

Notes on CPME data plotting.

GSFC processing of DECOM tapes.

Proposed for routine plotting two kinds of representations

1. Type A-- plots of proton, alpha, and electron energy spectra; proton, alpha, and electron angular distributions and p/alpha versus sector number. This is a two dimensional representation of three dimensional data (intensity-energy-time) as shown on the attachment. Data is broken down into 2 hour blocks-- 21 or 22 5.5 minute averages. Each 2 hour period generates 3 frames of plot as follows:

TRAPLT

1	proton energy spectrum	484 points
2	alpha energy spectrum	264 points
3	electron energy spectrum	264 points
4	proton/alpha ratio versus energy	264 points
5	P1 versus sector #	352 points
6	P8 versus sector #	352 points
7	A1 versus sector #	352 points
8	A6 versus sector #	352 points
9	E1 versus sector #	352 points
10	E2A versus sector #	352 points
11	E3 versus sector #	352 points
12	E4 versus sector #	352 points
Storage Requirements		4092 words

2. Type B-- plots of selected proton, alpha, electron intensities versus time. Also X-rays, p/alpha, alpha/n, E2B-E2C, C and delta for protons, alphas, electrons versus time. Time period is one day; at 5.5 minute resolution this yields 267 points. Plot dimensions are 11" by 17" on calcomp, 1/4 inch per hour. Each day yields 3 frames of data as follows:

TRADAY

a.	P2, <del>P8</del> , A1, <del>A6</del> versus time	2096 points
b.	E1, E2A, E3, E4 versus time	2096 points
c.	X1, X2, X3 versus time	1572 points
d.	p/alpha, alpha/n, E2B/E2C, C, delta, for P1, A1, E2A (add time vector)	4716 points
Storage Requirement		262 points
		10742 words
e. M&S scintillators		
Total Storage		14834 words
		59336 bytes

Suggested as options

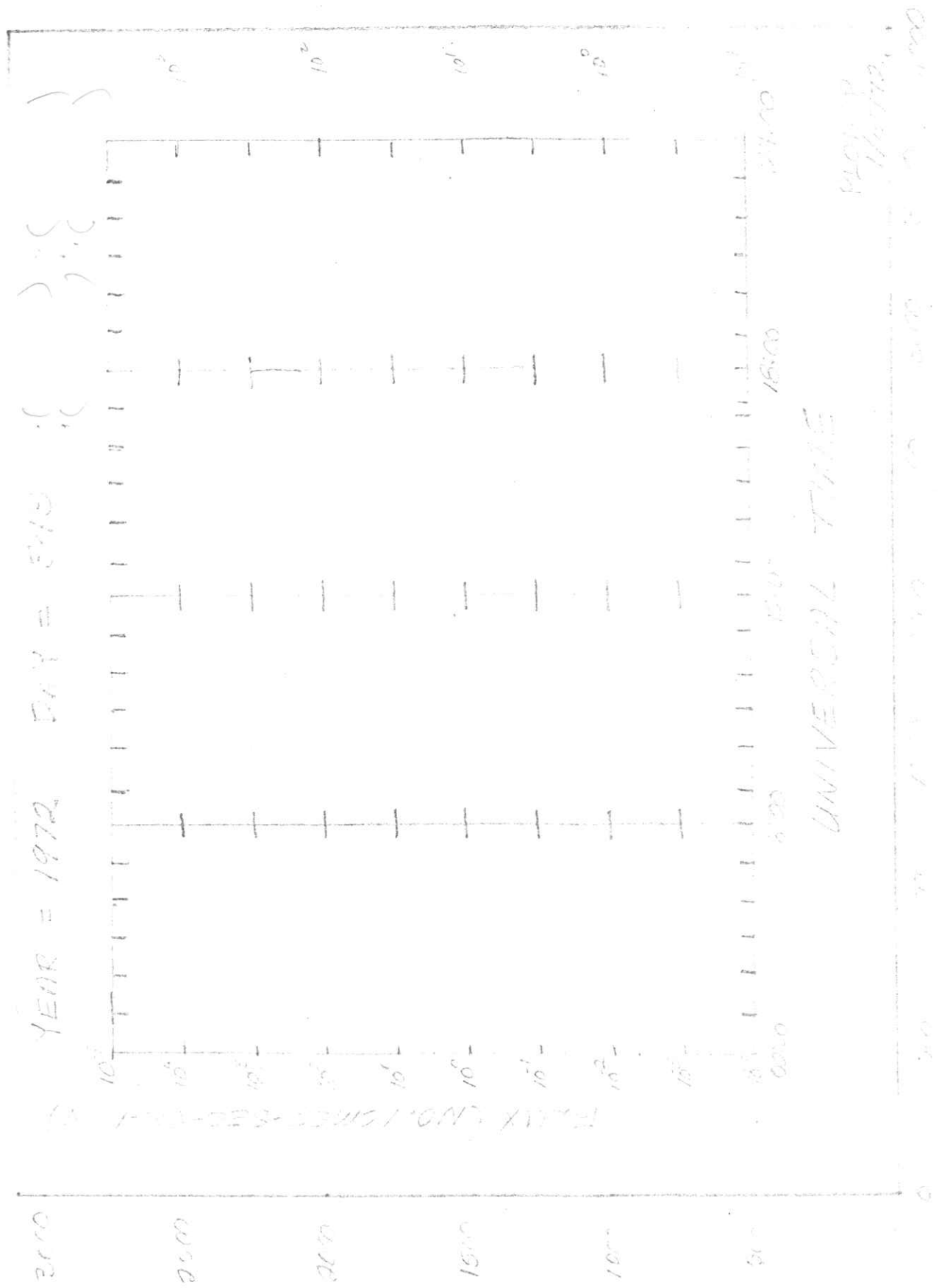
1. X-ray plots at higher than 5.5 minute time resolution.
2. Selected particle data at higher than 5.5 minute time resolution.

