Chapter 2 - Orbit Overview

Contents

Introduction to Chapter 2

This chapter gives an overview of the NIMS observations in the G29 Orbit.

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The table on pages 4 through 6 is a time-ordered listing of the NIMS Oapels for G29.

The plot on page 7 shows the geometry of the NIMS G29 observations using a north trajectory pole view projection. The plot on page 8 shows the geometry of the NIMS G29 calibrations.

The spreadsheet on page 9 summarizes the various inputs for the NIMS G29 Observations. The spreadsheet on pages 10 and 11 summarizes the resource usage for the NIMS G29 observations.

The table on pages 12 through 14 lists various NIMS G29 observing parameters: target latitude/longitude, range, cone angle, incidence angle light), emission angle view) and phase angle.

The timeline on pages 15 through 31 shows the placement of the G29 observations for all intruments during the G29 Encounter Period.

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The NIMS G29 mosaic designs are summarized on pages 43 through 47 in time-order.

NIMS G29 SCIENCE OVERVIEW

Jupiter Science

There are thirty-three Jupiter observations in G29. Eleven are realtime and twenty-two are recorded. Two of the realtime observations look at the Northern Temperate Zone (NTZ), three more look at the Southern Temperate Zone (STZ), one looks at the Northern Equatorial Belt (NEB) and five look at the limb near the northern aurora (LIMBRT). Ten of the recorded observations look at the South Polar Aurora zone (AURORA), covering all 360 degrees of longitude in similar geometries. Two look at the Great Red Spot Wake region (GRWAKE). Two others look at the hot spot region (HTSPOT). One looks at the white oval region (WTOVAL) and another (JUPNTZ) is a long latitudinal strip across the NTZ. Six recorded observations (GLOBAL) build up a global map covering all 360 degrees of longitude of Jupiter at 60 degree intervals.

Io Science

Three distant observation monitor Io’s activity (IWATCH).

Europa Science

There is a single global Europa observation in G29.

Ganymede Science

There are four observations of Ganymede in G29. REGION01 is a moderate resolution observation. GLOBAL01 and GLOBAL02 combine to make a global map of the Jupiter-facing hemisphere of Ganymede. GLOBAL03 is a single swath global map of the same region of Ganymede but at lower resolution.

Callisto Science

There is a single low-resolution global map of Callisto for comparison with Cassini observations.

Calibration

There are four NIMS calibration observations planned for G29: one PCT cal, one RCT cal, one star cal and one dark calibration of all four gain states. All calibrations were recorded during Cruise.

Cassini Coordination.

Observations were added to the G29 orbit to coordinate with the Cassini flyby of Jupiter.

Early Data Return

There are eleven realtime observations in G29, all of Jupiter.

G29 Playback

G29 playback is split into two passes through the tape.

G29 Time-Ordered Listing

OAPEL	Start (UTC)	End (UTC)	Duration
29GNREGION01	00-363/10:00:08	00-363/10:16:19	000/00:16:10
29NNGLOBAL01-	00-363/13:46:37	00-363/13:48:39	000/00:02:01
29CNGLOBAL01	00-363/13:48:39	00-363/14:08:52	000/00:20:13
29NNGLOBAL01-	00-363/17:19:58	00-363/17:21:59	000/00:02:01
29GNGLOBAL01	00-363/17:21:59	00-363/17:36:09	000/00:14:09
29NNGLOBAL02-	00-363/17:34:07	00-363/17:36:09	000/00:02:01
29GNGLOBAL02	00-363/17:36:09	00-363/18:06:29	000/00:30:20
29NNGLOBAL03-	00-363/22:38:28	00-363/22:40:29	000/00:02:01
29GNGLOBAL03-	00-363/22:40:29	00-363/22:56:40	000/00:16:10
29NNIWATCH01-	00-363/23:20:56	00-363/23:22:57	000/00:02:01
29INIWATCH01	00-363/23:22:57	00-363/23:30:02	000/00:07:04
29NNHTSPOT01-	00-364/03:11:28	00-364/03:13:29	000/00:02:01
29JNHTSPOT01	00-364/03:13:29	00-364/03:33:43	000/00:20:13
29NNIWATCH02-	00-364/03:55:57	00-364/03:57:59	000/00:02:01
29INIWATCH02	00-364/03:57:59	00-364/04:05:03	000/00:07:04
29NNHTSPOT02-	00-364/04:04:03	00-364/04:06:04	000/00:02:01
29JNHTSPOT02	00-364/04:06:04	00-364/04:21:14	000/00:15:10
29NNNEBRLT01-	00-364/04:23:15	00-364/04:25:17	000/00:02:01
29JNNEBRLT01	00-364/04:25:17	00-364/04:40:27	000/00:15:10
29NNNTZRLT01-	00-364/04:48:32	00-364/04:50:33	000/00:02:01
29JNNTZRLT01	00-364/04:50:33	00-364/05:05:43	000/00:15:10
29NNSTZRLT01-	00-364/05:08:45	00-364/05:10:47	000/00:02:01
29JNSTZRLT01	00-364/05:10:47	00-364/05:25:57	000/00:15:10
29NNHTSPOT03-	00-364/05:28:59	00-364/05:31:00	000/00:02:01
29JNHTSPOT03	00-364/05:31:00	00-364/05:46:10	000/00:15:10
29NNGRWAKE01-	00-364/06:03:21	00-364/06:05:23	000/00:02:01
29JNGRWAKE01	00-364/06:05:23	00-364/06:25:36	000/00:20:13
29NNNEBRLT02-	00-364/09:00:18	00-364/09:02:19	000/00:02:01
29JNNEBRLT02	00-364/09:02:19	00-364/09:17:29	000/00:15:10
29NNNTZRLT02-	00-364/09:48:50	00-364/09:50:51	000/00:02:01
29JNNTZRLT02	00-364/09:50:51	00-364/10:06:01	000/00:15:10
29NNSTZRLT02-	00-364/10:04:00	00-364/10:06:01	000/00:02:01
29JNSTZRLT02	00-364/10:06:01	00-364/10:21:11	000/00:15:10

