Chapter 2 - Orbit Overview

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Introduction to Chapter 2

This chapter gives an overview of the NIMS observations in the G28 Orbit.

The text on page 3 summarizes the NIMS science objectives for G28. The NIMS calibrations are discussed on page 3. Early data return and G28 playback are also discussed on page 3.

The table on pages 4 and 5 is a time-ordered listing of the NIMS Oapels for G28.

The plot on page 6 shows the geometry of the NIMS G28 observations using a north trajectory pole view projection. The plot on page 7 shows the geometry of the NIMS G28 calibrations.

The spreadsheet on pages 8 and 9 summarizes the various inputs for the NIMS G28 Observations. The spreadsheet on pages 10 through 13 summarizes the resource usage for the NIMS G28 observations.

The table on pages 14 and 15 lists various NIMS G28 observing parameters: target latitude/longitude, range, cone angle, incidence angle light), emission angle view) and phase angle.

The timeline on pages 16 through 19 shows the placement of the G28 observations for all intruments during the G28 Encounter Period.

The tapemap on page 20 shows the placement of the G28 observations on the spacecraft's tape recorder.

The timeline on pages 21 through 40 shows the preliminary G28 playback schedule.

The NIMS G28 mosaic designs are summarized on pages 41 through 44 in time-order.

NIMS G28 SCIENCE OVERVIEW

Jupiter Science

There are twenty-nine Jupiter observations in G28. Sixteen are realtime and thirteen are recorded. Three of the realtime observations look at the Northern Temperate Belt (NTB), three more look at the North Equatorial Belt (NEB) and six look at the Equatorial Bulge (EQBLGE). Ten of the recorded observations look at the North Polar Aurora zone (AURORA), covering all 360 degrees of longitude in similar geometries. The remaining three recorded observations (GLOBAL) build up a global map covering just over half of Jupiter.

Io Science

Io was not observed in G28.

Europa Science

There is a single Europa eclipse observation in G28.

Ganymede Science

There are four observations of Ganymede in G28. FEATRE01 is a high resolution observation of a dark crater, ice and background dark regio. LMSCAN01 is a limb scan to look at Ganymede’s atmosphere. PERRIN01 looks at the Perrine Region. GLOBAL01 is a global map of the Jupiter-facing hemisphere.

Callisto Science

Callisto was not observed in G28.

Calibration

There are two NIMS calibration observations planned for G28: one PCT cal and one RCT cal.

Early Data Return

There are eighteen realtime observations in G28: Sixteen Jupiter observations (JUPRTS), one PCT calibration and one RCT calibration.

G28 Playback

G28 playback is split into two passes through the tape.

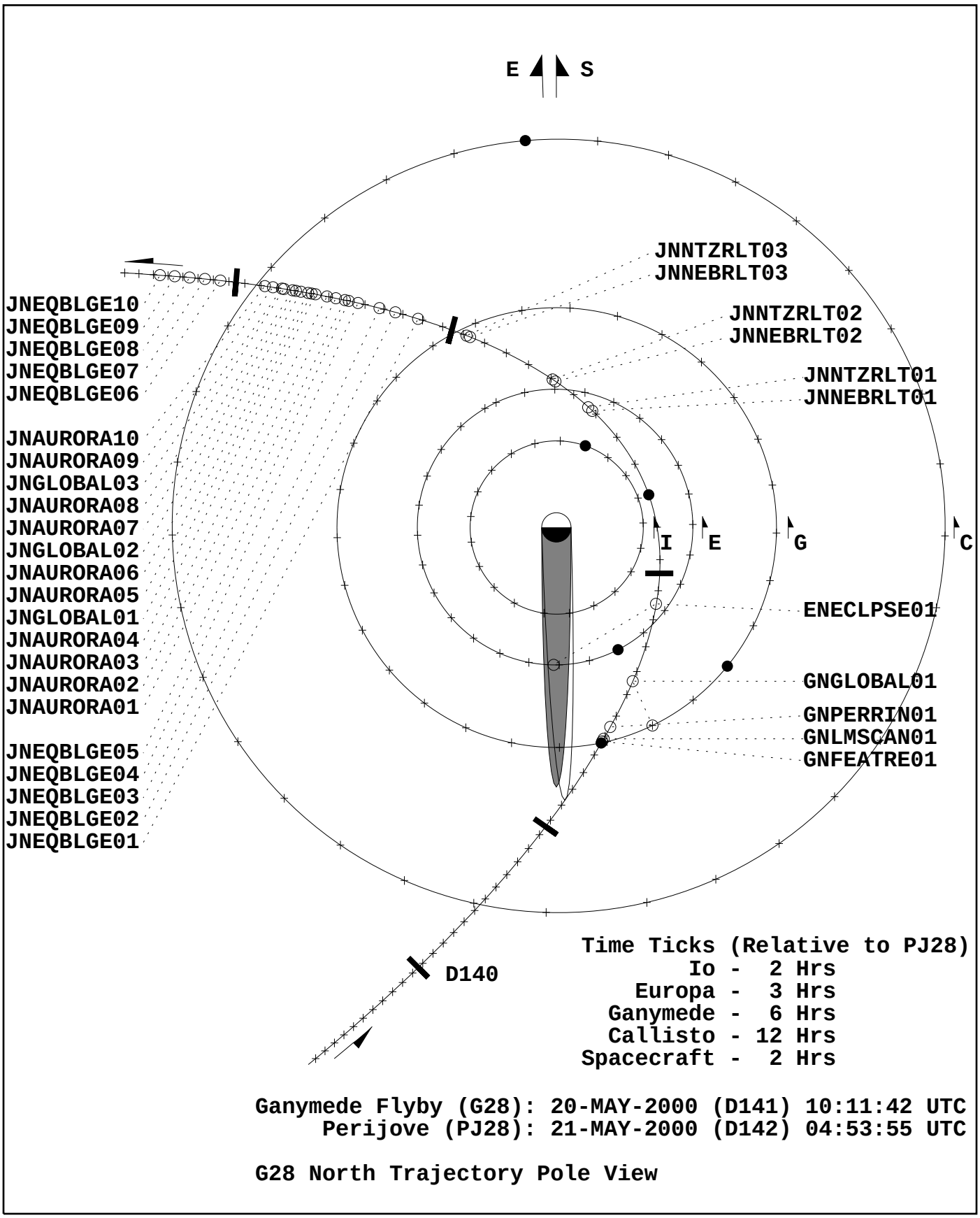
G28 Time-Ordered Listing

OAPEL	Start (UTC)	End (UTC)	Duration
28NNFEATRE01	00-141/10:15:30	00-141/10:17:32	000/00:02:01
28GNFEATRE01	00-141/10:17:32	00-141/10:28:39	000/00:11:07
28NNLMSCAN01	00-141/10:33:42	00-141/10:35:44	000/00:02:01
28GNLMSCAN01	00-141/10:35:44	00-141/10:49:53	000/00:14:09
28NNPERRIN01	00-141/11:44:29	00-141/11:46:30	000/00:02:01
28GNPERRIN01	00-141/11:46:30	00-141/12:22:54	000/00:36:24
28NNGLOBAL01	00-141/16:02:19	00-141/16:04:20	000/00:02:01
28GNGLOBAL01	00-141/16:04:20	00-141/16:53:53	000/00:49:32
28NNECLPSE01	00-141/21:52:10	00-141/21:54:11	000/00:02:01
28ENECLPSE01	00-141/21:54:11	00-141/22:09:21	000/00:15:10
28NNNEBRLT01	00-142/11:10:56	00-142/11:12:58	000/00:02:01
28JNNEBRLT01	00-142/11:12:58	00-142/11:28:08	000/00:15:10
28JNNTZRLT01	00-142/11:31:10	00-142/11:50:22	000/00:19:12
28NNNEBRLT02	00-142/14:25:04	00-142/14:27:06	000/00:02:01
28JNNEBRLT02	00-142/14:27:06	00-142/14:45:18	000/00:18:12
28JNNTZRLT02	00-142/14:45:18	00-142/15:00:28	000/00:15:10
28NNNEBRLT03	00-142/22:10:11	00-142/22:12:12	000/00:02:01
28JNNEBRLT03	00-142/22:12:12	00-142/22:30:24	000/00:18:12
28JNNTZRLT03	00-142/22:30:24	00-142/22:50:38	000/00:20:13
28NNEQBLGE01	00-143/03:17:34	00-143/03:19:35	000/00:02:01
28JNEQBLGE01	00-143/03:19:35	00-143/03:30:42	000/00:11:07
28NNEQBLGE02	00-143/05:37:06	00-143/05:39:07	000/00:02:01
28JNEQBLGE02	00-143/05:39:07	00-143/05:49:14	000/00:10:06
28NNEQBLGE03	00-143/07:18:12	00-143/07:20:14	000/00:02:01
28JNEQBLGE03	00-143/07:20:14	00-143/07:29:20	000/00:09:06
28JNEQBLGE04	00-143/09:38:45	00-143/09:48:52	000/00:10:06
28NNEQBLGE05	00-143/10:37:24	00-143/10:39:25	000/00:02:01
28JNEQBLGE05	00-143/10:39:25	00-143/10:49:32	000/00:10:06
28JNAURORA01	00-143/11:04:42	00-143/11:19:52	000/00:15:10
28NNAURORA02	00-143/12:03:20	00-143/12:05:22	000/00:02:01
28JNAURORA02	00-143/12:05:22	00-143/12:20:32	000/00:15:10
28NNAURORA03	00-143/13:03:00	00-143/13:05:01	000/00:02:01
28JNAURORA03	00-143/13:05:01	00-143/13:20:11	000/00:15:10

G28 Time-Ordered Listing

OAPEL	Start (UTC)	End (UTC)	Duration
28NNAURORA04	00-143/14:23:53	00-143/14:25:54	000/00:02:01
28JNAURORA04	00-143/14:25:54	00-143/14:40:04	000/00:14:09
28NNGLOBAL01	00-143/14:48:09	00-143/14:50:10	000/00:02:01
28JNGLOBAL01	00-143/14:50:10	00-143/15:14:26	000/00:24:16
28NNAURORA05	00-143/15:14:26	00-143/15:16:28	000/00:02:01
28JNAURORA05	00-143/15:16:28	00-143/15:30:37	000/00:14:09
28NNAURORA06	00-143/16:05:00	00-143/16:07:01	000/00:02:01
28JNAURORA06	00-143/16:07:01	00-143/16:20:10	000/00:13:08
28NNGLOBAL02	00-143/16:38:22	00-143/16:40:23	000/00:02:01
28JNGLOBAL02	00-143/16:41:24	00-143/17:03:38	000/00:22:14
28NNAURORA07	00-143/17:03:38	00-143/17:05:40	000/00:02:01
28JNAURORA07	00-143/17:05:40	00-143/17:19:49	000/00:14:09
28NNAURORA08	00-143/18:04:18	00-143/18:06:20	000/00:02:01
28JNAURORA08	00-143/18:06:20	00-143/18:20:29	000/00:14:09
28NNGLOBAL03	00-143/18:20:29	00-143/18:22:30	000/00:02:01
28JNGLOBAL03	00-143/18:22:30	00-143/18:49:48	000/00:27:18
28NNAURORA09	00-143/19:25:12	00-143/19:27:13	000/00:02:01
28JNAURORA09	00-143/19:27:13	00-143/19:40:22	000/00:13:08
28NNAURORA10	00-143/20:24:51	00-143/20:26:52	000/00:02:01
28JNAURORA10	00-143/20:26:52	00-143/20:40:01	000/00:13:08
28NNEQBLGE06	00-144/01:57:30	00-144/01:59:32	000/00:02:01
28JNEQBLGE06	00-144/01:59:32	00-144/02:08:38	000/00:09:06
28NNEQBLGE07	00-144/03:57:50	00-144/03:59:51	000/00:02:01
28JNEQBLGE07	00-144/03:59:51	00-144/04:08:57	000/00:09:06
28NNEQBLGE08	00-144/05:58:09	00-144/06:00:10	000/00:02:01
28JNEQBLGE08	00-144/06:00:10	00-144/06:09:16	000/00:09:06
28NNEQBLGE09	00-144/07:57:28	00-144/07:59:29	000/00:02:01
28JNEQBLGE09	00-144/07:59:29	00-144/08:08:35	000/00:09:06
28NNEQBLGE10	00-144/09:57:47	00-144/09:59:48	000/00:02:01
28JNEQBLGE10	00-144/09:59:48	00-144/10:08:54	000/00:09:06
28NNCHOPOF01	00-159/01:26:32	00-159/01:36:38	000/00:10:06
28NNRCTRLT01	00-187/11:00:53	00-188/00:16:38	000/13:15:44
28NNPCTRLT01	00-188/18:30:39	00-189/02:20:49	000/07:50:10

NIMS G28 OBSERVATIONS

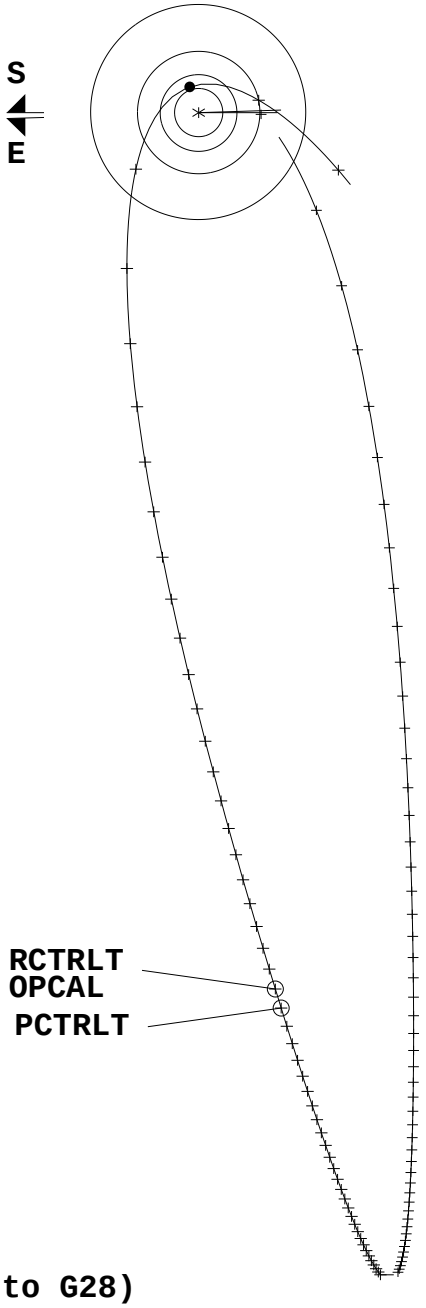


Ganymede Flyby (G28): 20-MAY-2000 (D141) 10:11:42 UTC
Perijove (PJ28): 21-MAY-2000 (D142) 04:53:55 UTC

G28 North Trajectory Pole View

NIMS - FEL - 05/15/00

NIMS G28 CALIBRATIONS



Time Ticks (Relative to G28)
Spacecraft - 2 Days

Ganymede Flyby (G28): 20-MAY-2000 (D141) 10:11:42 UTC
Perijove (PJ28): 21-MAY-2000 (D142) 04:53:54 UTC

G28 North Trajectory Pole View

G28 NIMS INPUTS

Activity ID	Observation Title	NIMS Edit Table	NIMS PB Table	Mode	Gain	Grating Start	Grating Offset	Record Fromat	PSID
28NNFEATRE01	NIMS Software Reload								
28GNFEATRE01	Ganymede Hi-Res Feature	G28GLM442	G28GLM360	LM	2	0	4	MPW	DA
28NNLMSCAN01	NIMS Software Reload								
28GNLMSCAN01	Ganymede Limb Scan	G28GLM442	G28GLM360	LM	4	0	4	MPW	DB
28NNPERRIN01	NIMS Software Reload								
28GNPERRIN01	Ganymede Perrine Region	G28GLM442	G28GLM360	LM	2	0	4	MPW	DC
28NNGLOBAL01	NIMS Software Reload								
28GNGLOBAL01	Ganymede Global Composition Map	G28GLM442	G28GLM360	LM	2	0	4	MPW	DD
28NNECLPSE01	NIMS Software Reload								
28ENECLPSE01	Europa Eclipse Obs	G28ELM442	G28ELM360	LM	4	0	4	MPW	DE
28NNNEBRLT01	NIMS Software Reload								
28JNNEBRLT01	Jupiter NEB R/T OBS	G28JLM442	R/T	LM	2	0	4	R/T	DF
28JNNTZRLT01	Jupiter NTZ R/T OBS	G28JLM442	R/T	LM	2	0	4	R/T	DG
28NNNEBRLT02	NIMS Software Reload								
28JNNEBRLT02	Jupiter NEB R/T OBS	G28JLM442	R/T	LM	2	0	4	R/T	DH
28JNNTZRLT02	Jupiter NTZ R/T OBS	G28JLM442	R/T	LM	2	0	4	R/T	DI
28NNNEBRLT03	NIMS Software Reload								
28JNNEBRLT03	Jupiter NEB R/T OBS	G28JLM442	R/T	LM	2	0	4	R/T	DJ
28JNNTZRLT03	Jupiter NTZ R/T OBS	G28JLM442	R/T	LM	2	0	4	R/T	DK
28NNEQBLGE01	NIMS Software Reload								
28JNEQBLGE01	Jupiter Equatorial Bulge	G28JLM442	R/T	LM	2	0	4	R/T	DL
28NNEQBLGE02	NIMS Software Reload								
28JNEQBLGE02	Jupiter Equatorial Bulge	G28JLM442	R/T	LM	2	0	4	R/T	DM
28NNEQBLGE03	NIMS Software Reload								
28JNEQBLGE03	Jupiter Equatorial Bulge	G28JLM442	R/T	LM	2	0	4	R/T	DN
28JNEQBLGE04	Jupiter Equatorial Bulge	G28JLM442	R/T	LM	2	0	4	R/T	DO
28NNEQBLGE05	NIMS Software Reload								
28JNEQBLGE05	Jupiter Equatorial Bulge	G28JLM442	R/T	LM	2	0	4	R/T	DP
28JNAURORA01	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	DQ
28NNAURORA02	NIMS Software Reload								
28JNAURORA02	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	DS
28NNAURORA03	NIMS Software Reload								
28JNAURORA03	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	DT
28NNAURORA04	NIMS Software Reload								
28JNAURORA04	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	DY
28NNGLOBAL01	NIMS Software Reload								
28JNGLOBAL01	Jupiter Global Observation	G28JGM17A	G28JXM15	XM	2	0	4	MPW	DZ
28NNAURORA05	NIMS Software Reload								
28JNAURORA05	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	KA
28NNAURORA06	NIMS Software Reload								
28JNAURORA06	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	KB
28NNGLOBAL02	NIMS Software Reload								
28JNGLOBAL02	Jupiter Global Observation	G28JGM17A	G28JXM15	XM	2	0	4	MPW	KC