#### Further notes

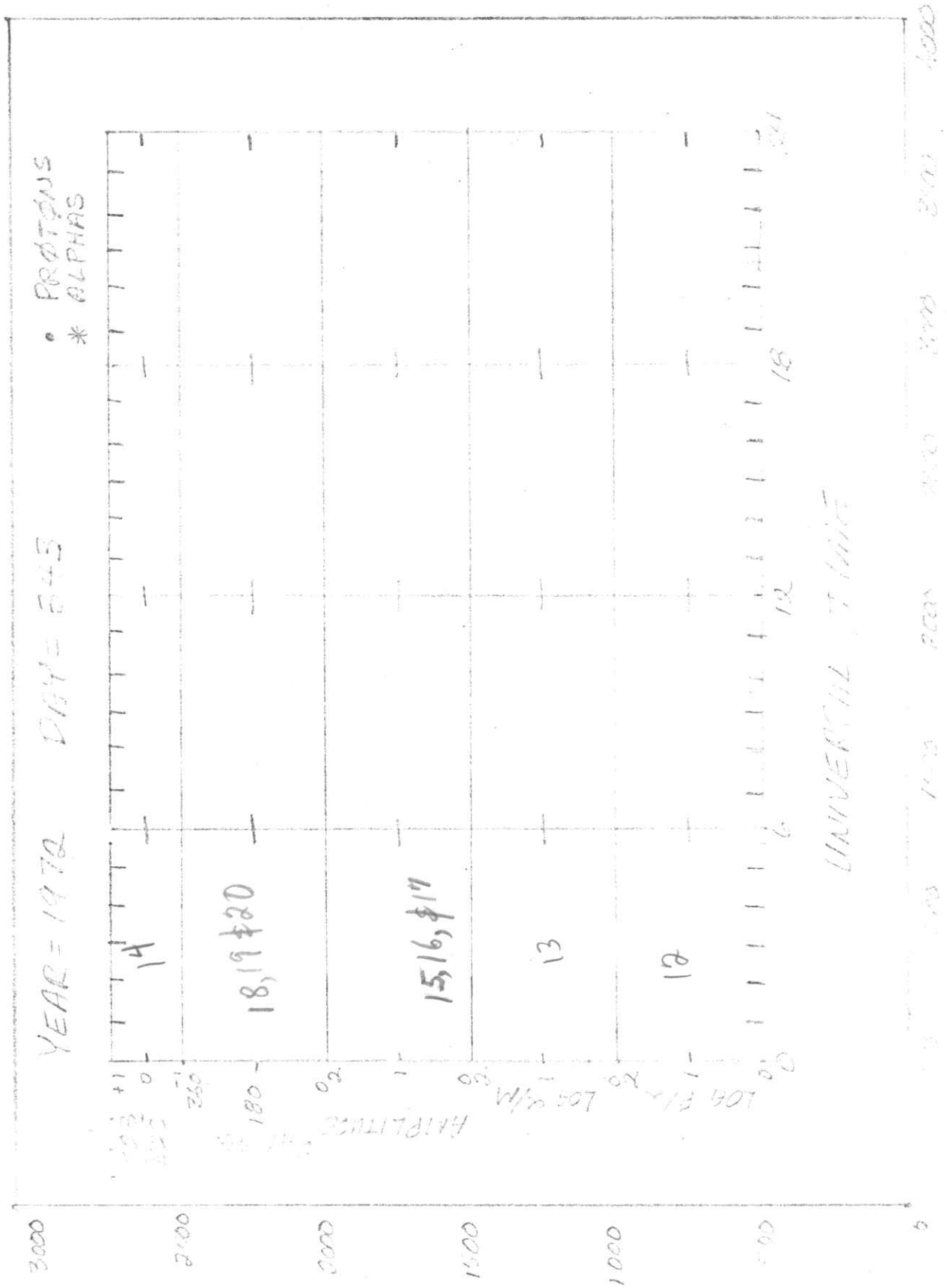
Each DECOM tape processing run will generate approximately 144 Type A plots--on 11" calcomp equals 152 feet of paper. This seems to be too much. Therefore, Type A plots should go out to SC 4060--yielding 10 feet or so of film per DECOM run.

