

† Option Codes

49, 50 MAX/MIN:
 0xxx Store spatial max or min at loc xxx
 1xxx Store max or min at loc xxx & loc of max or min at xxx+1

60 OPTION codes:
 0x Power spectra
 1x Real and imaginary
 2x Magnitude and phase
 x = 0 No taper
 x = 1 Taper

63, 68 PARAMETERS 1-8:
 Following Inst. 97 RF IDs & Phone No.: 1 digit at a time
 32 Between RF IDs (e.g., repeater & site)
 32 & 84 Between Phone Modem No.
 70 After last RF
 13 To end

Following Inst. 98 (256 Character limit)
 Base 10 value of ASCII Character (1-99)
 00 to end

OUTPUT PROCESSING INSTRUCTIONS

Note: A Program Control instruction that sets the output flag high is required to obtain output data from these instructions.

INST.	01:	02:	03:	04:	05:	06:	07:	08:	09:	10:
69 WIND VECTOR	REPS	SMPL/SUBINT†	SEN/OUT†	WS/E	WD/N					
70 SAMPLE	REPS	LOC								
71 AVERAGE	REPS	LOC								
72 TOTALIZE	REPS	LOC								
73 MAXIMUM	REPS	TIME†	LOC							
74 MINIMUM	REPS	TIME†	LOC							
75 HISTOGRAM	REPS	BINS	FORM†	B SEL LOC	WV LOC†	LOW LIM	HIGH LIM			
77 REAL TIME	OPTION†									
78 RESOLUTION	OPTION†									
79 SMPL ON MAX/MIN	REPS	LOC	(must follow Inst. 73 or 74)							
80 STORE AREA	AREA†	LOC/ID								
82 STD DEV	REPS	LOC								

† Option Codes

69 SaMPles/SUBINteRval (std dev):
 0 No subinterval
 xxxx Number of scans per subinterval

73,74 TIME of max or min:
 00 Max/min value only
 01 With seconds
 10 With Hour-Minute
 11 With Hour-Minute, Second

75 FORM codes:
 0 Open form (data beyond limits are included)
 1 Closed form (data beyond limits are excluded)

77 OPTION codes:
 xxx1 Seconds
 xx1x Hour-Minute
 xx2x Hour-Minute, 2400 at midnight
 x1xx Day
 x2xx Day, Previous day at midnight
 1xxx Year
 (0 - no output, e.g., 110 = Day, Hr-Min)

78 OPTION codes:
 0 Low resolution
 1 High resolution

80 AREA codes:
 1 Final Storage 1
 2 Final Storage 2
 3 Input Storage

SENSOR type/OUTput codes:
 x0 Avg WS, Θ 1, $\sigma(\Theta$ 1)
 x1 Avg WS, Θ 1
 x2 Avg WS; resultant U, Θ u, $\sigma(\Theta$ u)
 x = 0 (anemometers & vanes)
 x = 1 (north- & east-facing propellers)

Where: Θ 1 = Avg unit vector dir
 $\sigma(\Theta$ 1) = Std dev dir (Yamartino)
 Θ u = Avg resultant vector dir
 $\sigma(\Theta$ u) = Std dev dir (CSI)

WV LOcation:
 0 Frequency Distribution
 xxxx Weighted Value Loc

PROGRAM CONTROL INSTRUCTIONS

(F is fixed data (constant); X, Y, & Z are input locations)

