Antelope Practices

Antelope User Group Meeting

Tucson, Arizona

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Configuration

- Local rt home directory
- Local /opt/antelope directory
- rt user/group not dependent on yp or something similar
- Shutdown order
  1) Readers
  2) Writers
  3) Orbservers

dbbuild

- Current needs: generate and maintain metadata for 119+ stations (headed to 400)…
- Single dbbuild batch file, with new station metadata appended.
- Re-run dbbuild across entire batch file with only new information from tail of file added

dbbuild -b ANF_TA-only my-dbbuild

dbbuild

- Advantages
  - Quick editting adds in metadata info to batch file.
  - All information is in a single file.
- Disadvantages:
  - Takes longer and longer to run through batch file as more stations are added.

dbbuild

- Alternate solutions:
  - Individual station batch files?

    dbbuild -b new_TA_N10A

    dbmerge new_TA_N10A ANF_TA-only

  - Other options ???

mk_dataless_seed

- Generate dataless SEED volume

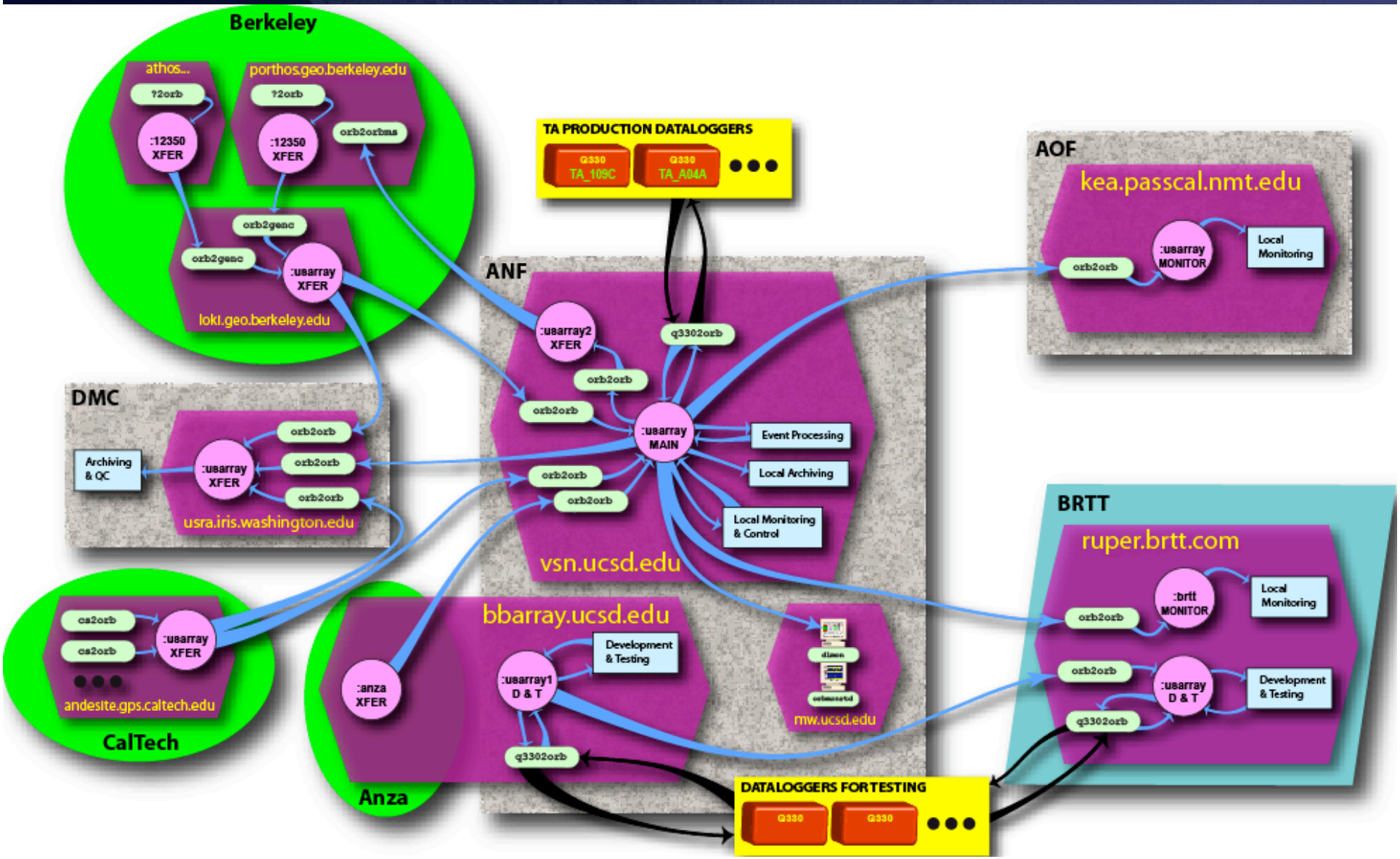
  mk_dataless_seed -o DATALESS.TA.2006.06.10 ANF_TA-only

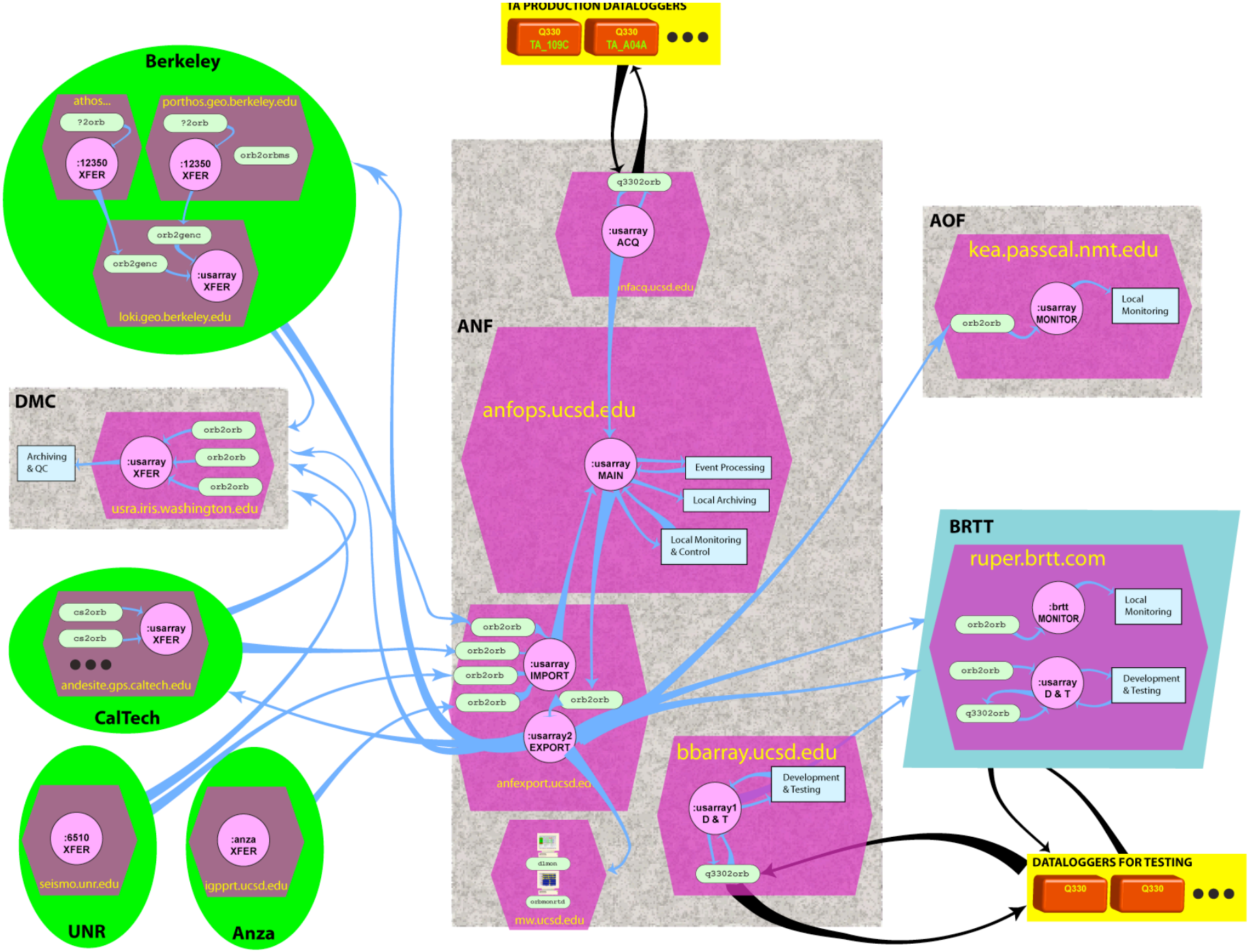
- Use orbxfer2 to transfer to DMC, PIC, others.