G28 NIMS INPUTS

Activity ID	Observation Title	NIMS Edit Table	NIMS PB Table	Mode	Gain	Grating Start	Grating Offset	Record Fromat	PSID
28NNAURORA07	NIMS Software Reload								
28JNAURORA07	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	KD
28NNAURORA08	NIMS Software Reload								
28JNAURORA08	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	KE
28NNGLOBAL03	NIMS Software Reload								
28JNGLOBAL03	Jupiter Global Observation	G28JGM17A	G28JXM15	XM	2	0	4	MPW	EC
28NNAURORA09	NIMS Software Reload								
28JNAURORA09	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	KG
28NNAURORA10	NIMS Software Reload								
28JNAURORA10	Jupiter Northern Aurora Mapping	G28JLM442	G28JLM360	LM	2	0	4	MPW	KI
28NNEQBLGE06	NIMS Software Reload								
28JNEQBLGE06	Jupiter Equatorial Bulge	G28JLM442	R/T	LM	2	0	4	R/T	KJ
28NNEQBLGE07	NIMS Software Reload								
28JNEQBLGE07	Jupiter Equatorial Bulge	G28JLM442	R/T	LM	2	0	4	R/T	KK
28NNEQBLGE08	NIMS Software Reload								
28JNEQBLGE08	Jupiter Equatorial Bulge	G28JLM442	R/T	LM	2	0	4	R/T	KL
28NNEQBLGE09	NIMS Software Reload								
28JNEQBLGE09	Jupiter Equatorial Bulge	G28JLM442	R/T	LM	2	0	4	R/T	KM
28NNEQBLGE10	NIMS Software Reload								
28JNEQBLGE10	Jupiter Equatorial Bulge	G28JLM442	R/T	LM	2	0	4	R/T	KN
28NNCHOPOF01	NIMS Chopper Off								
28NNRCTRLT01-	RCT Calibration	G28RCT252	R/T	LM	1	0	4	R/T	XE
28NNROPCAL01	NIMS OPCAL	G28OPCAL48	R/T	LM	4	0	4	R/T	XF
28NNPCTRLT01-	PCT Calibration	G28PCT252	R/T	LM	4	0	4	R/T	FE

G28 RESOURCES

Activity ID	Mode	Record Format	Obs. Cost (tracks)	Obs. Cost (ticks)	Number Wavelengths Returned	Obs Record (sec.)	Obs PB (sec.)	Selected Bits to Tape sBOT (MBITS)	Bits to Tape BOT (Mbit)	Mode Cycle time (sec)
28GNFEATRE01	LM	MPW	0.0734	428	360	484	482.667	5.56	5.58	8.667
28GNLMBSCN01	LM	MPW	0.1090	635	360	720	719.333	8.29	8.29	8.667
28GNPERRIN01	LM	MPW	0.0732	427	360	482.7	480	5.53	5.56	8.667
28GNGLOBAL01	LM	MPW	0.1090	635	360	720	720	8.29	8.29	8.667
28ENECLPSE01	LM	MPW	0.0099	58	360	62.667	60	0.69	0.72	8.667
28JNNEBRLT01	LM	RT			360	480	480	0.00	0.00	8.667
28JNNTZRLT01	LM	RT			360	420	420	0.00	0.00	8.667
28JNNEBRLT02	LM	RT/BDT			360	480	480	0.00	0.00	8.667
28JNNTZRLT02	LM	RT			360	420	420	0.00	0.00	8.667
28JNNEBRLT03	LM	RT			360	480	480	0.00	0.00	8.667
28JNNTZRLT03	LM	RT			360	420	420	0.00	0.00	8.667
28JNEQBLGE01	LM	RT			360	300	300	0.00	0.00	8.667
28JNEQBLGE02	LM	RT			360	300	300	0.00	0.00	8.667
28JNEQBLGE03	LM	RT			360	300	300	0.00	0.00	8.667
28JNEQBLGE04	LM	RT			360	300	300	0.00	0.00	8.667
28JNEQBLGE05	LM	RT			360	300	300	0.00	0.00	8.667
28JNAURORA01	LM	MPW	0.0246	143	360	160	157	1.81	1.84	8.667
28JNAURORA02	LM	MPW	0.0246	143	360	160	157	1.81	1.84	8.667
28JNAURORA03	LM	MPW	0.0246	143	360	160	157	1.81	1.84	8.667
28JNAURORA04	LM	MPW	0.0246	143	360	160	157	1.81	1.84	8.667
28JNGLOBAL01	XM	MPW	0.0461	269	15	303	300	3.46	3.49	0.333
28JNAURORA05	LM	MPW	0.0246	143	360	160	157	1.81	1.84	8.667
28JNAURORA06	LM	MPW	0.0246	143	360	160	157	1.81	1.84	8.667
28JNGLOBAL02	XM	MPW	0.0522	304	15	343	340	3.92	3.95	0.333
28JNAURORA07	LM	MPW	0.0246	143	360	160	157	1.81	1.84	8.667
28JNAURORA08	LM	MPW	0.0246	143	360	160	157	1.81	1.84	8.667
28JNGLOBAL03	XM	MPW	0.0487	284	15	320	317	3.65	3.69	0.333
28JNAURORA09	LM	MPW	0.0246	143	360	160	157	1.81	1.84	8.667
28JNAURORA10	LM	MPW	0.0246	143	360	160	157	1.81	1.84	8.667
28JNEQBLGE06	LM	RT			360	300	300	0.00	0.00	8.667
28JNEQBLGE07	LM	RT			360	300	300	0.00	0.00	8.667
28JNEQBLGE08	LM	RT/BDT			360	300	300	0.00	0.00	8.667
28JNEQBLGE09	LM	RT			360	300	300	0.00	0.00	8.667
28JNEQBLGE10	LM	RT			360	300	300	0.00	0.00	8.667
28NNPCTRLT01	LM	RT			252					

G28 RESOURCES

Activity ID	Mode	Record Format	Obs. Cost (tracks)	Obs. Cost (ticks)	Number Wavelengths Returned	Obs Record (sec.)	Obs PB (sec.)	Selected Bits to Tape sBOT (MBITS)	Bits to Tape BOT (Mbit)	Mode Cycle time (sec)
28NNRCTRLT01	LM	RT			252					
27INMOSAIC01-	LM	MPW			360	842	842	9.70	9.70	8.667
27INPROMTH01-	LM	MPW			360	573	573	6.60	6.60	8.667
27ISCAMAXT01-	LM	MPW			360	102	100	1.15	1.18	8.667
27INCAMAXT01-	LM	MPW			360	120	116	1.34	1.38	8.667
27INAMRANI01-	LM	MPW			360	1120	1120	12.90	12.90	8.667

G28 RESOURCES

Activity ID	AACS Mbits c 2.5	Comp	Thold	RT BTG	Total BTG Mbits (w/4% ohead)	Data Reduction Factor (sBOT/BTG)	Pass
28GNFEATRE01	0.03	1.1			3.7910	1.47	1
28GNLMBSCN01	0.04	1.1			5.6498	1.47	1,2
28GNPERRIN01	0.03	1.1			3.7700	1.47	2
28GNGLOBAL01	0.04	1.1			5.6551	1.47	1,2
28ENECLPSE01	0.00	1.1			0.4713	1.47	1
28JNNEBRLT01	0.03			0.1280		0.00	
28JNNTZRLT01	0.02			0.1120		0.00	
28JNNEBRLT02	0.03				0.1280	0.00	
28JNNTZRLT02	0.02			0.1120		0.00	
28JNNEBRLT03	0.03			0.1280		0.00	
28JNNTZRLT03	0.02			0.1120		0.00	
28JNEQBLGE01	0.02			0.0800		0.00	
28JNEQBLGE02	0.02			0.0800		0.00	
28JNEQBLGE03	0.02			0.0800		0.00	
28JNEQBLGE04	0.02			0.0800		0.00	
28JNEQBLGE05	0.02			0.0800		0.00	
28JNAURORA01	0.01	1.1			1.2331	1.47	2
28JNAURORA02	0.01	1.1			1.2331	1.47	1
28JNAURORA03	0.01	1.1			1.2331	1.47	2
28JNAURORA04	0.01	1.1			1.2331	1.47	1
28JNGLOBAL01	0.02	1.1			2.5553	1.35	2
28JNAURORA05	0.01	1.1			1.2331	1.47	1
28JNAURORA06	0.01	1.1			1.2331	1.47	2
28JNGLOBAL02	0.02	1.1			2.8960	1.35	1
28JNAURORA07	0.01	1.1			1.2331	1.47	2
28JNAURORA08	0.01	1.1			1.2331	1.47	1
28JNGLOBAL03	0.02	1.1			2.7001	1.35	2
28JNAURORA09	0.01	1.1			1.2331	1.47	1
28JNAURORA10	0.01	1.1			1.2331	1.47	2
28JNEQBLGE06	0.02			0.0800		0.00	
28JNEQBLGE07	0.02			0.0800		0.00	
28JNEQBLGE08	0.02				0.0800	0.00	
28JNEQBLGE09	0.02			0.0800		0.00	
28JNEQBLGE10	0.02			0.0800		0.00	
28NNPCTRLT01				0.2000			

G28 RESOURCES

Activity ID	AACS Mbits c 2.5	Comp	Thold	RT BTG	Total BTG Mbits (w/4% ohead)	Data Reduction Factor (sBOT/BTG)	Pass
28NNRCTRLT01				0.1400			
27INMOSAIC01-	0.05	1.24			5.8666	1.65	1
27INPROMTH01-	0.03	1.08			4.5838	1.44	1
27ISCAMAXT01-	0.01	1.19			0.7260	1.59	1
27INCAMAXT01-	0.01	1.13			0.8869	1.51	1
27INAMRANI01-	0.06	1.06			9.1287	1.41	1

NIMS G28 OBSERVING GEOMETRY

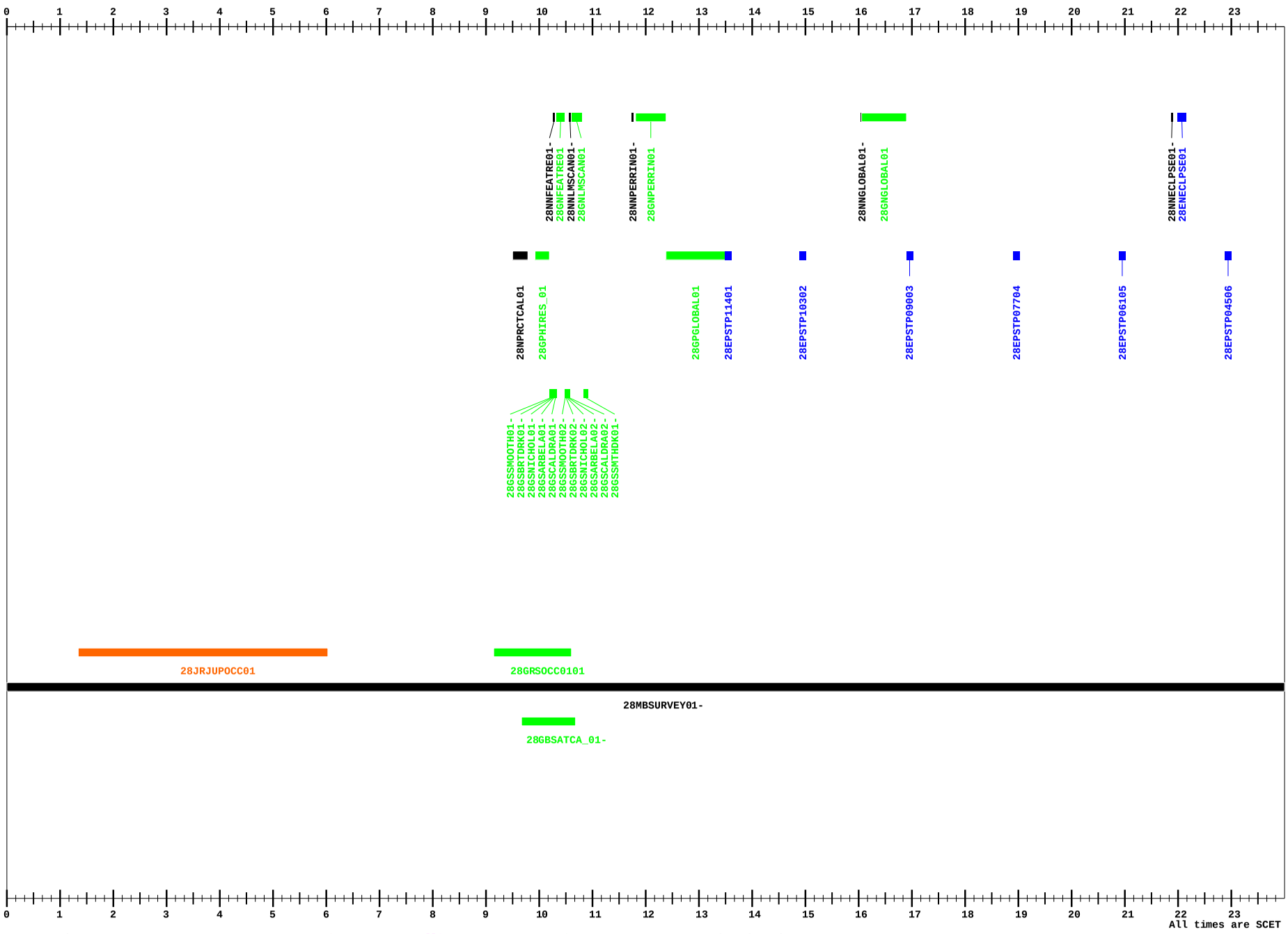
OAPEL	Latitude (deg)	Longitude (deg)	Range (km)	Cone (deg)	Light (deg)	View (deg)	Phase (deg)
28GNFEATRE01	-32 to -28	336 to 339	5.4 to 10.3K	134 to 149	47 to 50	32 to 34	29 to 43
28GNLMSCAN01	+8 to +12	6o to 78	18 to 25K	143 to 147	45 to 62	79 to 94	33 to --
28GNPERRIN01	-10 to +10	345 to 15	65 to 86K	158 to 160	4 to 38	0 to 23	17 to 19
28GNGLOBAL01	-30 to +30	190 to 100	250K	161	3 to 106	3 to 90	16
28ENECLPSE01	-90 to +90	45 to 95	586K	123	9 to 149	3 to 90	59
28JNNEBRLT01	+7 to +9	22 to 30	530K	165	6 to 16	7 to 18	17
28JNNTZRLT01	+20 to +23	33 to 45	547K	167	20 to 24	21 to 30	15
28JNNEBRLT02	+7 to +19	75 to 85	680K	176	48 to 65	52 to 70	6
28JNNTZRLT02	+20 to +33	79 to 90	690K	175	54 to 71	58 to 76	6
28JNNEBRLT03	+4 to +7	15 to 30	955K	153	24 to 45	7 to 22	24
28JNNTZRLT03	+17 to +20	29 to 45	972K	152	27 to 45	20 to 26	25
28JNEQBLGE01	-1 to +1	275 to 296	1200K	140	32 to 55	69 to 91	37 to --
28JNEQBLGE02	-1 to +1	350 to 10	1300K	137	28 to 51	68 to 92	40 to --
28JNEQBLGE03	-1 to +1	53 to 74	1360K	135	26 to 50	68 to 92	42 to --
28JNEQBLGE04	-1 to +1	134 to 156	1450K	133	23 to 47	67 to 92	44 to --
28JNEQBLGE05	-1 to +1	169 to 192	1490K	132	22 to 46	67 to 92	45 to --

NIMS G28 OBSERVING GEOMETRY

OAPEL	Latitude (deg)	Longitude (deg)	Range (km)	Cone (deg)	Light (deg)	View (deg)	Phase (deg)
28JNAURORA01	+55 to +85	125 to 180	1500K	134	66 to 95	67 to 92	42 to --
28JNAURORA02	+55 to +85	160 to 210	1540K	134	66 to 92	67 to 92	43 to --
28JNAURORA03	+50 to +85	190 to 220	1570K	133	62 to 94	63 to 84	44 to --
28JNAURORA04	+50 to +85	240 to 300	1620K	131	63 to 92	63 to 91	45 to --
28JNGLOBAL01	-55 to -5	200 to 310	1630K	130	2 to 120	4 to 90	45
28JNAURORA05	+50 to +85	275 to 325	1650K	131	65 to 112	65 to 92	46 to --
28JNAURORA06	+50 to +85	300 to 350	1680K	130	63 to 93	64 to 91	46 to --
28JNGLOBAL02	-90 to -10	260 to 20	1690K	131	4 to 122	5 to 91	46 to --
28JNAURORA07	+50 to +80	350 to 40	1720K	128	64 to 113	65 to 92	47 to --
28JNAURORA08	+50 to +85	15 to 60	1750K	128	62 to 93	62 to 91	48 to --
28JNGLOBAL03	-70 to -15	315 to 90	1750K	128	2 to 126	1 to 91	47
28JNAURORA09	+50 to +85	70 to 110	1790K	126	61 to 122	62 to 92	49 to --
28JNAURORA10	+50 to +85	100 to 140	1830K	126	63 to 97	64 to 91	49 to --
28JNEQBLGE06	-1 to +1	350 to 20	2020K	121	9 to 35	64 to 91	55 to --
28JNEQBLGE07	-1 to +1	60 to 90	2090K	120	7 to 34	63 to 91	56 to --
28JNEQBLGE08	-1 to +1	130 to 160	2150K	119	5 to 33	61 to 91	57 to --
28JNEQBLGE09	-1 to +1	200 to 230	2210K	118	6 to 32	63 to 91	58 to --
28JNEQBLGE10	-1 to +1	275 to 305	2280K	118	5 to 31	62 to 90	59 to --

