

Received 8/24/88 VIA FED EX  
COVER LETTER AND INPUT DATA WERE IMAGED.

HIGH  
1-HR  
SGROUP# 1

\*\*\* DER Key West E-W Downwash Scenario for 1984 \*\*\*

\* HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*  
\* FROM SOURCES: 1,  
\* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 900.53430 AND OCCURRED AT ( 200.0, 90.0) \*

DIRECTION / DEGREES) /	RANGE (METERS)				
	100.0	200.0	300.0	400.0	500.0
180.0 /	431.10600 (316,24)	877.14900 (316,24)	474.95410 (311,10)	355.14830 (311,10)	286.51090 (311,10)
90.0 /	457.19060 ( 89, 8)	900.53430 ( 89, 8)	605.38980 ( 89, 8)	484.70620 (107,12)	425.68240 (107,12)

\*\*\* DER Key West E-W Downwash Scenario for 1984 \*\*\*

\* SECOND HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*  
 \* FROM SOURCES: 1,  
 \* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 840.33850 AND OCCURRED AT ( 200.0, 90.0) \*

DIRECTION / (DEGREES) /	RANGE (METERS)				
	100.0	200.0	300.0	400.0	500.0
180.0 /	334.88080 (342, 5)	738.48940 (311,10)	473.76610 (329,11)	354.22040 (329,11)	285.74480 (329,11)
90.0 /	413.59760 (328,11)	840.33850 (101,13)	553.02450 (101,13)	463.30860 ( 89, 8)	378.46160 ( 89, 8)

\*\*\* DER Key West E-W Downwash Scenario for 1984

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\* 50 MAXIMUM 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*

\* FROM SOURCES: 1,

RANK	CON.	HOUR	DAY	X Y(METERS)		RANK	CON.	HOUR	DAY	X Y(METERS)	
				OR	OR					OR	OR
				RANGE	DIRECTION					RANGE	DIRECTION
				(METERS)	(DEGREES)					(METERS)	(DEGREES)
1	900.53430	8	89	200.0	90.0	26	463.30860	8	89	400.0	90.0
2	877.14900	24	316	200.0	180.0	27	457.19060	8	89	100.0	90.0
3	840.33850	13	101	200.0	90.0	28	454.86140	24	316	300.0	180.0
4	832.90330	11	328	200.0	90.0	29	450.04930	5	342	300.0	180.0
5	738.48940	10	311	200.0	180.0	30	431.10600	24	316	100.0	180.0
6	736.79990	11	329	200.0	180.0	31	426.57430	15	35	200.0	90.0
7	725.18100	22	327	200.0	180.0	32	425.68240	12	107	500.0	90.0
8	702.97870	5	342	200.0	180.0	33	422.69100	11	21	300.0	180.0
9	663.98030	11	21	200.0	180.0	34	418.54510	13	101	400.0	90.0
10	643.88930	14	327	200.0	180.0	35	417.47240	11	328	400.0	90.0
11	642.53870	14	27	200.0	90.0	36	416.00570	18	311	200.0	180.0
12	642.34470	15	327	200.0	180.0	37	413.59760	11	328	100.0	90.0
13	605.38980	8	89	300.0	90.0	38	407.71680	14	27	300.0	90.0
14	600.84020	23	327	200.0	180.0	39	406.42580	14	327	300.0	180.0
15	589.17250	12	107	200.0	90.0	40	405.36120	15	327	300.0	180.0
16	553.02450	13	101	300.0	90.0	41	393.81840	7	342	200.0	180.0
17	550.40860	11	328	300.0	90.0	42	385.62700	23	327	300.0	180.0
18	544.90280	12	107	300.0	90.0	43	378.46160	8	89	500.0	90.0
19	533.73970	16	108	200.0	90.0	44	372.46800	13	101	100.0	90.0
20	508.79030	18	177	200.0	90.0	45	369.11920	12	328	200.0	90.0
21	504.01240	6	329	200.0	180.0	46	362.46550	13	327	200.0	180.0
22	484.70620	12	107	400.0	90.0	47	355.14830	10	311	400.0	180.0
23	474.95410	10	311	300.0	180.0	48	354.22040	11	329	400.0	180.0
24	473.76610	11	329	300.0	180.0	49	347.84810	22	327	400.0	180.0
25	465.60430	22	327	300.0	180.0	50	345.07460	16	108	300.0	90.0

\*\*\* DER Key West E-W Downwash Scenario for 1984 \*\*\*

\* HIGHEST 3-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*

\* FROM SOURCES: 1,

\* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 549.56650 AND OCCURRED AT ( 200.0, 180.0) \*

DIRECTION / (DEGREES) /	100.0	200.0	300.0	400.0	500.0
180.0 /	251.23230 (327, 5)	549.56650 (327, 5)	343.65630 (327, 5)	252.13290 (327, 5)	200.55990 (327, 5)
90.0 /	207.37760 (328, 4)	400.67420 (328, 4)	258.51120 (328, 4)	192.87470 (328, 4)	154.86360 (328, 4)

\*\*\* DER Key West E-W Downwash Scenario for 1984 \*\*\*

\* SECOND HIGHEST 3-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*  
\* FROM SOURCES: 1,  
\* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 442.00710 AND OCCURRED AT ( 200.0, 180.0) \*

DIRECTION / (DEGREES) /	100.0	200.0	300.0	400.0	500.0
180.0 /	213.58590 (327, 8)	442.00710 (327, 8)	283.74380 (327, 8)	211.32620 (327, 8)	169.69360 (327, 8)
90.0 /	197.09420 ( 89, 3)	393.44490 (101, 5)	251.47820 (101, 5)	187.56210 ( 89, 3)	151.68740 (101, 5)

\*\*\* DER Key West E-W Downwash Scenario for 1984

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\* 50 MAXIMUM 3-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*

\* FROM SOURCES: 1,

RANK	CON.	PER.	DAY	X	Y(METERS)	RANK	CON.	PER.	DAY	X	Y(METERS)
				OR	OR					OR	OR
				RANGE	DIRECTION					RANGE	DIRECTION
				(METERS)	(DEGREES)					(METERS)	(DEGREES)
1	549.56650	5	327	200.0	180.0	26	196.39090	4	107	200.0	90.0
2	442.00710	8	327	200.0	180.0	27	192.87470	4	328	400.0	90.0
3	400.67420	4	328	200.0	90.0	28	192.02860	3	342	200.0	180.0
4	393.44490	5	101	200.0	90.0	29	187.56210	3	89	400.0	90.0
5	383.91270	3	89	200.0	90.0	30	187.34920	5	101	400.0	90.0
6	343.65630	5	327	300.0	180.0	31	181.63430	4	107	300.0	90.0
7	317.90370	2	342	200.0	180.0	32	178.35230	5	101	100.0	90.0
8	292.38300	8	316	200.0	180.0	33	169.69360	8	327	500.0	180.0
9	283.74380	8	327	300.0	180.0	34	169.59680	6	177	200.0	90.0
10	258.51120	4	328	300.0	90.0	35	168.00440	2	329	200.0	180.0
11	252.13290	5	327	400.0	180.0	36	161.56880	4	107	400.0	90.0
12	251.47820	5	101	300.0	90.0	37	161.55180	2	342	100.0	180.0
13	251.23230	5	327	100.0	180.0	38	158.31810	4	311	300.0	180.0
14	249.87690	3	89	300.0	90.0	39	157.92200	4	329	300.0	180.0
15	246.16310	4	311	200.0	180.0	40	154.86360	4	328	500.0	90.0
16	245.60000	4	329	200.0	180.0	41	151.68740	5	101	500.0	90.0
17	221.32680	4	21	200.0	180.0	42	151.62050	8	316	300.0	180.0
18	214.17960	5	27	200.0	90.0	43	151.21150	3	89	500.0	90.0
19	213.58590	8	327	100.0	180.0	44	145.34150	2	342	400.0	180.0
20	211.32620	8	327	400.0	180.0	45	143.70200	8	316	100.0	180.0
21	207.37760	4	328	100.0	90.0	46	142.19140	5	35	200.0	90.0
22	200.55990	5	327	500.0	180.0	47	141.89410	4	107	500.0	90.0
23	198.35380	2	342	300.0	180.0	48	140.89700	4	21	300.0	180.0
24	198.10370	6	108	200.0	90.0	49	138.66860	6	311	200.0	180.0
25	197.09420	3	89	100.0	90.0	50	135.90560	5	27	300.0	90.0

\*\*\* DER Key West E-W Downwash Scenario for 1984 \*\*\*

\* HIGHEST 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*  
\* FROM SOURCES: 1,  
\* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 123.96000 AND OCCURRED AT ( 200.0, 180.0) \*

DIRECTION / DEGREES) /	100.0	200.0	300.0	400.0	500.0
180.0 /	58.10336 (327, 1)	123.96000 (327, 1)	78.43777 (327, 1)	57.94865 (327, 1)	46.38678 (327, 1)
90.0 /	29.15363 ( 89, 1)	54.25278 ( 89, 1)	35.31961 ( 89, 1)	26.40845 ( 89, 1)	21.21813 ( 89, 1)

\*\*\* DER Key West E-W Downwash Scenario for 1984

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\* SECOND HIGHEST 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*

\* FROM SOURCES: 1,

\* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 65.04758 AND OCCURRED AT ( 200.0, 180.0) \*

DIRECTION / (DEGREES) /	RANGE (METERS)				
	100.0	200.0	300.0	400.0	500.0
180.0 /	34.85971 (342, 1)	65.04758 (342, 1)	39.50978 (342, 1)	28.43610 (342, 1)	22.46107 (342, 1)
90.0 /	25.92220 (328, 1)	50.08427 (328, 1)	32.31390 (328, 1)	24.10933 (328, 1)	20.86387 (107, 1)



\*\*\* DER Key West E-W Downwash Scenario for 1984

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\* 50 MAXIMUM 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*