mk_dataless_seed

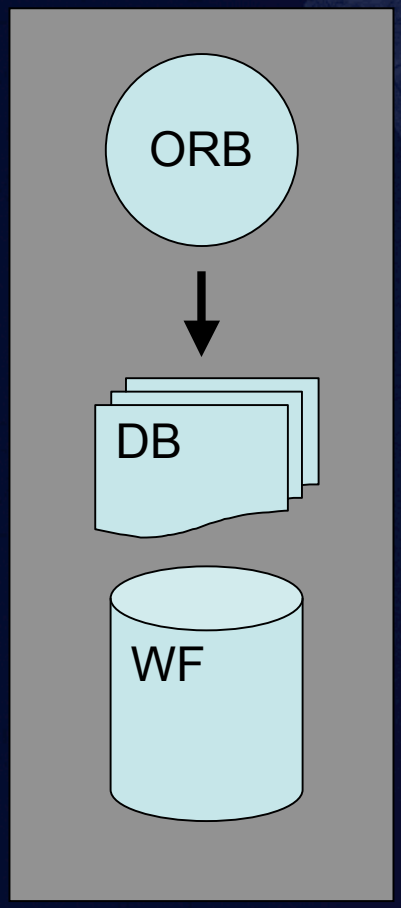
- Advantages:
  - New -o option allows consistent user-defined naming convention.
  - Network-wide dataless SEED volume
- Disadvantages:
  - No individual (by station) dataless