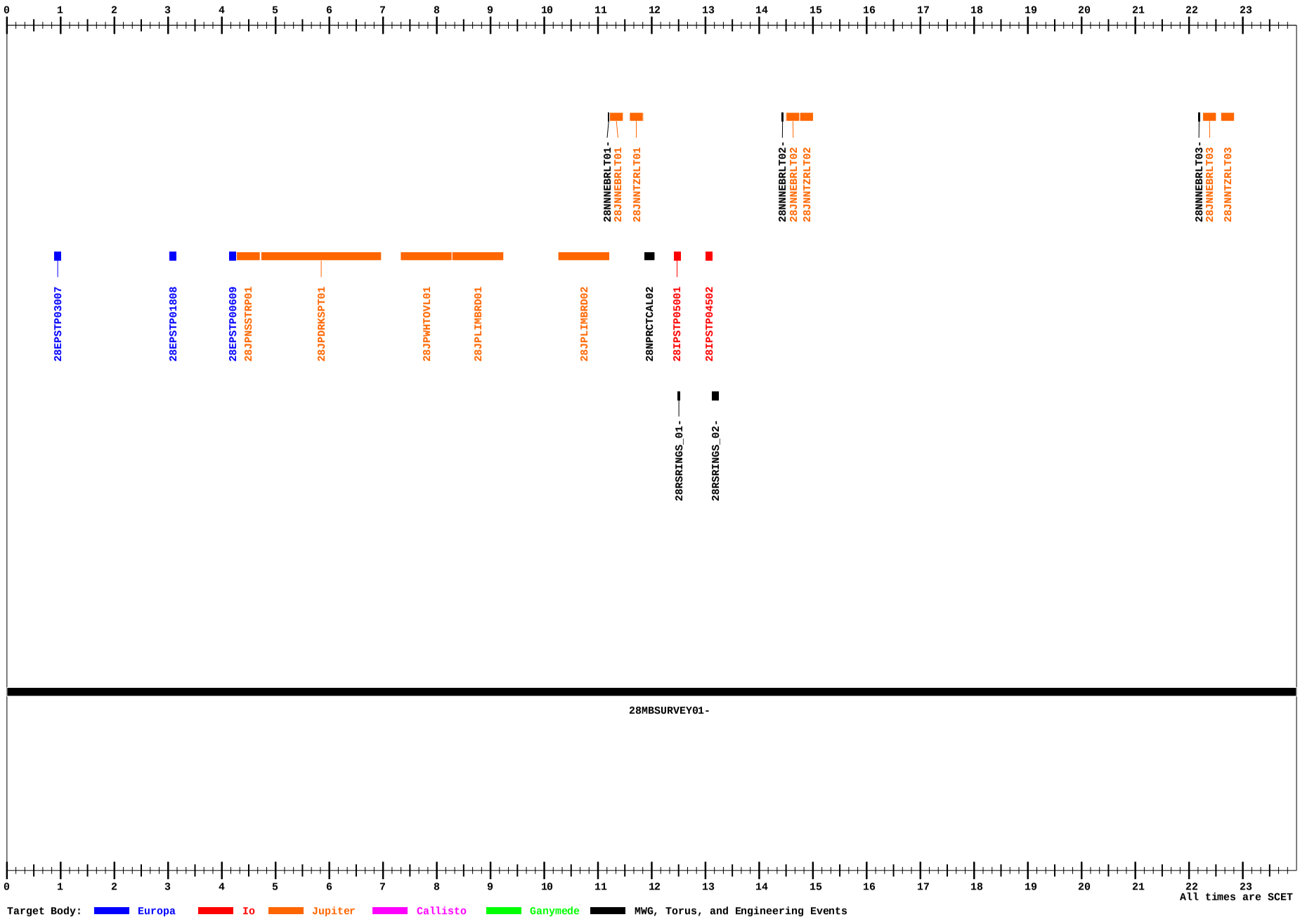
G28 ENCOUNTER
Plot Time: 00-141/00:00:00.000 to 00-142/00:00:00.000
Date of Plot: 24-May-100 11:12:16

GEM: G28



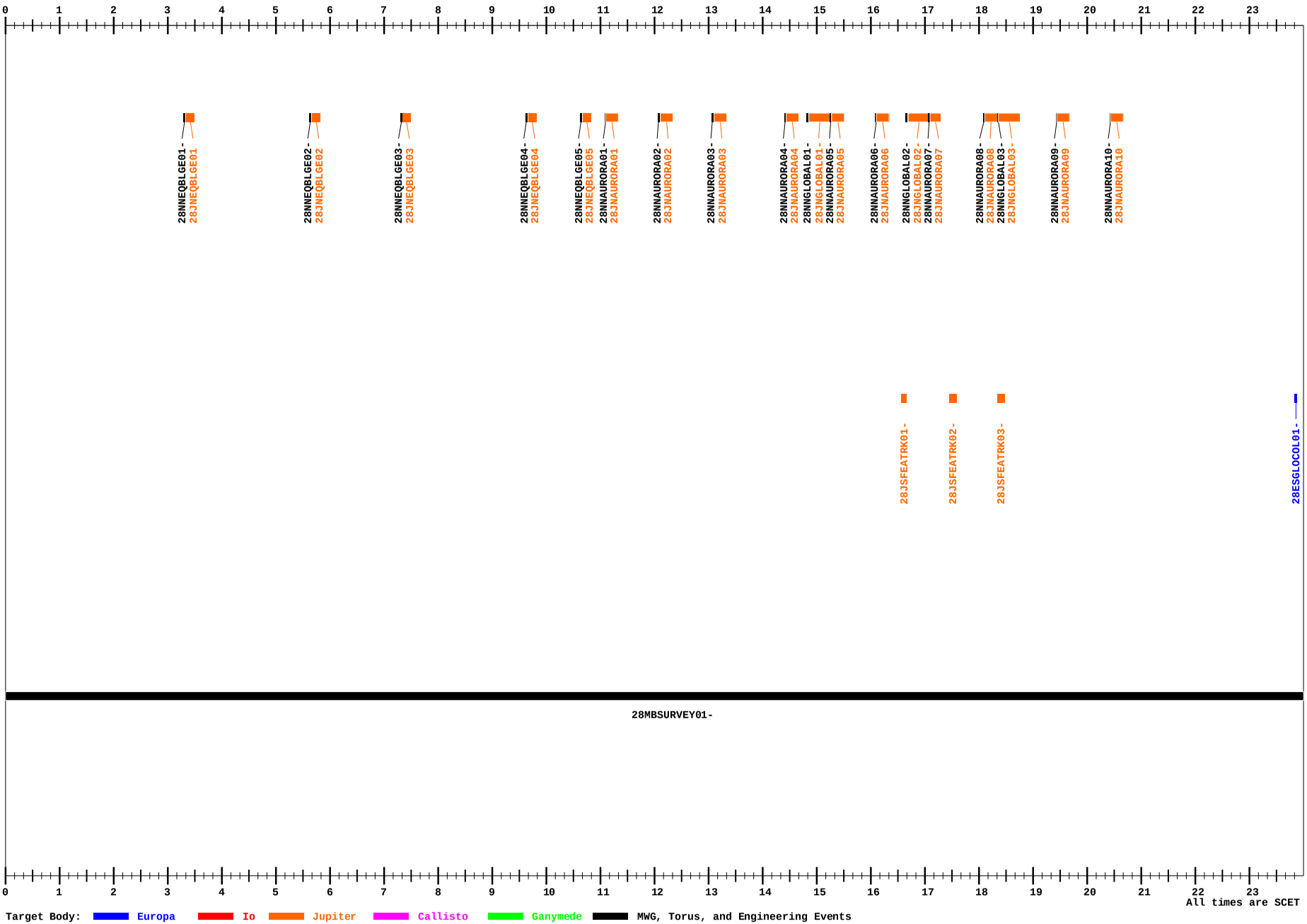
GEM: G28

G28 ENCOUNTER
Plot Time: 00-142/00:00:00.000 to 00-143/00:00:00.000
Date of Plot: 24-May-100 11:12:16



GEM: G28

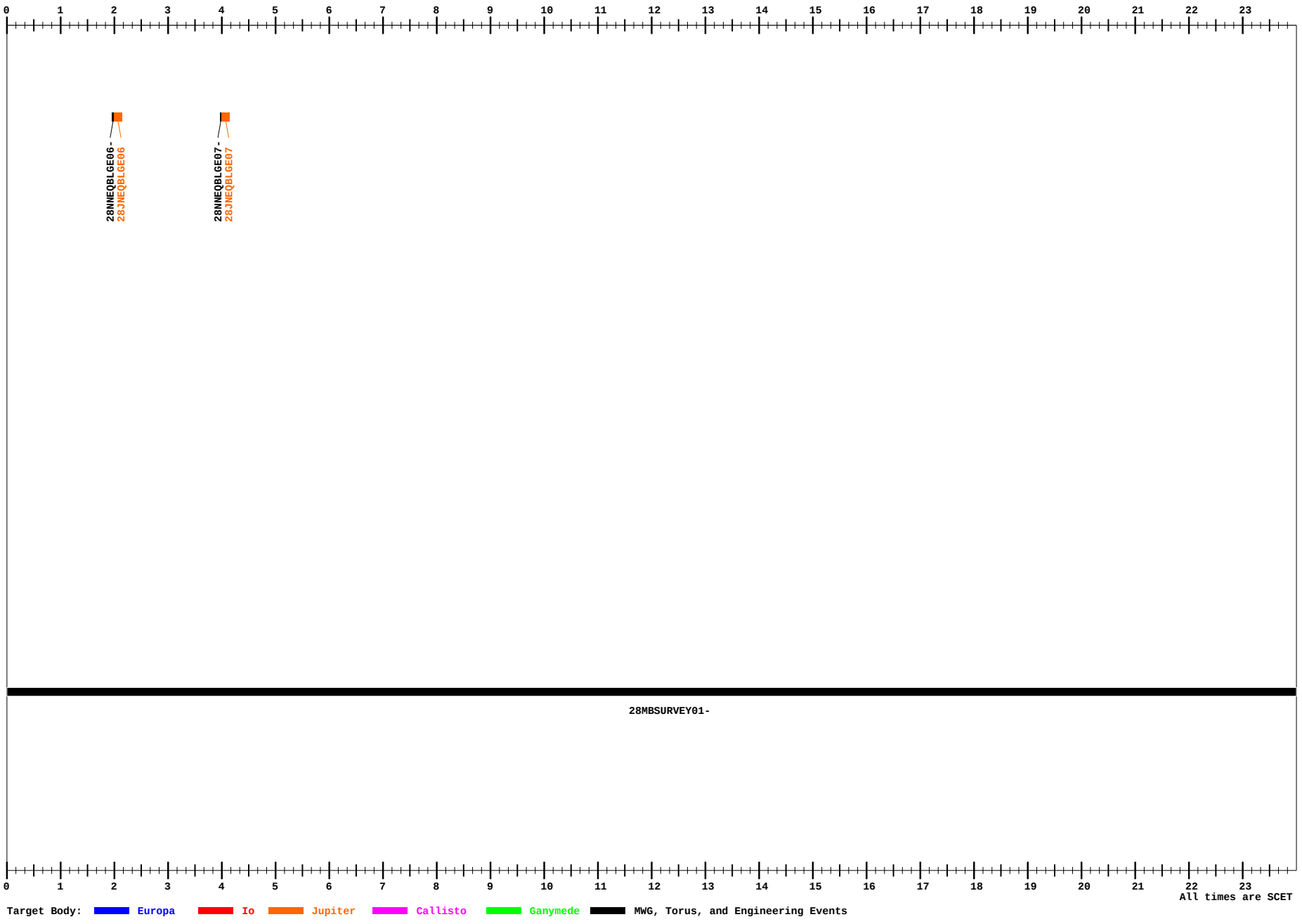
G28 ENCOUNTER
Plot Time: 00-143/00:00:00.000 to 00-144/00:00:00.000
Date of Plot: 24-May-100 11:12:16



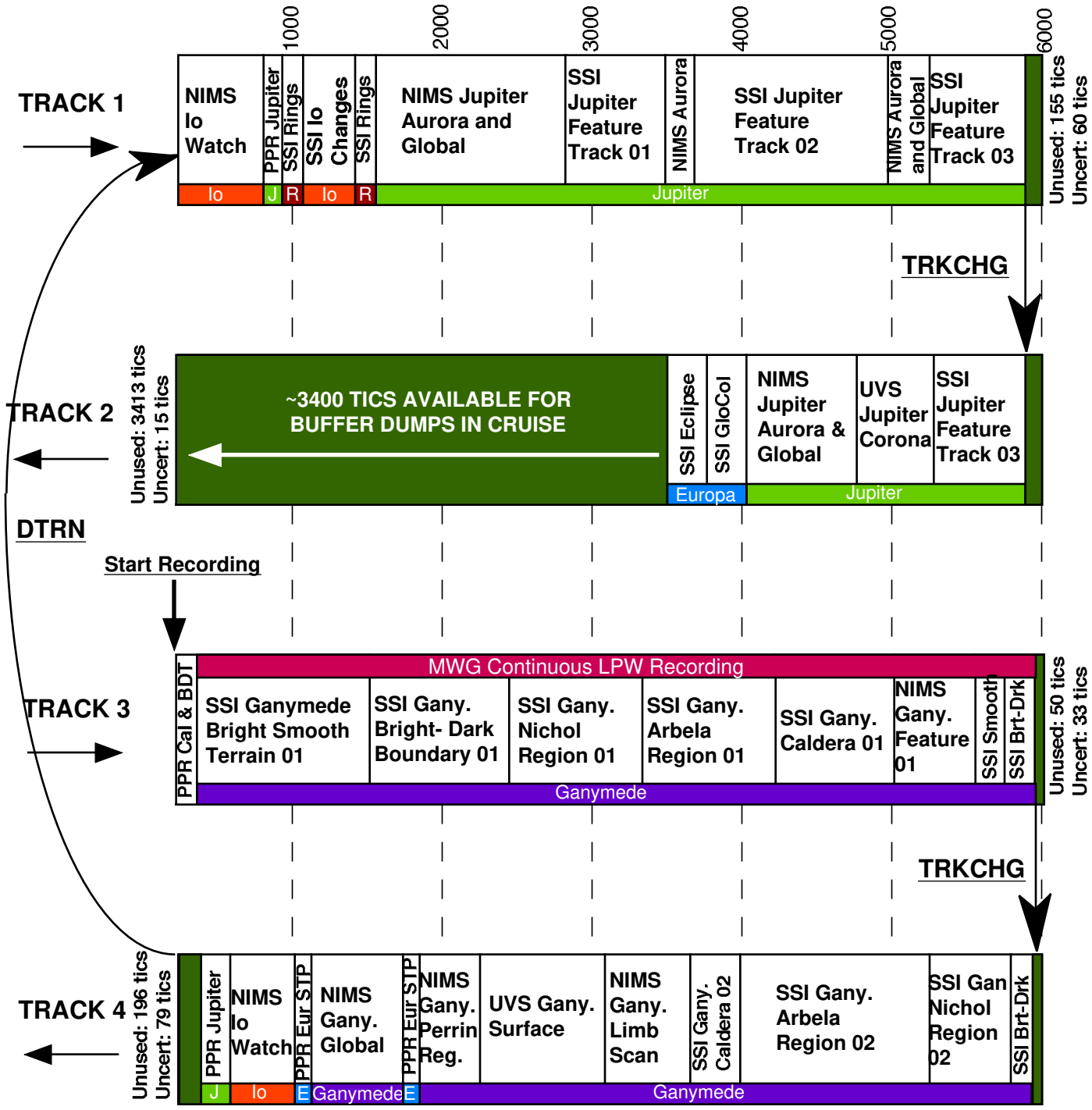
Target Body: Europa Io Jupiter Callisto Ganymede MWG, Torus, and Engineering Events

GEM: G28

G28 ENCOUNTER
Plot Time: 00-144/00:00:00.000 to 00-145/00:00:00.000
Date of Plot: 24-May-100 11:12:17

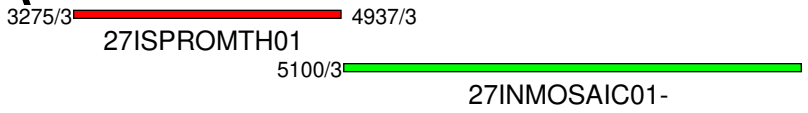


G28 ENCOUNTER HIGH-LEVEL TAPEMAP



J. Gross, 4/30/99

G28PAA



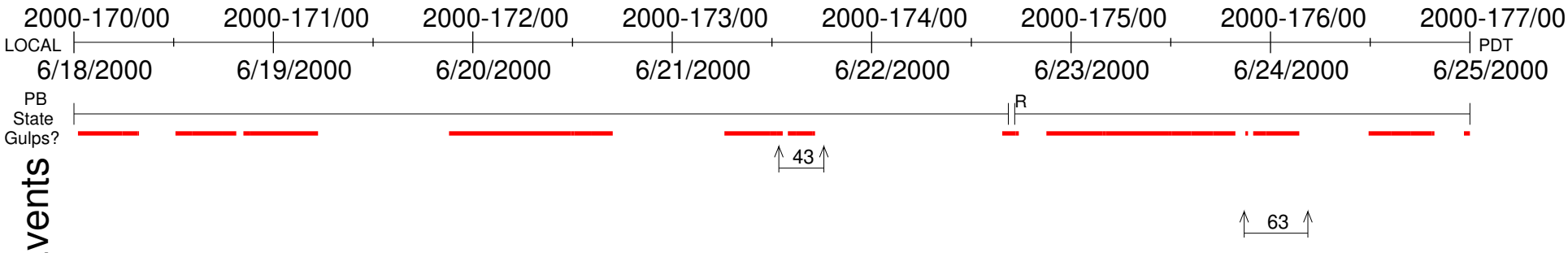
Playback / Date Returned

Events

G28PAA

Playback / Date Returned

Events



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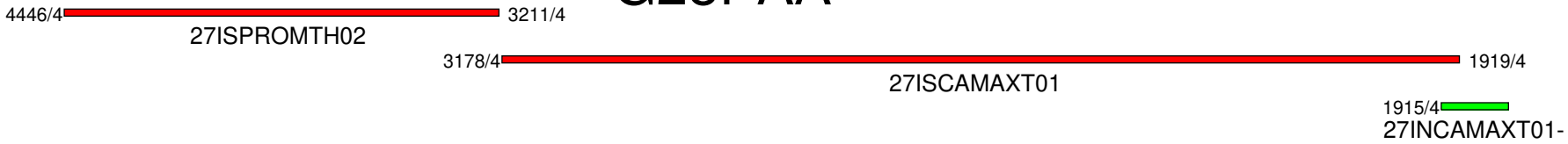
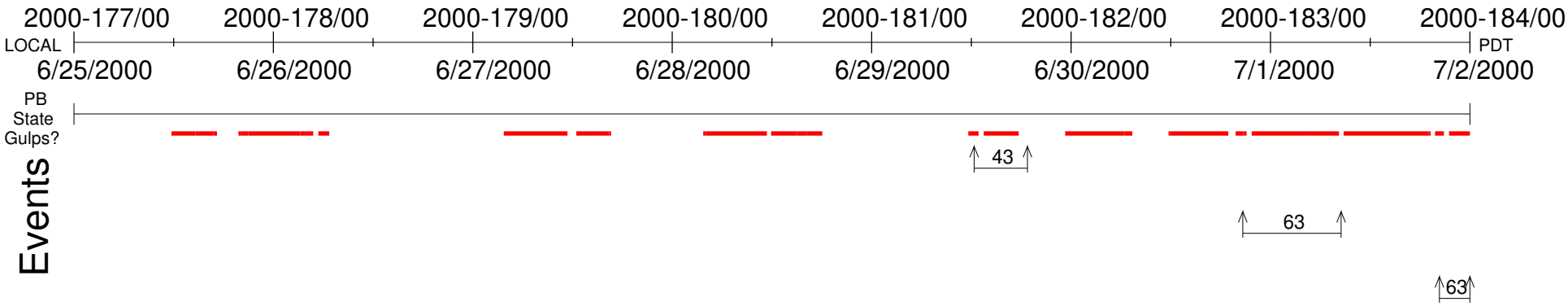