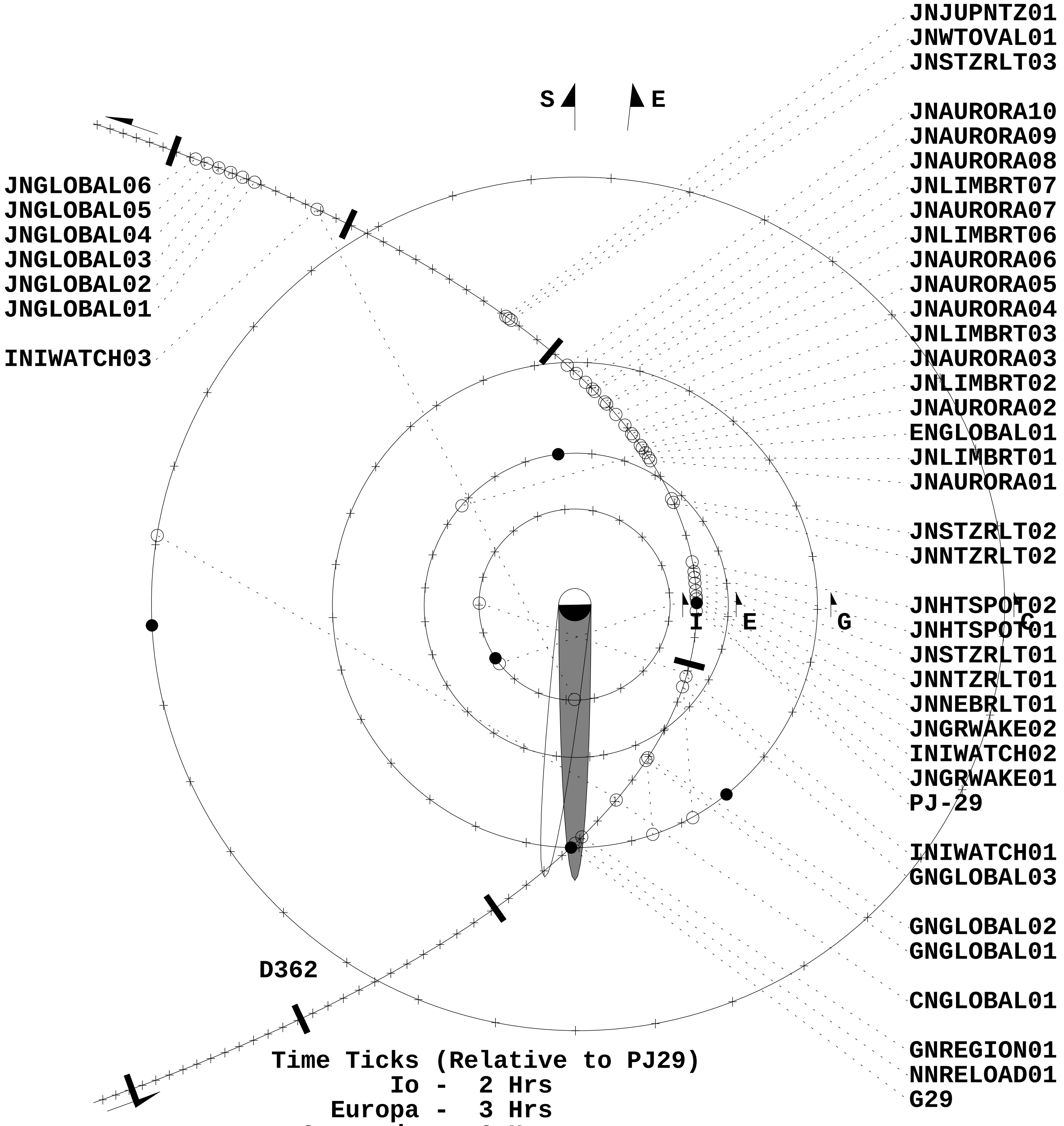
G29 Time-Ordered Listing

OAPEL	Start (UTC)	End (UTC)	Duration
29NNAURORA01-	00-364/12:53:52	00-364/12:55:53	000/00:02:01
29JNAURORA01	00-364/12:55:53	00-364/13:10:03	000/00:14:09
29JNLIMBRT01	00-364/13:11:03	00-364/13:21:10	000/00:10:06
29NNGLOBAL01-	00-364/13:28:15	00-364/13:30:16	000/00:02:01
29ENGLOBAL01	00-364/13:30:16	00-364/13:46:27	000/00:16:10
29NNAURORA02-	00-364/13:54:32	00-364/13:56:33	000/00:02:01
29JNAURORA02	00-364/13:56:33	00-364/14:10:43	000/00:14:09
29JNLIMBRT02	00-364/14:11:43	00-364/14:21:50	000/00:10:06
29NNAURORA03-	00-364/14:55:12	00-364/14:57:13	000/00:02:01
29JNAURORA03	00-364/14:57:13	00-364/15:11:23	000/00:14:09
29JNLIMBRT03	00-364/15:12:23	00-364/15:22:30	000/00:10:06
29NNAURORA04-	00-364/15:55:52	00-364/15:57:53	000/00:02:01
29JNAURORA04	00-364/15:57:53	00-364/16:12:03	000/00:14:09
29JNLIMBRT04	00-364/16:13:03	00-364/16:23:10	000/00:10:06
29NNAURORA05-	00-364/16:56:32	00-364/16:58:33	000/00:02:01
29JNAURORA05	00-364/16:58:33	00-364/17:12:43	000/00:14:09
29JNLIMBRT05	00-364/17:13:43	00-364/17:23:50	000/00:10:06
29NNAURORA06-	00-364/17:57:12	00-364/17:59:13	000/00:02:01
29JNAURORA06	00-364/17:59:13	00-364/18:13:23	000/00:14:09
29JNLIMBRT06	00-364/18:14:23	00-364/18:24:30	000/00:10:06
29NNAURORA07-	00-364/19:18:05	00-364/19:20:07	000/00:02:01
29JNAURORA07	00-364/19:20:07	00-364/19:34:16	000/00:14:09
29JNLIMBRT07	00-364/19:35:17	00-364/19:45:23	000/00:10:06
29NNAURORA08-	00-364/20:18:45	00-364/20:20:47	000/00:02:01
29JNAURORA08	00-364/20:20:47	00-364/20:34:56	000/00:14:09
29JNLIMBRT08	00-364/20:35:57	00-364/20:46:03	000/00:10:06
29NNAURORA09-	00-364/21:19:25	00-364/21:21:27	000/00:02:01
29JNAURORA09	00-364/21:21:27	00-364/21:35:36	000/00:14:09
29NNAURORA10-	00-364/22:20:05	00-364/22:22:07	000/00:02:01
29JNAURORA10	00-364/22:22:07	00-364/22:36:16	000/00:14:09
29NNNEBRLT03-	00-365/04:02:51	00-365/04:04:53	000/00:02:01
29JNNEBRLT03	00-365/04:04:53	00-365/04:20:03	000/00:15:10
29NNNTZRLT03-	00-365/04:19:02	00-365/04:21:03	000/00:02:01