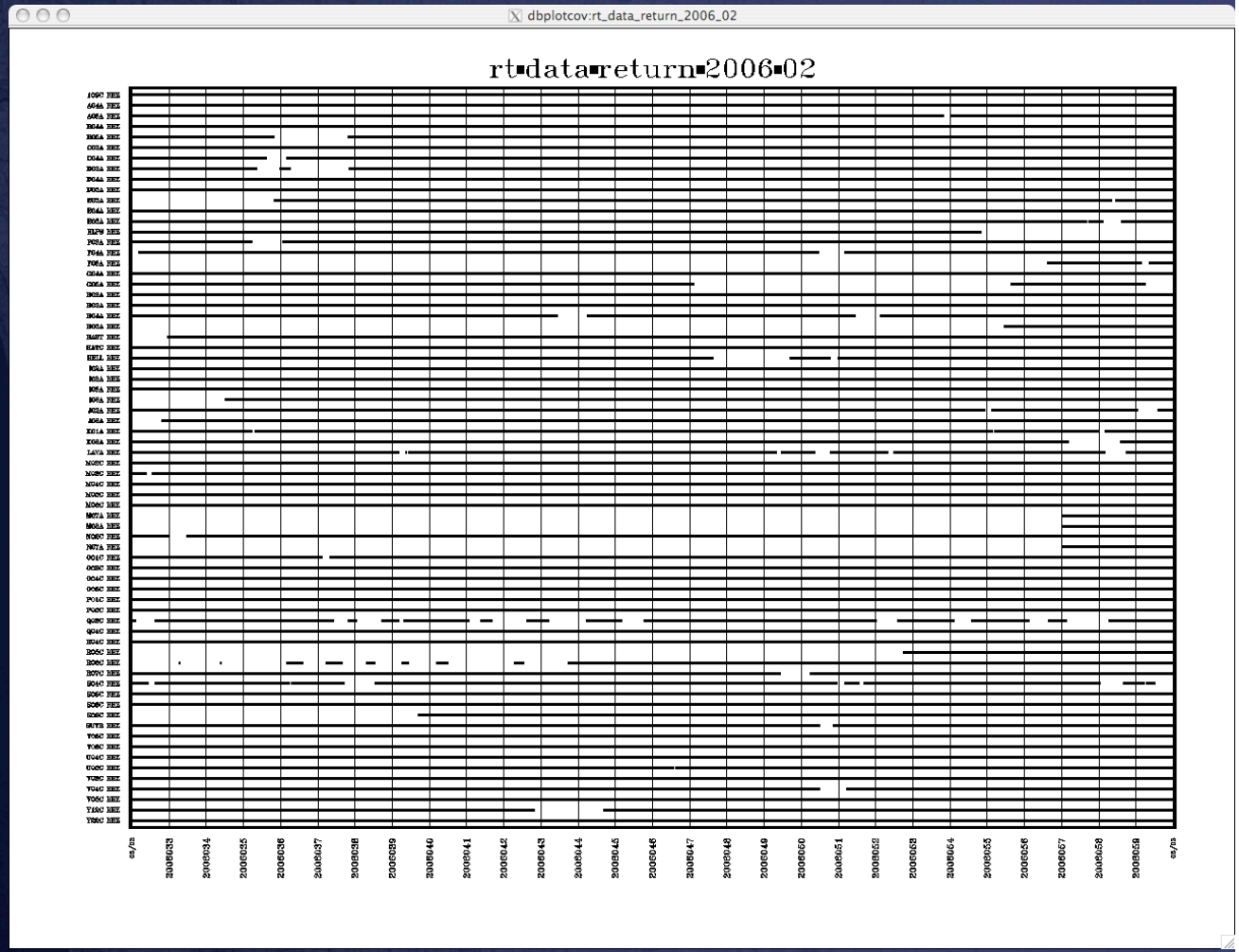
ANF Operations



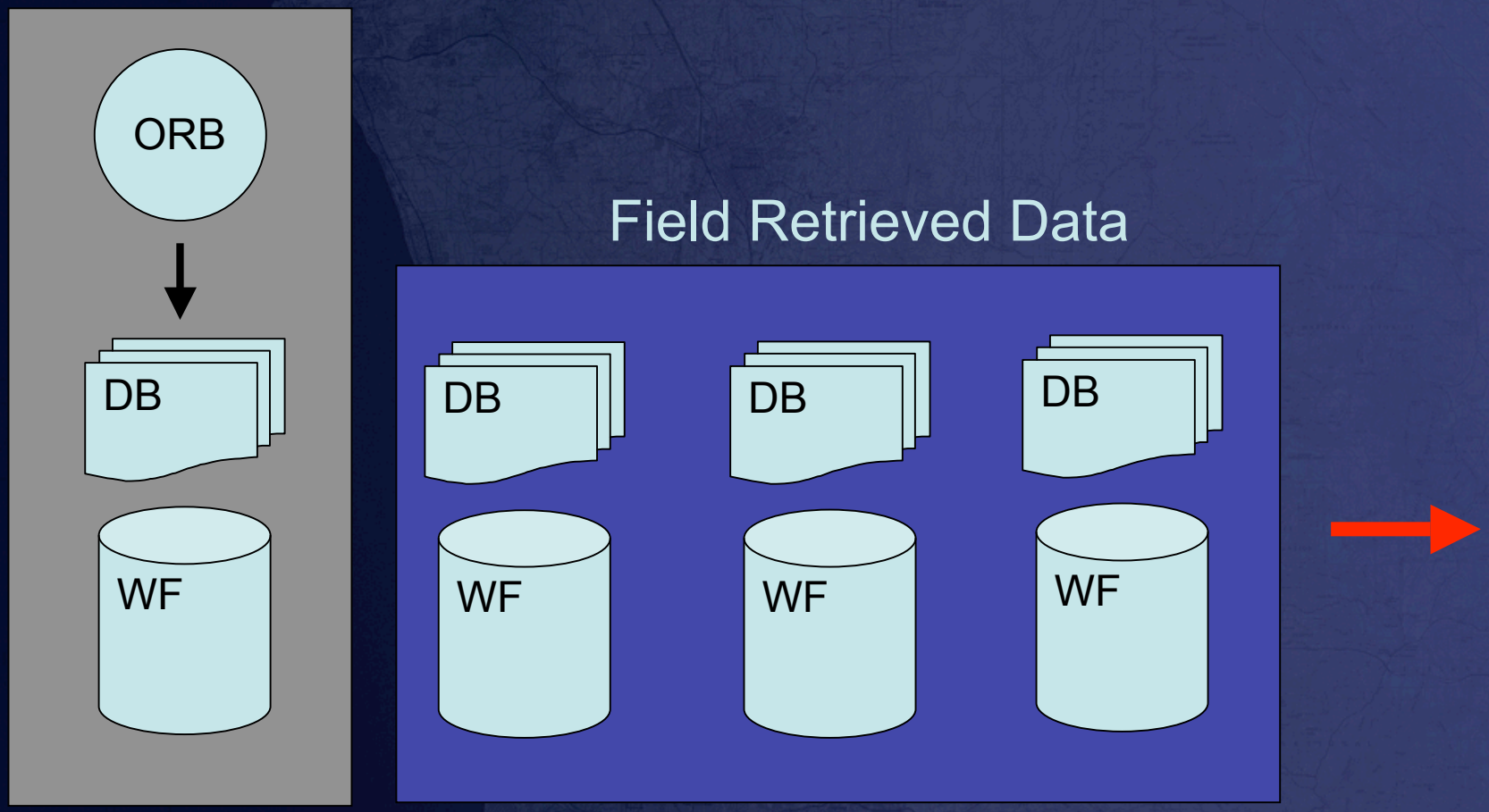

TA PRODUCTION DATALOGGERS
Q330 TA_109C
Q330 TA_A04A
Berkeley
athos...
?2orb
:12350 XFER
porthos.geo.berkeley.edu
?2orb
:12350 XFER
orb2orbms
orb2genc
orb2genc
:usarray XFER
loki.geo.berkeley.edu
DMC
Archiving & QC
:usarray XFER
orb2orb
orb2orb
orb2orb
usra.iris.washington.edu
cs2orb
cs2orb
:usarray XFER
andesite.gps.caltech.edu
CalTech
:6510 XFER
seismo.unr.edu
UNR
:anza XFER
igpprt.ucsd.edu
Anza
ANF
q3302orb
:usarray ACQ
anfacq.ucsd.edu
anfops.ucsd.edu
:usarray MAIN
Event Processing
Local Archiving
Local Monitoring & Control
orb2orb
orb2orb
orb2orb
orb2orb
:usarray IMPORT
orb2orb
:usarray2 EXPORT
anfexport.ucsd.edu
dlmon
orbmonrtd
mw.ucsd.edu
bbarray.ucsd.edu
Development & Testing
:usarray1 D & T
q3302orb
AOF
kea.passcal.nmt.edu
orb2orb
:usarray MONITOR
Local Monitoring
BRTT
ruper.brtt.com
orb2orb
:brtt MONITOR
Local Monitoring
orb2orb
:usarray D & T
Development & Testing
q3302orb
DATALOGGERS FOR TESTING
Q330
Q330

rtsystem


ORB
DB
WF


dbplotcov:rt_data_return_2006_02
rt▪data▪return▪2006▪02

rtsystem



ROADNet

Gap filling

Problem

- Identify gaps
- Multiple data repositories
  - Rt system
  - Field downloads
  - Telemetry downloads
- Multiple times data appears
- Determining completeness

Rtoutage netperf

usarray netperf

File Edit View Options Graphics Help

net	time	npsta	npchan	perf
AZ	1/01/2006 (001) 0:00:00.00000	2	4	99.96
BK	1/01/2006 (001) 0:00:00.00000	18	36	90.96
CI	1/01/2006 (001) 0:00:00.00000	41	82	97.54
NN	1/01/2006 (001) 0:00:00.00000	1	2	92.95
TA	1/01/2006 (001) 0:00:00.00000	66	132	83.00
AZ	1/02/2006 (002) 0:00:00.00000	2	4	99.96
