Remote monitoring system overview

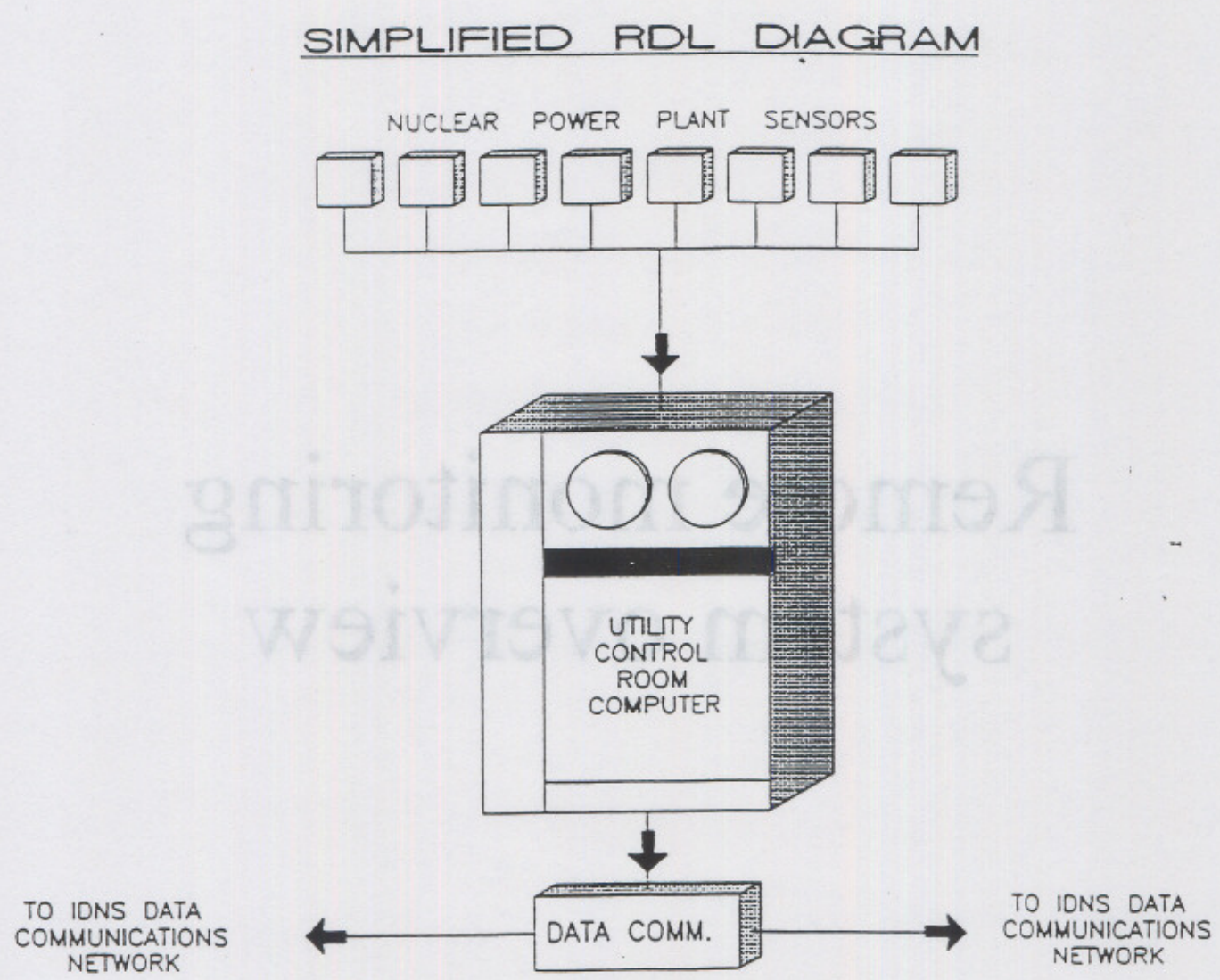
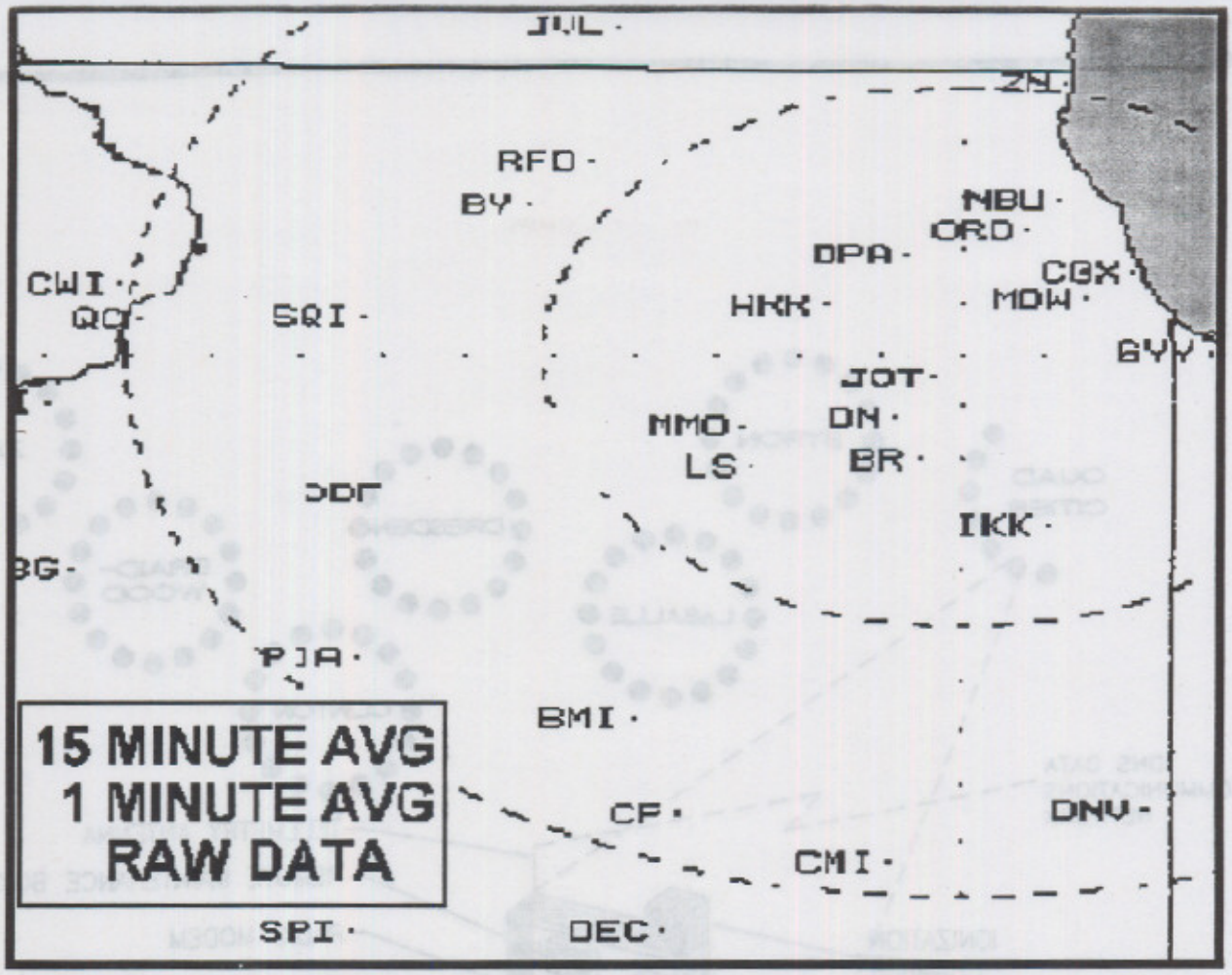
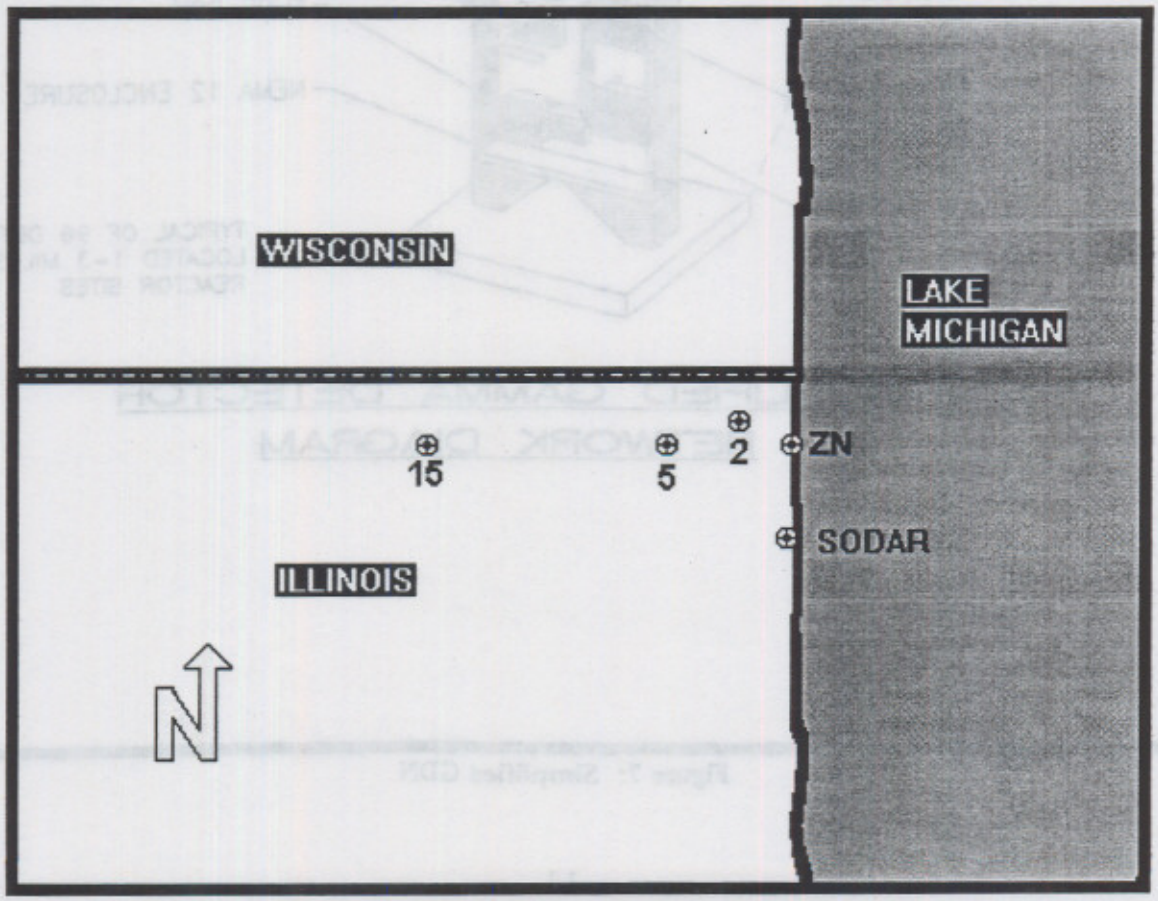
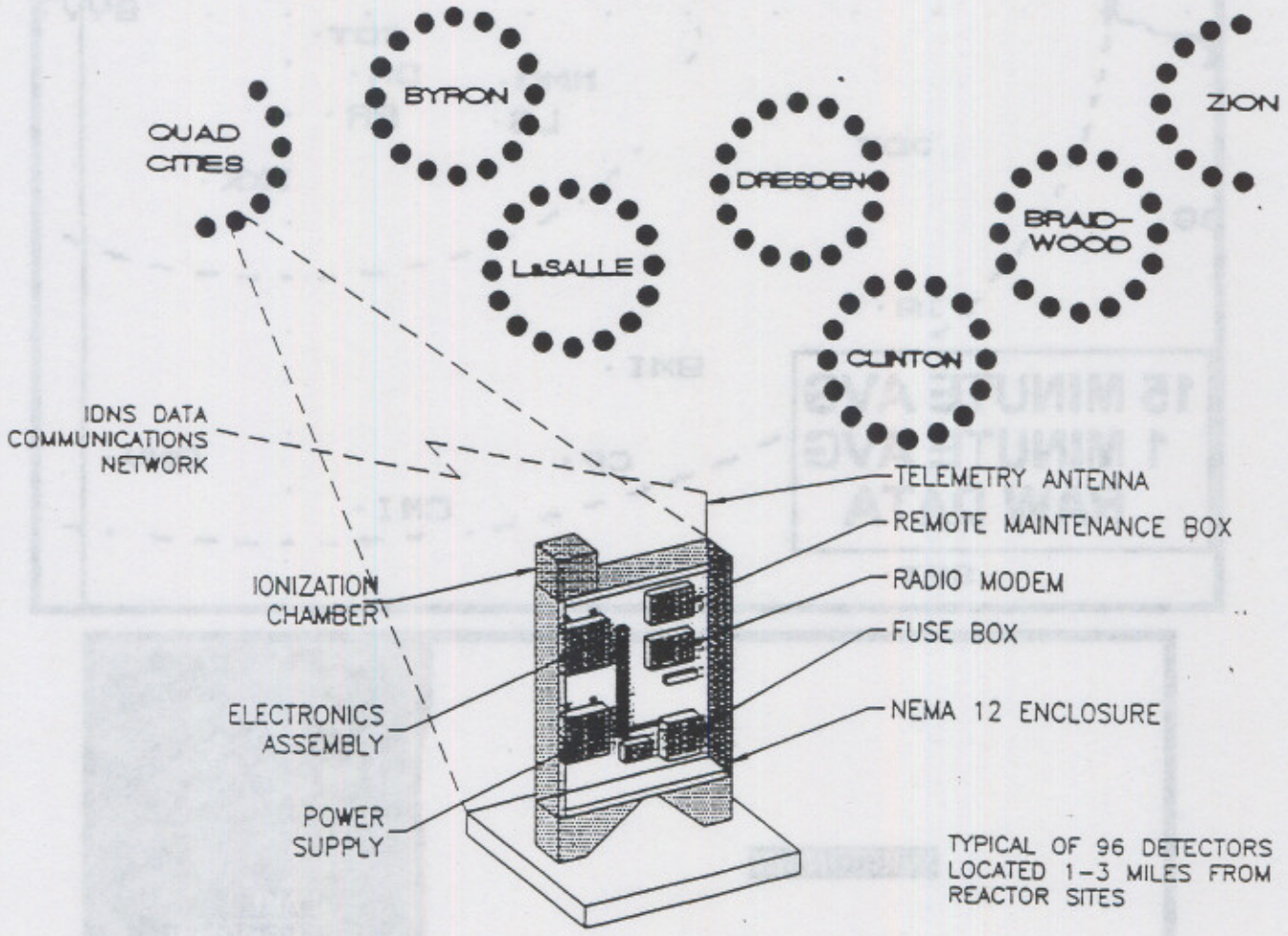


Figure 6: Simplified RDL

DP058


JVL
ZN
RFD
BY
NBU
ORD
DPA
CWI
QC
SQI
HKK
MDW
GYY
JOT
MMO
DN
LS
BR
IKK
PIA
BMI
CP
DNV
CMI
SPI
DEC
15 MINUTE AVG
1 MINUTE AVG
RAW DATA


WISCONSIN
LAKE
MICHIGAN
15
5
2
ZN
SODAR
ILLINOIS
N



SIMPLIFIED GAMMA DETECTOR NETWORK DIAGRAM

Figure 7: Simplified GDN

DP056

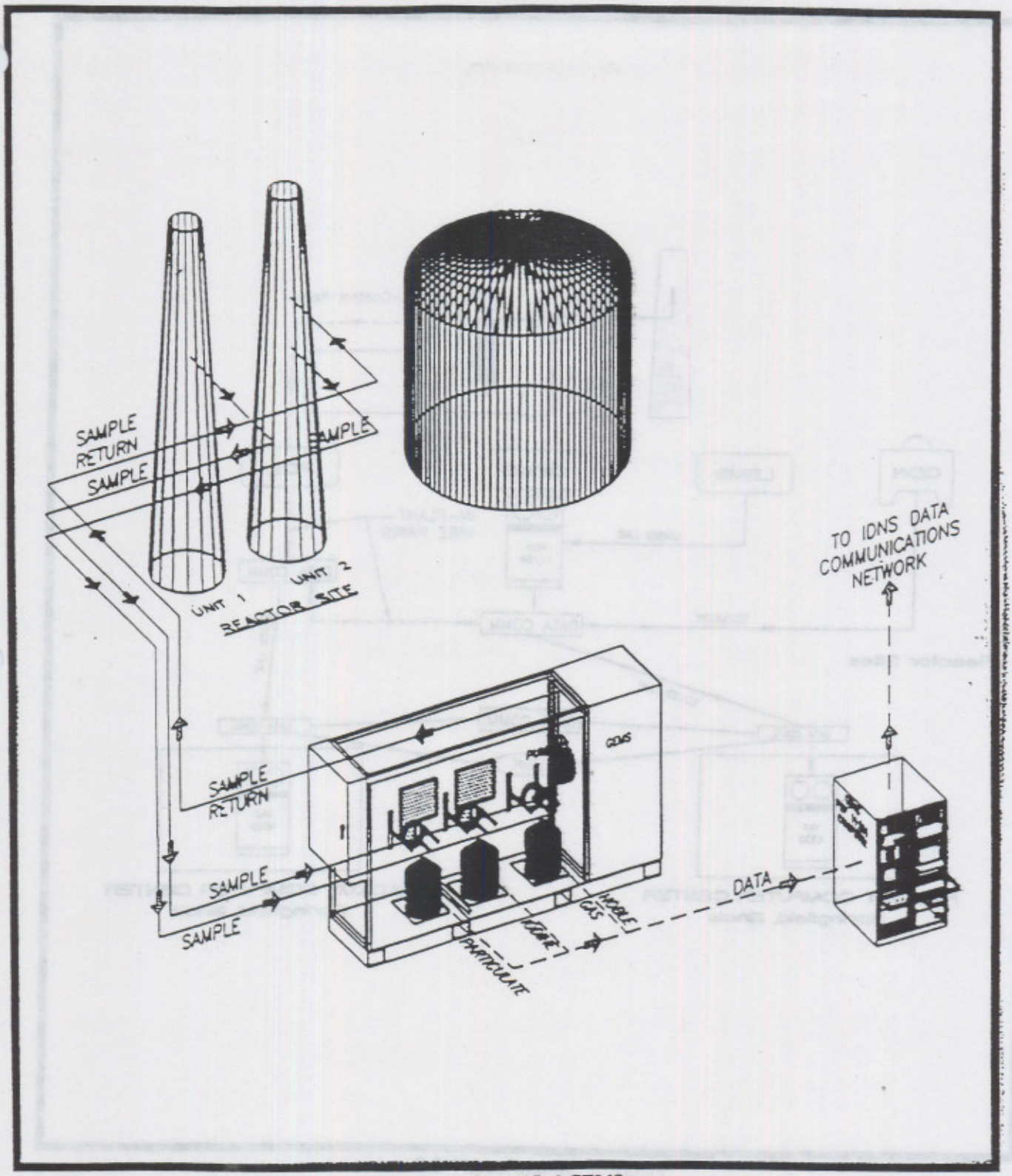


Figure 4: Simplified GEMS

DP060

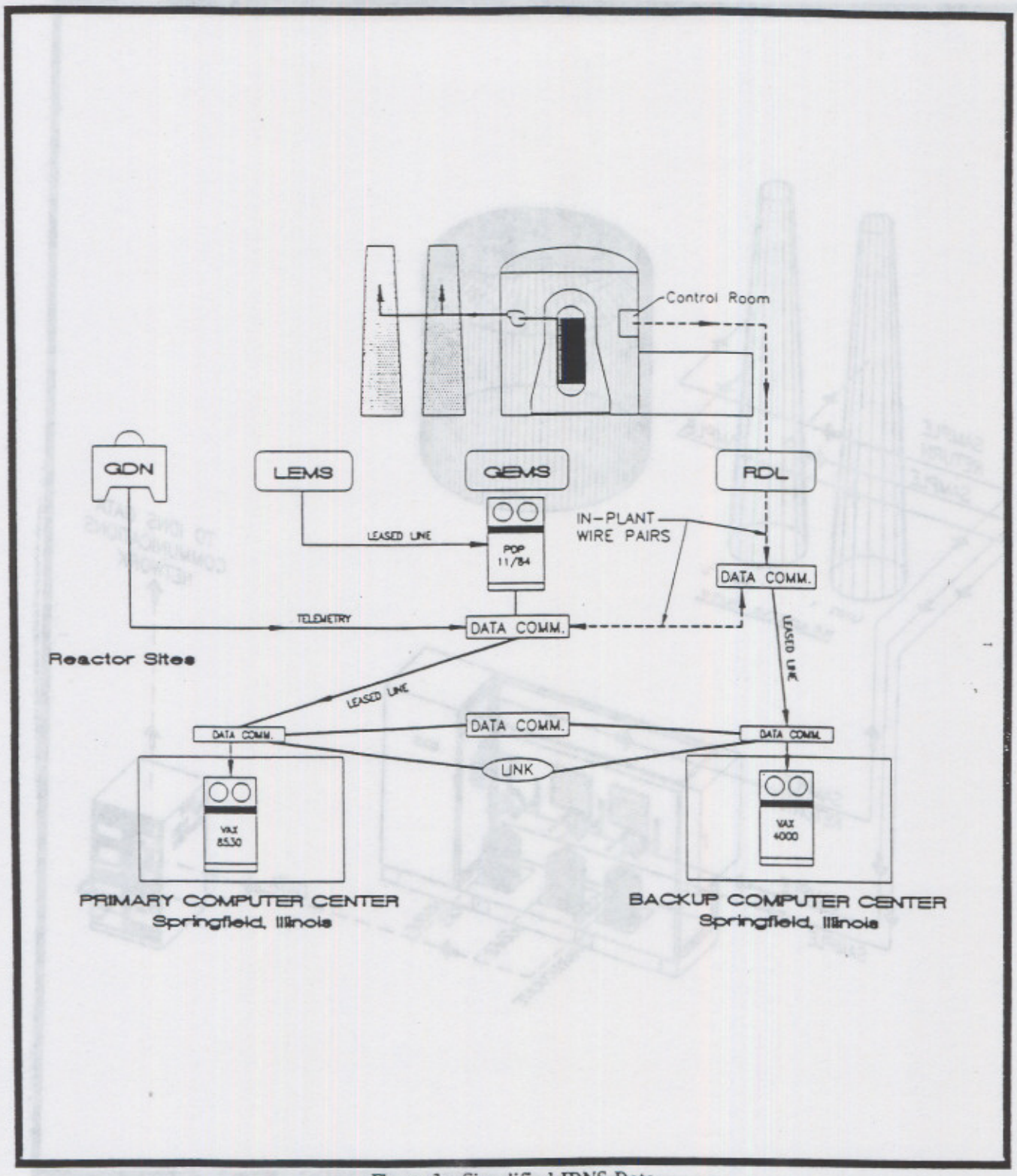
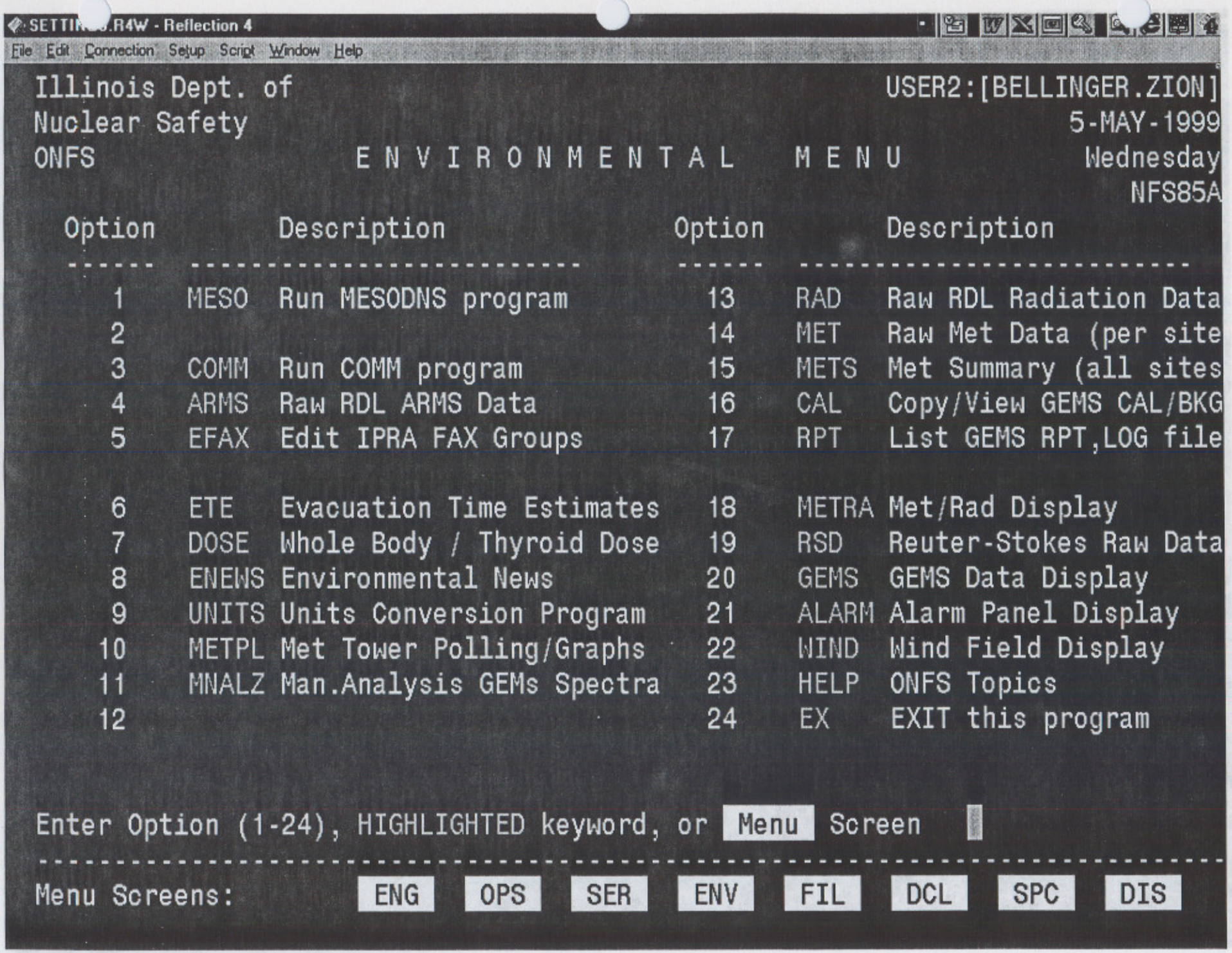
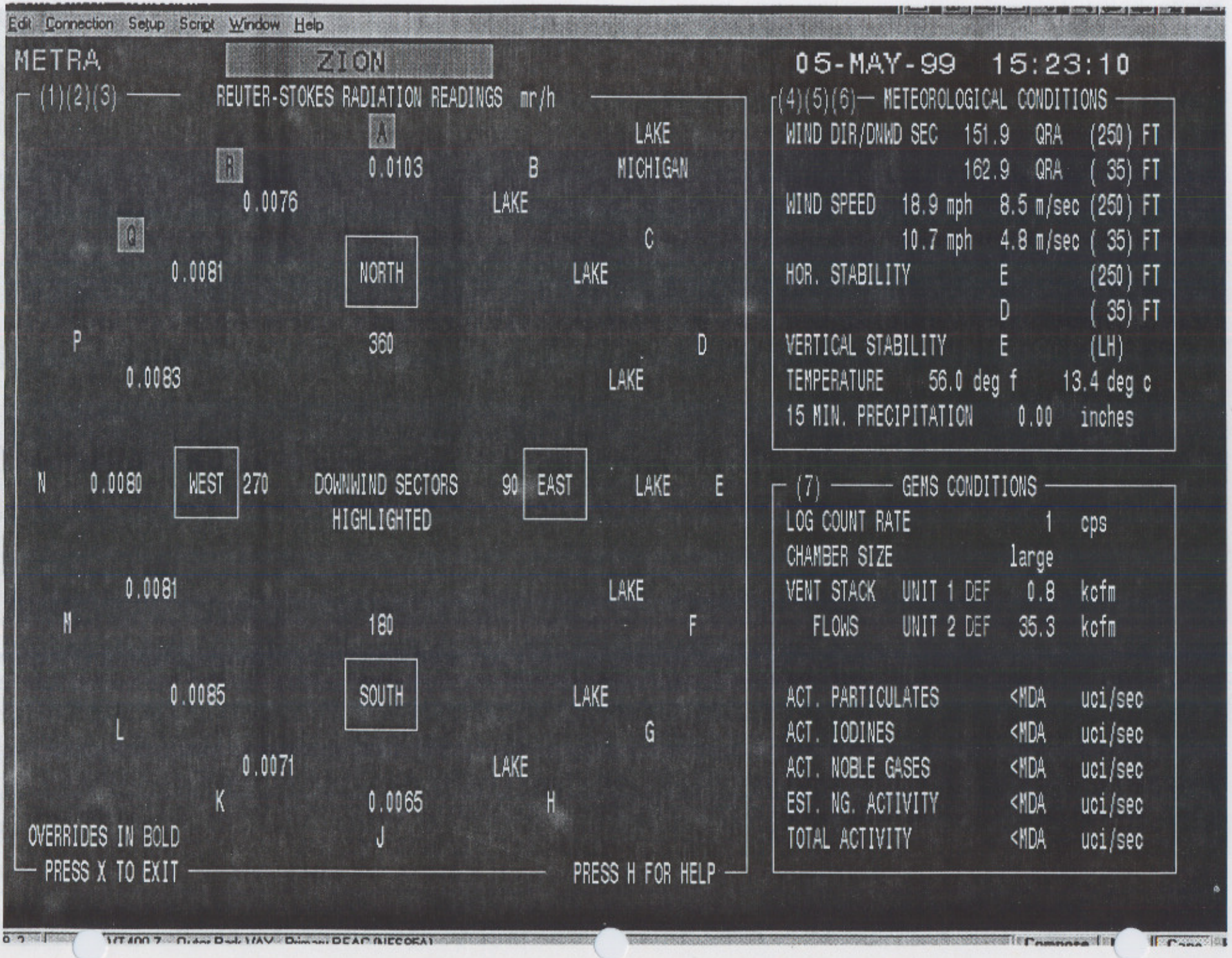
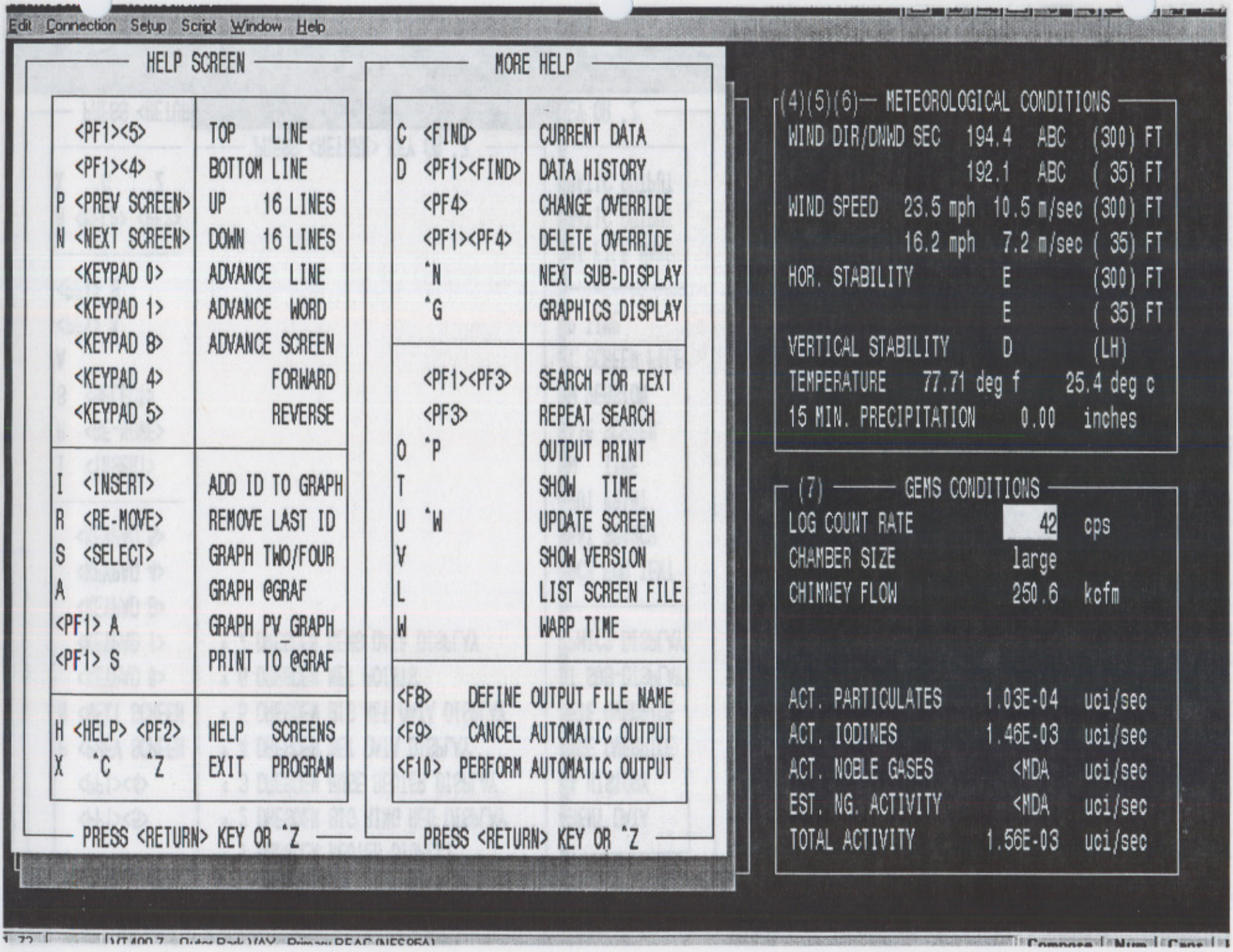


