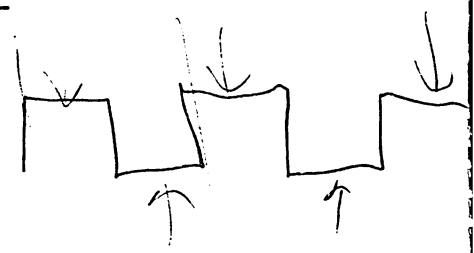
General Single Dish Data Format

Parameter	Pointer Name	Location
Basic Information		
Scan Number	KSNO	1
Type of Data-~~Observing Mode~~	KSTC	2
Length of Header (8-byte words)	KHLN	3
Length of Data (8-byte words)	KDLN	4
Source Name (16 characters)	KSNA	5-6
Observer Name (16 characters)	KONA	7-8
Observer Initials/Operator Initials	KOBS	9
Receiver Descriptor (8 characters)	KRCV	10
BackEnd Descriptor (8 characters)	KBKE	11
Telescope Descriptor (8 characters)	KTEL	12
Project Identification (8 characters)	KPID	13
Telescope Parameters		
Horizontal Pointing Correction AZIMUTH/RA	KHPC	16
Vertical Pointing Correction ELEVATION/DEC	KVPC	17
Collimation Error	KCE	18
Bend Error	KBE	19
Antenna Aperature Efficiency	KAAE	20
Antenna Beam Efficiency	KABE	21
Observing Parameters		
Sample Rate (sec of time) Length of Cycle	KSRT	24
~~Scan Integration Time~~ ~~Record Rate~~ Number	KINT	25
Universal Time Date (yyyy.mmdd) of cycles	KDAT	26
Universal Time (decimal hours)	KUT	27
LST (decimal hours)	KLST	28
Calibration Temperature in an integration	KCAL	29
Receiver Temperature	KRT	30
Source System Temperature	KSTP	31
~~Rest Frequency~~ Front End Center Frequency	KRF	32
Positions		
Coordinate System Code	KCSC	36
Epoch	KEPH	37
Description of Origin (3)	KDSO	38-40
Source Lambda	KSL	41
Source Beta	KSB	42
Reference Lambda	KRL	43
Reference Beta	KRB	44
Epoch Right Ascension	KERA	45
Epoch Declination	KEDC	46
Galactic Longitude	KGL	47
Galactic Latitude	KGB	48
Azimuth	KAZ	49
Elevation	KEL	50

512

1024 bytes / rec



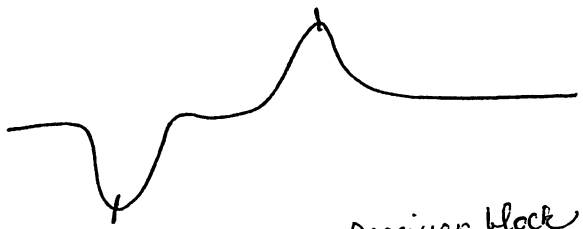
16 ~~d~~ on diff

pts/rec
freq
resolution
system temp
noise tube

Phase Block (8, 16)

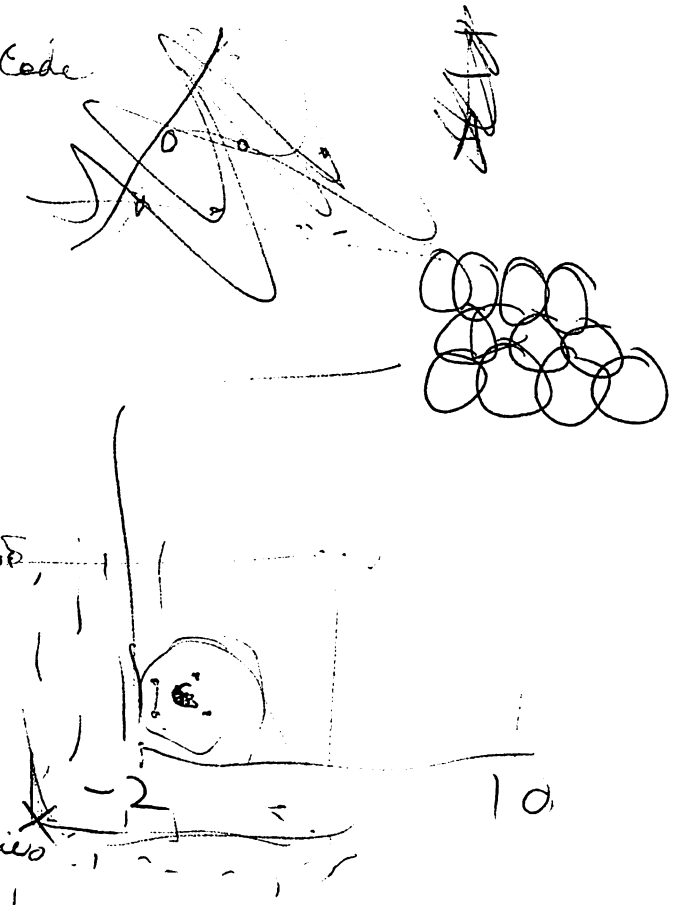
Number of Backend Channels
Number of Phases per Cycle

