	2.	1.4822E-01	2.	2.8796E-01	2.	2.3343E-01	1.	9.3658E-01	1.	4.1948E-01	7.	4.5273E-02	0.	0.0000E+00
63	2.	7.0460E-01	3.	2.2736E-01	3.	7.6882E-01	4.	1.4086E-01	4.	2.1949E-01	3.	9.5256E-01	3.	3.3642E-01	2.	4.1133E-01	1.	2.5855E-01	0.	0.0000E+00
62	6.	5.2129E-01	7.	0.4727E-01	7.	3.0924E-01	7.	3.0269E-01	6.	9.9118E-01	6.	3.3613E-01	5.	2.9807E-01	3.	8.5685E-01	2.	0.3917E-01	0.	0.0000E+00
61	1.	1.1861E+00	1.	0.6531E+00	1.	0.0897E+00	9.	4.5429E-01	8.	7.3134E-01	7.	8.9277E-01	6.	8.6224E-01	5.	4.1501E-01	3.	2.3832E-01	0.	0.0000E+00
60	8.	9.0360E-01	7.	5.6564E-01	6.	5.7106E-01	5.	7.5767E-01	5.	0.4758E-01	4.	4.0800E-01	3.	6.2301E-01	2.	6.3794E-01	1.	4.6877E-01	0.	0.0000E+00
59	-2.	1.2193E-01	-1.	2.4210E-01	3.	9.1695E-03	7.	5.3090E-02	9.	9.7112E-02	9.	8.5293E-02	1.	1.2437E-01	1.	0.3637E-01	6.	1.6418E-02	0.	0.0000E+00
58	-1.	5.6167E-01	-1.	0.6436E-01	-3.	5.7055E-02	1.	7.9525E-02	4.	5.6204E-02	4.	9.1188E-02	4.	3.8866E-02	4.	0.7395E-02	2.	4.9289E-02	0.	0.0000E+00
57	-1.	0.3684E-01	-8.	7.0504E-02	-4.	0.4805E-02	-6.	9.9745E-03	1.	6.7291E-02	2.	2.3598E-02	1.	8.9492E-02	1.	6.9707E-02	1.	0.3777E-02	0.	0.0000E+00
56	-5.	2.2001E-02	-6.	0.2448E-02	-3.	1.0442E-02	-1.	0.6235E-02	4.	0.6964E-03	1.	0.5491E-02	8.	4.4411E-03	7.	1.1088E-03	4.	2.3105E-03	0.	0.0000E+00
55	-7.	1.2058E-03	-2.	6.3375E-02	-1.	2.3929E-02	-4.	4.0162E-03	1.	8.8015E-03	7.	2.7245E-03	7.	2.4231E-03	6.	1.4948E-03	3.	6.6061E-03	0.	0.0000E+00
54	-3.	8.3768E-03	-1.	3.4347E-02	-8.	4.1014E-03	-3.	4.3306E-03	1.	2.3845E-03	5.	6.1954E-03	6.	3.1451E-03	5.	4.3677E-03	3.	2.1918E-03	0.	0.0000E+00
53	-1.	1.8018E-03	0.	0.0000E+00	-4.	4.8836E-03	-2.	4.6197E-03	7.	1.9034E-04	3.	9.4396E-03	2.	7.6453E-03	1.	8.1397E-03	8.	9.3843E-04	0.	0.0000E+00
52	-6.	0.0716E-05	0.	0.0000E+00	2.	2.8881E-04	1.	2.1371E-03	2.	5.4817E-03	4.	5.0621E-03	2.	4.2797E-03	1.	1.9655E-03	4.	4.6433E-04	0.	0.0000E+00
51	9.	1.0890E-05	0.	0.0000E+00	1.	1.0535E-03	2.	0.4761E-03	2.	9.9942E-03	3.	8.8180E-03	2.	0.6781E-03	8.	9.6684E-04	2.	6.2809E-04	0.	0.0000E+00
50	1.	3.7552E-04	0.	0.0000E+00	1.	4.0501E-03	2.	3.4483E-03	3.	0.2701E-03	3.	3.9003E-03	1.	8.1699E-03	7.	3.8479E-04	1.	7.6916E-04	0.	0.0000E+00
49	1.	6.1697E-04	0.	0.0000E+00	1.	4.4637E-03	2.	3.2313E-03	2.	8.1736E-03	2.	9.1608E-03	1.	6.0737E-03	6.	2.3828E-04	1.	1.9353E-04	0.	0.0000E+00
48	1.	8.6029E-04	0.	0.0000E+00	1.	4.0277E-03	2.	1.9370E-03	2.	5.5949E-03	2.	5.3350E-03	1.	4.3129E-03	5.	3.2897E-04	7.	5.0205E-05	0.	0.0000E+00
47	2.	1.4837E-04	0.	0.0000E+00	1.	3.4289E-03	2.	0.5254E-03	2.	3.2803E-03	2.	2.3942E-03	1.	2.9737E-03	4.	5.2642E-04	3.	6.7583E-05	0.	0.0000E+00
46	2.	5.3780E-04	0.	0.0000E+00	1.	3.0343E-03	1.	9.4614E-03	2.	1.5040E-03	2.	0.1752E-03	1.	0.8553E-03	3.	6.8816E-04	1.	5.5991E-05	0.	0.0000E+00
45	3.	3.8484E-04	0.	0.0000E+00	1.	3.4257E-03	1.	9.1538E-03	2.	0.3289E-03	1.	8.3106E-03	1.	0.6084E-03	3.	4.5800E-04	-2.	0.7952E-05	0.	0.0000E+00
44	3.	2.4815E-04	0.	0.0000E+00	1.	2.3411E-03	1.	7.6862E-03	1.	8.6890E-03	1.	6.7011E-03	9.	9.3462E-04	3.	1.7320E-04	-4.	6.9526E-05	0.	0.0000E+00
43	3.	3.8675E-04	0.	0.0000E+00	1.	1.6692E-03	1.	6.5849E-03	1.	7.3580E-03	1.	5.3000E-03	9.	2.5986E-04	2.	8.4801E-04	-6.	6.7553E-05	0.	0.0000E+00
42	3.	6.2492E-04	0.	0.0000E+00	1.	1.2422E-03	1.	5.7987E-03	1.	6.3403E-03	1.	4.1446E-03	8.	7.1959E-04	2.	5.3980E-04	-7.	9.4721E-05	0.	0.0000E+00
41	3.	9.1838E-04	0.	0.0000E+00	1.	1.0132E-03	1.	5.3158E-03	1.	5.6592E-03	1.	3.2963E-03	8.	2.7434E-04	2.	3.5997E-04	-8.	3.2035E-05	0.	0.0000E+00
40	4.	2.7675E-04	0.	0.0000E+00	1.	0.9918E-03	1.	5.1651E-03	1.	5.3716E-03	1.	2.8426E-03	7.	8.6526E-04	2.	3.7753E-04	-7.	3.8022E-05	0.	0.0000E+00

K	1-->	21	22	23	24	25	26	27	28	29	30
39		4. 77873E-04	0. 00000E+00	1. 12454E-03	1. 53995E-03	1. 55593E-03	1. 28847E-03	8. 14069E-04	2. 58014E-04	-6. 65164E-05	0. 00000E+00
38		4. 92621E-04	0. 00000E+00	1. 12578E-03	1. 55909E-03	1. 59649E-03	1. 35329E-03	8. 72600E-04	2. 85680E-04	-4. 61188E-05	0. 00000E+00
37		5. 17966E-04	0. 00000E+00	1. 14599E-03	1. 60661E-03	1. 67908E-03	1. 47940E-03	9. 58923E-04	3. 30866E-04	-1. 63025E-05	0. 00000E+00
36		5. 48725E-04	0. 00000E+00	1. 18035E-03	1. 68022E-03	1. 80470E-03	1. 67356E-03	1. 08130E-03	3. 95783E-04	2. 08112E-05	0. 00000E+00
35		5. 82756E-04	0. 00000E+00	1. 22483E-03	1. 77563E-03	1. 97063E-03	1. 94068E-03	1. 25359E-03	4. 73189E-04	6. 73628E-05	0. 00000E+00
34		6. 19069E-04	0. 00000E+00	1. 27446E-03	1. 88453E-03	2. 16830E-03	2. 27730E-03	1. 46453E-03	5. 67123E-04	1. 22079E-04	0. 00000E+00
33		6. 56949E-04	0. 00000E+00	1. 32169E-03	1. 99421E-03	2. 37965E-03	2. 66727E-03	1. 68306E-03	6. 87504E-04	1. 76855E-04	0. 00000E+00
32		6. 95532E-04	0. 00000E+00	1. 35691E-03	2. 08465E-03	2. 57593E-03	3. 07777E-03	1. 89060E-03	8. 26612E-04	2. 24165E-04	0. 00000E+00
31		7. 32257E-04	0. 00000E+00	1. 36708E-03	2. 13044E-03	2. 71705E-03	3. 45197E-03	2. 08526E-03	9. 51626E-04	2. 60193E-04	0. 00000E+00
30		7. 60475E-04	0. 00000E+00	1. 33660E-03	2. 10162E-03	2. 75317E-03	3. 70083E-03	2. 26885E-03	1. 03430E-03	2. 78836E-04	0. 00000E+00
29		7. 62430E-04	0. 00000E+00	1. 24512E-03	1. 96808E-03	2. 63170E-03	3. 69128E-03	2. 52422E-03	1. 07335E-03	2. 48558E-04	0. 00000E+00
28		6. 93330E-04	0. 00000E+00	1. 06511E-03	1. 70542E-03	2. 31394E-03	3. 23543E-03	2. 10682E-03	8. 75430E-04	-5. 93568E-05	0. 00000E+00
27		9. 44450E-04	0. 00000E+00	5. 99903E-04	7. 62204E-04	1. 07937E-03	2. 09745E-03	2. 03819E-03	-5. 18877E-04	-1. 19566E-03	0. 00000E+00
26		1. 15590E-03	0. 00000E+00	-7. 93902E-04	-1. 85453E-03	-2. 48180E-03	-2. 10655E-03	-1. 37620E-03	-4. 95835E-03	-3. 91372E-03	0. 00000E+00
25		1. 34663E-03	0. 00000E+00	-3. 60688E-03	-7. 23007E-03	-1. 03147E-02	-1. 21003E-02	-1. 25119E-02	-1. 39914E-02	-9. 10584E-03	0. 00000E+00
24		1. 57457E-03	0. 00000E+00	-8. 03262E-03	-1. 59024E-02	-2. 34977E-02	-2. 95124E-02	-3. 17880E-02	-2. 93141E-02	-1. 80117E-02	0. 00000E+00
23		1. 84464E-03	0. 00000E+00	-1. 32548E-02	-2. 62324E-02	-3. 81861E-02	-4. 74676E-02	-4. 85691E-02	-3. 90267E-02	-2. 15235E-02	0. 00000E+00
22		2. 87505E-02	8. 30798E-02	-3. 48165E-02	-1. 03261E-01	-1. 27638E-01	-1. 23300E-01	-1. 08168E-01	-8. 55871E-02	-4. 86499E-02	0. 00000E+00
21		-1. 42426E-02	-3. 80897E-02	-1. 02741E-01	-1. 52862E-01	-1. 80151E-01	-1. 84806E-01	-1. 68792E-01	-1. 33821E-01	-7. 69229E-02	0. 00000E+00
20		-5. 65803E-02	-1. 13832E-01	-1. 71798E-01	-2. 18838E-01	-2. 47278E-01	-2. 53412E-01	-2. 34610E-01	-1. 88249E-01	-1. 10505E-01	0. 00000E+00
19		-9. 54719E-02	-1. 76631E-01	-2. 41696E-01	-2. 91847E-01	-3. 22748E-01	-3. 30090E-01	-3. 08910E-01	-2. 53050E-01	-1. 54409E-01	0. 00000E+00
18		-1. 38866E-01	-2. 39526E-01	-3. 12366E-01	-3. 66133E-01	-3. 99313E-01	-4. 08147E-01	-3. 86659E-01	-3. 25133E-01	-2. 08975E-01	0. 00000E+00
17		1. 95039E-01	2. 41502E-01	2. 59893E-01	2. 64069E-01	2. 56951E-01	2. 37062E-01	2. 02865E-01	1. 53636E-01	8. 91643E-02	0. 00000E+00
16		5. 17405E-02	8. 54729E-02	9. 51684E-02	9. 72006E-02	9. 53853E-02	8. 41682E-02	6. 18401E-02	3. 30239E-02	7. 81017E-03	0. 00000E+00
15		-6. 77917E-03	1. 23036E-02	9. 67129E-03	1. 34094E-03	-1. 88328E-02	-3. 73769E-02	-5. 46564E-02	-7. 06396E-02	-7. 66945E-02	0. 00000E+00
14		-7. 76520E-03	-6. 58615E-03	-2. 49021E-02	-4. 22043E-02	-5. 07338E-02	-5. 61492E-02	-5. 25412E-02	-3. 42859E-02	0. 00000E+00	
13		3. 64595E-03	-5. 04032E-03	-3. 48971E-02	-5. 05431E-02	-6. 02250E-02	-6. 47875E-02	-6. 36812E-02	-5. 49723E-02	0. 00000E+00	
12		-6. 07004E-03	-6. 14104E-03	-2. 86093E-02	-4. 31726E-02	-4. 89940E-02	-4. 48910E-02	-2. 85073E-02	0. 00000E+00		
11		-2. 89478E-02	-1. 30364E-02	-3. 17424E-02	-4. 36155E-02	-4. 80861E-02	-4. 50455E-02	-3. 46676E-02	0. 00000E+00		
10		-6. 40413E-02	-2. 81992E-02	-4. 26730E-02	-4. 93218E-02	-4. 91050E-02	-4. 06260E-02	0. 00000E+00			
9		-1. 14945E-01	-5. 24129E-02	-6. 23370E-02	-5. 57449E-02	-4. 41862E-02	0. 00000E+00				
8		-1. 90153E-01	-8. 76573E-02	-1. 11922E-01	-4. 78358E-02	0. 00000E+00					
7		-3. 12114E-01	-1. 15874E-01	0. 00000E+00							
6		-6. 51799E-01	-4. 16690E+00	← 入口							
5		0. 00000E+00		↑ 入口							

\*\*\*\*\* CONSTANT J PLANE J= 1 \*\*\*\*\*

K	1-->	31	32	33	34
80		2. 57143E+00	2. 47079E+00	2. 12564E+00	2. 09641E+00 → 出口
79		2. 29078E+00	2. 39239E+00	2. 73698E+00	2. 69801E+00 → 出口