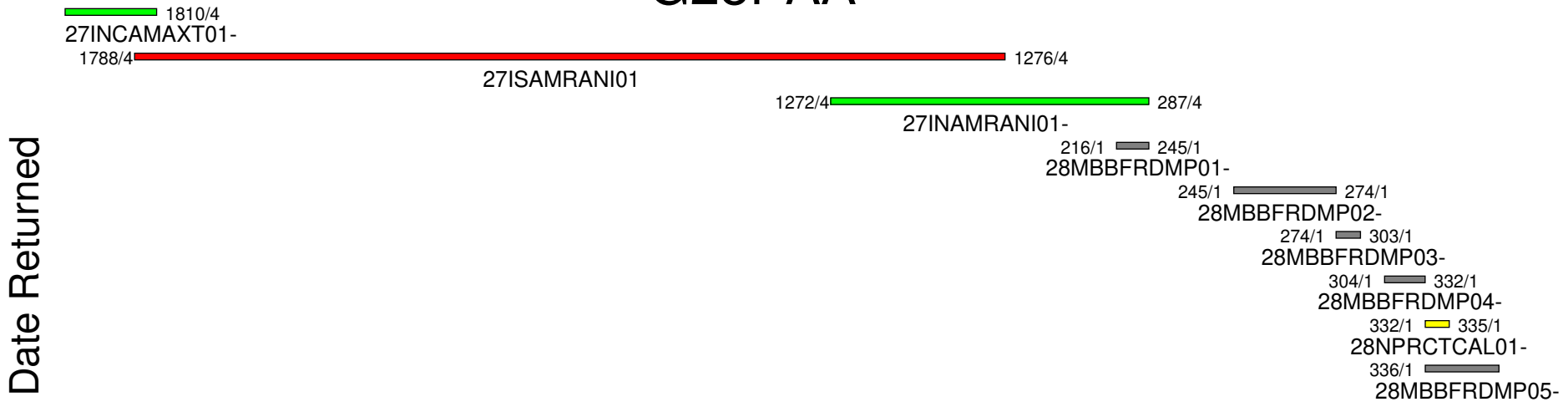
Playback / Date Returned

2-23



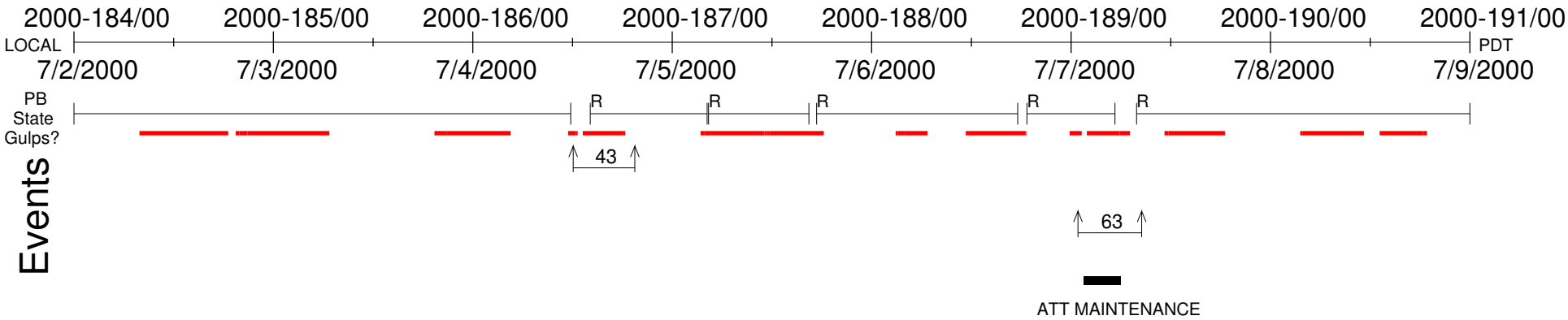
Events

G28PAA



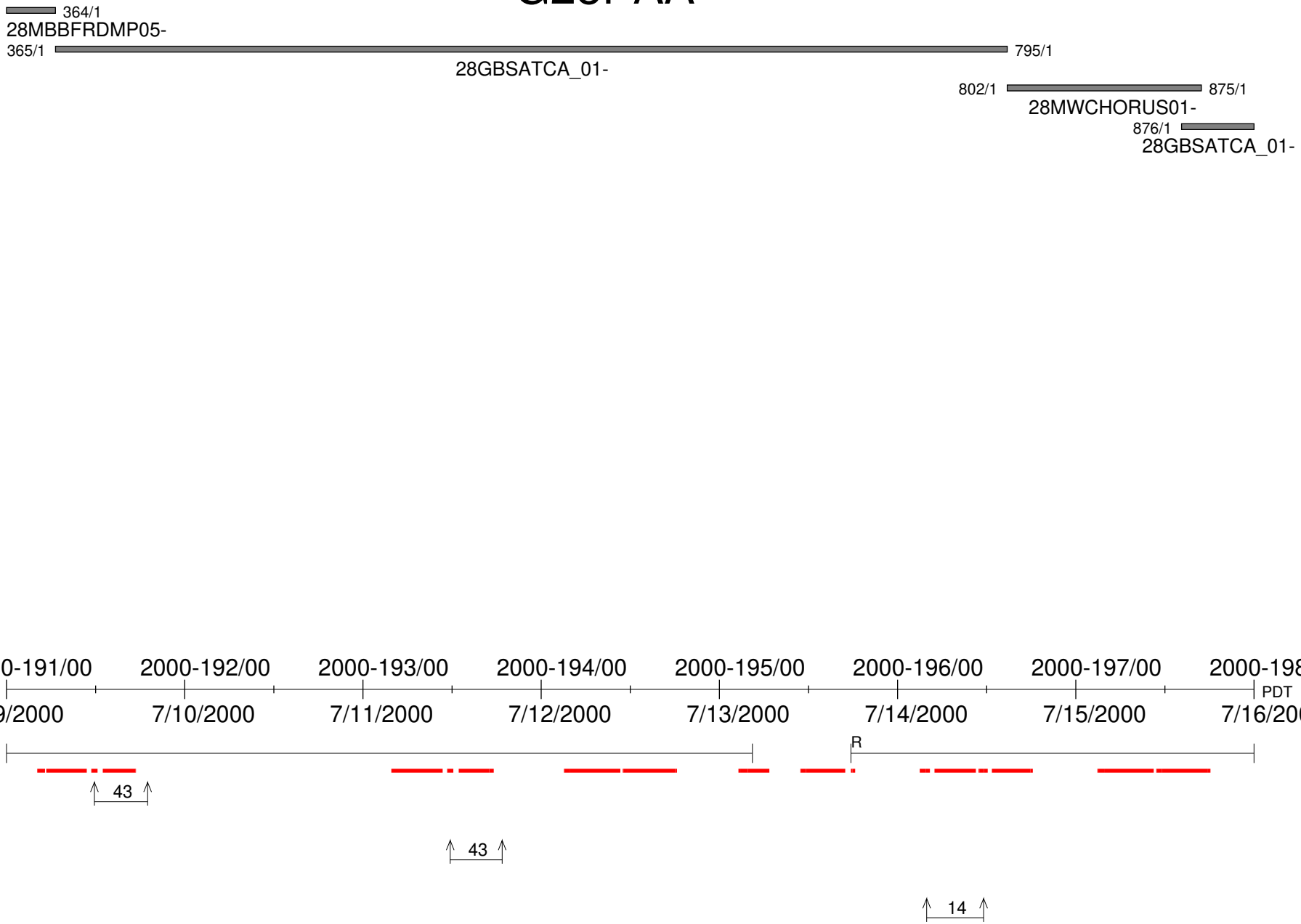
Playback / Date Returned

2-24

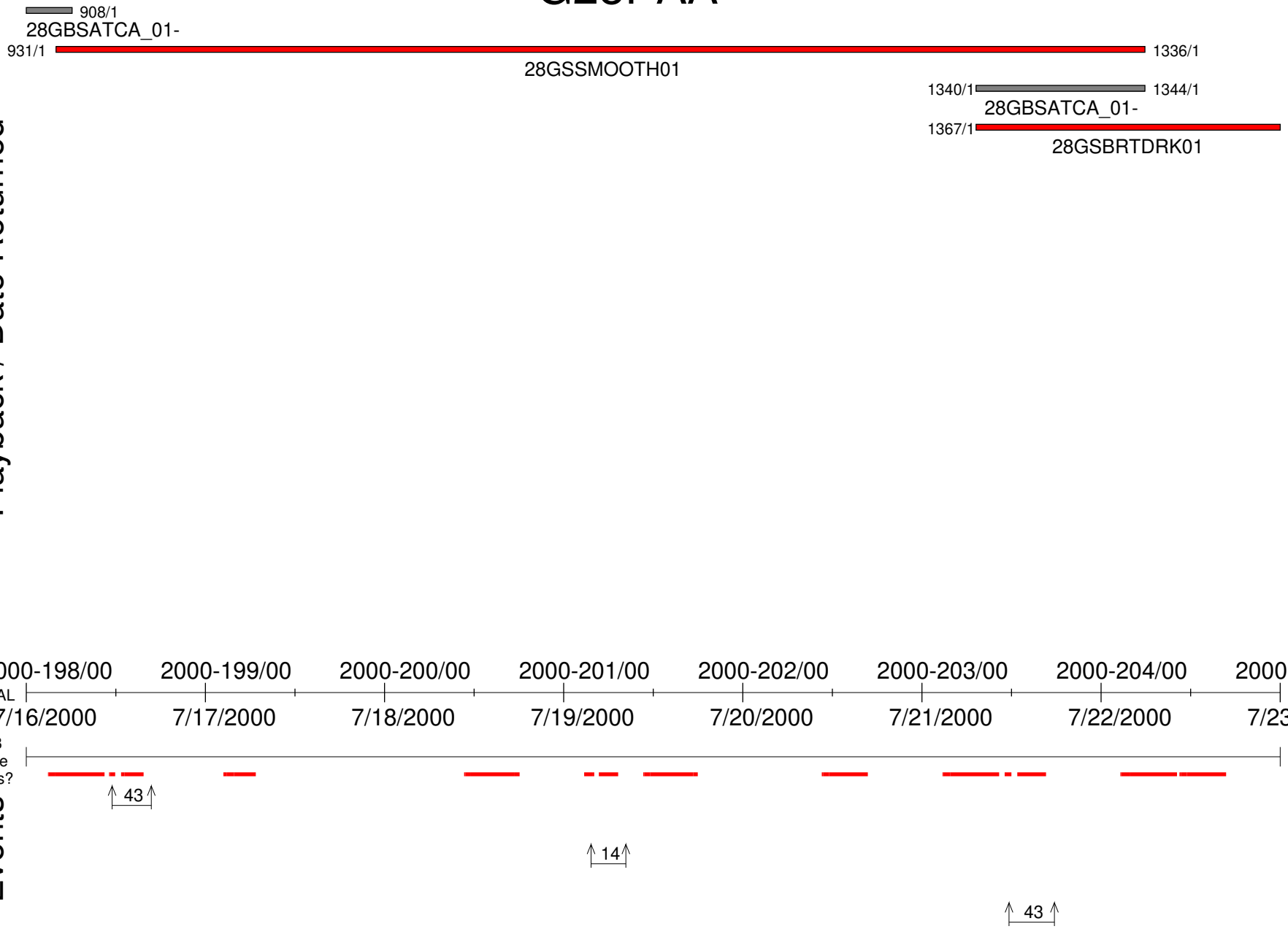


Events

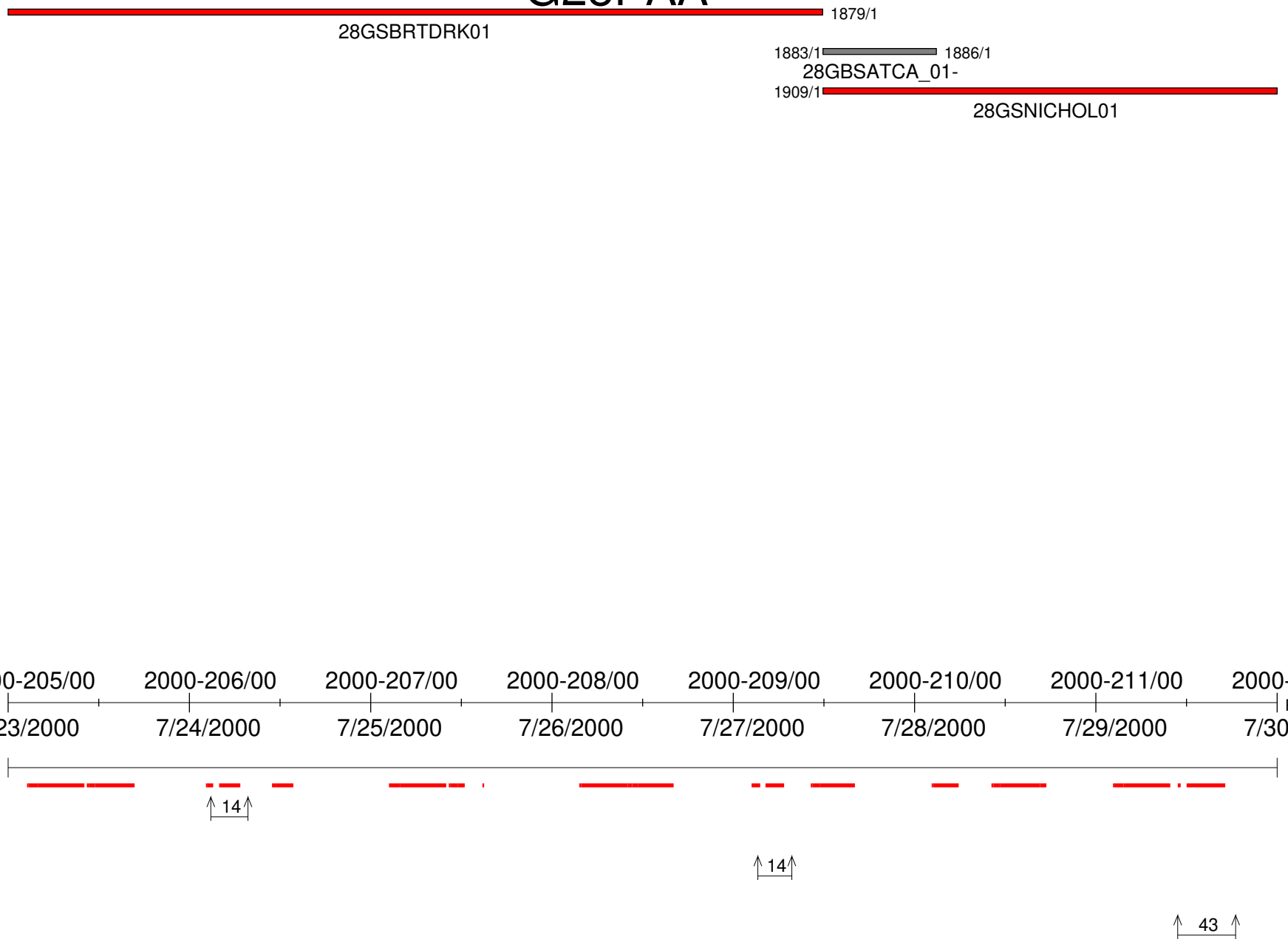
G28PAA


364/1
28MBBFRDMP05-
365/1
795/1
28GBSATCA_01-
802/1
875/1
28MWCHORUS01-
876/1
28GBSATCA_01-
Playback / Date Returned
2-25
2000-191/00
2000-192/00
2000-193/00
2000-194/00
2000-195/00
2000-196/00
2000-197/00
2000-198/00
LOCAL
PDT
7/9/2000
7/10/2000
7/11/2000
7/12/2000
7/13/2000
7/14/2000
7/15/2000
7/16/2000
PB
State
Gulps?
R
Events
43
43
14

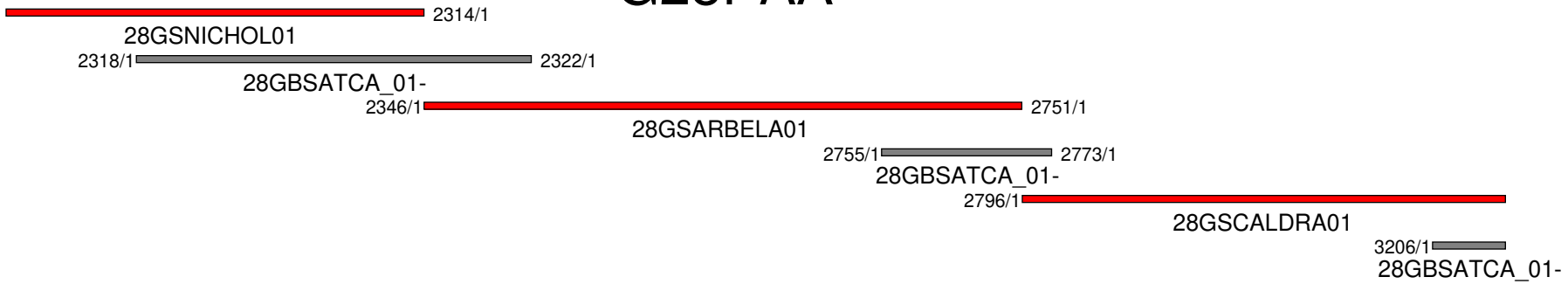
G28PAA


908/1
28GBSATCA_01-
931/1
1336/1
28GSSMOOTH01
1340/1
1344/1
28GBSATCA_01-
1367/1
28GSBRTDRK01
Playback / Date Returned
2-26
2000-198/00
2000-199/00
2000-200/00
2000-201/00
2000-202/00
2000-203/00
2000-204/00
2000-205/00
LOCAL
PDT
7/16/2000
7/17/2000
7/18/2000
7/19/2000
7/20/2000
7/21/2000
7/22/2000
7/23/2000
PB State Gulps?
Events
43
14
43