G29 Time-Ordered Listing

OAPEL	Start (UTC)	End (UTC)	Duration
29JNNTZRLT03	00-365/04:21:03	00-365/04:35:13	000/00:14:09
29NNSTZRLT03-	00-365/04:33:11	00-365/04:35:13	000/00:02:01
29JNSTZRLT03	00-365/04:35:13	00-365/04:49:22	000/00:14:09
29NNGRWAKE02-	00-365/04:48:21	00-365/04:50:23	000/00:02:01
29JNGRWAKE02	00-365/04:50:23	00-365/05:10:36	000/00:20:13
29NNJUPNTZ01-	00-365/05:08:35	00-365/05:10:36	000/00:02:01
29JNJUPNTZ01	00-365/05:10:36	00-365/05:25:46	000/00:15:10
29NNIWATCH03-	00-366/04:03:41	00-366/04:05:43	000/00:02:01
29INIWATCH03	00-366/04:14:49	00-366/04:21:53	000/00:07:04
29NNGLOBAL01-	00-366/12:33:17	00-366/12:35:19	000/00:02:01
29JNGLOBAL01	00-366/12:35:19	00-366/12:50:29	000/00:15:10
29NNGLOBAL02-	00-366/14:13:23	00-366/14:15:25	000/00:02:01
29JNGLOBAL02	00-366/14:15:25	00-366/14:30:35	000/00:15:10
29NNGLOBAL03-	00-366/15:53:29	00-366/15:55:31	000/00:02:01
29JNGLOBAL03	00-366/15:55:31	00-366/16:10:41	000/00:15:10
29NNGLOBAL04-	00-366/17:33:35	00-366/17:35:37	000/00:02:01
29JNGLOBAL04	00-366/17:35:37	00-366/17:50:47	000/00:15:10
29NNGLOBAL05-	00-366/19:13:41	00-366/19:15:43	000/00:02:01
29JNGLOBAL05	00-366/19:15:43	00-366/19:30:53	000/00:15:10
29NNGLOBAL06-	00-366/20:53:47	00-366/20:55:49	000/00:02:01
29JNGLOBAL06	00-366/20:55:49	00-366/21:10:59	000/00:15:10
29NNCHOPOF01-	01-002/02:06:54	01-002/02:08:57	000/00:02:03
29HNSTRCAL01-	01-112/20:01:26	01-112/20:12:49	000/00:11:23
29HNDRKCAL01-	01-112/20:17:37	01-112/20:30:41	000/00:13:04
29NNRCTCAL01-	01-113/04:05:45	01-113/16:54:12	000/14:48:27
29NNPCTCAL01-	01-113/22:39:41	01-114/01:06:37	000/02:26:56

NIMS G29 OBSERVATIONS



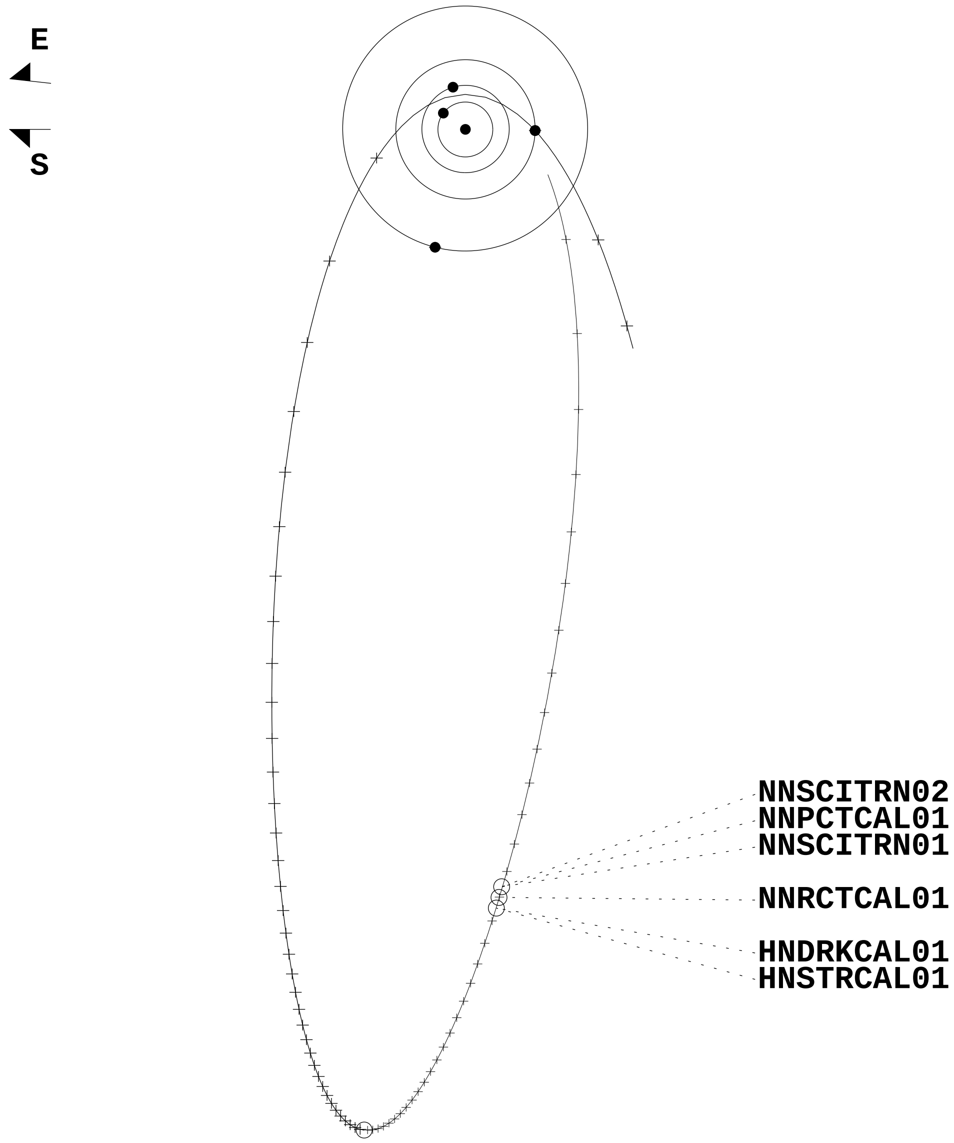
Time Ticks (Relative to PJ29)
Io - 2 Hrs
Europa - 3 Hrs
Ganymede - 6 Hrs
Callisto - 12 Hrs
Spacecraft - 2 Hrs