WL (M/S) : VELOCITY IN Z-DIRECTION AT TIME= 2.878E+05 SECONDS ... Z 方向流速

\*\*\*\*\* CONSTANT J PLANE J= 1 \*\*\*\*\*

K	1-->	1	2	3	4	5	6	7	8	9	10
90		0.00000E+00									
89		1.79773E-04	1.86735E-04	1.98689E-04	2.20094E-04	1.50822E-04	1.31271E-04	1.22698E-04	1.22471E-04	3.77203E-05	-6.05780E-05
88		3.36532E-04	3.26885E-04	3.10262E-04	3.09069E-04	2.42626E-04	2.24622E-04	2.11624E-04	1.98984E-04	9.74965E-05	-1.93869E-06
87		4.20305E-04	4.03675E-04	3.80521E-04	3.54355E-04	2.67873E-04	2.43476E-04	2.32024E-04	2.29821E-04	1.37339E-04	5.67505E-05
86		4.52432E-04	4.31648E-04	4.09979E-04	3.64107E-04	2.56046E-04	2.28537E-04	2.14707E-04	2.09853E-04	1.19109E-04	5.84685E-05
85		4.47273E-04	3.72733E-04	3.46539E-04	2.98512E-04	2.21497E-04	2.13624E-04	1.81351E-04	1.41317E-04	7.38811E-05	3.95277E-05
84		2.93743E-04	2.14601E-04	1.96012E-04	1.66797E-04	1.53581E-04	1.51503E-04	1.16546E-04	5.91974E-05	4.77657E-05	4.73458E-05
83		0.00000E+00									
82		2.30529E-04	1.88524E-04	1.83712E-04	2.01509E-04	1.82242E-04	1.84241E-04	1.74754E-04	1.84698E-04	1.14384E-04	1.92920E-05
81		3.67192E-04	3.31479E-04	3.43408E-04	3.63903E-04	2.98467E-04	2.91896E-04	2.83393E-04	2.07268E-04	1.35864E-04	5.13089E-05
80		3.93054E-04	4.01852E-04	4.20453E-04	4.43338E-04	3.41310E-04	3.10500E-04	2.62664E-04	1.73696E-04	1.35286E-04	1.01434E-04
79		3.29331E-04	3.34085E-04	3.47546E-04	3.69509E-04	2.82835E-04	2.37756E-04	1.94615E-04	1.78124E-04	1.22499E-04	7.61823E-05
78		1.59086E-04	1.62623E-04	1.71792E-04	2.07474E-04	1.68981E-04	1.50530E-04	1.57037E-04	1.38009E-04	8.75867E-05	4.26747E-05
77		0.00000E+00									
76		2.19519E-04	2.51568E-04	2.28592E-04	2.61398E-04	1.81500E-04	1.57125E-04	1.18540E-04	3.17258E-05	2.76189E-07	-4.89886E-05
75		2.82816E-04	3.04230E-04	3.01603E-04	3.55105E-04	2.88564E-04	2.46385E-04	1.74955E-04	5.71913E-05	1.45749E-05	-3.37086E-05
74		2.37724E-04	2.54257E-04	2.72340E-04	3.03056E-04	2.76225E-04	2.55758E-04	1.96142E-04	6.73820E-05	4.43848E-05	2.24491E-05
73		1.37945E-04	1.40557E-04	1.51239E-04	1.65379E-04	1.60578E-04	1.58690E-04	1.43536E-04	7.84984E-05	6.38210E-05	5.47139E-05
72		0.00000E+00									
71		1.89446E-04	1.94643E-04	1.71515E-04	1.40864E-04	1.34252E-04	1.28114E-04	1.21096E-04	1.18716E-04	9.17794E-05	6.45707E-05
70		2.27578E-04	2.35150E-04	2.39495E-04	2.32398E-04	2.14293E-04	2.08875E-04	1.93001E-04	1.83335E-04	1.16711E-04	5.81983E-05
69		1.69130E-04	1.77064E-04	1.85331E-04	1.86503E-04	2.24566E-04	2.36420E-04	2.32718E-04	2.12321E-04	1.25339E-04	6.61611E-05
68		2.54840E-05	4.79568E-05	9.08208E-05	1.15510E-04	1.56398E-04	1.62419E-04	1.64557E-04	1.71255E-04	1.13646E-04	7.75825E-05
67		0.00000E+00									
66		-1.55021E-03	-1.50509E-03	-1.42838E-03	-1.30780E-03	-9.98223E-04	-8.59392E-04	-7.35269E-04	-5.00648E-04	-8.21778E-05	8.26987E-05
65		-3.44480E-03	-3.33504E-03	-3.14582E-03	-2.87924E-03	-2.35952E-03	-2.07849E-03	-1.77582E-03	-1.27045E-03	-3.60451E-04	-2.02936E-05
64		-5.17530E-03	-5.01892E-03	-4.75612E-03	-4.36461E-03	-3.75410E-03	-3.38567E-03	-2.93425E-03	-2.15243E-03	-7.96102E-04	-2.48264E-04
63		-6.14819E-03	-5.97681E-03	-5.70910E-03	-5.29192E-03	-4.72754E-03	-4.37053E-03	-3.89684E-03	-2.92522E-03	-1.47760E-03	-6.28286E-04
62		-5.96998E-03	-5.80194E-03	-5.55349E-03	-5.12745E-03	-4.75162E-03	-4.46608E-03	-4.06188E-03	-3.04582E-03	-2.28521E-03	-1.02090E-03
61		-4.24012E-03	-4.07512E-03	-3.88154E-03	-3.47106E-03	-3.33713E-03	-3.20141E-03	-2.95160E-03	-2.13447E-03	-1.87318E-03	-9.25441E-04
60		0.00000E+00									
59		1.30675E+00	1.21165E+00	1.49310E+00	1.15173E+00	1.11311E+00	1.10348E+00	1.08721E+00	9.68508E-01	9.81712E-01	8.51422E-01
58		2.02616E+00	1.97157E+00	2.33776E+00	1.85801E+00	1.75072E+00	1.74905E+00	1.69830E+00	1.61872E+00	1.61825E+00	1.35230E+00
57		2.01248E+00	1.97974E+00	2.33444E+00	1.85532E+00	1.70547E+00	1.77098E+00	1.68406E+00	1.67440E+00	1.61117E+00	1.35140E+00
56		1.87796E+00	1.84740E+00	2.17839E+00	1.73130E+00	1.59146E+00	1.65259E+00	1.57149E+00	1.56247E+00	1.50346E+00	1.26106E+00
55		1.85095E+00	1.82083E+00	2.14706E+00	1.70640E+00	1.56858E+00	1.62882E+00	1.54889E+00	1.54000E+00	1.48184E+00	1.24293E+00
54		1.82598E+00	1.80186E+00	2.26622E+00	1.71278E+00	1.62652E+00	2.36146E+00	1.65564E+00	1.56676E+00	2.48856E+00	1.33452E+00

K	1-->	1	2	3	4	5	6	7	8	9	10
53		4. 28700E+00	4. 23801E+00	5. 45419E+00	4. 04823E+00	3. 81692E+00	1. 89785E+00	3. 95234E+00	3. 70497E+00	1. 88711E+00	3. 22272E+00
52		2. 90780E+00	2. 16012E+00	2. 78001E+00	2. 06339E+00	1. 94549E+00	1. 89784E+00	2. 01451E+00	1. 88843E+00	1. 88710E+00	1. 64262E+00
51		4. 28452E+00	6. 02012E+00	5. 59107E+00	5. 75044E+00	5. 42078E+00	1. 89688E+00	5. 61349E+00	5. 26231E+00	1. 88641E+00	4. 57767E+00
50		3. 58076E+00	6. 02147E+00	5. 58913E+00	5. 75168E+00	5. 42063E+00	1. 89573E+00	5. 61377E+00	5. 26278E+00	1. 88560E+00	4. 57849E+00
49		3. 57814E+00	6. 02285E+00	5. 58706E+00	5. 75299E+00	5. 42045E+00	1. 89456E+00	5. 61405E+00	5. 26325E+00	1. 88480E+00	4. 57934E+00
48		3. 57541E+00	6. 02424E+00	5. 58486E+00	5. 75439E+00	5. 42027E+00	1. 89338E+00	5. 61433E+00	5. 26372E+00	1. 88399E+00	4. 58023E+00
47		3. 57258E+00	6. 02565E+00	5. 58251E+00	5. 75587E+00	5. 42007E+00	1. 89217E+00	5. 61460E+00	5. 26420E+00	1. 88318E+00	4. 58118E+00
46		3. 56962E+00	6. 02707E+00	5. 57999E+00	5. 75745E+00	5. 41986E+00	1. 89095E+00	5. 61486E+00	5. 26469E+00	1. 88238E+00	4. 58218E+00
45		3. 56655E+00	6. 02848E+00	5. 57730E+00	5. 75913E+00	5. 41963E+00	1. 88970E+00	5. 61511E+00	5. 26518E+00	1. 88158E+00	4. 58324E+00
44		3. 56471E+00	6. 02929E+00	5. 57563E+00	5. 76015E+00	5. 41949E+00	1. 88897E+00	5. 61525E+00	5. 26546E+00	1. 88113E+00	4. 58388E+00
43		3. 56283E+00	6. 03009E+00	5. 57390E+00	5. 76122E+00	5. 41934E+00	1. 88824E+00	5. 61538E+00	5. 26575E+00	1. 88068E+00	4. 58456E+00
42		3. 56091E+00	6. 03088E+00	5. 57210E+00	5. 76233E+00	5. 41918E+00	1. 88749E+00	5. 61551E+00	5. 26603E+00	1. 88023E+00	4. 58525E+00
41		3. 55896E+00	6. 03167E+00	5. 57023E+00	5. 76349E+00	5. 41902E+00	1. 88674E+00	5. 61564E+00	5. 26632E+00	1. 87979E+00	4. 58598E+00
40		3. 55697E+00	6. 03245E+00	5. 56827E+00	5. 76468E+00	5. 41885E+00	1. 88599E+00	5. 61577E+00	5. 26661E+00	1. 87935E+00	4. 58674E+00
39		3. 55494E+00	6. 03321E+00	5. 56624E+00	5. 76593E+00	5. 41868E+00	1. 88522E+00	5. 61589E+00	5. 26690E+00	1. 87892E+00	4. 58753E+00
38		3. 54714E+00	6. 00794E+00	5. 54970E+00	5. 74320E+00	5. 39911E+00	1. 88460E+00	5. 59270E+00	5. 24679E+00	1. 87857E+00	4. 57048E+00
37		3. 53887E+00	5. 98017E+00	5. 53185E+00	5. 71786E+00	5. 37745E+00	1. 88402E+00	5. 56691E+00	5. 22444E+00	1. 87826E+00	4. 55187E+00
36		3. 53012E+00	5. 94986E+00	5. 51266E+00	5. 69005E+00	5. 35383E+00	1. 88350E+00	5. 53872E+00	5. 19998E+00	1. 87798E+00	4. 53156E+00
35		3. 52101E+00	5. 91757E+00	5. 49245E+00	5. 66034E+00	5. 32870E+00	1. 88303E+00	5. 50874E+00	5. 17393E+00	1. 87773E+00	4. 50992E+00
34		3. 51181E+00	5. 88434E+00	5. 47184E+00	5. 62967E+00	5. 30287E+00	1. 88262E+00	5. 47792E+00	5. 14712E+00	1. 87751E+00	4. 48760E+00
33		3. 50275E+00	5. 85113E+00	5. 45137E+00	5. 59896E+00	5. 27706E+00	1. 88228E+00	5. 44714E+00	5. 12030E+00	1. 87733E+00	4. 46521E+00
32		3. 49402E+00	5. 81881E+00	5. 43154E+00	5. 56899E+00	5. 25191E+00	1. 88200E+00	5. 41719E+00	5. 09415E+00	1. 87719E+00	4. 44330E+00
31		3. 48585E+00	5. 78822E+00	5. 41284E+00	5. 54057E+00	5. 22810E+00	1. 88179E+00	5. 38885E+00	5. 06934E+00	1. 87708E+00	4. 42242E+00
30		3. 47842E+00	5. 76018E+00	5. 39576E+00	5. 51443E+00	5. 20611E+00	1. 88163E+00	5. 36283E+00	5. 04651E+00	1. 87700E+00	4. 40306E+00
29		3. 47179E+00	5. 73491E+00	5. 38044E+00	5. 49085E+00	5. 18625E+00	1. 88154E+00	5. 33938E+00	5. 02588E+00	1. 87695E+00	4. 38535E+00
28		3. 46572E+00	5. 71149E+00	5. 36630E+00	5. 46901E+00	5. 16771E+00	1. 88149E+00	5. 31754E+00	5. 00665E+00	1. 87693E+00	4. 36824E+00
27		2. 58327E+00	2. 24366E+00	2. 89194E+00	2. 14841E+00	2. 03005E+00	1. 88149E+00	2. 08890E+00	1. 96678E+00	1. 87693E+00	1. 71599E+00
26		5. 32709E+00	6. 05490E+00	3. 35976E+01	5. 79785E+00	5. 47843E+00	1. 88149E+00	5. 63726E+00	5. 30767E+00	1. 87693E+00	4. 63088E+00
25		5. 32709E+00	6. 05490E+00	3. 35976E+01	5. 79784E+00	5. 47843E+00	1. 88149E+00	5. 63726E+00	5. 30767E+00	1. 87693E+00	4. 63088E+00
24		5. 32710E+00	6. 05489E+00	3. 35976E+01	5. 79784E+00	5. 47843E+00	1. 88149E+00	5. 63726E+00	5. 30767E+00	1. 87693E+00	4. 63088E+00
23		3. 80051E+00	7. 50332E+00	3. 35980E+01	7. 18477E+00	6. 78895E+00	1. 88149E+00	6. 98578E+00	6. 57735E+00	1. 87693E+00	5. 73865E+00
22		2. 98232E+01	1. 08989E+01	1. 41834E+01	1. 04362E+01	9. 86126E+00	1. 88149E+00	1. 01471E+01	9. 55385E+00	1. 87693E+00	8. 33560E+00
21		2. 98232E+01	1. 08989E+01	1. 41834E+01	1. 04362E+01	9. 86126E+00	1. 88149E+00	1. 01471E+01	9. 55385E+00	1. 87693E+00	8. 33560E+00
20		2. 98232E+01	1. 08989E+01	1. 41834E+01	1. 04362E+01	9. 86126E+00	1. 88149E+00	1. 01471E+01	9. 55385E+00	1. 87693E+00	8. 33560E+00
19		1. 12304E+01	1. 08987E+01	1. 41832E+01	1. 04360E+01	9. 86102E+00	1. 88139E+00	1. 01469E+01	9. 55364E+00	1. 87683E+00	8. 33536E+00
18		1. 12304E+01	1. 08987E+01	1. 41832E+01	1. 04360E+01	9. 86102E+00	1. 88139E+00	1. 01469E+01	9. 55364E+00	1. 87683E+00	8. 33536E+00
17		1. 77439E+00	1. 72199E+00	2. 24092E+00	1. 64888E+00	1. 55804E+00	1. 18452E+00	1. 60321E+00	1. 50947E+00	1. 18165E+00	1. 31698E+00
16		2. 77796E+00	2. 65410E+00	2. 57057E+00	2. 33801E+00	2. 27795E+00	2. 15653E+00	1. 97233E+00	1. 51151E+00	1. 33959E+00	3. 61857E-01
15		2. 89151E+00	2. 75787E+00	2. 63713E+00	2. 45787E+00	2. 40853E+00	2. 23171E+00	1. 98970E+00	1. 56755E+00	5. 58795E-01	2. 45885E-01
14		5. 17713E+00	4. 88516E+00	4. 68630E+00	4. 32767E+00	4. 53729E+00	4. 28941E+00	3. 96783E+00	3. 45373E+00	2. 69385E+00	2. 45948E+00

K	1-->	1	2	3	4	5	6	7	8	9	10
13		0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
12		4.78646E-03	-9.69227E-06	-1.58511E-03	-2.86764E-02	-2.72897E-02	-2.58067E-02	-2.41806E-02	-2.18176E-02	-1.72691E-02	-1.64709E-02
11		8.88957E-03	-7.06597E-05	-2.89098E-03	-4.90908E-02	-4.79983E-02	-4.64160E-02	-4.44784E-02	-4.13476E-02	-3.34696E-02	-3.21539E-02
10		1.34155E-02	-1.01209E-04	-4.36838E-03	-5.96612E-02	-6.20058E-02	-6.28608E-02	-6.33337E-02	-6.27986E-02	-5.61240E-02	-5.44581E-02
9		1.84071E-02	-3.16425E-04	-5.81640E-03	-4.96407E-02	-5.50383E-02	-6.04207E-02	-6.86392E-02	-9.09276E-02	-9.09248E-02	-8.88250E-02
8		2.54852E-02	4.07576E-03	-1.25679E-02	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	-1.33446E-01	-1.46523E-01	-1.49224E-01
7		5.31994E-02	4.37576E-02	3.76247E-02	1.39609E-02	6.76156E-03	-1.54613E-03	-1.64308E-02	-1.41335E-01	-1.58260E-01	-1.82534E-01
6		7.29444E-02	6.46001E-02	5.61814E-02	3.15823E-02	2.13395E-02	8.64016E-03	-1.79900E-02	-1.35002E-01	-1.46530E-01	-1.92092E-01
5		9.11028E-02	8.38702E-02	7.58503E-02	5.84762E-02	4.78875E-02	3.48484E-02	5.77415E-03	-1.16568E-01	-1.24607E-01	-1.81223E-01
4		1.06889E-01	1.01172E-01	9.48006E-02	8.44633E-02	7.58230E-02	6.42378E-02	4.01232E-02	-8.70220E-02	-9.25318E-02	-1.51855E-01
3		1.11380E-01	1.06387E-01	1.00806E-01	9.36947E-02	8.53858E-02	7.21875E-02	4.53270E-02	-3.96394E-02	-4.32169E-02	-1.07739E-01
2		9.76721E-02	9.22213E-02	8.57769E-02	7.72781E-02	6.42348E-02	5.33434E-02	4.10987E-02	2.11568E-02	-2.05712E-02	-6.77239E-02
1		6.50113E-02	6.03281E-02	5.57827E-02	4.94380E-02	4.42004E-02	3.77101E-02	3.02254E-02	1.79306E-02	-1.69926E-02	-2.16621E-02