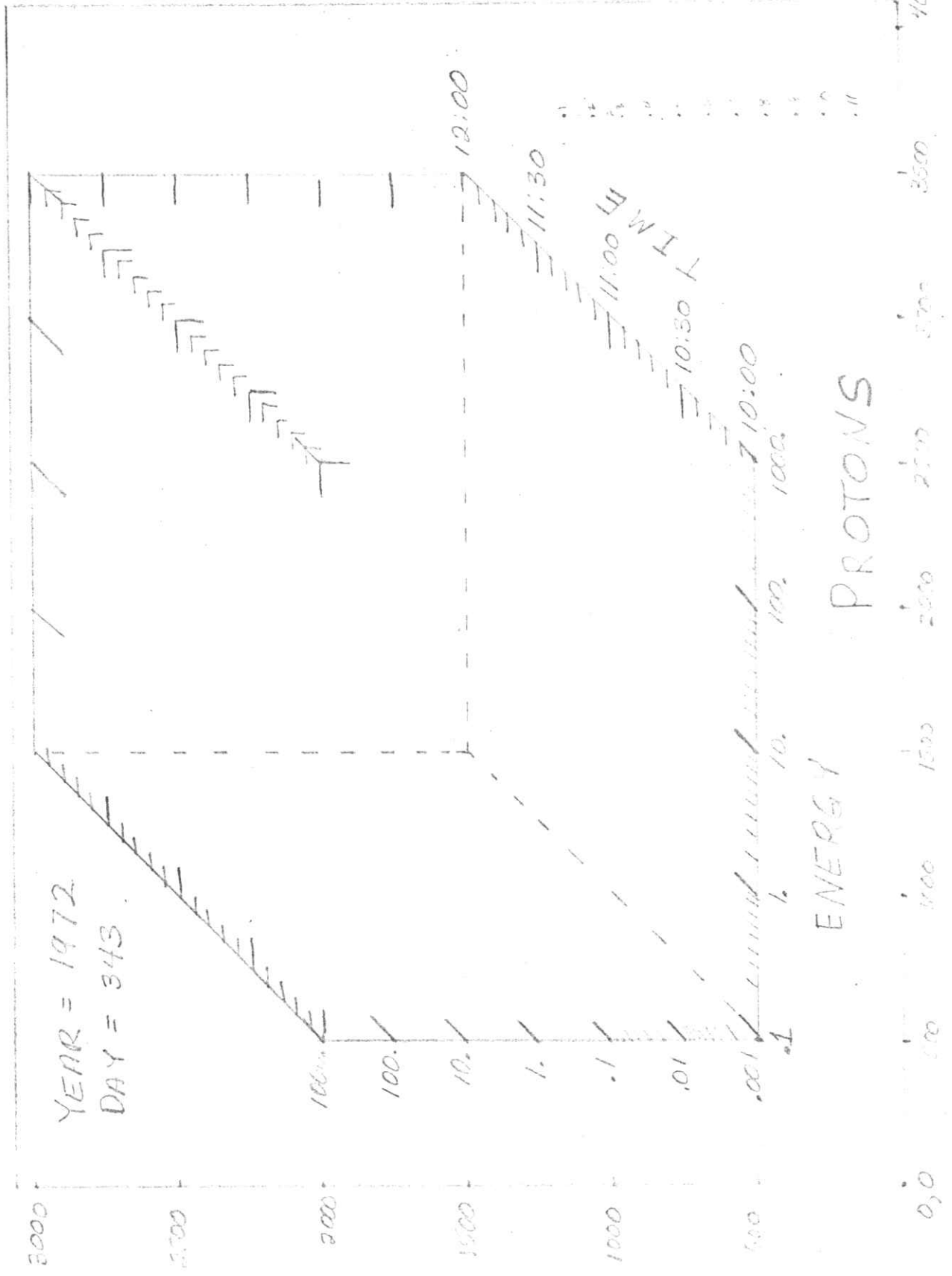
Each DECOM tape run will generate approximately 16 frames of plot. At 17" per plot this equals 23 feet of paper per DECOM run. Perhaps 1 1/2 hours of plotting time.