Ganymede Flyby (G29): 28-DEC-2000 (D363) 08:33:25 UTC
Perijove (PJ29): 29-DEC-2000 (D364) 03:34:38 UTC

G29 North Trajectory Pole View

NIMS - FEL - 12/28/00

NIMS G29 CALIBRATIONS



Time Ticks (Relative to G29)
Spacecraft - 2 Days

Ganymede Flyby (G29): 28-DEC-2000 (D363) 08:33:25 UTC
Perijove (PJ29): 29-DEC-2000 (D364) 03:34:38 UTC

G29 North Trajectory Pole View

NIMS - FEL - 02/21/01

G29 NIMS INPUTS

Activity ID	Observation Title	NIMS Edit Table	NIMS PB Table	Mode	Gain	Grating Start	Grating Offset	Record Format	PSID
29GNREGION01	Ganymede Region Obs	G29GLM442	G29GLMFG288	LM	2	0	4	MPW	DA
29CNGLOBAL01	Callisto Global Obs	G29CLM442	G29CLMFG288	LM	4	0	4	MPW	DB
29GNGLOBAL01	Ganymede Global Obs 01	G29GLMFG252	G29GLMFG252	LM	2	0	4	LPU	DC
29GNGLOBAL02	Ganymede Global Obs 02	G29GLMFG252	G29GLMFG252	LM	2	0	4	LPU	DD
29GNGLOBAL03	Ganymede Global Obs 03	G29GLMFG252	G29GLMFG252	LM	2	0	4	LPU	DE
29INIWATCH01	Io Monitoring 01	G29ILM442	G29ILMFG288	LM	2	0	4	MPW	DF
29JNGRWAKE01	Jupiter GRS Wake Obs 01	G29JLM240	G29JLMFG48	LM	2	0	4	LPU	DG
29INIWATCH02	Io Monitoring 02	G29ILM442	G29ILMFG288	LM	2	0	4	MPW	DH
29JNGRWAKE02	Jupiter GRS Wake Obs 02	G29JLMFG240	G29JLMFG48	LM	2	0	4	LPU	DI
29JNNEBRLT01	Jupiter R/T NEB Obs 01	G29JLM442		LM	2	0	4	R/T	DJ
29JNNTZRLT01	Jupiter R/T MTZ Obs 01	G29JLM442		LM	2	0	4	R/T	DK
29JNSTZRLT01	Jupiter R/T STZ Obs 01	G29JLM442		LM	2	0	4	R/T	DL
29JNHTSPOT01	Jupiter Hot Spot Obs 01	G29JLMFG240	G29JLMFG48	LM	2	0	4	LPU	DM
29JNHTSPOT02	Jupiter Hot Spot Obs 02	G29JLM240		LM	2	0	4	LPU	DN
29JNNTZRLT02	Jupiter R/T NTZ Obs 02	G29JLM442		LM	2	0	4	R/T	DP
29JNSTZRLT02	Jupiter R/T STZ Obs 02	G29JLM442		LM	2	0	4	R/T	DQ
29JNAURORA01	Jupiter Aurora Obs 01	G29JLMFG240	G29GLMFG72	LM	4	0	4	LPU	DR
29JNLIMBRT01	Jupiter R/T Limb Obs 01	G29JLM442		LM	4	0	4	R/T	DS
29ENGLOBAL01	Europa Global Obs	G29ELM442	G29ELMFG288	LM	3	0	4	MPW	DT
29JNAURORA02	Jupiter Aurora Obs 02	G29JLM240		LM	4	0	4	LPU	DU
29JNLIMBRT02	Jupiter R/T Limb Obs 02	G29JLM442		LM	4	0	4	R/T	DV
29JNAURORA03	Jupiter Aurora Obs 03	G29JLMFG240	G29GLMFG72	LM	4	0	4	LPU	DX
29JNLIMBRT03	Jupiter R/T Limb Obs 03	G29JLM442		LM	4	0	4	R/T	DY
29JNAURORA04	Jupiter Aurora Obs 04	G29JLMFG240	G29GLMFG72	LM	4	0	4	LPU	DZ
29JNAURORA05	Jupiter Aurora Obs 05	G29JLM240		LM	4	0	4	LPU	EB
29JNAURORA06	Jupiter Aurora Obs 06	G29JLMFG240	G29GLMFG72	LM	4	0	4	LPU	ED
29JNLIMBRT06	Jupiter R/T Limb Obs 06	G29JLM442		LM	4	0	4	R/T	EE
29JNAURORA07	Jupiter Aurora Obs 07	G29JLMFG240	G29GLMFG72	LM	4	0	4	LPU	EF
29JNLIMBRT07	Jupiter R/T Limb Obs 07	G29JLM442		LM	4	0	4	R/T	EG
29JNAURORA08	Jupiter Aurora Obs 08	G29JLMFG240	G29GLMFG72	LM	4	0	4	LPU	EH
29JNAURORA09	Jupiter Aurora Obs 09	G29JLMFG240	G29GLMFG72	LM	4	0	4	LPU	EK
29JNAURORA10	Jupiter Aurora Obs 10	G29JLM240		LM	4	0	4	LPU	EL
29JNSTZRLT03	Jupiter R/T STZ Obs 03	G29JLM442		LM	2	0	4	R/T	EP
29JNWTOVAL01	Jupiter White Oval Obs	G29JLMFG240	G29JLMFG48	LM	2	0	4	LPU	EQ
29JNJUPNTZ01	Jupiter NTZ Obs	G29JLM240	G29JLMFG24	LM	2	0	4	LPU	ER
29INIWATCH03	Io Monitoring 03	G29ILM442	G29ILMFG288	LM	2	0	4	MPW	ES
29JNGLOBAL01	Jupiter Global Map 01	G29JXM10	G29JXMFG9	XM	2	0	4	LPU	ET
29JNGLOBAL02	Jupiter Global Map 02	G29JXMFG10	G29JXMFG9	XM	2	0	4	LPU	EU
29JNGLOBAL03	Jupiter Global Map 03	G29JXMFG10	G29JXMFG9	XM	2	0	4	LPU	EV
29JNGLOBAL04	Jupiter Global Map 04	G29JXMFG10	G29JXMFG9	XM	2	0	4	LPU	EW
29JNGLOBAL05	Jupiter Global Map 05	G29JXMFG10	G29JXMFG9	XM	2	0	4	LPU	EX
29JNGLOBAL06	Jupiter Global Map 06	G29JXMFG10	G29JXMFG9	XM	2	0	4	LPU	EY
29HNSTRCAL01	Star Calibration	G29HLMFG442	G29HLMFG144	LM	4				DA
29HNDRKCAL01	Dark Calibration	G29HLMFG442	G29HLMFG360	LM	1,2,3,4				DB
29NNRCTCAL01	RCT Calibration	G29HLMFG442	G29HLMFG216	LM	1				DC
29NNPCTCAL01	PCT Calibration	G29HLMFG442	G29HLMFG192	LM	4				DD