BK	1/02/2006 (002) 0:00:00.00000	18	36	90.61
CI	1/02/2006 (002) 0:00:00.00000	41	82	95.83
NN	1/02/2006 (002) 0:00:00.00000	1	2	54.98
TA	1/02/2006 (002) 0:00:00.00000	66	132	79.46
AZ	1/03/2006 (003) 0:00:00.00000	2	4	100.00
BK	1/03/2006 (003) 0:00:00.00000	18	36	90.95
CI	1/03/2006 (003) 0:00:00.00000	41	82	92.67
NN	1/03/2006 (003) 0:00:00.00000	1	2	43.31
TA	1/03/2006 (003) 0:00:00.00000	66	132	79.49
AZ	1/04/2006 (004) 0:00:00.00000	2	4	100.00
BK	1/04/2006 (004) 0:00:00.00000	18	36	91.21
CI	1/04/2006 (004) 0:00:00.00000	41	82	97.53
NN	1/04/2006 (004) 0:00:00.00000	1	2	73.33
TA	1/04/2006 (004) 0:00:00.00000	66	132	78.51
AZ	1/05/2006 (005) 0:00:00.00000	2	4	100.00
BK	1/05/2006 (005) 0:00:00.00000	18	36	97.70
CI	1/05/2006 (005) 0:00:00.00000	41	82	97.56
NN	1/05/2006 (005) 0:00:00.00000	1	2	100.00
TA	1/05/2006 (005) 0:00:00.00000	66	132	82.13
AZ	1/06/2006 (006) 0:00:00.00000	2	4	100.00
BK	1/06/2006 (006) 0:00:00.00000	18	36	100.00
CI	1/06/2006 (006) 0:00:00.00000	41	82	97.55
NN	1/06/2006 (006) 0:00:00.00000	1	2	100.00
TA	1/06/2006 (006) 0:00:00.00000	66	132	82.25
AZ	1/07/2006 (007) 0:00:00.00000	2	4	100.00
BK	1/07/2006 (007) 0:00:00.00000	18	36	99.99
CI	1/07/2006 (007) 0:00:00.00000	41	82	97.56
NN	1/07/2006 (007) 0:00:00.00000	1	2	100.00
TA	1/07/2006 (007) 0:00:00.00000	66	132	81.67
AZ	1/08/2006 (008) 0:00:00.00000	2	4	100.00
BK	1/08/2006 (008) 0:00:00.00000	18	36	100.00
CI	1/08/2006 (008) 0:00:00.00000	41	82	97.55
NN	1/08/2006 (008) 0:00:00.00000	1	2	100.00
TA	1/08/2006 (008) 0:00:00.00000	66	132	82.17
AZ	1/09/2006 (009) 0:00:00.00000	2	4	100.00
BK	1/09/2006 (009) 0:00:00.00000	18	36	99.98
CI	1/09/2006 (009) 0:00:00.00000	41	82	97.56