\*\*\*\*\* CONSTANT J PLANE J= 1 \*\*\*\*\*

K	1-->	11	12	13	14	15	16	17	18	19	20
90		0.00000E+00									
89		-5.16735E-05	-1.23691E-04	-2.34597E-02	-2.23975E-02	-1.99633E-02	-1.74965E-02	-1.38241E-02	-9.26688E-03	-1.26741E-03	8.60117E-03
88		-1.25047E-04	-2.21588E-04	-4.93970E-02	-4.73407E-02	-4.26043E-02	-3.77597E-02	-3.05381E-02	-2.15638E-02	-5.90491E-03	1.32609E-02
87		-1.25873E-04	-3.00385E-04	-8.04870E-02	-7.75117E-02	-7.06971E-02	-6.36188E-02	-5.30380E-02	-3.98264E-02	-1.69108E-02	1.11287E-02
86		-9.07259E-05	-3.16129E-04	-1.18539E-01	-1.14718E-01	-1.06106E-01	-9.69858E-02	-8.32925E-02	-6.60857E-02	-3.64423E-02	3.81827E-04
85		-4.87568E-05	-2.64308E-04	-1.64460E-01	-1.59957E-01	-1.50126E-01	-1.39293E-01	-1.22896E-01	-1.01900E-01	-6.58892E-02	-2.12781E-02
84		-1.28097E-05	-1.72347E-04	-2.17089E-01	-2.11918E-01	-2.01175E-01	-1.88765E-01	-1.69889E-01	-1.45322E-01	-1.03567E-01	-5.11500E-02
83		0.00000E+00	0.00000E+00	-2.73592E-01	-2.67661E-01	-2.56086E-01	-2.42171E-01	-2.21033E-01	-1.93219E-01	-1.46541E-01	-8.73119E-02
82		-1.71919E-05	-2.42559E-04	-3.30410E-01	-3.23516E-01	-3.10855E-01	-2.95247E-01	-2.71685E-01	-2.40580E-01	-1.89131E-01	-1.23690E-01
81		-9.00536E-05	-3.27367E-04	-3.84321E-01	-3.76225E-01	-3.62019E-01	-3.44338E-01	-3.17857E-01	-2.82999E-01	-2.26020E-01	-1.53935E-01
80		-1.08467E-04	-3.58109E-04	-4.33096E-01	-4.23657E-01	-4.07575E-01	-3.87586E-01	-3.57882E-01	-3.18998E-01	-2.55879E-01	-1.76404E-01
79		-3.70288E-05	-3.40780E-04	-4.75531E-01	-4.64779E-01	-4.46802E-01	-4.24618E-01	-3.91938E-01	-3.49487E-01	-2.81052E-01	-1.95240E-01
78		-2.94880E-05	-2.13998E-04	-5.11127E-01	-4.99223E-01	-4.79571E-01	-4.55551E-01	-4.20500E-01	-3.75413E-01	-3.03491E-01	-2.14069E-01
77		0.00000E+00	0.00000E+00	-5.39767E-01	-5.26914E-01	-5.05876E-01	-4.80389E-01	-4.43510E-01	-3.96482E-01	-3.22251E-01	-2.30977E-01
76		-1.25293E-04	-6.07757E-05	-5.61576E-01	-5.47972E-01	-5.25821E-01	-4.99166E-01	-4.60814E-01	-4.12147E-01	-3.35683E-01	-2.41902E-01
75		-1.66174E-04	-1.17451E-04	-5.76844E-01	-5.62682E-01	-5.39686E-01	-5.12144E-01	-4.72660E-01	-4.22664E-01	-3.44259E-01	-2.48048E-01
74		-9.85170E-05	-1.83542E-04	-5.85969E-01	-5.71435E-01	-5.47869E-01	-5.19726E-01	-4.79492E-01	-4.28601E-01	-3.49033E-01	-2.51487E-01
73		-2.59390E-05	-1.73697E-04	-5.89408E-01	-5.74659E-01	-5.50809E-01	-5.22308E-01	-4.81717E-01	-4.30222E-01	-3.50404E-01	-2.52841E-01
72		0.00000E+00	0.00000E+00	-5.87612E-01	-5.72747E-01	-5.48920E-01	-5.20203E-01	-4.79649E-01	-4.27505E-01	-3.48232E-01	-2.51339E-01
71		-6.91404E-05	-1.61731E-04	-5.80909E-01	-5.65986E-01	-5.42482E-01	-5.13646E-01	-4.73481E-01	-4.20548E-01	-3.42478E-01	-2.46745E-01
70		-5.03885E-05	-2.63542E-04	-5.69473E-01	-5.54544E-01	-5.31641E-01	-5.02809E-01	-4.63356E-01	-4.09604E-01	-3.33307E-01	-2.39403E-01
69		-4.42426E-05	-2.77759E-04	-5.53347E-01	-5.38458E-01	-5.16420E-01	-4.87767E-01	-4.49349E-01	-3.94944E-01	-3.20984E-01	-2.29906E-01
68		-4.59245E-05	-2.00852E-04	-5.32450E-01	-5.17630E-01	-4.96694E-01	-4.68445E-01	-4.31394E-01	-3.76711E-01	-3.05687E-01	-2.18706E-01
67		0.00000E+00	0.00000E+00	-5.06622E-01	-4.91834E-01	-4.72148E-01	-4.44540E-01	-4.09167E-01	-3.54771E-01	-2.87317E-01	-2.05830E-01

K	11	12	13	14	15	16	17	18	19	20
66	4. 63301E-04	7. 58599E-04	4. 75735E-01	4. 60756E-01	4. 42256E-01	4. 15425E-01	3. 81967E-01	3. 28565E-01	2. 65349E-01	1. 90735E-01
65	9. 37206E-04	1. 99100E-03	4. 40040E-01	4. 24123E-01	4. 06233E-01	3. 79990E-01	3. 48528E-01	2. 96941E-01	2. 38701E-01	1. 72188E-01
64	1. 37581E-03	3. 36923E-03	4. 01124E-01	3. 81915E-01	3. 62818E-01	3. 36201E-01	3. 06671E-01	2. 57990E-01	2. 05674E-01	1. 48117E-01
63	1. 62355E-03	4. 56089E-03	3. 64848E-01	3. 34463E-01	3. 09159E-01	2. 79727E-01	2. 52592E-01	2. 09026E-01	1. 64238E-01	1. 14967E-01
62	1. 40769E-03	4. 98585E-03	3. 51263E-01	2. 80761E-01	2. 35846E-01	1. 99318E-01	1. 79973E-01	1. 47115E-01	1. 14169E-01	6. 42014E-02
61	6. 72341E-04	3. 82489E-03	4. 40772E-01	1. 88267E-01	1. 14991E-01	6. 03100E-02	2. 59945E-02	2. 83882E-02	7. 13632E-02	1. 13544E-01
60	0. 00000E+00	0. 00000E+00	3. 14511E-01	3. 01998E-01	2. 74270E-01	2. 46070E-01	2. 36539E-01	2. 12563E-01	1. 92728E-01	1. 81336E-01
59	6. 57182E-01	6. 40717E-01	4. 29347E-01	3. 24936E-01	2. 68222E-01	2. 13737E-01	1. 91259E-01	1. 58155E-01	1. 26876E-01	1. 05923E-01
58	8. 21242E-01	5. 55897E-01	3. 03044E-01	2. 04199E-01	1. 35063E-01	1. 19372E-02	1. 14085E-01	1. 79573E-02	6. 28280E-02	9. 79033E-02
57	5. 52317E-01	7. 38486E-02	1. 38377E-01	1. 21564E-01	7. 67747E-02	1. 10378E-02	7. 44831E-02	3. 75217E-02	3. 14782E-02	9. 33611E-02
56	5. 15389E-01	6. 88935E-02	1. 72389E-03	5. 71640E-02	4. 29950E-02	8. 12865E-03	3. 74152E-02	2. 90506E-02	1. 48247E-02	7. 93003E-02
55	5. 07977E-01	6. 79025E-02	8. 17713E-02	5. 26616E-02	3. 86048E-02	3. 57681E-04	6. 35999E-03	3. 62721E-03	3. 29390E-04	3. 26268E-02
54	2. 63931E-01	5. 29843E-02	2. 39253E-02	6. 60424E-02	5. 44174E-02	6. 80082E-03	2. 24921E-03	5. 15731E-03	1. 17567E-02	1. 35749E-02
53	2. 11675E-01	1. 07101E-01	9. 03990E-02	1. 69780E-01	1. 47858E-01	3. 26237E-01	2. 22895E-02	0. 00000E+00	3. 26479E-02	0. 00000E+00
52	4. 67218E-01	3. 73144E-01	3. 14976E-01	3. 74728E-01	3. 26279E-01	2. 19529E-03	2. 79439E-03	0. 00000E+00	2. 17832E-02	0. 00000E+00
51	4. 66912E-01	3. 72894E-01	3. 14861E-01	3. 74646E-01	3. 26231E-01	3. 83104E-04	1. 59599E-03	0. 00000E+00	3. 16223E-02	0. 00000E+00
50	4. 66521E-01	3. 72597E-01	3. 14699E-01	3. 74552E-01	3. 26183E-01	1. 00846E-03	2. 13743E-03	0. 00000E+00	2. 17950E-02	0. 00000E+00
49	4. 66085E-01	3. 72285E-01	3. 14541E-01	3. 74469E-01	3. 26149E-01	2. 52496E-03	3. 49168E-03	0. 00000E+00	2. 18009E-02	0. 00000E+00
48	4. 65596E-01	3. 71952E-01	3. 14376E-01	3. 74392E-01	3. 26115E-01	2. 62886E-03	1. 99845E-03	0. 00000E+00	2. 17988E-02	0. 00000E+00
47	4. 65049E-01	3. 71607E-01	3. 14211E-01	3. 74320E-01	3. 26101E-01	1. 65340E-03	6. 63751E-04	0. 00000E+00	2. 17876E-02	0. 00000E+00
46	4. 64431E-01	3. 71246E-01	3. 14058E-01	3. 74254E-01	3. 26080E-01	8. 44372E-04	3. 86551E-04	0. 00000E+00	2. 17805E-02	0. 00000E+00
45	4. 63734E-01	3. 70873E-01	3. 13908E-01	3. 74200E-01	3. 26065E-01	6. 14367E-04	7. 42330E-04	0. 00000E+00	5. 08364E-02	0. 00000E+00
44	4. 63277E-01	3. 70653E-01	3. 13828E-01	3. 74174E-01	3. 26056E-01	7. 01996E-04	3. 14784E-04	0. 00000E+00	5. 08458E-02	0. 00000E+00
43	4. 62783E-01	3. 70430E-01	3. 13751E-01	3. 74152E-01	3. 26048E-01	7. 56950E-04	2. 63973E-05	0. 00000E+00	5. 08383E-02	0. 00000E+00
42	4. 62250E-01	3. 70209E-01	3. 13679E-01	3. 74134E-01	3. 26046E-01	6. 53516E-04	1. 90175E-05	0. 00000E+00	5. 08399E-02	0. 00000E+00
41	4. 61672E-01	3. 69990E-01	3. 13611E-01	3. 74117E-01	3. 26048E-01	4. 26538E-04	9. 50172E-05	0. 00000E+00	5. 08337E-02	0. 00000E+00
40	4. 61043E-01	3. 69776E-01	3. 13551E-01	3. 74102E-01	3. 26045E-01	2. 11921E-04	3. 28552E-04	0. 00000E+00	5. 08182E-02	0. 00000E+00
39	4. 60358E-01	3. 69569E-01	3. 13500E-01	3. 74090E-01	3. 26042E-01	1. 62383E-05	4. 56656E-04	0. 00000E+00	5. 08216E-02	0. 00000E+00
38	4. 59755E-01	3. 69412E-01	3. 13464E-01	3. 74083E-01	3. 26038E-01	6. 82509E-06	3. 24432E-04	0. 00000E+00	5. 08314E-02	0. 00000E+00
37	4. 59179E-01	3. 69271E-01	3. 13435E-01	3. 74079E-01	3. 26034E-01	8. 19536E-05	1. 50586E-04	0. 00000E+00	5. 08342E-02	0. 00000E+00
36	4. 58639E-01	3. 69146E-01	3. 13410E-01	3. 74076E-01	3. 26033E-01	1. 12048E-04	4. 09036E-05	0. 00000E+00	5. 08278E-02	0. 00000E+00
35	4. 58144E-01	3. 69039E-01	3. 13389E-01	3. 74073E-01	3. 26035E-01	4. 32523E-02	4. 36143E-02	0. 00000E+00	5. 08169E-02	0. 00000E+00
34	4. 57702E-01	3. 68950E-01	3. 13374E-01	3. 74070E-01	3. 26036E-01	8. 78315E-05	5. 39883E-05	0. 00000E+00	5. 08099E-02	0. 00000E+00
33	4. 57319E-01	3. 68878E-01	3. 13362E-01	3. 74067E-01	3. 26036E-01	7. 92748E-05	4. 74463E-05	0. 00000E+00	5. 08117E-02	0. 00000E+00
32	4. 56999E-01	3. 68822E-01	3. 13355E-01	3. 74066E-01	3. 26034E-01	6. 79384E-05	3. 79272E-05	0. 00000E+00	5. 08182E-02	0. 00000E+00
31	4. 56743E-01	3. 68781E-01	3. 13350E-01	3. 74065E-01	3. 26033E-01	5. 60271E-05	7. 05811E-06	0. 00000E+00	5. 08239E-02	0. 00000E+00
30	4. 56554E-01	3. 68753E-01	3. 13346E-01	3. 74066E-01	3. 26032E-01	1. 52417E-05	2. 79623E-05	0. 00000E+00	5. 08224E-02	0. 00000E+00
29	4. 56428E-01	3. 68737E-01	3. 13344E-01	3. 74066E-01	3. 26033E-01	3. 61550E-05	4. 98264E-05	0. 00000E+00	5. 08131E-02	0. 00000E+00
28	4. 56364E-01	3. 68730E-01	3. 13343E-01	3. 74065E-01	3. 26034E-01	1. 95425E-05	5. 72138E-05	0. 00000E+00	5. 08032E-02	0. 00000E+00
27	4. 56364E-01	3. 68730E-01	3. 13343E-01	3. 74064E-01	3. 26034E-01	2. 72831E-05	3. 50009E-05	0. 00000E+00	5. 07995E-02	0. 00000E+00