\* FROM SOURCES: 1,

RANK	CON.	PER.	DAY	X Y(METERS)		RANK	CON.	PER.	DAY	X Y(METERS)	
				OR	OR					OR	OR
				RANGE	DIRECTION					RANGE	DIRECTION
				(METERS)	(DEGREES)					(METERS)	(DEGREES)
1	123.96000	1	327	200.0	180.0	26	26.40845	1	89	400.0	90.0
2	78.43777	1	327	300.0	180.0	27	25.92220	1	328	100.0	90.0
3	65.04758	1	342	200.0	180.0	28	25.47978	1	329	100.0	180.0
4	58.10336	1	327	100.0	180.0	29	25.00472	1	311	100.0	180.0
5	57.94865	1	327	400.0	180.0	30	24.76297	1	108	200.0	90.0
6	54.25278	1	89	200.0	90.0	31	24.62882	1	329	400.0	180.0
7	53.41858	1	311	200.0	180.0	32	24.17523	1	311	400.0	180.0
8	51.91471	1	329	200.0	180.0	33	24.10933	1	328	400.0	90.0
9	50.08427	1	328	200.0	90.0	34	23.57683	1	107	400.0	90.0
10	49.28131	1	101	200.0	90.0	35	23.45278	1	101	400.0	90.0
11	46.38678	1	327	500.0	180.0	36	22.46107	1	342	500.0	180.0
12	39.87041C	1	316	200.0	180.0	37	22.45443	1	101	100.0	90.0
13	39.50978	1	342	300.0	180.0	38	21.21813	1	89	500.0	90.0
14	35.31961	1	89	300.0	90.0	39	21.19960	1	177	200.0	90.0
15	34.85971	1	342	100.0	180.0	40	20.86387	1	107	500.0	90.0
16	33.17490	1	329	300.0	180.0	41	20.67552C	1	316	300.0	180.0
17	33.11182	1	311	300.0	180.0	42	19.78091	1	329	500.0	180.0
18	32.79633	1	107	200.0	90.0	43	19.59573C	1	316	100.0	180.0
19	32.31390	1	328	300.0	90.0	44	19.50549	1	311	500.0	180.0
20	31.47295	1	101	300.0	90.0	45	19.35794	1	328	500.0	90.0
21	29.15363	1	89	100.0	90.0	46	19.05116	1	101	500.0	90.0
22	28.43610	1	342	400.0	180.0	47	18.20198	1	35	200.0	90.0
23	27.66585	1	21	200.0	180.0	48	17.61213	1	21	300.0	180.0
24	27.42419	1	107	300.0	90.0	49	16.98827	1	27	300.0	90.0
25	26.77245	1	27	200.0	90.0	50	15.67556	1	108	300.0	90.0

ENDED ON 08-17-88 AT 16:07:35

ISCST (DATED 88207)  
AN AIR QUALITY DISPERSION MODEL IN  
SECTION 1. GUIDELINE MODELS  
IN UNAMAP (VERSION 6) JUNE 88.  
SOURCE: UNAMAP FILE ON EPA'S UNIVAC AT RTP, NC.

IBM-PC VERSION (1.62)  
(C) COPYRIGHT 1988, TRINITY CONSULTANTS, INC.  
SERIAL NUMBER 5503 SOLD TO R. W. BECK & ASSOC.  
RUN BEGAN ON 08-17-88 AT 16:07:44

DER  
Key West E-W  
Downwash Scenario  
1985  
Stack Island Only

CALCULATE (CONCENTRATION=1,DEPOSITION=2)	ISW(1) = 1
RECEPTOR GRID SYSTEM (RECTANGULAR=1 OR 3, POLAR=2 OR 4)	ISW(2) = 2
DISCRETE RECEPTOR SYSTEM (RECTANGULAR=1,POLAR=2)	ISW(3) = 1
TERRAIN ELEVATIONS ARE READ (YES=1,NO=0)	ISW(4) = 0
CALCULATIONS ARE WRITTEN TO TAPE (YES=1,NO=0)	ISW(5) = 0
LIST ALL INPUT DATA (NO=0,YES=1,MET DATA ALSO=2)	ISW(6) = 1
COMPUTE AVERAGE CONCENTRATION (OR TOTAL DEPOSITION)	
WITH THE FOLLOING TIME PERIODS:	
HOURLY (YES=1,NO=0)	ISW(7) = 1
2-HOUR (YES=1,NO=0)	ISW(8) = 0
3-HOUR (YES=1,NO=0)	ISW(9) = 1
4-HOUR (YES=1,NO=0)	ISW(10) = 0
6-HOUR (YES=1,NO=0)	ISW(11) = 0
8-HOUR (YES=1,NO=0)	ISW(12) = 0
12-HOUR (YES=1,NO=0)	ISW(13) = 0
24-HOUR (YES=1,NO=0)	ISW(14) = 1
PRINT 'N'-DAY TABLE(S) (YES=1,NO=0)	ISW(15) = 0
PRINT THE FOLLOWING TYPES OF TABLES WHOSE TIME PERIODS ARE	
SPECIFIED BY ISW(7) THROUGH ISW(14):	
DAILY TABLES (YES=1,NO=0)	ISW(16) = 0
HIGHEST & SECOND HIGHEST TABLES (YES=1,NO=0)	ISW(17) = 1
MAXIMUM 50 TABLES (YES=1,NO=0)	ISW(18) = 1
METEOROLOGICAL DATA INPUT METHOD (PRE-PROCESSED=1,CARD=2)	ISW(19) = 1
RURAL-URBAN OPTION (RU.=0,UR. MODE 1=1,UR. MODE 2=2,UR. MODE 3=3)	ISW(20) = 0
WIND PROFILE EXPONENT VALUES (DEFAULTS=1,USER ENTERS=2,3)	ISW(21) = 1
VERTICAL POT. TEMP. GRADIENT VALUES (DEFAULTS=1,USER ENTERS=2,3)	ISW(22) = 1
SCALE EMISSION RATES FOR ALL SOURCES (NO=0,YES>0)	ISW(23) = 0
PROGRAM CALCULATES FINAL PLUME RISE ONLY (YES=1,NO=2)	ISW(24) = 1
PROGRAM ADJUSTS ALL STACK HEIGHTS FOR DOWNWASH (YES=2,NO=1)	ISW(25) = 2
PROGRAM USES BUOYANCY INDUCED DISPERSION (YES=1,NO=2)	ISW(26) = 1
CONCENTRATIONS DURING CALM PERIODS SET = 0 (YES=1,NO=2)	ISW(27) = 1
REG. DEFAULT OPTION CHOSEN (YES=1,NO=2)	ISW(28) = 2
TYPE OF POLLUTANT TO BE MODELLED (1=SO2,2=OTHER)	ISW(29) = 1
DEBUG OPTION CHOSEN (YES=1,NO=2)	ISW(30) = 2
ABOVE GROUND (FLAGPOLE) RECEPTORS USED (YES=1,NO=0)	ISW(31) = 0
NUMBER OF INPUT SOURCES	NSOURC = 1
NUMBER OF SOURCE GROUPS (=0,ALL SOURCES)	NGROUP = 1
TIME PERIOD INTERVAL TO BE PRINTED (=0,ALL INTERVALS)	IPERD = 0
NUMBER OF X (RANGE) GRID VALUES	NXPNTS = 5
NUMBER OF Y (THETA) GRID VALUES	NYPNTS = 2
NUMBER OF DISCRETE RECEPTORS	NXWYPT = 0
SOURCE EMISSION RATE UNITS CONVERSION FACTOR	TK = .10000E+07
HEIGHT ABOVE GROUND AT WHICH WIND SPEED WAS MEASURED	ZR = 7.00 METERS
LOGICAL UNIT NUMBER OF METEOROLOGICAL DATA	IMET = 9
DECAY COEFFICIENT FOR PHYSICAL OR CHEMICAL DEPLETION	DECAY = .000000E+00
SURFACE STATION NO.	ISS = 12839
YEAR OF SURFACE DATA	ISY = 85
UPPER AIR STATION NO.	IUS = 12844
YEAR OF UPPER AIR DATA	IUY = 85
ALLOCATED DATA STORAGE	LIMIT = 43500 WORDS
REQUIRED DATA STORAGE FOR THIS PROBLEM RUN	MIMIT = 1067 WORDS



\*\*\* VERTICAL POTENTIAL TEMPERATURE GRADIENTS \*\*\*  
(DEGREES KELVIN PER METER)

STABILITY CATEGORY	WIND SPEED CATEGORY					
	1	2	3	4	5	6
A	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
B	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
C	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
D	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
E	.20000E-01	.20000E-01	.20000E-01	.20000E-01	.20000E-01	.20000E-01
F	.35000E-01	.35000E-01	.35000E-01	.35000E-01	.35000E-01	.35000E-01

\*\*\* RANGES OF POLAR GRID SYSTEM \*\*\*  
(METERS)

100.0, 200.0, 300.0, 400.0, 500.0,

\*\*\* RADIAL ANGLES OF POLAR GRID SYSTEM \*\*\*

(DEGREES)

90.0, 180.0,



CALM HOURS (=1) FOR DAY 220 \* 0 0 1 0  
\* CALM HOURS (=1) FOR DAY 221 \* 0 0 1 0 1  
\* CALM HOURS (=1) FOR DAY 222 \* 0 0 1 0  
CALM HOURS (=1) FOR DAY 231 \* 0 1 0 0 0 1 1 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0  
CALM HOURS (=1) FOR DAY 266 \* 1 0  
\* CALM HOURS (=1) FOR DAY 285 \* 1 0 1 0  
CALM HOURS (=1) FOR DAY 302 \* 1 0  
CALM HOURS (=1) FOR DAY 312 \* 0 0 1 0  
\* CALM HOURS (=1) FOR DAY 320 \* 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  
\* CALM HOURS (=1) FOR DAY 362 \* 0 1  
CALM HOURS (=1) FOR DAY 363 \* 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