Dismiss

Rtoutage
TA netperf

usarray View82

File Edit View Options Graphics Help

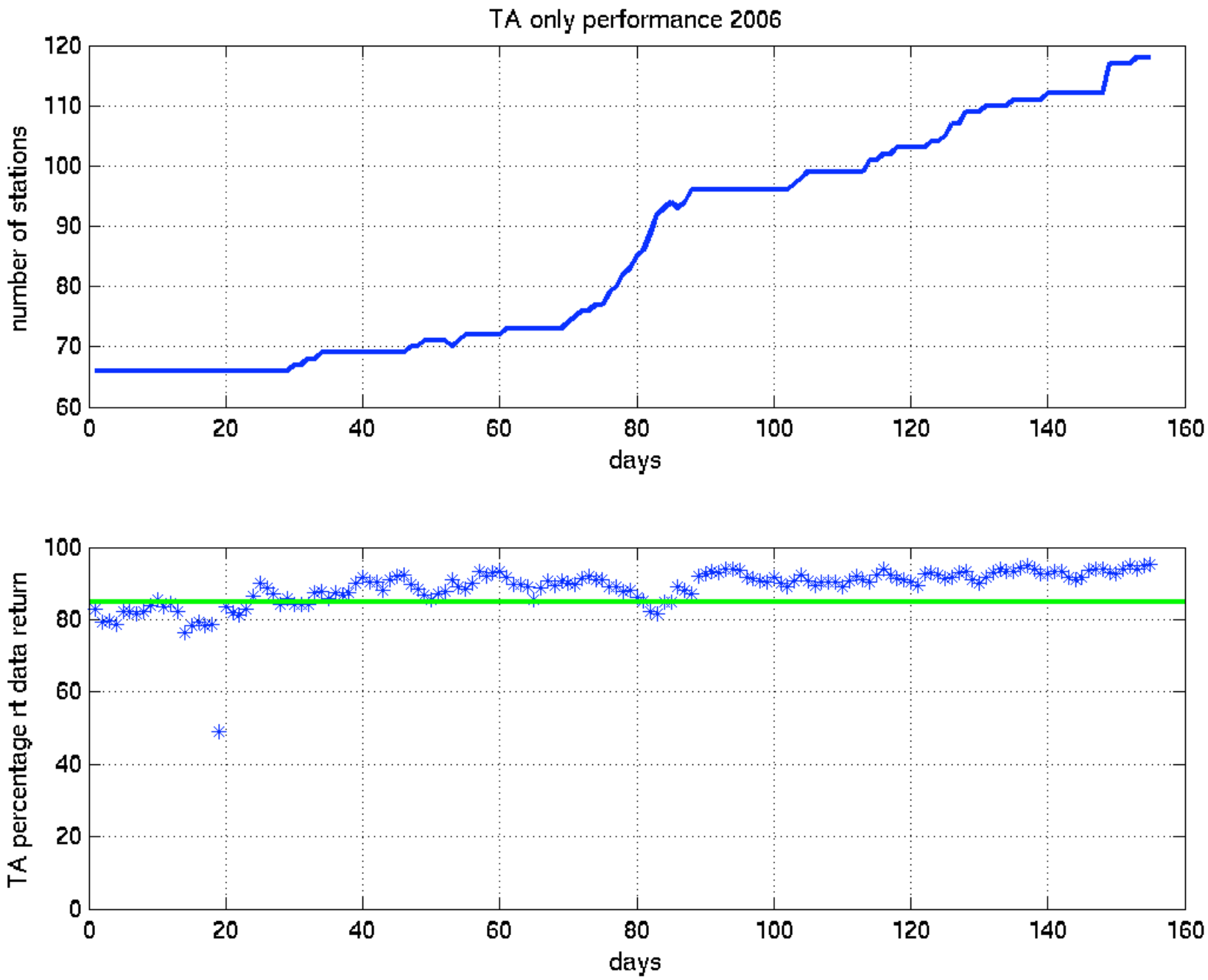
ok X TA

net	time	npsta	npchan	perf
TA	1/01/2006 (001) 0:00:00.00000	66	132	83.00
TA	1/02/2006 (002) 0:00:00.00000	66	132	79.46
TA	1/03/2006 (003) 0:00:00.00000	66	132	79.49
TA	1/04/2006 (004) 0:00:00.00000	66	132	78.51
TA	1/05/2006 (005) 0:00:00.00000	66	132	82.13
TA	1/06/2006 (006) 0:00:00.00000	66	132	82.25
TA	1/07/2006 (007) 0:00:00.00000	66	132	81.67
TA	1/08/2006 (008) 0:00:00.00000	66	132	82.17
TA	1/09/2006 (009) 0:00:00.00000	66	132	83.76
TA	1/10/2006 (010) 0:00:00.00000	66	132	85.60
TA	1/11/2006 (011) 0:00:00.00000	66	132	83.71
TA	1/12/2006 (012) 0:00:00.00000	66	132	84.69
TA	1/13/2006 (013) 0:00:00.00000	66	132	82.20
TA	1/14/2006 (014) 0:00:00.00000	66	132	76.51
TA	1/15/2006 (015) 0:00:00.00000	66	132	78.43
TA	1/16/2006 (016) 0:00:00.00000	66	132	79.32
TA	1/17/2006 (017) 0:00:00.00000	66	132	78.43
TA	1/18/2006 (018) 0:00:00.00000	66	132	78.71
TA	1/19/2006 (019) 0:00:00.00000	66	132	48.88
TA	1/20/2006 (020) 0:00:00.00000	66	132	83.70
TA	1/21/2006 (021) 0:00:00.00000	66	132	81.78
TA	1/22/2006 (022) 0:00:00.00000	66	132	81.24
TA	1/23/2006 (023) 0:00:00.00000	66	132	82.94
TA	1/24/2006 (024) 0:00:00.00000	66	132	86.33
TA	1/25/2006 (025) 0:00:00.00000	66	132	90.11
TA	1/26/2006 (026) 0:00:00.00000	66	132	88.62
TA	1/27/2006 (027) 0:00:00.00000	66	132	87.28
TA	1/28/2006 (028) 0:00:00.00000	66	132	84.07
TA	1/29/2006 (029) 0:00:00.00000	66	132	85.76
TA	1/30/2006 (030) 0:00:00.00000	67	134	84.14
TA	1/31/2006 (031) 0:00:00.00000	67	134	84.29
TA	2/01/2006 (032) 0:00:00.00000	68	136	84.08
TA	2/02/2006 (033) 0:00:00.00000	68	136	87.52
TA	2/03/2006 (034) 0:00:00.00000	69	138	87.68
TA	2/04/2006 (035) 0:00:00.00000	69	138	85.68
TA	2/05/2006 (036) 0:00:00.00000	69	138	87.56
TA	2/06/2006 (037) 0:00:00.00000	69	138	86.85
TA	2/07/2006 (038) 0:00:00.00000	69	138	87.39
TA	2/08/2006 (039) 0:00:00.00000	69	138	89.94
TA	2/09/2006 (040) 0:00:00.00000	69	138	91.71
TA	2/10/2006 (041) 0:00:00.00000	69	138	90.41
TA	2/11/2006 (042) 0:00:00.00000	69	138	90.52
TA	2/12/2006 (043) 0:00:00.00000	69	138	88.26

0 161

Dismiss

ROADNet


TA only performance 2006
number of stations
days
TA percentage rt data return
days

Rtoutage
TA chanperf

usarray View84

File Edit View Options Graphics Help

ok X sta =~ /.[0-9][0-9]./

0	sta	chan	time	perf
	109C	BHZ	1/01/2006 (001) 0:00:00.00000	100.00
	109C	LHZ	1/01/2006 (001) 0:00:00.00000	100.00
	A04A	BHZ	1/01/2006 (001) 0:00:00.00000	100.00
	A04A	LHZ	1/01/2006 (001) 0:00:00.00000	99.99
	A05A	BHZ	1/01/2006 (001) 0:00:00.00000	100.00
	A05A	LHZ	1/01/2006 (001) 0:00:00.00000	100.00
	B04A	BHZ	1/01/2006 (001) 0:00:00.00000	100.00
	B04A	LHZ	1/01/2006 (001) 0:00:00.00000	100.00
	B05A	BHZ	1/01/2006 (001) 0:00:00.00000	100.00
	B05A	LHZ	1/01/2006 (001) 0:00:00.00000	100.00
	C03A	BHZ	1/01/2006 (001) 0:00:00.00000	100.00
	C03A	LHZ	1/01/2006 (001) 0:00:00.00000	100.00
	C04A	BHZ	1/01/2006 (001) 0:00:00.00000	100.00
	C04A	LHZ	1/01/2006 (001) 0:00:00.00000	100.00
	D03A	BHZ	1/01/2006 (001) 0:00:00.00000	28.96
	D03A	LHZ	1/01/2006 (001) 0:00:00.00000	28.94
	D04A	BHZ	1/01/2006 (001) 0:00:00.00000	100.00
	D04A	LHZ	1/01/2006 (001) 0:00:00.00000	100.00
	D05A	BHZ	1/01/2006 (001) 0:00:00.00000	100.00
	D05A	LHZ	1/01/2006 (001) 0:00:00.00000	100.00
	E03A	BHZ	1/01/2006 (001) 0:00:00.00000	100.00
	E03A	LHZ	1/01/2006 (001) 0:00:00.00000	100.00
	E04A	BHZ	1/01/2006 (001) 0:00:00.00000	0.00
	E04A	LHZ	1/01/2006 (001) 0:00:00.00000	0.00
	E05A	BHZ	1/01/2006 (001) 0:00:00.00000	0.00
	E05A	LHZ	1/01/2006 (001) 0:00:00.00000	0.00
	F03A	BHZ	1/01/2006 (001) 0:00:00.00000	100.00
	F03A	LHZ	1/01/2006 (001) 0:00:00.00000	100.00
	F04A	BHZ	1/01/2006 (001) 0:00:00.00000	100.00
	F04A	LHZ	1/01/2006 (001) 0:00:00.00000	100.00
	F05A	BHZ	1/01/2006 (001) 0:00:00.00000	0.00
	F05A	LHZ	1/01/2006 (001) 0:00:00.00000	0.00
	G04A	BHZ	1/01/2006 (001) 0:00:00.00000	100.00
	G04A	LHZ	1/01/2006 (001) 0:00:00.00000	100.00
	G05A	BHZ	1/01/2006 (001) 0:00:00.00000	100.00
	G05A	LHZ	1/01/2006 (001) 0:00:00.00000	100.00
	H02A	BHZ	1/01/2006 (001) 0:00:00.00000	100.00
	H02A	LHZ	1/01/2006 (001) 0:00:00.00000	100.00
	H03A	BHZ	1/01/2006 (001) 0:00:00.00000	100.00
	H03A	LHZ	1/01/2006 (001) 0:00:00.00000	100.00
	H04A	BHZ	1/01/2006 (001) 0:00:00.00000	100.00
	H04A	LHZ	1/01/2006 (001) 0:00:00.00000	100.00
	H05A	BHZ	1/01/2006 (001) 0:00:00.00000	0.00

25906

Dismiss

ROADNet

Gap Filling

- Procedures
  - Build independent self-consistent dbs
    - *Orb2db*
    - Cds + *miniseed2days*
    - Baler_admin + *miniseed2days*
    - Other mechanisms
  - Include dbmaster through descriptor file
  - Dbverify

Gap Filling

- Procedures
  - Dbcentral concept
  - Identify gaps *rtoutage*
  - Build combined pseudo wfdisc
  - Identify complete waveform days
  - Make new db complete with sta-chan-day wfs
  - Ship data to DMC