G29 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)
29GNREGION01	LM	MPW	0.1362	794	288	900	479	5.52	10.37	8.667
29CNGLOBAL01	LM	MPW	0.0193	112	288	125	123	1.42	1.44	8.667
29GNGLOBAL01	LM	LPU	0.0245	143	252	600	588	3.63	3.70	8.667
29GNGLOBAL02	LM	LPU	0.0249	145	252	610	608	3.75	3.76	8.667
29GNGLOBAL03	LM	LPU	0.0195	113	252	475	463	2.86	2.93	8.667
29INIWATCH01	LM	MPW	0.0283	165	288	185	180	2.07	2.13	8.667
29JNGRWAKE01	LM	LPU	0.0462	269	50	1140	1140	7.03	7.03	8.667
29INIWATCH02	LM	MPW	0.0291	169	288	190	188	2.17	2.19	8.667
29JNGRWAKE02	LM	LPU	0.0349	204	48	860	848	5.23	5.30	8.667
29JNNEBRLT01	LM	R/T			130			0.00	0.00	8.667
29JNNTZRLT01	LM	R/T			130			0.00	0.00	8.667
29JNSTZRLT01	LM	R/T			130			0.00	0.00	8.667
29JNHTSPOT01	LM	LPU	0.0349	204	48	860	848	5.23	5.30	8.667
29JNHTSPOT02	LM	LPU	0.0341	199	100	840	840	5.18	5.18	8.667
29JNNTZRLT02	LM	R/T			130			0.00	0.00	8.667
29JNSTZRLT02	LM	R/T			130			0.00	0.00	8.667
29JNAURORA01	LM	LPU	0.0297	173	72	730	718	4.43	4.50	8.667
29JNLIMBRT01	LM	R/T			80			0.00	0.00	8.667
29ENGLOBAL01	LM	MPW	0.0276	161	288	180	178	2.05	2.07	8.667
29JNAURORA02	LM	LPU	0.0317	185	50	780	780	4.81	4.81	8.667
29JNLIMBRT02	LM	R/T			80			0.00	0.00	8.667
29JNAURORA03	LM	LPU	0.0296	172	72	727	724	4.47	4.48	8.667
29JNLIMBRT03	LM	R/T			80			0.00	0.00	8.667
29JNAURORA04	LM	LPU	0.0317	185	72	780	726	4.48	4.81	8.667
29JNAURORA05	LM	LPU	0.0317	185	50	780	780	4.81	4.81	8.667
29JNAURORA06	LM	LPU	0.0317	185	72	780	608	3.75	4.81	8.667
29JNLIMBRT06	LM	R/T			80			0.00	0.00	8.667
29JNAURORA07	LM	LPU	0.0317	185	72	780	731	4.51	4.81	8.667
29JNLIMBRT07	LM	R/T			80			0.00	0.00	8.667
29JNAURORA08	LM	LPU	0.0317	185	72	780	734	4.53	4.81	8.667
29JNAURORA09	LM	LPU	0.0317	185	72	780	776	4.79	4.81	8.667
29JNAURORA10	LM	LPU	0.0317	185	50	780	780	4.81	4.81	8.667
29JNSTZRLT03	LM	R/T			130			0.00	0.00	8.667
29JNWTOVAL01	LM	LPU	0.0394	230	48	972	967	5.96	6.00	8.667
29JNJUPNTZ01	LM	LPU	0.0341	199	100	840	840	5.18	5.18	8.667
29INIWATCH03	LM	MPW	0.0253	148	288	165	161	1.85	1.90	8.667
29JNGLOBAL01	XM	LPU	0.0269	157	7	660	660	4.07	4.07	0.333
29JNGLOBAL02	XM	LPU	0.0263	153	9	646	634	3.91	3.98	0.333
29JNGLOBAL03	XM	LPU	0.0263	153	9	646	634	3.91	3.98	0.333
29JNGLOBAL04	XM	LPU	0.0263	153	9	646	634	3.91	3.98	0.333
29JNGLOBAL05	XM	LPU	0.0269	157	9	660	635	3.92	4.07	0.333
29JNGLOBAL06	XM	LPU	0.0263	153	9	646	634	3.91	3.98	0.333
29HNSTRCAL01	LM	MPW			144	360	193	2.22		8.667
29HNDRKCAL01		MPW			360	360	240	2.76		8.667
29NNRCTCAL01	LM	MPW			216	606	604	6.96		8.667
29NNPCTCAL01	LM	MPW			288	121	63	0.73		8.667
29NNPCTCAL01	LM	MPW			216	606	306	3.53		8.667