\*\*\* DER Key West E-W Downwash Scenario for 1985 \*\*\*

\* HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*  
\* FROM SOURCES: 1,  
\* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 891.30590 AND OCCURRED AT ( 200.0, 90.0) \*

DIRECTION / (DEGREES) /	RANGE (METERS)				
	100.0	200.0	300.0	400.0	500.0
180.0 /	389.00310 ( 26,14)	786.54000 ( 26,14)	517.15260 ( 26,14)	390.68990 ( 26,14)	316.56220 ( 26,14)
90.0 /	427.65720 ( 76,15)	891.30590 ( 76,15)	595.81310 ( 76,15)	454.63870 ( 76,15)	370.80270 ( 76,15)



\*\*\* DER Key West E-W Downwash Scenario for 1985

\*\*\*

\* SECOND HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*

\* FROM SOURCES: 1,

\* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 770.51900 AND OCCURRED AT ( 200.0, 90.0) \*

DIRECTION / DEGREES) /	RANGE (METERS)				
	100.0	200.0	300.0	400.0	500.0
180.0 /	303.55010 ( 44, 9)	656.84740 ( 44, 9)	415.62810 ( 44, 9)	308.15930 ( 44, 9)	247.45430 ( 44, 9)
90.0 /	358.83550 ( 20,15)	770.51900 ( 20,15)	503.01160 ( 20,15)	378.58110 ( 20,15)	306.12840 ( 20,15)

\*\*\* DER Key West E-W Downwash Scenario for 1985

\*\*\*

\* 50 MAXIMUM 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*

\* FROM SOURCES: 1,

RANK	CON.	HOUR	DAY	X Y(METERS)		RANK	CON.	HOUR	DAY	X Y(METERS)	
				OR	OR					OR	OR
				RANGE	DIRECTION					RANGE	DIRECTION
				(METERS)	(DEGREES)					(METERS)	(DEGREES)
1	891.30590	15	76	200.0	90.0	26	415.62810	9	44	300.0	180.0
2	786.54000	14	26	200.0	180.0	27	407.71680	14	305	300.0	90.0
3	770.51900	15	20	200.0	90.0	28	403.82050	14	144	200.0	90.0
4	760.95630	17	137	200.0	90.0	29	390.68990	14	26	400.0	180.0
5	713.27300	16	305	200.0	90.0	30	389.00310	14	26	100.0	180.0
6	667.94540	13	76	200.0	90.0	31	378.58110	15	20	400.0	90.0
7	656.84740	9	44	200.0	180.0	32	370.80270	15	76	500.0	90.0
8	642.53870	14	305	200.0	90.0	33	370.43130	10	26	200.0	180.0
9	595.81310	15	76	300.0	90.0	34	370.16190	17	137	400.0	90.0
10	576.62130	12	76	200.0	90.0	35	364.37640	12	76	300.0	90.0
11	554.58940	9	360	200.0	180.0	36	359.36030	18	137	200.0	90.0
12	527.66880	24	38	200.0	180.0	37	358.83550	15	20	100.0	90.0
13	518.73380	10	39	200.0	180.0	38	343.43250	9	360	300.0	180.0
14	517.15260	14	26	300.0	180.0	39	338.44640	16	305	400.0	90.0
15	503.01160	15	20	300.0	90.0	40	328.44840	24	38	300.0	180.0
16	494.83700	12	26	200.0	180.0	41	324.74500	17	137	100.0	90.0
17	493.52470	17	137	300.0	90.0	42	322.32670	10	39	300.0	180.0
18	470.67330	9	21	200.0	180.0	43	316.56220	14	26	500.0	180.0
19	468.03320	10	22	200.0	180.0	44	313.36760	13	76	400.0	90.0
20	454.70920	16	305	300.0	90.0	45	308.15930	9	44	400.0	180.0
21	454.63870	15	76	400.0	90.0	46	306.12840	15	20	500.0	90.0
22	427.95170	11	76	200.0	90.0	47	304.17700	12	26	300.0	180.0
23	427.65720	15	76	100.0	90.0	48	303.55010	9	44	100.0	180.0
24	423.04430	13	76	300.0	90.0	49	301.62230	14	305	400.0	90.0
25	418.83680	14	18	200.0	90.0	50	298.76010	17	137	500.0	90.0

\*\*\* DER Key West E-W Downwash Scenario for 1985 \*\*\*

\* HIGHEST 3-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*  
\* FROM SOURCES: 1,  
\* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 521.42860 AND OCCURRED AT ( 200.0, 90.0) \*

DIRECTION / (DEGREES) /	100.0	200.0	300.0	400.0	500.0
180.0 /	147.14010 ( 26, 4)	288.55660 ( 26, 4)	176.77810 ( 26, 4)	130.23000 ( 26, 5)	105.52080 ( 26, 5)
90.0 /	235.69140 ( 76, 5)	521.42860 ( 76, 5)	340.29910 ( 76, 5)	256.36130 ( 76, 5)	207.55380 ( 76, 5)

\*\*\* DER Key West E-W Downwash Scenario for 1985

\*\*\*

\* SECOND HIGHEST 3-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*  
\* FROM SOURCES: 1,  
\* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 373.43890 AND OCCURRED AT ( 200.0, 90.0) \*

DIRECTION / (DEGREES) /	RANGE (METERS)				
	100.0	200.0	300.0	400.0	500.0
180.0 /	129.67400 ( 26, 5)	262.18050 ( 26, 5)	172.38430 ( 26, 5)	127.49040 ( 26, 4)	99.89825 ( 26, 4)
90.0 /	175.65400 ( 76, 4)	373.43890 (137, 6)	236.38740 (137, 6)	174.39050 (137, 6)	139.01220 (137, 6)

\*\*\* DER Key West E-W Downwash Scenario for 1985

\*\*\*

\* 50 MAXIMUM 3-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*

\* FROM SOURCES: 1,

RANK	CON.	PER. DAY	X Y(METERS)		RANK	CON.	PER. DAY	X Y(METERS)	
			OR RANGE (METERS)	OR DIRECTION (DEGREES)				OR RANGE (METERS)	OR DIRECTION (DEGREES)
1	521.42860	5 76	200.0	90.0	26	158.85350	5 305	100.0	90.0
2	373.43890	6 137	200.0	90.0	27	157.35070	5 18	200.0	90.0
3	340.29910	5 76	300.0	90.0	28	156.90080	3 21	200.0	180.0
4	334.85770	4 76	200.0	90.0	29	156.74190	4 76	400.0	90.0
5	325.88060	5 305	200.0	90.0	30	156.01110	4 22	200.0	180.0
6	288.55660	4 26	200.0	180.0	31	151.56970	6 305	300.0	90.0
7	286.61790	5 20	200.0	90.0	32	147.14010	4 26	100.0	180.0
8	262.18050	5 26	200.0	180.0	33	143.01490	5 305	400.0	90.0
9	256.36130	5 76	400.0	90.0	34	141.41910	5 20	100.0	90.0
10	237.75770	6 305	200.0	90.0	35	139.02140	5 25	200.0	90.0
11	236.38740	6 137	300.0	90.0	36	139.01220	6 137	500.0	90.0
12	235.69140	5 76	100.0	90.0	37	138.54270	3 44	300.0	180.0
13	218.94910	3 44	200.0	180.0	38	136.55910	5 20	400.0	90.0
14	213.02710	4 76	300.0	90.0	39	134.60680	5 144	200.0	90.0
15	207.55380	5 76	500.0	90.0	40	130.23000	5 26	400.0	180.0
16	198.79440	5 305	300.0	90.0	41	129.67400	5 26	100.0	180.0
17	184.86310	3 360	200.0	180.0	42	127.49040	4 26	400.0	180.0
18	183.62800	5 20	300.0	90.0	43	124.17750	4 76	500.0	90.0
19	176.77810	4 26	300.0	180.0	44	114.47750	3 360	300.0	180.0
20	175.88960	8 38	200.0	180.0	45	112.81870	6 305	400.0	90.0
21	175.65400	4 76	100.0	90.0	46	111.89280	5 305	500.0	90.0
22	174.39050	6 137	400.0	90.0	47	109.48520	5 20	500.0	90.0
23	172.91130	4 39	200.0	180.0	48	109.48280	8 38	300.0	180.0
24	172.38430	5 26	300.0	180.0	49	107.44220	4 39	300.0	180.0
25	166.82970	6 137	100.0	90.0	50	105.52080	5 26	500.0	180.0

\*\*\* DER Key West E-W Downwash Scenario for 1985 \*\*\*

\* HIGHEST 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*  
\* FROM SOURCES: 1,  
\* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 107.03580 AND OCCURRED AT ( 200.0, 90.0) \*

DIRECTION / DEGREES) /	RANGE (METERS)				
	100.0	200.0	300.0	400.0	500.0
180.0 /	34.65537 ( 26, 1)	68.86481 ( 26, 1)	43.65225 ( 26, 1)	32.21934 ( 26, 1)	25.71108 ( 26, 1)
90.0 /	51.41817 ( 76, 1)	107.03580 ( 76, 1)	69.16579 ( 76, 1)	51.64264 ( 76, 1)	41.57167 ( 76, 1)

\*\*\* DER Key West E-W Downwash Scenario for 1985

\*\*\*

\* SECOND HIGHEST 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*  
\* FROM SOURCES: 1,  
\* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 70.45478 AND OCCURRED AT ( 200.0, 90.0) \*

DIRECTION / (DEGREES) /	RANGE (METERS)				
	100.0	200.0	300.0	400.0	500.0
180.0 /	28.64271 ( 39, 1)	46.52526 ( 39, 1)	27.21825 ( 39, 1)	18.99852 ( 39, 1)	14.61411 ( 39, 1)
90.0 /	31.75641 (305, 1)	70.45478 (305, 1)	43.79552 (305, 1)	31.98233 (305, 1)	25.40315 (305, 1)