Dbcentral clusters

all_ta_data clusters

File Edit View Options Graphics Help

0 clustername	time	endtime	schema	net	dir	dfile	description
rtdata	1/01/2006 (001) 0:00:00.00000		css3.0	TA	../db	usarray	TA current real time data
baler_data	12/31/2005 (365) 20:52:40.99990	2/01/2006 (032) 0:23:00.00000	css3.0		baler_admin/2006_05_22	cleaned_baler	
baler_data	1/21/2006 (021) 20:55:27.00000	1/30/2006 (030) 15:01:52.99990	css3.0		baler_admin/2006_05_23	cleaned_baler	
baler_data	10/05/2005 (278) 21:50:24.56950	2/22/2006 (053) 8:38:43.99990	css3.0		baler_admin/2006_05_05	cleaned_baler	
baler_data	12/12/2005 (346) 10:06:04.99990	12/13/2005 (347) 5:28:34.00000	css3.0		baler_admin/2006_01_26	cleaned_baler	
baler_data	3/01/2006 (060) 2:03:13.99990	3/16/2006 (075) 11:48:20.99990	css3.0		baler_admin/2006_03_30	cleaned_baler	
baler_data	10/03/2005 (276) 16:57:27.00000	1/01/2006 (001) 6:38:02.99990	css3.0		baler_admin/2006_03_31	cleaned_baler	
baler_data	12/31/2005 (365) 23:06:48.00000	3/01/2006 (060) 15:49:21.00000	css3.0		baler_admin/2006_04_03	cleaned_baler	
baler_data	3/14/2006 (073) 22:04:37.99990	3/30/2006 (089) 3:42:00.00000	css3.0		baler_admin/2006_04_06	cleaned_baler	
baler_data	3/12/2006 (071) 6:01:26.06950	3/12/2006 (071) 11:08:31.56950	css3.0		baler_admin/2006_04_06-1	cleaned_baler	
baler_data	6/08/2004 (160) 13:01:50.00000	7/21/2004 (203) 23:01:25.56950	css3.0		cdroms/2004_07_24	cleaned_baler	
baler_data	12/06/2004 (341) 5:44:23.00000	12/29/2004 (364) 3:18:36.00000	css3.0		cdroms/2005_01_05	cleaned_baler	
baler_data	7/19/2004 (201) 22:23:00.00000	1/14/2005 (014) 18:08:14.50000	css3.0		cdroms/2005_01_25	cleaned_baler	
baler_data	12/10/2004 (345) 0:56:44.00000	1/27/2005 (027) 19:38:57.50000	css3.0		cdroms/2005_01_28	cleaned_baler	
baler_data	12/05/2004 (340) 0:55:12.00000	1/01/2005 (001) 13:49:38.50000	css3.0		cdroms/2005_06_04	cleaned_baler	
baler_data	12/01/2005 (335) 3:16:06.99990	2/01/2006 (032) 17:22:45.99990	css3.0		cdroms/2006_02_05	cleaned_baler	
baler_data	11/28/2005 (332) 21:30:35.99990	2/09/2006 (040) 3:31:18.00000	css3.0		cdroms/2006_02_16	cleaned_baler	
baler_data	12/31/2005 (365) 21:37:54.99990	2/22/2006 (053) 8:38:43.99990	css3.0		cdroms/2006_02_26	cleaned_baler	
baler_data	1/02/2006 (002) 21:39:15.00000	5/02/2006 (122) 21:12:10.00000	css3.0		cdroms/2006_05_11	cleaned_baler	
baler_data	7/15/2005 (196) 16:07:20.00000	9/02/2005 (245) 17:44:19.50000	css3.0		cdroms/2005_09_05	cleaned_baler	
baler_data	7/20/2005 (201) 0:00:29.00000	1/21/2006 (021) 20:55:42.50000	css3.0		cdroms/2006_01_26	cleaned_baler	
baler_data	3/09/2006 (068) 20:46:08.00000	3/30/2006 (089) 19:37:23.50000	css3.0		cdroms/2006_03_31	cleaned_baler	
baler_data	11/19/2005 (323) 1:06:43.00000	3/27/2006 (086) 22:14:23.50000	css3.0		cdroms/2006_05_11-1	cleaned_baler	
baler_data	3/17/2006 (076) 21:07:51.00000	4/02/2006 (092) 18:51:24.50000	css3.0		cdroms/2006_05_11-2	cleaned_baler	
baler_data	12/10/2005 (344) 3:27:13.00000	3/26/2006 (085) 23:00:23.50000	css3.0		cdroms/2006_05_11-3	cleaned_baler	
baler_data	2/25/2006 (056) 22:56:14.00000	5/10/2006 (130) 0:24:18.00000	css3.0		cdroms/2006_05_12	cleaned_baler	
baler_data	7/31/2005 (212) 20:28:49.00000	8/11/2005 (223) 0:07:52.00000	css3.0		cdroms/2005_09_21	cleaned_baler	
baler_data	8/06/2005 (218) 10:13:37.00000	8/31/2005 (243) 19:35:15.99990	css3.0		cdroms/2005_09_22	cleaned_baler	
baler_data	7/31/2005 (212) 21:08:34.99990	9/01/2005 (244) 2:24:07.99990	css3.0		cdroms/2005_09_23	cleaned_baler	
baler_data	6/05/2005 (156) 5:16:40.00000	9/16/2005 (259) 9:30:01.00000	css3.0		cdroms/2005_11_07	cleaned_baler	
baler_data	7/20/2004 (202) 22:58:36.00000	8/31/2004 (244) 19:29:40.50000	css3.0		cdroms/2004_09_01	cleaned_baler	
baler_data	9/27/2004 (271) 10:10:41.00000	9/28/2004 (272) 3:00:55.00000	css3.0		cdroms/2004_10_02	cleaned_baler	
baler_data	1/31/2006 (031) 13:44:12.99990	3/01/2006 (060) 16:13:22.99990	css3.0		baler_admin/2006_06_01	cleaned_baler	
baler_data	2/01/2006 (032) 4:00:00.00000	3/01/2006 (060) 15:23:59.99990	css3.0		baler_admin/2006_06_04	cleaned_baler	
baler_data	4/30/2006 (120) 8:57:43.00000	6/01/2006 (152) 15:15:25.00000	css3.0		baler_admin/2006_06_05	cleaned_baler	
baler_data	4/30/2006 (120) 20:50:47.99990	6/01/2006 (152) 15:45:27.99990	css3.0		baler_admin/2006_06_06	cleaned_baler	