G29 RESOURCES

Activity ID	AACS Mbits c 2.5	Comp	Thold	RT BTG	Total BTG (Mbits) (w/4% ohead)	Data Reduction Factor (sBOT/BTG)	Pass
29GNREGION01	0.03	1.79			1.850	2.98	1
29CNGLOBAL01	0.01	1.76			0.483	2.93	1
29GNGLOBAL01	0.03	1.52			2.340	1.55	1
29GNGLOBAL02	0.04	2					1
29GNGLOBAL03	0.03	1.34			2.090	1.37	1
29INIWATCH01	0.01	1.44			0.864	2.40	1
29JNGRWAKE01	0.07	1.5					2
29INIWATCH02	0.01	1.27			1.023	2.12	1
29JNGRWAKE02	0.05	1.32			0.740	7.07	1
29JNNEBRLT01	0.00						
29JNNTZRLT01	0.00						
29JNSTZRLT01	0.00						
29JNHTSPOT01	0.05	1.37			0.713	7.34	1
29JNHTSPOT02	0.05	1.2					2
29JNNTZRLT02	0.00						
29JNSTZRLT02	0.00						
29JNAURORA01	0.04	1.32			0.940	4.71	1
29JNLIMBRT01	0.00						
29ENGLOBAL01	0.01	1.45			0.848	2.42	1
29JNAURORA02	0.04	1.7					2
29JNLIMBRT02	0.00						
29JNAURORA03	0.04	1.35			0.927	4.82	1
29JNLIMBRT03	0.00						
29JNAURORA04	0.04	1.41			0.890	5.03	1
29JNAURORA05	0.04	1.7					2
29JNAURORA06	0.04	1.68			0.625	6.00	1
29JNLIMBRT06	0.00						
29JNAURORA07	0.04	1.53			0.826	5.46	1
29JNLIMBRT07	0.00						
29JNAURORA08	0.04	1.49			0.851	5.32	1
29JNAURORA09	0.04	1.49			0.900	5.32	1
29JNAURORA10	0.04	1.7					2
29JNSTZRLT03	0.00						
29JNWTOVAL01	0.06	1.82			0.612	9.74	1
29JNJUPNTZ01	0.05	1.5					2
29INIWATCH03	0.01	2.91			0.382	4.85	1
29JNGLOBAL01	0.04	1.8					2
29JNGLOBAL02	0.04	2.12			1.681	2.33	1
29JNGLOBAL03	0.04	2.13			1.673	2.34	1
29JNGLOBAL04	0.04	2.16			1.650	2.37	1
29JNGLOBAL05	0.04	2.23			1.601	2.45	1
29JNGLOBAL06	0.04	2.43			1.467	2.67	1
29HNSTRCAL01		2.49			0.268	8.30	1
29HNDRKCAL01		4.26			0.487	5.68	1
29NNRCTCAL01		4.32			0.725	9.60	1
29NNPCTCAL01		2.2					1
29NNPCTCAL01		2.52			0.629	5.60	1

NIMS G29 OBSERVING GEOMETRY

OAPEL	Latitude (deg)	Longitude (deg)	Range (km)	Cone (deg)	Light (deg)	View (deg)	Phase (deg)
29GNREGION01	-35 to +9	355 to 35	79 to 90K	169	2 to 35	0 to 33	1 to 2
29CNGLOBAL01	-90 to +90	290 to 110	2340K	71	29 to 170	13 to 90	120
29GNGLOBAL01	-25 to +90	290 to 110	346 to 353K	169	26 to 89	30 to 90	4
29GNGLOBAL02	-90 to +30	290 to 110	355 to 363K	169	29 to 92	26 to 90	3
29GNGLOBAL03	-90 to +90	300 to 120	593 to 603K	166	2 to 92	2 to 90	4
29INIWATCH01	-90 to +90	290 to 110	968K	82	19 to 168	7 to 90	109
29JNGRWAKE01	-18 to -11	57 to 71	470 to 488K	96	47 to 74	25 to 52	94
29INIWATCH02	-90 to +90	290 to 110	920K	119	8 to 160	6 to 90	71
29JNGRWAKE02	-17 to -10	56 to 71	487 to 511K	101	25 to 44	50 to 72	90
29JNNEBRLT01	+7 to +9	74 to 92	478 to 501K	105	25 to 51	36 to 62	87
29JNNTZRLT01	+7 to +9	110 to 121	471 to 482K	110	46 to 64	18 to 36	81
29JNSTZRLT01	-26 to -24	106 to 121	483 to 500K	112	40 to 59	37 to 55	79
29JNHTSPOT01	+3 to +12	123 to 131	481 to 495K	115	32 to 50	28 to 44	76
29JNHTSPOT02	+1 to +10	120 to 134	500 to 522K	118	8 to 30	44 to 65	73
29JNNTZRLT02	+19 to +21	201 to 238	585 to 634K	144	17 to 46	53 to 92	47