K	1-->	11	12	13	14	15	16	17	18	19	20
26		4. 56365E-01	3. 68730E-01	3. 13343E-01	3. 74064E-01	3. 26033E-01	2. 85209E-05	3. 86329E-05	0. 00000E+00	5. 08025E-02	0. 00000E+00
25		4. 56365E-01	3. 68729E-01	3. 13343E-01	3. 74063E-01	3. 26031E-01	1. 64399E-05	4. 54093E-05	0. 00000E+00	5. 08067E-02	0. 00000E+00
24		4. 56365E-01	3. 68729E-01	3. 13343E-01	3. 74064E-01	3. 26030E-01	9. 76934E-06	3. 40191E-05	0. 00000E+00	5. 08071E-02	0. 00000E+00
23		4. 56366E-01	3. 68729E-01	3. 13342E-01	3. 74064E-01	3. 26030E-01	3. 52197E-05	-6. 85502E-06	0. 00000E+00	2. 89692E-02	0. 00000E+00
22		5. 60842E-01	4. 55120E-01	3. 86757E-01	4. 59698E-01	4. 00669E-01	0. 00000E+00	0. 00000E+00	0. 00000E+00	1. 05966E-01	0. 00000E+00
21		5. 60841E-01	4. 55120E-01	3. 86756E-01	4. 59697E-01	4. 00669E-01	1. 68051E-02	-1. 56062E-02	0. 00000E+00	1. 05961E-01	0. 00000E+00
20		5. 60841E-01	4. 55120E-01	3. 86756E-01	4. 59696E-01	4. 00669E-01	4. 95775E-02	-4. 60414E-02	0. 00000E+00	1. 05964E-01	0. 00000E+00
19		5. 60841E-01	4. 55120E-01	3. 86756E-01	4. 59696E-01	4. 00668E-01	1. 14995E-01	-1. 06792E-01	0. 00000E+00	1. 05968E-01	0. 00000E+00
18		5. 60841E-01	4. 55120E-01	3. 86756E-01	4. 59696E-01	4. 00668E-01	2. 29871E-01	-2. 13473E-01	0. 00000E+00	1. 05971E-01	0. 00000E+00
17		5. 60840E-01	4. 55118E-01	3. 86754E-01	4. 59695E-01	4. 00666E-01	3. 89690E-01	-3. 61890E-01	0. 00000E+00	4. 87656E+00	0. 00000E+00
16		5. 60840E-01	4. 55118E-01	3. 86753E-01	4. 59695E-01	4. 00666E-01	5. 63136E-01	-5. 22963E-01	-2. 79081E-01	1. 51288E-01	2. 27060E-01
15		5. 60840E-01	4. 55120E-01	3. 86755E-01	7. 30916E-02	6. 37061E-02	-3. 08438E+01	-2. 37156E+00	7. 97119E-01	5. 04667E-01	4. 07484E-01
14		0. 00000E+00	-5. 60521E+00	5. 51783E-01	5. 71103E-01	4. 91477E-01					
13		0. 00000E+00	5. 16609E-01	5. 67768E-01	5. 03842E-01						
12		-9. 67342E-03	3. 49511E-04	1. 91694E-02	4. 89523E-02	1. 01446E-01	1. 49994E-01	2. 27311E-01	3. 87421E-01	4. 67659E-01	4. 61752E-01
11		-1. 94944E-02	-3. 17110E-04	3. 44213E-02	8. 09398E-02	1. 46847E-01	2. 03287E-01	2. 76547E-01	3. 62493E-01	4. 30510E-01	4. 37055E-01
10		-3. 85546E-02	-1. 27232E-02	3. 32036E-02	8. 63335E-02	1. 55273E-01	2. 12724E-01	2. 82077E-01	3. 49247E-01	4. 14270E-01	4. 30064E-01
9		-7. 19829E-02	-4. 17768E-02	1. 12572E-02	6. 82709E-02	1. 38177E-01	1. 96151E-01	2. 64492E-01	3. 29723E-01	4. 00789E-01	4. 33928E-01
8		-1. 23226E-01	-8. 81270E-02	-3. 28177E-02	3. 13743E-02	1. 00141E-01	1. 58420E-01	2. 27480E-01	2. 95877E-01	3. 78446E-01	4. 37487E-01
7		-1. 67561E-01	-1. 37932E-01	-8. 96305E-02	-2. 69111E-02	4. 81071E-02	1. 04434E-01	1. 70975E-01	2. 40623E-01	3. 32807E-01	4. 21571E-01
6		-1. 92066E-01	-1. 71272E-01	-1. 38904E-01	-9. 48005E-02	-2. 93056E-02	4. 43379E-02	9. 56451E-02	1. 56936E-01	2. 43219E-01	3. 45994E-01
5		-1. 91280E-01	-1. 73644E-01	-1. 42264E-01	-9. 84561E-02	-6. 43617E-02	-4. 00584E-02	7. 83823E-03	5. 26806E-02	9. 49080E-02	1. 18764E-01
4		-1. 68215E-01	-1. 50911E-01	-1. 15275E-01	-6. 31640E-02	-1. 97181E-02	3. 54725E-02	8. 82146E-02	7. 81373E-02	1. 35804E-01	
3		-1. 28984E-01	-1. 10731E-01	-7. 05747E-02	-6. 73155E-03	4. 89485E-02	7. 73566E-02	1. 41880E-01			
2		-8. 59368E-02	-6. 17791E-02	-2. 52657E-02	3. 31510E-02	9. 42025E-02					
1		-4. 65961E-02									

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K	1-->	21	22	23	24	25	26	27	28	29	30
90		0. 00000E+00	0. 00000E+00	0. 00000E+00	0. 00000E+00	0. 00000E+00	0. 00000E+00	0. 00000E+00	0. 00000E+00	0. 00000E+00	0. 00000E+00
89		2. 10230E-02	3. 13838E-02	4. 31337E-02	4. 89052E-02	4. 78897E-02	3. 32435E-02	5. 58146E-03	-2. 19664E-02	-4. 81116E-02	-7. 31582E-02
88		3. 60706E-02	5. 48306E-02	7. 37484E-02	8. 79010E-02	9. 02782E-02	7. 01080E-02	1. 66442E-02	-3. 96359E-02	-8. 56102E-02	-1. 22325E-01
87		4. 33535E-02	7. 02796E-02	9. 68213E-02	1. 17064E-01	1. 26405E-01	1. 11416E-01	5. 01018E-02	-5. 08041E-02	-1. 12125E-01	-1. 54451E-01
86		4. 14290E-02	7. 69537E-02	1. 12412E-01	1. 40921E-01	1. 57623E-01	1. 51214E-01	1. 01904E-01	-4. 57765E-02	-1. 20031E-01	-1. 70692E-01
85		3. 09539E-02	7. 46696E-02	1. 19961E-01	1. 58871E-01	1. 86466E-01	1. 90538E-01	1. 51178E-01	3. 66747E-02	-1. 33404E-01	-1. 83461E-01
84		1. 09551E-02	6. 37320E-02	1. 19768E-01	1. 71029E-01	2. 13615E-01	2. 35816E-01	2. 16644E-01	1. 16585E-01	-1. 26452E-01	-1. 72567E-01
83		-1. 62935E-02	4. 67776E-02	1. 12789E-01	1. 75988E-01	2. 33990E-01	2. 76317E-01	2. 80694E-01	1. 93638E-01	-8. 59443E-02	-1. 38353E-01
82		-4. 47489E-02	2. 68746E-02	1. 02126E-01	1. 75130E-01	2. 46036E-01	3. 07273E-01	3. 39730E-01	2. 80488E-01	-3. 26400E-02	-9. 63996E-02
81		-6. 73943E-02	1. 12351E-02	9. 48990E-02	1. 76130E-01	2. 57298E-01	3. 33680E-01	3. 93465E-01	3. 63596E-01	6. 38815E-03	-6. 08665E-02
80		-8. 13345E-02	4. 23020E-03	9. 66589E-02	1. 88590E-01	2. 82929E-01	3. 75061E-01	4. 59102E-01	4. 36703E-01	-1. 95736E-01	0. 00000E+00

K	1-->	21	22	23	24	25	26	27	28	29	30
79		-9.22913E-02	1.08813E-03	1.03770E-01	2.10843E-01	3.27994E-01	4.55019E-01	5.91018E-01	6.50151E-01	3.96805E-01	-1.01227E-02
78		-1.06691E-01	-7.33350E-03	1.03230E-01	2.19758E-01	3.52758E-01	5.08989E-01	6.91380E-01	8.60936E-01	2.35279E+00	0.00000E+00
77		-1.22462E-01	-2.21273E-02	8.87042E-02	1.99200E-01	3.19337E-01	4.51198E-01	5.84067E-01	6.82672E-01	6.94476E-01	6.07315E-01
76		-1.30741E-01	-3.02986E-02	7.62272E-02	1.79490E-01	2.89308E-01	4.11034E-01	5.40271E-01	6.55927E-01	7.39464E-01	7.98915E-01
75		-1.34257E-01	-3.39433E-02	6.85853E-02	1.66607E-01	2.69346E-01	3.87500E-01	5.24390E-01	6.61289E-01	7.79624E-01	8.77019E-01
74		-1.36252E-01	-3.58665E-02	6.46274E-02	1.60185E-01	2.57846E-01	3.73414E-01	5.17465E-01	6.68966E-01	8.03949E-01	9.13879E-01
73		-1.39462E-01	-3.78335E-02	6.22518E-02	1.57274E-01	2.51475E-01	3.64444E-01	5.13024E-01	6.73381E-01	8.16786E-01	9.31894E-01
72		-1.43912E-01	-4.05984E-02	5.94641E-02	1.54431E-01	2.46502E-01	3.57845E-01	5.08951E-01	6.74261E-01	8.22042E-01	9.39674E-01
71		-1.46756E-01	-4.42214E-02	5.47048E-02	1.48957E-01	2.40061E-01	3.51636E-01	5.04497E-01	6.72034E-01	8.22025E-01	9.41027E-01
70		-1.46815E-01	-4.79249E-02	4.78561E-02	1.40049E-01	2.30571E-01	3.44025E-01	4.98986E-01	6.67353E-01	8.18106E-01	9.37715E-01
69		-1.44399E-01	-5.12717E-02	3.95246E-02	1.28120E-01	2.17658E-01	3.34152E-01	4.91842E-01	6.60564E-01	8.10975E-01	9.30467E-01
68		-1.40231E-01	-5.43268E-02	2.99680E-02	1.13517E-01	2.01842E-01	3.22625E-01	4.83228E-01	6.51432E-01	8.00450E-01	9.19125E-01
67		-1.34735E-01	-5.71872E-02	1.92589E-02	9.65171E-02	1.84223E-01	3.10740E-01	4.73490E-01	6.39412E-01	7.85421E-01	9.02315E-01
66		-1.27701E-01	-5.96158E-02	7.58389E-03	7.77529E-02	1.67263E-01	3.00638E-01	4.62835E-01	6.23002E-01	7.63179E-01	8.76712E-01
65		-1.18093E-01	-6.05238E-02	-4.28812E-03	5.99994E-02	1.57001E-01	2.95601E-01	4.50640E-01	5.98535E-01	7.27975E-01	8.35506E-01
64		-1.04055E-01	-5.81924E-02	-1.28139E-02	5.61362E-02	1.65843E-01	2.98733E-01	4.33193E-01	5.57717E-01	6.68546E-01	7.65951E-01
63		-8.28610E-02	-4.93717E-02	1.06394E-02	1.01696E-01	2.04362E-01	3.05164E-01	3.98298E-01	4.83787E-01	5.64978E-01	6.46416E-01
62		-1.59395E-02	5.52352E-02	1.26168E-01	1.91711E-01	2.46788E-01	2.89295E-01	3.21420E-01	3.50723E-01	3.87801E-01	4.44557E-01
61		1.52005E-01	1.91452E-01	2.24576E-01	2.44696E-01	2.46504E-01	2.27533E-01	1.89795E-01	1.44046E-01	1.08759E-01	1.17497E-01
60		1.86289E-01	1.98405E-01	2.12949E-01	2.13239E-01	1.92807E-01	1.46985E-01	6.95619E-02	-5.38330E-02	-2.20591E-01	-4.01895E-01
59		9.38246E-02	9.68353E-02	1.34176E-01	1.49407E-01	1.35929E-01	9.40206E-02	-5.11069E-03	-1.57210E-01	-3.51254E-01	-5.74301E-01
58		1.42062E-01	1.85884E-01	2.83891E-01	2.36873E-01	1.69626E-01	9.75304E-02	1.65392E-02	-1.62777E-01	-3.97794E-01	-6.46657E-01
57		1.79426E-01	2.34058E-01	3.64391E-01	3.00520E-01	2.04340E-01	1.04064E-01	1.25005E-02	-1.64599E-01	-4.15240E-01	-6.75919E-01
56		2.07105E-01	2.46532E-01	4.14156E-01	3.37559E-01	2.31698E-01	1.11425E-01	9.54122E-03	-1.66073E-01	-4.22197E-01	-6.87567E-01
55		2.27474E-01	2.34662E-01	4.45054E-01	3.59819E-01	2.48327E-01	1.19176E-01	7.56809E-03	-1.67255E-01	-4.25249E-01	-6.92316E-01
54		2.28709E-01	2.30024E-01	4.48244E-01	3.61682E-01	2.49851E-01	1.20542E-01	7.63435E-03	-1.67460E-01	-4.25814E-01	-6.93196E-01
53		2.98052E-01	2.96760E-01	4.49348E-01	3.62835E-01	2.50984E-01	1.21651E-01	7.86467E-03	-1.67620E-01	-4.26318E-01	-6.93970E-01
52		2.95279E-01	2.99385E-01	4.40795E-01	3.66313E-01	2.56835E-01	1.27835E-01	5.91662E-03	-1.69227E-01	-4.27939E-01	-6.95605E-01
51		2.95174E-01	2.99482E-01	4.41115E-01	3.67709E-01	2.58777E-01	1.30722E-01	3.25382E-03	-1.70822E-01	-4.28926E-01	-6.96206E-01
50		2.95357E-01	2.99309E-01	4.42916E-01	3.69323E-01	2.60467E-01	1.32354E-01	5.50331E-04	-1.72597E-01	-4.29901E-01	-6.96617E-01
49		2.95633E-01	2.99047E-01	4.45205E-01	3.70954E-01	2.61738E-01	1.33144E-01	-1.79297E-03	-1.74237E-01	-4.30769E-01	-6.96893E-01
48		2.95959E-01	2.98738E-01	4.47562E-01	3.72486E-01	2.62702E-01	1.33490E-01	-3.73498E-03	-1.75735E-01	-4.31550E-01	-6.97080E-01
47		2.96332E-01	2.98381E-01	4.49847E-01	3.73875E-01	2.63448E-01	1.33617E-01	-5.36532E-03	-1.77106E-01	-4.32261E-01	-6.97197E-01
46		2.96763E-01	2.97971E-01	4.52035E-01	3.75127E-01	2.64038E-01	1.33627E-01	-6.75371E-03	-1.78398E-01	-4.32909E-01	-6.97254E-01
45		2.97272E-01	2.97487E-01	4.54158E-01	3.76268E-01	2.64504E-01	1.33554E-01	-8.14002E-03	-1.79495E-01	-4.33461E-01	-6.97279E-01
44		2.97664E-01	2.97117E-01	4.55418E-01	3.76861E-01	2.64690E-01	1.33442E-01	-8.79508E-03	-1.80127E-01	-4.33791E-01	-6.97260E-01
43		2.98040E-01	2.96760E-01	4.56576E-01	3.77413E-01	2.64855E-01	1.33327E-01	-9.36903E-03	-1.80724E-01	-4.34121E-01	-6.97217E-01
42		2.98432E-01	2.96388E-01	4.57671E-01	3.77923E-01	2.64993E-01	1.33201E-01	-9.87973E-03	-1.81291E-01	-4.34440E-01	-6.97157E-01
41		2.98850E-01	2.95989E-01	4.58726E-01	3.78397E-01	2.65106E-01	1.33057E-01	-1.03367E-02	-1.81839E-01	-4.34743E-01	-6.97085E-01
40		2.99303E-01	2.95559E-01	4.59760E-01	3.78846E-01	2.65199E-01	1.32896E-01	-1.07600E-02	-1.82363E-01	-4.35033E-01	-6.97010E-01