\*\*\* DER Key West E-W Downwash Scenario for 1985

\*\*\*

\* 50 MAXIMUM 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*

\* FROM SOURCES: 1,

RANK	CON.	PER.	DAY	X	Y(METERS)	RANK	CON.	PER.	DAY	X	Y(METERS)
				OR	OR					OR	OR
				RANGE	DIRECTION					RANGE	DIRECTION
				(METERS)	(DEGREES)					(METERS)	(DEGREES)
1	107.03580	1	76	200.0	90.0	26	22.94212C	1	38	200.0	180.0
2	70.45478	1	305	200.0	90.0	27	21.83317C	1	20	400.0	90.0
3	69.16579	1	76	300.0	90.0	28	21.80097	1	137	400.0	90.0
4	68.86481	1	26	200.0	180.0	29	20.85371	1	137	100.0	90.0
5	51.64264	1	76	400.0	90.0	30	20.76088	1	22	200.0	180.0
6	51.41817	1	76	100.0	90.0	31	20.45084	1	18	200.0	90.0
7	46.67986	1	137	200.0	90.0	32	19.62524	1	21	200.0	180.0
8	46.52526	1	39	200.0	180.0	33	18.99852	1	39	400.0	180.0
9	46.20251C	1	20	200.0	90.0	34	17.47573C	1	20	500.0	90.0
10	43.79552	1	305	300.0	90.0	35	17.43075	1	137	500.0	90.0
11	43.65225	1	26	300.0	180.0	36	17.39030	1	25	200.0	90.0
12	41.57167	1	76	500.0	90.0	37	17.31785	1	44	300.0	180.0
13	34.65537	1	26	100.0	180.0	38	16.82586	1	144	200.0	90.0
14	32.21934	1	26	400.0	180.0	39	14.61411	1	39	500.0	180.0
15	31.98233	1	305	400.0	90.0	40	14.30987	1	360	300.0	180.0
16	31.75641	1	305	100.0	90.0	41	14.28036C	1	38	300.0	180.0
17	29.54843	1	137	300.0	90.0	42	12.84316	1	44	400.0	180.0
18	29.44583C	1	20	300.0	90.0	43	12.64792	1	44	100.0	180.0
19	28.64271	1	39	100.0	180.0	44	12.49319	1	22	300.0	180.0
20	27.36864	1	44	200.0	180.0	45	12.30604	1	21	300.0	180.0
21	27.21825	1	39	300.0	180.0	46	11.99324	1	18	300.0	90.0
22	25.71108	1	26	500.0	180.0	47	11.55750	1	21	100.0	180.0
23	25.40315	1	305	500.0	90.0	48	11.30307	1	22	100.0	180.0
24	23.30767C	1	20	100.0	90.0	49	11.04353C	1	38	100.0	180.0
25	23.10789	1	360	200.0	180.0	50	11.02839	1	360	100.0	180.0

ENDED ON 08-17-88 AT 16:29:47



ISCST (DATED 88207)  
AN AIR QUALITY DISPERSION MODEL IN  
SECTION 1. GUIDELINE MODELS  
IN UNAMAP (VERSION 6) JUNE 88.  
SOURCE: UNAMAP FILE ON EPA'S UNIVAC AT RTP, NC.

IBM-PC VERSION (1.62)  
(C) COPYRIGHT 1988, TRINITY CONSULTANTS, INC.  
SERIAL NUMBER 5503 SOLD TO R. W. BECK & ASSOC.  
RUN BEGAN ON 08-19-88 AT 10:11:55

DER

Key West SE-NW

Downwash Scenario

1983

CALCULATE (CONCENTRATION=1,DEPOSITION=2)	ISW(1) = 1
RECEPTOR GRID SYSTEM (RECTANGULAR=1 OR 3, POLAR=2 OR 4)	ISW(2) = 2
DISCRETE RECEPTOR SYSTEM (RECTANGULAR=1,POLAR=2)	ISW(3) = 1
TERRAIN ELEVATIONS ARE READ (YES=1,NO=0)	ISW(4) = 0
CALCULATIONS ARE WRITTEN TO TAPE (YES=1,NO=0)	ISW(5) = 0
LIST ALL INPUT DATA (NO=0,YES=1,MET DATA ALSO=2)	ISW(6) = 1
COMPUTE AVERAGE CONCENTRATION (OR TOTAL DEPOSITION)	
WITH THE FOLLOWING TIME PERIODS:	
HOURLY (YES=1,NO=0)	ISW(7) = 1
2-HOUR (YES=1,NO=0)	ISW(8) = 0
3-HOUR (YES=1,NO=0)	ISW(9) = 1
4-HOUR (YES=1,NO=0)	ISW(10) = 0
6-HOUR (YES=1,NO=0)	ISW(11) = 0
8-HOUR (YES=1,NO=0)	ISW(12) = 0
12-HOUR (YES=1,NO=0)	ISW(13) = 0
24-HOUR (YES=1,NO=0)	ISW(14) = 1
PRINT 'N'-DAY TABLE(S) (YES=1,NO=0)	ISW(15) = 0
PRINT THE FOLLOWING TYPES OF TABLES WHOSE TIME PERIODS ARE	
SPECIFIED BY ISW(7) THROUGH ISW(14):	
DAILY TABLES (YES=1,NO=0)	ISW(16) = 0
HIGHEST & SECOND HIGHEST TABLES (YES=1,NO=0)	ISW(17) = 1
MAXIMUM 50 TABLES (YES=1,NO=0)	ISW(18) = 1
METEOROLOGICAL DATA INPUT METHOD (PRE-PROCESSED=1,CARD=2)	ISW(19) = 1
RURAL-URBAN OPTION (RU.=0,UR. MODE 1=1,UR. MODE 2=2,UR. MODE 3=3)	ISW(20) = 0
WIND PROFILE EXPONENT VALUES (DEFAULTS=1,USER ENTERS=2,3)	ISW(21) = 1
VERTICAL POT. TEMP. GRADIENT VALUES (DEFAULTS=1,USER ENTERS=2,3)	ISW(22) = 1
SCALE EMISSION RATES FOR ALL SOURCES (NO=0,YES>0)	ISW(23) = 0
PROGRAM CALCULATES FINAL PLUME RISE ONLY (YES=1,NO=2)	ISW(24) = 1
PROGRAM ADJUSTS ALL STACK HEIGHTS FOR DOWNWASH (YES=2,NO=1)	ISW(25) = 2
PROGRAM USES BUOYANCY INDUCED DISPERSION (YES=1,NO=2)	ISW(26) = 1
CONCENTRATIONS DURING CALM PERIODS SET = 0 (YES=1,NO=2)	ISW(27) = 1
REG. DEFAULT OPTION CHOSEN (YES=1,NO=2)	ISW(28) = 2
TYPE OF POLLUTANT TO BE MODELLED (1=SO2,2=OTHER)	ISW(29) = 1
DEBUG OPTION CHOSEN (YES=1,NO=2)	ISW(30) = 2
ABOVE GROUND (FLAGPOLE) RECEPTORS USED (YES=1,NO=0)	ISW(31) = 0
NUMBER OF INPUT SOURCES	NSOURC = 1
NUMBER OF SOURCE GROUPS (=0,ALL SOURCES)	NGROUP = 1
TIME PERIOD INTERVAL TO BE PRINTED (=0,ALL INTERVALS)	IPERD = 0
NUMBER OF X (RANGE) GRID VALUES	NXPNTS = 5
NUMBER OF Y (THETA) GRID VALUES	NYPNTS = 2
NUMBER OF DISCRETE RECEPTORS	NXWYPT = 0
SOURCE EMISSION RATE UNITS CONVERSION FACTOR	TK = .10000E+07
HEIGHT ABOVE GROUND AT WHICH WIND SPEED WAS MEASURED	ZR = 7.00 METERS
LOGICAL UNIT NUMBER OF METEOROLOGICAL DATA	IMET = 9
DECAY COEFFICIENT FOR PHYSICAL OR CHEMICAL DEPLETION	DECAY = .000000E+00
SURFACE STATION NO.	ISS = 12839
YEAR OF SURFACE DATA	ISY = 83
UPPER AIR STATION NO.	IUS = 12844
YEAR OF UPPER AIR DATA	IUY = 83
ALLOCATED DATA STORAGE	LIMIT = 43500 WORDS
REQUIRED DATA STORAGE FOR THIS PROBLEM RUN	MIMIT = 1067 WORDS



\*\*\* VERTICAL POTENTIAL TEMPERATURE GRADIENTS \*\*\*  
 (DEGREES KELVIN PER METER)

STABILITY CATEGORY	WIND SPEED CATEGORY					
	1	2	3	4	5	6
A	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
B	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
C	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
D	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
E	.20000E-01	.20000E-01	.20000E-01	.20000E-01	.20000E-01	.20000E-01
F	.35000E-01	.35000E-01	.35000E-01	.35000E-01	.35000E-01	.35000E-01

\*\*\* RANGES OF POLAR GRID SYSTEM \*\*\*  
 (METERS)

100.0, 200.0, 300.0, 400.0, 500.0,

\*\*\* RADIAL ANGLES OF POLAR GRID SYSTEM \*\*\*

(DEGREES)

