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FAX COVER PAGE

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DATE:	12/11/97

FROM:	Larry Jones
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REFER TO:	LIGO-T970222-00-B
SUBJECT:	Rai's analysis

NUMBER OF PAGES FAXED INCLUDING THIS COVER SHEET:	4

NOTE: Please call when you have a few minutes.

rom: Rainer Weiss
ate: Wed Dec 10 21:33 PST 1997
o: ljones@ligo.caltech.edu
ubject: accumulation data from Dec 9,10

arry,
have placed a framemaker file on my account on the LIGO sun
~weiss/ac1210.fm

his file gives a tabulation of the air signature without correction
or temperature and also shows the accumulation data from which the
ir signature was derived.

he data does not look consistent for an air signature and is
ess than 2.5 x 10^-7 torr liters/sec from all estimators. The leak
s gone!

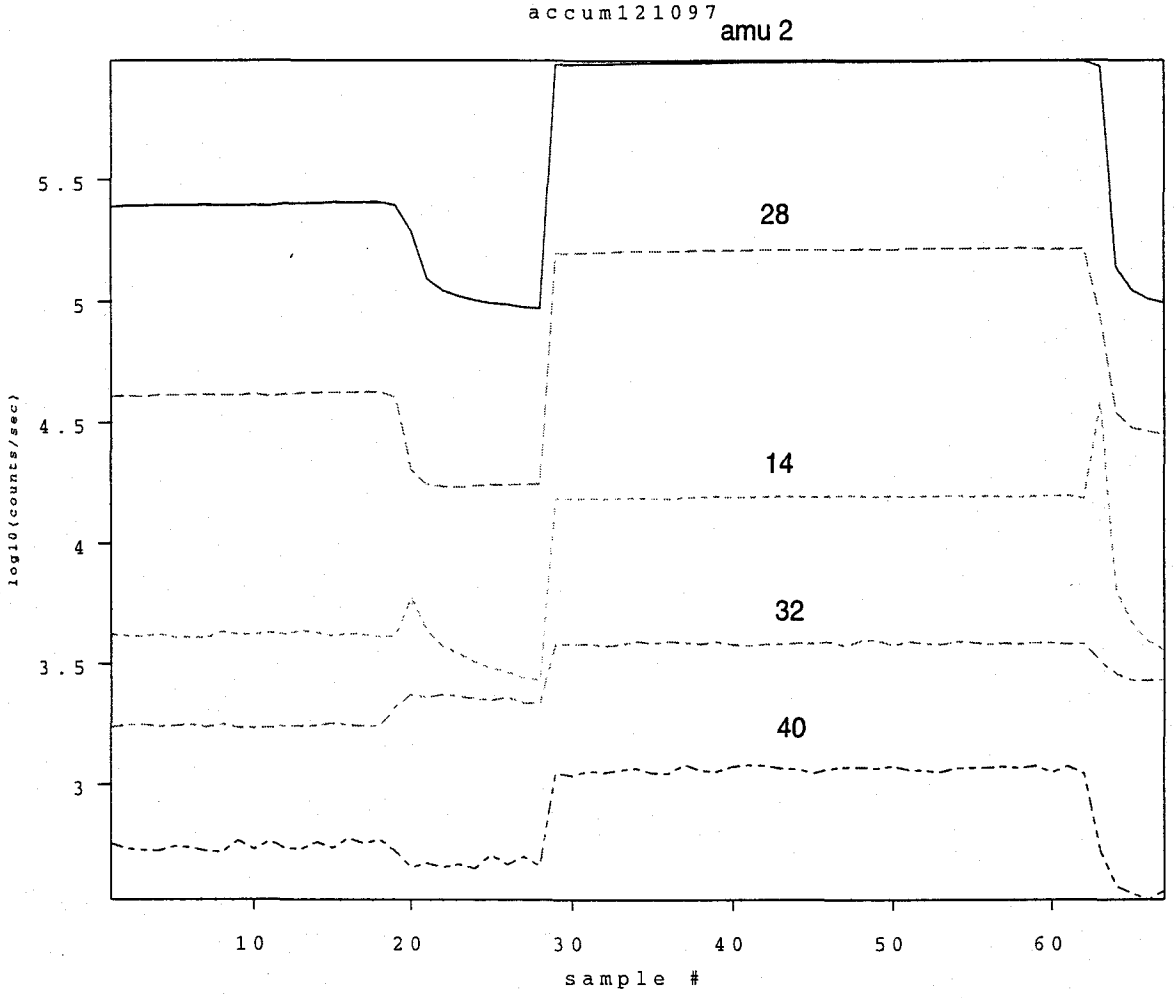
he calibrations look ok and have no long time constant tails. My major
oncern now is what do we see when we actually put air into the system.
he global air calibration will answer this and should be carried out
s soon as possible. If this condition persists there is nothing to
ocalize, so now the global calibration needs to have the highest
riority.
W

Y1

NO TEMPERATURE CORRECTION HAS BEEN MADE.
The average temperature on the tube is 0.3 +- 0.8 C

AMU	torr liters/sec	+- torr liters/sec	equivalent air leak torr liters/sec
2	9.257997E-07	1.340917E-08	
12	4.694254E-09	1.166910E-09	
13	4.027438E-10	5.603042E-11	
14	2.329407E-08	3.113750E-10	1.69 E -07
15	2.265510E-09	2.641795E-10	
16	1.156260E-08	2.395237E-09	
17	-1.319236E-09	4.419800E-10	
18	-4.551947E-09	1.555451E-09	
20	3.115109E-10	3.599281E-11	
24	-6.627668E-14	1.192961E-11	
25	-5.155542E-12	3.263009E-11	
26	-3.419042E-11	6.811435E-11	
27	1.536801E-09	1.583536E-10	
28	2.488340E-07	4.196381E-09	2.48E -07
29	1.214388E-09	1.271819E-10	
30	3.392599E-08	4.250019E-10	
32	4.293403E-09	1.215788E-10	2.47E -08
34	1.569634E-11	1.479678E-11	
37	-1.317378E-10	4.446128E-11	
38	-2.797996E-10	8.403116E-11	
39	-8.714734E-10	9.955553E-11	
40	1.249267E-09	7.417415E-11	7.19E -08
41	-2.267526E-09	1.754978E-10	
42	-5.041969E-10	7.233258E-11	
43	-6.185272E-10	2.495972E-10	
44	5.982521E-08	1.707667E-08	
45	3.758602E-10	2.097045E-10	

avg temp (C) = 23.00accum time (sec) = 5.908000E+04
H2 cal (torr/cps) = 3.200000E-14 N2 cal = 5.011000E-14
H2 binding T = 8.000000E+03 H2O binding T = 1.000000E+04
H2 temp cor = 1.000000E+00 H2O temp cor = 1.000000E+00
global H2 cal = 1.000000E+00 global N2 cal = 1.000000E+00


accum121097
amu 2
28
14
32
40
5.5
5
4.5
4
3.5
3
log10(counts/sec)
10
20
30
40
50
60
sample #