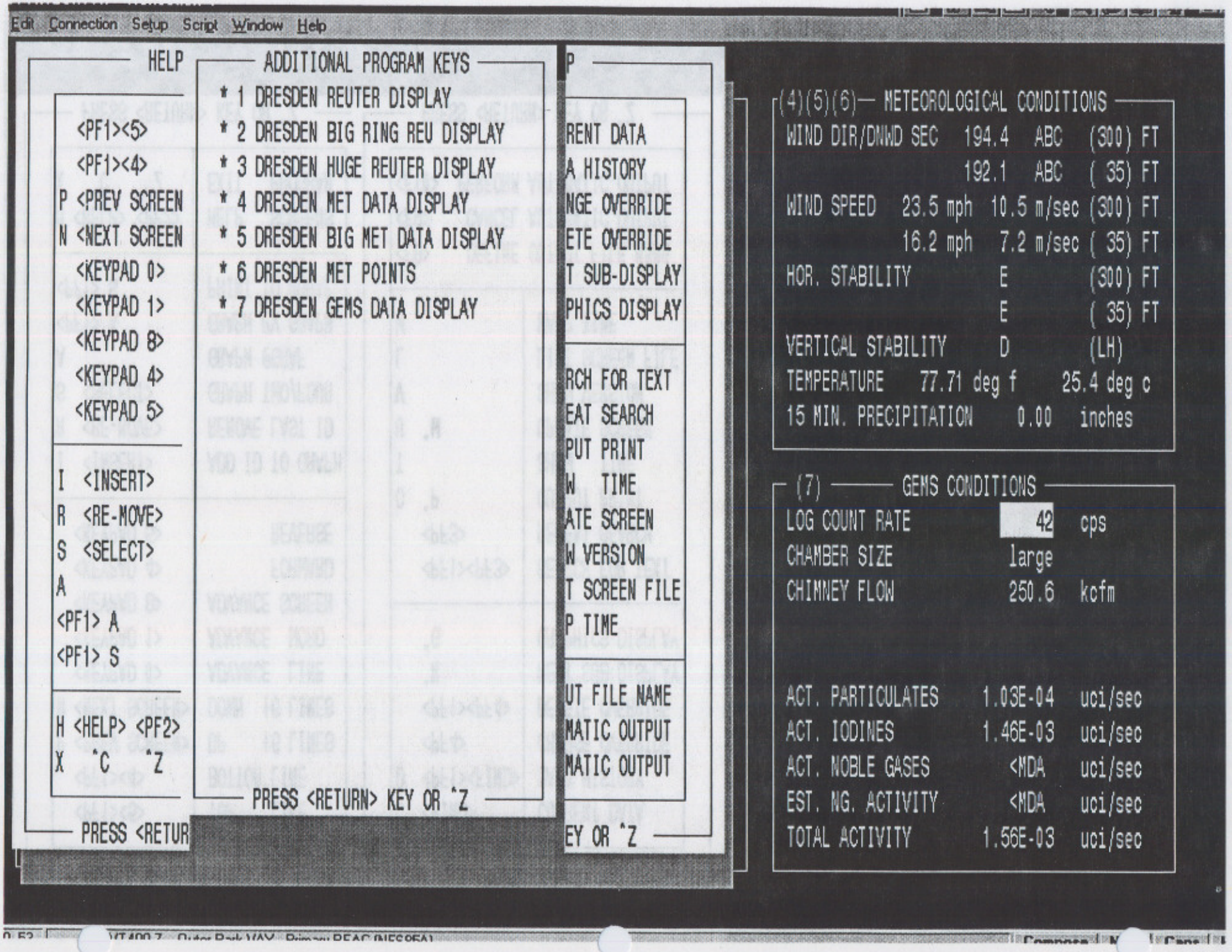
Figure 3: Simplified IDNS Data Communications Network

DP052


SETTI .R4W - Reflection 4
File Edit Connection Setup Script Window Help
Illinois Dept. of
Nuclear Safety
ONFS
USER2:[BELLINGER.ZION]
5-MAY-1999
Wednesday
NFS85A
E N V I R O N M E N T A L M E N U
Option Description Option Description
1 MESO Run MESODNS program 13 RAD Raw RDL Radiation Data
2 14 MET Raw Met Data (per site
3 COMM Run COMM program 15 METS Met Summary (all sites
4 ARMS Raw RDL ARMS Data 16 CAL Copy/View GEMS CAL/BKG
5 EFAX Edit IPRA FAX Groups 17 RPT List GEMS RPT,LOG file
6 ETE Evacuation Time Estimates 18 METRA Met/Rad Display
7 DOSE Whole Body / Thyroid Dose 19 RSD Reuter-Stokes Raw Data
8 ENEWS Environmental News 20 GEMS GEMS Data Display
9 UNITS Units Conversion Program 21 ALARM Alarm Panel Display
10 METPL Met Tower Polling/Graphs 22 WIND Wind Field Display
11 MNALZ Man.Analysis GEMs Spectra 23 HELP ONFS Topics
12 24 EX EXIT this program
Enter Option (1-24), HIGHLIGHTED keyword, or Menu Screen
Menu Screens: ENG OPS SER ENV FIL DCL SPC DIS


Edit Connection Setup Script Window Help
METRA
ZION
05-MAY-99 15:23:10
(1)(2)(3) REUTER-STOKES RADIATION READINGS mr/h
A
LAKE
MICHIGAN
B
0.0103
R
0.0076
LAKE
Q
C
0.0081
NORTH
LAKE
P
360
D
0.0083
LAKE
N
0.0080
WEST
270
DOWNWIND SECTORS
HIGHLIGHTED
90
EAST
LAKE
E
0.0081
LAKE
M
180
F
0.0085
SOUTH
LAKE
L
G
0.0071
LAKE
K
0.0065
H
J
OVERRIDES IN BOLD
PRESS X TO EXIT
PRESS H FOR HELP
(4)(5)(6) METEOROLOGICAL CONDITIONS
WIND DIR/DNWD SEC 151.9 QRA (250) FT
162.9 QRA (35) FT
WIND SPEED 18.9 mph 8.5 m/sec (250) FT
10.7 mph 4.8 m/sec (35) FT
HOR. STABILITY E (250) FT
D (35) FT
VERTICAL STABILITY E (LH)
TEMPERATURE 56.0 deg f 13.4 deg c
15 MIN. PRECIPITATION 0.00 inches
(7) GEMS CONDITIONS
LOG COUNT RATE 1 cps
CHAMBER SIZE large
VENT STACK UNIT 1 DEF 0.8 kcfm
FLOWS UNIT 2 DEF 35.3 kcfm
ACT. PARTICULATES <MDA uci/sec
ACT. IODINES <MDA uci/sec
ACT. NOBLE GASES <MDA uci/sec
EST. NG. ACTIVITY <MDA uci/sec
TOTAL ACTIVITY <MDA uci/sec


Edit Connection Setup Script Window Help
HELP SCREEN
<PF1><5> TOP LINE
<PF1><4> BOTTOM LINE
P <PREV SCREEN> UP 16 LINES
N <NEXT SCREEN> DOWN 16 LINES
<KEYPAD 0> ADVANCE LINE
<KEYPAD 1> ADVANCE WORD
<KEYPAD 8> ADVANCE SCREEN
<KEYPAD 4> FORWARD
<KEYPAD 5> REVERSE
I <INSERT> ADD ID TO GRAPH
R <RE-MOVE> REMOVE LAST ID
S <SELECT> GRAPH TWO/FOUR
A GRAPH @GRAF
<PF1> A GRAPH PV_GRAPH
<PF1> S PRINT TO @GRAF
H <HELP> <PF2> HELP SCREENS
X ^C ^Z EXIT PROGRAM
PRESS <RETURN> KEY OR ^Z
MORE HELP
C <FIND> CURRENT DATA
D <PF1><FIND> DATA HISTORY
<PF4> CHANGE OVERRIDE
<PF1><PF4> DELETE OVERRIDE
^N NEXT SUB-DISPLAY
^G GRAPHICS DISPLAY
<PF1><PF3> SEARCH FOR TEXT
<PF3> REPEAT SEARCH
O ^P OUTPUT PRINT
T SHOW TIME
U ^W UPDATE SCREEN
V SHOW VERSION
L LIST SCREEN FILE
W WARP TIME
<F8> DEFINE OUTPUT FILE NAME
<F9> CANCEL AUTOMATIC OUTPUT
<F10> PERFORM AUTOMATIC OUTPUT
PRESS <RETURN> KEY OR ^Z
(4)(5)(6) METEOROLOGICAL CONDITIONS
WIND DIR/DNWD SEC 194.4 ABC (300) FT
192.1 ABC (35) FT
WIND SPEED 23.5 mph 10.5 m/sec (300) FT
16.2 mph 7.2 m/sec (35) FT
HOR. STABILITY E (300) FT
E (35) FT
VERTICAL STABILITY D (LH)
TEMPERATURE 77.71 deg f 25.4 deg c
15 MIN. PRECIPITATION 0.00 inches
(7) GEMS CONDITIONS
LOG COUNT RATE 42 cps
CHAMBER SIZE large
CHIMNEY FLOW 250.6 kcfm
ACT. PARTICULATES 1.03E-04 uci/sec
ACT. IODINES 1.46E-03 uci/sec
ACT. NOBLE GASES <MDA uci/sec
EST. NG. ACTIVITY <MDA uci/sec
TOTAL ACTIVITY 1.56E-03 uci/sec


Edit Connection Setup Script Window Help
HELP
<PF1><5>
<PF1><4>
P <PREV SCREEN
N <NEXT SCREEN
<KEYPAD 0>
<KEYPAD 1>
<KEYPAD 8>
<KEYPAD 4>
<KEYPAD 5>
I <INSERT>
R <RE-MOVE>
S <SELECT>
A
<PF1> A
<PF1> S
H <HELP> <PF2>
X ^C ^Z
PRESS <RETUR
ADDITIONAL PROGRAM KEYS
* 1 DRESDEN REUTER DISPLAY
* 2 DRESDEN BIG RING REU DISPLAY
* 3 DRESDEN HUGE REUTER DISPLAY
* 4 DRESDEN MET DATA DISPLAY
* 5 DRESDEN BIG MET DATA DISPLAY
* 6 DRESDEN MET POINTS
* 7 DRESDEN GEMS DATA DISPLAY
PRESS <RETURN> KEY OR ^Z
P
RENT DATA
A HISTORY
NGE OVERRIDE
ETE OVERRIDE
T SUB-DISPLAY
PHICS DISPLAY
RCH FOR TEXT
EAT SEARCH
PUT PRINT
W TIME
ATE SCREEN
W VERSION
T SCREEN FILE
P TIME
UT FILE NAME
MATIC OUTPUT
MATIC OUTPUT
EY OR ^Z
(4)(5)(6)— METEOROLOGICAL CONDITIONS
WIND DIR/DNWD SEC 194.4 ABC (300) FT
192.1 ABC (35) FT
WIND SPEED 23.5 mph 10.5 m/sec (300) FT
16.2 mph 7.2 m/sec (35) FT
HOR. STABILITY E (300) FT
E (35) FT
VERTICAL STABILITY D (LH)
TEMPERATURE 77.71 deg f 25.4 deg c
15 MIN. PRECIPITATION 0.00 inches
(7) GEMS CONDITIONS
LOG COUNT RATE 42 cps
CHAMBER SIZE large
CHIMNEY FLOW 250.6 kcfm
ACT. PARTICULATES 1.03E-04 uci/sec
ACT. IODINES 1.46E-03 uci/sec
ACT. NOBLE GASES <MDA uci/sec
EST. NG. ACTIVITY <MDA uci/sec
TOTAL ACTIVITY 1.56E-03 uci/sec

Edit Lo ion Setup Script Window Help

05-MAY-99 **ZION ALARM PANEL** 15:42:40

(1)REUTER-STOKES (2)GEMS (3)METEOROLOGY (4)PLANT RADIATION

RADIATION
MIN: OK MAX: OK

HIGH VOLT BATTERY
MIN: OK MAX: OK

SYSTEM BATTERY
MIN: OK MAX: OK

PLUME AT R/S
IS ELEVATED

REUTERS REPORTING
9

	UNIT 1	UNIT 2
STK	LOW	LOW
SYS	NON-ISO	NON-ISO

LCR: OK BKG: OK

NOBLE GAS
STATUS :Counting
ACT : <MDA
NRG CAL: OK
CHAMBER: LARGE
RPT: 05-May 14:03

IODINES
STATUS :Counting
ACT : <MDA
NRG CAL: OK
CART : 29
RPT: 04-May 19:23

PARTICULATE
STATUS :Counting
ACT : <MDA
NRG CAL: OK
CART : 29
RPT: 04-May 19:22

WIND SPEED
OK

HZN STABILITY
HIGH: STABLE
MID :NAVAIL
LOW :UNSTABLE

VRT STABILITY
UPPER: STABLE
LOWER:NAVAIL

WIND SHEAR
NONE

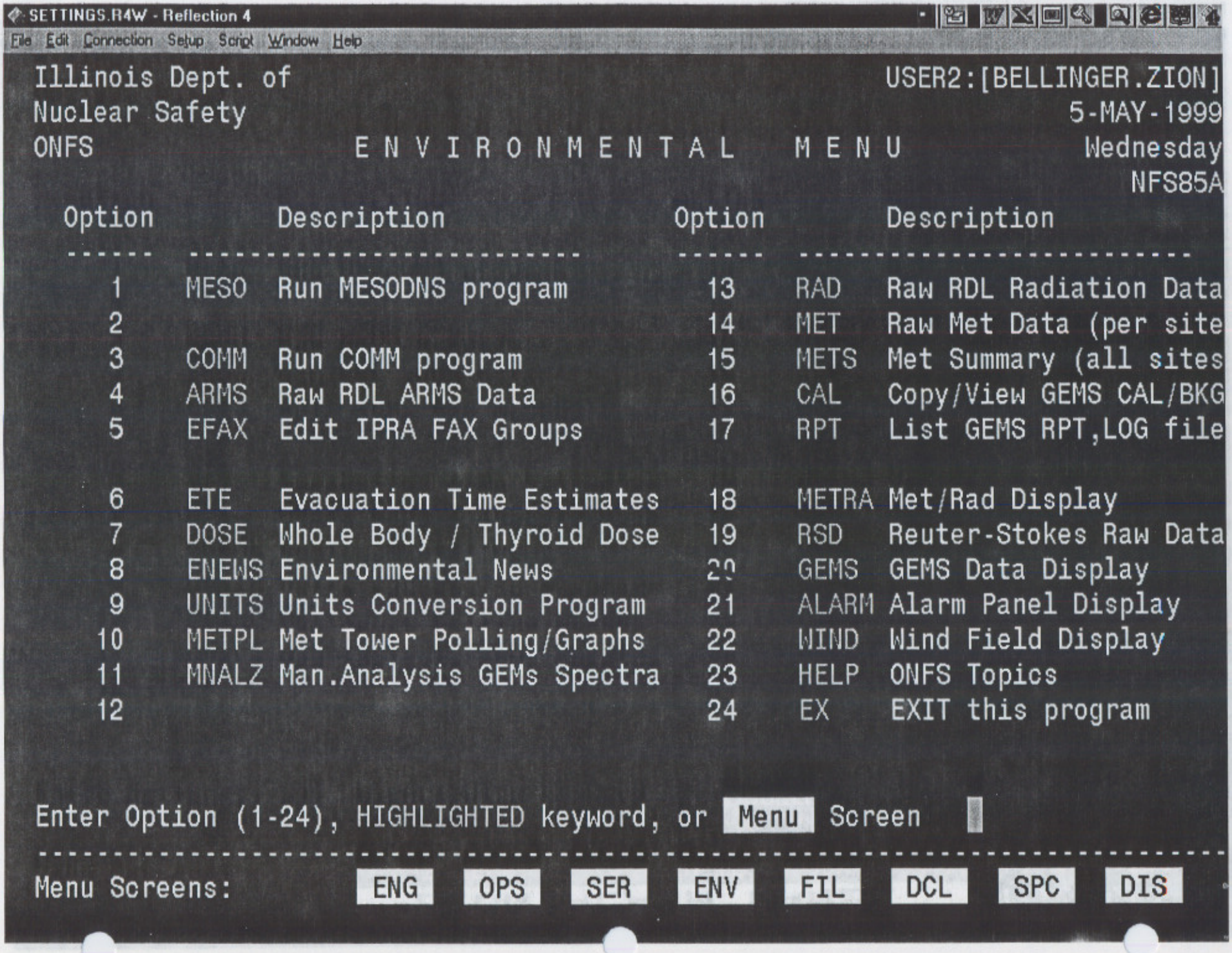
(7) MESOSCALE EFFECTS
NO

RAIN? NO

ARM'S	UNIT 1	UNIT 2
CNMT	OK	OK
MAIN STM	OK	OK
MISC	OK	BAD
SPINGS (5)		
STACK	OK	OK
CNMT	BAD	BAD
TSC	OK	
CTRL RM	OK	
MISC (5)		
CNMT PRG	OK	OK
MSC VENT		
AUX BLDG	OK	
STM AIR	OK	OK

(6) SET POINT FILE

77,2 VT400-7 - Outer Park VAX - Primary REAC (NFS85A) Compose Num Caps


SETTINGS.R4W - Reflection 4
File Edit Connection Setup Script Window Help
Illinois Dept. of
Nuclear Safety
ONFS
USER2:[BELLINGER.ZION]
5-MAY-1999
Wednesday
NFS85A
E N V I R O N M E N T A L M E N U
Option Description Option Description
1 MESO Run MESODNS program
2
3 COMM Run COMM program
4 ARMS Raw RDL ARMS Data
5 EFAX Edit IPRA FAX Groups
6 ETE Evacuation Time Estimates
7 DOSE Whole Body / Thyroid Dose
8 ENEWS Environmental News
9 UNITS Units Conversion Program
10 METPL Met Tower Polling/Graphs
11 MNALZ Man.Analysis GEMs Spectra
12
13 RAD Raw RDL Radiation Data
14 MET Raw Met Data (per site
15 METS Met Summary (all sites
16 CAL Copy/View GEMS CAL/BKG
17 RPT List GEMS RPT,LOG file
18 METRA Met/Rad Display
19 RSD Reuter-Stokes Raw Data
20 GEMS GEMS Data Display
21 ALARM Alarm Panel Display
22 WIND Wind Field Display
23 HELP ONFS Topics
24 EX EXIT this program
Enter Option (1-24), HIGHLIGHTED keyword, or Menu Screen
Menu Screens: ENG OPS SER ENV FIL DCL SPC DIS

SETTINGS.R4W - Reflection 4

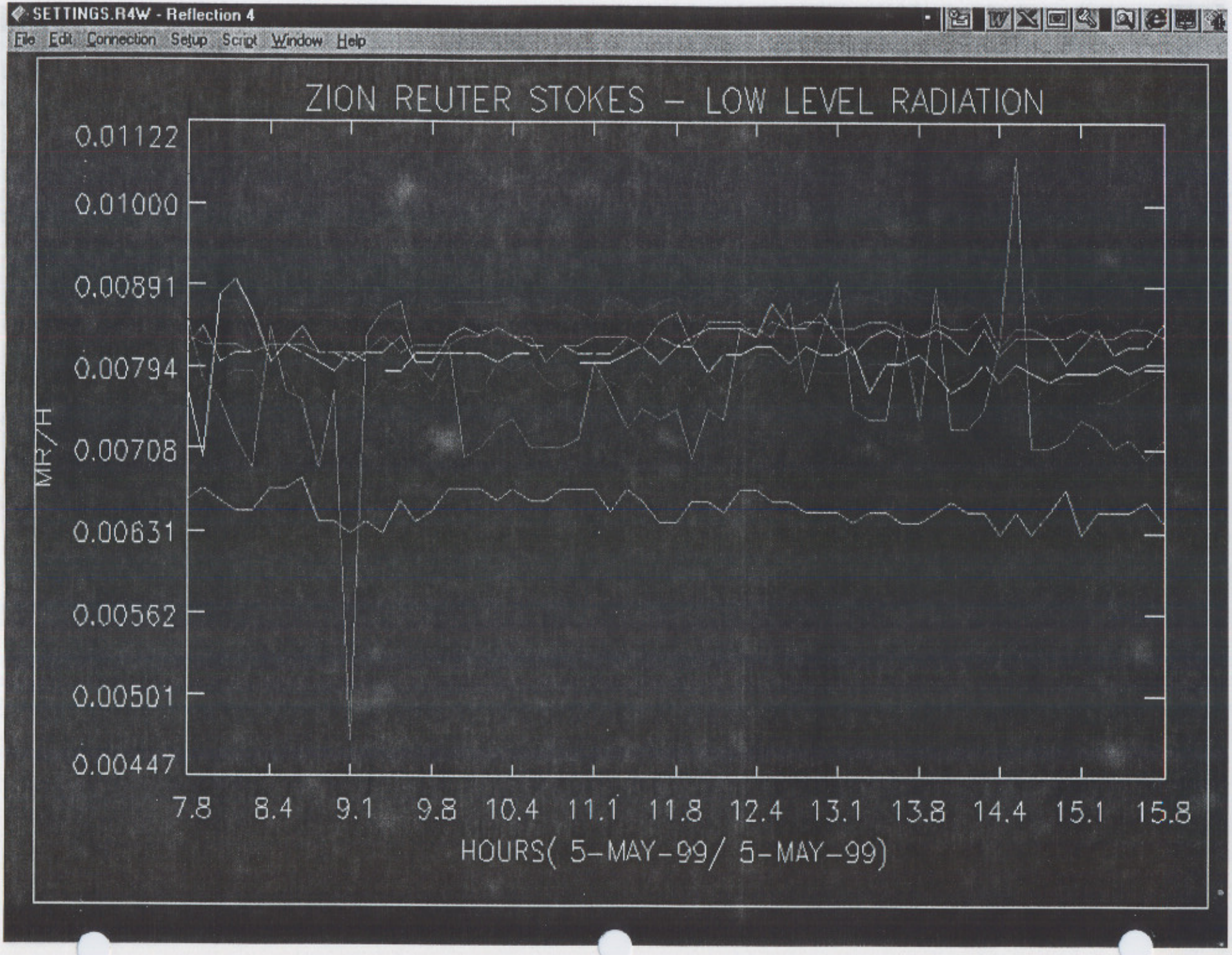
File Edit Connection Setup Script Window Help

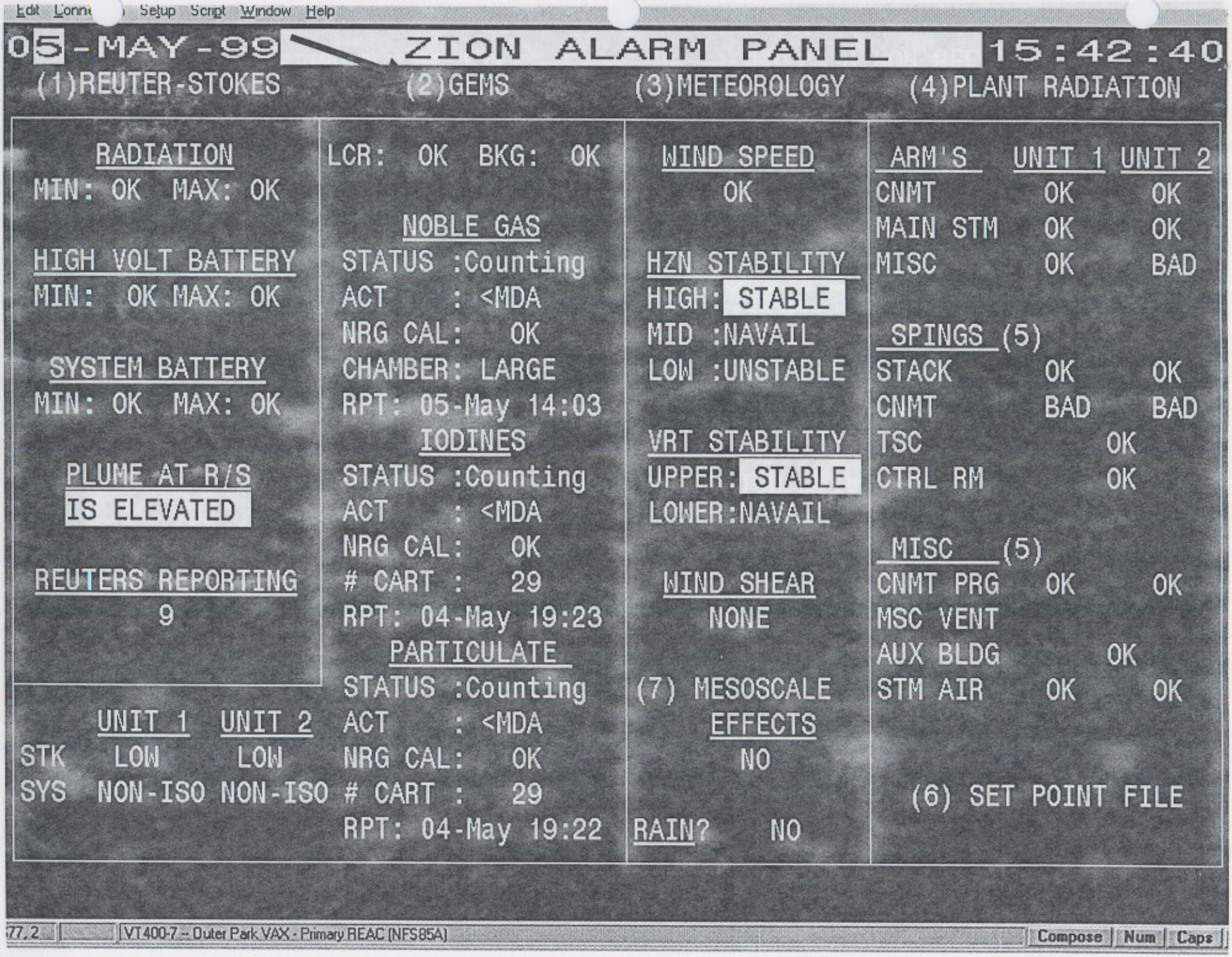
.RSD ZION NFS85A 05-MAY-99 15:44

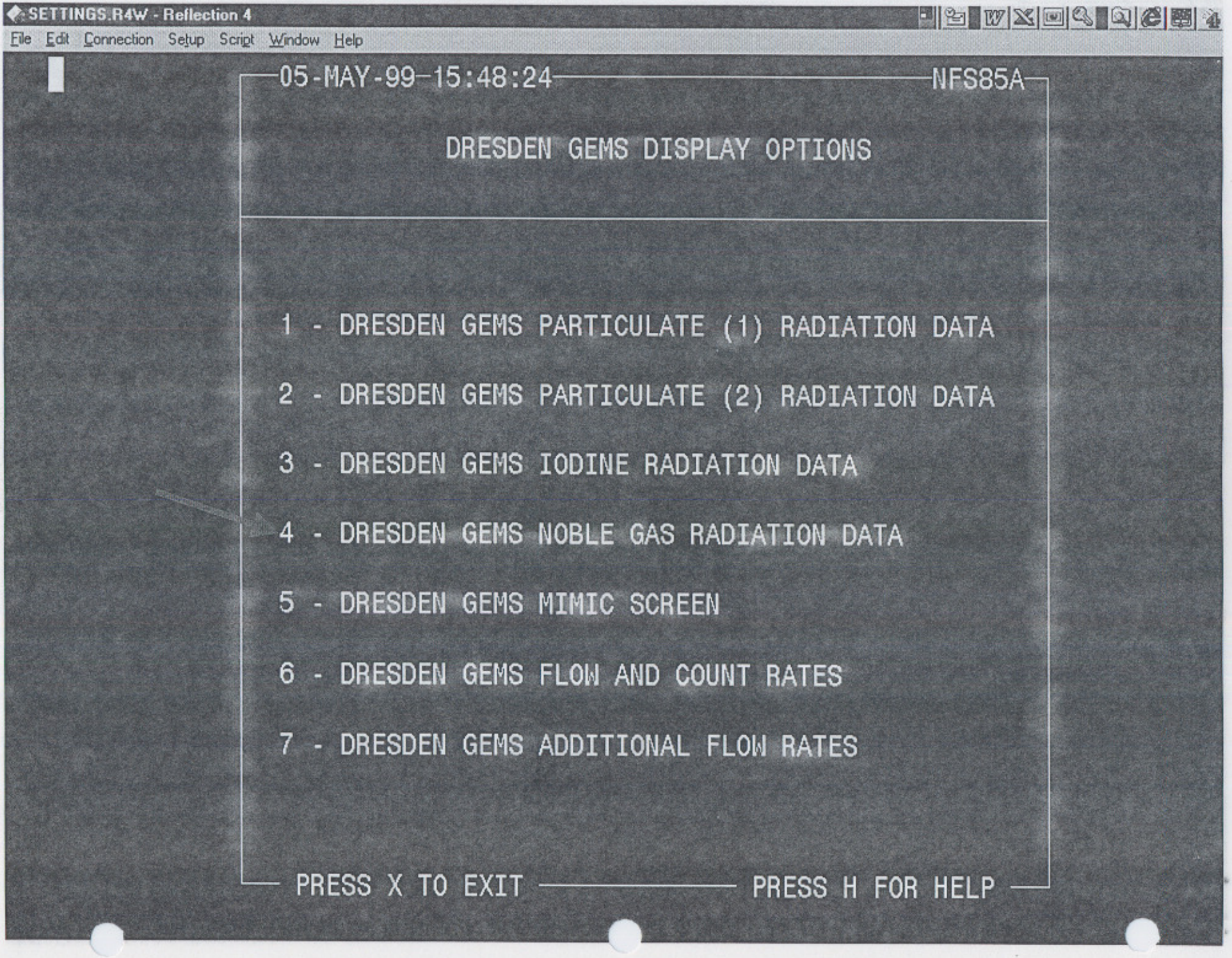
R-S SECTOR	DIR	RADIATION mr/h	HV BATTERY volts	SYS BATTERY volts	STATUS AC PWR	STATUS A/D CONV	STATUS COMM	STATUS CPU	LAST POLLED
A	N	0.0104	307.	13.58	normal	normal	normal	normal	05-May-99 15:38
B	NNE								
C	NE								
D	ENE								
E	E			(LAKE MICHIGAN AREA)					
F	ESE								
G	SE								
H	SSE								
J	S	0.0066	300.	13.93	normal	normal	normal	normal	05-May-99 15:38
K	SSW	0.0070	300.	13.46	normal	normal	normal	normal	05-May-99 15:38
L	SW	0.0086	301.	13.69	normal	normal	normal	normal	05-May-99 15:38
M	WSW	0.0082	301.	13.52	normal	normal	normal	normal	05-May-99 15:38
N	W	0.0080	303.	13.05	normal	normal	normal	normal	05-May-99 15:38
P	WNW	0.0084	301.	14.08	normal	normal	normal	normal	05-May-99 15:38
Q	NW	0.0082	301.	13.68	normal	normal	normal	normal	05-May-99 15:38
R	NNW	0.0078	300.	12.71	normal	normal	normal	normal	05-May-99 15:38

X:EXIT PVGRAPHS. (1) - LLR (2) - HVB (3) - SPSB (4) - ALL GRAPHS H:HELP

M:METRA Q:REUPOLL K:TECH SCHEDULE


SETTINGS.R4W - Reflection 4
File Edit Connection Setup Script Window Help
ZION REUTER STOKES – LOW LEVEL RADIATION
0.01122
0.01000
0.00891
0.00794
0.00708
0.00631
0.00562
0.00501
0.00447
MR/H
7.8 8.4 9.1 9.8 10.4 11.1 11.8 12.4 13.1 13.8 14.4 15.1 15.8
HOURS(5-MAY-99/ 5-MAY-99)


Edit Conn Setup Script Window Help
05-MAY-99 ZION ALARM PANEL 15:42:40
(1)REUTER-STOKES (2)GEMS (3)METEOROLOGY (4)PLANT RADIATION
RADIATION
MIN: OK MAX: OK
HIGH VOLT BATTERY
MIN: OK MAX: OK
SYSTEM BATTERY
MIN: OK MAX: OK
PLUME AT R/S
IS ELEVATED
REUTERS REPORTING
9
UNIT 1 UNIT 2
STK LOW LOW
SYS NON-ISO NON-ISO
LCR: OK BKG: OK
NOBLE GAS
STATUS :Counting
ACT : <MDA
NRG CAL: OK
CHAMBER: LARGE
RPT: 05-May 14:03
IODINES
STATUS :Counting
ACT : <MDA
NRG CAL: OK
CART : 29
RPT: 04-May 19:23
PARTICULATE
STATUS :Counting
ACT : <MDA
NRG CAL: OK
CART : 29
RPT: 04-May 19:22
WIND SPEED
OK
HZN STABILITY
HIGH: STABLE
MID :NAVAIL
LOW :UNSTABLE
VRT STABILITY
UPPER: STABLE
LOWER:NAVAIL
WIND SHEAR
NONE
(7) MESOSCALE
EFFECTS
NO
RAIN? NO
ARM'S UNIT 1 UNIT 2
CNMT OK OK
MAIN STM OK OK
MISC OK BAD
SPINGS (5)
STACK OK OK
CNMT BAD BAD
TSC OK
CTRL RM OK
MISC (5)
CNMT PRG OK OK
MSC VENT
AUX BLDG OK
STM AIR OK OK
(6) SET POINT FILE
77,2
VT400-7 -- Outer Park VAX - Primary REAC (NFS85A)
Compose
Num
Caps