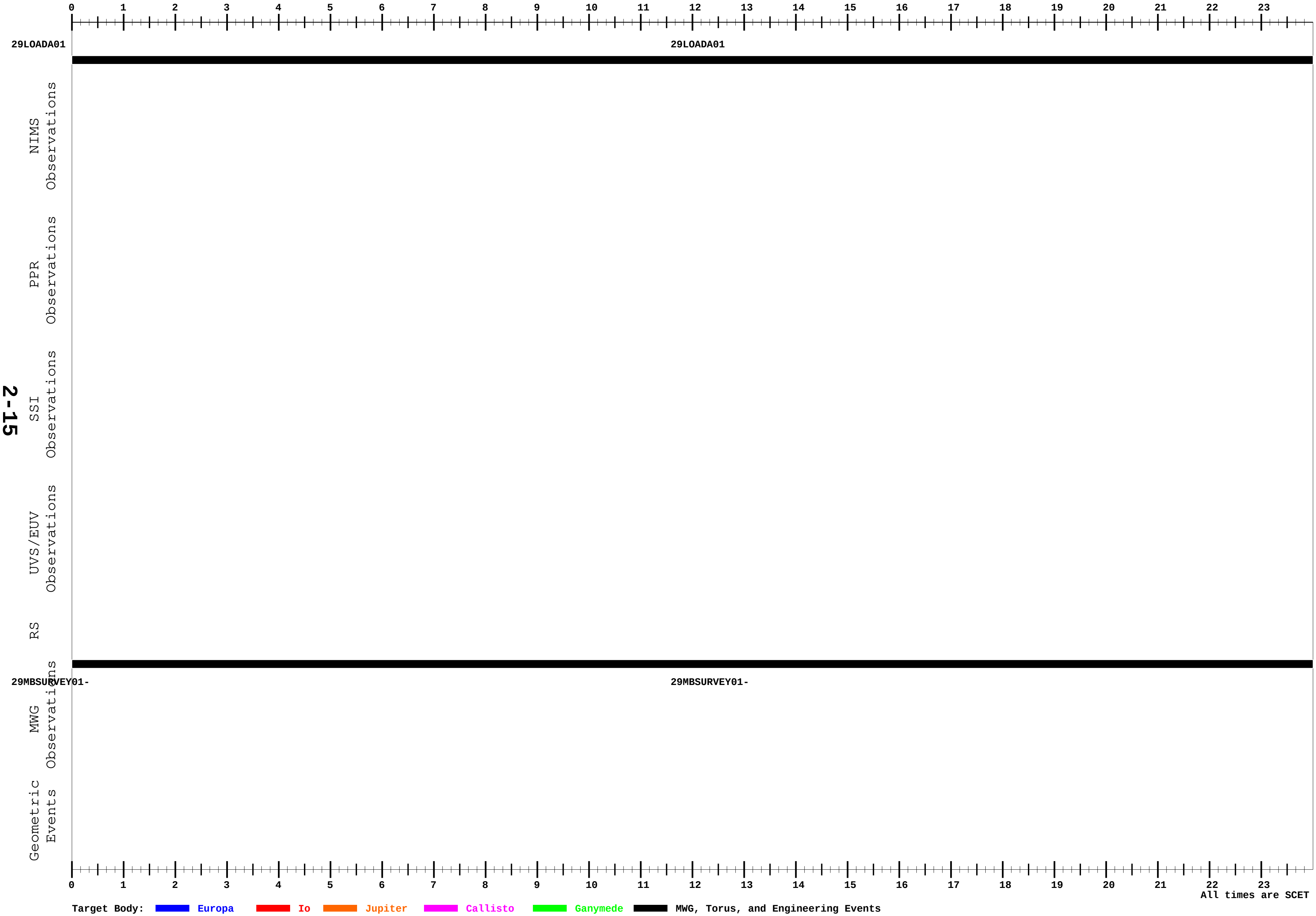
NIMS G29 OBSERVING GEOMETRY

OAPEL	Latitude (deg)	Longitude (deg)	Range (km)	Cone (deg)	Light (deg)	View (deg)	Phase (deg)
29JNSTZRLT02	-27 to -25	230 to 249	590 to 618K	145	29 to 38	51 to 73	45
29JNAURORA01	-90 to -60	19 to 56	702 to 709K	164	75 to 83	74 to 76	25
29JNLIMBRT01	+54 to +68	69 to 109	710 to 733K	168	75 to 97	72 to 93	24
29ENGLOBAL01	-90 to +90	220 to 40	838K	118	7 to 162	7 to 90	73
29JNAURORA02	-90 to -60	53 to 95	737 to 743K	167	75 to 85	74 to 79	21
29JNLIMBRT02	+54 to +68	105 to 142	746 to 767K	172	75 to 96	73 to 93	20
29JNAURORA03	-90 to -60	88 to 126	772 to 781	170	77 to 81	75 to 78	17
29JNLIMBRT03	+54 to +68	141 to 175	784 to 803K	176	75 to 94	75 to 93	16
29JNAURORA04	-90 to -60	109 to 181	812 to 823K	172	78 to 88	77 to 84	13
29JNAURORA05	-90 to -64	158 to 232	840 to 871K	173	70 to 94	70 to 92	10
29JNAURORA06	-90 to -55	19 1to 264	888 to 901K	172	80 to 89	80 to 86	8
29JNLIMBRT06	+50 to +65	237 to 277	888 to 913K	174	66 to 89	70 to 92	8
29JNAURORA07	-90 to -60	235 to 290	930 to 941K	170	74 to 79	75 to 78	4
29JNLIMBRT07	+51 to +66	283 to 322	939 to 962K	171	66 to 88	71 to 92	7
29JNAURORA08	-90 to -55	266 to 318	965 to 975K	168	72 to 75	72 to 75	2

NIMS G29 OBSERVING GEOMETRY

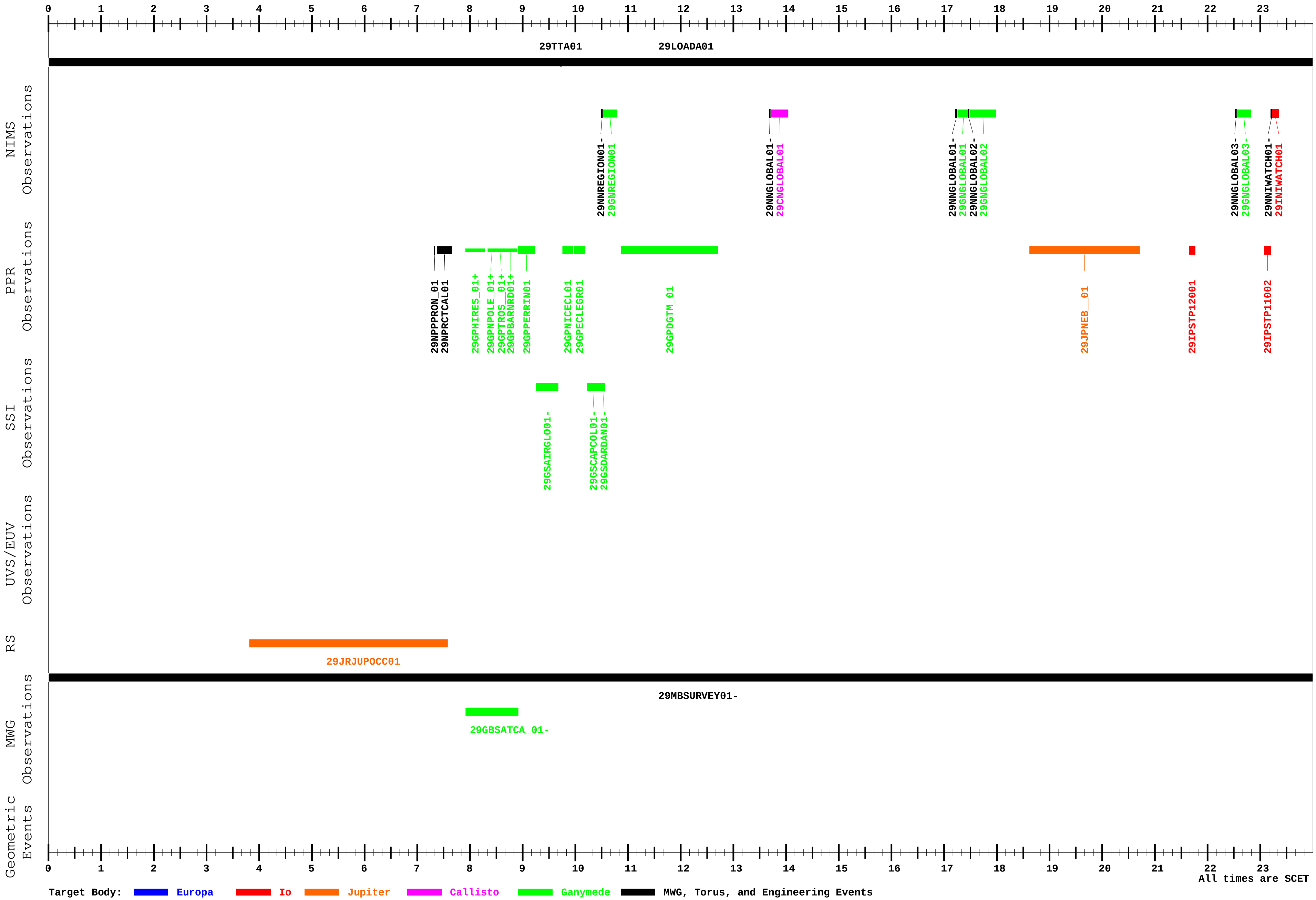
OAPEL	Latitude (deg)	Longitude (deg)	Range (km)	Cone (deg)	Light (deg)	View (deg)	Phase (deg)
29JNAURORA09	-90 to -55	300 to 357	1003 to 1015K	166	71 to 75	71 to 76	3
29JNAURORA10	-90 to -50	345 to 30	1039 to 1055K	164	70 to 76	71 to 79	5
29JNSTZRLT03	-29 to -24	221 to 252	1245 to 1270K	153	33 to 60	41 to 72	15
29JNWTOVAL01	-39 to -27	213 to 260	1253 to 1280K	154	36 to 60	35 to 72	15
29JNJUPNTZ01	+16 to +28	170 to 241	1259 to 1272K	155	19 to 53	22 to 44	15
29INIWATCH03	-90 to +90	239 to 59	2436K	141	10 to 117	17 to 90	27
29JNGLOBAL01	-90 to +90	180 to 336	2300K	131	3 to 122	0 to 90	36
29JNGLOBAL02	-90 to +90	240 to 30	2370K	130	3 to 123	0 to 91	37
29JNGLOBAL03	-90 to +90	280 to 90	2410K	130	5 to 123	0 to 91	37
29JNGLOBAL04	-90 to +90	340 to 150	2470K	129	5 to 127	0 to 91	38
29JNGLOBAL05	-90 to +90	30 to 210	2510K	128	5 to 128	0 to 90	38
29JNGLOBAL06	-90 to +90	90 to 270	2540K	128	2 to 128	0 to 91	39
29HNSTRCAL01	--	--	--	130	--	--	--
29HNDRKCAL01	--	--	--	130	--	--	--