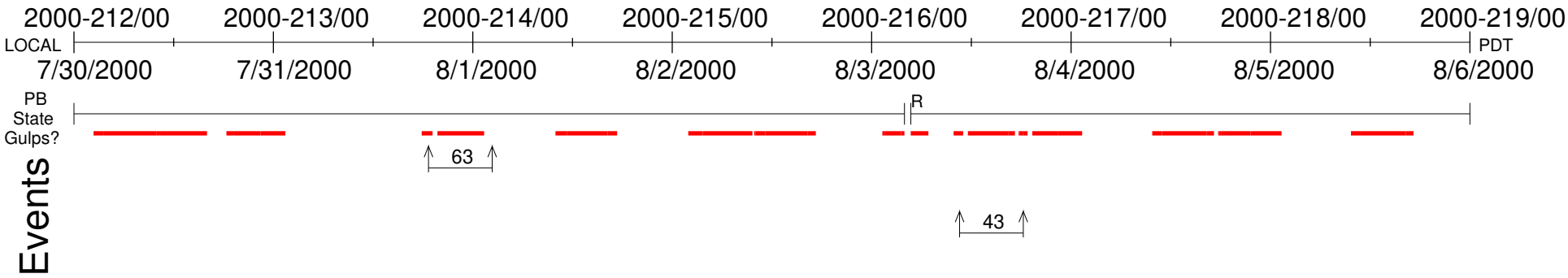
G28PAA


1879/1
28GSBRTDRK01
1883/1
1886/1
28GBSATCA_01-
1909/1
28GSNICHOL01
Playback / Date Returned
2000-205/00
2000-206/00
2000-207/00
2000-208/00
2000-209/00
2000-210/00
2000-211/00
2000-212/00
LOCAL
PDT
7/23/2000
7/24/2000
7/25/2000
7/26/2000
7/27/2000
7/28/2000
7/29/2000
7/30/2000
PB State Gulps?
Events
14
14
43

G28PAA

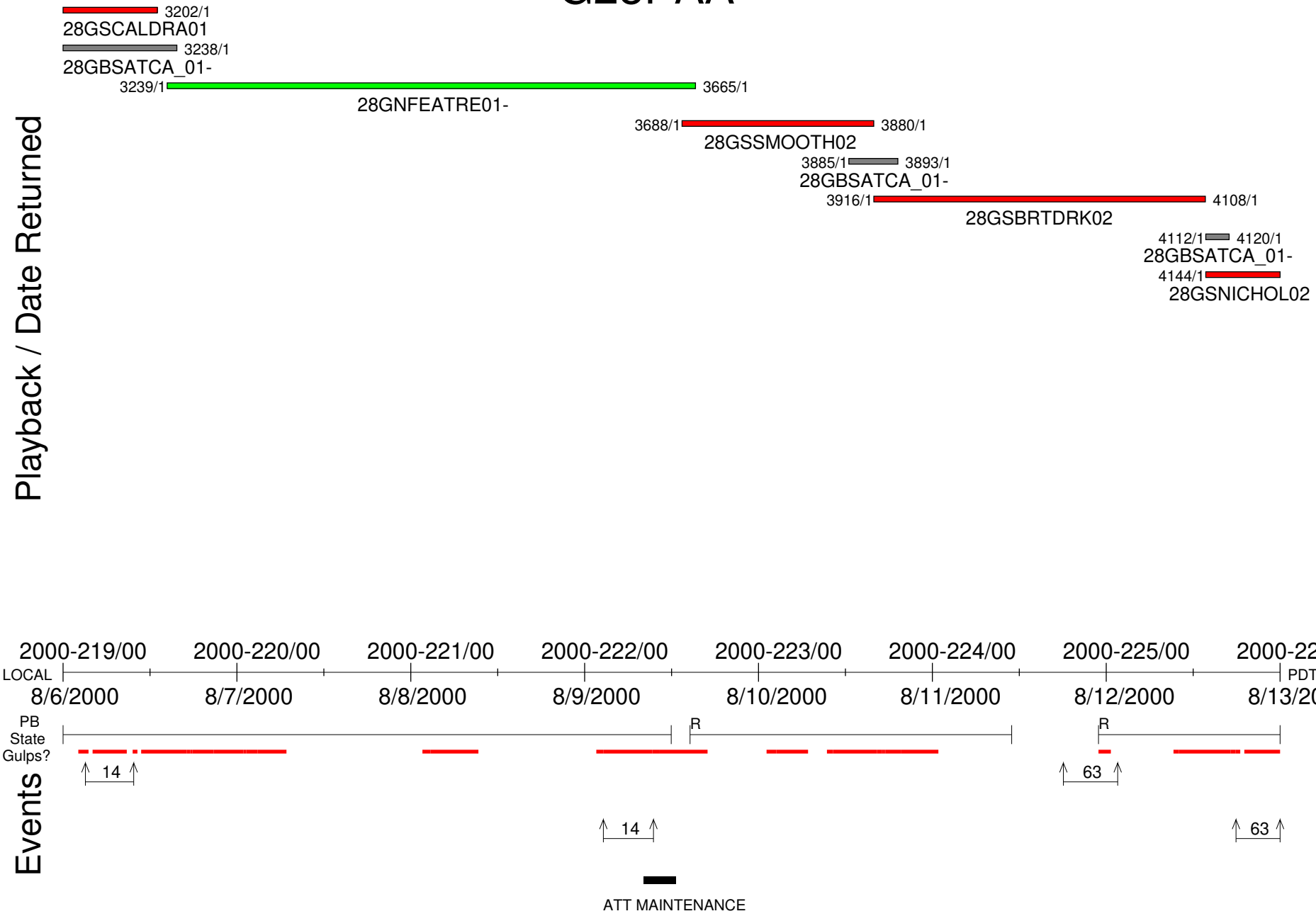


Playback / Date Returned

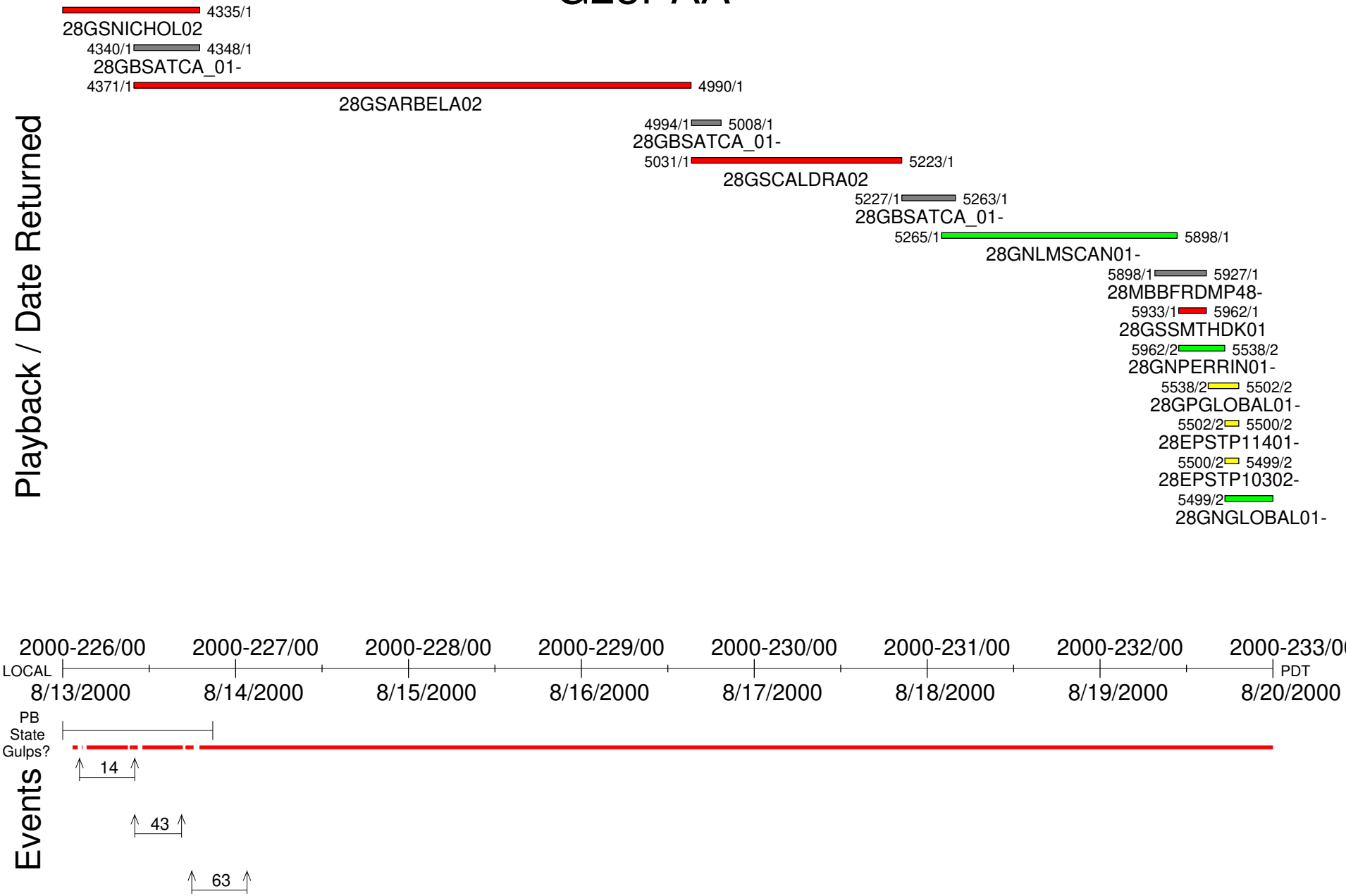


Events

G28PAA


3202/1
28GSCALDRA01
3238/1
28GBSATCA_01-
3239/1
3665/1
28GNFEATRE01-
3688/1
3880/1
28GSSMOOTH02
3885/1
3893/1
28GBSATCA_01-
3916/1
4108/1
28GSBRTDRK02
4112/1
4120/1
28GBSATCA_01-
4144/1
28GSNICHOL02
Playback / Date Returned
2000-219/00
2000-220/00
2000-221/00
2000-222/00
2000-223/00
2000-224/00
2000-225/00
2000-226/00
LOCAL
PDT
8/6/2000
8/7/2000
8/8/2000
8/9/2000
8/10/2000
8/11/2000
8/12/2000
8/13/2000
PB State Gulps?
R
R
14
63
14
63
Events
ATT MAINTENANCE

G28PAA

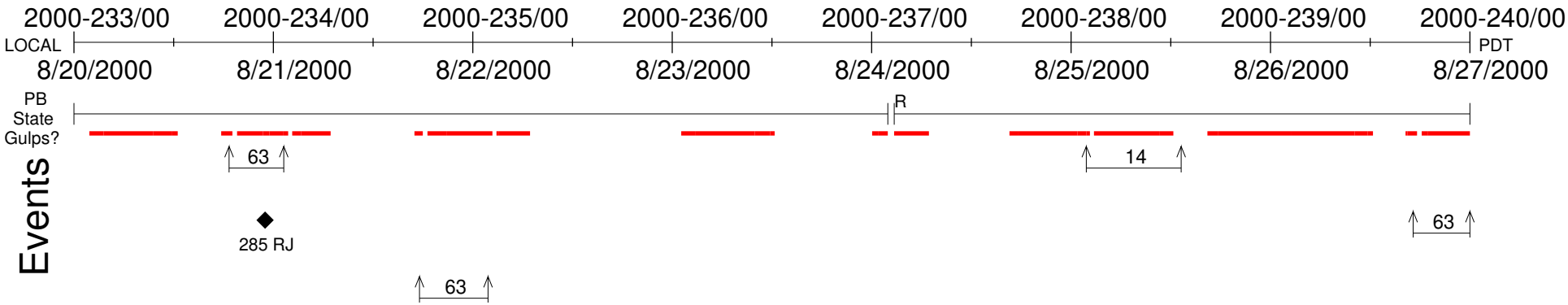

Playback / Date Returned
4335/1
28GSNICHOL02
4340/1
4348/1
28GBSATCA_01-
4371/1
4990/1
28GSARBELA02
4994/1
5008/1
28GBSATCA_01-
5031/1
5223/1
28GSCALDRA02
5227/1
5263/1
28GBSATCA_01-
5265/1
5898/1
28GNLMSCAN01-
5898/1
5927/1
28MBBFRDMP48-
5933/1
5962/1
28GSSMTHDK01
5962/2
5538/2
28GNPERRIN01-
5538/2
5502/2
28GPGLOBAL01-
5502/2
5500/2
28EPSTP11401-
5500/2
5499/2
28EPSTP10302-
5499/2
28GNGLOBAL01-
2000-226/00
2000-227/00
2000-228/00
2000-229/00
2000-230/00
2000-231/00
2000-232/00
2000-233/00
LOCAL
PDT
8/13/2000
8/14/2000
8/15/2000
8/16/2000
8/17/2000
8/18/2000
8/19/2000
8/20/2000
PB State Gulps?
Events
14
43
63

2-30

G28PCF

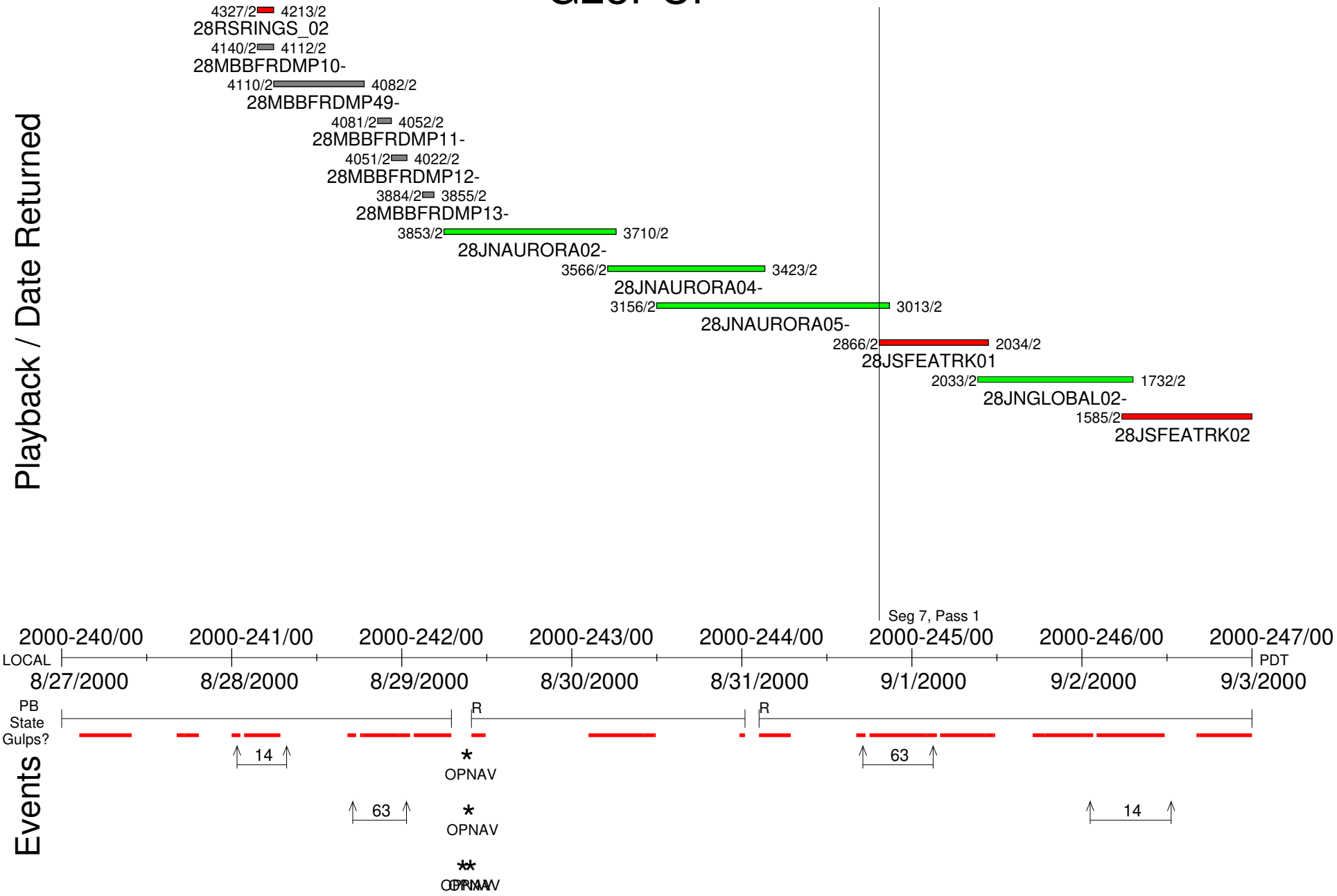
2-31

Playback / Date Returned

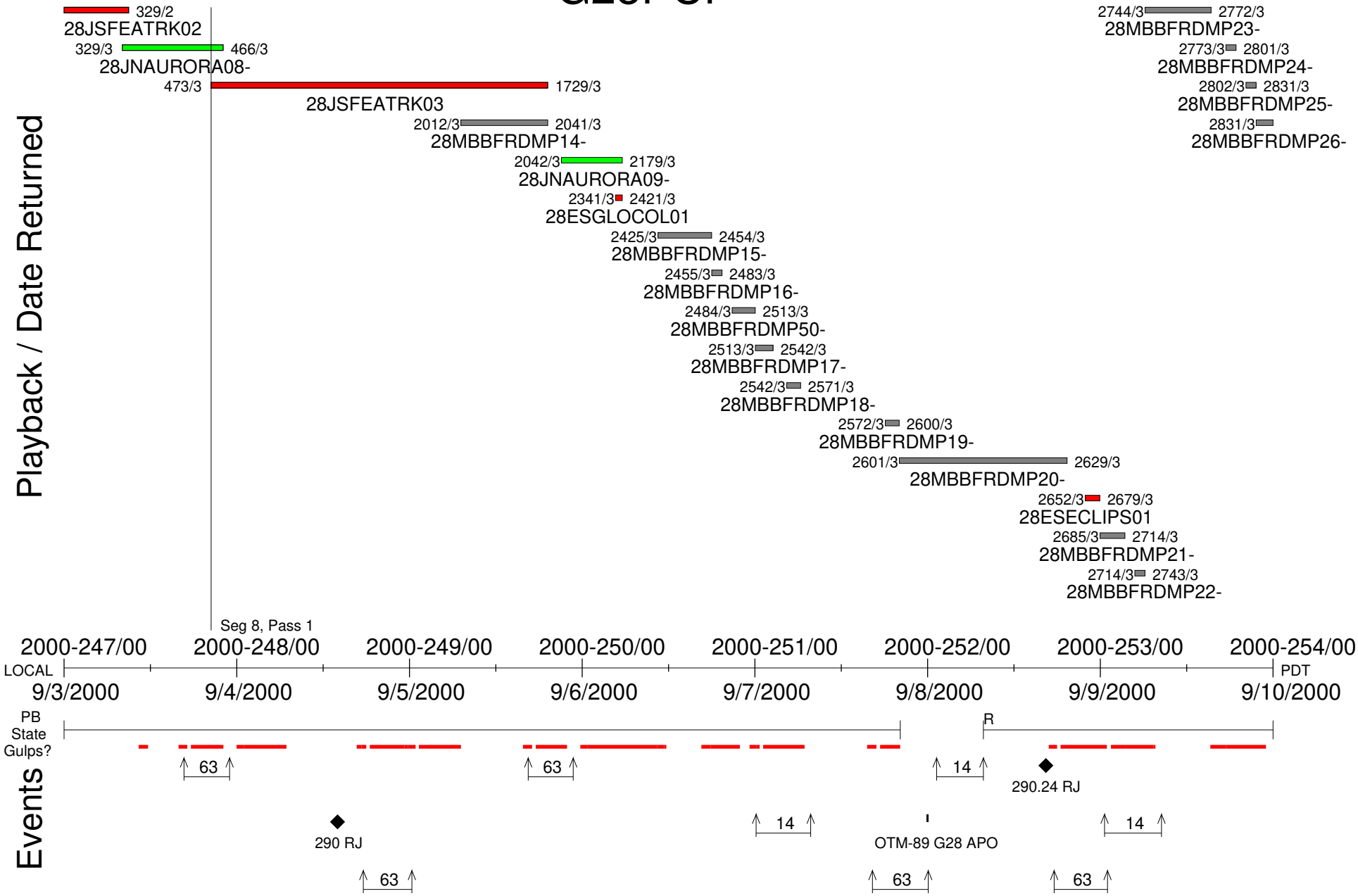


Events

G28PCF


Playback / Date Returned
4327/2 4213/2
28RSRINGS_02
4140/2 4112/2
28MBBFRDMP10-
4110/2 4082/2
28MBBFRDMP49-
4081/2 4052/2
28MBBFRDMP11-
4051/2 4022/2
28MBBFRDMP12-
3884/2 3855/2
28MBBFRDMP13-
3853/2 3710/2
28JNAURORA02-
3566/2 3423/2
28JNAURORA04-
3156/2 3013/2
28JNAURORA05-
2866/2 2034/2
28JSFEATRK01
2033/2 1732/2
28JNGLOBAL02-
1585/2
28JSFEATRK02
Seg 7, Pass 1
2000-240/00
2000-241/00
2000-242/00
2000-243/00
2000-244/00
2000-245/00
2000-246/00
2000-247/00
LOCAL
PDT
8/27/2000
8/28/2000
8/29/2000
8/30/2000
8/31/2000
9/1/2000
9/2/2000
9/3/2000
PB State Gulps?
R
R
Events
14
63
OPNAV
63
OPNAV
14
OPNAV