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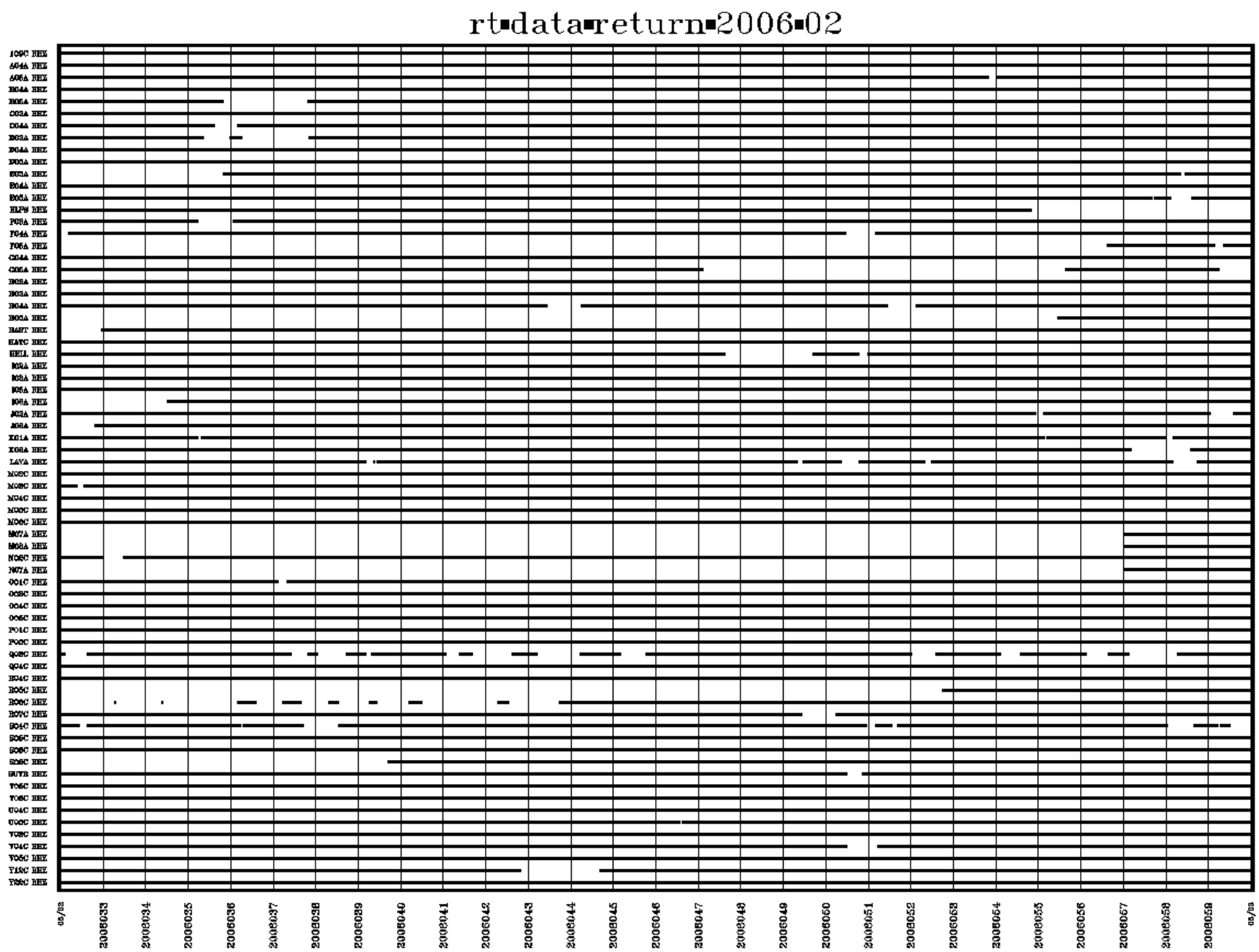
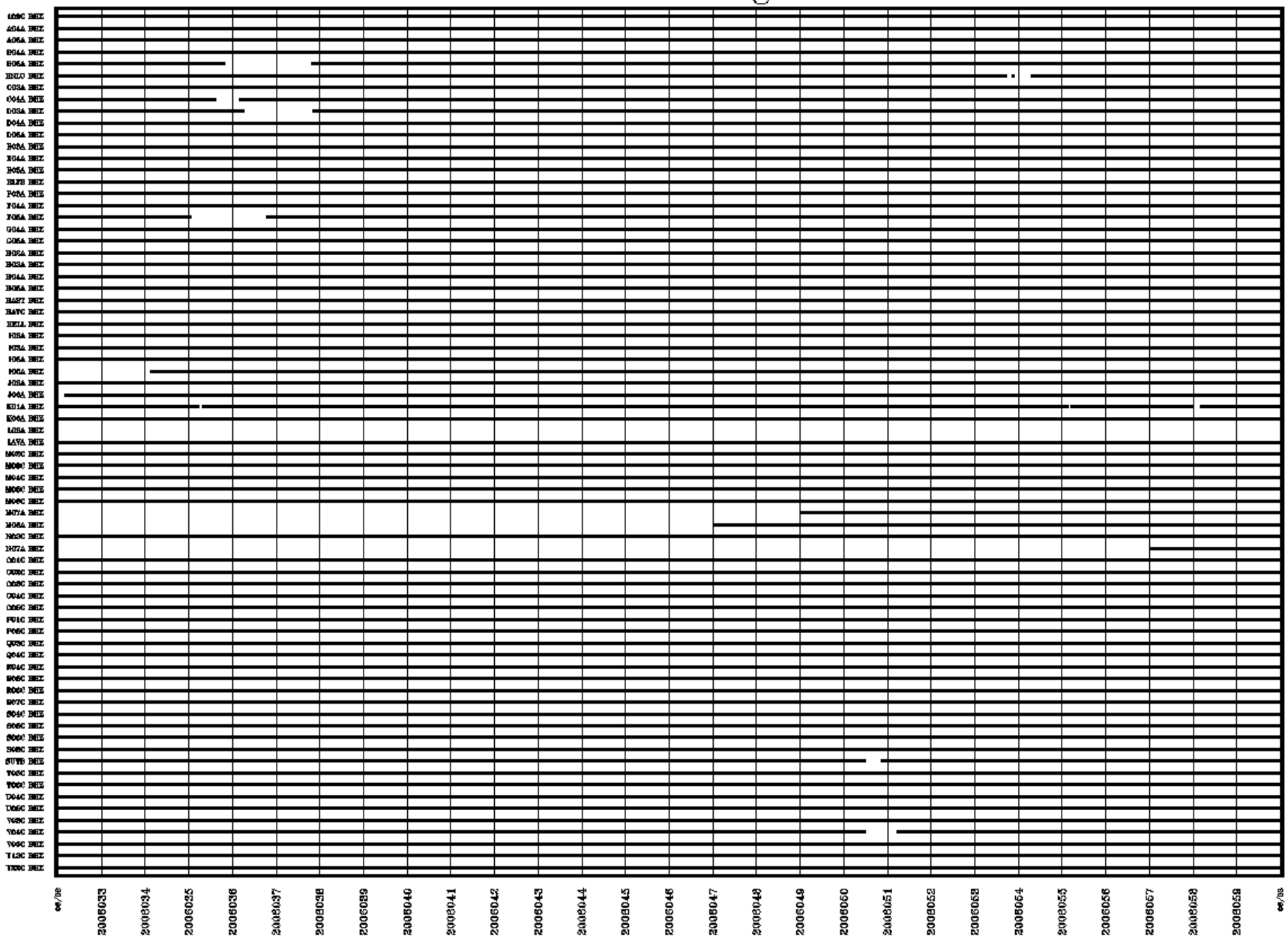
Dismiss