135.0, 315.0,

\*\*\* SOURCE DATA \*\*\*

SOURCE NUMBER	PK	PART.	E E	CATS.	EMISSION RATE		X	Y	BASE		TEMP.	EXIT VEL.	BLDG. HEIGHT	BLDG. LENGTH	BLDG. WIDTH	
					TYPE=0,1	TYPE=2			(DEG.K)	(M/SEC)						
1000					(GRAMS/SEC)	(GRAMS/SEC)	(METERS)	(METERS)	ELEV.	HEIGHT	VERT.DIM	HORZ.DIM	DIAMETER	TYPE=0	TYPE=0	TYPE=0
1000					.12600E+02		.0	.0	.0	30.50	589.00	30.00	1.20	18.29	29.71	29.71
					CALM HOURS (=1) FOR DAY	5 *	0	0	0	0	0	0	0	0	0	0
*					CALM HOURS (=1) FOR DAY	7 *	0	0	0	0	0	0	0	0	0	0
*					CALM HOURS (=1) FOR DAY	8 *	0	0	0	0	0	0	0	0	0	0
					CALM HOURS (=1) FOR DAY	9 *	0	0	0	1	0	0	0	0	0	0
					CALM HOURS (=1) FOR DAY	10 *	0	1	0	0	0	0	0	0	0	0
*					CALM HOURS (=1) FOR DAY	11 *	1	1	1	0	1	1	1	0	0	0
					CALM HOURS (=1) FOR DAY	21 *	0	0	0	0	0	0	0	0	0	0
					CALM HOURS (=1) FOR DAY	22 *	0	1	1	0	0	0	0	0	0	0
*					CALM HOURS (=1) FOR DAY	27 *	0	0	0	1	1	0	0	0	0	0
					CALM HOURS (=1) FOR DAY	29 *	0	0	0	0	0	0	0	0	0	0
					CALM HOURS (=1) FOR DAY	30 *	1	1	1	0	0	0	0	0	0	0
					CALM HOURS (=1) FOR DAY	31 *	1	0	0	0	1	1	1	1	0	0
*					CALM HOURS (=1) FOR DAY	46 *	0	0	0	0	0	0	0	0	0	0
					CALM HOURS (=1) FOR DAY	55 *	0	0	0	0	1	1	1	0	0	0
					CALM HOURS (=1) FOR DAY	62 *	0	0	0	1	1	0	0	0	0	0
*					CALM HOURS (=1) FOR DAY	72 *	0	0	0	0	0	1	1	0	0	0
					CALM HOURS (=1) FOR DAY	73 *	0	0	1	1	0	1	1	1	0	0
					CALM HOURS (=1) FOR DAY	79 *	0	1	1	0	1	1	0	0	0	0
*					CALM HOURS (=1) FOR DAY	89 *	0	0	0	0	0	0	1	0	0	0
*					CALM HOURS (=1) FOR DAY	90 *	0	0	0	0	0	0	1	0	0	0
					CALM HOURS (=1) FOR DAY	94 *	0	0	0	0	0	0	1	0	0	0
					CALM HOURS (=1) FOR DAY	100 *	0	0	0	0	0	0	0	0	0	0
*					CALM HOURS (=1) FOR DAY	111 *	0	0	0	0	0	0	0	0	0	0
					CALM HOURS (=2) FOR DAY	112 *	0	1	1	0	0	0	0	0	0	0
					CALM HOURS (=1) FOR DAY	122 *	0	1	0	1	1	0	0	0	0	0
*					CALM HOURS (=1) FOR DAY	144 *	0	0	1	0	0	0	0	0	0	0
*					CALM HOURS (=1) FOR DAY	145 *	0	0	0	0	0	0	0	1	0	0
					CALM HOURS (=1) FOR DAY	146 *	0	0	0	0	0	0	0	1	0	0
					CALM HOURS (=1) FOR DAY	147 *	0	0	0	0	0	0	0	0	0	0
*					CALM HOURS (=1) FOR DAY	148 *	1	1	0	1	0	0	0	0	0	0
					CALM HOURS (=1) FOR DAY	150 *	0	0	0	0	0	0	0	0	0	0
					CALM HOURS (=1) FOR DAY	154 *	0	0	0	0	0	1	0	0	0	0
*					CALM HOURS (=1) FOR DAY	156 *	0	0	0	0	0	1	0	0	0	0
					CALM HOURS (=1) FOR DAY	159 *	0	0	0	0	0	1	0	0	0	0
					CALM HOURS (=1) FOR DAY	161 *	0	0	1	1	1	1	0	0	0	0
					CALM HOURS (=1) FOR DAY	165 *	0	0	0	0	1	0	0	0	0	0
*					CALM HOURS (=1) FOR DAY	174 *	0	0	0	0	1	1	1	0	0	0
					CALM HOURS (=1) FOR DAY	176 *	0	0	0	1	0	0	0	0	0	0
					CALM HOURS (=1) FOR DAY	180 *	0	0	0	0	0	0	1	0	0	0
*					CALM HOURS (=1) FOR DAY	190 *	0	0	0	0	0	0	0	0	0	0
					CALM HOURS (=1) FOR DAY	191 *	0	0	0	0	0	0	0	0	0	0
					CALM HOURS (=1) FOR DAY	197 *	0	0	1	0	0	0	0	0	0	0
*					CALM HOURS (=1) FOR DAY	198 *	0	0	0	0	1	0	0	0	0	0
*					CALM HOURS (=1) FOR DAY	199 *	0	0	0	0	0	0	0	0	0	0
					CALM HOURS (=2) FOR DAY	200 *	0	0	0	1	1	0	1	0	0	0
					CALM HOURS (=1) FOR DAY	201 *	0	0	0	0	0	1	0	0	0	0



CALM HOURS (=1) FOR DAY 313 \* 0 0 0 0 0 1 0  
\* CALM HOURS (=1) FOR DAY 314 \* 0 0 0 0 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0  
\* CALM HOURS (=1) FOR DAY 316 \* 0 0 0 0 1 0  
CALM HOURS (=1) FOR DAY 317 \* 0 1 0 0 0  
CALM HOURS (=1) FOR DAY 319 \* 0 1 0 0 0 0 1 0  
\* CALM HOURS (=1) FOR DAY 324 \* 0 1  
CALM HOURS (=1) FOR DAY 325 \* 1 0 0 0 0 0 1 0  
CALM HOURS (=1) FOR DAY 326 \* 0 0 0 1 0 1 0  
\* CALM HOURS (=1) FOR DAY 330 \* 0 0 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  
\* CALM HOURS (=1) FOR DAY 333 \* 0 1 1 1 0  
CALM HOURS (=1) FOR DAY 334 \* 0 0 0 0 1 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  
CALM HOURS (=1) FOR DAY 335 \* 0 0 0 0 1 0 1 0  
\* CALM HOURS (=1) FOR DAY 336 \* 0 0 0 1 0  
CALM HOURS (=1) FOR DAY 338 \* 0 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1  
CALM HOURS (=1) FOR DAY 339 \* 1 1 0 0 1 1 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  
\* CALM HOURS (=1) FOR DAY 345 \* 0 0 0 0 1 0  
CALM HOURS (=1) FOR DAY 347 \* 0 0 0 0 0 0 1 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  
CALM HOURS (=1) FOR DAY 348 \* 1 0 0 1 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  
CALM HOURS (=1) FOR DAY 352 \* 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 0 1 0  
\* CALM HOURS (=1) FOR DAY 353 \* 0 1  
CALM HOURS (=1) FOR DAY 354 \* 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 0 0 0  
CALM HOURS (=1) FOR DAY 355 \* 0 0 0 0 0 1 0  
\* CALM HOURS (=1) FOR DAY 356 \* 0 0 0 0 1 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  
CALM HOURS (=1) FOR DAY 357 \* 0 0 0 1 1 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  
CALM HOURS (=1) FOR DAY 358 \* 1 0  
CALM HOURS (=1) FOR DAY 361 \* 0 1 0 0 0  
\* CALM HOURS (=1) FOR DAY 363 \* 0 1  
CALM HOURS (=1) FOR DAY 364 \* 1 0

\*\*\* DER Key West SE-NW Downwash Scenario for 1983 \*\*\*

\* HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*  
\* FROM SOURCES: 1,  
\* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 94.89601 AND OCCURRED AT ( 200.0, 315.0) \*

DIRECTION / (DEGREES) /	RANGE (METERS)				
	100.0	200.0	300.0	400.0	500.0
315.0 /	79.68486 ( 64,13)	94.89601 ( 64,13)	61.55479 ( 64,13)	46.06888 ( 64,13)	39.84567 (142,12)
135.0 /	78.21658 ( 70, 5)	93.22442 ( 70, 5)	68.41651 (346, 8)	70.82639 (346, 8)	35.79675 ( 70,22)



\*\*\* DER Key West SE-NW Downwash Scenario for 1983 \*\*\*

\* SECOND HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*  
\* FROM SOURCES: 1,  
\* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 92.51719 AND OCCURRED AT ( 200.0, 315.0) \*

DIRECTION / (DEGREES) /	RANGE (METERS)				
	100.0	200.0	300.0	400.0	500.0
315.0 /	77.89455 ( 41,13)	92.51719 ( 41,13)	59.87130 ( 41,13)	44.97709 (142,12)	38.45346 (139,14)
135.0 /	77.13763 ( 70,22)	92.09529 ( 70,22)	59.56111 ( 70,22)	44.50663 ( 70,22)	34.31024 (110,12)