K	1-->	21	22	23	24	25	26	27	28	29	30
39		2. 99797E-01	2. 95090E-01	4. 60791E-01	3. 79284E-01	2. 65279E-01	1. 32717E-01-1.	1. 1804E-02-1.	8. 2848E-01-4.	3. 5316E-01-6.	9. 6944E-01
38		3. 00245E-01	2. 94666E-01	4. 61645E-01	3. 79637E-01	2. 65341E-01	1. 32563E-01-1.	1. 15020E-02-1.	8. 3246E-01-4.	3. 5555E-01-6.	9. 6889E-01
37		3. 00706E-01	2. 94228E-01	4. 62500E-01	3. 80004E-01	2. 65419E-01	1. 32428E-01-1.	1. 18265E-02-1.	8. 3665E-01-4.	3. 5798E-01-6.	9. 6861E-01
36		3. 01190E-01	2. 93768E-01	4. 63371E-01	3. 80392E-01	2. 65526E-01	1. 32328E-01-1.	1. 21787E-02-1.	8. 4113E-01-4.	3. 6051E-01-6.	9. 6849E-01
35		3. 01704E-01	2. 93281E-01	4. 64267E-01	3. 80811E-01	2. 65674E-01	1. 32284E-01-1.	1. 25789E-02-1.	8. 4601E-01-4.	3. 6324E-01-6.	9. 6864E-01
34		3. 02249E-01	2. 92763E-01	4. 65197E-01	3. 81270E-01	2. 65879E-01	1. 32322E-01-1.	1. 30420E-02-1.	8. 5156E-01-4.	3. 6617E-01-6.	9. 6914E-01
33		3. 02828E-01	2. 92214E-01	4. 66165E-01	3. 81776E-01	2. 66155E-01	1. 32472E-01-1.	1. 35908E-02-1.	8. 5793E-01-4.	3. 6938E-01-6.	9. 7002E-01
32		3. 03443E-01	2. 91631E-01	4. 67169E-01	3. 82331E-01	2. 66511E-01	1. 32763E-01-1.	1. 42582E-02-1.	8. 6498E-01-4.	3. 7306E-01-6.	9. 7130E-01
31		3. 04095E-01	2. 91014E-01	4. 68200E-01	3. 82929E-01	2. 66951E-01	1. 33222E-01-1.	1. 50657E-02-1.	8. 7249E-01-4.	3. 7739E-01-6.	9. 7294E-01
30		3. 04780E-01	2. 90363E-01	4. 69238E-01	3. 83555E-01	2. 67464E-01	1. 33863E-01-1.	1. 59971E-02-1.	8. 8047E-01-4.	3. 8235E-01-6.	9. 7485E-01
29		3. 05492E-01	2. 89688E-01	4. 70253E-01	3. 84181E-01	2. 68026E-01	1. 34666E-01-1.	1. 69723E-02-1.	8. 8918E-01-4.	3. 8778E-01-6.	9. 7688E-01
28		3. 06205E-01	2. 89011E-01	4. 71198E-01	3. 84771E-01	2. 68592E-01	1. 35549E-01-1.	1. 77501E-02-1.	8. 9944E-01-4.	3. 9372E-01-6.	9. 7869E-01
27		3. 07791E-01	2. 87507E-01	4. 73174E-01	3. 86045E-01	2. 69852E-01	1. 37428E-01-1.	1. 96067E-02-1.	9. 2072E-01-4.	4. 1038E-01-6.	9. 7761E-01
26		3. 10107E-01	2. 85311E-01	4. 74366E-01	3. 86421E-01	2. 70547E-01	1. 39534E-01-1.	1. 95608E-02-1.	9. 6984E-01-4.	4. 2414E-01-6.	9. 9548E-01
25		3. 12887E-01	2. 82677E-01	4. 72817E-01	3. 84287E-01	2. 69173E-01	1. 40067E-01-1.	1. 83010E-02-2.	0. 4040E-01-4.	4. 0738E-01-6.	8. 8160E-01
24		3. 16124E-01	2. 79609E-01	4. 65784E-01	3. 76919E-01	2. 62573E-01	1. 35779E-01-2.	0. 0233E-02-2.	0. 7830E-01-4.	3. 2247E-01-6.	7. 1125E-01
23		3. 19910E-01	2. 76021E-01	4. 50120E-01	3. 60895E-01	2. 46478E-01	1. 22223E-01-2.	0. 66910E-02-2.	0. 5353E-01-4.	1. 2385E-01-6.	3. 7426E-01
22		3. 30464E-01	2. 66020E-01	3. 88640E-01	2. 98047E-01	1. 85996E-01	7. 21125E-02-4.	0. 3580E-02-1.	6. 9729E-01-3.	3. 8150E-01-5.	4. 1648E-01
21		2. 79936E-01	2. 55237E-01	2. 78084E-01	2. 30272E-01	1. 58174E-01	7. 12858E-02-3.	0. 4006E-02-1.	5. 1865E-01-3.	0. 5520E-01-4.	9. 6399E-01
20		2. 66871E-01	2. 32721E-01	2. 13699E-01	1. 77328E-01	1. 25499E-01	5. 96993E-02-2.	1. 19141E-02-1.	2. 24245E-01-2.	5. 5327E-01-4.	2. 4856E-01
19		2. 14972E-01	1. 77609E-01	1. 52390E-01	1. 24405E-01	8. 90030E-02	4. 40426E-02-1.	3. 3261E-02-8.	8. 0248E-02-1.	8. 6934E-01-3.	2. 2079E-01
18		1. 27400E-01	9. 87613E-02	8. 13786E-02	6. 54709E-02	4. 71306E-02	2. 42508E-02-5.	3. 3578E-03-4.	5. 3326E-02-1.	0. 0651E-01-1.	7. 8464E-01
17		1. 16728E-02	0. 00000E+00	0. 00000E+00	2. 04510E+00						
16		1. 63152E-01	8. 59162E-02	4. 75954E-02	2. 52154E-02	6. 55813E-03-1.	5. 1301E-02-3.	9. 9508E-02-6.	6. 6149E-02-9.	4. 2664E-02-1.	2. 1693E-01
15		3. 01721E-01	1. 41246E-01	6. 95670E-02	3. 52570E-02	1. 02643E-02-2.	6. 8960E-02-7.	0. 4619E-02-1.	0. 9038E-01-1.	3. 2703E-01-1.	3. 3747E-01
14		3. 65235E-01	1. 73417E-01	6. 58192E-02	2. 09094E-02-2.	6. 2268E-02-6.	1. 8937E-02-1.	0. 4400E-01-1.	4. 1683E-01-1.	4. 8285E-01	
13		3. 76621E-01	1. 74754E-01	3. 19725E-02-1.	2. 5096E-02-4.	4. 9465E-02-7.	5. 4505E-02-1.	0. 1843E-01-1.	1. 2227E-01-8.	8. 5338E-02	
12		3. 58850E-01	1. 61267E-01-1.	8. 5717E-02-4.	1. 3573E-02-6.	4. 7714E-02-8.	7. 1973E-02-1.	0. 4231E-01-1.	0. 1671E-01		
11		3. 48784E-01	1. 60657E-01-5.	6. 7907E-02-6.	7. 9211E-02-7.	7. 6004E-02-8.	3. 6649E-02-7.	9. 7504E-02-5.	5. 7925E-02		
10		3. 59721E-01	1. 83540E-01-8.	9. 2271E-02-9.	0. 2036E-02-8.	8. 81968E-02-8.	1. 8499E-02-6.	5. 3306E-02			
9		3. 92125E-01	2. 35181E-01-1.	1. 5735E-01-1.	0. 4532E-01-9.	1. 3411E-02-7.	0. 9957E-02				
8		4. 41397E-01	3. 25014E-01-1.	3. 6487E-01-9.	8. 1048E-02-7.	5. 9291E-02					
7		4. 94135E-01	4. 70489E-01-1.	8. 3538E-01							
6		5. 06255E-01	7. 53167E-01-1	← 入口							
5		1. 44546E-01		↑ 入口							

\*\*\*\*\* CONSTANT J PLANE J= 1 \*\*\*\*\*

K	1-->	31	32	33	34
80		0. 00000E+00	0. 00000E+00	0. 00000E+00	0. 00000E+00 → 出口
79		-5. 34368E-03-1.	5. 6879E-02-5.	0. 6940E-02-9.	3. 6270E-02 → 出口

TL (DEGREES CELSIUS) : TEMPERATURE AT TIME= 2.878E+05 SECONDS ... 冷却材温度

\*\*\*\*\* CONSTANT J PLANE J= 1 \*\*\*\*\*

K	1-->	1	2	3	4	5	6	7	8	9	10
90		4.97277E+02	4.97277E+02	4.97277E+02	4.97278E+02	4.97277E+02	4.97276E+02	4.97277E+02	4.97277E+02	4.97278E+02	4.97276E+02
89		4.97276E+02	4.97276E+02	4.97276E+02	4.97277E+02	4.97276E+02	4.97277E+02	4.97276E+02	4.97277E+02	4.97276E+02	4.97276E+02
88		4.97276E+02	4.97276E+02	4.97275E+02	4.97276E+02	4.97275E+02	4.97276E+02	4.97276E+02	4.97276E+02	4.97277E+02	4.97276E+02
87		4.97275E+02	4.97276E+02	4.97275E+02	4.97275E+02						
86		4.97276E+02	4.97276E+02	4.97276E+02	4.97276E+02	4.97274E+02	4.97275E+02	4.97275E+02	4.97275E+02	4.97274E+02	4.97275E+02
85		4.97275E+02	4.97273E+02	4.97274E+02	4.97274E+02	4.97273E+02	4.97275E+02	4.97274E+02	4.97274E+02	4.97273E+02	4.97273E+02
84		4.97274E+02	4.97274E+02	4.97273E+02	4.97273E+02	4.97274E+02	4.97274E+02	4.97274E+02	4.97273E+02	4.97274E+02	4.97274E+02
83		4.97275E+02	4.97275E+02	4.97275E+02	4.97276E+02	4.97275E+02	4.97277E+02	4.97275E+02	4.97276E+02	4.97276E+02	4.97275E+02
82		4.97274E+02	4.97274E+02	4.97274E+02	4.97274E+02	4.97274E+02	4.97275E+02	4.97275E+02	4.97275E+02	4.97276E+02	4.97273E+02
81		4.97273E+02	4.97274E+02	4.97274E+02	4.97275E+02	4.97273E+02	4.97275E+02	4.97275E+02	4.97274E+02	4.97274E+02	4.97275E+02
80		4.97275E+02	4.97275E+02	4.97275E+02	4.97275E+02	4.97275E+02	4.97275E+02	4.97273E+02	4.97273E+02	4.97273E+02	4.97274E+02
79		4.97272E+02	4.97272E+02	4.97272E+02	4.97273E+02	4.97273E+02	4.97272E+02	4.97272E+02	4.97274E+02	4.97274E+02	4.97272E+02
78		4.97273E+02	4.97273E+02	4.97272E+02	4.97273E+02	4.97273E+02	4.97273E+02	4.97273E+02	4.97271E+02	4.97271E+02	4.97272E+02
77		4.97273E+02	4.97274E+02	4.97273E+02	4.97274E+02	4.97273E+02	4.97273E+02	4.97273E+02	4.97272E+02	4.97274E+02	4.97273E+02
76		4.97273E+02	4.97274E+02	4.97272E+02	4.97274E+02	4.97273E+02	4.97273E+02	4.97273E+02	4.97273E+02	4.97273E+02	4.97272E+02
75		4.97271E+02	4.97272E+02	4.97272E+02	4.97272E+02	4.97273E+02	4.97273E+02	4.97271E+02	4.97271E+02	4.97272E+02	4.97272E+02
74		4.97271E+02	4.97271E+02	4.97271E+02	4.97271E+02	4.97271E+02	4.97272E+02	4.97270E+02	4.97270E+02	4.97271E+02	4.97271E+02
73		4.97270E+02	4.97270E+02	4.97270E+02	4.97270E+02	4.97271E+02	4.97270E+02	4.97270E+02	4.97271E+02	4.97271E+02	4.97271E+02
72		4.97271E+02	4.97272E+02	4.97271E+02	4.97270E+02	4.97271E+02	4.97271E+02	4.97271E+02	4.97271E+02	4.97271E+02	4.97271E+02
71		4.97270E+02	4.97270E+02	4.97271E+02	4.97271E+02	4.97270E+02	4.97269E+02	4.97269E+02	4.97270E+02	4.97270E+02	4.97271E+02
70		4.97270E+02	4.97270E+02	4.97270E+02	4.97269E+02	4.97269E+02	4.97270E+02	4.97269E+02	4.97269E+02	4.97268E+02	4.97268E+02
69		4.97268E+02	4.97268E+02	4.97268E+02	4.97268E+02	4.97269E+02	4.97269E+02	4.97269E+02	4.97269E+02	4.97267E+02	4.97267E+02
68		4.97267E+02	4.97267E+02	4.97269E+02	4.97269E+02	4.97269E+02	4.97269E+02	4.97269E+02	4.97268E+02	4.97267E+02	4.97269E+02
67		4.97680E+02	4.97680E+02	4.97678E+02	4.97679E+02	4.97678E+02	4.97678E+02	4.97676E+02	4.97676E+02	4.97674E+02	4.97673E+02
66		4.97681E+02	4.97682E+02	4.97683E+02	4.97681E+02	4.97682E+02	4.97683E+02	4.97683E+02	4.97684E+02	4.97686E+02	4.97688E+02
65		4.97683E+02	4.97682E+02	4.97683E+02	4.97686E+02	4.97689E+02	4.97691E+02	4.97693E+02	4.97697E+02	4.97701E+02	4.97703E+02
64		4.97682E+02	4.97683E+02	4.97687E+02	4.97689E+02	4.97694E+02	4.97696E+02	4.97698E+02	4.97703E+02	4.97711E+02	4.97713E+02
63		4.97684E+02	4.97685E+02	4.97686E+02	4.97689E+02	4.97693E+02	4.97695E+02	4.97697E+02	4.97705E+02	4.97708E+02	4.97713E+02
62		4.97684E+02	4.97684E+02	4.97687E+02	4.97689E+02	4.97691E+02	4.97692E+02	4.97694E+02	4.97700E+02	4.97702E+02	4.97706E+02
61		4.97684E+02	4.97684E+02	4.97685E+02	4.97686E+02	4.97689E+02	4.97689E+02	4.97690E+02	4.97694E+02	4.97695E+02	4.97698E+02
60		4.71868E+02	5.10861E+02	5.10216E+02	5.16552E+02	5.17426E+02	5.14804E+02	5.12730E+02	5.13794E+02	5.13850E+02	5.13884E+02
59		4.71719E+02	5.25179E+02	5.09490E+02	5.20886E+02	5.21106E+02	5.01177E+02	5.04567E+02	5.15767E+02	5.15700E+02	5.13991E+02
58		4.71584E+02	5.31896E+02	5.02786E+02	5.23734E+02	5.21569E+02	4.62629E+02	5.09660E+02	5.23112E+02	5.14878E+02	5.11947E+02
57		4.71457E+02	5.35057E+02	4.97686E+02	5.25910E+02	5.20419E+02	4.18685E+02	5.39158E+02	5.26550E+02	4.71026E+02	5.10473E+02
56		4.71457E+02	5.35058E+02	4.97684E+02	5.25910E+02	5.20418E+02	4.18662E+02	5.39173E+02	5.26551E+02	4.71003E+02	5.10472E+02
55		4.71456E+02	5.35057E+02	4.97683E+02	5.25909E+02	5.20418E+02	4.18662E+02	5.39173E+02	5.26550E+02	4.71003E+02	5.10471E+02
54		4.71420E+02	5.35221E+02	4.97331E+02	5.26665E+02	5.19857E+02	3.93039E+02	5.39247E+02	5.26251E+02	4.12571E+02	5.12206E+02