a, b, c

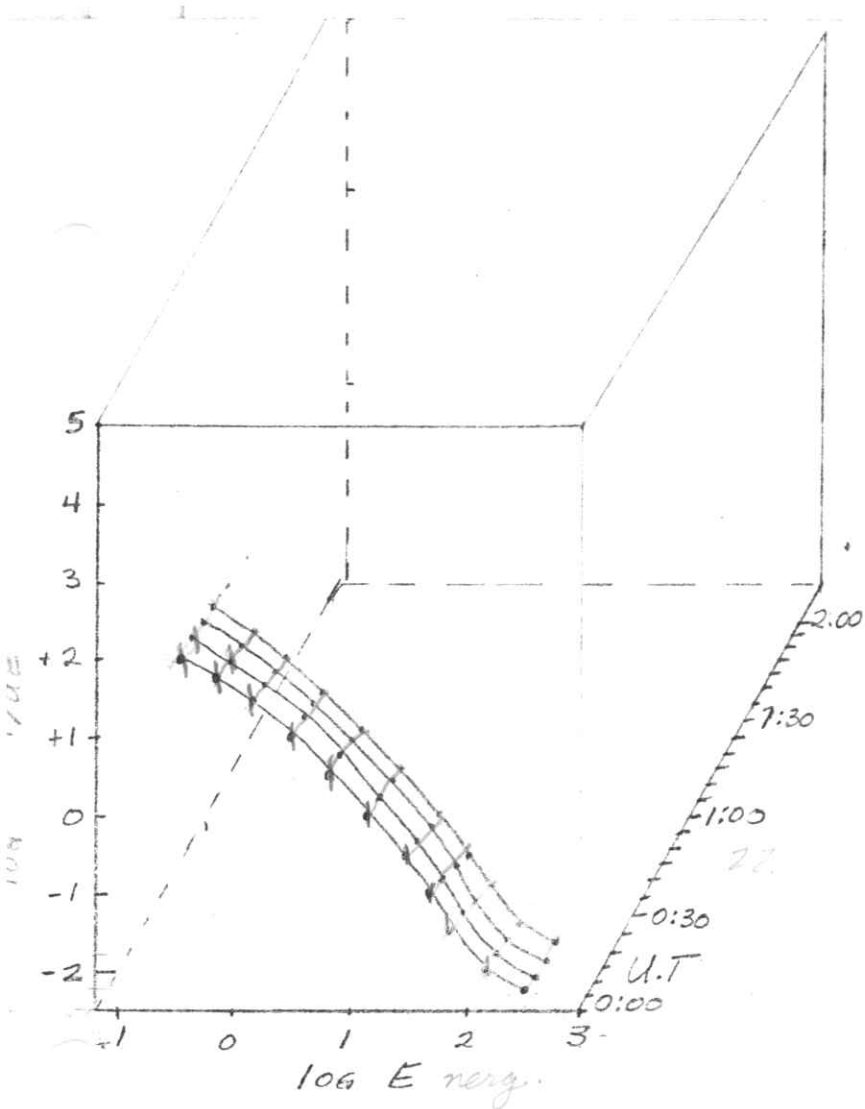


(d)