G28PCF


Playback / Date Returned
329/2
28JSFEATRK02
329/3
466/3
28JNAURORA08-
473/3
1729/3
28JSFEATRK03
2012/3
2041/3
28MBBFRDMP14-
2042/3
2179/3
28JNAURORA09-
2341/3
2421/3
28ESGLOCOL01
2425/3
2454/3
28MBBFRDMP15-
2455/3
2483/3
28MBBFRDMP16-
2484/3
2513/3
28MBBFRDMP50-
2513/3
2542/3
28MBBFRDMP17-
2542/3
2571/3
28MBBFRDMP18-
2572/3
2600/3
28MBBFRDMP19-
2601/3
2629/3
28MBBFRDMP20-
2652/3
2679/3
28ESECLIPS01
2685/3
2714/3
28MBBFRDMP21-
2714/3
2743/3
28MBBFRDMP22-
2744/3
2772/3
28MBBFRDMP23-
2773/3
2801/3
28MBBFRDMP24-
2802/3
2831/3
28MBBFRDMP25-
2831/3
28MBBFRDMP26-
Seg 8, Pass 1
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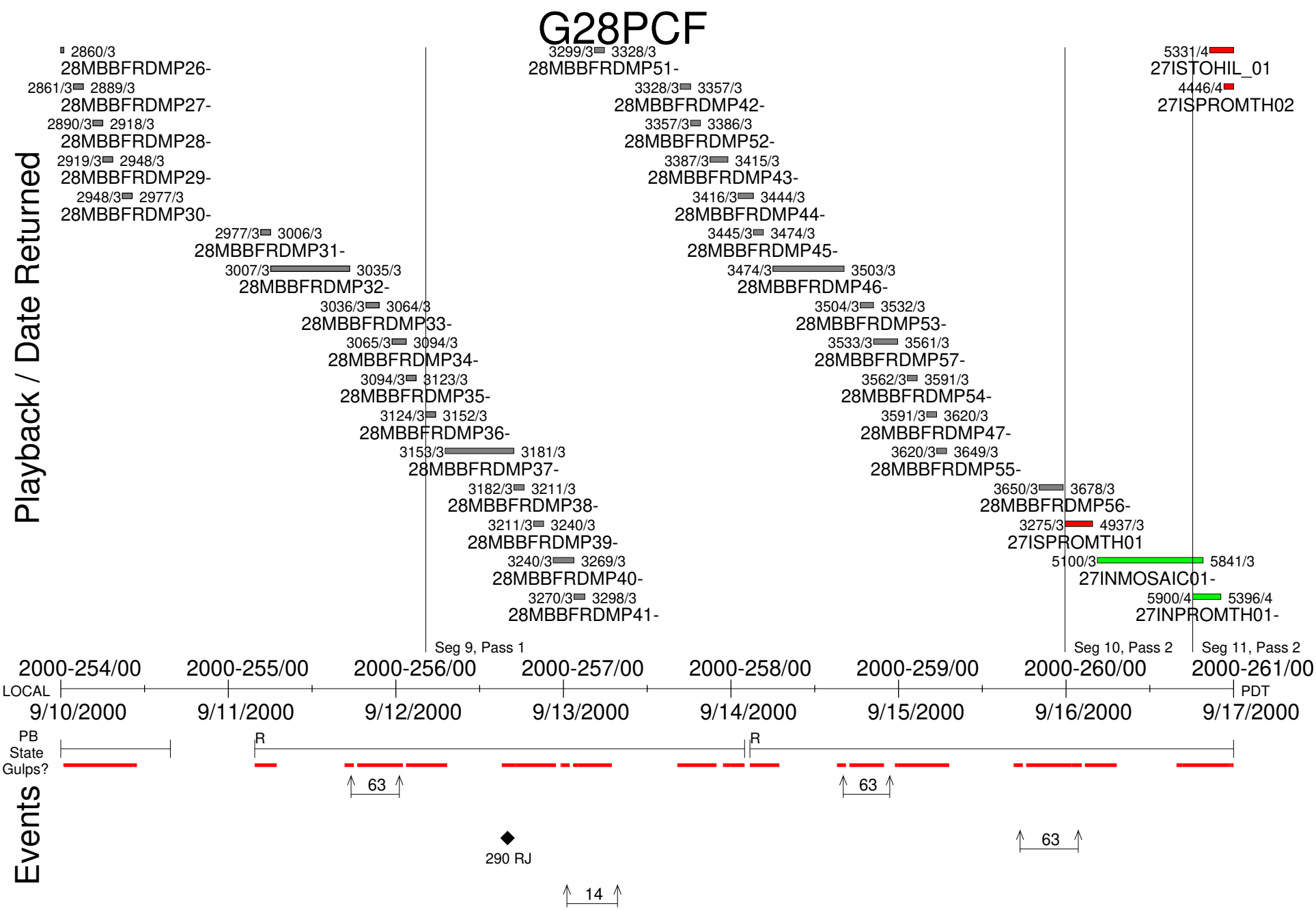
2000-248/00
2000-249/00
2000-250/00
2000-251/00
2000-252/00
2000-253/00
2000-254/00
LOCAL
PDT
9/3/2000
9/4/2000
9/5/2000
9/6/2000
9/7/2000
9/8/2000
9/9/2000
9/10/2000
PB State Gulps?
R
Events
63
63
14
290.24 RJ
290 RJ
14
OTM-89 G28 APO
14
63
63
63


G28PCF
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2860/3
28MBBFRDMP26-
2861/3 2889/3
28MBBFRDMP27-
2890/3 2918/3
28MBBFRDMP28-
2919/3 2948/3
28MBBFRDMP29-
2948/3 2977/3
28MBBFRDMP30-
2977/3 3006/3
28MBBFRDMP31-
3007/3 3035/3
28MBBFRDMP32-
3036/3 3064/3
28MBBFRDMP33-
3065/3 3094/3
28MBBFRDMP34-
3094/3 3123/3
28MBBFRDMP35-
3124/3 3152/3
28MBBFRDMP36-
3153/3 3181/3
28MBBFRDMP37-
3182/3 3211/3
28MBBFRDMP38-
3211/3 3240/3
28MBBFRDMP39-
3240/3 3269/3
28MBBFRDMP40-
3270/3 3298/3
28MBBFRDMP41-
3299/3 3328/3
28MBBFRDMP51-
3328/3 3357/3
28MBBFRDMP42-
3357/3 3386/3
28MBBFRDMP52-
3387/3 3415/3
28MBBFRDMP43-
3416/3 3444/3
28MBBFRDMP44-
3445/3 3474/3
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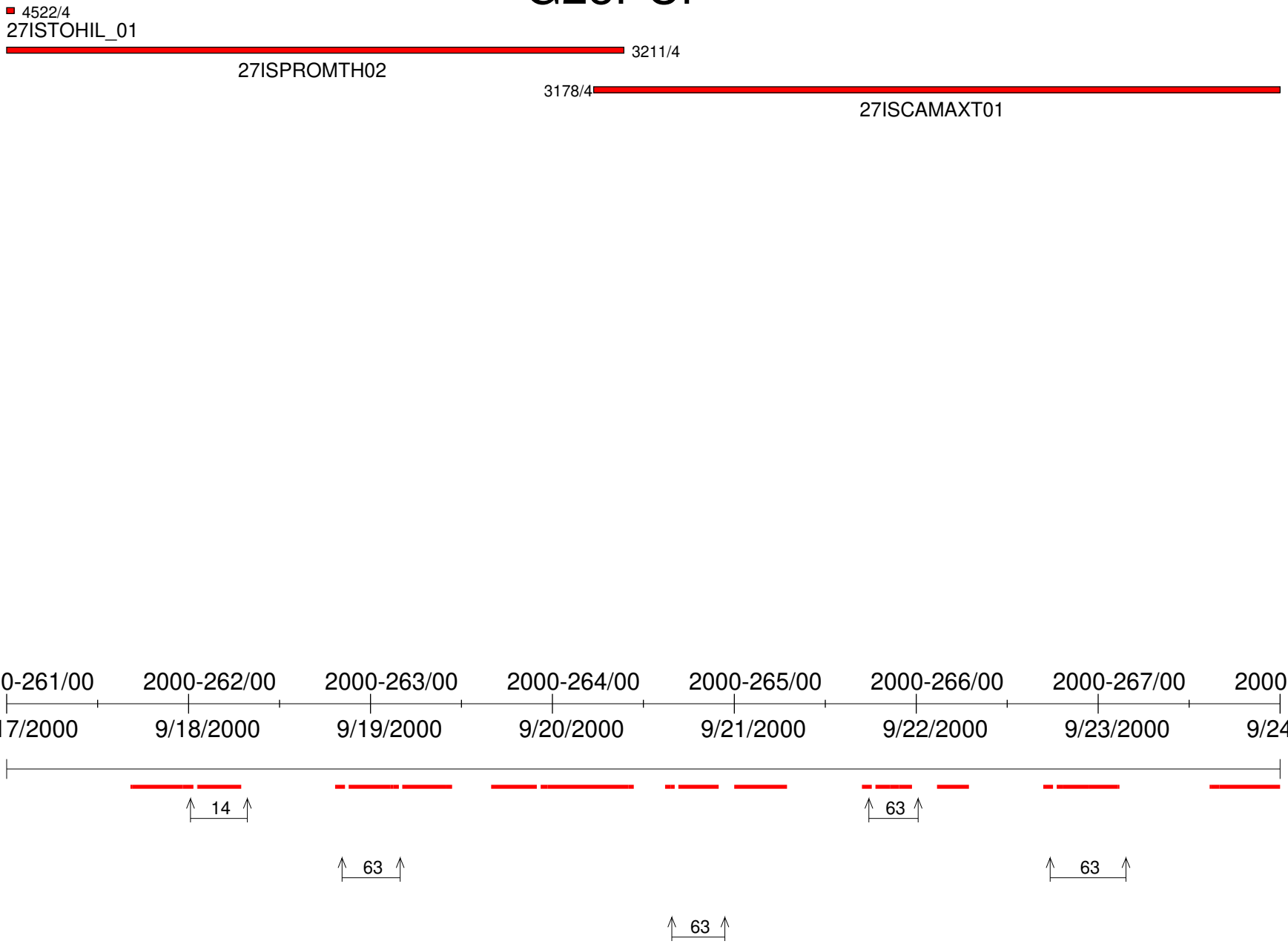
3474/3 3503/3
28MBBFRDMP46-
3504/3 3532/3
28MBBFRDMP53-
3533/3 3561/3
28MBBFRDMP57-
3562/3 3591/3
28MBBFRDMP54-
3591/3 3620/3
28MBBFRDMP47-
3620/3 3649/3
28MBBFRDMP55-
3650/3 3678/3
28MBBFRDMP56-
3275/3 4937/3
27ISPROMTH01
5100/3 5841/3
27INMOSAIC01-
5900/4 5396/4
27INPROMTH01-
5331/4
27ISTOHIL_01
4446/4
27ISPROMTH02
Seg 9, Pass 1
Seg 10, Pass 2
Seg 11, Pass 2
2000-254/00
2000-255/00
2000-256/00
2000-257/00
2000-258/00
2000-259/00
2000-260/00
2000-261/00
LOCAL
PDT
9/10/2000
9/11/2000
9/12/2000
9/13/2000
9/14/2000
9/15/2000
9/16/2000
9/17/2000
PB
State
Gulps?
R
R
63
63
63
290 RJ
14
Events