K	1-->	1	2	3	4	5	6	7	8	9	10
53		4. 71386E+02	5. 35369E+02	4. 97054E+02	5. 27038E+02	5. 19594E+02	3. 81632E+02	5. 41141E+02	5. 26122E+02	3. 69901E+02	5. 15677E+02
52		4. 71386E+02	5. 35369E+02	4. 97051E+02	5. 27037E+02	5. 19594E+02	3. 81624E+02	5. 41140E+02	5. 26121E+02	3. 69877E+02	5. 15677E+02
51		4. 69359E+02	5. 36027E+02	4. 96082E+02	5. 27637E+02	5. 19512E+02	3. 79789E+02	5. 41295E+02	5. 26382E+02	3. 68556E+02	5. 16182E+02
50		4. 66908E+02	5. 36798E+02	4. 94879E+02	5. 28378E+02	5. 19412E+02	3. 77601E+02	5. 41470E+02	5. 26685E+02	3. 67002E+02	5. 16793E+02
49		4. 64346E+02	5. 37581E+02	4. 93593E+02	5. 29161E+02	5. 19303E+02	3. 75374E+02	5. 41639E+02	5. 26992E+02	3. 65448E+02	5. 17434E+02
48		4. 61668E+02	5. 38373E+02	4. 92222E+02	5. 29993E+02	5. 19185E+02	3. 73109E+02	5. 41806E+02	5. 27302E+02	3. 63891E+02	5. 18107E+02
47		4. 58877E+02	5. 39172E+02	4. 90757E+02	5. 30878E+02	5. 19060E+02	3. 70804E+02	5. 41969E+02	5. 27616E+02	3. 62338E+02	5. 18818E+02
46		4. 55965E+02	5. 39975E+02	4. 89187E+02	5. 31818E+02	5. 18924E+02	3. 68458E+02	5. 42128E+02	5. 27934E+02	3. 60791E+02	5. 19571E+02
45		4. 52934E+02	5. 40777E+02	4. 87509E+02	5. 32818E+02	5. 18779E+02	3. 66071E+02	5. 42283E+02	5. 28253E+02	3. 59252E+02	5. 20364E+02
44		4. 51116E+02	5. 41235E+02	4. 86471E+02	5. 33428E+02	5. 18689E+02	3. 64672E+02	5. 42366E+02	5. 28437E+02	3. 58373E+02	5. 20850E+02
43		4. 49259E+02	5. 41690E+02	4. 85389E+02	5. 34064E+02	5. 18593E+02	3. 63257E+02	5. 42448E+02	5. 28623E+02	3. 57499E+02	5. 21355E+02
42		4. 47362E+02	5. 42140E+02	4. 84263E+02	5. 34722E+02	5. 18494E+02	3. 61828E+02	5. 42528E+02	5. 28810E+02	3. 56633E+02	5. 21879E+02
41		4. 45425E+02	5. 42585E+02	4. 83090E+02	5. 35409E+02	5. 18391E+02	3. 60383E+02	5. 42607E+02	5. 28998E+02	3. 55774E+02	5. 22424E+02
40		4. 43447E+02	5. 43026E+02	4. 81867E+02	5. 36121E+02	5. 18285E+02	3. 58924E+02	5. 42683E+02	5. 29186E+02	3. 54927E+02	5. 22992E+02
39		4. 41431E+02	5. 43457E+02	4. 80591E+02	5. 36859E+02	5. 18173E+02	3. 57451E+02	5. 42757E+02	5. 29376E+02	3. 54091E+02	5. 23585E+02
38		4. 33658E+02	5. 29085E+02	4. 70191E+02	5. 23311E+02	5. 05686E+02	3. 56243E+02	5. 28590E+02	5. 16219E+02	3. 53424E+02	5. 10759E+02
37		4. 25371E+02	5. 13149E+02	4. 58891E+02	5. 08070E+02	4. 91752E+02	3. 55127E+02	5. 12681E+02	5. 01466E+02	3. 52813E+02	4. 96635E+02
36		4. 16550E+02	4. 95561E+02	4. 46652E+02	4. 91165E+02	4. 76407E+02	3. 54110E+02	4. 95111E+02	4. 85165E+02	3. 52262E+02	4. 81078E+02
35		4. 07329E+02	4. 76613E+02	4. 33665E+02	4. 72911E+02	4. 59929E+02	3. 53204E+02	4. 76209E+02	4. 67624E+02	3. 51778E+02	4. 64332E+02
34		3. 97954E+02	4. 56875E+02	4. 20303E+02	4. 53849E+02	4. 42802E+02	3. 52418E+02	4. 56537E+02	4. 49356E+02	3. 51362E+02	4. 46873E+02
33		3. 88664E+02	4. 36902E+02	4. 06923E+02	4. 34527E+02	4. 25507E+02	3. 51756E+02	4. 36654E+02	4. 30880E+02	3. 51015E+02	4. 29169E+02
32		3. 79671E+02	4. 17218E+02	3. 93855E+02	4. 15442E+02	4. 08478E+02	3. 51220E+02	4. 17062E+02	4. 12652E+02	3. 50737E+02	4. 11655E+02
31		3. 71197E+02	3. 98367E+02	3. 81438E+02	3. 97130E+02	3. 92180E+02	3. 50805E+02	3. 98300E+02	3. 95170E+02	3. 50524E+02	3. 94779E+02
30		3. 63457E+02	3. 80885E+02	3. 70009E+02	3. 80105E+02	3. 76989E+02	3. 50507E+02	3. 80881E+02	3. 78907E+02	3. 50372E+02	3. 78972E+02
29		3. 56522E+02	3. 64975E+02	3. 59682E+02	3. 64588E+02	3. 63135E+02	3. 50316E+02	3. 65014E+02	3. 64073E+02	3. 50276E+02	3. 64375E+02
28		3. 50144E+02	3. 50081E+02	3. 50097E+02	3. 50086E+02	3. 50100E+02	3. 50226E+02	3. 50098E+02	3. 50114E+02	3. 50231E+02	3. 50144E+02
27		3. 50144E+02	3. 50070E+02	3. 50089E+02	3. 50082E+02	3. 50096E+02	3. 50226E+02	3. 50089E+02	3. 50106E+02	3. 50230E+02	3. 50137E+02
26		3. 50154E+02	3. 50077E+02	3. 50091E+02	3. 50086E+02	3. 50101E+02	3. 50227E+02	3. 50094E+02	3. 50110E+02	3. 50231E+02	3. 50139E+02
25		3. 50159E+02	3. 50075E+02	3. 50090E+02	3. 50085E+02	3. 50100E+02	3. 50228E+02	3. 50094E+02	3. 50110E+02	3. 50230E+02	3. 50139E+02
24		3. 50164E+02	3. 50074E+02	3. 50087E+02	3. 50084E+02	3. 50098E+02	3. 50230E+02	3. 50093E+02	3. 50108E+02	3. 50232E+02	3. 50137E+02
23		3. 50167E+02	3. 50075E+02	3. 50127E+02	3. 50081E+02	3. 50095E+02	3. 50232E+02	3. 50094E+02	3. 50110E+02	3. 50232E+02	3. 50138E+02
22		3. 50216E+02	3. 50094E+02	3. 50126E+02	3. 50123E+02	3. 50133E+02	3. 50231E+02	3. 50112E+02	3. 50125E+02	3. 50230E+02	3. 50149E+02
21		3. 50216E+02	3. 50095E+02	3. 50127E+02	3. 50122E+02	3. 50133E+02	3. 50231E+02	3. 50112E+02	3. 50124E+02	3. 50231E+02	3. 50149E+02
20		3. 50215E+02	3. 50094E+02	3. 50126E+02	3. 50121E+02	3. 50133E+02	3. 50229E+02	3. 50112E+02	3. 50124E+02	3. 50231E+02	3. 50149E+02
19		3. 50046E+02	3. 50045E+02	3. 50058E+02	3. 50045E+02	3. 50044E+02	3. 50029E+02	3. 50046E+02	3. 50046E+02	3. 50032E+02	3. 50044E+02
18		3. 50045E+02	3. 50045E+02	3. 50060E+02	3. 50044E+02	3. 50043E+02	3. 50029E+02	3. 50046E+02	3. 50045E+02	3. 50030E+02	3. 50044E+02
17		3. 50030E+02	3. 50028E+02	3. 50030E+02	3. 50030E+02	3. 50031E+02	3. 50031E+02	3. 50029E+02	3. 50030E+02	3. 50030E+02	3. 50030E+02
16		3. 50029E+02	3. 50029E+02	3. 50030E+02	3. 50028E+02	3. 50029E+02	3. 50029E+02	3. 50029E+02	3. 50030E+02	3. 50030E+02	3. 50030E+02
15		3. 50026E+02	3. 50026E+02	3. 50026E+02	3. 50027E+02	3. 50027E+02	3. 50028E+02	3. 50028E+02	3. 50029E+02	3. 50030E+02	3. 50030E+02
14		3. 50024E+02	3. 50025E+02	3. 50025E+02	3. 50025E+02	3. 50025E+02	3. 50026E+02	3. 50026E+02	3. 50027E+02	3. 50027E+02	3. 50028E+02

K	1-->	1	2	3	4	5	6	7	8	9	10
13		3.50003E+02	3.50005E+02	3.50004E+02	3.50005E+02	3.50004E+02	3.50004E+02	3.50004E+02	3.50003E+02	3.50003E+02	3.50005E+02
12		3.50003E+02	3.50004E+02	3.50004E+02	3.50002E+02	3.50003E+02	3.50003E+02	3.50003E+02	3.50003E+02	3.50004E+02	3.50004E+02
11		3.50003E+02	3.50003E+02	3.50003E+02	3.50002E+02	3.50002E+02	3.50003E+02	3.50003E+02	3.50002E+02	3.50003E+02	3.50003E+02
10		3.50002E+02	3.50001E+02	3.50002E+02	3.50001E+02	3.50001E+02	3.50002E+02	3.50002E+02	3.50003E+02	3.50003E+02	3.50002E+02
9		3.50002E+02	3.50001E+02	3.50002E+02	3.50001E+02	3.50001E+02	3.50001E+02	3.50001E+02	3.50002E+02	3.50001E+02	3.50000E+02
8		3.50001E+02	3.50000E+02	3.50000E+02	3.50000E+02	3.50001E+02	3.50002E+02	3.50000E+02	3.50000E+02	3.50000E+02	3.50001E+02
7		3.50000E+02	3.50001E+02	3.50001E+02	3.50001E+02	3.50001E+02	3.50000E+02	3.50000E+02	3.50000E+02	3.50000E+02	3.50001E+02
6		3.50000E+02	3.50000E+02	3.50000E+02	3.49999E+02	3.50000E+02	3.49999E+02	3.49999E+02	3.50000E+02	3.50000E+02	3.49998E+02
5		3.49999E+02	3.49999E+02	3.49998E+02	3.49998E+02	3.49998E+02	3.49999E+02	3.49999E+02	3.49998E+02	3.49998E+02	3.49998E+02
4		3.49999E+02	3.49997E+02	3.49997E+02	3.49997E+02	3.49998E+02	3.49998E+02	3.49998E+02	3.49999E+02	3.49999E+02	3.49999E+02
3		3.49997E+02	3.49997E+02	3.49997E+02	3.49998E+02	3.49997E+02	3.49998E+02	3.49997E+02	3.49997E+02	3.49997E+02	3.49997E+02
2		3.49996E+02	3.49996E+02	3.49996E+02	3.49997E+02	3.49997E+02	3.49997E+02	3.49997E+02	3.49997E+02	3.49997E+02	3.49998E+02
1		3.49995E+02	3.49995E+02	3.49996E+02	3.49996E+02	3.49996E+02	3.49996E+02	3.49996E+02	3.49997E+02	3.49997E+02	3.49997E+02

\*\*\*\*\* CONSTANT J PLANE J= 1 \*\*\*\*\*

K	1-->	11	12	13	14	15	16	17	18	19	20
90		4.97278E+02	4.97277E+02	4.97273E+02	4.97274E+02	4.97274E+02	4.97274E+02	4.97274E+02	4.97274E+02	4.97274E+02	4.97273E+02
89		4.97277E+02	4.97276E+02	4.97272E+02	4.97274E+02	4.97273E+02	4.97274E+02	4.97273E+02	4.97274E+02	4.97273E+02	4.97274E+02
88		4.97275E+02	4.97276E+02	4.97271E+02	4.97273E+02	4.97273E+02	4.97274E+02	4.97274E+02	4.97274E+02	4.97274E+02	4.97274E+02
87		4.97275E+02	4.97274E+02	4.97271E+02	4.97272E+02	4.97273E+02	4.97274E+02	4.97274E+02	4.97275E+02	4.97275E+02	4.97273E+02
86		4.97274E+02	4.97274E+02	4.97273E+02	4.97271E+02	4.97273E+02	4.97274E+02	4.97275E+02	4.97275E+02	4.97276E+02	4.97276E+02
85		4.97274E+02	4.97272E+02	4.97270E+02	4.97274E+02	4.97274E+02	4.97275E+02	4.97277E+02	4.97277E+02	4.97278E+02	4.97282E+02
84		4.97273E+02	4.97273E+02	4.97271E+02	4.97274E+02	4.97275E+02	4.97276E+02	4.97280E+02	4.97281E+02	4.97284E+02	4.97286E+02
83		4.97275E+02	4.97274E+02	4.97272E+02	4.97275E+02	4.97278E+02	4.97280E+02	4.97282E+02	4.97285E+02	4.97290E+02	4.97295E+02
82		4.97276E+02	4.97274E+02	4.97270E+02	4.97274E+02	4.97279E+02	4.97282E+02	4.97287E+02	4.97291E+02	4.97296E+02	4.97301E+02
81		4.97273E+02	4.97274E+02	4.97270E+02	4.97275E+02	4.97280E+02	4.97284E+02	4.97290E+02	4.97295E+02	4.97302E+02	4.97308E+02
80		4.97274E+02	4.97272E+02	4.97272E+02	4.97275E+02	4.97280E+02	4.97285E+02	4.97292E+02	4.97298E+02	4.97306E+02	4.97313E+02
79		4.97273E+02	4.97271E+02	4.97271E+02	4.97276E+02	4.97281E+02	4.97287E+02	4.97292E+02	4.97301E+02	4.97310E+02	4.97316E+02
78		4.97271E+02	4.97271E+02	4.97271E+02	4.97274E+02	4.97281E+02	4.97288E+02	4.97293E+02	4.97301E+02	4.97311E+02	4.97317E+02
77		4.97272E+02	4.97272E+02	4.97270E+02	4.97274E+02	4.97282E+02	4.97289E+02	4.97296E+02	4.97303E+02	4.97313E+02	4.97320E+02
76		4.97271E+02	4.97273E+02	4.97270E+02	4.97274E+02	4.97282E+02	4.97289E+02	4.97297E+02	4.97303E+02	4.97312E+02	4.97320E+02
75		4.97270E+02	4.97271E+02	4.97268E+02	4.97274E+02	4.97281E+02	4.97289E+02	4.97297E+02	4.97303E+02	4.97313E+02	4.97319E+02
74		4.97271E+02	4.97270E+02	4.97268E+02	4.97274E+02	4.97282E+02	4.97288E+02	4.97296E+02	4.97304E+02	4.97311E+02	4.97319E+02
73		4.97270E+02	4.97269E+02	4.97269E+02	4.97273E+02	4.97281E+02	4.97288E+02	4.97295E+02	4.97302E+02	4.97311E+02	4.97318E+02
72		4.97270E+02	4.97271E+02	4.97268E+02	4.97273E+02	4.97280E+02	4.97286E+02	4.97295E+02	4.97301E+02	4.97309E+02	4.97317E+02
71		4.97270E+02	4.97269E+02	4.97266E+02	4.97273E+02	4.97279E+02	4.97285E+02	4.97293E+02	4.97299E+02	4.97308E+02	4.97315E+02
70		4.97270E+02	4.97268E+02	4.97265E+02	4.97271E+02	4.97277E+02	4.97284E+02	4.97292E+02	4.97300E+02	4.97306E+02	4.97311E+02
69		4.97269E+02	4.97268E+02	4.97264E+02	4.97271E+02	4.97276E+02	4.97282E+02	4.97288E+02	4.97296E+02	4.97303E+02	4.97309E+02
68		4.97268E+02	4.97267E+02	4.97264E+02	4.97270E+02	4.97276E+02	4.97282E+02	4.97289E+02	4.97295E+02	4.97301E+02	4.97306E+02
67		4.97669E+02	4.97661E+02	4.97264E+02	4.97269E+02	4.97275E+02	4.97281E+02	4.97287E+02	4.97292E+02	4.97298E+02	4.97304E+02