INST.	01:	02:	03:	04:	05:	06:	07:	08:
83 IF CASE < F	F	CMD†						
85 BEGIN SUBR	SUBR†							
86 DO	CMD†							
87 LOOP	DELAY	COUNT						
88 IF X <=> Y	X	COMP†	Y	CMD†				
89 IF X <=> F	X	COMP†	F	CMD†				
90 LOOP INDEX	STEP							
91 IF FLAG/PORT	COMP†	CMD†						
92 IF TIME IS	T†	INT†	CMD†					
93 BEGIN CASE	CASE LOC							
94 ELSE								
95 END								
96 SERIAL OUT	DEVICE†							
97 INITIATE TELE	MODEM†	FLAG	LIM (sec)	F DEL (sec)	NO RETRIES	S DEL (min)	FAIL LOC	ID (must be followed by Inst. 63 or 68)
98 SEND CHAR	DEVICE†	(must be followed by Inst. 63 or 68)						
111 RUN FLASH	F PROGRAM	(indexing compiles program as *6)						
120 TGT1 GOES	BUFFER†	FWD/REF LOC						
121 ARGOS	COMMAND	COMMAND	COMMAND					
123 AUTO PROG TGT1	1-8: ADDR, 9: ASSIGNED CH, 10: RANDOM CH, 11: TIMED DAYS, 12: TIMED HRS, 13: TIMED MIN, 14: TIMED SEC, 15: RANDOM HRS, 16: RANDOM MIN, 17: RANDOM SEC, 18: INITIAL HRS, 19: INITIAL MIN, 20: INITIAL SEC, 21: ASSIGNED WIN†, 22: PREAMBLE†, 23: BUFFER†							
124 FIRE TGT	FORMAT†	BUFFER†	FWD/REF LOC					
221 ALERT	SENSOR ID	PACKET ID	LOC					

† Option Codes

FLAG DESCRIPTIONS:
 0 Output flag
 1-8 User flags
 9 Intermed. processing disable flag

83-92 CoMmanD codes:
 0 Go to end of Pgm. Table
 1-9, 79-99 Call Subroutine
 10-19 Set flag 0-9 high
 20-29 Set flag 0-9 low
 30 Then Do
 31 Exit Loop if true
 32 Exit Loop if false
 41 Set Port 1 high
 51 Set Port 1 low
 61 Toggle Port
 71 Pulse Port

85 SUBROUTINE:
 Subroutine number valid entries are 1-9, 79-99; 98 allows special interrupts on C2

88,89 CoMParison codes:
 1 = 3 ≥
 2 ≠ 4 <

91 CoMParison codes:
 1x Do if flag x is high
 2x Do if flag x is low
 40 Do if modem is on
 4X Do if port x is high
 50 Do if modem is off
 5X Do if port x is low
 Ports can be indexed with C (--)

92 Time into INteRval
 xxx T and INT in minutes (T max is 1439, INT max is 1440)
 xxx-- T and INT in seconds (T max is 59, INT max is 60)

96,*8 DEVICE/baud codes (y = Baud Codes):
Addressed Print Device
 1y Printable ASCII
 2y Comma separated ASCII
 3y Binary Final Storage format
Serial Printer or Computer
 4y Printable ASCII
 5y Comma separated ASCII
 6y Binary Final Storage format
Storage Module
 7N Storage Module, address N (1-8)
 7N -- Filemark to Storage Module N (1-8)
Transfer Data to Other Final Storage Area
 80 New data only (Inst. 96 only)
 81 All data (Inst. 96 only)

97 MODEM/baud codes:
 0y RF modem
 1y Short haul/Direct
 2y Phone modem
 31 Voice call-back, 1200 baud
 40 Voice modem, data call-back, 300 baud
 41 Voice modem, data call-back, 1200 baud
 5y RF modem (SDC state)
 y = Baud Rate Code; baud rate code 3 not valid for Inst. 97.

98 DEVICE/baud codes (y = Baud Codes):
 1y Addressed Print Device
 4y Pin-Enabled Print Device

100 BUFFER:
A B C
 A Mode
 0 - binary
 1 - ASCII
 3 - 18-bit, high-resolution
 B Buffer
 0 - Self-timed
 1 - Random
 C New data
 0 - Appends new data to old
 1 - Writes over old data

123 PREAMBLE
 0 - Short (0.98 seconds)
 1 - Long (7.3 seconds)

123 BUFFER
 1 - Self-timed
 2 - Random
 3 - Both

124 Fire Weather FORMAT:
 0 RAWS 7 output
 1 xxx.x ASCII output
 2 xx.xx ASCII output
 3 x.xxx ASCII output
 4 xxx ASCII output

124 BUFFER Control:
 0 Self-timed buffer, appends new data to old
 1 Self-timed buffer, writes over old data
 2 Random buffer, appends new data to old
 3 Random buffer, writes over old data
 9 Erases random buffer without writing any data

y=	0	300
	1	1200
	2	9600
	3	76800

123 ASSIGNED transmission WINDOW
 0 - 1 minute
 1 - 2 minute