SETTINGS.R4W - Reflection 4
File Edit Connection Setup Script Window Help
05-MAY-99-15:48:24
NFS85A
DRESDEN GEMS DISPLAY OPTIONS
1 - DRESDEN GEMS PARTICULATE (1) RADIATION DATA
2 - DRESDEN GEMS PARTICULATE (2) RADIATION DATA
3 - DRESDEN GEMS IODINE RADIATION DATA
4 - DRESDEN GEMS NOBLE GAS RADIATION DATA
5 - DRESDEN GEMS MIMIC SCREEN
6 - DRESDEN GEMS FLOW AND COUNT RATES
7 - DRESDEN GEMS ADDITIONAL FLOW RATES
PRESS X TO EXIT
PRESS H FOR HELP

File Edit ection Setup Script Window Help

DRESDEN GEMS NOBLE GAS RADIATION

```
LAST ENERGY CALIBRATION: success
COUNT TIME BEGIN  : 05-May-99 13:54
COUNT TIME END    : 05-May-99 14:58
COUNT TIME        :          3753   (SEC)
LOG COUNT RATE    :          35.4   (CPS)
TOT ACT           :        <MDA     (UCI/SEC)
TOT DOSE ASS ACT  :        <MDA     (UCI/SEC)
```

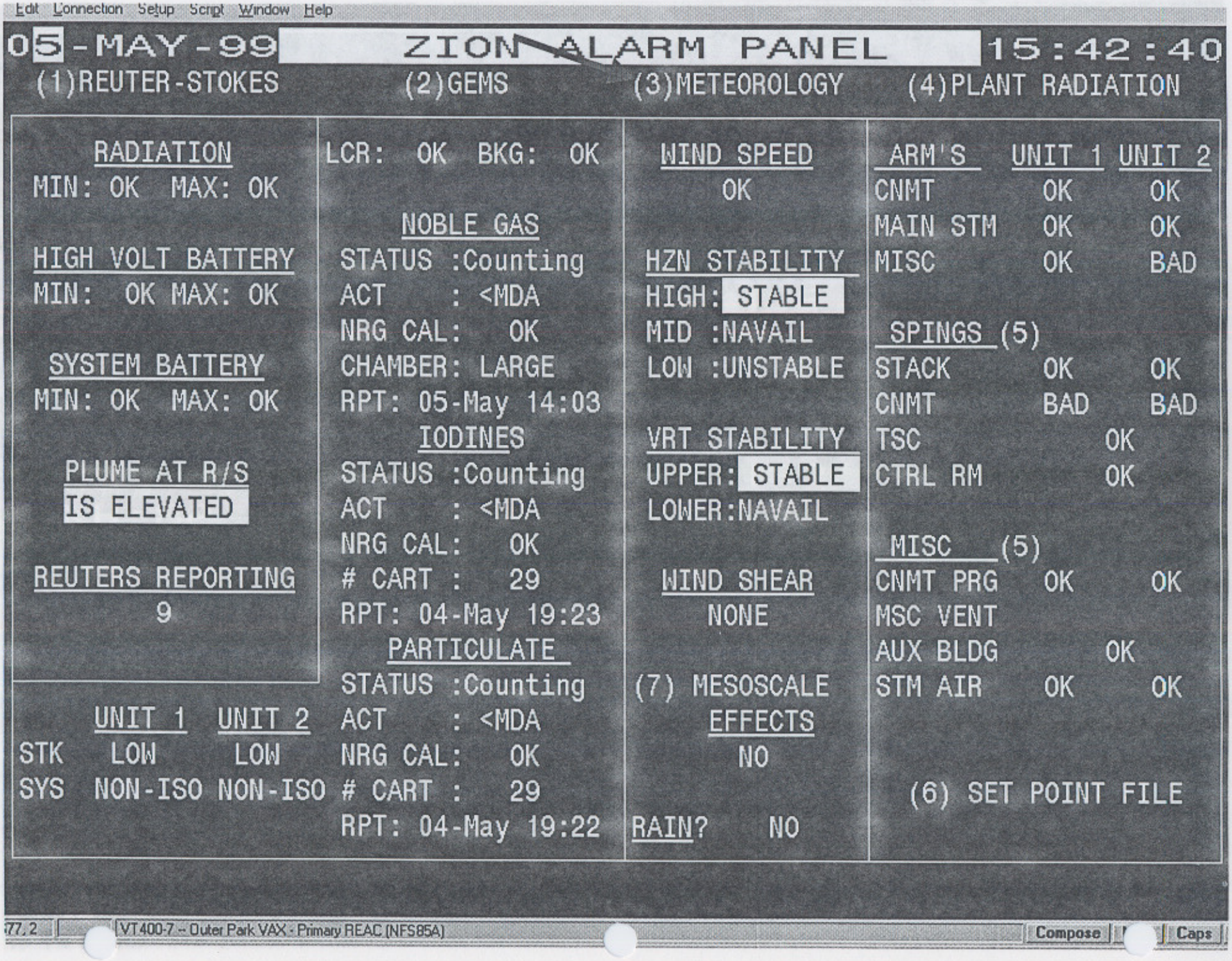
KR-85	:	<MDA	XE-131M	:	<MDA
KR-85M	:	<MDA	XE-133	:	<MDA
KR-87	:	<MDA	XE-133M	:	<MDA
KR-88	:	<MDA	XE-135	:	<MDA
			XE-135M	:	<MDA
AR-41	:	<MDA *	XE-137	:	<MDA
RB-88	:	<MDA *	XE-138	:	<MDA

* NOT INCLUDED IN DOSE ASSESS. TOTAL

```
LAST C/S & BKG COUNT: 05-May-99 11:47
LAST BKG COUNT RATE :          26   (CPS)
```

PRESS X TO EXIT — PRESS H FOR HELP

686, 2 | VT400-7 – Outer Park VAX - Primary REAC (NFS85A) | Compose | Num | Ca


Edit Connection Setup Script Window Help
05-MAY-99 ZION ALARM PANEL 15:42:40
(1)REUTER-STOKES (2)GEMS (3)METEOROLOGY (4)PLANT RADIATION
RADIATION
MIN: OK MAX: OK
HIGH VOLT BATTERY
MIN: OK MAX: OK
SYSTEM BATTERY
MIN: OK MAX: OK
PLUME AT R/S
IS ELEVATED
REUTERS REPORTING
9
UNIT 1 UNIT 2
STK LOW LOW
SYS NON-ISO NON-ISO
LCR: OK BKG: OK
NOBLE GAS
STATUS :Counting
ACT : <MDA
NRG CAL: OK
CHAMBER: LARGE
RPT: 05-May 14:03
IODINES
STATUS :Counting
ACT : <MDA
NRG CAL: OK
CART : 29
RPT: 04-May 19:23
PARTICULATE
STATUS :Counting
ACT : <MDA
NRG CAL: OK
CART : 29
RPT: 04-May 19:22
WIND SPEED
OK
HZN STABILITY
HIGH: STABLE
MID :NAVAIL
LOW :UNSTABLE
VRT STABILITY
UPPER: STABLE
LOWER:NAVAIL
WIND SHEAR
NONE
(7) MESOSCALE
EFFECTS
NO
RAIN? NO
ARM'S UNIT 1 UNIT 2
CNMT OK OK
MAIN STM OK OK
MISC OK BAD
SPINGS (5)
STACK OK OK
CNMT BAD BAD
TSC OK
CTRL RM OK
MISC (5)
CNMT PRG OK OK
MSC VENT
AUX BLDG OK
STM AIR OK OK
(6) SET POINT FILE
77, 2
VT400-7 -- Outer Park VAX - Primary REAC (NFS85A)
Compose
Caps

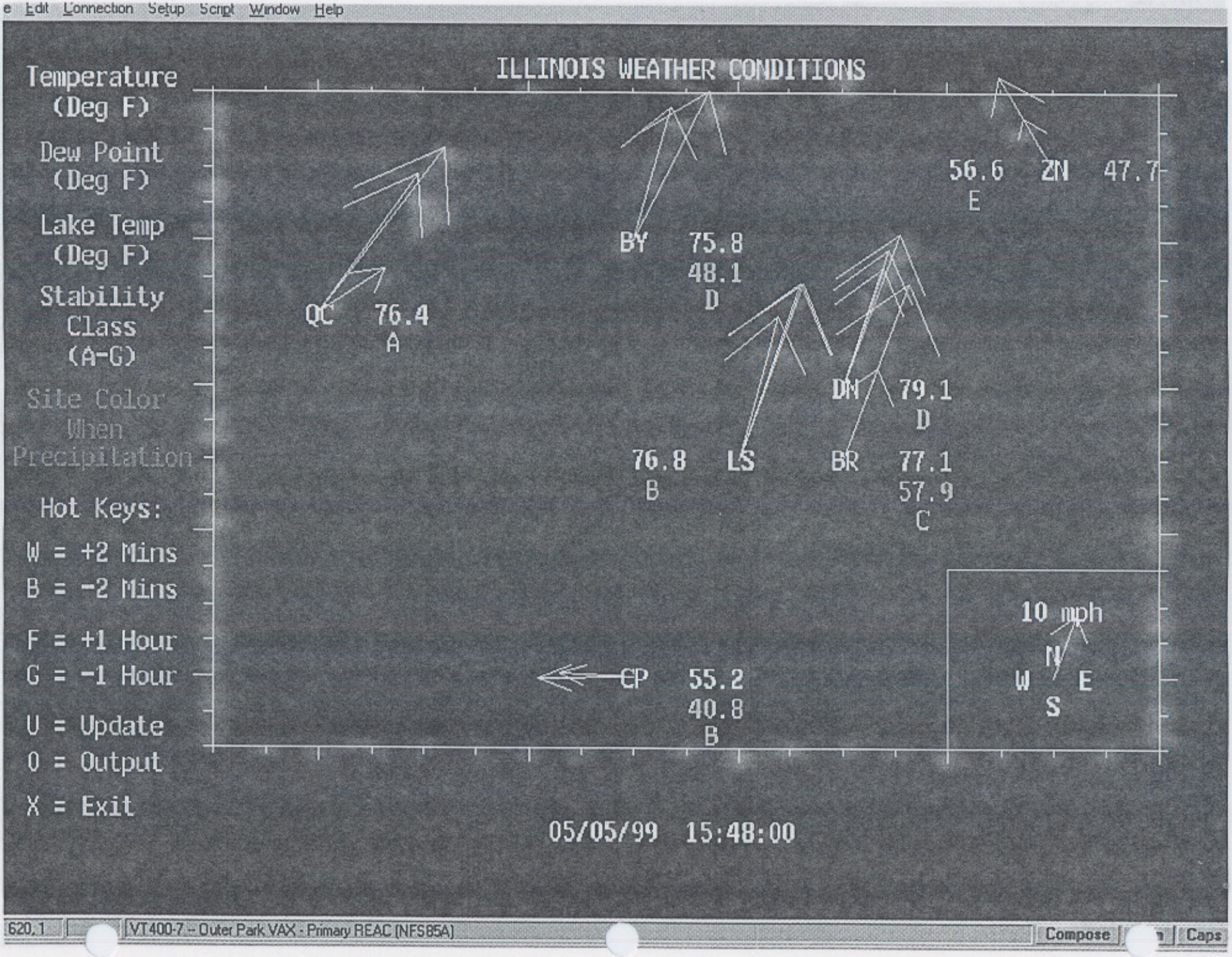
SETTINGS - Reflection 4

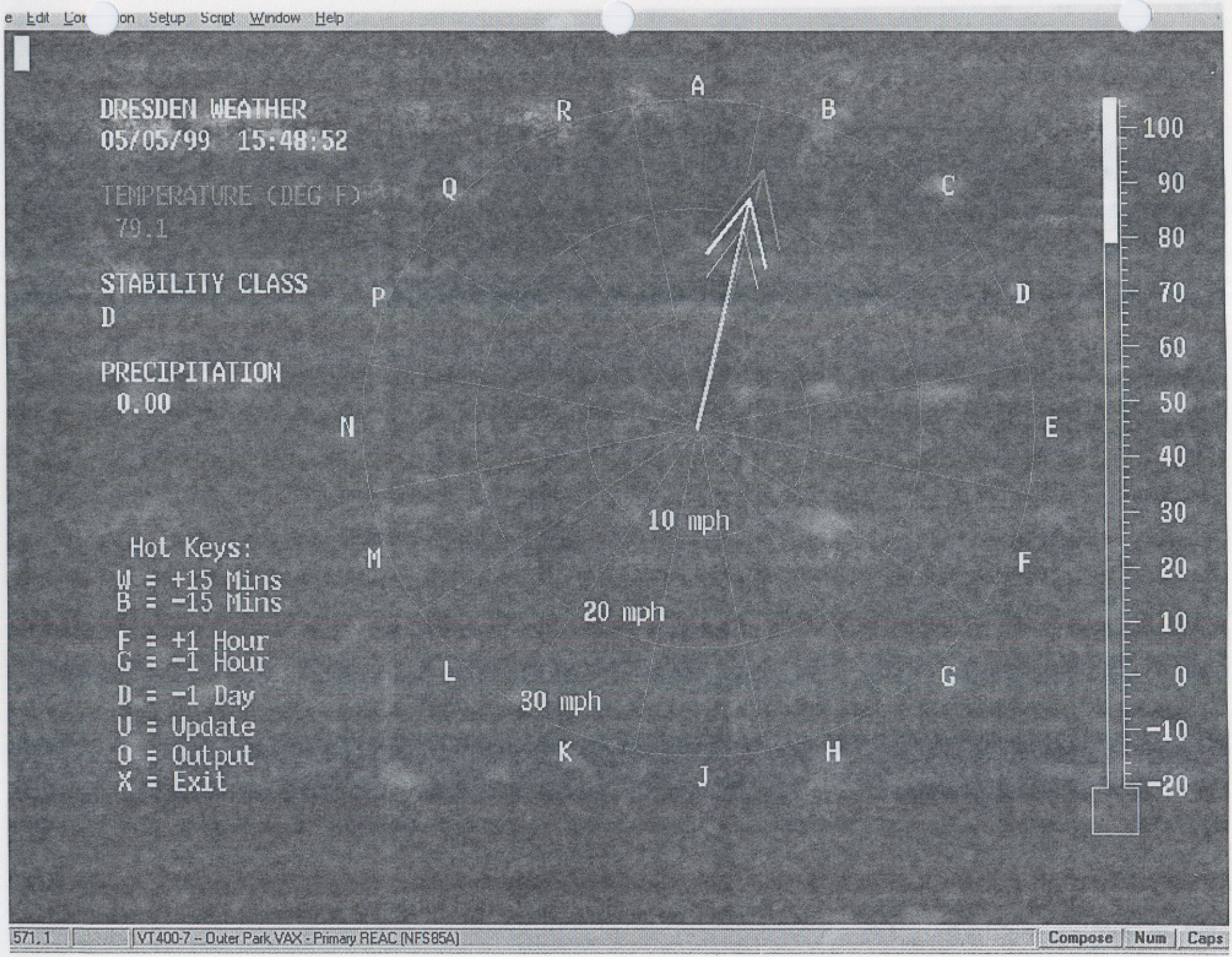
e Edit Connection Setup Script Window Help

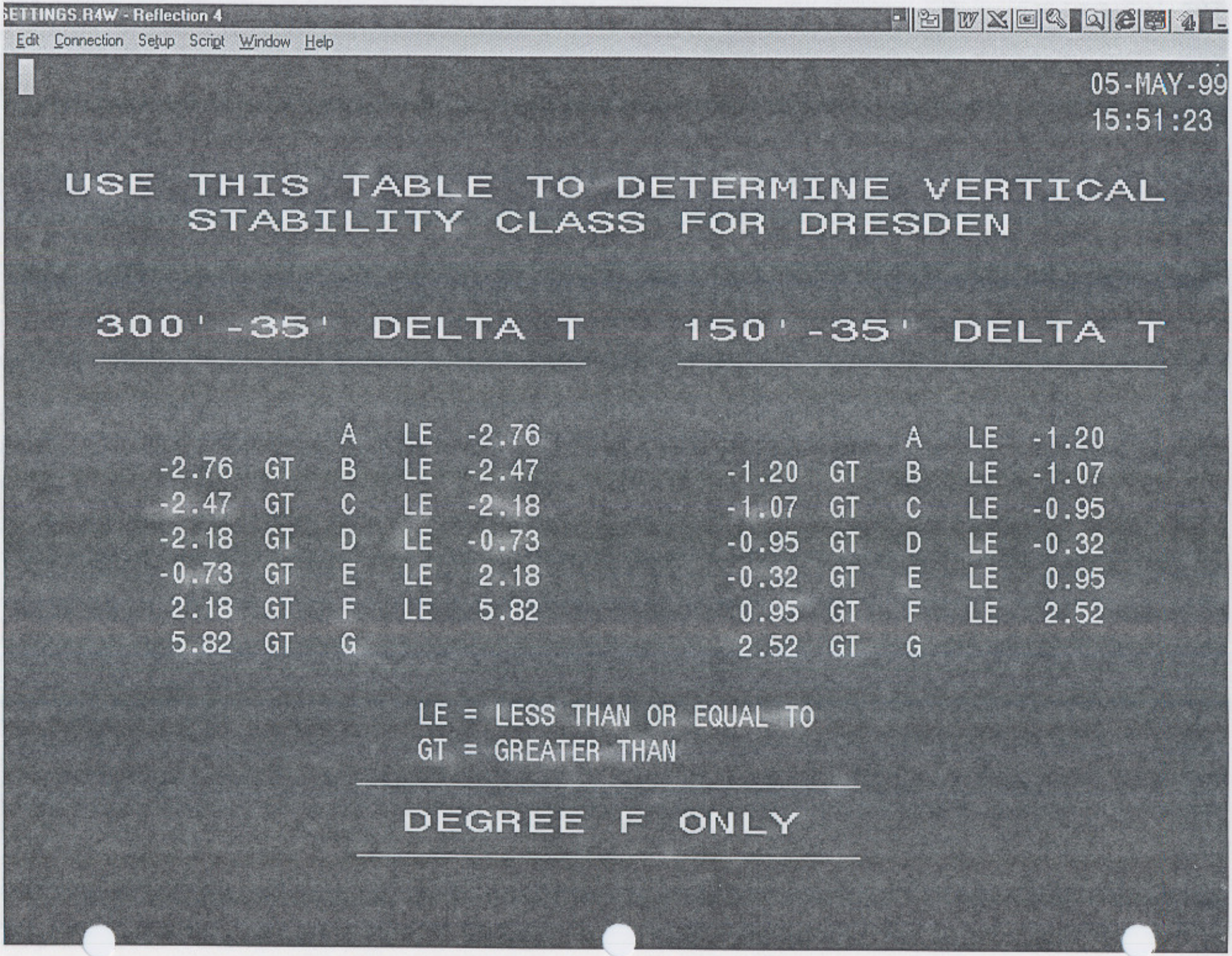
DRESDEN METEOROLOGICAL DISPLAY

05-MAY-99 15:49:39

PRESS X TO EXIT PRESS H FOR HELP	WIND DIRECTION 300' 150' 35'	WIND SPEED 300' 150' 35'	SIGMA THETA 300' 150' 35'	HORZ STAB CLASS 300' 150' 35'	DELTA T'S UPPER LOWER	VERT STAB CLASS UPPER LOWER	TEMPS AMB DEW	RAIN SNOW
ENV POINTS 15 MIN AVERAGES OF RAW RDL DATA	ABC ABC ABC 194.3 191.8 192.2 sect / degrees	24.4 21.1 18.7 [MPH] [M/S] 10.9 9.5 8.3	6.4 8.2 8.4 degree	E D D (3)	-2.03 -0.67 deg f	D D (1)	79.0 ----- deg f deg f	0.00 inches
15 MIN AVERAGES DRESDEN 2 DRESDEN 3 FROM RDL	191.0 193.9 192.7 190.1 193.3 191.7 dgrees	10.8 10.1 8.2 10.9 10.0 8.2 m/sec	9.3 10.9 11.6 9.5 11.1 11.4 dgree (3)		(2) -1.39 -1.06 -1.38 -1.05 c/100 m	SITE GRAPHICS (5)		
1 MIN AVERAGES DRESDEN 2 DRESDEN 3 FROM RDL	194.7 196.3 202.5 194.0 199.4 195.7 dgrees	23.7 22.8 19.0 28.3 25.6 20.6 m.p.h	5.1 5.7 5.4 4.0 3.6 8.3 dgree			ILLINOIS WINDFIELD (4)		
RAW RDL FOR DN2 RAW RDL FOR DN3 RAW RDL FOR DN3	187.6 194.7 206.1 191.2 200.8 197.6 191.2 200.8 197.6 dgrees	22.6 18.9 15.5 27.6 26.2 21.8 27.6 26.2 21.8 m.p.h.			(1) -2.09 -0.65 -2.07 -0.62 -2.09 -0.64 deg. f		79.2 deg. f	0.090 inches


e Edit Connection Setup Script Window Help
ILLINOIS WEATHER CONDITIONS
Temperature (Deg F)
Dew Point (Deg F)
Lake Temp (Deg F)
Stability Class (A-G)
Site Color When Precipitation
Hot Keys:
W = +2 Mins
B = -2 Mins
F = +1 Hour
G = -1 Hour
U = Update
O = Output
X = Exit
QC 76.4 A
BY 75.8 48.1 D
56.6 E
ZN 47.7
DN 79.1 D
76.8 B
LS
BR 77.1 57.9 C
CP 55.2 40.8 B
10 mph
N
W E
S
05/05/99 15:48:00
620,1
VT400-7 - Outer Park VAX - Primary REAC (NFS85A)
Compose
Caps


e Edit Lor on Setup Script Window Help
DRESDEN WEATHER
05/05/99 15:48:52
TEMPERATURE (DEG F)
79.1
STABILITY CLASS
D
PRECIPITATION
0.00
Hot Keys:
W = +15 Mins
B = -15 Mins
F = +1 Hour
G = -1 Hour
D = -1 Day
U = Update
O = Output
X = Exit
A
B
C
D
E
F
G
H
J
K
L
M
N
P
Q
R
10 mph
20 mph
30 mph
100
90
80
70
60
50
40
30
20
10
0
-10
-20
571,1
VT400-7 -- Outer Park VAX - Primary REAC (NFS85A)
Compose
Num
Caps


SETTINGS.R4W - Reflection 4
Edit Connection Setup Script Window Help
05-MAY-99
15:51:23
USE THIS TABLE TO DETERMINE VERTICAL STABILITY CLASS FOR DRESDEN
300'-35' DELTA T
A LE -2.76
-2.76 GT B LE -2.47
-2.47 GT C LE -2.18
-2.18 GT D LE -0.73
-0.73 GT E LE 2.18
2.18 GT F LE 5.82
5.82 GT G
150'-35' DELTA T
A LE -1.20
-1.20 GT B LE -1.07
-1.07 GT C LE -0.95
-0.95 GT D LE -0.32
-0.32 GT E LE 0.95
0.95 GT F LE 2.52
2.52 GT G
LE = LESS THAN OR EQUAL TO
GT = GREATER THAN
DEGREE F ONLY

Edit Connect... Setup Script Window Help

USE THIS TABLE TO DETERMINE VERTICAL STABILITY CLASS IN C/100M

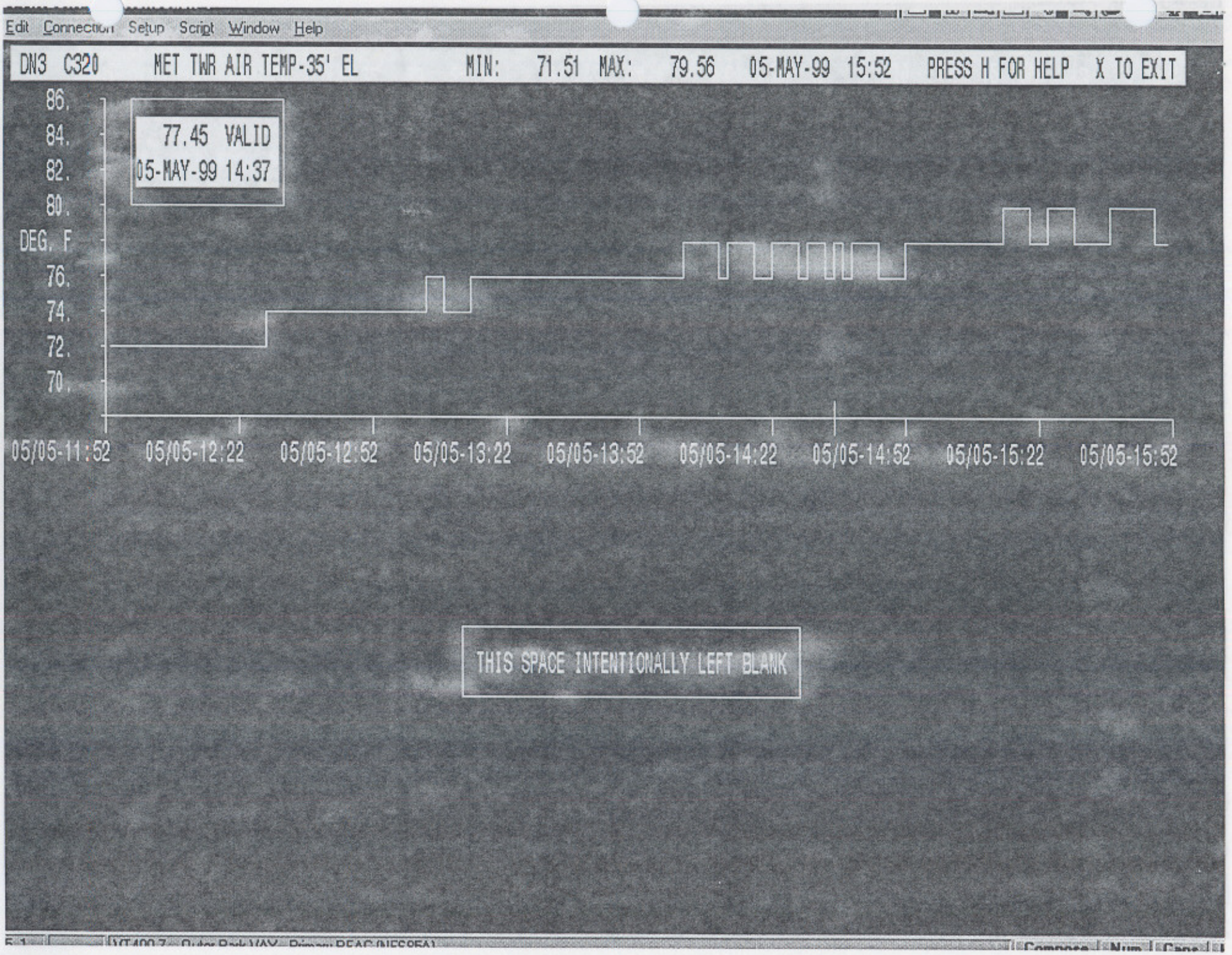
		A	≤	-1.90
-1.90	<	B	≤	-1.70
-1.70	<	C	≤	-1.50
-1.50	<	D	≤	-0.50
-0.50	<	E	≤	1.50
1.50	<	F	≤	4.00
4.00	<	G		

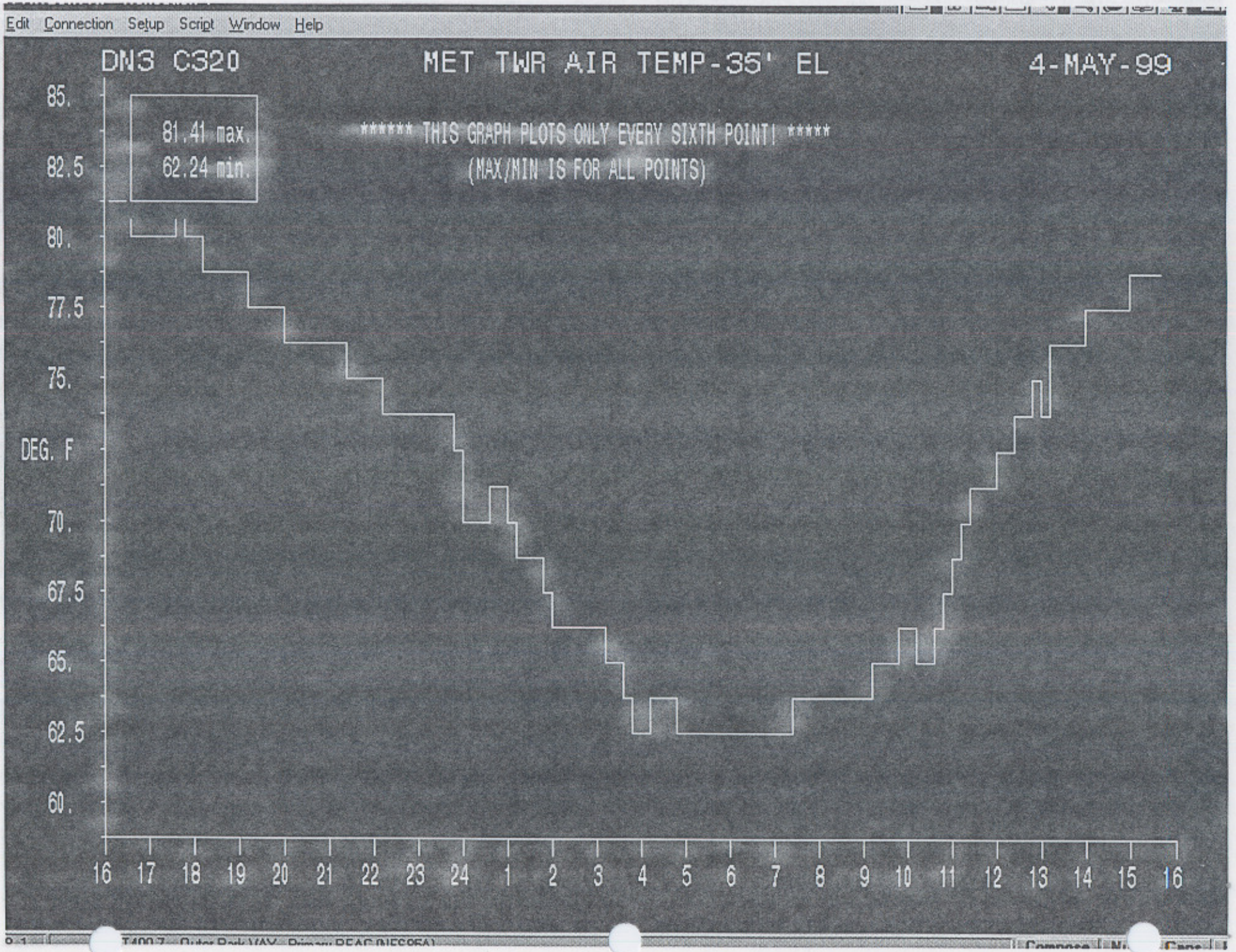
DEGREE C/100M ONLY

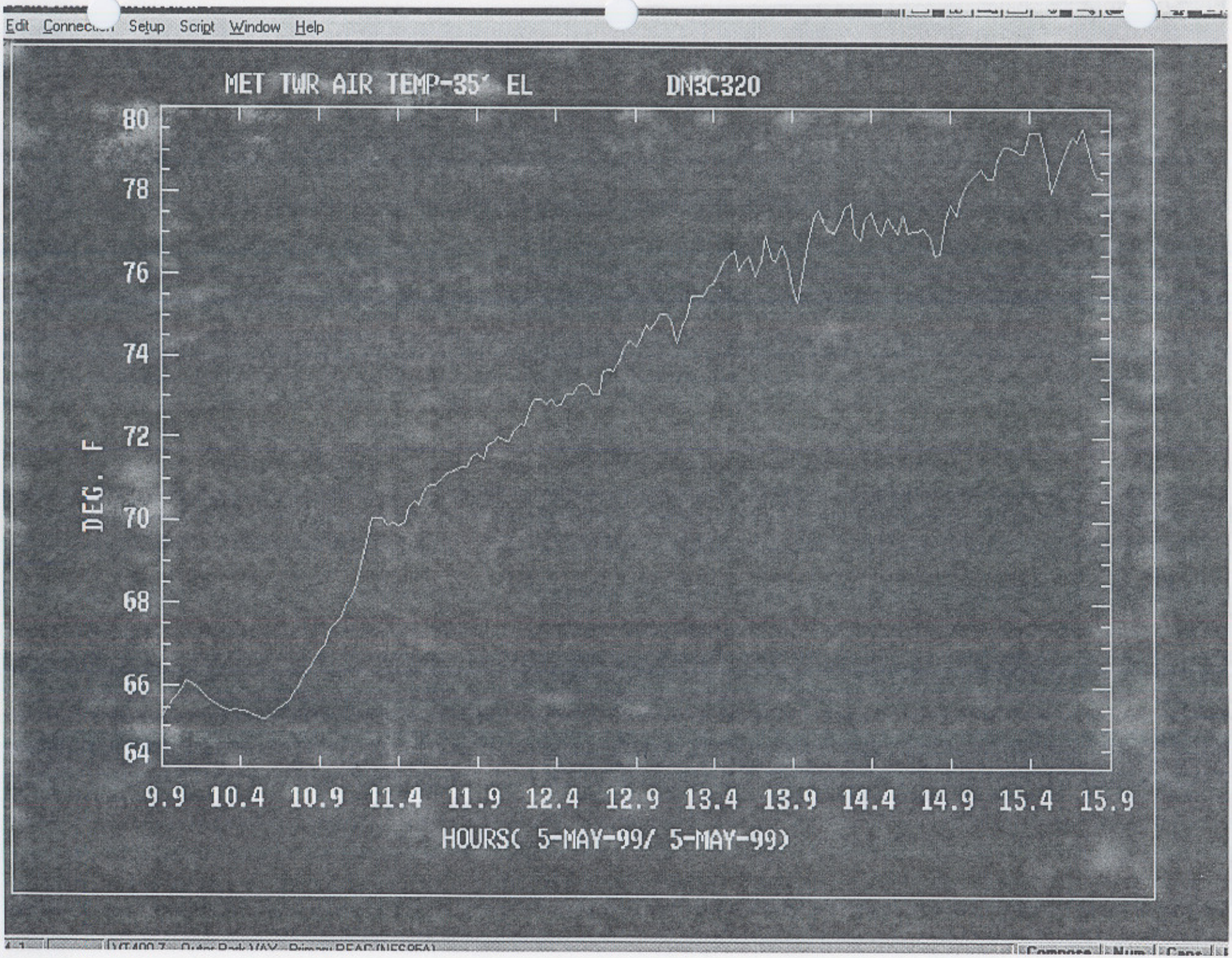
Edit Connection Setup Script Window Help