K	11	12	13	14	15	16	17	18	19	20
66	4.97687E+02	4.97682E+02	4.97263E+02	4.97269E+02	4.97273E+02	4.97279E+02	4.97284E+02	4.97291E+02	4.97295E+02	4.97300E+02
65	4.97705E+02	4.97701E+02	4.97264E+02	4.97267E+02	4.97271E+02	4.97276E+02	4.97281E+02	4.97286E+02	4.97291E+02	4.97295E+02
64	4.97716E+02	4.97717E+02	4.97262E+02	4.97266E+02	4.97271E+02	4.97275E+02	4.97278E+02	4.97284E+02	4.97287E+02	4.97291E+02
63	4.97720E+02	4.97733E+02	4.97263E+02	4.97264E+02	4.97268E+02	4.97271E+02	4.97275E+02	4.97279E+02	4.97283E+02	4.97286E+02
62	4.97715E+02	4.97747E+02	4.97269E+02	4.97272E+02	4.97274E+02	4.97277E+02	4.97280E+02	4.97391E+02	4.97515E+02	4.97607E+02
61	4.97709E+02	4.97778E+02	5.00265E+02	5.00135E+02	4.99938E+02	4.99658E+02	4.99338E+02	4.98945E+02	4.98571E+02	4.98216E+02
60	5.12061E+02	5.07973E+02	5.04477E+02	5.01635E+02	4.99988E+02	4.98510E+02	4.97294E+02	4.96555E+02	4.95949E+02	4.95549E+02
59	5.04268E+02	4.93275E+02	4.86221E+02	4.83346E+02	4.83276E+02	4.83348E+02	4.84518E+02	4.90451E+02	4.90467E+02	4.91775E+02
58	4.84061E+02	4.68678E+02	4.65525E+02	4.73686E+02	4.82789E+02	4.84984E+02	4.85254E+02	4.85640E+02	4.85168E+02	4.87152E+02
57	4.48166E+02	3.91238E+02	4.55297E+02	4.56222E+02	4.72714E+02	4.78719E+02	4.79178E+02	4.76567E+02	4.73356E+02	4.76496E+02
56	4.48109E+02	3.90315E+02	4.04543E+02	4.04162E+02	4.36028E+02	4.67592E+02	4.69484E+02	4.64319E+02	4.50204E+02	4.54199E+02
55	4.48108E+02	3.90301E+02	3.95194E+02	3.57697E+02	3.55157E+02	3.70845E+02	4.23021E+02	4.08225E+02	3.78752E+02	3.85795E+02
54	4.36710E+02	3.83701E+02	3.77200E+02	3.56711E+02	3.53002E+02	3.64547E+02	3.85237E+02	3.92140E+02	3.59850E+02	3.72247E+02
53	4.34683E+02	3.93111E+02	3.69446E+02	3.56679E+02	3.52777E+02	3.54675E+02	3.54495E+02	3.49999E+02	3.50546E+02	3.54692E+02
52	4.34673E+02	3.93199E+02	3.69380E+02	3.56678E+02	3.52774E+02	3.53300E+02	3.53671E+02	3.49999E+02	3.50261E+02	3.53348E+02
51	4.32382E+02	3.90867E+02	3.67770E+02	3.55864E+02	3.52328E+02	3.52573E+02	3.52823E+02	3.49999E+02	3.50251E+02	3.52593E+02
50	4.29402E+02	3.88002E+02	3.65902E+02	3.54966E+02	3.51882E+02	3.52017E+02	3.52224E+02	3.49999E+02	3.50251E+02	3.52024E+02
49	4.26076E+02	3.84970E+02	3.64023E+02	3.54130E+02	3.51500E+02	3.51597E+02	3.51774E+02	3.49999E+02	3.50250E+02	3.51575E+02
48	4.22347E+02	3.81774E+02	3.62144E+02	3.53362E+02	3.51177E+02	3.51259E+02	3.51381E+02	3.49999E+02	3.50249E+02	3.51242E+02
47	4.18156E+02	3.78412E+02	3.60288E+02	3.52667E+02	3.50910E+02	3.50960E+02	3.50998E+02	3.49999E+02	3.50247E+02	3.50953E+02
46	4.13423E+02	3.74899E+02	3.58476E+02	3.52052E+02	3.50696E+02	3.50720E+02	3.50728E+02	3.49999E+02	3.50248E+02	3.50715E+02
45	4.08057E+02	3.71258E+02	3.56737E+02	3.51526E+02	3.50532E+02	3.50565E+02	3.50583E+02	3.49999E+02	3.50247E+02	3.50563E+02
44	4.04533E+02	3.69100E+02	3.55797E+02	3.51274E+02	3.50463E+02	3.50482E+02	3.50497E+02	3.49999E+02	3.50247E+02	3.50482E+02
43	4.00716E+02	3.66932E+02	3.54906E+02	3.51056E+02	3.50405E+02	3.50418E+02	3.50427E+02	3.49999E+02	3.50246E+02	3.50419E+02
42	3.96575E+02	3.64763E+02	3.54075E+02	3.50866E+02	3.50361E+02	3.50370E+02	3.50375E+02	3.49999E+02	3.50245E+02	3.50371E+02
41	3.92074E+02	3.62616E+02	3.53311E+02	3.50707E+02	3.50324E+02	3.50333E+02	3.50336E+02	3.49999E+02	3.50246E+02	3.50331E+02
40	3.87170E+02	3.60513E+02	3.52622E+02	3.50575E+02	3.50298E+02	3.50303E+02	3.50306E+02	3.49999E+02	3.50245E+02	3.50303E+02
39	3.81817E+02	3.58489E+02	3.52020E+02	3.50471E+02	3.50278E+02	3.50284E+02	3.50287E+02	3.49999E+02	3.50246E+02	3.50281E+02
38	3.77077E+02	3.56943E+02	3.51608E+02	3.50407E+02	3.50266E+02	3.50271E+02	3.50273E+02	3.49999E+02	3.50245E+02	3.50270E+02
37	3.72546E+02	3.55554E+02	3.51261E+02	3.50358E+02	3.50260E+02	3.50263E+02	3.50266E+02	3.49999E+02	3.50244E+02	3.50261E+02
36	3.68286E+02	3.54331E+02	3.50975E+02	3.50319E+02	3.50252E+02	3.50257E+02	3.50260E+02	3.49999E+02	3.50243E+02	3.50257E+02
35	3.64371E+02	3.53279E+02	3.50748E+02	3.50291E+02	3.50249E+02	3.50248E+02	3.50247E+02	3.49999E+02	3.50244E+02	3.50247E+02
34	3.60868E+02	3.52399E+02	3.50571E+02	3.50272E+02	3.50248E+02	3.50247E+02	3.50247E+02	3.49999E+02	3.50243E+02	3.50247E+02
33	3.57824E+02	3.51686E+02	3.50442E+02	3.50257E+02	3.50245E+02	3.50246E+02	3.50245E+02	3.49999E+02	3.50243E+02	3.50246E+02
32	3.55277E+02	3.51136E+02	3.50352E+02	3.50250E+02	3.50243E+02	3.50244E+02	3.50243E+02	3.49999E+02	3.50243E+02	3.50244E+02
31	3.53243E+02	3.50732E+02	3.50292E+02	3.50245E+02	3.50243E+02	3.50243E+02	3.50243E+02	3.49999E+02	3.50243E+02	3.50242E+02
30	3.51729E+02	3.50461E+02	3.50259E+02	3.50242E+02	3.50243E+02	3.50244E+02	3.50243E+02	3.49999E+02	3.50242E+02	3.50243E+02
29	3.50723E+02	3.50301E+02	3.50244E+02	3.50242E+02	3.50241E+02	3.50242E+02	3.50243E+02	3.49999E+02	3.50241E+02	3.50241E+02
28	3.50211E+02	3.50231E+02	3.50238E+02	3.50241E+02	3.50242E+02	3.50241E+02	3.50242E+02	3.49999E+02	3.50242E+02	3.50241E+02
27	3.50213E+02	3.50232E+02	3.50239E+02	3.50239E+02	3.50240E+02	3.50240E+02	3.50240E+02	3.49999E+02	3.50241E+02	3.50241E+02

K	1-->	11	12	13	14	15	16	17	18	19	20
26		3. 50218E+02	3. 50233E+02	3. 50238E+02	3. 50241E+02	3. 50240E+02	3. 50240E+02	3. 50240E+02	3. 49999E+02	3. 50240E+02	3. 50241E+02
25		3. 50225E+02	3. 50235E+02	3. 50239E+02	3. 50240E+02	3. 50240E+02	3. 50239E+02	3. 50239E+02	3. 49999E+02	3. 50239E+02	3. 50238E+02
24		3. 50230E+02	3. 50238E+02	3. 50239E+02	3. 50238E+02	3. 50239E+02	3. 50238E+02	3. 50239E+02	3. 49999E+02	3. 50239E+02	3. 50239E+02
23		3. 50236E+02	3. 50237E+02	3. 50236E+02	3. 50237E+02	3. 50237E+02	3. 50238E+02	3. 50237E+02	3. 49999E+02	3. 50237E+02	3. 50239E+02
22		3. 50235E+02	3. 50236E+02	3. 50236E+02	3. 50235E+02	3. 50236E+02	3. 50023E+02	3. 50024E+02	3. 49999E+02	3. 50237E+02	3. 49999E+02
21		3. 50236E+02	3. 50235E+02	3. 50235E+02	3. 50236E+02	3. 50236E+02	3. 50023E+02	3. 50022E+02	3. 49999E+02	3. 50236E+02	3. 49999E+02
20		3. 50234E+02	3. 50236E+02	3. 50236E+02	3. 50235E+02	3. 50234E+02	3. 50023E+02	3. 50023E+02	3. 49999E+02	3. 50236E+02	3. 49999E+02
19		3. 50235E+02	3. 50234E+02	3. 50235E+02	3. 50234E+02	3. 50235E+02	3. 50023E+02	3. 50022E+02	3. 49999E+02	3. 50236E+02	3. 49999E+02
18		3. 50234E+02	3. 50235E+02	3. 50234E+02	3. 50234E+02	3. 50235E+02	3. 50022E+02	3. 50022E+02	3. 49999E+02	3. 50235E+02	3. 49999E+02
17		3. 50234E+02	3. 50233E+02	3. 50234E+02	3. 50233E+02	3. 50234E+02	3. 50022E+02	3. 50021E+02	3. 50008E+02	3. 50008E+02	3. 50008E+02
16		3. 50233E+02	3. 50234E+02	3. 50232E+02	3. 50233E+02	3. 50232E+02	3. 50021E+02	3. 50022E+02	3. 50007E+02	3. 50007E+02	3. 50008E+02
15		3. 50232E+02	3. 50232E+02	3. 50233E+02	3. 50232E+02	3. 50233E+02	3. 50233E+02	3. 50025E+02	3. 50006E+02	3. 50006E+02	3. 50006E+02
14		3. 50027E+02	3. 50027E+02	3. 50027E+02	3. 50025E+02	3. 50025E+02	3. 50025E+02	3. 50024E+02	3. 50005E+02	3. 50006E+02	3. 50005E+02
13		3. 50004E+02	3. 50003E+02	3. 50005E+02	3. 50005E+02	3. 50004E+02					
12		3. 50003E+02	3. 50003E+02	3. 50003E+02	3. 50004E+02	3. 50002E+02	3. 50004E+02	3. 50004E+02	3. 50003E+02	3. 50003E+02	3. 50004E+02
11		3. 50002E+02	3. 50002E+02	3. 50003E+02	3. 50002E+02	3. 50003E+02	3. 50003E+02				
10		3. 50001E+02	3. 50003E+02	3. 50001E+02	3. 50002E+02	3. 50003E+02	3. 50001E+02	3. 50001E+02	3. 50002E+02	3. 50003E+02	3. 50003E+02
9		3. 50002E+02	3. 50001E+02	3. 50000E+02	3. 50001E+02	3. 50001E+02	3. 50001E+02	3. 50001E+02	3. 50002E+02	3. 50002E+02	3. 50002E+02
8		3. 50001E+02	3. 50001E+02	3. 50001E+02	3. 50000E+02	3. 50000E+02	3. 50000E+02	3. 50000E+02	3. 50001E+02	3. 50001E+02	3. 50000E+02
7		3. 50000E+02	3. 50000E+02	3. 50000E+02	3. 50000E+02	3. 50001E+02	3. 50001E+02	3. 50001E+02	3. 50000E+02	3. 50000E+02	3. 50001E+02
6		3. 50000E+02	3. 49999E+02	3. 49999E+02	3. 50000E+02	3. 50000E+02	3. 49999E+02	3. 49999E+02	3. 49999E+02	3. 49999E+02	3. 50000E+02
5		3. 49999E+02	3. 49999E+02	3. 49999E+02	3. 49998E+02	3. 49999E+02	3. 50000E+02	3. 49999E+02	3. 49999E+02	3. 49998E+02	3. 49999E+02
4		3. 49999E+02	3. 49998E+02	3. 49997E+02	3. 49997E+02	3. 49999E+02	3. 49998E+02	3. 49999E+02	3. 49997E+02	3. 49997E+02	3. 49997E+02
3		3. 49997E+02	3. 49998E+02	3. 49998E+02	3. 49997E+02						
2		3. 49997E+02	3. 49996E+02	3. 49997E+02	3. 49997E+02	3. 49998E+02					
1		3. 49996E+02									

\*\*\*\*\* CONSTANT J PLANE J= 1 \*\*\*\*\*

K	1-->	21	22	23	24	25	26	27	28	29	30
90		4. 97274E+02	4. 97274E+02	4. 97272E+02	4. 97271E+02	4. 97270E+02	4. 97270E+02	4. 97269E+02	4. 97269E+02	4. 97269E+02	4. 97269E+02
89		4. 97273E+02	4. 97272E+02	4. 97272E+02	4. 97269E+02	4. 97268E+02	4. 97266E+02	4. 97265E+02	4. 97266E+02	4. 97267E+02	4. 97268E+02
88		4. 97273E+02	4. 97272E+02	4. 97272E+02	4. 97270E+02	4. 97267E+02	4. 97263E+02	4. 97262E+02	4. 97264E+02	4. 97266E+02	4. 97267E+02
87		4. 97274E+02	4. 97274E+02	4. 97272E+02	4. 97270E+02	4. 97266E+02	4. 97262E+02	4. 97260E+02	4. 97262E+02	4. 97264E+02	4. 97266E+02
86		4. 97276E+02	4. 97275E+02	4. 97274E+02	4. 97271E+02	4. 97267E+02	4. 97263E+02	4. 97259E+02	4. 97259E+02	4. 97262E+02	4. 97264E+02
85		4. 97281E+02	4. 97282E+02	4. 97278E+02	4. 97277E+02	4. 97271E+02	4. 97264E+02	4. 97258E+02	4. 97255E+02	4. 97262E+02	4. 97264E+02
84		4. 97287E+02	4. 97288E+02	4. 97286E+02	4. 97283E+02	4. 97277E+02	4. 97269E+02	4. 97259E+02	4. 97254E+02	4. 97262E+02	4. 97264E+02
83		4. 97296E+02	4. 97297E+02	4. 97297E+02	4. 97294E+02	4. 97286E+02	4. 97276E+02	4. 97260E+02	4. 97249E+02	4. 97261E+02	4. 97264E+02
82		4. 97306E+02	4. 97308E+02	4. 97308E+02	4. 97306E+02	4. 97299E+02	4. 97288E+02	4. 97268E+02	4. 97243E+02	4. 97262E+02	4. 97263E+02
81		4. 97314E+02	4. 97317E+02	4. 97318E+02	4. 97316E+02	4. 97310E+02	4. 97301E+02	4. 97279E+02	4. 97237E+02	4. 97258E+02	4. 97262E+02
80		4. 97319E+02	4. 97320E+02	4. 97320E+02	4. 97320E+02	4. 97318E+02	4. 97308E+02	4. 97284E+02	4. 97237E+02	4. 97210E+02	4. 97210E+02