\*\*\* DER Key West SE-NW Downwash Scenario for 1983

\*\*\*

\* 50 MAXIMUM 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*

\* FROM SOURCES: 1,

RANK	CON.	HOUR	DAY	X Y(METERS)		RANK	CON.	HOUR	DAY	X Y(METERS)	
				OR RANGE (METERS)	OR DIRECTION (DEGREES)					OR RANGE (METERS)	OR DIRECTION (DEGREES)
1	94.89601	13	64	200.0	315.0	26	77.13763	22	70	100.0	135.0
2	93.22442	5	70	200.0	135.0	27	77.13699	13	47	100.0	315.0
3	92.51719	13	41	200.0	315.0	28	76.59489	14	47	200.0	315.0
4	92.09529	22	70	200.0	135.0	29	75.87178	10	120	200.0	315.0
5	90.02879	13	47	200.0	315.0	30	75.65854	10	32	200.0	315.0
6	89.03282	8	346	200.0	135.0	31	75.55233	11	53	200.0	315.0
7	88.00729	11	66	200.0	315.0	32	75.44643	23	64	200.0	315.0
8	88.00729	15	32	200.0	315.0	33	75.23550	16	75	200.0	315.0
9	86.79436	13	63	200.0	315.0	34	75.23541	9	53	200.0	315.0
10	82.98499	20	65	200.0	315.0	35	73.89825	14	63	200.0	315.0
11	82.44305	13	32	200.0	315.0	36	73.76924	24	11	200.0	135.0
12	81.90940	10	63	200.0	315.0	37	73.74009	13	63	100.0	315.0
13	81.80345	10	47	200.0	315.0	38	73.40440	11	66	100.0	315.0
14	81.28016	6	61	200.0	135.0	39	73.40440	15	32	100.0	315.0
15	80.86176	22	83	200.0	135.0	40	73.38078	12	47	200.0	315.0
16	80.82332	12	70	200.0	135.0	41	73.04087	24	11	100.0	135.0
17	80.76391	20	97	200.0	315.0	42	73.03753	8	346	100.0	135.0
18	80.75851	12	71	200.0	135.0	43	71.49195	13	1	200.0	315.0
19	79.90999	6	32	200.0	315.0	44	71.09418	8	98	200.0	315.0
20	79.68486	13	64	100.0	315.0	45	70.89677	4	113	200.0	315.0
21	78.21658	5	70	100.0	135.0	46	70.82639	8	346	400.0	135.0
22	77.89455	13	41	100.0	315.0	47	69.36519	11	86	200.0	315.0
23	77.79156	13	324	200.0	315.0	48	69.18990	22	64	200.0	315.0
24	77.46169	10	324	200.0	315.0	49	68.93056	7	64	200.0	315.0
25	77.25053	7	139	200.0	315.0	50	68.77753	20	65	100.0	315.0

\*\*\* DER Key West SE-NW Downwash Scenario for 1983 \*\*\*

\* HIGHEST 3-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*  
\* FROM SOURCES: 1,  
\* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 71.89108 AND OCCURRED AT ( 200.0, 315.0) \*

DIRECTION / (DEGREES) /	RANGE (METERS)				
	100.0	200.0	300.0	400.0	500.0
315.0 /	61.44470 ( 32, 5)	71.89108 ( 32, 5)	45.41779 ( 32, 5)	33.40593 ( 32, 5)	26.55739 ( 32, 5)
135.0 /	48.39400 ( 70, 4)	58.92518 ( 70, 4)	35.97351 ( 70, 4)	26.04559 ( 70, 4)	20.55272 ( 70, 4)

\*\*\* DER Key West SE-NW Downwash Scenario for 1983

\*\*\*

\* SECOND HIGHEST 3-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*

\* FROM SOURCES: 1,

\* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 61.24313 AND OCCURRED AT ( 200.0, 315.0) \*

DIRECTION / (DEGREES) /	RANGE (METERS)				
	100.0	200.0	300.0	400.0	500.0
315.0 /	49.17110 ( 63, 4)	61.24313 ( 63, 4)	41.39381 ( 63, 4)	31.99642 ( 63, 4)	26.31846 ( 63, 4)
135.0 /	45.09380 ( 11, 8)	52.99591 ( 70, 2)	29.51921 ( 70, 8)	23.60908 (346, 3)	16.79954 ( 70, 8)

\*\*\* DER Key West SE-NW Downwash Scenario for 1983

\*\*\*

\* 50 MAXIMUM 3-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*

\* FROM SOURCES: 1,

RANK	CON.	PER. DAY		X Y(METERS)		RANK	CON.	PER. DAY		X Y(METERS)	
				OR	OR					OR	OR
				RANGE	DIRECTION					RANGE	DIRECTION
				(METERS)	(DEGREES)					(METERS)	(DEGREES)
1	71.89108	5	32	200.0	315.0	26	45.41779	5	32	300.0	315.0
2	61.44470	5	32	100.0	315.0	27	45.09380	8	11	100.0	135.0
3	61.24313	4	63	200.0	315.0	28	44.61938	7	65	200.0	315.0
4	58.92518	4	70	200.0	135.0	29	44.39175	5	324	200.0	315.0
5	55.54123	5	47	200.0	315.0	30	43.72155	2	70	100.0	135.0
6	55.13991	5	64	200.0	315.0	31	43.60301	4	41	200.0	315.0
7	55.02579	4	47	200.0	315.0	32	42.15607	8	70	100.0	135.0
8	54.49832	8	64	200.0	315.0	33	41.63484	3	32	100.0	315.0
9	53.58361	5	63	200.0	315.0	34	41.39381	4	63	300.0	315.0
10	52.99591	2	70	200.0	135.0	35	41.33871	4	71	100.0	135.0
11	49.17110	4	63	100.0	315.0	36	41.18389	2	86	200.0	315.0
12	48.76231	5	64	100.0	315.0	37	41.08109	7	64	200.0	315.0
13	48.63699	8	70	200.0	135.0	38	40.59137	4	74	100.0	315.0
14	48.39400	4	70	100.0	135.0	39	40.57166	7	70	100.0	135.0
15	48.33214	1	86	200.0	315.0	40	40.28833	7	97	200.0	315.0
16	48.14570	4	74	200.0	315.0	41	40.17699	2	61	100.0	135.0
17	47.41578	3	32	200.0	315.0	42	40.07481	2	32	200.0	315.0
18	47.40266	8	11	200.0	135.0	43	40.01591	3	97	200.0	315.0
19	47.10574	4	47	100.0	315.0	44	39.66965	1	86	100.0	315.0
20	46.77116	7	70	200.0	135.0	45	39.51488	6	75	200.0	315.0
21	46.54631	4	71	200.0	135.0	46	39.49365	6	64	200.0	315.0
22	46.48663	2	61	200.0	135.0	47	38.68026	4	41	100.0	315.0
23	46.47885	5	47	100.0	315.0	48	37.86308	3	53	200.0	315.0
24	46.23859	8	64	100.0	315.0	49	36.96716	6	65	200.0	315.0
25	45.66935	5	63	100.0	315.0	50	36.79430	4	53	200.0	315.0

\*\*\* DER Key West SE-NW Downwash Scenario for 1983 \*\*\*

\* HIGHEST 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*  
\* FROM SOURCES: 1,  
\* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 36.98760 AND OCCURRED AT ( 200.0, 315.0) \*

DIRECTION / (DEGREES) /	RANGE (METERS)				
	100.0	200.0	300.0	400.0	500.0
315.0 /	31.93981 ( 64, 1)	36.98760 ( 64, 1)	22.36984 ( 64, 1)	16.04043 ( 64, 1)	12.54457 ( 64, 1)
135.0 /	24.87697 ( 70, 1)	29.04265 ( 70, 1)	17.20289 ( 70, 1)	12.16703 ( 70, 1)	9.42985 ( 70, 1)

\*\*\* DER Key West SE-NW Downwash Scenario for 1983 \*\*\*

\* SECOND HIGHEST 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*

\* FROM SOURCES: 1,

\* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 33.29066 AND OCCURRED AT ( 200.0, 315.0) \*

DIRECTION / (DEGREES) /	100.0	200.0	RANGE (METERS)			500.0
			300.0	400.0		
315.0 /	29.63166 ( 32, 1)	33.29066 ( 32, 1)	18.79113 ( 32, 1)	12.91060 ( 32, 1)	9.83939 ( 32, 1)	
135.0 /	14.91411 ( 61, 1)	17.44980 ( 61, 1)	10.31833 ( 61, 1)	7.62368 ( 61, 1)	6.43891 ( 61, 1)	

\*\*\* DER Key West SE-NW Downwash Scenario for 1983

\*\*\*

\* 50 MAXIMUM 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*

\* FROM SOURCES: 1,

RANK	CON.	PER.	DAY	X	Y(METERS)	RANK	CON.	PER.	DAY	X	Y(METERS)
				OR	OR					OR	OR
				RANGE	DIRECTION					RANGE	DIRECTION
				(METERS)	(DEGREES)					(METERS)	(DEGREES)
1	36.98760	1	64	200.0	315.0	26	13.88843	1	66	100.0	315.0
2	33.29066	1	32	200.0	315.0	27	13.86722	1	98	200.0	315.0
3	31.93981	1	64	100.0	315.0	28	13.25639	1	41	200.0	315.0
4	29.63166	1	32	100.0	315.0	29	13.16638	1	53	200.0	315.0
5	29.04265	1	70	200.0	135.0	30	13.15966	1	97	100.0	315.0
6	24.87697	1	70	100.0	135.0	31	12.91060	1	32	400.0	315.0
7	22.36984	1	64	300.0	315.0	32	12.79454	1	74	100.0	315.0
8	22.13264	1	65	200.0	315.0	33	12.54457	1	64	500.0	315.0
9	20.01906	1	86	200.0	315.0	34	12.38885	1	98	100.0	315.0
10	19.19625	1	63	200.0	315.0	35	12.16703	1	70	400.0	135.0
11	19.08416	1	65	100.0	315.0	36	11.99692	1	65	300.0	315.0
12	18.95910	1	47	200.0	315.0	37	11.97843	1	41	100.0	315.0
13	18.79113	1	32	300.0	315.0	38	11.88720	1	86	300.0	315.0
14	17.44980	1	61	200.0	135.0	39	11.88678	1	63	300.0	315.0
15	17.30141	1	86	100.0	315.0	40	11.63235	1	53	100.0	315.0
16	17.20289	1	70	300.0	135.0	41	11.60685	1	47	300.0	315.0
17	16.47698	1	63	100.0	315.0	42	10.56749C	1	324	200.0	315.0
18	16.37780	1	47	100.0	315.0	43	10.44684C	1	11	200.0	135.0
19	16.04043	1	64	400.0	315.0	44	10.38808	1	362	200.0	315.0
20	15.92087	1	97	200.0	315.0	45	10.31833	1	61	300.0	135.0
21	15.86848	1	66	200.0	315.0	46	9.99598	1	105	200.0	315.0
22	15.27681	1	71	200.0	135.0	47	9.85770	1	97	300.0	315.0
23	15.09068	1	74	200.0	315.0	48	9.83939	1	32	500.0	315.0
24	14.91411	1	61	100.0	135.0	49	9.71689	1	1	200.0	315.0
25	14.28642	1	71	100.0	135.0	50	9.42985	1	70	500.0	135.0

ENDED ON 08-19-88 AT 10:35:20



ISCST (DATED 88207)

AN AIR QUALITY DISPERSION MODEL IN

SECTION 1. GUIDELINE MODELS

IN UNAMAP (VERSION 6) JUNE 88.