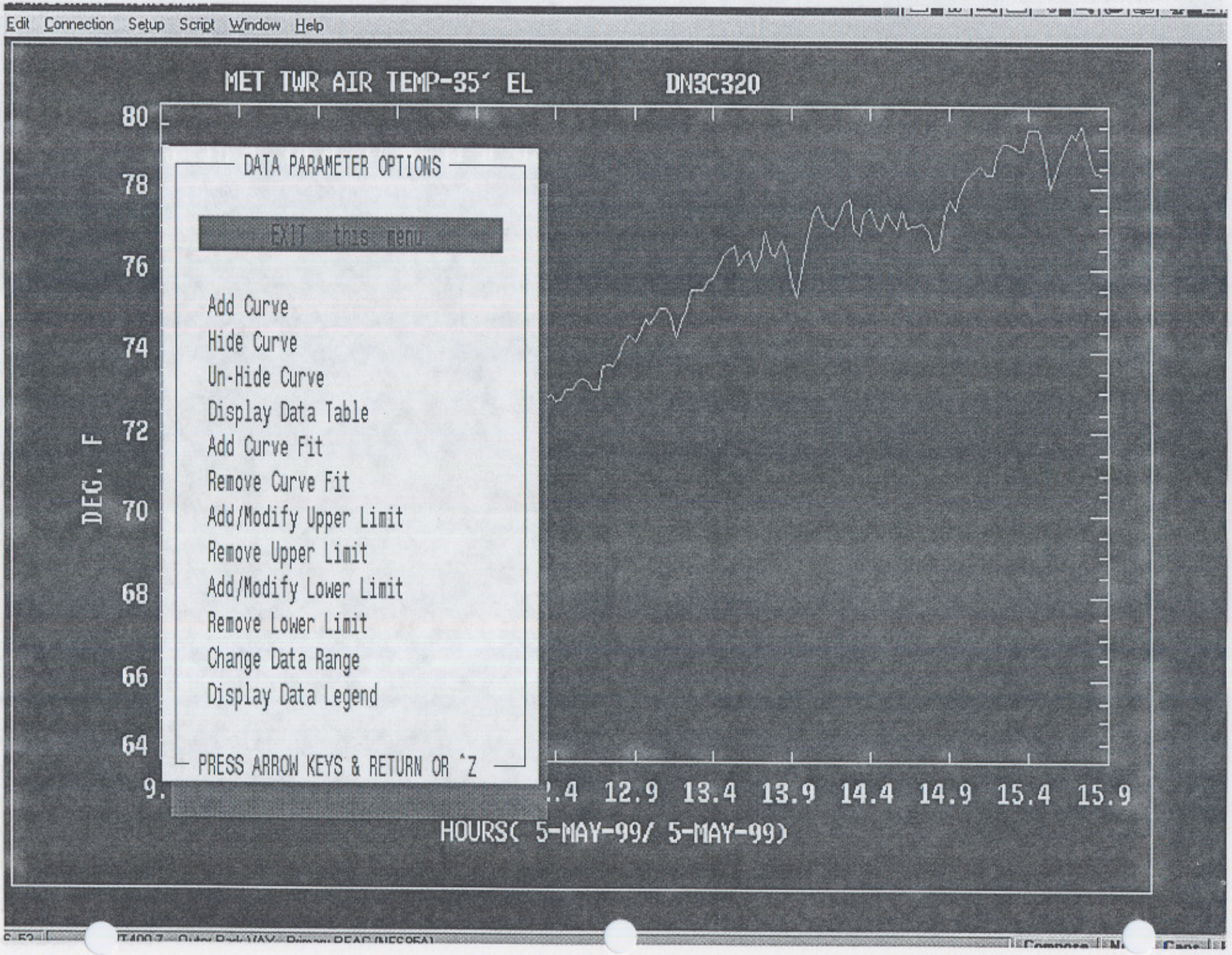
USE THIS TABLE TO DETERMINE HORIZONTAL STABILITY CLASS

		A	≤	22.5
22.5	<	B	≤	17.5
17.5	<	C	≤	12.5
12.5	<	D	≤	7.5
7.5	<	E	≤	3.8
3.8	<	F	≤	2.1
2.1	<	G		

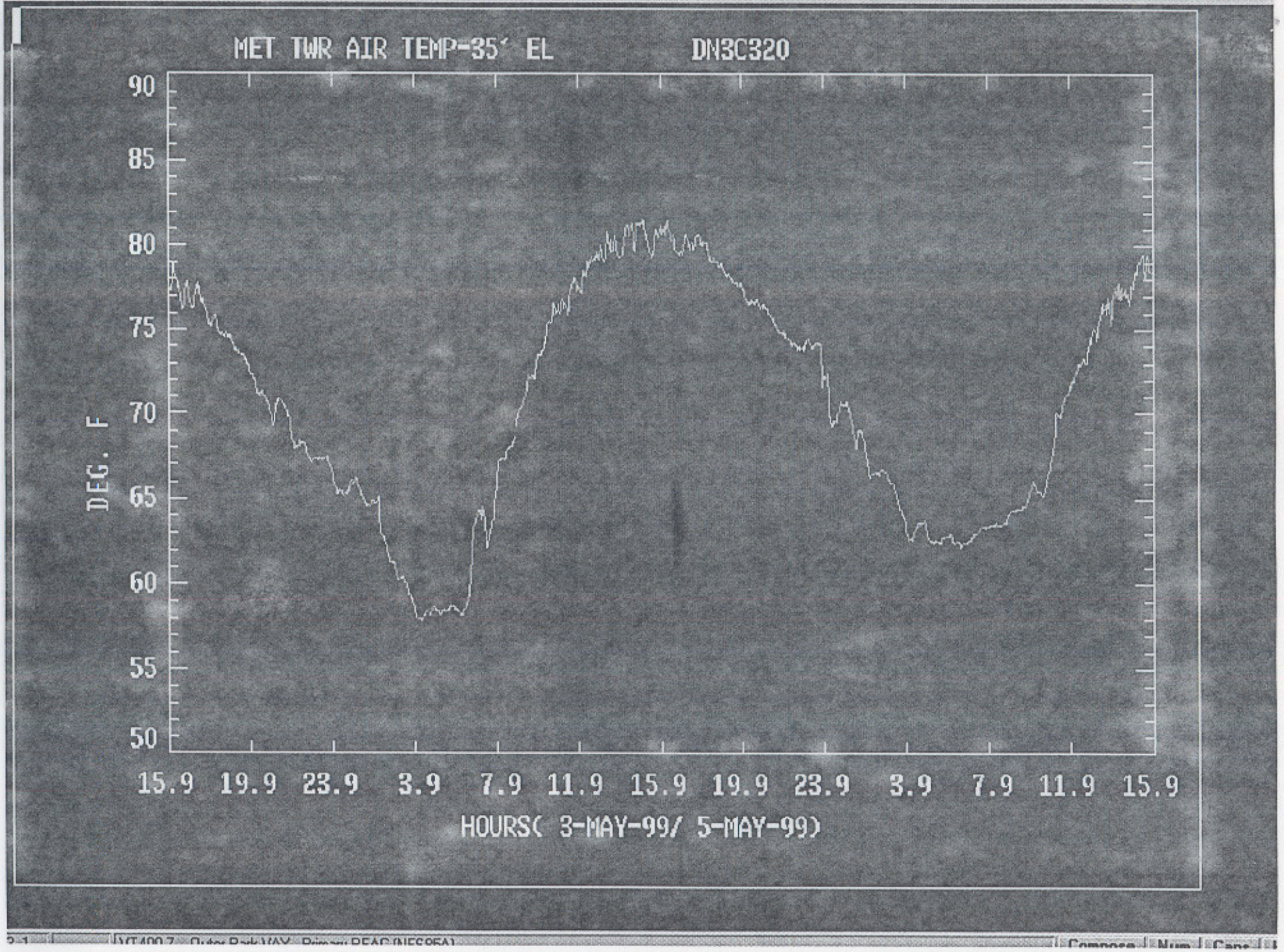

Edit Connection Setup Script Window Help
DN3 C320 MET TWR AIR TEMP-35' EL MIN: 71.51 MAX: 79.56 05-MAY-99 15:52 PRESS H FOR HELP X TO EXIT
86.
84.
82.
80.
DEG. F
76.
74.
72.
70.
77.45 VALID
05-MAY-99 14:37
05/05-11:52
05/05-12:22
05/05-12:52
05/05-13:22
05/05-13:52
05/05-14:22
05/05-14:52
05/05-15:22
05/05-15:52
THIS SPACE INTENTIONALLY LEFT BLANK

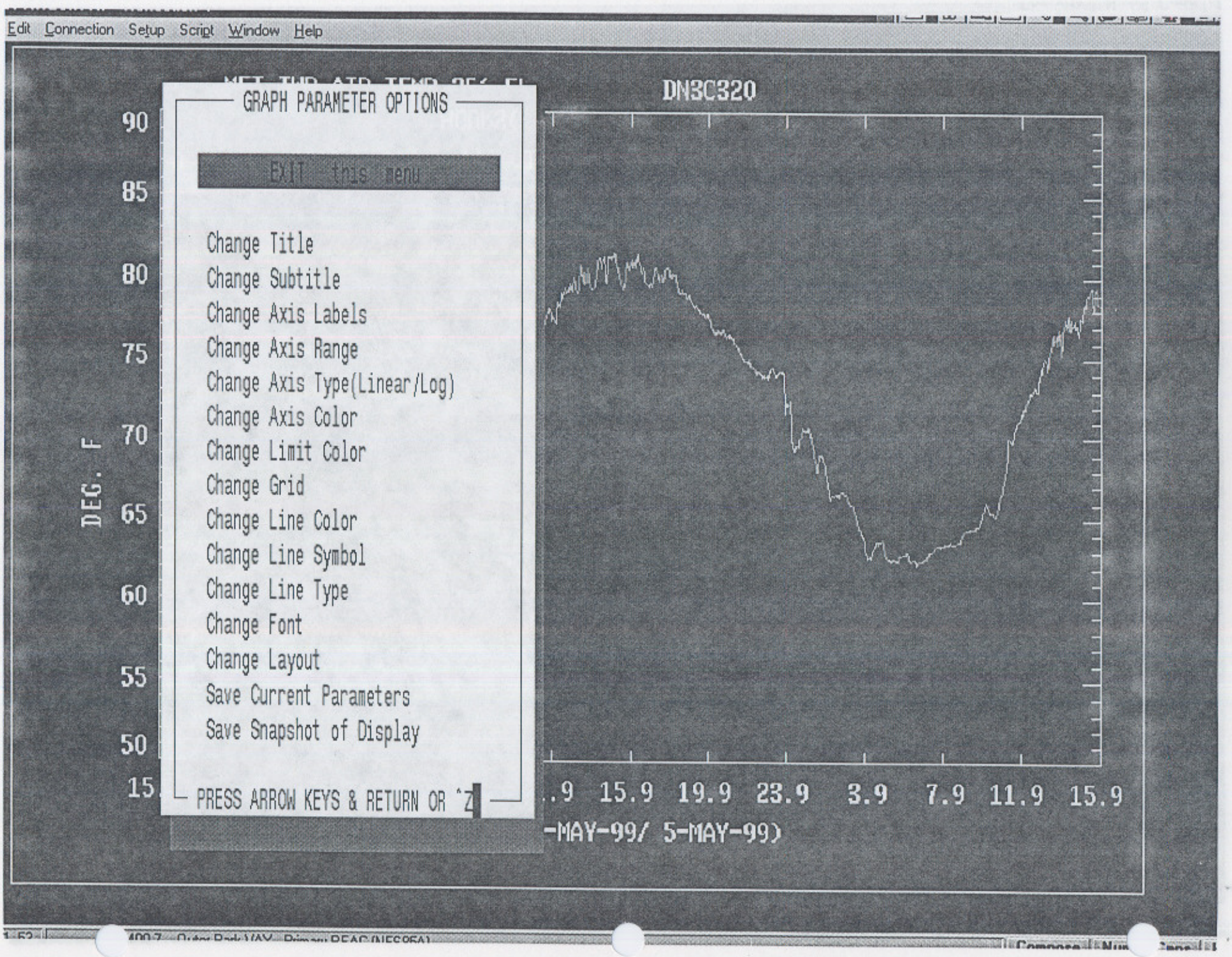

Edit Connection Setup Script Window Help
DN3 C320
MET TWR AIR TEMP-35' EL
4-MAY-99
81.41 max.
62.24 min.
***** THIS GRAPH PLOTS ONLY EVERY SIXTH POINT! *****
(MAX/MIN IS FOR ALL POINTS)
85.
82.5
80.
77.5
75.
DEG. F
70.
67.5
65.
62.5
60.
16 17 18 19 20 21 22 23 24 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

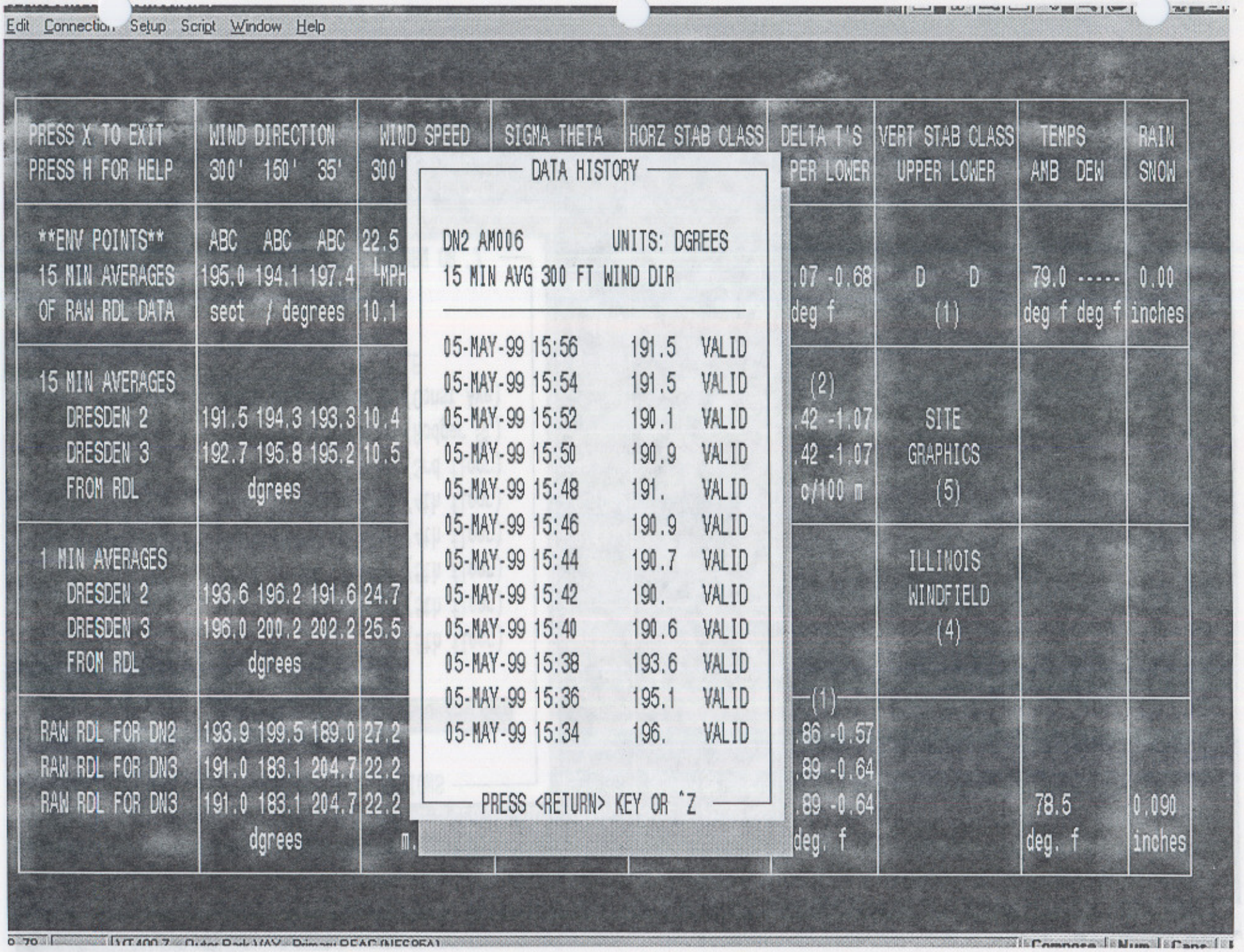

Edit Connection Setup Script Window Help
MET TWR AIR TEMP-35' EL
DN3C320
DEG. F
80
78
76
74
72
70
68
66
64
9.9 10.4 10.9 11.4 11.9 12.4 12.9 13.4 13.9 14.4 14.9 15.4 15.9
HOURS(5-MAY-99/ 5-MAY-99)

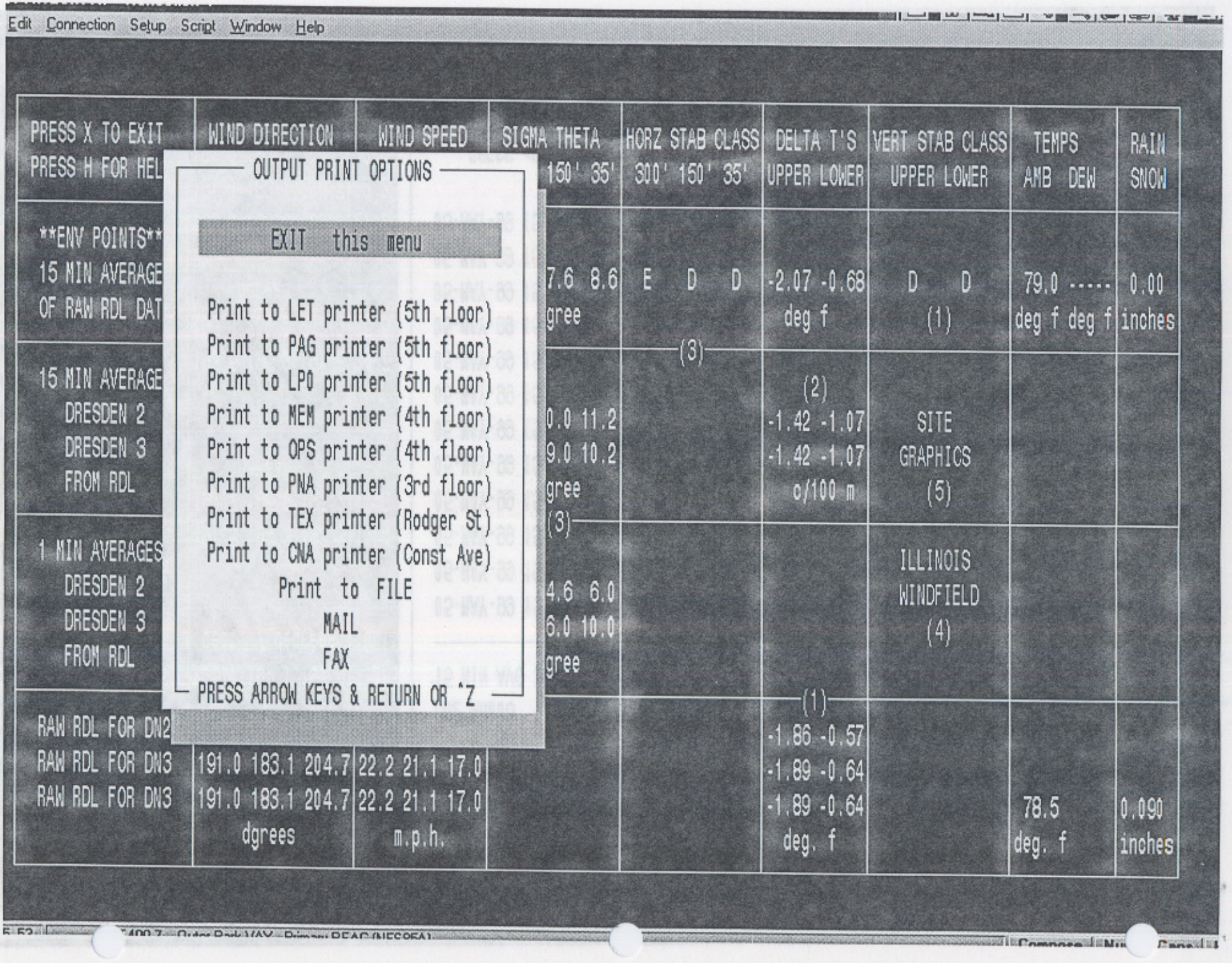

Edit Connection Setup Script Window Help
MET TWR AIR TEMP-35' EL
DN3C320
DATA PARAMETER OPTIONS
EXIT this menu
Add Curve
Hide Curve
Un-Hide Curve
Display Data Table
Add Curve Fit
Remove Curve Fit
Add/Modify Upper Limit
Remove Upper Limit
Add/Modify Lower Limit
Remove Lower Limit
Change Data Range
Display Data Legend
PRESS ARROW KEYS & RETURN OR ^Z
DEG. F
80
78
76
74
72
70
68
66
64
9.
12.9 13.4 13.9 14.4 14.9 15.4 15.9
HOURS(5-MAY-99/ 5-MAY-99)

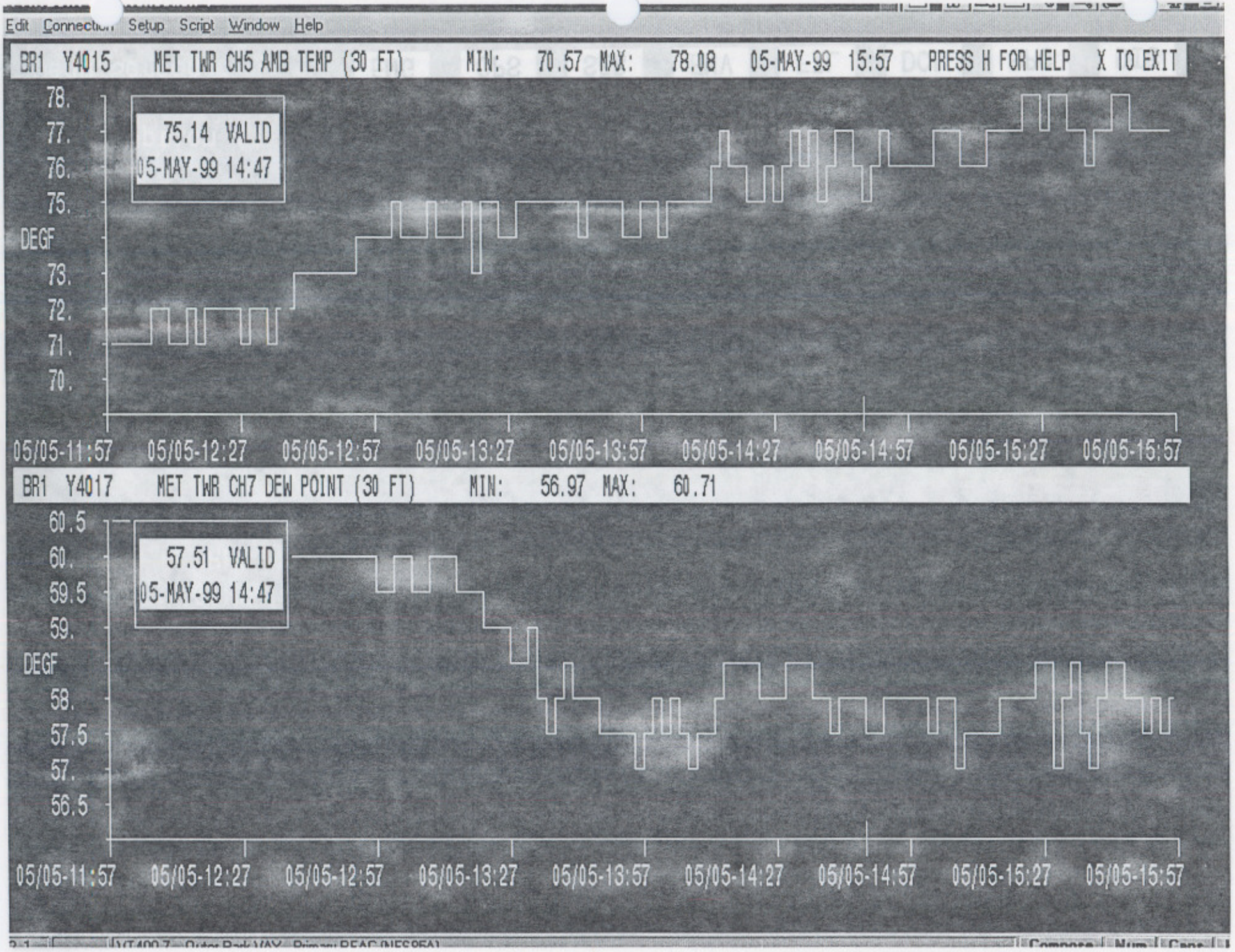
Edit Connection Setup Script Window Help

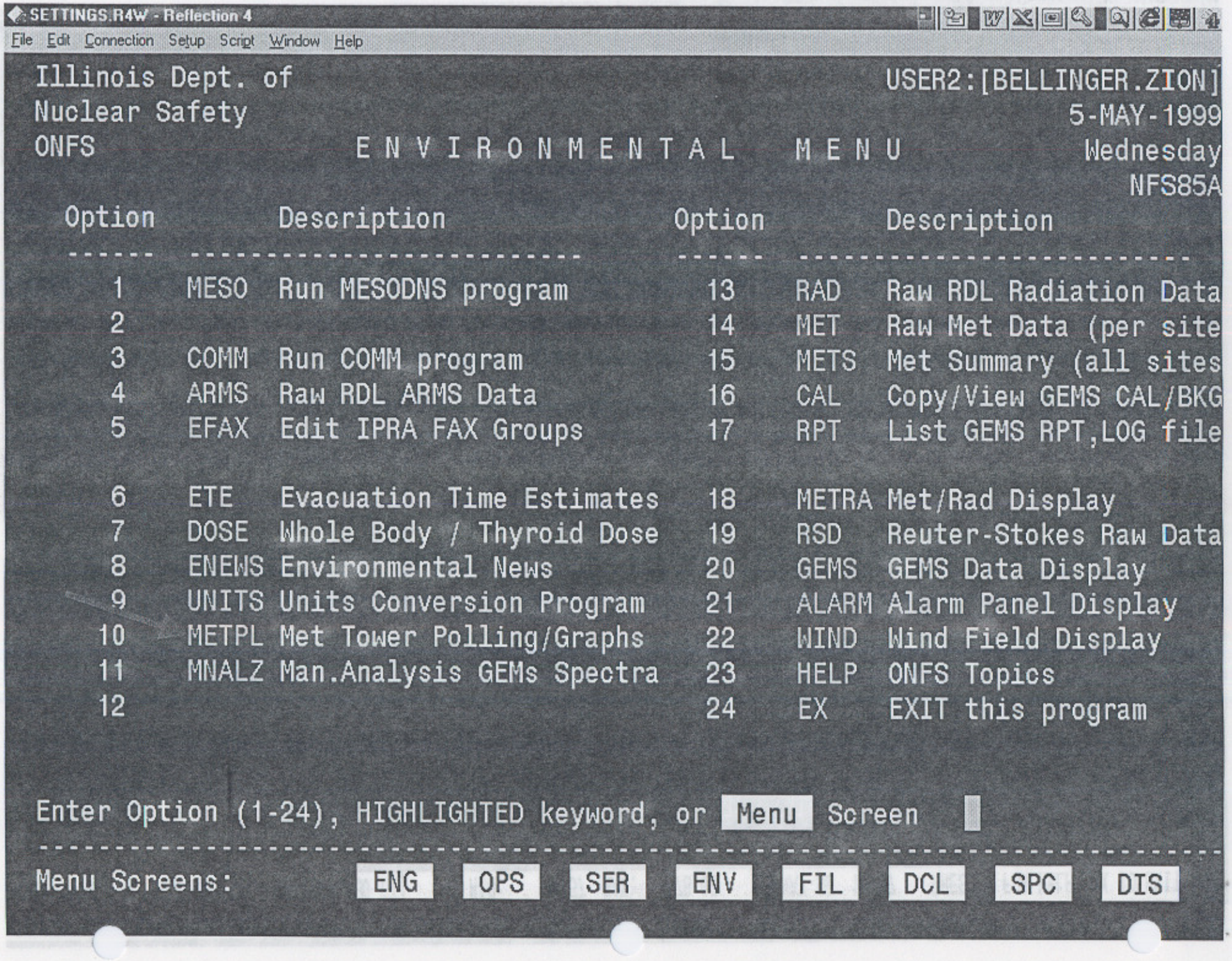


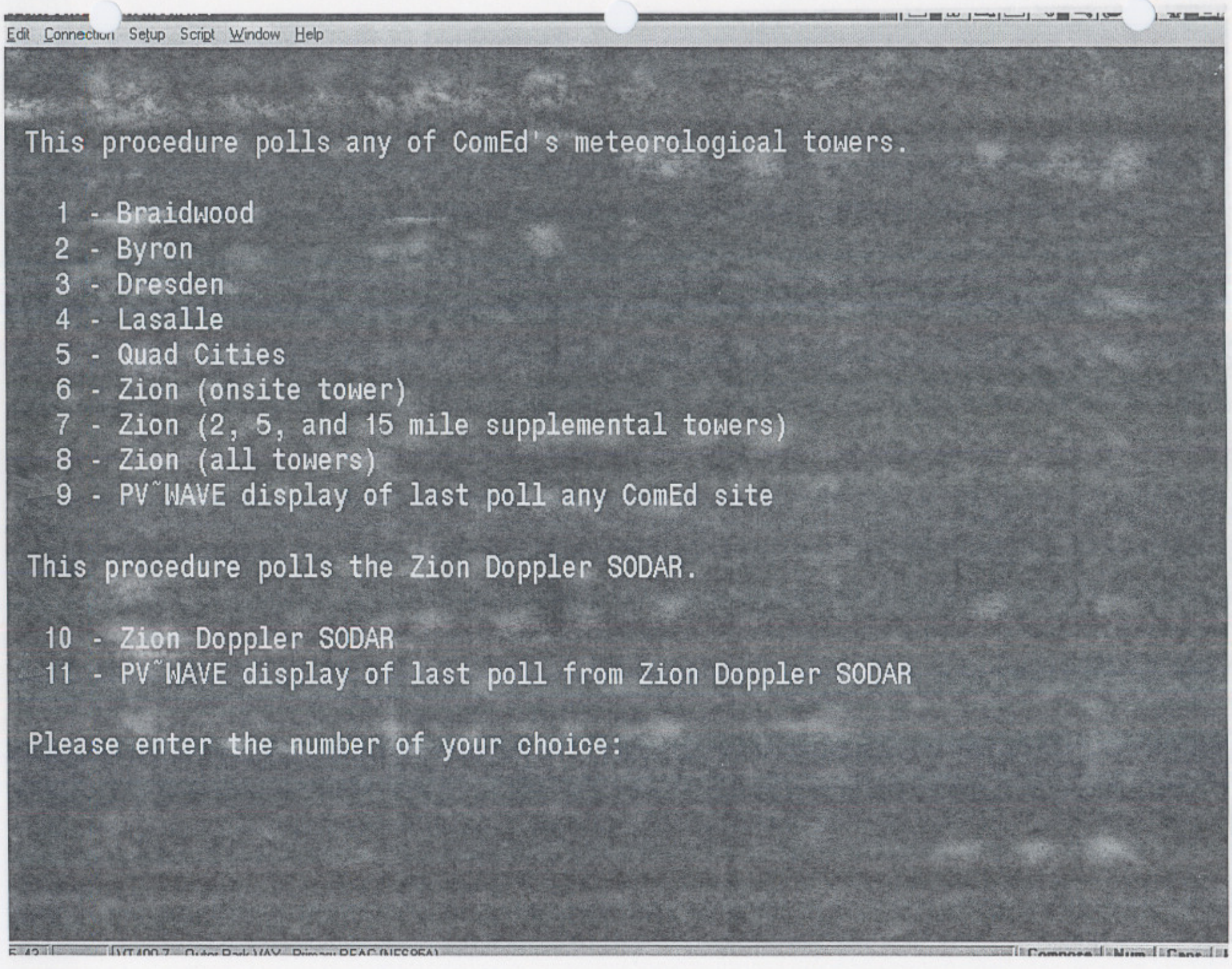

Edit Connection Setup Script Window Help
GRAPH PARAMETER OPTIONS
EXIT this menu
Change Title
Change Subtitle
Change Axis Labels
Change Axis Range
Change Axis Type(Linear/Log)
Change Axis Color
Change Limit Color
Change Grid
Change Line Color
Change Line Symbol
Change Line Type
Change Font
Change Layout
Save Current Parameters
Save Snapshot of Display
PRESS ARROW KEYS & RETURN OR ^Z
DN3C320
DEG. F
90
85
80
75
70
65
60
55
50
15
.9 15.9 19.9 23.9 3.9 7.9 11.9 15.9
-MAY-99/ 5-MAY-99)