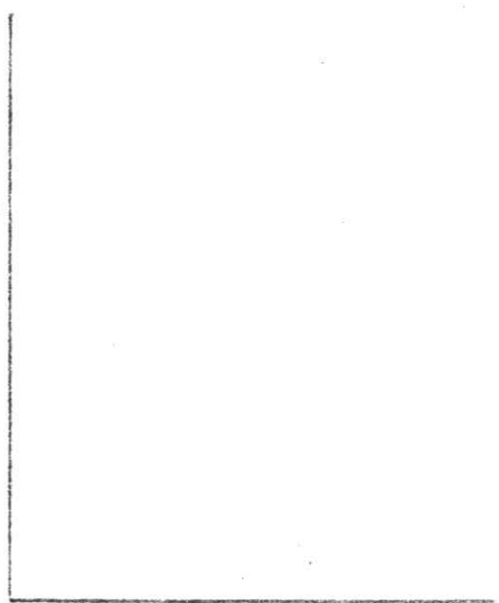




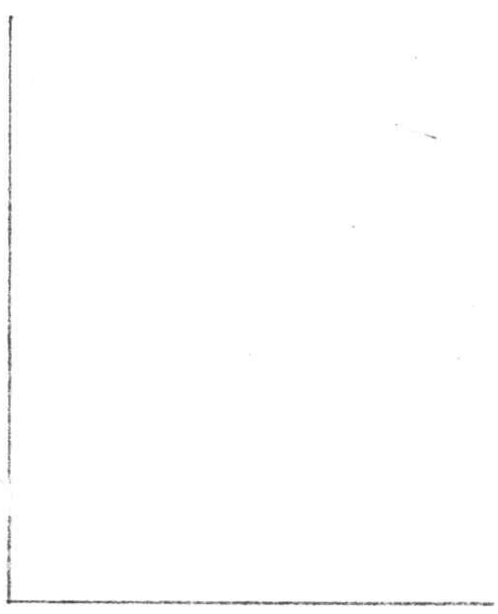
Type A PLOTS



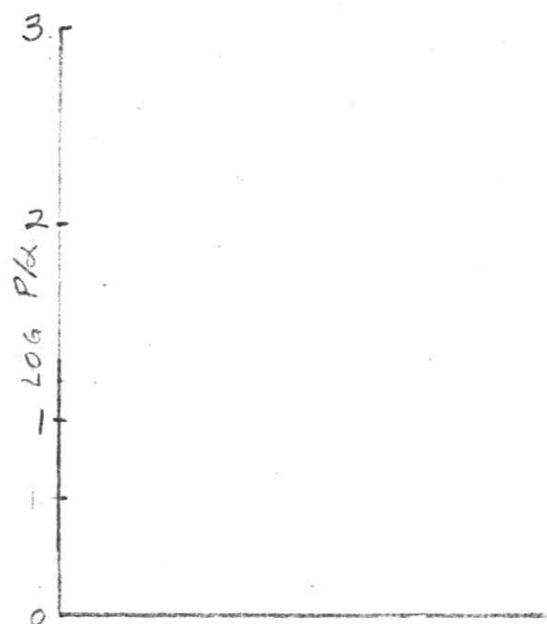
PROTONS



LOG E ALPHAS