SOURCE: UNAMAP FILE ON EPA'S UNIVAC AT RTP, NC.

IBM-PC VERSION (1.62)

(C) COPYRIGHT 1988, TRINITY CONSULTANTS, INC.

SERIAL NUMBER 5503 SOLD TO R. W. BECK & ASSOC.

RUN BEGAN ON 08-19-88 AT 10:59:15

DER

Key West SE-NW

Downwash Scenario

1985

CALCULATE (CONCENTRATION=1,DEPOSITION=2)	ISW(1) = 1
RECEPTOR GRID SYSTEM (RECTANGULAR=1 OR 3, POLAR=2 OR 4)	ISW(2) = 2
DISCRETE RECEPTOR SYSTEM (RECTANGULAR=1,POLAR=2)	ISW(3) = 1
TERRAIN ELEVATIONS ARE READ (YES=1,NO=0)	ISW(4) = 0
CALCULATIONS ARE WRITTEN TO TAPE (YES=1,NO=0)	ISW(5) = 0
LIST ALL INPUT DATA (NO=0,YES=1,MET DATA ALSO=2)	ISW(6) = 1
COMPUTE AVERAGE CONCENTRATION (OR TOTAL DEPOSITION)	
WITH THE FOLLOWING TIME PERIODS:	
HOURLY (YES=1,NO=0)	ISW(7) = 1
2-HOUR (YES=1,NO=0)	ISW(8) = 0
3-HOUR (YES=1,NO=0)	ISW(9) = 1
4-HOUR (YES=1,NO=0)	ISW(10) = 0
6-HOUR (YES=1,NO=0)	ISW(11) = 0
8-HOUR (YES=1,NO=0)	ISW(12) = 0
12-HOUR (YES=1,NO=0)	ISW(13) = 0
24-HOUR (YES=1,NO=0)	ISW(14) = 1
PRINT 'N'-DAY TABLE(S) (YES=1,NO=0)	ISW(15) = 0
PRINT THE FOLLOWING TYPES OF TABLES WHOSE TIME PERIODS ARE	
SPECIFIED BY ISW(7) THROUGH ISW(14):	
DAILY TABLES (YES=1,NO=0)	ISW(16) = 0
HIGHEST & SECOND HIGHEST TABLES (YES=1,NO=0)	ISW(17) = 1
MAXIMUM 50 TABLES (YES=1,NO=0)	ISW(18) = 1
METEOROLOGICAL DATA INPUT METHOD (PRE-PROCESSED=1,CARD=2)	ISW(19) = 1
RURAL-URBAN OPTION (RU.=0,UR. MODE 1=1,UR. MODE 2=2,UR. MODE 3=3)	ISW(20) = 0
WIND PROFILE EXPONENT VALUES (DEFAULTS=1,USER ENTERS=2,3)	ISW(21) = 1
VERTICAL POT. TEMP. GRADIENT VALUES (DEFAULTS=1,USER ENTERS=2,3)	ISW(22) = 1
SCALE EMISSION RATES FOR ALL SOURCES (NO=0,YES>0)	ISW(23) = 0
PROGRAM CALCULATES FINAL PLUME RISE ONLY (YES=1,NO=2)	ISW(24) = 1
PROGRAM ADJUSTS ALL STACK HEIGHTS FOR DOWNWASH (YES=2,NO=1)	ISW(25) = 2
PROGRAM USES BUOYANCY INDUCED DISPERSION (YES=1,NO=2)	ISW(26) = 1
CONCENTRATIONS DURING CALM PERIODS SET = 0 (YES=1,NO=2)	ISW(27) = 1
REG. DEFAULT OPTION CHOSEN (YES=1,NO=2)	ISW(28) = 2
TYPE OF POLLUTANT TO BE MODELLED (1=S02,2=OTHER)	ISW(29) = 1
DEBUG OPTION CHOSEN (YES=1,NO=2)	ISW(30) = 2
ABOVE GROUND (FLAGPOLE) RECEPTORS USED (YES=1,NO=0)	ISW(31) = 0
NUMBER OF INPUT SOURCES	NSOURC = 1
NUMBER OF SOURCE GROUPS (=0,ALL SOURCES)	NGROUP = 1
TIME PERIOD INTERVAL TO BE PRINTED (=0,ALL INTERVALS)	IPERD = 0
NUMBER OF X (RANGE) GRID VALUES	NXPNTS = 5
NUMBER OF Y (THETA) GRID VALUES	NYPNTS = 2
NUMBER OF DISCRETE RECEPTORS	NXWYPT = 0
SOURCE EMISSION RATE UNITS CONVERSION FACTOR	TK = .10000E+07
HEIGHT ABOVE GROUND AT WHICH WIND SPEED WAS MEASURED	ZR = 7.00 METERS
LOGICAL UNIT NUMBER OF METEOROLOGICAL DATA	IMET = 9
DECAY COEFFICIENT FOR PHYSICAL OR CHEMICAL DEPLETION	DECAY = .000000E+00
SURFACE STATION NO.	ISS = 12839
YEAR OF SURFACE DATA	ISY = 85
UPPER AIR STATION NO.	IUS = 12844
YEAR OF UPPER AIR DATA	IUY = 85
ALLOCATED DATA STORAGE	LIMIT = 43500 WORDS
REQUIRED DATA STORAGE FOR THIS PROBLEM RUN	MIMIT = 1067 WORDS



\*\*\* VERTICAL POTENTIAL TEMPERATURE GRADIENTS \*\*\*  
(DEGREES KELVIN PER METER)

STABILITY CATEGORY	WIND SPEED CATEGORY					
	1	2	3	4	5	6
A	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
B	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
C	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
D	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
E	.20000E-01	.20000E-01	.20000E-01	.20000E-01	.20000E-01	.20000E-01
F	.35000E-01	.35000E-01	.35000E-01	.35000E-01	.35000E-01	.35000E-01

\*\*\* RANGES OF POLAR GRID SYSTEM \*\*\*  
(METERS)

100.0, 200.0, 300.0, 400.0, 500.0,

\*\*\* RADIAL ANGLES OF POLAR GRID SYSTEM \*\*\*

(DEGREES)

135.0, 315.0,



CALM HOURS (=1) FOR DAY 220 \* 0 0 1 0  
CALM HOURS (=1) FOR DAY 221 \* 0 0 1 0 1  
\* CALM HOURS (=1) FOR DAY 222 \* 0 0 1 0  
CALM HOURS (=1) FOR DAY 231 \* 0 1 0 0 0 1 1 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0  
CALM HOURS (=1) FOR DAY 266 \* 1 0  
\* CALM HOURS (=1) FOR DAY 285 \* 1 0 1 0  
CALM HOURS (=1) FOR DAY 302 \* 1 0  
CALM HOURS (=1) FOR DAY 312 \* 0 0 1 0  
\* CALM HOURS (=1) FOR DAY 320 \* 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  
\* CALM HOURS (=1) FOR DAY 362 \* 0 1  
CALM HOURS (=1) FOR DAY 363 \* 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

\*\*\* DER Key West SE-NW Downwash Scenario for 1985 \*\*\*

\* HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*  
\* FROM SOURCES: 1,  
\* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 108.65780 AND OCCURRED AT ( 200.0, 315.0) \*

DIRECTION / DEGREES) /	100.0	200.0	300.0	400.0	500.0
315.0 /	95.47418 ( 32,12)	108.65780 ( 80,21)	73.49831 ( 32,12)	56.32671 ( 32,12)	46.12359 (241,14)
135.0 /	92.98293 (348,10)	106.33410 ( 43,11)	71.62389 (348,10)	54.70065 (348,10)	44.49487 (348,10)

\*\*\* DER Key West SE-NW Downwash Scenario for 1985

\*\*\*

\* SECOND HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*  
\* FROM SOURCES: 1,  
\* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 108.21920 AND OCCURRED AT ( 200.0, 315.0) \*

DIRECTION / (DEGREES) /	100.0	200.0	300.0	400.0	500.0
315.0 /	94.90157 ( 80,21)	108.21920 ( 32,12)	73.44193 ( 80,21)	56.16883 ( 80,21)	45.89883 ( 32,12)
135.0 /	92.81510 (348,11)	106.16820 (348,10)	71.49534 (348,11)	54.59779 (348,11)	44.40919 (348,11)