dbplotcov:rt_data_return_2006_02

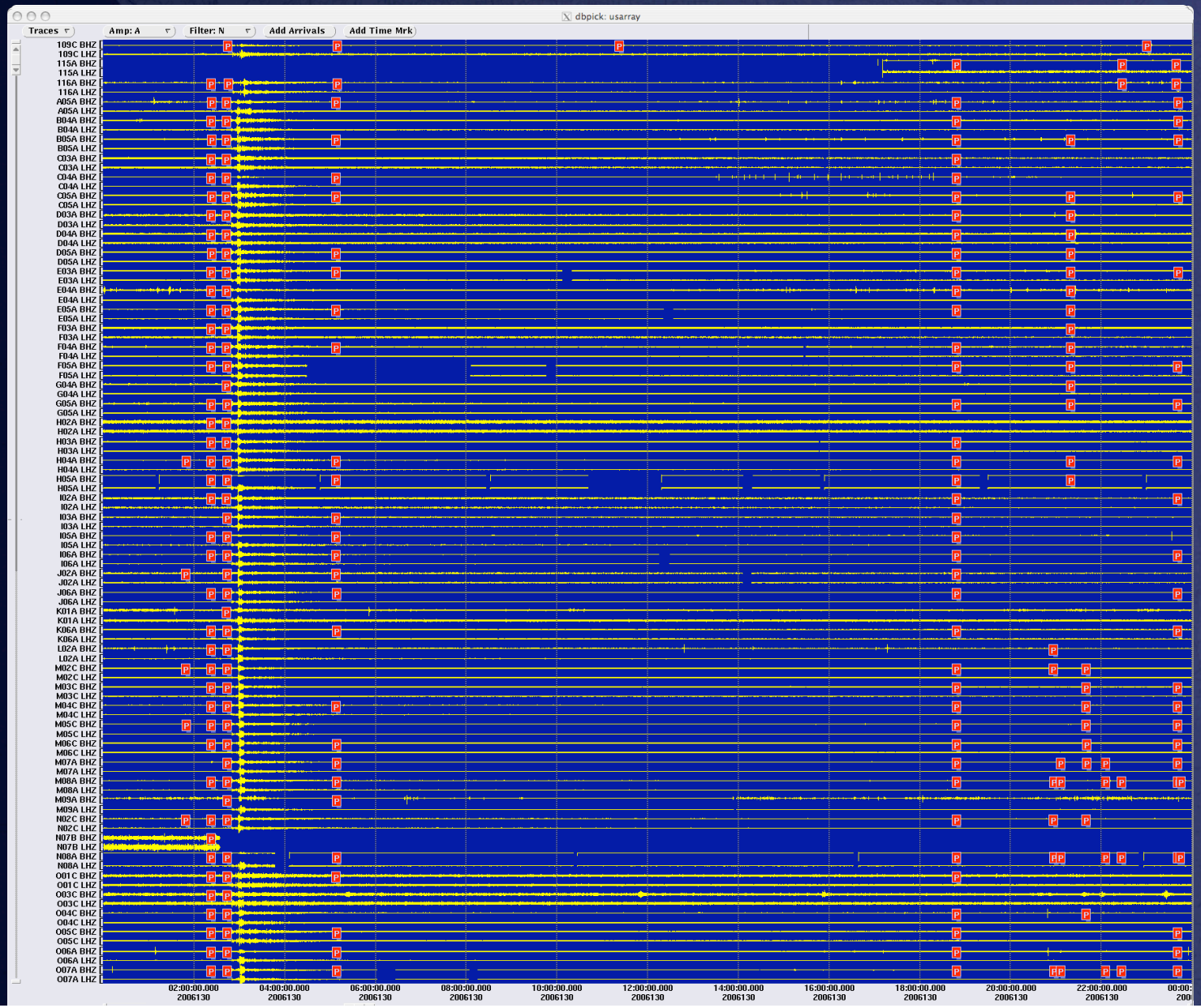


dbplotcov: TA_waveform_coverage_2006_02

TA waveform coverage 2006 02



Best laid plans……



ROADNet

2 May 2006
Gap list

usarray View81

File Edit View Options Graphics Help

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E04A	LHZ	5/02/2006 (122) 4:02:00.00000	40.00000
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LAVA	LHZ	5/02/2006 (122) 4:02:03.00000	31.00000
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G05A	LHZ	5/02/2006 (122) 4:02:07.00000	26.00000
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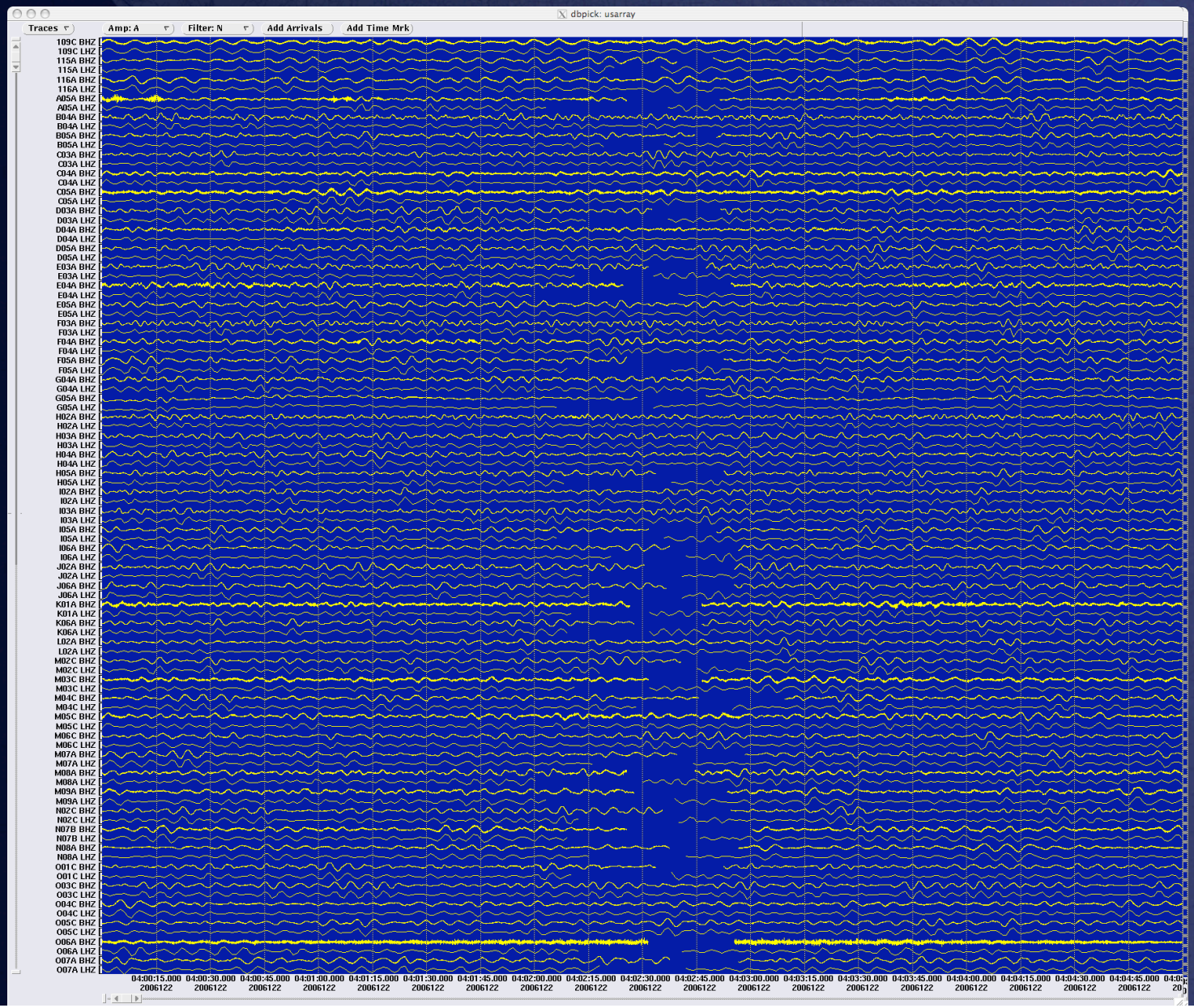
Dismiss

ROADNet

Sigh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Amp: A
Filter: N
Add Arrivals
Add Time Mrk
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