G28PCF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3211/4
27ISPROMTH02
3178/4
27ISCAMAXT01
Playback / Date Returned
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2000-262/00
2000-263/00
2000-264/00
2000-265/00
2000-266/00
2000-267/00
2000-268/00
LOCAL
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9/17/2000
9/18/2000
9/19/2000
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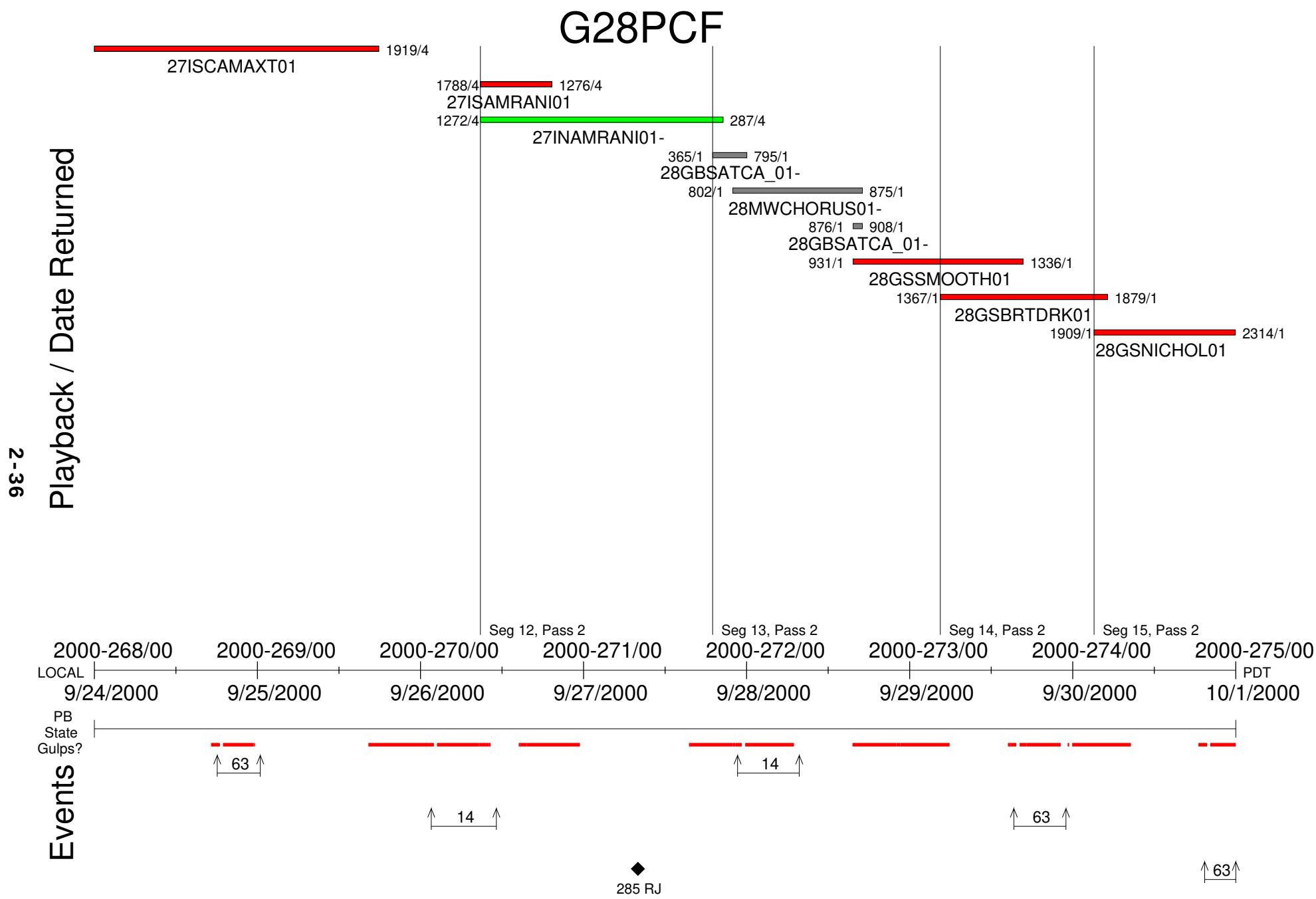
9/22/2000
9/23/2000
9/24/2000
PB State Gulps?
Events
14
63
63
63
63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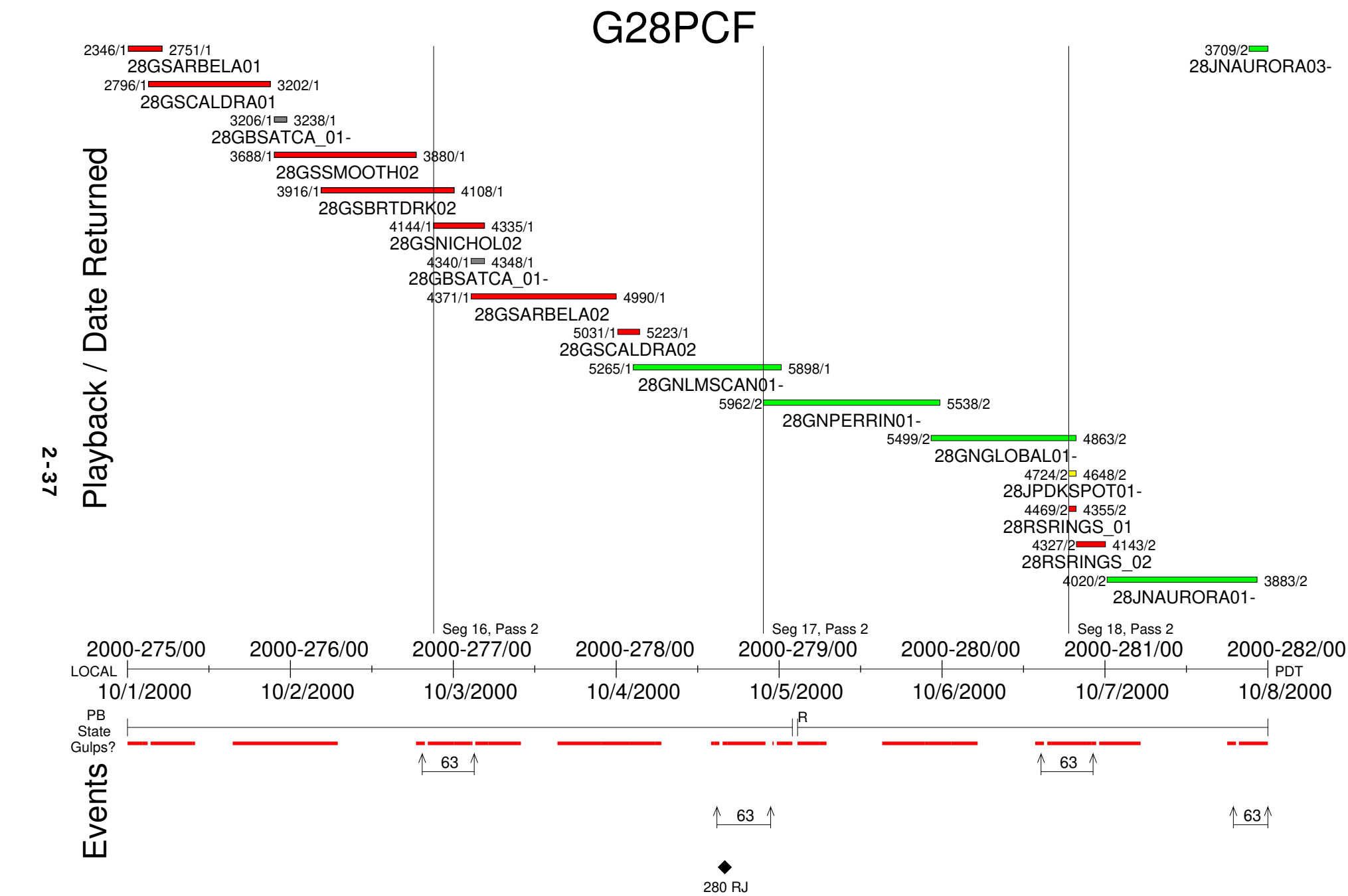
1788/4
1276/4
27ISAMRANI01
1272/4
287/4
27INAMRANI01-
365/1
795/1
28GBSATCA_01-
802/1
875/1
28MWCHORUS01-
876/1
908/1
28GBSATCA_01-
931/1
1336/1
28GSSMOOTH01
1367/1
1879/1
28GSBRTDRK01
1909/1
2314/1
28GSNICHOL01
Seg 12, Pass 2
Seg 13, Pass 2
Seg 14, Pass 2
Seg 15, Pass 2
2000-268/00
2000-269/00
2000-270/00
2000-271/00
2000-272/00
2000-273/00
2000-274/00
2000-275/00
LOCAL
PDT
9/24/2000
9/25/2000
9/26/2000
9/27/2000
9/28/2000
9/29/2000
9/30/2000
10/1/2000
PB State Gulps?
Events
63
14
14
63
63
285 RJ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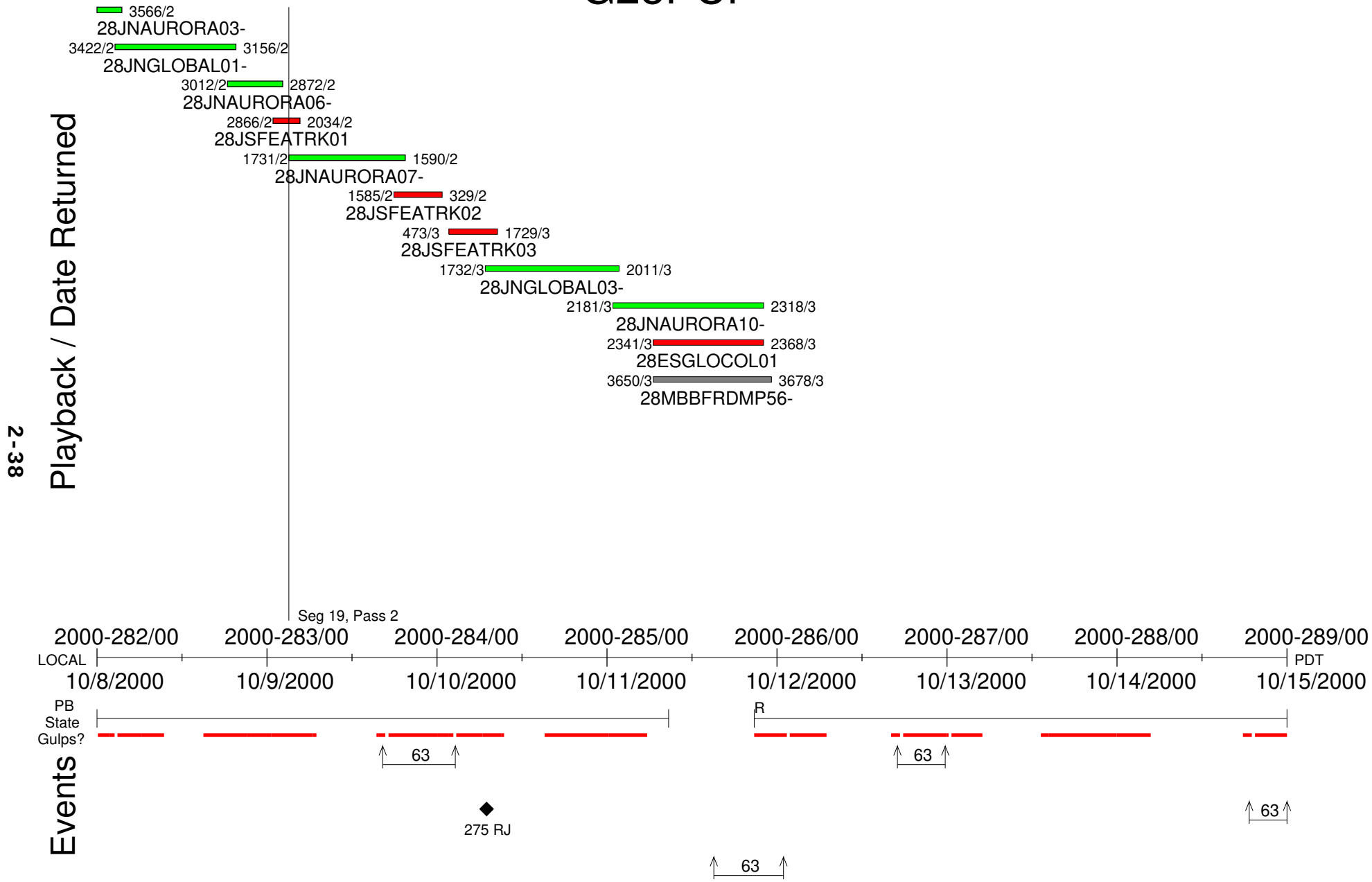
3206/1
3238/1
28GBSATCA_01-
3688/1
3880/1
28GSSMOOTH02
3916/1
4108/1
28GSBRTDRK02
4144/1
4335/1
28GSNICHOL02
4340/1
4348/1
28GBSATCA_01-
4371/1
4990/1
28GSARBELA02
5031/1
5223/1
28GSCALDRA02
5265/1
5898/1
28GNLMSCAN01-
5962/2
5538/2
28GNPERRIN01-
5499/2
4863/2
28GNGLOBAL01-
4724/2
4648/2
28JPDKSPOT01-
4469/2
4355/2
28RSRINGS_01
4327/2
4143/2
28RSRINGS_02
4020/2
3883/2
28JNAURORA01-
3709/2
28JNAURORA03-
Seg 16, Pass 2
Seg 17, Pass 2
Seg 18, Pass 2
2000-275/00
2000-276/00
2000-277/00
2000-278/00
2000-279/00
2000-280/00
2000-281/00
2000-282/00
LOCAL
PDT
10/1/2000
10/2/2000
10/3/2000
10/4/2000
10/5/2000
10/6/2000
10/7/2000
10/8/2000
PB
State
Gulps?
R
63
63
63
63
Events
280 RJ

2-37

G28PCF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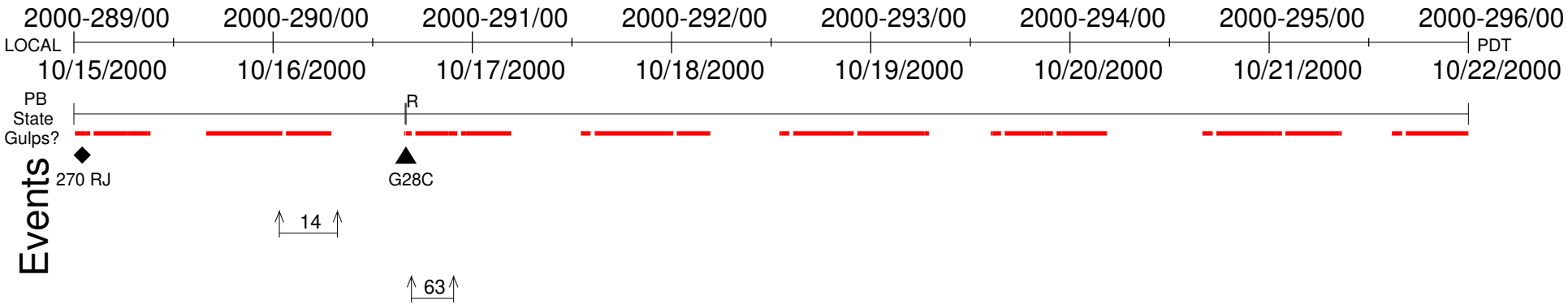
3156/2
28JNGLOBAL01-
3012/2
2872/2
28JNAURORA06-
2866/2
2034/2
28JSFEATRK01
1731/2
1590/2
28JNAURORA07-
1585/2
329/2
28JSFEATRK02
473/3
1729/3
28JSFEATRK03
1732/3
2011/3
28JNGLOBAL03-
2181/3
2318/3
28JNAURORA10-
2341/3
2368/3
28ESGLOCOL01
3650/3
3678/3
28MBBFRDMP56-
Seg 19, Pass 2
2000-282/00
2000-283/00
2000-284/00
2000-285/00
2000-286/00
2000-287/00
2000-288/00
2000-289/00
LOCAL
PDT
10/8/2000
10/9/2000
10/10/2000
10/11/2000
10/12/2000
10/13/2000
10/14/2000
10/15/2000
PB State Gulps?
R
63
63
63
63
275 RJ
Events

G28PCF

Playback / Date Returned

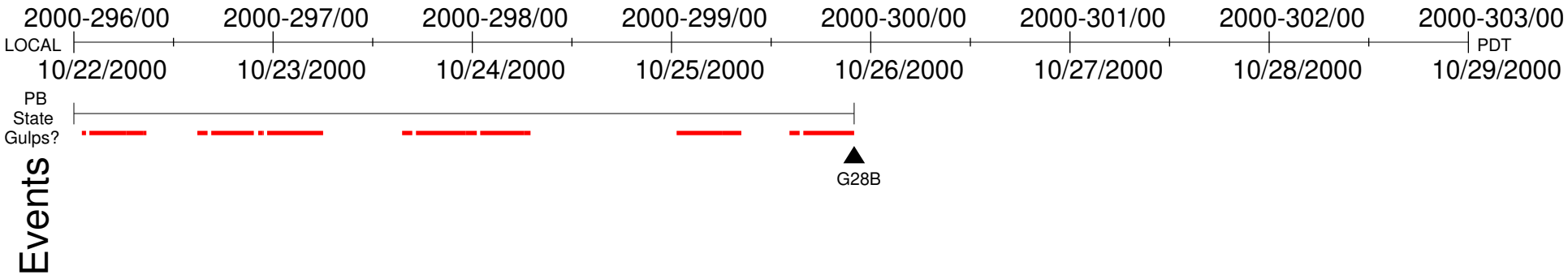
2-39



G28PCF

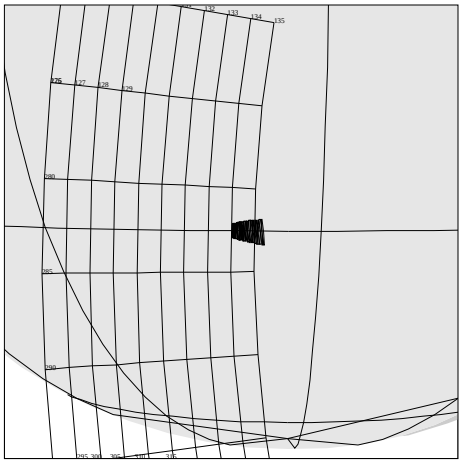
Playback / Date Returned

2-40



Events

G28 NIMS A



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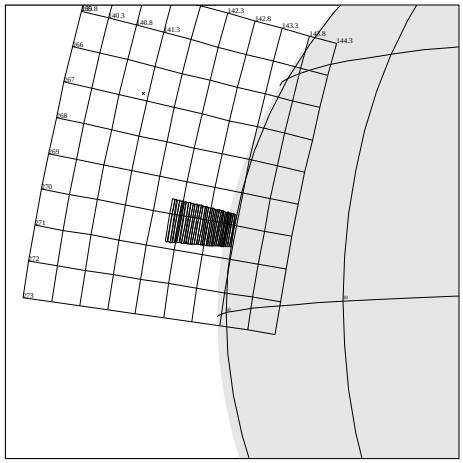

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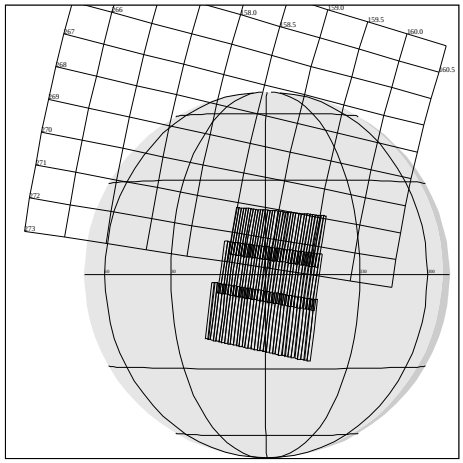

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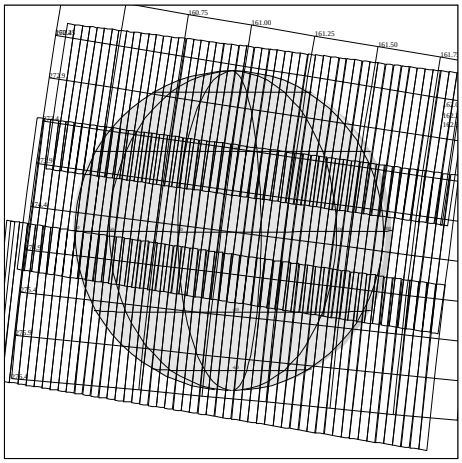

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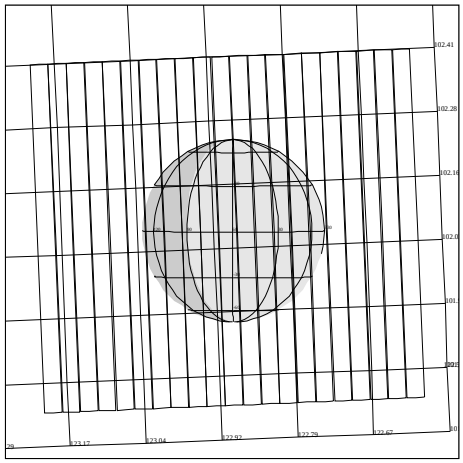

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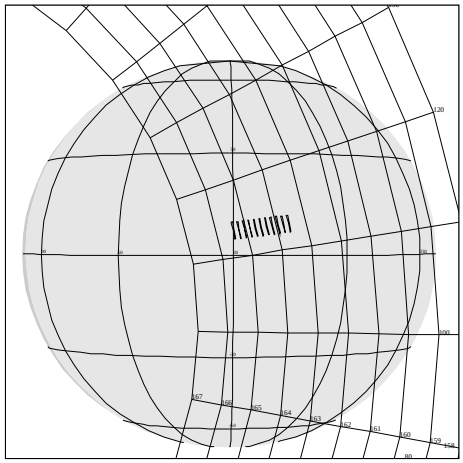

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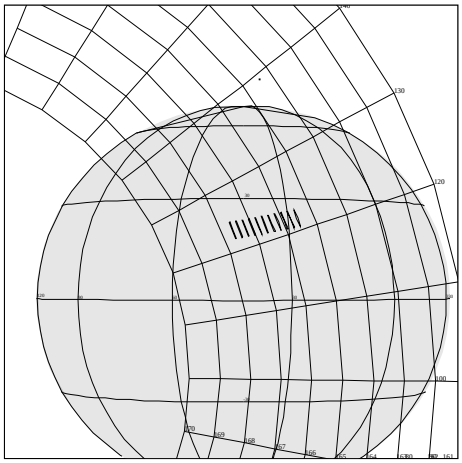

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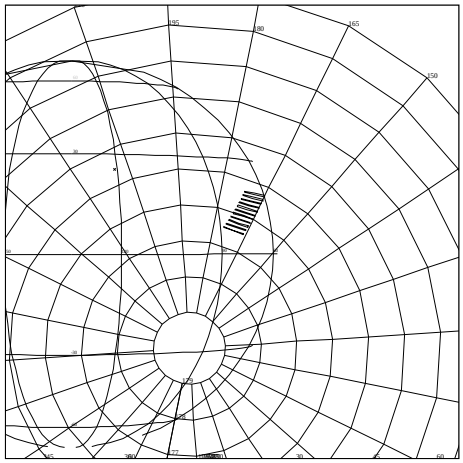