128
224 R*8
352



Receiver Block (16)
1) number pts
2) freq
3) resolution
4) calibration temp
5) source sys temp
6) ref sys temp

Frontend			
Number of Receivers		KNR	53
Signal Polarization		KSP	54
Reference Polarization		KRP	55
Environment			
Ambient Temperature		KAT	58
Pressure		KPRS	59
Relative Humidity		KRH	60
Index of Refraction		KIR	61
Total Opacity		KTO	62
H20 Opacity		KWO	63
H20 Temperature		KWT	64
O2 Temperature		KOT	65
Data Parameters			
~~Number of Phases~~		KNPH	68
Number of X points per ~~Phase~~		KNXP	69
Number of Y points per ~~Phase~~		KNYP	70
Reference X Point		KRXP	71
Reference Y Point		KRYP	72
~~X value at Reference Point~~		KXV	73
~~Y value at Reference Point~~		KYV	74
Delta X		KDX	75
Delta Y		KDY	76
X-axis code/Y-axis code		KAC	77
Data Precision Code		KDPC	78
Observing Dependent Parameters (Spectral Line)			
~~Sky Frequency (3)~~		KCF	80-82
Velocity wrt LSR		KVL	83
Velocity wrt SUN		KRH	84
~~Current Spectral Resolution~~		KCSR	85
Velocity Definition & Reference		KVRD	86
~~Reference System Temperature~~		KRTP	87
Off Scan Number		KOSN	88
Observing Dependent Parameters (Continuum)			
Source Temperature		KST	80
RMS of Mean		KRMS	81
Baseline Value		KBAS	82
Switched Power Calibration Factor		KSCF	83
Total Power Calibration Factor		KTCF	84
HP		KHP	85
Map Scanning Angle		KMSA	86
Telescope Dependent Parameters			
L1,L1F1,L1F2	(NRAO-GB)	KL1	90-92
L2,L2F1,L2F2	(NRAO-GB)	KL2	93-95
LA,LB,LC,LD	(NRAO-GB)	KLA	96-99
Center Frequency Formula	(NRAO-GB)	KCFF	100-102
Apparent Right Ascension	(NRAO-GB)	KARA	103
Apparent Declination	(NRAO-GB)	KADC	104



LO IF, First IF	(NRAO-TUC)	KLOF	90-91
Synthesizer Frequency	(NRAO-TUC)	KSYN	92
Sideband & LO Factor	(NRAO-TUC)	KSDB	93
Harmonic	(NRAO-TUC)	KHM	94
Source Offsets	(NRAO-TUC)	KSOF	95-96
Reference Offsets	(NRAO-TUC)	KROF	97-98
Reference Name	(NRAO-TUC)	KRN	99
Telescope Longitude	(IRAM-BURE)	KTLG	90
Telescope Latitude	(IRAM-BURE)	KTLT	91
Telescope Elevation	(IRAM-BURE)	KTE	92

****

Open Parameters 95-120

****

90-104 telescope dep

start at 121 — ?

20 1 RCVR = 128 total

****

Spectral Values

****

Data Values [Ph1(ch1),Ph2(ch1),....]	KDF	KHLN+1

1701

PLT5.DAT PLT5.DOC

6.DAT

~~Axis~~

Observing Mode

Rest Frequency

Resolution — Receiver Temperature

Calibration temperature

Source System temperature

Reference System temperature

Reference point for each receiver

~~x center~~ x value at reference point

delta x

X axis code cycles

Number of (points) per receiver

Number of points per cycle

~~Receiver #~~

total Opacity

H20 Opacity

H20 temp

O_2 temp

Observing mode - describes the possible phases

Number of Points for each phase

Freq Reference pt each rcvr

resolution

Calib temp

Source temp

reference temp

~~velocity~~ ~~x ref~~ velocity x center

~~x ref~~ ~~delta v~~ delta x

~~delta x~~

Y pt

Y ref

Y c