Edit Connection Setup Script Window Help
PRESS X TO EXIT
PRESS H FOR HELP
WIND DIRECTION
300' 150' 35'
WIND SPEED
300'
SIGNA THETA
HORZ STAB CLASS
DELTA T'S
PER LOWER
VERT STAB CLASS
UPPER LOWER
TEMPS
AMB DEW
RAIN
SNOW
ENV POINTS
15 MIN AVERAGES
OF RAW RDL DATA
ABC ABC ABC
195.0 194.1 197.4
sect / degrees
22.5
MPH
10.1
.07 -0.68
deg f
D D
(1)
79.0 -----
deg f deg f
0.00
inches
15 MIN AVERAGES
DRESDEN 2
DRESDEN 3
FROM RDL
191.5 194.3 193.3 10.4
192.7 195.8 195.2 10.5
dgrees
(2)
.42 -1.07
.42 -1.07
c/100 m
SITE
GRAPHICS
(5)
1 MIN AVERAGES
DRESDEN 2
DRESDEN 3
FROM RDL
193.6 196.2 191.6 24.7
196.0 200.2 202.2 25.5
dgrees
ILLINOIS
WINDFIELD
(4)
RAW RDL FOR DN2
RAW RDL FOR DN3
RAW RDL FOR DN3
193.9 199.5 189.0 27.2
191.0 183.1 204.7 22.2
191.0 183.1 204.7 22.2
dgrees
m.
(1)
.86 -0.57
.89 -0.64
.89 -0.64
deg. f
78.5
deg. f
0.090
inches
DATA HISTORY
DN2 AM006 UNITS: DGREES
15 MIN AVG 300 FT WIND DIR
05-MAY-99 15:56 191.5 VALID
05-MAY-99 15:54 191.5 VALID
05-MAY-99 15:52 190.1 VALID
05-MAY-99 15:50 190.9 VALID
05-MAY-99 15:48 191. VALID
05-MAY-99 15:46 190.9 VALID
05-MAY-99 15:44 190.7 VALID
05-MAY-99 15:42 190. VALID
05-MAY-99 15:40 190.6 VALID
05-MAY-99 15:38 193.6 VALID
05-MAY-99 15:36 195.1 VALID
05-MAY-99 15:34 196. VALID
PRESS <RETURN> KEY OR ^Z


Edit Connection Setup Script Window Help
PRESS X TO EXIT
PRESS H FOR HEL
WIND DIRECTION
WIND SPEED
SIGMA THETA
150' 35'
HORZ STAB CLASS
300' 150' 35'
DELTA T'S
UPPER LOWER
VERT STAB CLASS
UPPER LOWER
TEMPS
AMB DEW
RAIN
SNOW
OUTPUT PRINT OPTIONS
EXIT this menu
Print to LET printer (5th floor)
Print to PAG printer (5th floor)
Print to LPO printer (5th floor)
Print to MEM printer (4th floor)
Print to OPS printer (4th floor)
Print to PNA printer (3rd floor)
Print to TEX printer (Rodger St)
Print to CNA printer (Const Ave)
Print to FILE
MAIL
FAX
PRESS ARROW KEYS & RETURN OR ^Z
ENV POINTS
15 MIN AVERAGE
OF RAW RDL DAT
7.6 8.6
gree
E D D
(3)
-2.07 -0.68
deg f
D D
(1)
79.0 -----
deg f deg f
0.00
inches
15 MIN AVERAGE
DRESDEN 2
DRESDEN 3
FROM RDL
0.0 11.2
9.0 10.2
gree
(3)
(2)
-1.42 -1.07
-1.42 -1.07
c/100 m
SITE
GRAPHICS
(5)
1 MIN AVERAGES
DRESDEN 2
DRESDEN 3
FROM RDL
4.6 6.0
6.0 10.0
gree
ILLINOIS
WINDFIELD
(4)
RAW RDL FOR DN2
RAW RDL FOR DN3
RAW RDL FOR DN3
191.0 183.1 204.7
191.0 183.1 204.7
dgrees
22.2 21.1 17.0
22.2 21.1 17.0
m.p.h.
(1)
-1.86 -0.57
-1.89 -0.64
-1.89 -0.64
deg. f
78.5
deg. f
0.090
inches


Edit Connection Setup Script Window Help
BR1 Y4015 MET TWR CH5 AMB TEMP (30 FT) MIN: 70.57 MAX: 78.08 05-MAY-99 15:57 PRESS H FOR HELP X TO EXIT
78.
77.
76.
75.
DEGF
73.
72.
71.
70.
75.14 VALID
05-MAY-99 14:47
05/05-11:57
05/05-12:27
05/05-12:57
05/05-13:27
05/05-13:57
05/05-14:27
05/05-14:57
05/05-15:27
05/05-15:57
BR1 Y4017 MET TWR CH7 DEW POINT (30 FT) MIN: 56.97 MAX: 60.71
60.5
60.
59.5
59.
DEGF
58.
57.5
57.
56.5
57.51 VALID
05-MAY-99 14:47
05/05-11:57
05/05-12:27
05/05-12:57
05/05-13:27
05/05-13:57
05/05-14:27
05/05-14:57
05/05-15:27
05/05-15:57


SETTINGS.R4W - Reflection 4
File Edit Connection Setup Script Window Help
Illinois Dept. of
Nuclear Safety
ONFS
USER2:[BELLINGER.ZION]
5-MAY-1999
Wednesday
NFS85A
E N V I R O N M E N T A L M E N U
Option Description Option Description
1 MESO Run MESODNS program
2
3 COMM Run COMM program
4 ARMS Raw RDL ARMS Data
5 EFAX Edit IPRA FAX Groups
6 ETE Evacuation Time Estimates
7 DOSE Whole Body / Thyroid Dose
8 ENEWS Environmental News
9 UNITS Units Conversion Program
10 METPL Met Tower Polling/Graphs
11 MNALZ Man.Analysis GEMs Spectra
12
13 RAD Raw RDL Radiation Data
14 MET Raw Met Data (per site
15 METS Met Summary (all sites
16 CAL Copy/View GEMS CAL/BKG
17 RPT List GEMS RPT,LOG file
18 METRA Met/Rad Display
19 RSD Reuter-Stokes Raw Data
20 GEMS GEMS Data Display
21 ALARM Alarm Panel Display
22 WIND Wind Field Display
23 HELP ONFS Topics
24 EX EXIT this program
Enter Option (1-24), HIGHLIGHTED keyword, or Menu Screen
Menu Screens: ENG OPS SER ENV FIL DCL SPC DIS

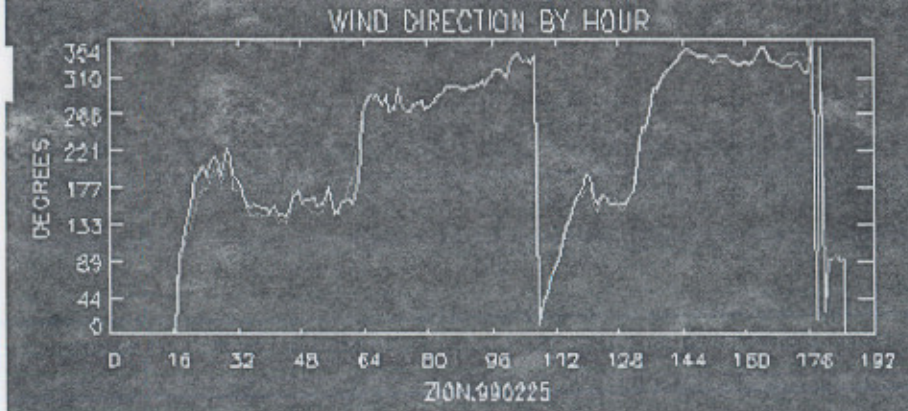

Edit Connection Setup Script Window Help
This procedure polls any of ComEd's meteorological towers.
1 - Braidwood
2 - Byron
3 - Dresden
4 - Lasalle
5 - Quad Cities
6 - Zion (onsite tower)
7 - Zion (2, 5, and 15 mile supplemental towers)
8 - Zion (all towers)
9 - PV˜WAVE display of last poll any ComEd site
This procedure polls the Zion Doppler SODAR.
10 - Zion Doppler SODAR
11 - PV˜WAVE display of last poll from Zion Doppler SODAR
Please enter the number of your choice:

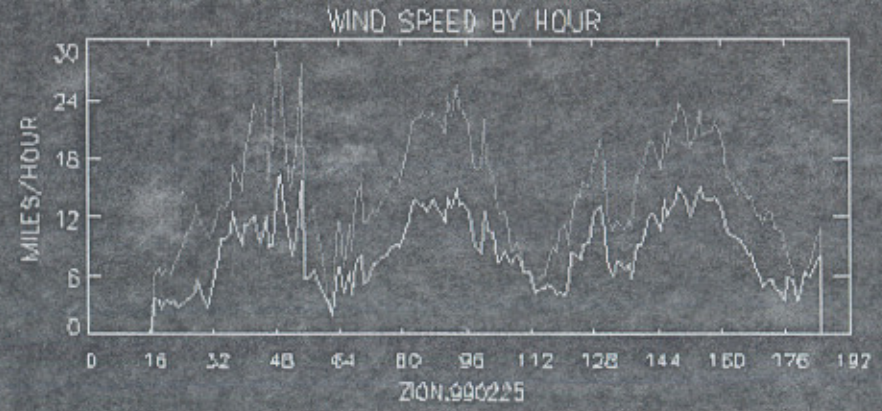
Edit Connection Setup Script Window Help

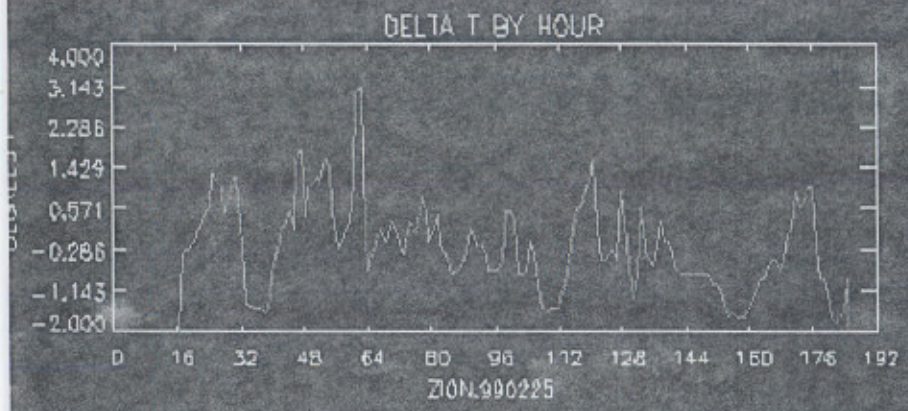
HEIGHT	HORIZONTAL WINDS	DIR	M/S	VERTICAL WINDS	HEIGHT
600m		********		-0.6	600m
570m		********		-0.4	570m
540m		********		-0.3	540m
510m		********		-0.4	510m
480m		********		-0.4	480m
450m	→	********		******	450m
420m	→	********		-0.4	420m
390m	→	********		-0.4	390m
360m	→	********		-0.4	360m
330m	→	********		-0.4	330m
300m	→ → →	252	6.9	-0.4	300m
270m	→ → → →	258	7.1	-0.3	270m
240m	→ → → →	255	6.4	-0.3	240m
210m	→ → → →	247	5.9	-0.2	210m
180m	→ → → →	242	5.3	-0.2	180m
150m	→ → →	********		-0.3	150m
120m	→ → → →	226	5.3	-0.2	120m
90m	→ → → →	225	4.6	-0.2	90m
60m	→ → → →	223	3.9	-0.2	60m
10m	→ → → →	222	1.7	-0.1	10m

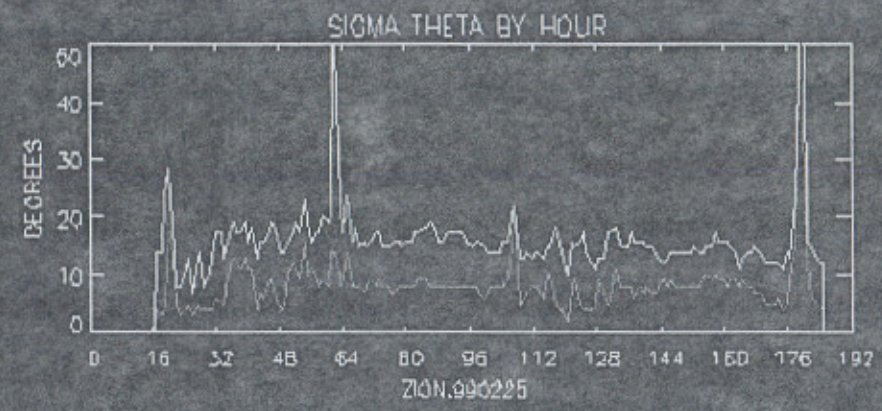
CURRENT DOPPLER SODAR DATA FROM 08/24 14:00 TO 08/24 15:00 CST

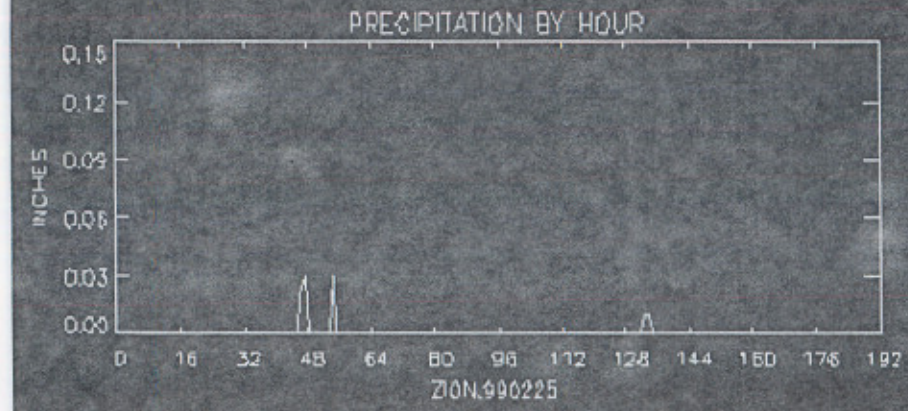
Edit Connection Setup Script Window Help

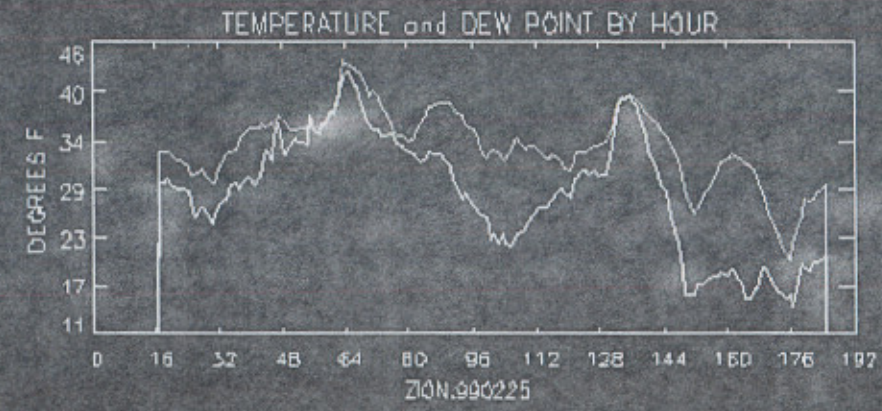


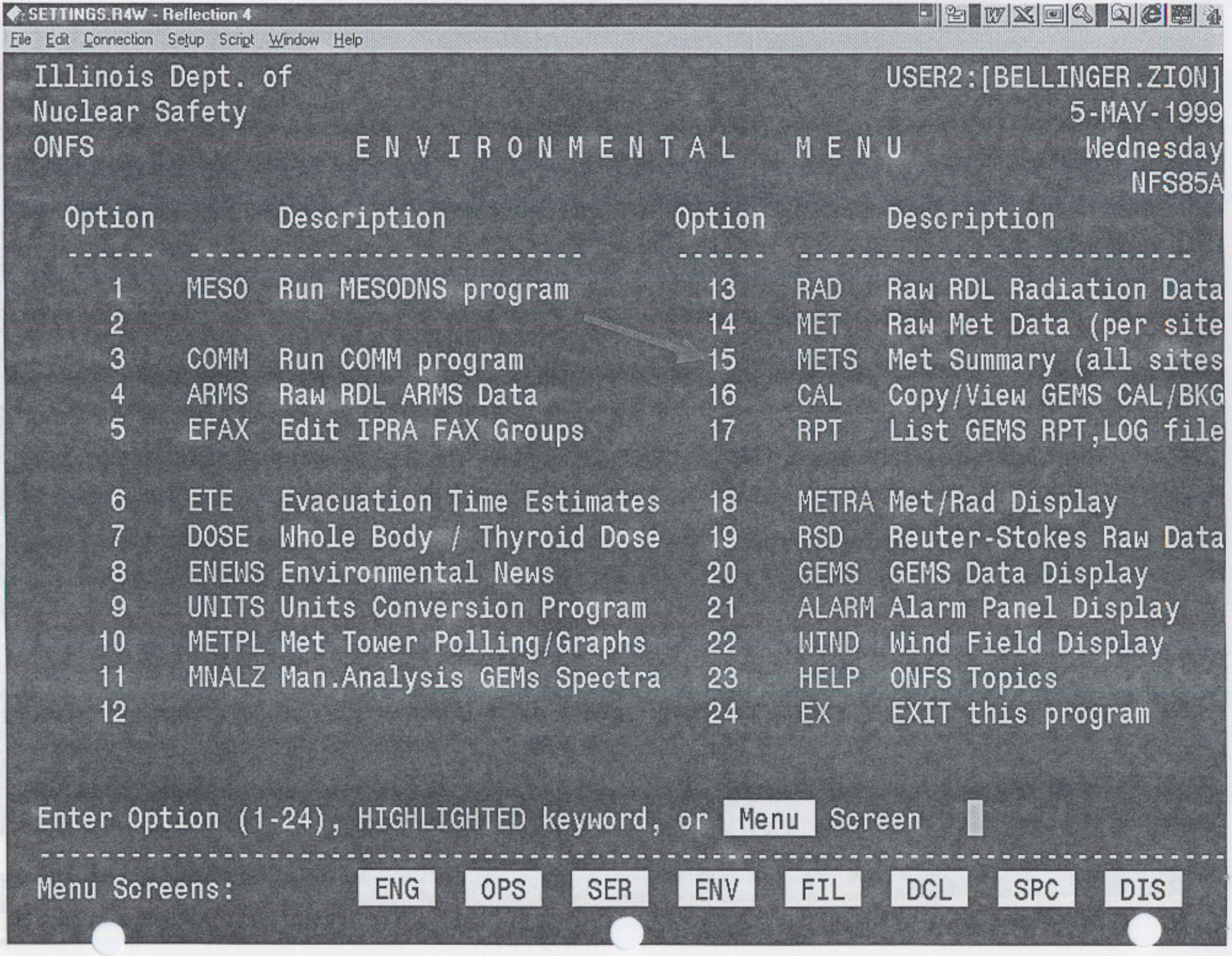








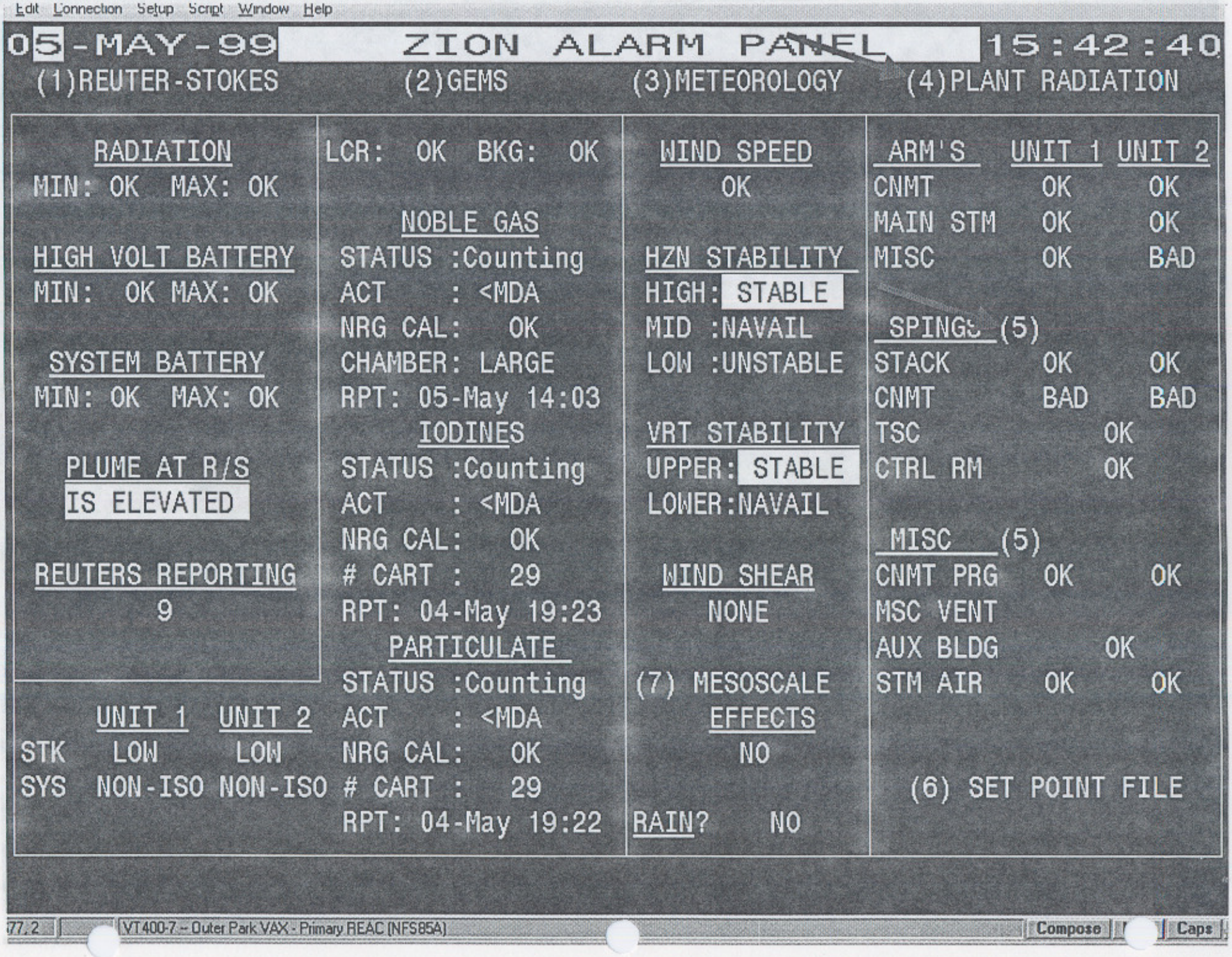


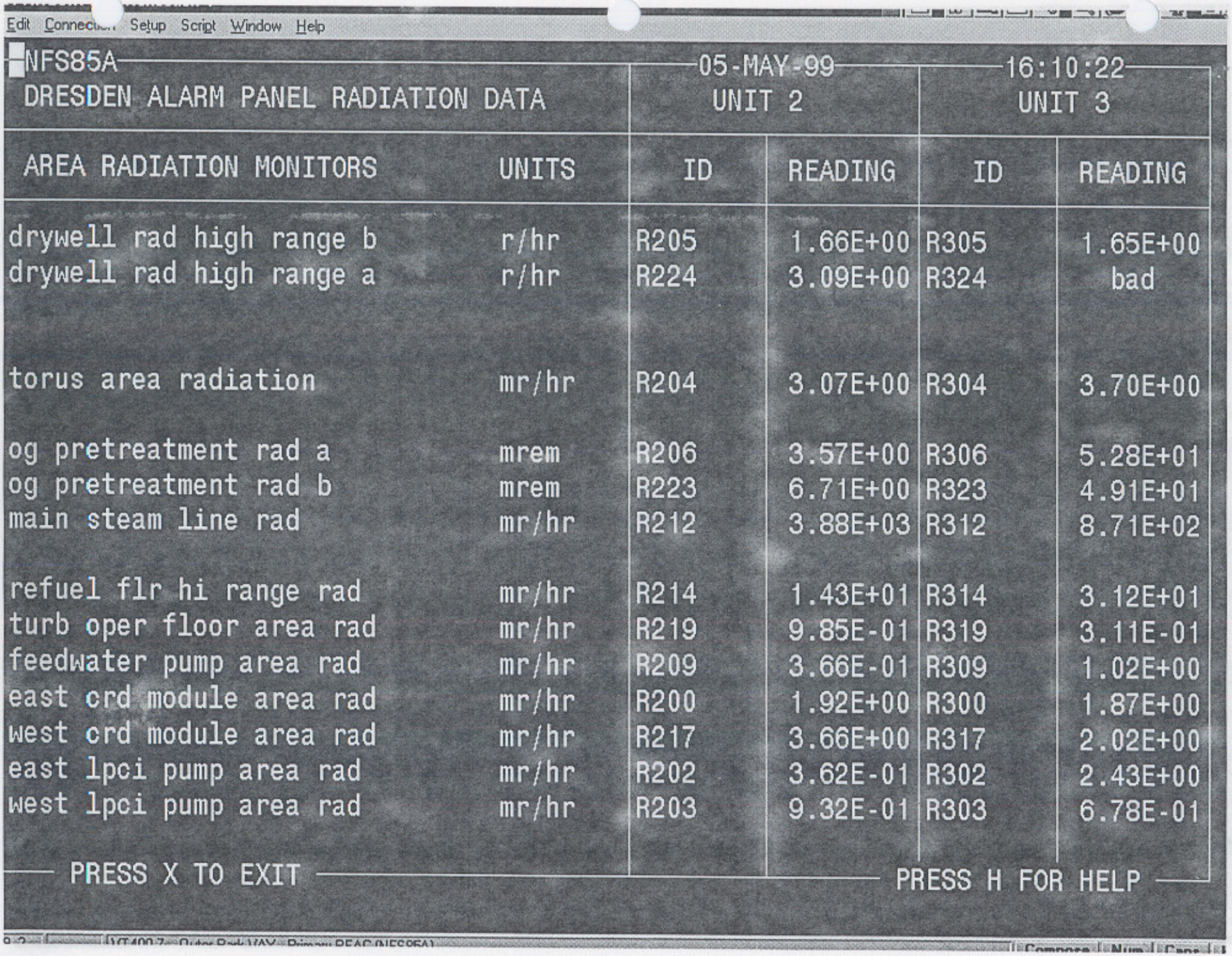

SETTINGS.R4W - Reflection 4
File Edit Connection Setup Script Window Help
Illinois Dept. of
Nuclear Safety
ONFS
USER2:[BELLINGER.ZION]
5-MAY-1999
Wednesday
NFS85A
E N V I R O N M E N T A L M E N U
Option Description Option Description
1 MESO Run MESODNS program
2
3 COMM Run COMM program
4 ARMS Raw RDL ARMS Data
5 EFAX Edit IPRA FAX Groups
6 ETE Evacuation Time Estimates
7 DOSE Whole Body / Thyroid Dose
8 ENEWS Environmental News
9 UNITS Units Conversion Program
10 METPL Met Tower Polling/Graphs
11 MNALZ Man.Analysis GEMs Spectra
12
13 RAD Raw RDL Radiation Data
14 MET Raw Met Data (per site
15 METS Met Summary (all sites
16 CAL Copy/View GEMS CAL/BKG
17 RPT List GEMS RPT,LOG file
18 METRA Met/Rad Display
19 RSD Reuter-Stokes Raw Data
20 GEMS GEMS Data Display
21 ALARM Alarm Panel Display
22 WIND Wind Field Display
23 HELP ONFS Topics
24 EX EXIT this program
Enter Option (1-24), HIGHLIGHTED keyword, or Menu Screen
Menu Screens: ENG OPS SER ENV FIL DCL SPC DIS

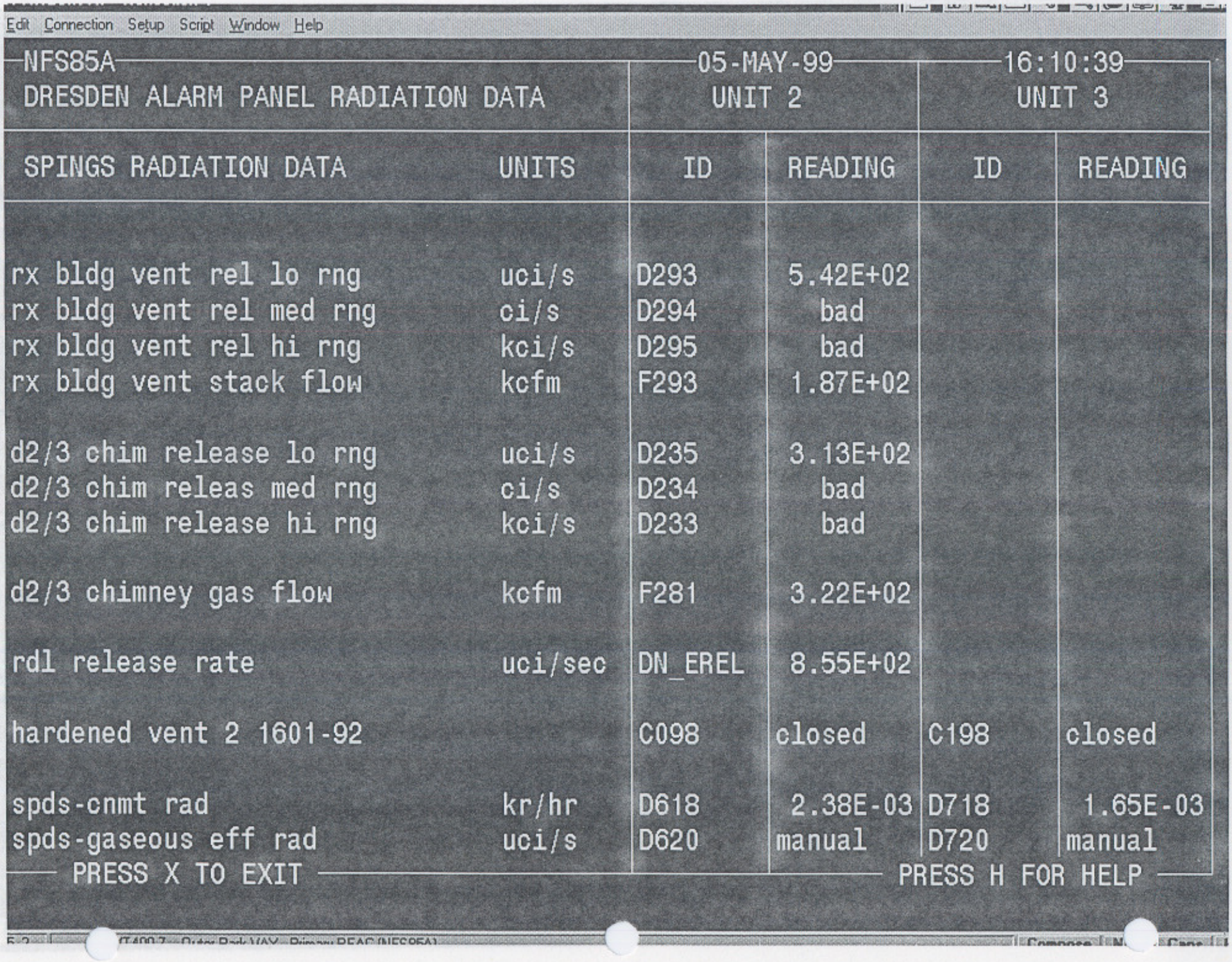
Edit Connection Setup Script Window Help