LOG E ELECTRONS



LOG P/ALPHA

# IMP H&J C.P.M.E. PRELIMINARY DATA

*over DETAIL*

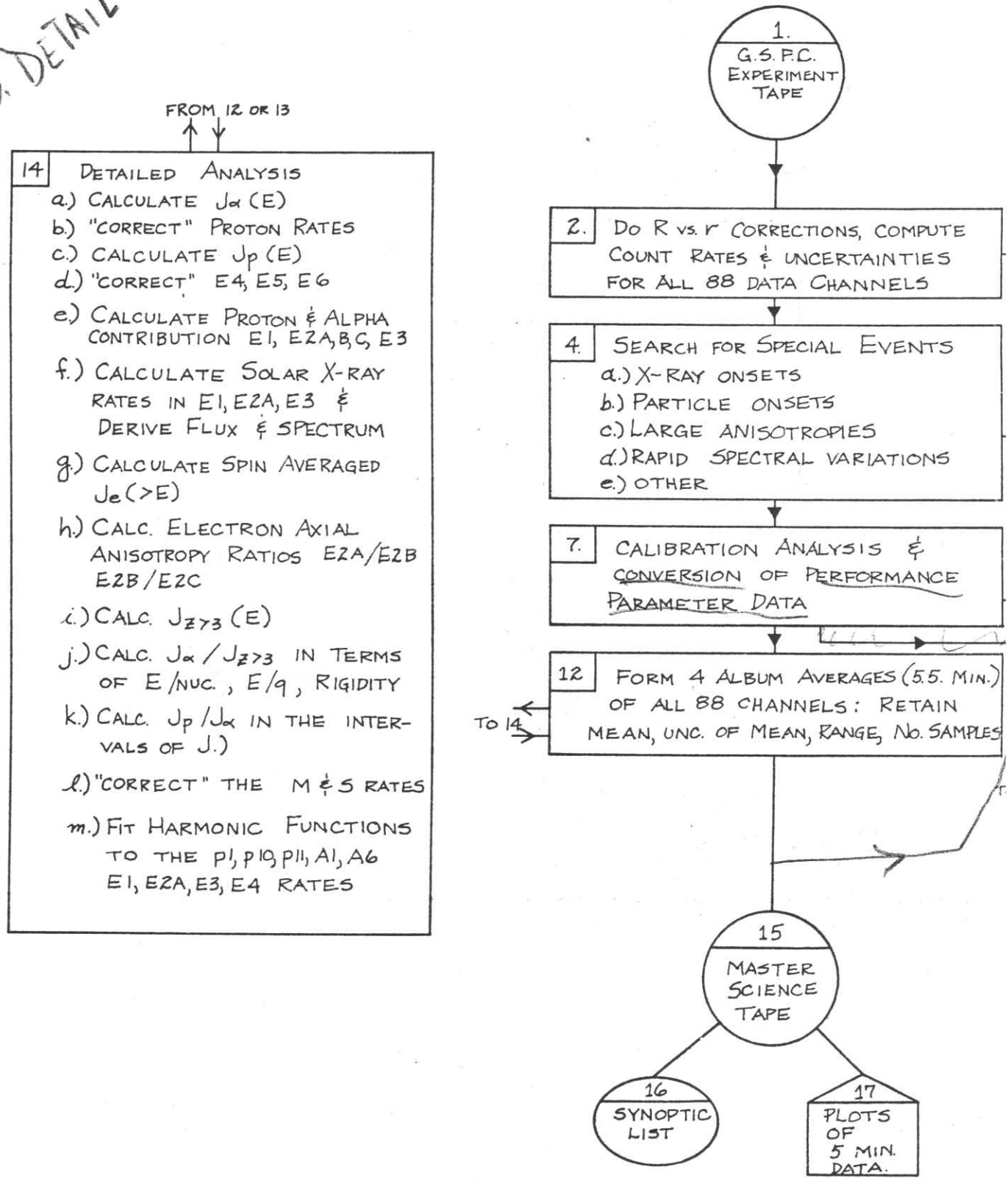


FIGURE 1

# ANALYSIS SCHEME