\*\*\* DER Key West SE-NW Downwash Scenario for 1985

\*\*\*

\* 50 MAXIMUM 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*

\* FROM SOURCES: 1,

RANK	CON.	HOUR	DAY	X Y(METERS)		RANK	CON.	HOUR	DAY	X Y(METERS)	
				OR RANGE (METERS)	OR DIRECTION (DEGREES)					OR RANGE (METERS)	OR DIRECTION (DEGREES)
1	108.65780	21	80	200.0	315.0	26	88.81313	19	43	100.0	135.0
2	108.21920	12	32	200.0	315.0	27	88.46529	19	80	100.0	315.0
3	106.33410	11	43	200.0	135.0	28	88.43443	12	325	200.0	315.0
4	106.16820	10	348	200.0	135.0	29	88.37600	16	80	100.0	315.0
5	105.99530	11	348	200.0	135.0	30	88.11366	14	308	200.0	135.0
6	103.29600	19	43	200.0	135.0	31	88.11361	9	325	200.0	315.0
7	102.45200	19	80	200.0	315.0	32	87.77138	13	166	200.0	315.0
8	102.35810	16	80	200.0	315.0	33	87.68959	13	30	200.0	315.0
9	97.27955	14	324	200.0	315.0	34	87.06131	20	308	200.0	135.0
10	97.17704	11	334	200.0	315.0	35	87.02013	11	30	200.0	315.0
11	95.47418	12	32	100.0	315.0	36	86.89092	9	137	200.0	135.0
12	95.08678	7	31	200.0	315.0	37	86.60168	21	279	200.0	315.0
13	94.90157	21	80	100.0	315.0	38	85.79096	23	21	200.0	135.0
14	93.83341	4	242	200.0	315.0	39	85.74088	22	154	200.0	315.0
15	93.67162	10	166	200.0	315.0	40	85.12308	24	166	200.0	315.0
16	93.24852	17	275	200.0	315.0	41	85.10258	15	186	200.0	315.0
17	92.98293	10	348	100.0	135.0	42	84.54449	14	60	200.0	315.0
18	92.81510	11	348	100.0	135.0	43	84.40909	1	334	200.0	315.0
19	92.72507	10	56	200.0	315.0	44	84.35719	10	5	200.0	135.0
20	92.41386	15	80	200.0	315.0	45	84.35697	14	22	200.0	135.0
21	92.17641	11	43	100.0	135.0	46	84.05665	19	88	200.0	315.0
22	91.07607	24	8	200.0	135.0	47	83.93965	5	90	200.0	315.0
23	89.93592	9	42	200.0	315.0	48	83.21779	18	80	200.0	315.0
24	88.97422	11	167	200.0	315.0	49	83.18245	11	21	200.0	135.0
25	88.92737	7	43	200.0	135.0	50	83.06284	11	269	200.0	135.0

\*\*\* DER Key West SE-NW Downwash Scenario for 1985 \*\*\*

\* HIGHEST 3-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*  
\* FROM SOURCES: 1,  
\* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 94.58154 AND OCCURRED AT ( 200.0, 315.0) \*

DIRECTION / (DEGREES) /	100.0	200.0	300.0	400.0	500.0
315.0 /	82.93331 ( 80, 7)	94.58154 ( 80, 7)	62.84860 ( 80, 7)	47.55780 ( 80, 7)	38.44856 ( 80, 7)
135.0 /	69.58688 (348, 4)	78.25655 (348, 4)	51.99241 (348, 4)	39.34143 (348, 4)	31.79845 (348, 4)

\*\*\* DER Key West SE-NW Downwash Scenario for 1985

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\* SECOND HIGHEST 3-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*

\* FROM SOURCES: 1,

\* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 73.17941 AND OCCURRED AT ( 200.0, 315.0) \*

DIRECTION / (DEGREES) /	RANGE (METERS)				
	100.0	200.0	300.0	400.0	500.0
315.0 /	64.98052 ( 80, 6)	73.17941 ( 80, 6)	47.57857 ( 80, 6)	35.50373 ( 80, 6)	28.42477 ( 80, 6)
135.0 /	51.30482 ( 21, 8)	57.03136 ( 43, 7)	36.86745 ( 43, 7)	27.51659 ( 43, 7)	22.09026 ( 43, 7)

\*\*\* DER Key West SE-NW Downwash Scenario for 1985

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\* 50 MAXIMUM 3-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*

\* FROM SOURCES: 1,

RANK	CON.	PER. DAY		X Y(METERS)		RANK	CON.	PER. DAY		X Y(METERS)	
				OR	OR					OR	OR
				RANGE	DIRECTION					RANGE	DIRECTION
				(METERS)	(DEGREES)					(METERS)	(DEGREES)
1	94.58154	7	80	200.0	315.0	26	51.30482	8	21	100.0	135.0
2	82.93331	7	80	100.0	315.0	27	50.66574	5	92	200.0	135.0
3	78.25655	4	348	200.0	135.0	28	50.58210	3	42	100.0	315.0
4	73.17941	6	80	200.0	315.0	29	49.82735	2	12	200.0	135.0
5	69.58688	4	348	100.0	135.0	30	49.31245	4	5	100.0	135.0
6	64.98052	6	80	100.0	315.0	31	49.14047	4	334	100.0	315.0
7	62.84886	4	2	200.0	315.0	32	49.10911	6	244	100.0	315.0
8	62.84860	7	80	300.0	315.0	33	49.00586	8	44	200.0	135.0
9	60.39980	5	80	200.0	315.0	34	48.83559	7	43	100.0	135.0
10	58.54237	3	42	200.0	315.0	35	48.77519	3	325	200.0	315.0
11	57.16852	6	244	200.0	315.0	36	48.74022	3	166	200.0	315.0
12	57.08635	4	334	200.0	315.0	37	48.71275	5	308	200.0	135.0
13	57.03136	7	43	200.0	135.0	38	48.35518	2	334	100.0	315.0
14	56.92596	8	21	200.0	135.0	39	48.33334	5	166	100.0	315.0
15	56.51278	5	166	200.0	315.0	40	47.98574	3	31	200.0	315.0
16	55.30003	5	30	200.0	315.0	41	47.57857	6	80	300.0	315.0
17	55.15268	2	334	200.0	315.0	42	47.55780	7	80	400.0	315.0
18	54.75180	5	358	200.0	315.0	43	47.00488	5	30	100.0	315.0
19	54.02912	7	308	200.0	135.0	44	46.56959	7	168	200.0	315.0
20	53.62562	4	5	200.0	135.0	45	46.42013	8	166	200.0	315.0
21	53.51918	5	80	100.0	315.0	46	46.26867	5	4	200.0	135.0
22	52.70018	4	2	100.0	315.0	47	46.24635	2	242	200.0	315.0
23	52.69618	5	186	200.0	315.0	48	46.07191	5	358	100.0	315.0
24	52.55328	4	7	200.0	135.0	49	45.40952	3	80	200.0	315.0
25	51.99241	4	348	300.0	135.0	50	45.26846	5	241	200.0	315.0

\*\*\* DER Key West SE-NW Downwash Scenario for 1985 \*\*\*

\* HIGHEST 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*  
\* FROM SOURCES: 1,  
\* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 40.99557 AND OCCURRED AT ( 200.0, 315.0) \*

DIRECTION / (DEGREES) /	100.0	200.0	300.0	400.0	500.0
315.0 /	36.35871 ( 80, 1)	40.99557 ( 80, 1)	26.10959 ( 80, 1)	19.28380 ( 80, 1)	15.35157 ( 80, 1)
135.0 /	21.80222 ( 21, 1)	24.02815 ( 21, 1)	15.08124 ( 21, 1)	11.00884 ( 21, 1)	8.67908 ( 21, 1)

\*\*\* DER Key West SE-NW Downwash Scenario for 1985

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\* SECOND HIGHEST 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*

\* FROM SOURCES: 1,

\* FOR THE RECEPTOR GRID \*

\* MAXIMUM VALUE EQUALS 34.75592 AND OCCURRED AT ( 200.0, 315.0) \*

DIRECTION / (DEGREES) /	100.0	200.0	300.0	400.0	500.0
315.0 /	30.20499 (166, 1)	34.75592 (166, 1)	20.30956 (166, 1)	14.25383 (166, 1)	10.99350 (166, 1)
135.0 /	18.13726 (308, 1)	21.22746 (308, 1)	12.92946 (308, 1)	9.33667 (308, 1)	7.34980 (308, 1)

\*\*\* DER Key West SE-NW Downwash Scenario for 1985

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\* 50 MAXIMUM 24-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) \*

\* FROM SOURCES: 1,

RANK	CON.	PER.	DAY	X	Y(METERS)	RANK	CON.	PER.	DAY	X	Y(METERS)
				OR	OR					OR	OR
				RANGE	DIRECTION					RANGE	DIRECTION
				(METERS)	(DEGREES)					(METERS)	(DEGREES)
1	40.99557	1	80	200.0	315.0	26	17.72300	1	333	200.0	315.0
2	36.35871	1	80	100.0	315.0	27	17.36426	1	7	200.0	135.0
3	34.75592	1	166	200.0	315.0	28	17.32387	1	31	100.0	315.0
4	30.20499	1	166	100.0	315.0	29	16.94436	1	351	200.0	135.0
5	27.71553	1	2	200.0	315.0	30	16.75352	1	333	100.0	315.0
6	26.97519	1	167	200.0	315.0	31	16.50597	1	167	300.0	315.0
7	26.44293	1	332	200.0	315.0	32	16.40906	1	42	200.0	315.0
8	26.10959	1	80	300.0	315.0	33	16.31079	1	43	200.0	135.0
9	25.71526	1	334	200.0	315.0	34	16.27239	1	324	200.0	315.0
10	24.93966	1	2	100.0	315.0	35	16.17452	1	44	100.0	135.0
11	24.02815	1	21	200.0	135.0	36	15.94997	1	359	200.0	135.0
12	23.71288	1	167	100.0	315.0	37	15.65380	1	2	300.0	315.0
13	23.16260	1	332	100.0	315.0	38	15.57866	1	335	200.0	315.0
14	22.47089	1	334	100.0	315.0	39	15.51646	1	276	200.0	315.0
15	21.80222	1	21	100.0	135.0	40	15.35157	1	80	500.0	315.0
16	21.24860	1	325	200.0	315.0	41	15.09817	1	88	200.0	315.0
17	21.22746	1	308	200.0	135.0	42	15.08124	1	21	300.0	135.0
18	20.30956	1	166	300.0	315.0	43	14.99727	1	324	100.0	315.0
19	20.28033C	1	30	200.0	315.0	44	14.84556	1	42	100.0	315.0
20	19.28380	1	80	400.0	315.0	45	14.77015	1	351	100.0	135.0
21	19.13177	1	44	200.0	135.0	46	14.56275	1	7	100.0	135.0
22	19.09276	1	31	200.0	315.0	47	14.52828	1	334	300.0	315.0
23	18.73445	1	325	100.0	315.0	48	14.41656	1	359	100.0	135.0
24	18.44072C	1	30	100.0	315.0	49	14.40030	1	43	100.0	135.0
25	18.13726	1	308	100.0	135.0	50	14.35203	1	332	300.0	315.0

ON ENDED ON 08-19-88 AT 11:22:52