K	1-->	21	22	23	24	25	26	27	28	29	30
79		4. 97322E+02	4. 97324E+02	4. 97324E+02	4. 97321E+02	4. 97320E+02	4. 97308E+02	4. 97284E+02	4. 97230E+02	4. 97178E+02	4. 97178E+02
78		4. 97323E+02	4. 97322E+02	4. 97322E+02	4. 97324E+02	4. 97322E+02	4. 97314E+02	4. 97284E+02	4. 97226E+02	4. 97162E+02	4. 97115E+02
77		4. 97323E+02	4. 97324E+02	4. 97322E+02	4. 97323E+02	4. 97326E+02	4. 97331E+02	4. 97319E+02	4. 97277E+02	4. 97205E+02	4. 97113E+02
76		4. 97322E+02	4. 97321E+02	4. 97319E+02	4. 97322E+02	4. 97326E+02	4. 97336E+02	4. 97336E+02	4. 97304E+02	4. 97229E+02	4. 97113E+02
75		4. 97321E+02	4. 97320E+02	4. 97317E+02	4. 97317E+02	4. 97320E+02	4. 97335E+02	4. 97342E+02	4. 97316E+02	4. 97241E+02	4. 97111E+02
74		4. 97320E+02	4. 97319E+02	4. 97317E+02	4. 97315E+02	4. 97319E+02	4. 97333E+02	4. 97346E+02	4. 97324E+02	4. 97248E+02	4. 97111E+02
73		4. 97319E+02	4. 97317E+02	4. 97318E+02	4. 97314E+02	4. 97316E+02	4. 97330E+02	4. 97348E+02	4. 97327E+02	4. 97251E+02	4. 97111E+02
72		4. 97318E+02	4. 97316E+02	4. 97316E+02	4. 97314E+02	4. 97315E+02	4. 97330E+02	4. 97347E+02	4. 97328E+02	4. 97251E+02	4. 97109E+02
71		4. 97316E+02	4. 97317E+02	4. 97315E+02	4. 97313E+02	4. 97314E+02	4. 97329E+02	4. 97347E+02	4. 97327E+02	4. 97249E+02	4. 97109E+02
70		4. 97314E+02	4. 97314E+02	4. 97313E+02	4. 97313E+02	4. 97314E+02	4. 97329E+02	4. 97348E+02	4. 97327E+02	4. 97248E+02	4. 97107E+02
69		4. 97311E+02	4. 97312E+02	4. 97311E+02	4. 97311E+02	4. 97313E+02	4. 97332E+02	4. 97349E+02	4. 97326E+02	4. 97248E+02	4. 97105E+02
68		4. 97309E+02	4. 97310E+02	4. 97310E+02	4. 97308E+02	4. 97311E+02	4. 97332E+02	4. 97348E+02	4. 97324E+02	4. 97244E+02	4. 97103E+02
67		4. 97307E+02	4. 97307E+02	4. 97307E+02	4. 97306E+02	4. 97313E+02	4. 97337E+02	4. 97350E+02	4. 97320E+02	4. 97241E+02	4. 97100E+02
66		4. 97303E+02	4. 97302E+02	4. 97302E+02	4. 97304E+02	4. 97319E+02	4. 97346E+02	4. 97352E+02	4. 97318E+02	4. 97235E+02	4. 97094E+02
65		4. 97298E+02	4. 97299E+02	4. 97298E+02	4. 97305E+02	4. 97331E+02	4. 97355E+02	4. 97353E+02	4. 97311E+02	4. 97226E+02	4. 97087E+02
64		4. 97293E+02	4. 97294E+02	4. 97297E+02	4. 97328E+02	4. 97361E+02	4. 97374E+02	4. 97352E+02	4. 97297E+02	4. 97208E+02	4. 97074E+02
63		4. 97288E+02	4. 97329E+02	4. 97384E+02	4. 97419E+02	4. 97419E+02	4. 97389E+02	4. 97332E+02	4. 97262E+02	4. 97173E+02	4. 97047E+02
62		4. 97650E+02	4. 97652E+02	4. 97608E+02	4. 97527E+02	4. 97424E+02	4. 97316E+02	4. 97222E+02	4. 97149E+02	4. 97085E+02	4. 96988E+02
61		4. 97940E+02	4. 97660E+02	4. 97388E+02	4. 97140E+02	4. 96937E+02	4. 96793E+02	4. 96721E+02	4. 96720E+02	4. 96720E+02	4. 96719E+02
60		4. 95402E+02	4. 95293E+02	4. 95225E+02	4. 95277E+02	4. 95356E+02	4. 95419E+02	4. 95420E+02	4. 95570E+02	4. 96049E+02	4. 96517E+02
59		4. 93641E+02	4. 94178E+02	4. 94765E+02	4. 95534E+02	4. 95731E+02	4. 95801E+02	4. 95793E+02	4. 95674E+02	4. 95954E+02	4. 96452E+02
58		4. 92711E+02	4. 93721E+02	4. 94762E+02	4. 95550E+02	4. 95837E+02	4. 95884E+02	4. 95883E+02	4. 95726E+02	4. 95928E+02	4. 96429E+02
57		4. 91715E+02	4. 93173E+02	4. 94670E+02	4. 95553E+02	4. 95868E+02	4. 95908E+02	4. 95900E+02	4. 95747E+02	4. 95921E+02	4. 96418E+02
56		4. 90963E+02	4. 92592E+02	4. 94568E+02	4. 95545E+02	4. 95868E+02	4. 95916E+02	4. 95899E+02	4. 95757E+02	4. 95918E+02	4. 96413E+02
55		4. 90688E+02	4. 92028E+02	4. 94490E+02	4. 95537E+02	4. 95870E+02	4. 95918E+02	4. 95894E+02	4. 95759E+02	4. 95919E+02	4. 96412E+02
54		4. 90768E+02	4. 91958E+02	4. 94483E+02	4. 95536E+02	4. 95870E+02	4. 95918E+02	4. 95893E+02	4. 95760E+02	4. 95919E+02	4. 96411E+02
53		4. 90866E+02	4. 91920E+02	4. 94479E+02	4. 95536E+02	4. 95870E+02	4. 95918E+02	4. 95892E+02	4. 95767E+02	4. 95919E+02	4. 96410E+02
52		4. 90845E+02	4. 91927E+02	4. 94455E+02	4. 95534E+02	4. 95873E+02	4. 95918E+02	4. 95894E+02	4. 95771E+02	4. 95918E+02	4. 96406E+02
51		4. 90838E+02	4. 91935E+02	4. 94450E+02	4. 95537E+02	4. 95875E+02	4. 95920E+02	4. 95894E+02	4. 95775E+02	4. 95918E+02	4. 96406E+02
50		4. 90829E+02	4. 91942E+02	4. 94445E+02	4. 95544E+02	4. 95880E+02	4. 95923E+02	4. 95894E+02	4. 95779E+02	4. 95918E+02	4. 96403E+02
49		4. 90820E+02	4. 91950E+02	4. 94440E+02	4. 95555E+02	4. 95885E+02	4. 95924E+02	4. 95894E+02	4. 95783E+02	4. 95919E+02	4. 96403E+02
48		4. 90811E+02	4. 91958E+02	4. 94435E+02	4. 95565E+02	4. 95893E+02	4. 95924E+02	4. 95892E+02	4. 95786E+02	4. 95920E+02	4. 96400E+02
47		4. 90801E+02	4. 91967E+02	4. 94430E+02	4. 95572E+02	4. 95898E+02	4. 95926E+02	4. 95891E+02	4. 95788E+02	4. 95921E+02	4. 96398E+02
46		4. 90792E+02	4. 91978E+02	4. 94426E+02	4. 95582E+02	4. 95903E+02	4. 95928E+02	4. 95891E+02	4. 95791E+02	4. 95922E+02	4. 96395E+02
45		4. 90782E+02	4. 91986E+02	4. 94422E+02	4. 95592E+02	4. 95907E+02	4. 95928E+02	4. 95890E+02	4. 95791E+02	4. 95920E+02	4. 96395E+02
44		4. 90777E+02	4. 91994E+02	4. 94417E+02	4. 95598E+02	4. 95912E+02	4. 95929E+02	4. 95890E+02	4. 95794E+02	4. 95921E+02	4. 96394E+02
43		4. 90771E+02	4. 92000E+02	4. 94415E+02	4. 95601E+02	4. 95913E+02	4. 95930E+02	4. 95890E+02	4. 95795E+02	4. 95923E+02	4. 96393E+02
42		4. 90765E+02	4. 92007E+02	4. 94412E+02	4. 95606E+02	4. 95915E+02	4. 95930E+02	4. 95889E+02	4. 95796E+02	4. 95923E+02	4. 96392E+02
41		4. 90760E+02	4. 92011E+02	4. 94409E+02	4. 95612E+02	4. 95919E+02	4. 95929E+02	4. 95888E+02	4. 95797E+02	4. 95922E+02	4. 96391E+02
40		4. 90754E+02	4. 92020E+02	4. 94406E+02	4. 95617E+02	4. 95919E+02	4. 95930E+02	4. 95888E+02	4. 95797E+02	4. 95923E+02	4. 96391E+02

K	1-->	21	22	23	24	25	26	27	28	29	30
39		4.90748E+02	4.92026E+02	4.94404E+02	4.95622E+02	4.95924E+02	4.95929E+02	4.95888E+02	4.95799E+02	4.95922E+02	4.96389E+02
38		4.90745E+02	4.92031E+02	4.94401E+02	4.95626E+02	4.95925E+02	4.95929E+02	4.95889E+02	4.95800E+02	4.95924E+02	4.96389E+02
37		4.90740E+02	4.92036E+02	4.94399E+02	4.95630E+02	4.95926E+02	4.95930E+02	4.95889E+02	4.95801E+02	4.95925E+02	4.96388E+02
36		4.90733E+02	4.92043E+02	4.94396E+02	4.95634E+02	4.95929E+02	4.95929E+02	4.95888E+02	4.95801E+02	4.95925E+02	4.96387E+02
35		4.90729E+02	4.92050E+02	4.94393E+02	4.95639E+02	4.95929E+02	4.95929E+02	4.95891E+02	4.95804E+02	4.95926E+02	4.96387E+02
34		4.90724E+02	4.92057E+02	4.94391E+02	4.95643E+02	4.95932E+02	4.95929E+02	4.95891E+02	4.95804E+02	4.95924E+02	4.96385E+02
33		4.90719E+02	4.92063E+02	4.94389E+02	4.95649E+02	4.95934E+02	4.95929E+02	4.95893E+02	4.95806E+02	4.95926E+02	4.96384E+02
32		4.90714E+02	4.92069E+02	4.94386E+02	4.95652E+02	4.95936E+02	4.95930E+02	4.95895E+02	4.95807E+02	4.95925E+02	4.96383E+02
31		4.90710E+02	4.92077E+02	4.94384E+02	4.95658E+02	4.95938E+02	4.95929E+02	4.95896E+02	4.95807E+02	4.95926E+02	4.96384E+02
30		4.90704E+02	4.92084E+02	4.94383E+02	4.95663E+02	4.95940E+02	4.95929E+02	4.95899E+02	4.95809E+02	4.95925E+02	4.96382E+02
29		4.90699E+02	4.92093E+02	4.94379E+02	4.95669E+02	4.95942E+02	4.95928E+02	4.95900E+02	4.95810E+02	4.95925E+02	4.96382E+02
28		4.90694E+02	4.92101E+02	4.94376E+02	4.95672E+02	4.95945E+02	4.95928E+02	4.95903E+02	4.95814E+02	4.95926E+02	4.96380E+02
27		4.90681E+02	4.92118E+02	4.94370E+02	4.95682E+02	4.95949E+02	4.95926E+02	4.95901E+02	4.95818E+02	4.95930E+02	4.96378E+02
26		4.90668E+02	4.92143E+02	4.94364E+02	4.95691E+02	4.95951E+02	4.95926E+02	4.95887E+02	4.95823E+02	4.95939E+02	4.96376E+02
25		4.90656E+02	4.92169E+02	4.94352E+02	4.95693E+02	4.95952E+02	4.95926E+02	4.95864E+02	4.95839E+02	4.95956E+02	4.96373E+02
24		4.90641E+02	4.92199E+02	4.94327E+02	4.95689E+02	4.95956E+02	4.95938E+02	4.95872E+02	4.95873E+02	4.95988E+02	4.96373E+02
23		4.90626E+02	4.92232E+02	4.94272E+02	4.95669E+02	4.95962E+02	4.95969E+02	4.95953E+02	4.95961E+02	4.96062E+02	4.96370E+02
22		4.90595E+02	4.92328E+02	4.94032E+02	4.95569E+02	4.95959E+02	4.96017E+02	4.95992E+02	4.96006E+02	4.96100E+02	4.96366E+02
21		4.90588E+02	4.92496E+02	4.94316E+02	4.95402E+02	4.95916E+02	4.96061E+02	4.96061E+02	4.96073E+02	4.96152E+02	4.96366E+02
20		4.90489E+02	4.92224E+02	4.93817E+02	4.94977E+02	4.95718E+02	4.96069E+02	4.96147E+02	4.96156E+02	4.96214E+02	4.96367E+02
19		4.90064E+02	4.91293E+02	4.92558E+02	4.93727E+02	4.94786E+02	4.95649E+02	4.96163E+02	4.96191E+02	4.96234E+02	4.96323E+02
18		4.89215E+02	4.89237E+02	4.89227E+02	4.89215E+02	4.89202E+02	4.89184E+02	4.89166E+02	4.89047E+02	4.87995E+02	4.83869E+02
17		3.50009E+02	3.50008E+02	3.50009E+02	3.50008E+02	3.50009E+02	3.50009E+02	3.50009E+02	3.50008E+02	3.50008E+02	3.50015E+02
16		3.50008E+02	3.50008E+02	3.50008E+02	3.50009E+02	3.50008E+02	3.50008E+02	3.50009E+02	3.50009E+02	3.50009E+02	3.50013E+02
15		3.50007E+02	3.50008E+02	3.50008E+02	3.50009E+02	3.50009E+02	3.50008E+02	3.50009E+02	3.50010E+02	3.50011E+02	3.50013E+02
14		3.50006E+02	3.50008E+02	3.50008E+02	3.50008E+02	3.50007E+02	3.50009E+02	3.50008E+02	3.50009E+02	3.50010E+02	
13		3.50005E+02	3.50007E+02	3.50008E+02	3.50008E+02	3.50007E+02	3.50008E+02	3.50007E+02	3.50009E+02	3.50009E+02	
12		3.50005E+02	3.50006E+02	3.50007E+02	3.50007E+02	3.50008E+02	3.50008E+02	3.50007E+02	3.50008E+02		
11		3.50004E+02	3.50004E+02	3.50006E+02	3.50006E+02	3.50006E+02	3.50007E+02	3.50007E+02	3.50007E+02		
10		3.50003E+02	3.50005E+02	3.50006E+02	3.50006E+02	3.50006E+02	3.50007E+02	3.50006E+02			
9		3.50003E+02	3.50004E+02	3.50006E+02	3.50005E+02	3.50005E+02	3.50005E+02				
8		3.50002E+02	3.50002E+02	3.50004E+02	3.50006E+02	3.50005E+02					
7		3.50000E+02	3.50000E+02	3.50004E+02							
6		3.50000E+02	3.50001E+02	← 入口							
5		3.49998E+02		↑ 入口							

\*\*\*\*\* CONSTANT J PLANE J= 1 \*\*\*\*\*

K	1-->	31	32	33	34
80		4.97211E+02	4.97210E+02	4.97209E+02	4.97209E+02 → 出口
79		4.97181E+02	4.97183E+02	4.97184E+02	4.97191E+02 → 出口