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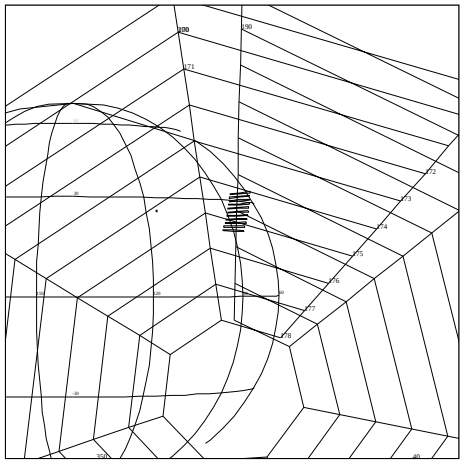

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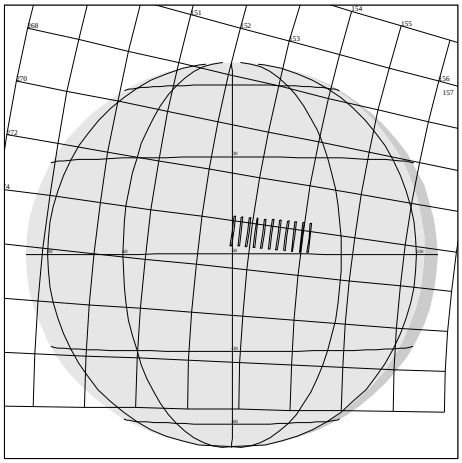
G28 NIMS B



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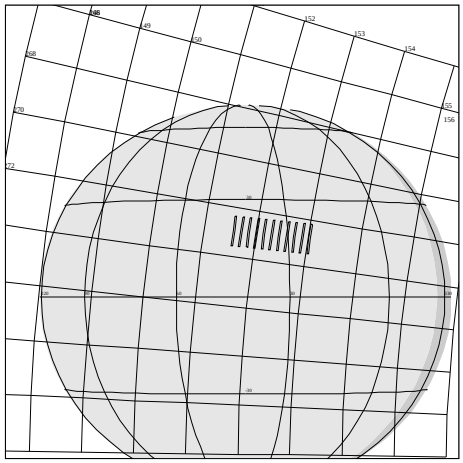

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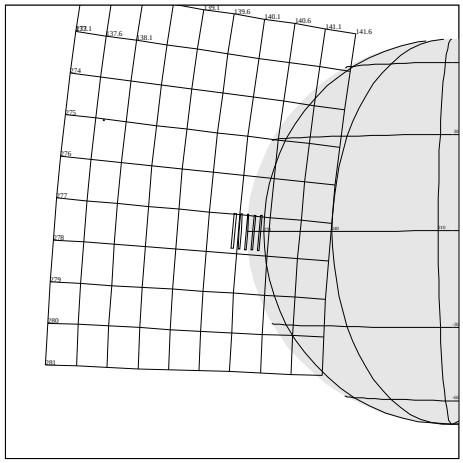

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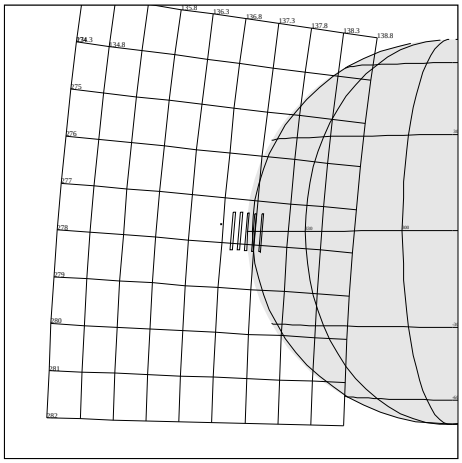

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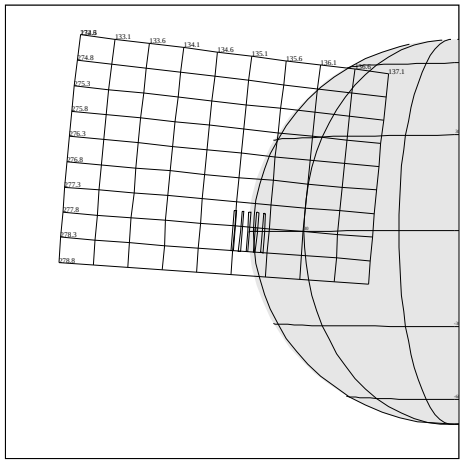

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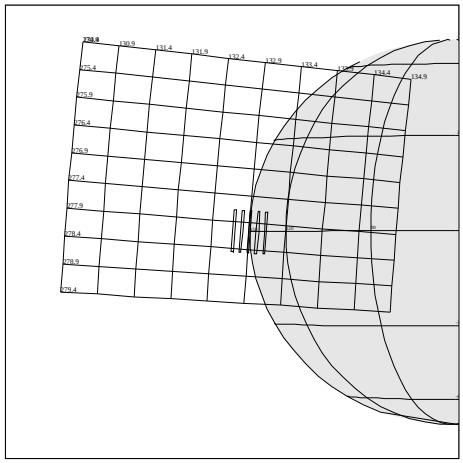

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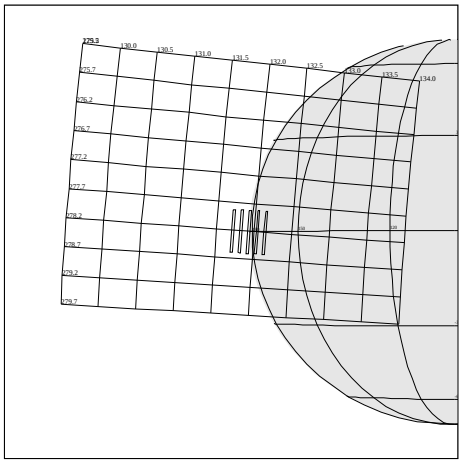

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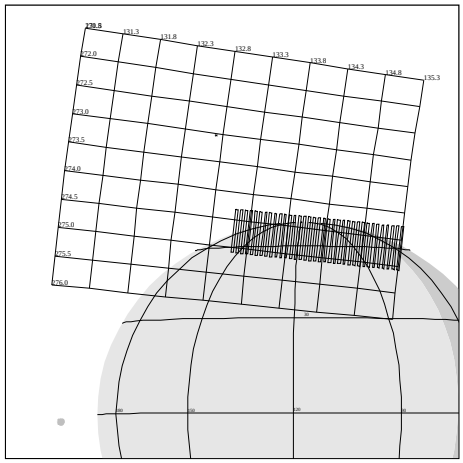

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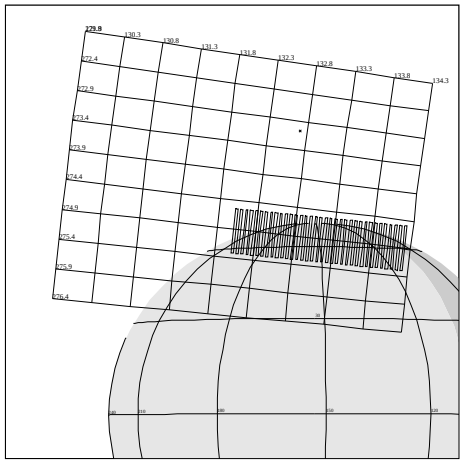

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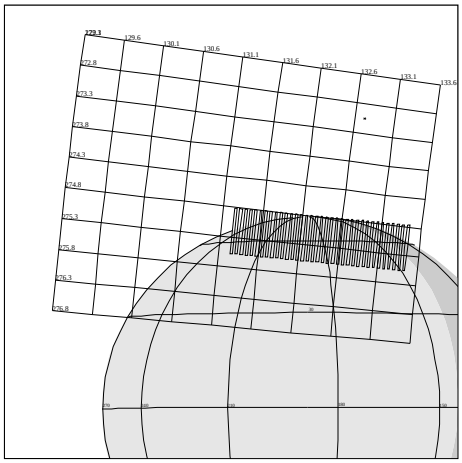
G28 NIMS C



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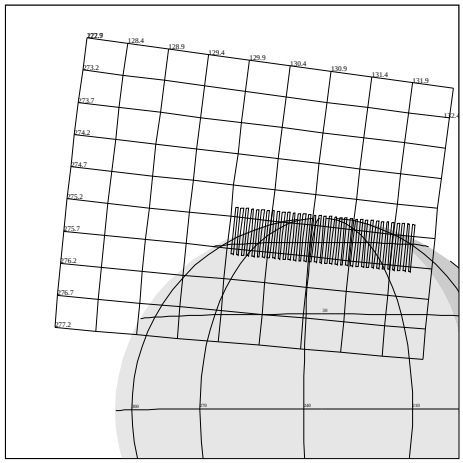

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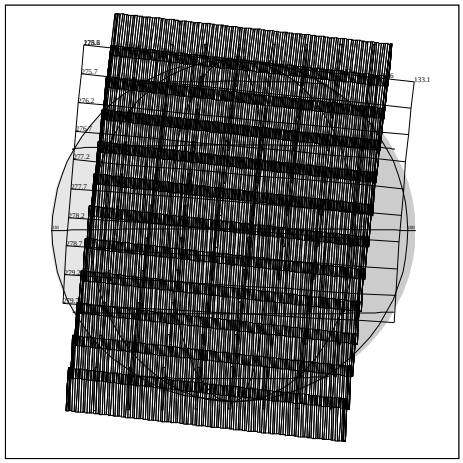

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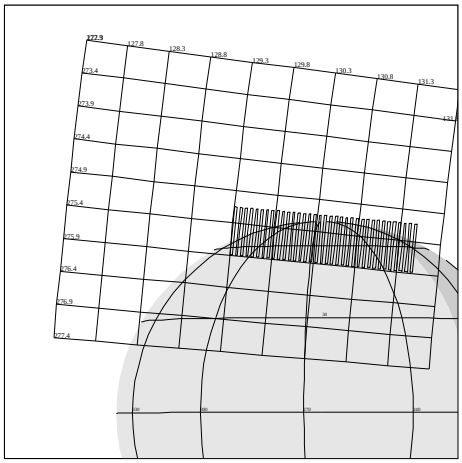

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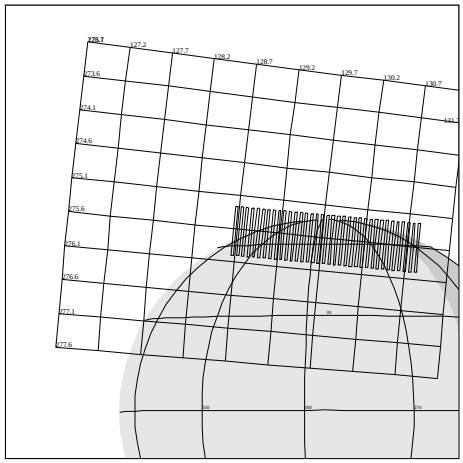

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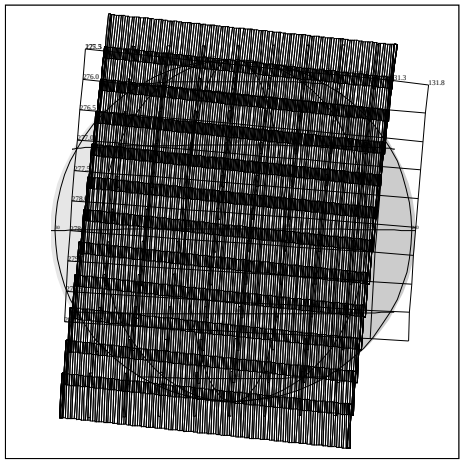

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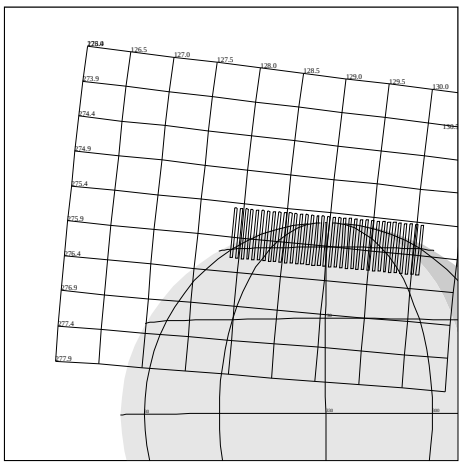

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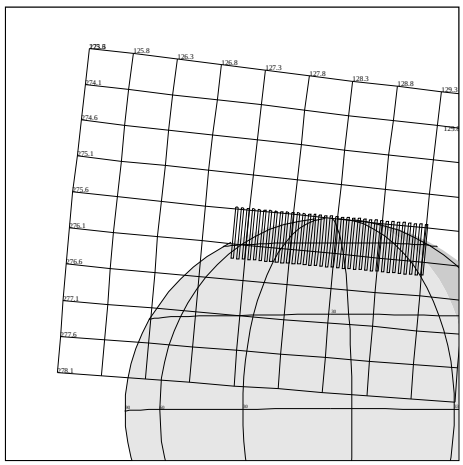

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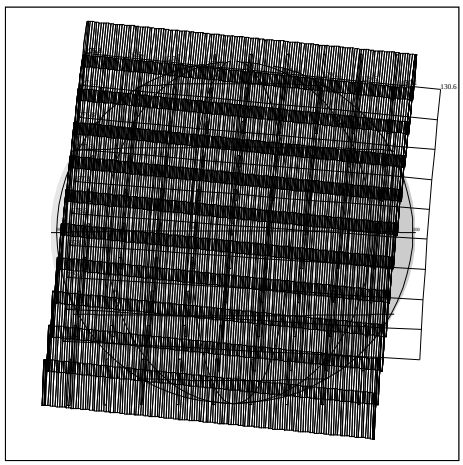

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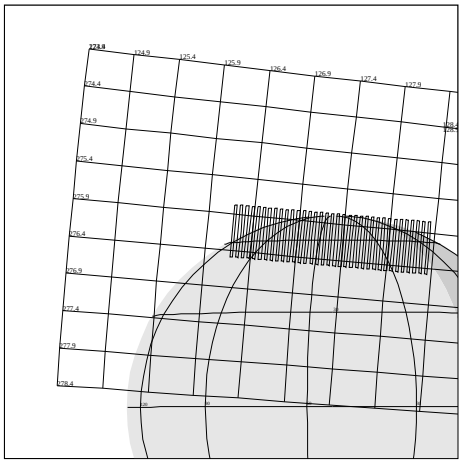
G28 NIMS D



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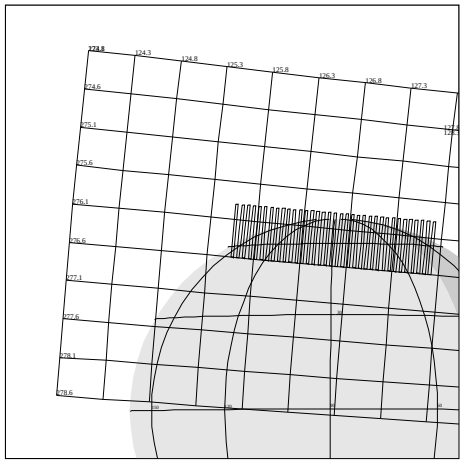

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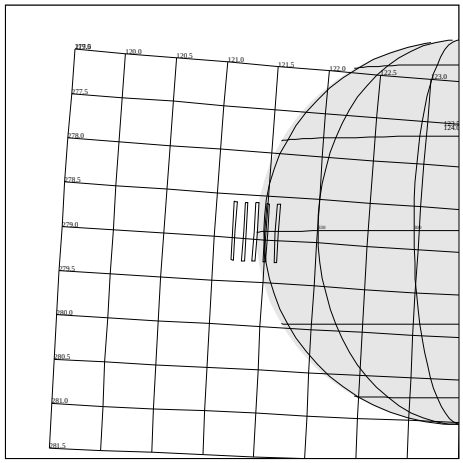

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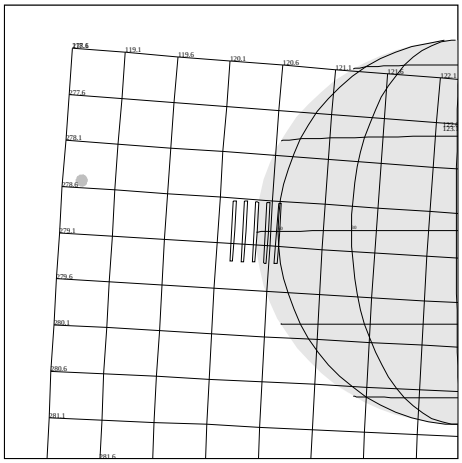

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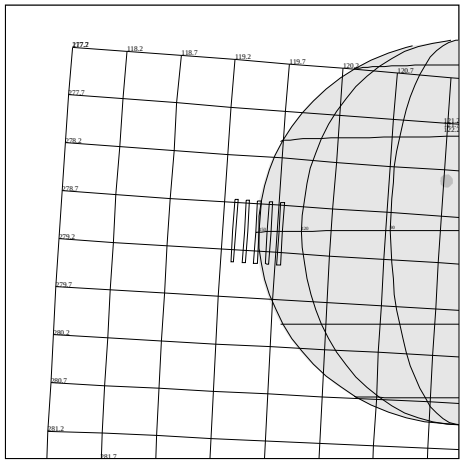

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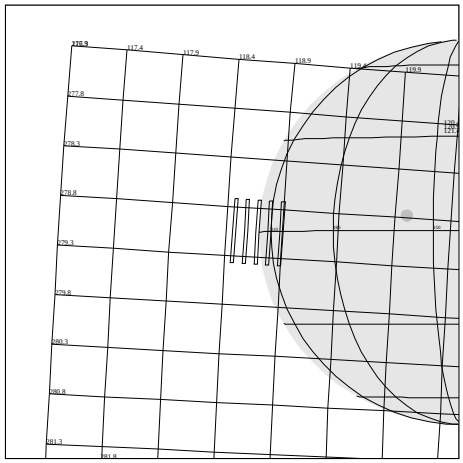

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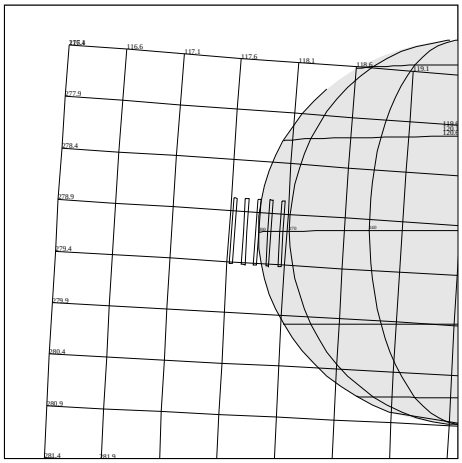

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