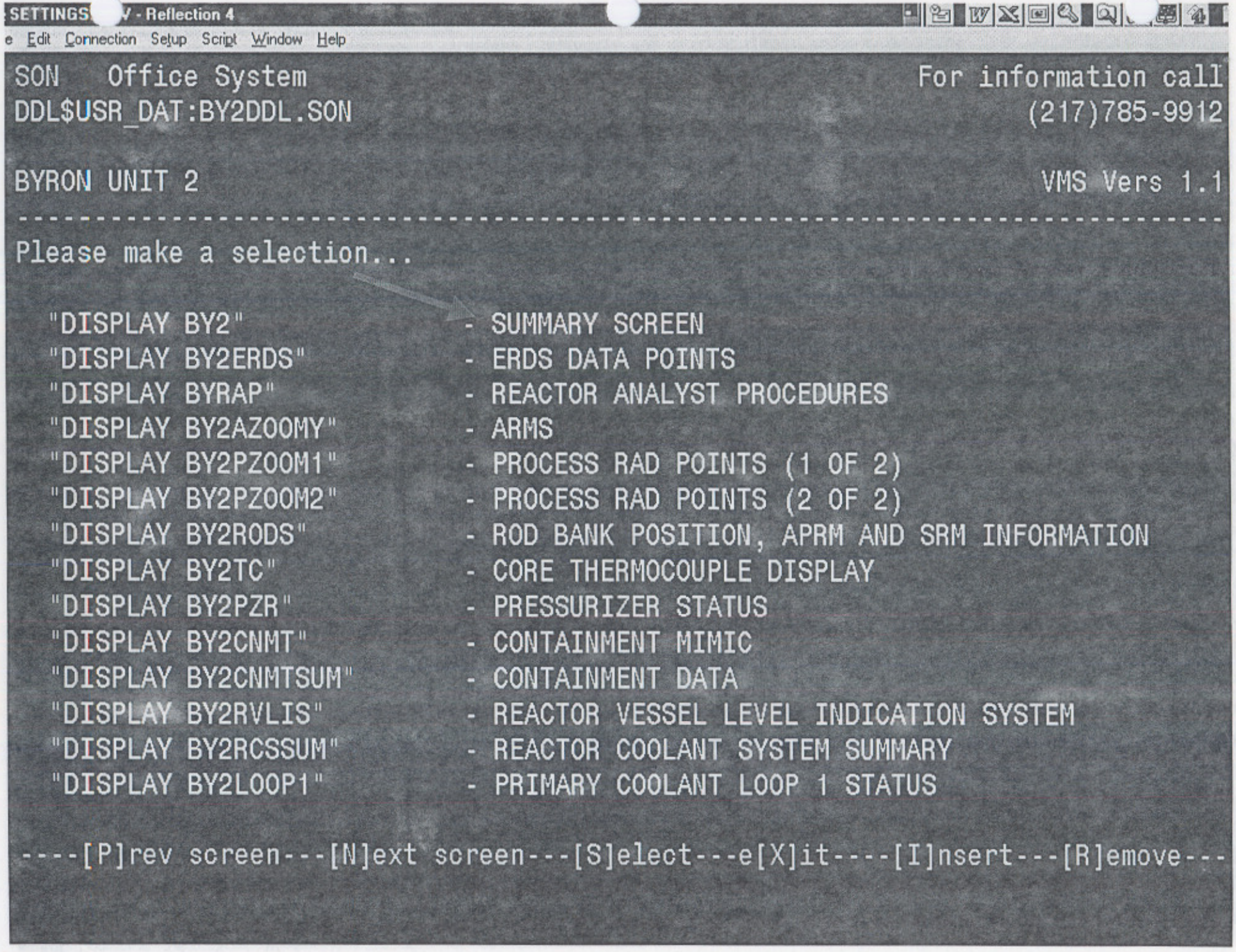
- METSUN - X TO EXIT		AVG WIND DIRECTION	DOWNWIND SECTOR	AVG WIND SPEED (MPH)	RAINFALL DURING PRIOR 15 MIN (IN)	AMBIENT AIR TEMPERATURE	VERTICAL STABILITY	HORIZONTAL STABILITY	05-MAY-99 16:00:36
BRAIDWOOD	(1)	184.9	RAB	27.4	0.00	77.31 F	C	E	(203) FT
		189.2	RAB	17.4		25.17 C		D	(34) FT
BYRON	(2)	191.6	ABC	26.2	0.00	75.25 F	D	D	(250) FT
		189.6	RAB	20.0		24.03 C		E	(30) FT
CLINTON	(3)	88.1	MNP	10.1	(N/A)	55.21 F	B	(N/A)	(197) FT
		94.3	MNP	7.8		12.89 C		(N/A)	(33) FT
DRESDEN	(4)	192.5	ABC	22.7	0.00	78.80 F	D	E	(300) FT
		197.4	ABC	17.4		26.00 C		D	(35) FT
LASALLE	(5)	191.9	ABC	29.1	0.00	76.56 F	D	F	(375) FT
		191.3	ABC	24.1		24.76 C		E	(33) FT
QUAD CITIES	(6)	208.8	ABC	31.2	0.00	75.44 F	B	F	(296) FT
		222.9	BCD	12.3		24.13 C		B	(33) FT
ZION	(7)	154.0	QRA	13.6	0.00	56.76 F	E	D	(250) FT
		160.6	QRA	7.6		13.75 C		B	(35) FT

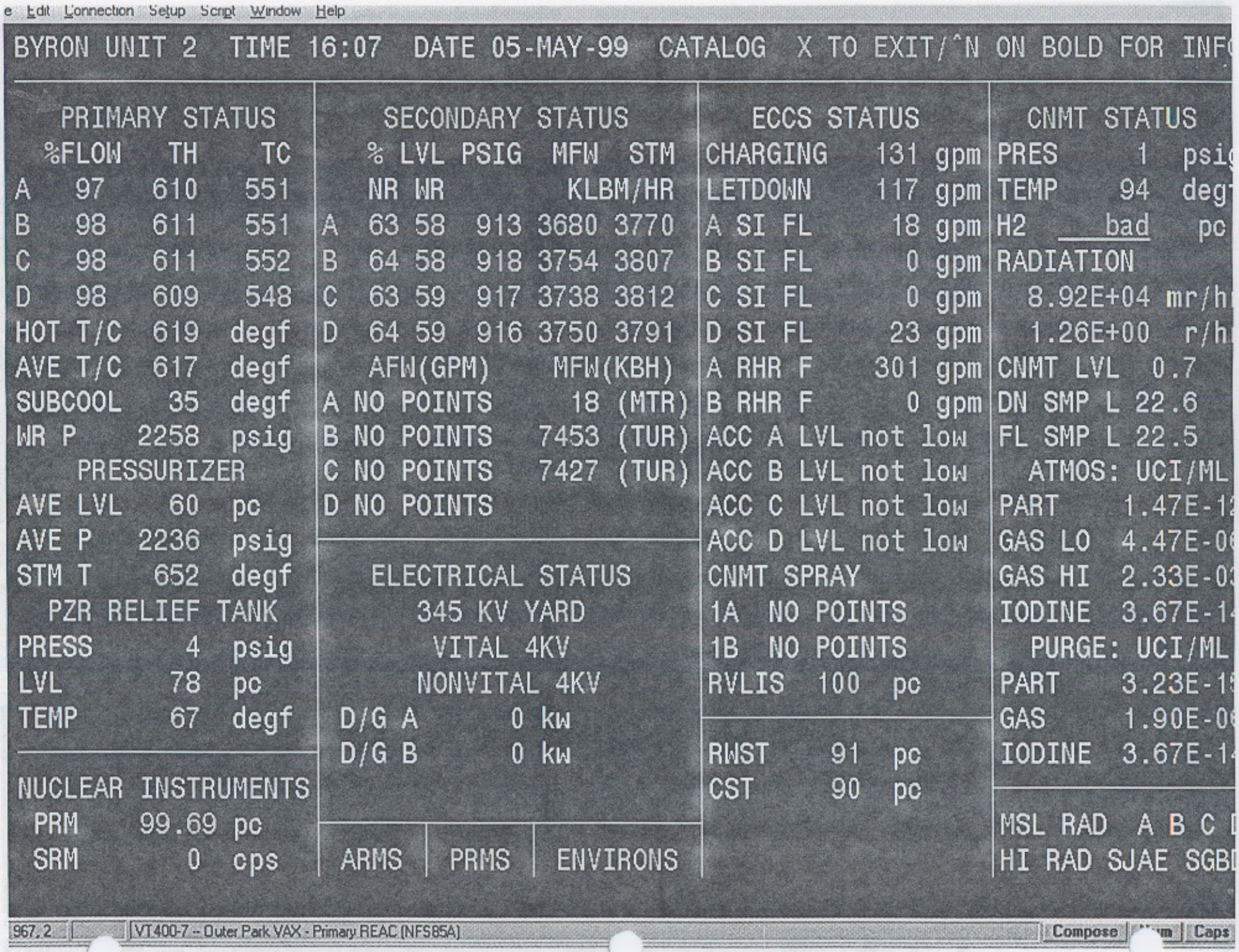
H FOR HELP

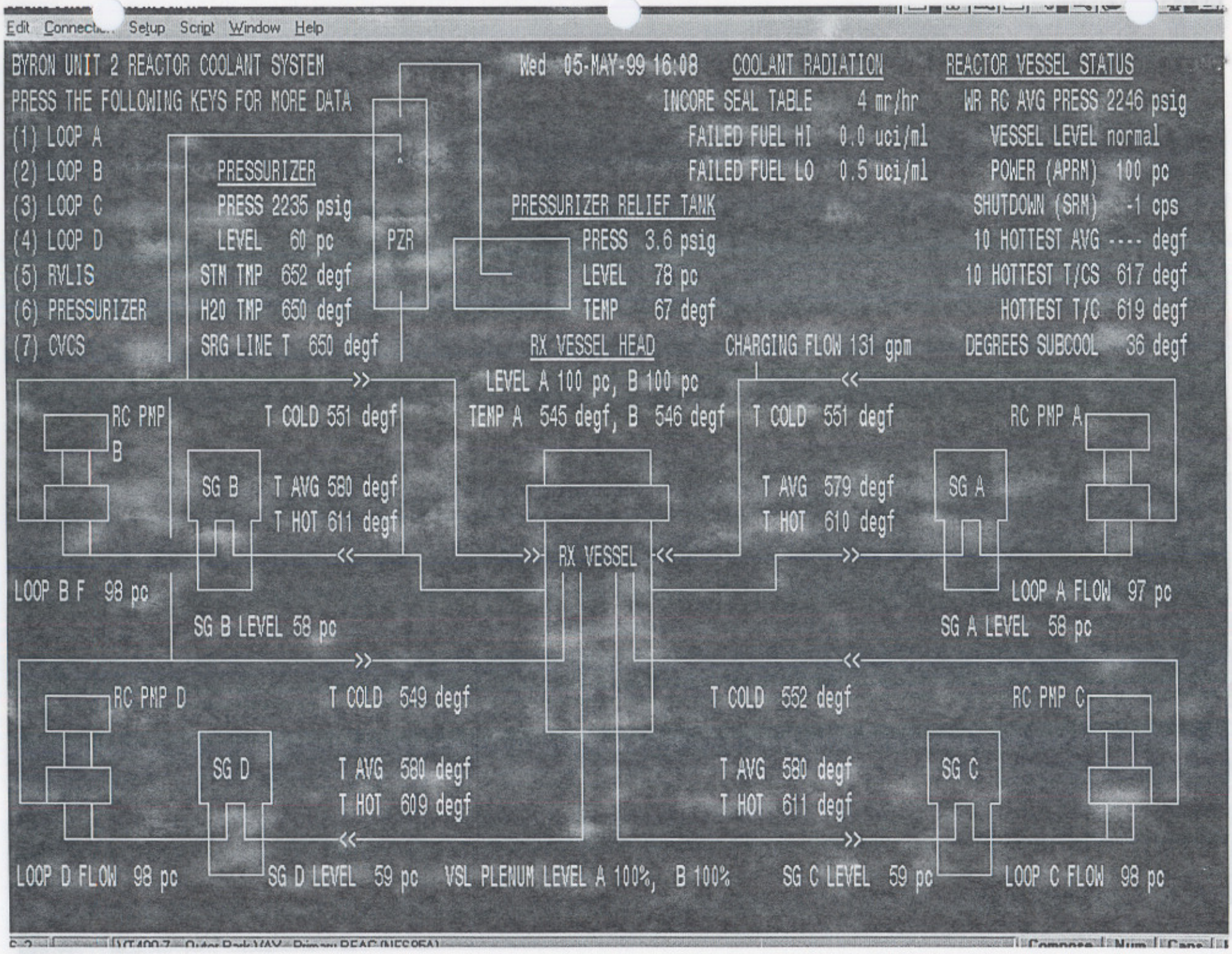

Edit Connection Setup Script Window Help
05-MAY-99 ZION ALARM PANEL 15:42:40
(1)REUTER-STOKES (2)GEMS (3)METEOROLOGY (4)PLANT RADIATION
RADIATION
MIN: OK MAX: OK
HIGH VOLT BATTERY
MIN: OK MAX: OK
SYSTEM BATTERY
MIN: OK MAX: OK
PLUME AT R/S
IS ELEVATED
REUTERS REPORTING
9
UNIT 1 UNIT 2
STK LOW LOW
SYS NON-ISO NON-ISO
LCR: OK BKG: OK
NOBLE GAS
STATUS :Counting
ACT : <MDA
NRG CAL: OK
CHAMBER: LARGE
RPT: 05-May 14:03
IODINES
STATUS :Counting
ACT : <MDA
NRG CAL: OK
CART : 29
RPT: 04-May 19:23
PARTICULATE
STATUS :Counting
ACT : <MDA
NRG CAL: OK
CART : 29
RPT: 04-May 19:22
WIND SPEED
OK
HZN STABILITY
HIGH: STABLE
MID :NAVAIL
LOW :UNSTABLE
VRT STABILITY
UPPER: STABLE
LOWER:NAVAIL
WIND SHEAR
NONE
(7) MESOSCALE
EFFECTS
NO
RAIN? NO
ARM'S UNIT 1 UNIT 2
CNMT OK OK
MAIN STM OK OK
MISC OK BAD
SPINGS (5)
STACK OK OK
CNMT BAD BAD
TSC OK
CTRL RM OK
MISC (5)
CNMT PRG OK OK
MSC VENT
AUX BLDG OK
STM AIR OK OK
(6) SET POINT FILE
77,2
VT400-7 -- Outer Park VAX - Primary REAC (NFS85A)
Compose
Caps

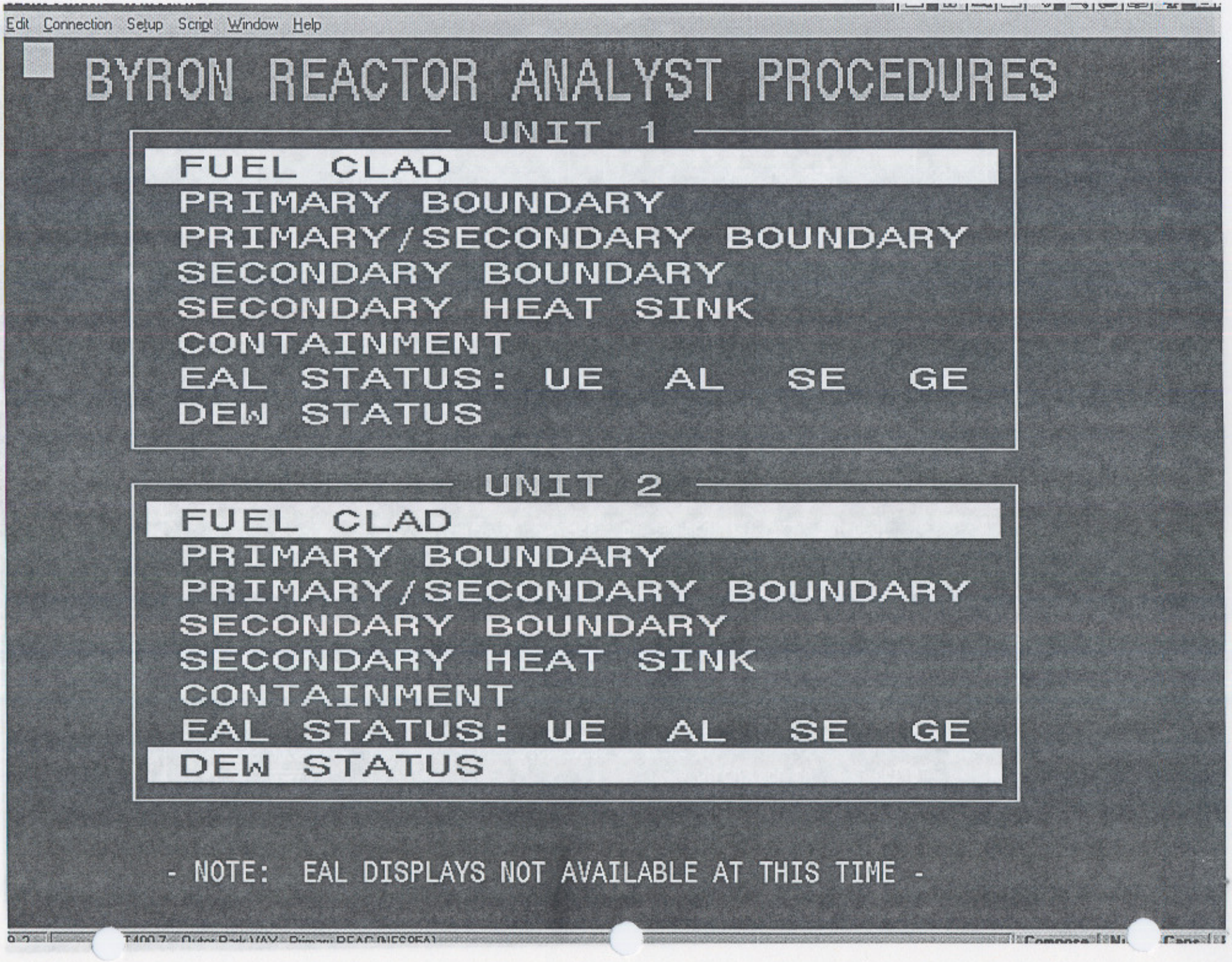

Edit Connection Setup Script Window Help
NFS85A
05-MAY-99
16:10:22
DRESDEN ALARM PANEL RADIATION DATA
UNIT 2
UNIT 3
AREA RADIATION MONITORS
UNITS
ID
READING
ID
READING
drywell rad high range b r/hr R205 1.66E+00 R305 1.65E+00
drywell rad high range a r/hr R224 3.09E+00 R324 bad
torus area radiation mr/hr R204 3.07E+00 R304 3.70E+00
og pretreatment rad a mrem R206 3.57E+00 R306 5.28E+01
og pretreatment rad b mrem R223 6.71E+00 R323 4.91E+01
main steam line rad mr/hr R212 3.88E+03 R312 8.71E+02
refuel flr hi range rad mr/hr R214 1.43E+01 R314 3.12E+01
turb oper floor area rad mr/hr R219 9.85E-01 R319 3.11E-01
feedwater pump area rad mr/hr R209 3.66E-01 R309 1.02E+00
east crd module area rad mr/hr R200 1.92E+00 R300 1.87E+00
west crd module area rad mr/hr R217 3.66E+00 R317 2.02E+00
east lpci pump area rad mr/hr R202 3.62E-01 R302 2.43E+00
west lpci pump area rad mr/hr R203 9.32E-01 R303 6.78E-01
PRESS X TO EXIT
PRESS H FOR HELP


Edit Connection Setup Script Window Help
NFS85A
05-MAY-99
16:10:39
DRESDEN ALARM PANEL RADIATION DATA
UNIT 2
UNIT 3
SPINGS RADIATION DATA
UNITS
ID
READING
ID
READING
rx bldg vent rel lo rng uci/s D293 5.42E+02
rx bldg vent rel med rng ci/s D294 bad
rx bldg vent rel hi rng kci/s D295 bad
rx bldg vent stack flow kcfm F293 1.87E+02
d2/3 chim release lo rng uci/s D235 3.13E+02
d2/3 chim releas med rng ci/s D234 bad
d2/3 chim release hi rng kci/s D233 bad
d2/3 chimney gas flow kcfm F281 3.22E+02
rdl release rate uci/sec DN_EREL 8.55E+02
hardened vent 2 1601-92 C098 closed C198 closed
spds-cnmt rad kr/hr D618 2.38E-03 D718 1.65E-03
spds-gaseous eff rad uci/s D620 manual D720 manual
PRESS X TO EXIT
PRESS H FOR HELP


SETTINGS - Reflection 4
e Edit Connection Setup Script Window Help
SON Office System
For information call
DDL$USR_DAT:BY2DDL.SON
(217)785-9912
BYRON UNIT 2
VMS Vers 1.1
Please make a selection...
"DISPLAY BY2" - SUMMARY SCREEN
"DISPLAY BY2ERDS" - ERDS DATA POINTS
"DISPLAY BYRAP" - REACTOR ANALYST PROCEDURES
"DISPLAY BY2AZOOMY" - ARMS
"DISPLAY BY2PZOOM1" - PROCESS RAD POINTS (1 OF 2)
"DISPLAY BY2PZOOM2" - PROCESS RAD POINTS (2 OF 2)
"DISPLAY BY2RODS" - ROD BANK POSITION, APRM AND SRM INFORMATION
"DISPLAY BY2TC" - CORE THERMOCOUPLE DISPLAY
"DISPLAY BY2PZR" - PRESSURIZER STATUS
"DISPLAY BY2CNMT" - CONTAINMENT MIMIC
"DISPLAY BY2CNMTSUM" - CONTAINMENT DATA
"DISPLAY BY2RVLIS" - REACTOR VESSEL LEVEL INDICATION SYSTEM
"DISPLAY BY2RCSSUM" - REACTOR COOLANT SYSTEM SUMMARY
"DISPLAY BY2LOOP1" - PRIMARY COOLANT LOOP 1 STATUS
----[P]rev screen---[N]ext screen---[S]elect---e[X]it----[I]nsert---[R]emove---


e Edit Connection Setup Script Window Help
BYRON UNIT 2 TIME 16:07 DATE 05-MAY-99 CATALOG X TO EXIT/^N ON BOLD FOR INF
PRIMARY STATUS
%FLOW TH TC
A 97 610 551
B 98 611 551
C 98 611 552
D 98 609 548
HOT T/C 619 degf
AVE T/C 617 degf
SUBCOOL 35 degf
WR P 2258 psig
PRESSURIZER
AVE LVL 60 pc
AVE P 2236 psig
STM T 652 degf
PZR RELIEF TANK
PRESS 4 psig
LVL 78 pc
TEMP 67 degf
NUCLEAR INSTRUMENTS
PRM 99.69 pc
SRM 0 cps
SECONDARY STATUS
% LVL PSIG MFW STM
NR WR KLBM/HR
A 63 58 913 3680 3770
B 64 58 918 3754 3807
C 63 59 917 3738 3812
D 64 59 916 3750 3791
AFW(GPM) MFW(KBH)
A NO POINTS 18 (MTR)
B NO POINTS 7453 (TUR)
C NO POINTS 7427 (TUR)
D NO POINTS
ELECTRICAL STATUS
345 KV YARD
VITAL 4KV
NONVITAL 4KV
D/G A 0 kw
D/G B 0 kw
ARMS
PRMS
ENVIRONS
ECCS STATUS
CHARGING 131 gpm
LETDOWN 117 gpm
A SI FL 18 gpm
B SI FL 0 gpm
C SI FL 0 gpm
D SI FL 23 gpm
A RHR F 301 gpm
B RHR F 0 gpm
ACC A LVL not low
ACC B LVL not low
ACC C LVL not low
ACC D LVL not low
CNMT SPRAY
1A NO POINTS
1B NO POINTS
RVLIS 100 pc
RWST 91 pc
CST 90 pc
CNMT STATUS
PRES 1 psi
TEMP 94 deg
H2 bad pc
RADIATION
8.92E+04 mr/h
1.26E+00 r/h
CNMT LVL 0.7
DN SMP L 22.6
FL SMP L 22.5
ATMOS: UCI/ML
PART 1.47E-1
GAS LO 4.47E-0
GAS HI 2.33E-0
IODINE 3.67E-1
PURGE: UCI/ML
PART 3.23E-1
GAS 1.90E-0
IODINE 3.67E-1
MSL RAD A B C
HI RAD SJAE SGB
967, 2
VT400-7 -- Outer Park VAX - Primary REAC (NFS85A)
Compose
Caps


Edit Connect... Setup Script Window Help
BYRON UNIT 2 REACTOR COOLANT SYSTEM
Wed 05-MAY-99 16:08
PRESS THE FOLLOWING KEYS FOR MORE DATA
(1) LOOP A
(2) LOOP B
(3) LOOP C
(4) LOOP D
(5) RVLIS
(6) PRESSURIZER
(7) CVCS
PRESSURIZER
PRESS 2235 psig
LEVEL 60 pc
STM TMP 652 degf
H2O TMP 650 degf
SRG LINE T 650 degf
PZR
COOLANT RADIATION
INCORE SEAL TABLE 4 mr/hr
FAILED FUEL HI 0.0 uci/ml
FAILED FUEL LO 0.5 uci/ml
PRESSURIZER RELIEF TANK
PRESS 3.6 psig
LEVEL 78 pc
TEMP 67 degf
REACTOR VESSEL STATUS
WR RC AVG PRESS 2246 psig
VESSEL LEVEL normal
POWER (APRM) 100 pc
SHUTDOWN (SRM) -1 cps
10 HOTTEST AVG ---- degf
10 HOTTEST T/CS 617 degf
HOTTEST T/C 619 degf
DEGREES SUBCOOL 36 degf
RX VESSEL HEAD
LEVEL A 100 pc, B 100 pc
TEMP A 545 degf, B 546 degf
CHARGING FLOW 131 gpm
RC PMP B
T COLD 551 degf
SG B
T AVG 580 degf
T HOT 611 degf
T COLD 551 degf
RC PMP A
T AVG 579 degf
T HOT 610 degf
SG A
RX VESSEL
LOOP B F 98 pc
SG B LEVEL 58 pc
LOOP A FLOW 97 pc
SG A LEVEL 58 pc
RC PMP D
T COLD 549 degf
T COLD 552 degf
RC PMP C
SG D
T AVG 580 degf
T HOT 609 degf
T AVG 580 degf
T HOT 611 degf
SG C
LOOP D FLOW 98 pc
SG D LEVEL 59 pc
VSL PLENUM LEVEL A 100%, B 100%
SG C LEVEL 59 pc
LOOP C FLOW 98 pc


Edit Connection Setup Script Window Help
BYRON REACTOR ANALYST PROCEDURES
UNIT 1
FUEL CLAD
PRIMARY BOUNDARY
PRIMARY/SECONDARY BOUNDARY
SECONDARY BOUNDARY
SECONDARY HEAT SINK
CONTAINMENT
EAL STATUS: UE AL SE GE
DEW STATUS
UNIT 2
FUEL CLAD
PRIMARY BOUNDARY
PRIMARY/SECONDARY BOUNDARY
SECONDARY BOUNDARY
SECONDARY HEAT SINK
CONTAINMENT
EAL STATUS: UE AL SE GE
DEW STATUS
- NOTE: EAL DISPLAYS NOT AVAILABLE AT THIS TIME -

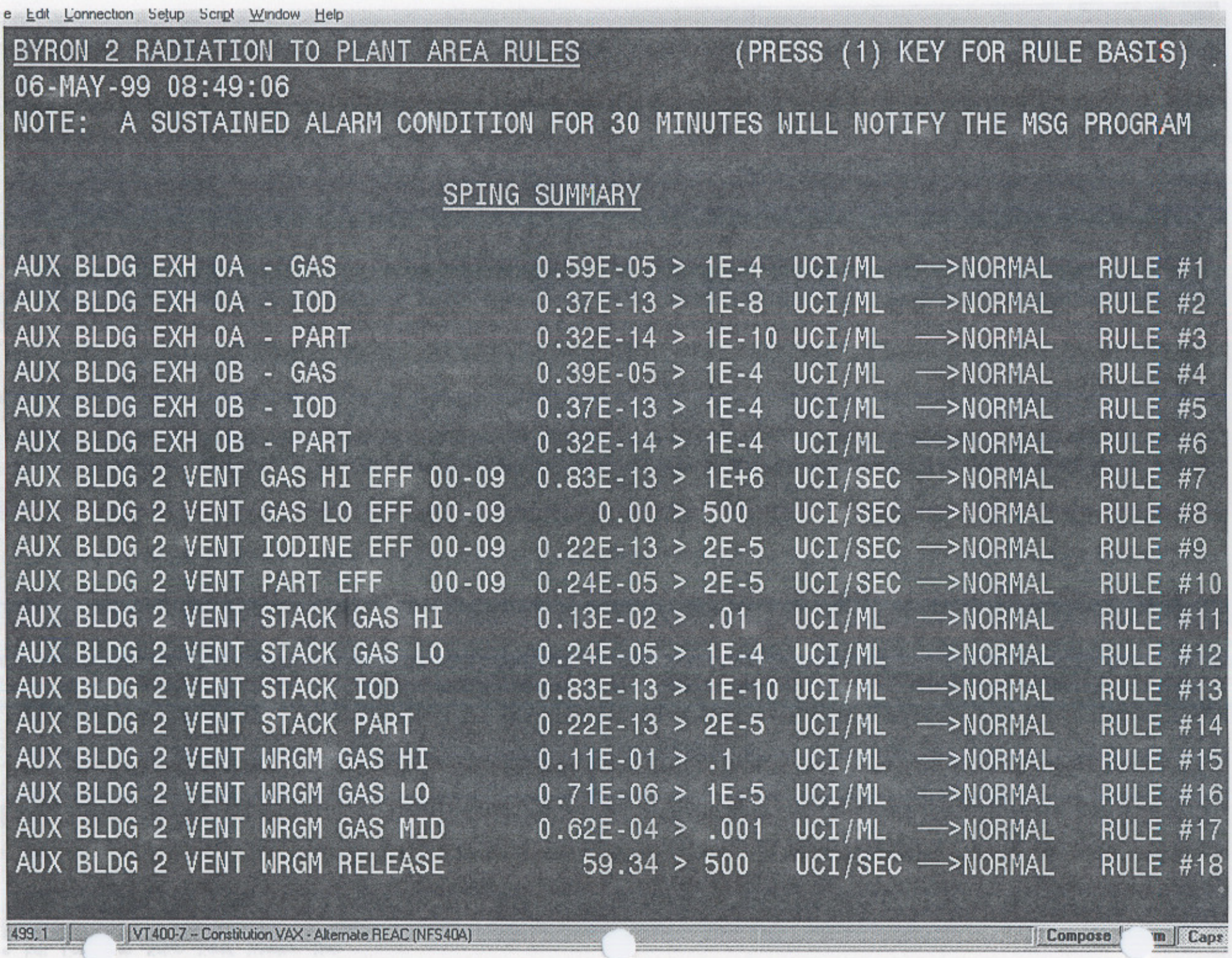
e Edit Con on Setup Script Window Help

DNS EARLY WARNING (DEW) PROGRAM

06-MAY-99 08:48

CHRONOL LOG	BRAIDWOOD LOG		BYRON LOG		CP LOG	DRESDEN LOG		LASALLE LOG		QUAD CITIES LOG		ZION LOG	
SYSTEM	BR1	BR2	BY1	BY2	CP1	DN2	DN3	LS1	LS2	QC1	QC2	ZN1	ZN2
% POWER	100.7	0.0	100.4	99.7	0.4	99.3	99.2	100.4	99.3	78.4	99.5	0.0	0.0
MODE	POWER	REFUELNG	POWER	POWER	HOTSTNBY	RUN	RUN	RUN	RUN	RUN	RUN	NAVAIL	NAVAIL
CLAD	normal	normal	normal	normal	degraded	normal	normal	normal	normal	normal	normal	normal	normal
RCS	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal
CNMT	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal
ECCS	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal
ELECTRICAL	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal	degraded
RHR/SW	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal
BOP	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal
AREA RAD	normal	normal	normal	alarm	normal	normal	normal	normal	normal	normal	normal	normal	normal
ENV RAD	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal	normal
SCRAM	no	no	no	no	yes	no	no	no	no	no	no	yes	yes
NFS85A TIME	08:47	08:47	08:47	08:46	08:47	08:47	08:46	08:47	08:46	08:47	08:46	08:47	08:47
NFS40A TIME	08:47	08:47	08:47	08:46	08:47	08:47	08:46	08:47	08:46	08:47	08:46	08:47	08:47
RDL DATA	NORMAL		NORMAL		NORMAL	NORMAL		NORMAL		NORMAL		NORMAL	
GDN DATA	NORMAL		NORMAL		NORMAL	NORMAL		NORMAL		NORMAL		NORMAL	
GEMS DATA	NORMAL		NORMAL		NORMAL	NORMAL		NORMAL		NORMAL		NORMAL	

780, 2 VT400-7 – Constitution VAX - Alternate REAC (NFS40A) Compose Num Caps


e Edit Connection Setup Script Window Help
BYRON 2 RADIATION TO PLANT AREA RULES (PRESS (1) KEY FOR RULE BASIS)
06-MAY-99 08:49:06
NOTE: A SUSTAINED ALARM CONDITION FOR 30 MINUTES WILL NOTIFY THE MSG PROGRAM
SPING SUMMARY
AUX BLDG EXH 0A - GAS 0.59E-05 > 1E-4 UCI/ML —>NORMAL RULE #1
AUX BLDG EXH 0A - IOD 0.37E-13 > 1E-8 UCI/ML —>NORMAL RULE #2
AUX BLDG EXH 0A - PART 0.32E-14 > 1E-10 UCI/ML —>NORMAL RULE #3
AUX BLDG EXH 0B - GAS 0.39E-05 > 1E-4 UCI/ML —>NORMAL RULE #4
AUX BLDG EXH 0B - IOD 0.37E-13 > 1E-4 UCI/ML —>NORMAL RULE #5
AUX BLDG EXH 0B - PART 0.32E-14 > 1E-4 UCI/ML —>NORMAL RULE #6
AUX BLDG 2 VENT GAS HI EFF 00-09 0.83E-13 > 1E+6 UCI/SEC —>NORMAL RULE #7
AUX BLDG 2 VENT GAS LO EFF 00-09 0.00 > 500 UCI/SEC —>NORMAL RULE #8
AUX BLDG 2 VENT IODINE EFF 00-09 0.22E-13 > 2E-5 UCI/SEC —>NORMAL RULE #9
AUX BLDG 2 VENT PART EFF 00-09 0.24E-05 > 2E-5 UCI/SEC —>NORMAL RULE #10
AUX BLDG 2 VENT STACK GAS HI 0.13E-02 > .01 UCI/ML —>NORMAL RULE #11
AUX BLDG 2 VENT STACK GAS LO 0.24E-05 > 1E-4 UCI/ML —>NORMAL RULE #12
AUX BLDG 2 VENT STACK IOD 0.83E-13 > 1E-10 UCI/ML —>NORMAL RULE #13
AUX BLDG 2 VENT STACK PART 0.22E-13 > 2E-5 UCI/ML —>NORMAL RULE #14
AUX BLDG 2 VENT WRGM GAS HI 0.11E-01 > .1 UCI/ML —>NORMAL RULE #15
AUX BLDG 2 VENT WRGM GAS LO 0.71E-06 > 1E-5 UCI/ML —>NORMAL RULE #16
AUX BLDG 2 VENT WRGM GAS MID 0.62E-04 > .001 UCI/ML —>NORMAL RULE #17
AUX BLDG 2 VENT WRGM RELEASE 59.34 > 500 UCI/SEC —>NORMAL RULE #18
499, 1
VT400-7 – Constitution VAX - Alternate REAC (NFS40A)
Compose
Caps

SETTINGS - Reflection 4

e Edit Connection Setup Script Window Help

ZION 1 EAL GENERAL EMERGENCY RULES: RG1, FG1, MG1, MG3 06-MAY-99 08:51:26

GENERAL EMERGENCY RULE RG1:

U1 + U2 CALC SPING LOW RANGE navail >= 3.1E6 UCI/SEC

ZION 1 CLAD BARRIER normal = LOSS
ZION 1 RCS BARRIER normal = LOSS
ZION 1 CONTAINMENT BARRIER normal = LOSS

OR

AND ->no data

U1 + U2 CALC SPING LOW RANGE navail >= 7.2E7 UCI/SEC

U1 CNMT NOBLE GAS LO RANGE bad >= 1.7E-3 UCI/SEC

U2 CNMT NOBLE GAS LO RANGE bad >= 1.7E-3 UCI/SEC

U1 CNMT PURGE EXH STK EFLNT GAS RAD 34.6 >= 2900 CPM

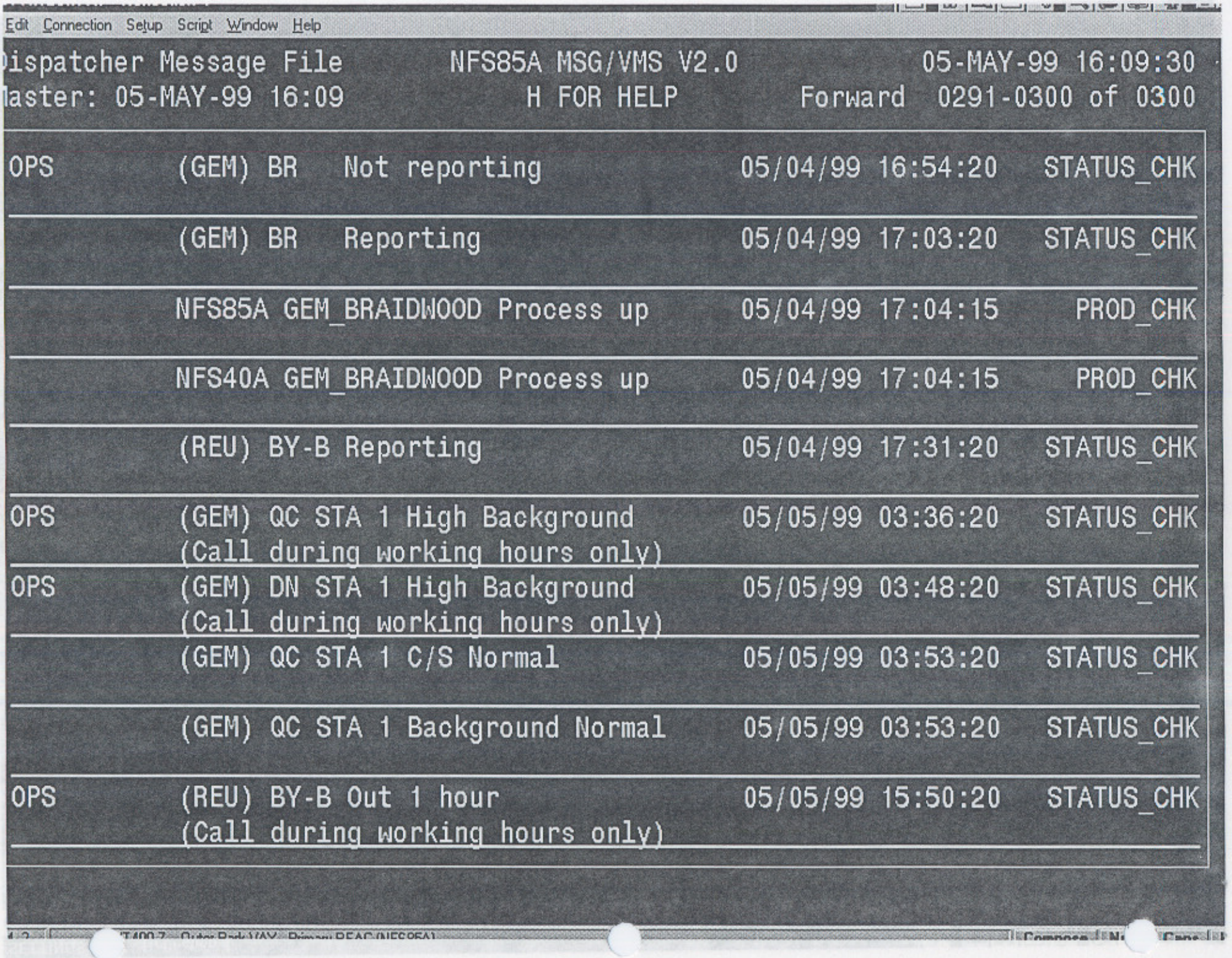
U2 CNMT PURGE EXH STK EFLNT GAS RAD 74.8 >= 2900 CPM

U1 STEAM AIR EJECTOR EXHAUST RAD 20.0 >= 1200 DKCM

U2 STEAM AIR EJECTOR EXHAUST RAD 12.7 >= 1200 DKCM

OR

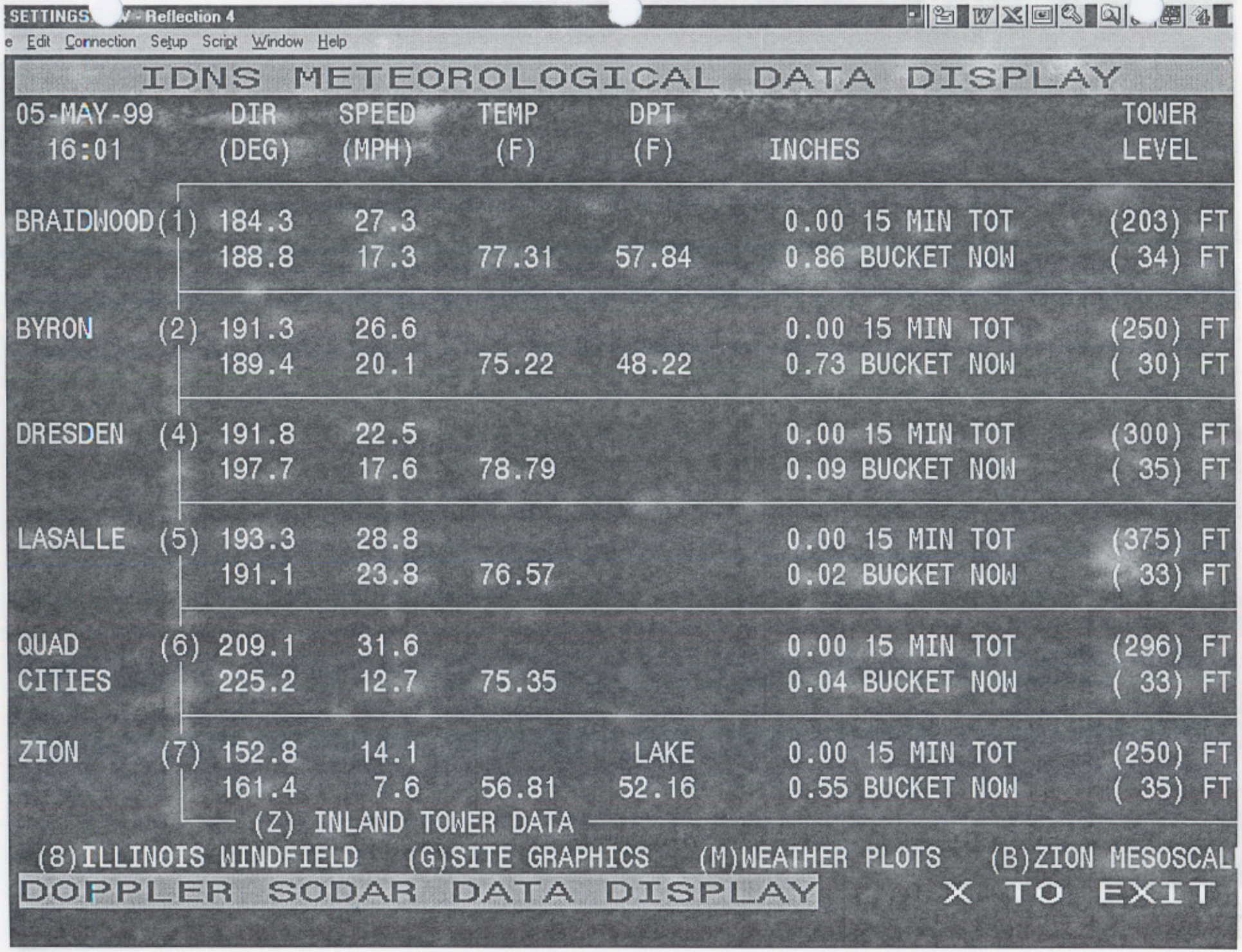
AND ->no data



Edit Connection Setup Script Window Help

Dispatcher Message File NFS85A MSG/VMS V2.0 05-MAY-99 16:09:30
Master: 05-MAY-99 16:09 H FOR HELP Forward 0291-0300 of 0300

OPS	(GEM) BR Not reporting	05/04/99 16:54:20	STATUS_CHK
	(GEM) BR Reporting	05/04/99 17:03:20	STATUS_CHK
	NFS85A GEM_BRAIDWOOD Process up	05/04/99 17:04:15	PROD_CHK
	NFS40A GEM_BRAIDWOOD Process up	05/04/99 17:04:15	PROD_CHK
	(REU) BY-B Reporting	05/04/99 17:31:20	STATUS_CHK
OPS	(GEM) QC STA 1 High Background (Call during working hours only)	05/05/99 03:36:20	STATUS_CHK
OPS	(GEM) DN STA 1 High Background (Call during working hours only)	05/05/99 03:48:20	STATUS_CHK
	(GEM) QC STA 1 C/S Normal	05/05/99 03:53:20	STATUS_CHK
	(GEM) QC STA 1 Background Normal	05/05/99 03:53:20	STATUS_CHK
OPS	(REU) BY-B Out 1 hour (Call during working hours only)	05/05/99 15:50:20	STATUS_CHK


SETTINGS - Reflection 4
e Edit Connection Setup Script Window Help
IDNS METEOROLOGICAL DATA DISPLAY
05-MAY-99 16:01
DIR (DEG)
SPEED (MPH)
TEMP (F)
DPT (F)
INCHES
TOWER LEVEL
BRAIDWOOD (1) 184.3 27.3 0.00 15 MIN TOT (203) FT
188.8 17.3 77.31 57.84 0.86 BUCKET NOW (34) FT
BYRON (2) 191.3 26.6 0.00 15 MIN TOT (250) FT
189.4 20.1 75.22 48.22 0.73 BUCKET NOW (30) FT
DRESDEN (4) 191.8 22.5 0.00 15 MIN TOT (300) FT
197.7 17.6 78.79 0.09 BUCKET NOW (35) FT
LASALLE (5) 193.3 28.8 0.00 15 MIN TOT (375) FT
191.1 23.8 76.57 0.02 BUCKET NOW (33) FT
QUAD CITIES (6) 209.1 31.6 0.00 15 MIN TOT (296) FT
225.2 12.7 75.35 0.04 BUCKET NOW (33) FT
ZION (7) 152.8 14.1 LAKE 0.00 15 MIN TOT (250) FT
161.4 7.6 56.81 52.16 0.55 BUCKET NOW (35) FT
(Z) INLAND TOWER DATA
(8) ILLINOIS WINDFIELD (G) SITE GRAPHICS (M) WEATHER PLOTS (B) ZION MESOSCAL
DOPPLER SODAR DATA DISPLAY
X TO EXIT

SETTINGS.R4W - Reflection 4

e Edit Connection Setup Script Window Help

DOPPLER SODAR DATA DISPLAY

X TO EXIT

05-MAY-99

16:01

LEVEL	WD	WS	V
600	- - -	- - - -	- - - -
570	- - -	- - - -	- - - -
540	- - -	- - - -	- - - -
510	- - -	- - - -	- - - -
480	- - -	- - - -	- - - -
450	- - -	- - - -	- - - -
420	- - -	- - - -	- - - -
390	- - -	- - - -	- - - -
360	- - -	- - - -	- - - -
330	- - -	- - - -	- - - -
300	- - -	- - - -	- - -
270	- - -	- - - -	- - - -
240	- - -	- - - -	- - - -
210	- - -	- - - -	- - - -
180	- - -	- - - -	- - - -
150	- - -	- - - -	- - - -
120	- - -	- - - -	- - - -
90	- - -	- - - -	- - - -
60	- - -	- - - -	- - - -
10	- - -	- - - -	- - - -

SAMPLING INTERVAL (CST)

--/-- --:--

TO

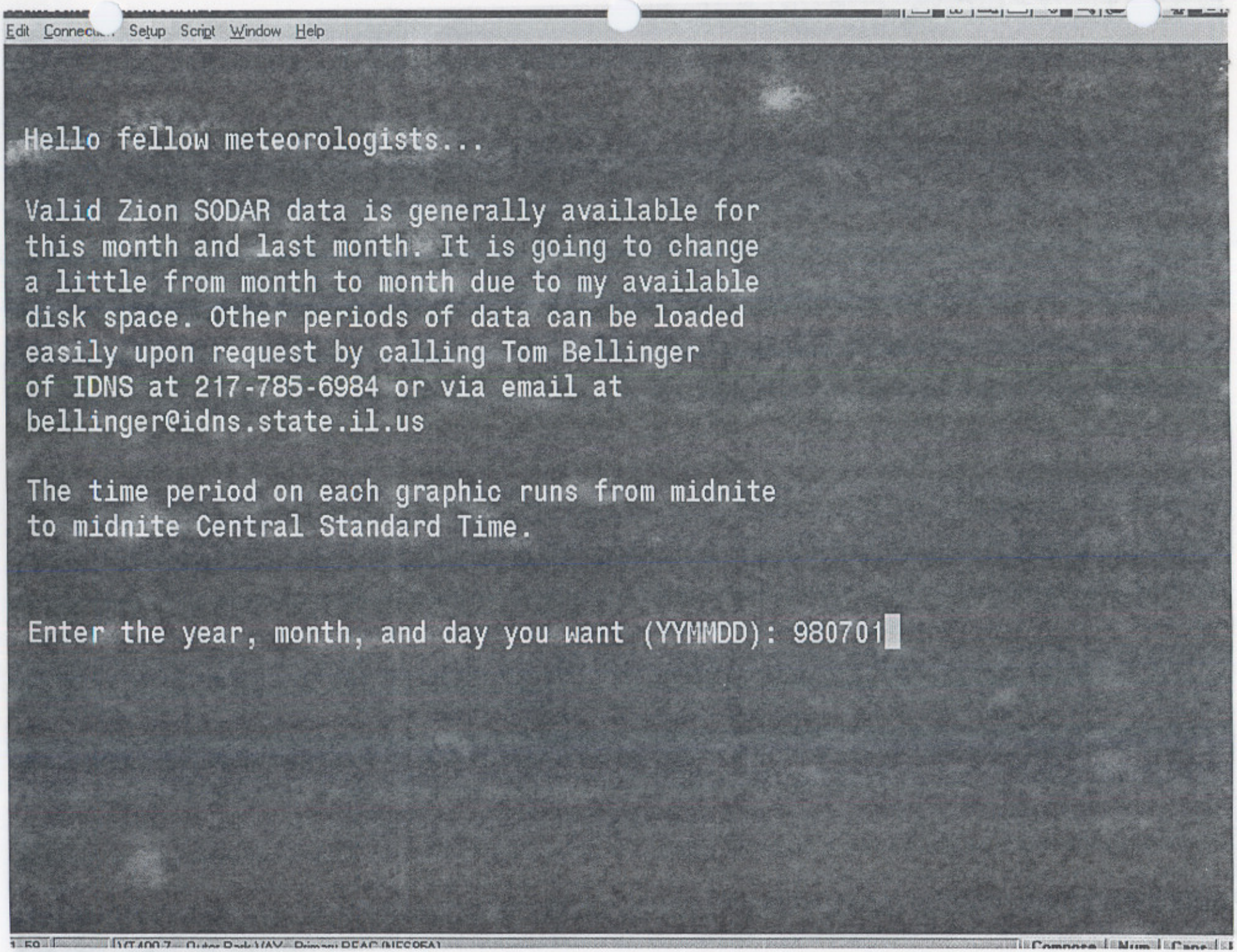
--/-- --:--

(9)24 HR PLOT

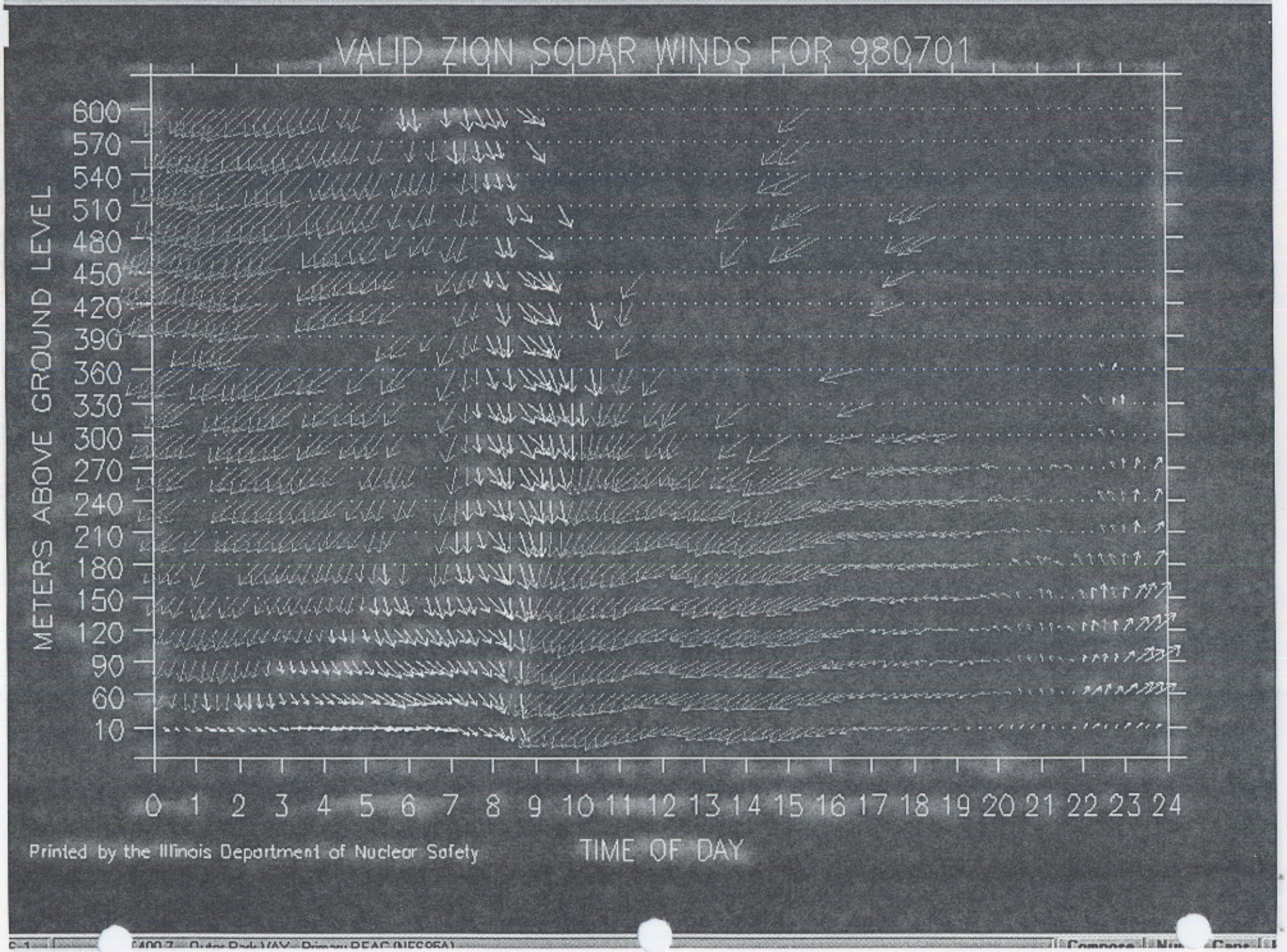
(0)132 COLUMN

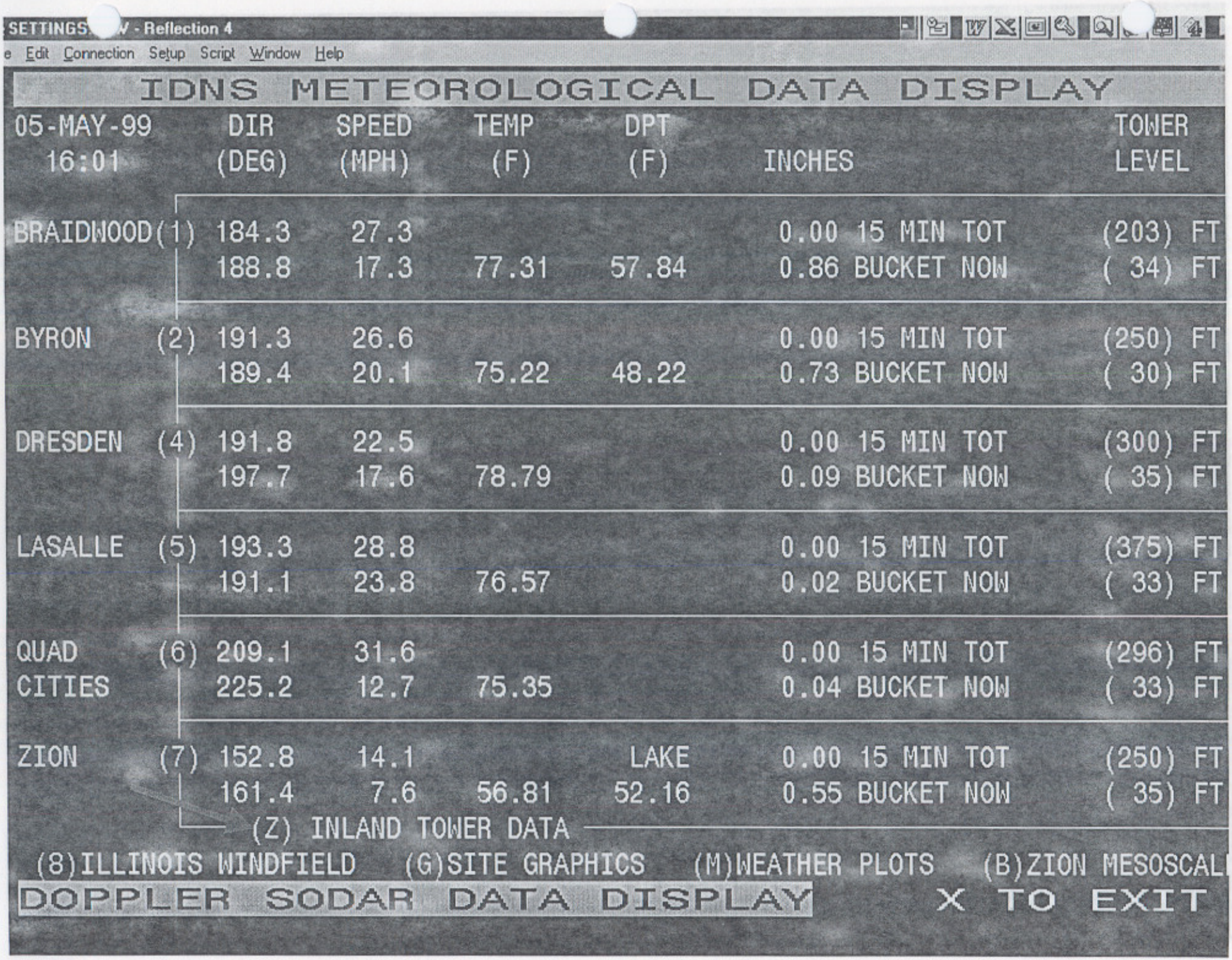
(Q)QUERY PAST SODAR DATA

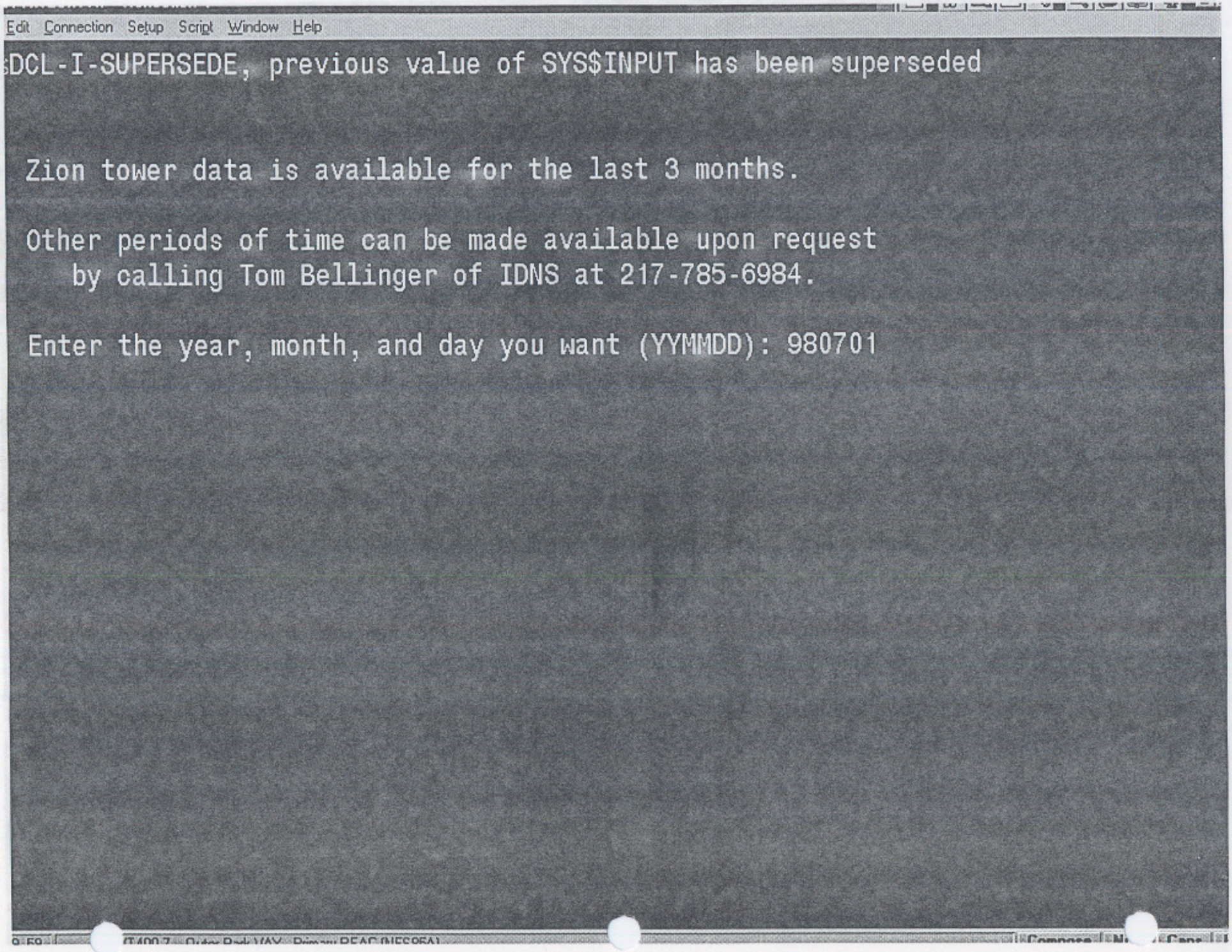
ALL SPEEDS IN M/S

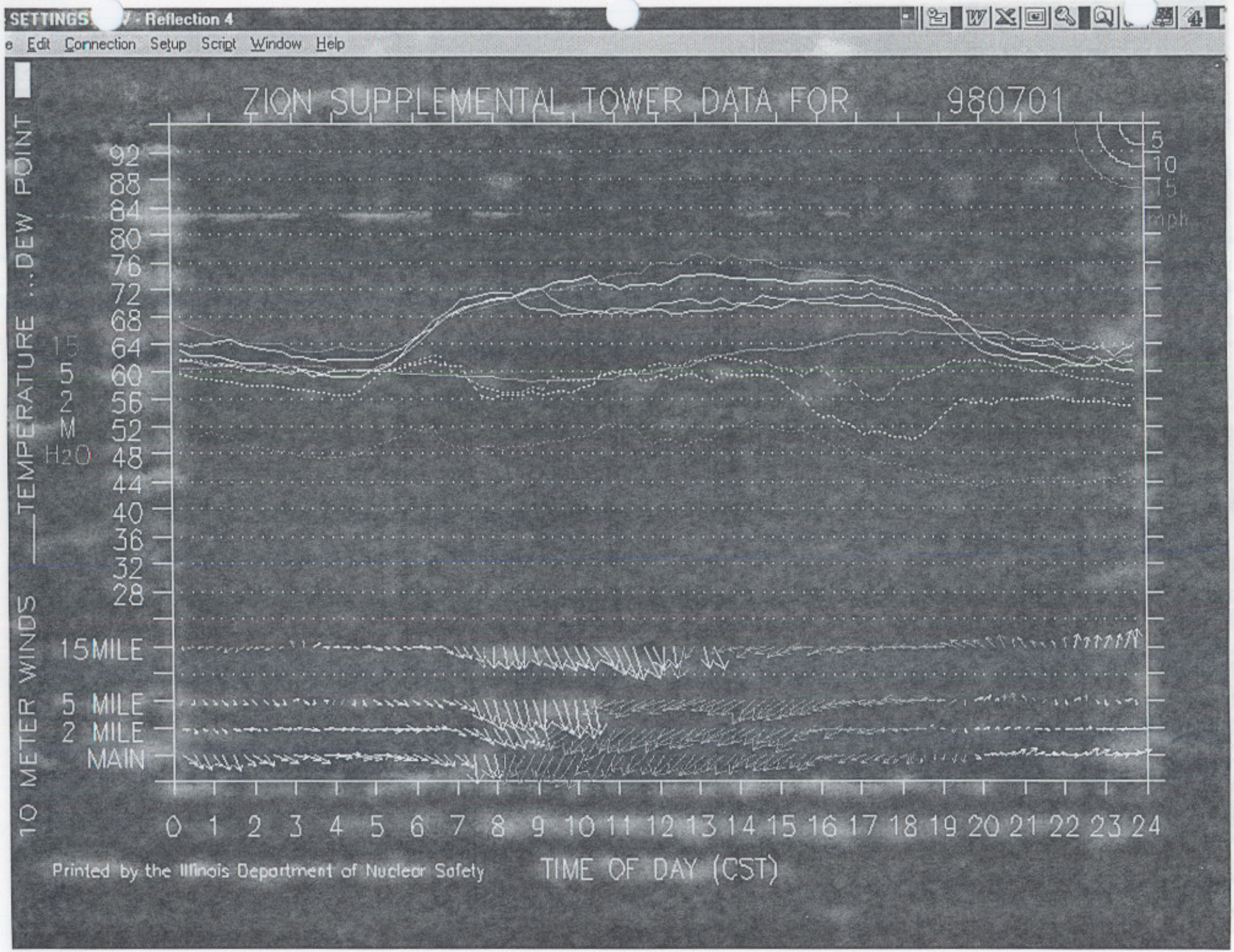

Edit Connec... Setup Script Window Help
Hello fellow meteorologists...
Valid Zion SODAR data is generally available for
this month and last month. It is going to change
a little from month to month due to my available
disk space. Other periods of data can be loaded
easily upon request by calling Tom Bellinger
of IDNS at 217-785-6984 or via email at
bellinger@idns.state.il.us
The time period on each graphic runs from midnite
to midnite Central Standard Time.
Enter the year, month, and day you want (YYMMDD): 980701

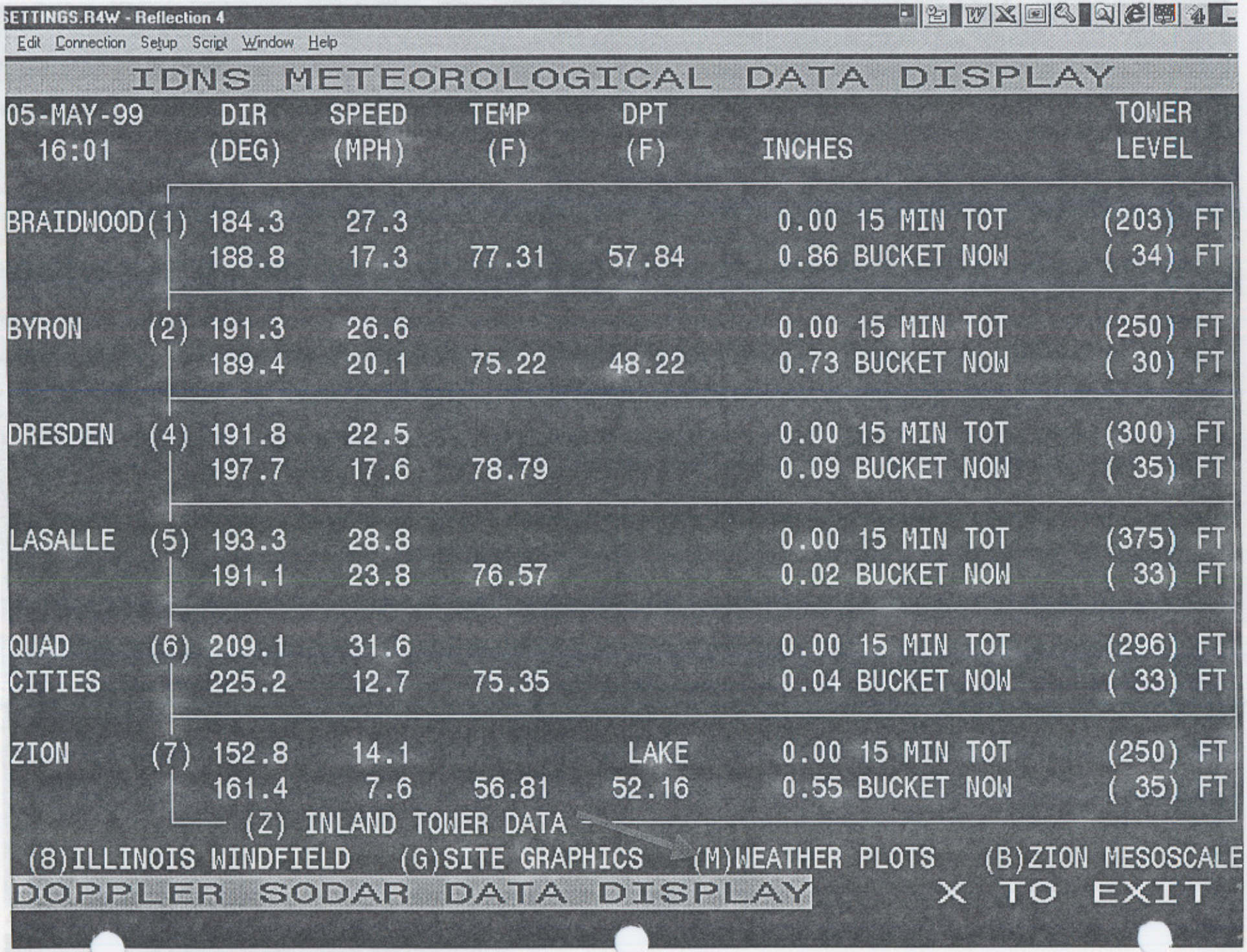
Edit Connection Setup Script Window Help

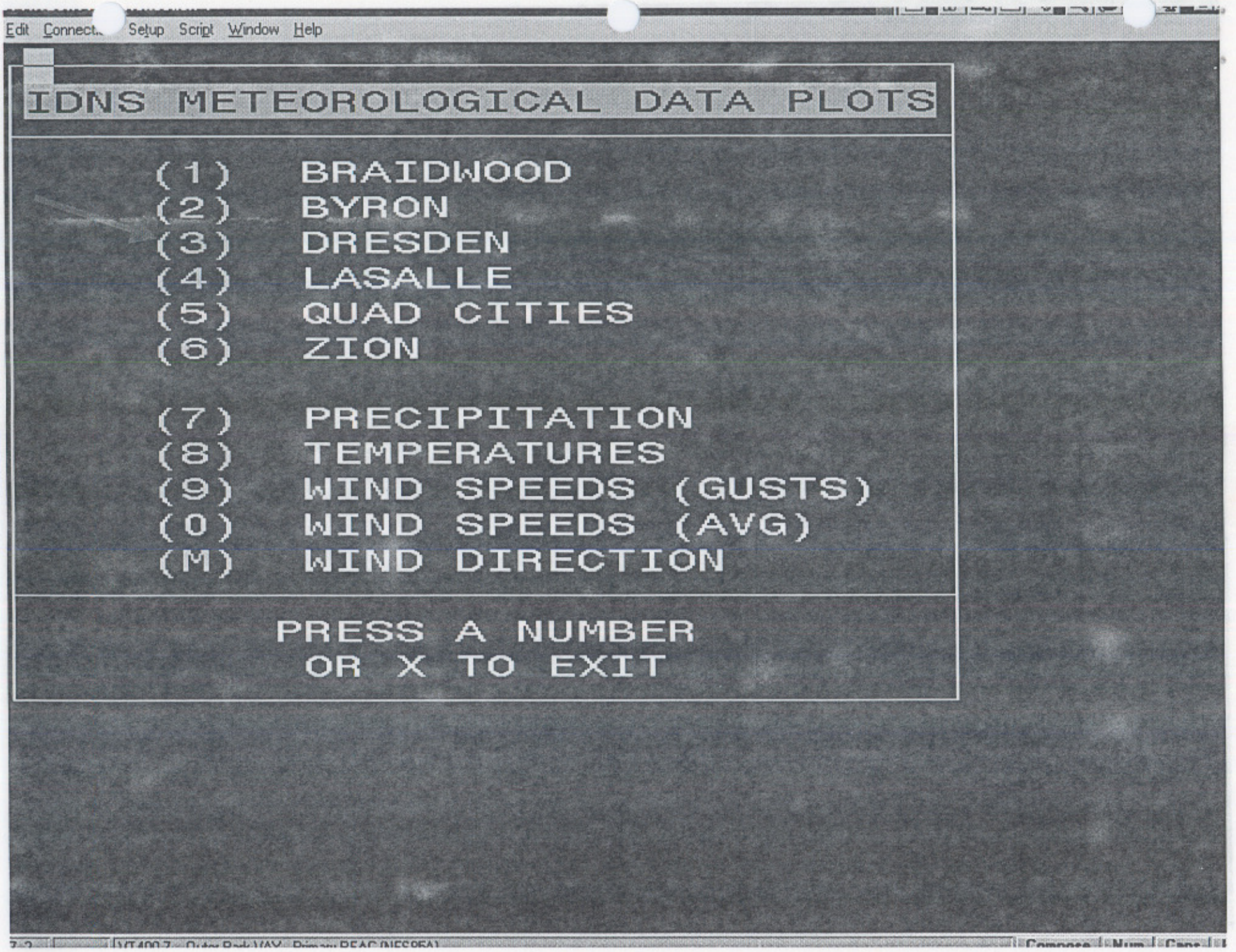



SETTINGS - Reflection 4
e Edit Connection Setup Script Window Help
IDNS METEOROLOGICAL DATA DISPLAY
05-MAY-99 16:01
DIR (DEG)
SPEED (MPH)
TEMP (F)
DPT (F)
INCHES
TOWER LEVEL
BRAIDWOOD (1) 184.3 27.3 0.00 15 MIN TOT (203) FT
188.8 17.3 77.31 57.84 0.86 BUCKET NOW (34) FT
BYRON (2) 191.3 26.6 0.00 15 MIN TOT (250) FT
189.4 20.1 75.22 48.22 0.73 BUCKET NOW (30) FT
DRESDEN (4) 191.8 22.5 0.00 15 MIN TOT (300) FT
197.7 17.6 78.79 0.09 BUCKET NOW (35) FT
LASALLE (5) 193.3 28.8 0.00 15 MIN TOT (375) FT
191.1 23.8 76.57 0.02 BUCKET NOW (33) FT
QUAD CITIES (6) 209.1 31.6 0.00 15 MIN TOT (296) FT
225.2 12.7 75.35 0.04 BUCKET NOW (33) FT
ZION (7) 152.8 14.1 LAKE 0.00 15 MIN TOT (250) FT
161.4 7.6 56.81 52.16 0.55 BUCKET NOW (35) FT
(Z) INLAND TOWER DATA
(8)ILLINOIS WINDFIELD (G)SITE GRAPHICS (M)WEATHER PLOTS (B)ZION MESOSCAL
DOPPLER SODAR DATA DISPLAY
X TO EXIT

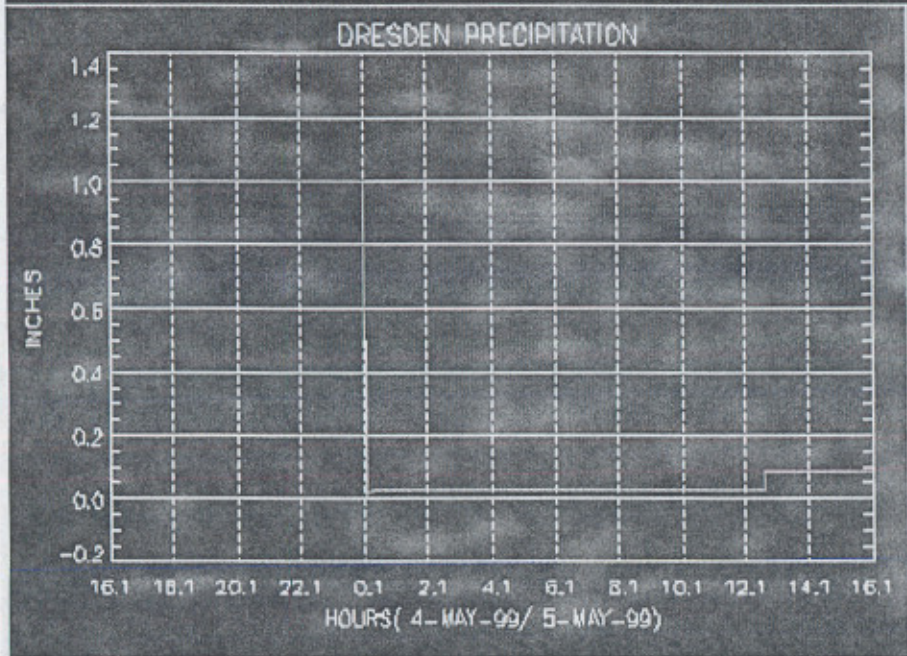

Edit Connection Setup Script Window Help
%DCL-I-SUPERSEDE, previous value of SYS$INPUT has been superseded
Zion tower data is available for the last 3 months.
Other periods of time can be made available upon request
by calling Tom Bellinger of IDNS at 217-785-6984.
Enter the year, month, and day you want (YYMMDD): 980701

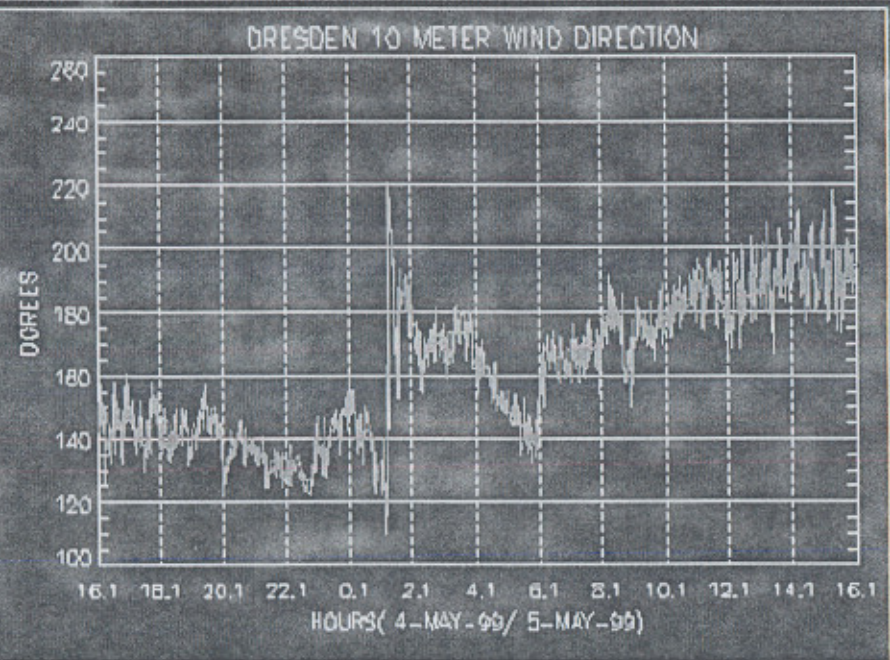

SETTINGS - Reflection 4
e Edit Connection Setup Script Window Help
ZION SUPPLEMENTAL TOWER DATA FOR 980701
10 METER WINDS ___TEMPERATURE ...DEW POINT
92
88
84
80
76
72
68
64
60
56
52
48
44
40
36
32
28
15
5
2
M
H2O
15MILE
5 MILE
2 MILE
MAIN
5
10
5
mph
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
TIME OF DAY (CST)
Printed by the Illinois Department of Nuclear Safety

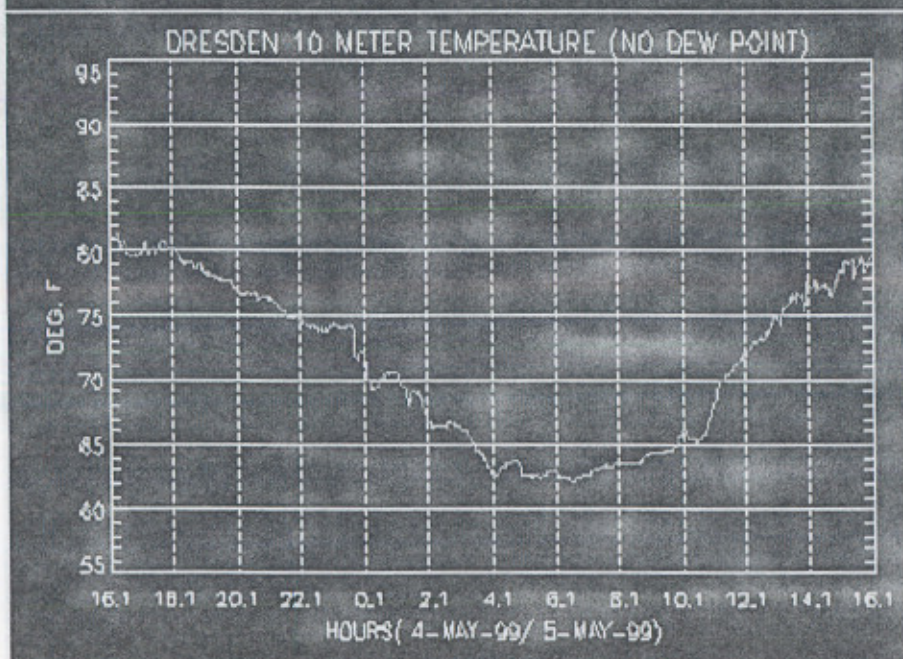

SETTINGS.R4W - Reflection 4
Edit Connection Setup Script Window Help
IDNS METEOROLOGICAL DATA DISPLAY
05-MAY-99 16:01
DIR (DEG)
SPEED (MPH)
TEMP (F)
DPT (F)
INCHES
TOWER LEVEL
BRAIDWOOD (1) 184.3 27.3 0.00 15 MIN TOT (203) FT
188.8 17.3 77.31 57.84 0.86 BUCKET NOW (34) FT
BYRON (2) 191.3 26.6 0.00 15 MIN TOT (250) FT
189.4 20.1 75.22 48.22 0.73 BUCKET NOW (30) FT
DRESDEN (4) 191.8 22.5 0.00 15 MIN TOT (300) FT
197.7 17.6 78.79 0.09 BUCKET NOW (35) FT
LASALLE (5) 193.3 28.8 0.00 15 MIN TOT (375) FT
191.1 23.8 76.57 0.02 BUCKET NOW (33) FT
QUAD CITIES (6) 209.1 31.6 0.00 15 MIN TOT (296) FT
225.2 12.7 75.35 0.04 BUCKET NOW (33) FT
ZION (7) 152.8 14.1 LAKE 0.00 15 MIN TOT (250) FT
161.4 7.6 56.81 52.16 0.55 BUCKET NOW (35) FT
(Z) INLAND TOWER DATA
(8) ILLINOIS WINDFIELD
(G) SITE GRAPHICS
(M) WEATHER PLOTS
(B) ZION MESOSCALE
DOPPLER SODAR DATA DISPLAY
X TO EXIT

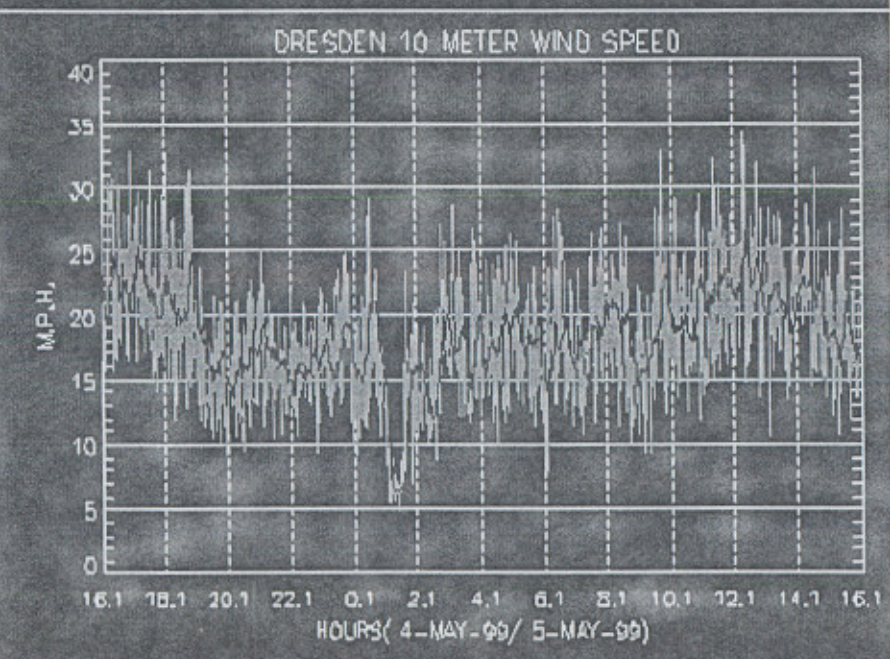

Edit Connect Setup Script Window Help
IDNS METEOROLOGICAL DATA PLOTS
(1) BRAIDWOOD
(2) BYRON
(3) DRESDEN
(4) LASALLE
(5) QUAD CITIES
(6) ZION
(7) PRECIPITATION
(8) TEMPERATURES
(9) WIND SPEEDS (GUSTS)
(0) WIND SPEEDS (AVG)
(M) WIND DIRECTION
PRESS A NUMBER
OR X TO EXIT

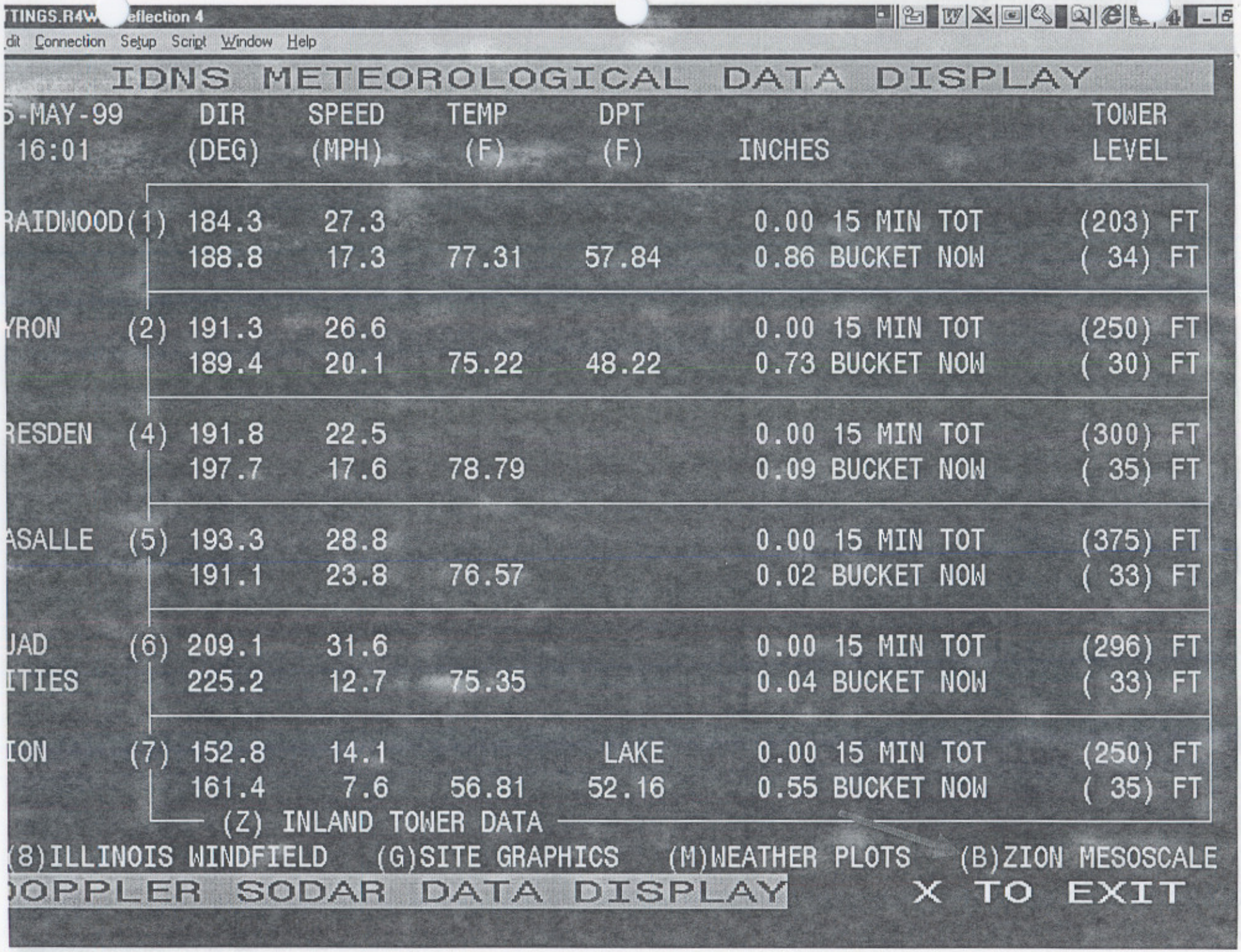
Edit Connection Setup Script Window Help







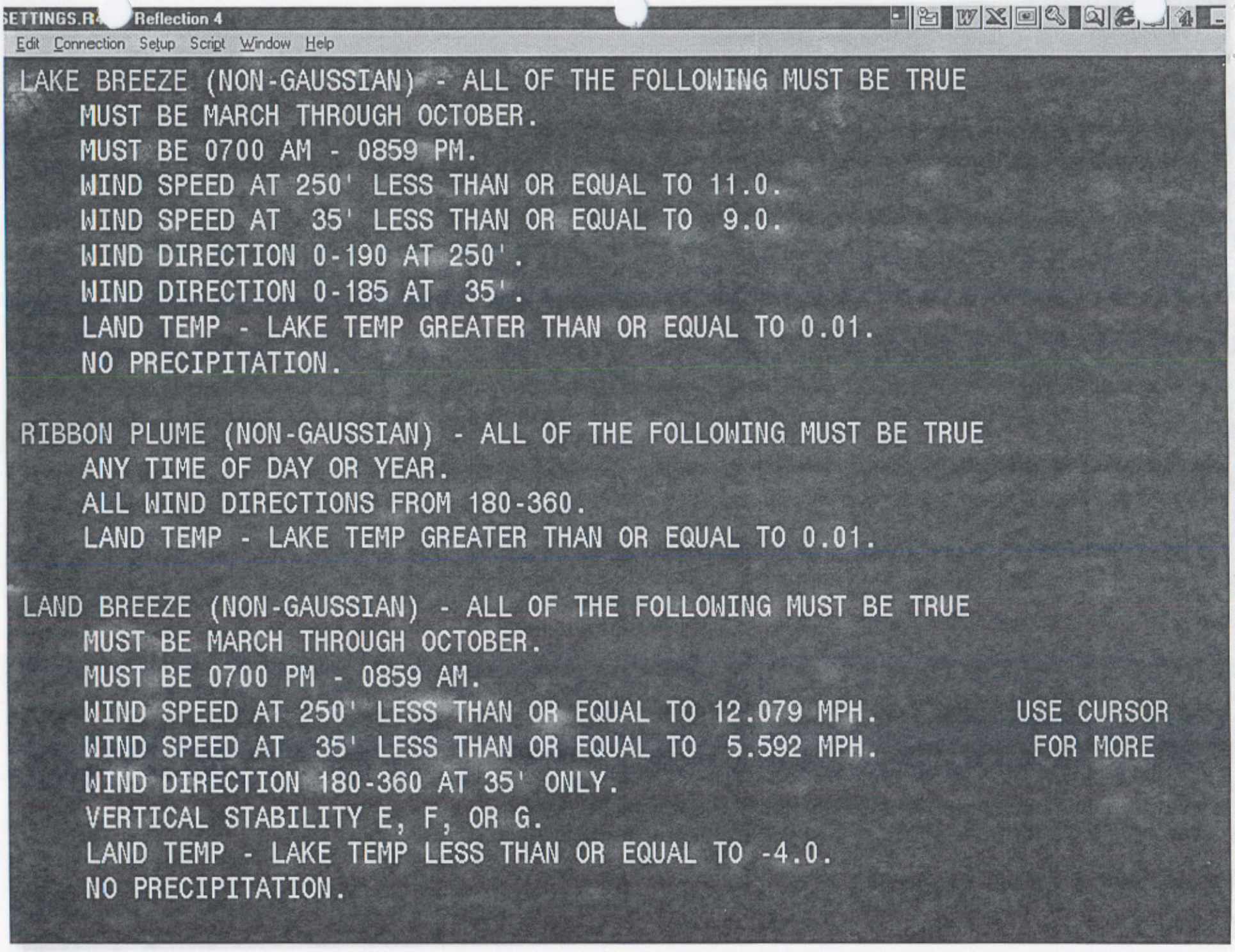



TTINGS.R4W eflection 4
dit Connection Setup Script Window Help
IDNS METEOROLOGICAL DATA DISPLAY
5-MAY-99 DIR SPEED TEMP DPT TOWER
16:01 (DEG) (MPH) (F) (F) INCHES LEVEL
RAIDWOOD (1) 184.3 27.3 0.00 15 MIN TOT (203) FT
188.8 17.3 77.31 57.84 0.86 BUCKET NOW (34) FT
YRON (2) 191.3 26.6 0.00 15 MIN TOT (250) FT
189.4 20.1 75.22 48.22 0.73 BUCKET NOW (30) FT
RESDEN (4) 191.8 22.5 0.00 15 MIN TOT (300) FT
197.7 17.6 78.79 0.09 BUCKET NOW (35) FT
ASALLE (5) 193.3 28.8 0.00 15 MIN TOT (375) FT
191.1 23.8 76.57 0.02 BUCKET NOW (33) FT
JAD (6) 209.1 31.6 0.00 15 MIN TOT (296) FT
ITIES 225.2 12.7 75.35 0.04 BUCKET NOW (33) FT
ION (7) 152.8 14.1 LAKE 0.00 15 MIN TOT (250) FT
161.4 7.6 56.81 52.16 0.55 BUCKET NOW (35) FT
(Z) INLAND TOWER DATA
(8)ILLINOIS WINDFIELD (G)SITE GRAPHICS (M)WEATHER PLOTS (B)ZION MESOSCALE
OPPLER SODAR DATA DISPLAY
X TO EXIT

Edit Connection Setup Script Window Help

ZION PLUME DISPERSION AND TRANSPORT

TOWER LEVEL	250'	35'
WIND DIRECTION	153.1	156.3
DOWNWIND SECTORS	QRA	QRA
WIND SPEED (MPH)	17.0	8.6
SIGMA THETA	8.1	16.5
HORIZONTAL STABILITY	D	C
DELTA T (F)	1.31	
VERTICAL STABILITY	E	
WIND SHEAR	NORMAL	
LAND TEMPERATURE (F)	56.8	DIFF
LAKE TEMPERATURE (F)	68.0	-11.2
LAKE BREEZE MARKER	NOT AVAILABLE	
(1)MESOSCALE REGIME (VIA RDL)	SYNOPTIC FLOW	
PLUME TYPE	GAUSSIAN	


SETTINGS.R4 Reflection 4
Edit Connection Setup Script Window Help
LAKE BREEZE (NON-GAUSSIAN) - ALL OF THE FOLLOWING MUST BE TRUE
MUST BE MARCH THROUGH OCTOBER.
MUST BE 0700 AM - 0859 PM.
WIND SPEED AT 250' LESS THAN OR EQUAL TO 11.0.
WIND SPEED AT 35' LESS THAN OR EQUAL TO 9.0.
WIND DIRECTION 0-190 AT 250'.
WIND DIRECTION 0-185 AT 35'.
LAND TEMP - LAKE TEMP GREATER THAN OR EQUAL TO 0.01.
NO PRECIPITATION.
RIBBON PLUME (NON-GAUSSIAN) - ALL OF THE FOLLOWING MUST BE TRUE
ANY TIME OF DAY OR YEAR.
ALL WIND DIRECTIONS FROM 180-360.
LAND TEMP - LAKE TEMP GREATER THAN OR EQUAL TO 0.01.
LAND BREEZE (NON-GAUSSIAN) - ALL OF THE FOLLOWING MUST BE TRUE
MUST BE MARCH THROUGH OCTOBER.
MUST BE 0700 PM - 0859 AM.
WIND SPEED AT 250' LESS THAN OR EQUAL TO 12.079 MPH.
WIND SPEED AT 35' LESS THAN OR EQUAL TO 5.592 MPH.
WIND DIRECTION 180-360 AT 35' ONLY.
VERTICAL STABILITY E, F, OR G.
LAND TEMP - LAKE TEMP LESS THAN OR EQUAL TO -4.0.
NO PRECIPITATION.
USE CURSOR
FOR MORE

SETTINGS.R4W - Reflection 4

Edit Connection Setup Script Window Help

```
FUMIGATION (NON-GAUSSIAN) - ALL OF THE FOLLOWING MUST BE TRUE
    MUST BE MARCH THROUGH OCTOBER.
    MUST BE 0900 AM - 0659 PM.
    ALL WIND DIRECTIONS FROM 0-180.
    VERTICAL STABILITY D,E,F, OR G.
    LAND TEMP - LAKE TEMP GREATER THAN OR EQUAL TO 0.01.
    NO PRECIPITATION.

SYNOPTIC FLOW (GAUSSIAN) - ANY OF THE FOLLOWING MUST BE TRUE
   1. ANY PRECIPITATION
   2. WIND SPEED AT 250' GREATER THAN 11.0 MPH OR
      WIND SPEED AT  35' GREATER THAN  9.0 MPH.
   3. ALL WIND DIRECTIONS FROM 0-180.
      LAND TEMP - LAKE TEMP LESS THAN OR EQUAL TO 0.0.          USE CURSOR
   4. MUST BE 0800 AM - 0859 PM.                                 FOR MORE
      ALL WIND DIRECTIONS FROM 180-360.
      LAND TEMP - LAKE TEMP LESS THAN OR EQUAL TO 0.0.
   5. MUST BE 0900 PM - 0659 AM.
      ALL WIND DIRECTIONS FROM 0-180.
      LAND TEMP - LAKE TEMP GREATER THAN OR EQUAL TO 0.01.

CONFLUENCE (UNDETERMINED) - ALL OF THE FOLLOWING MUST BE TRUE
    WIND DIRECTIONS ARE NOT UNIFORMLY FROM THE LAKE OR LAND.
    THAT IS, WIND DIRECTIONS "STRADDLE" THE SHORE LINE.
```

Edit Connec Setup Script Window Help

3. ALL WIND DIRECTIONS FROM 0-180.
   LAND TEMP - LAKE TEMP LESS THAN OR EQUAL TO 0.0.
4. MUST BE 0800 AM - 0859 PM.
   ALL WIND DIRECTIONS FROM 180-360.
   LAND TEMP - LAKE TEMP LESS THAN OR EQUAL TO 0.0.
5. MUST BE 0900 PM - 0659 AM.
   ALL WIND DIRECTIONS FROM 0-180.
   LAND TEMP - LAKE TEMP GREATER THAN OR EQUAL TO 0.01.

USE CURSOR
FOR MORE

CONFLUENCE (UNDETERMINED) - ALL OF THE FOLLOWING MUST BE TRUE
   WIND DIRECTIONS ARE NOT UNIFORMLY FROM THE LAKE OR LAND.
   THAT IS, WIND DIRECTIONS "STRADDLE" THE SHORE LINE.
   IE. WIND IS BLOWING FROM THE LAKE AT ONE LEVEL, WHILE WIND
       IS BLOWING FROM THE LAND AT THE OTHER LEVEL.

UNDETERMINED
   DEFAULT IF NONE OF THE ABOVE CONDITIONS EXIST.
   CHECK FOR CALIBRATION OF MET TOWER, DEICING OF WATER INTAKE,
   VERY CALM CONDITIONS, TRANSITIONAL PERIODS, IMPROPER OVERIDE VALUE
   FOR AIR-LAKE TEMPERATURE, ETC.

06-MAY-99 09:40:06

National Weather Service, Chicago

Science-Weather Events in Northeast Illinois

Weather in Northern Illinois has created many fascinating events over the years. With new technologies available to the National Weather Service combined with enhanced display capabilities, it is now possible to view these events with some clarity.

The purpose of this page is to illustrate some of the more notable or unusual weather occurrences which have been witnessed in northern Illinois.

These cases are written on a level for the professional meteorologist or dedicated student. While the content may be somewhat above a general audience, it serves to illustrate the complexities that meteorology, as a science, really is.

We hope you enjoy the presentations. Comments or suggestions can be directed to the webmaster.

Click on the case below to access the story...

- **Chicago Killer Heat Wave July 13, 1995**
- **Lindenhurst, Illinois Tornado May 18, 1887**
- **Elevated Convection October 26, 1997**
- **Mid-Lake Swirl November 13, 1997**
- **Heavy Snow over Lake County Illinois November 15, 1997**
- **Shallow Stratus Intrusion February 9, 1998**
- **Convective Wind/Wake Low May 28, 1998**
- **Rockford Heavy Snow/Lightning January 8, 1998** ***viewed with AWIPS***
- **Convective Roll Snow Squalls over the Midwest February 12, 1999**
- **Return to Top of Page**