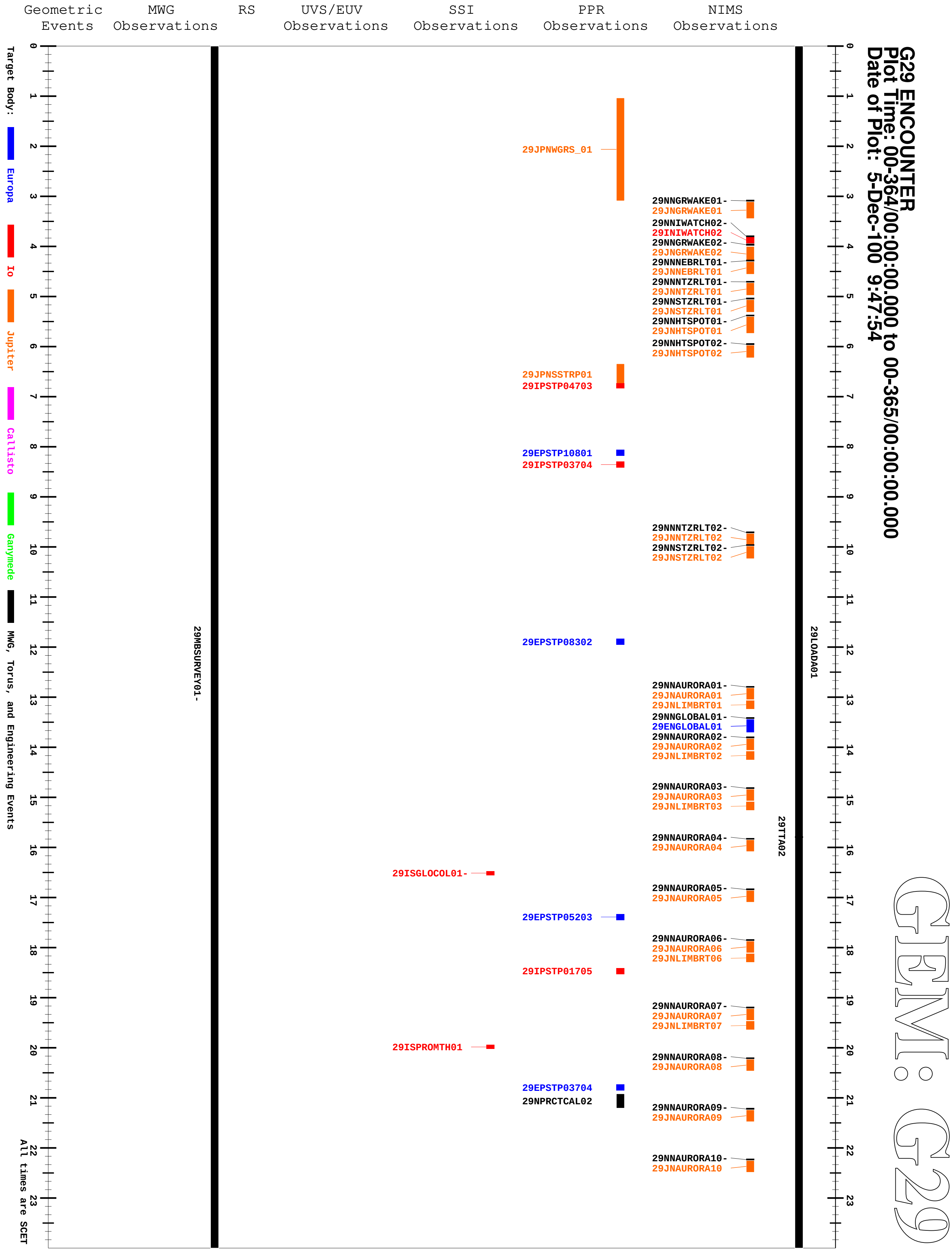
G29 ENCOUNTER
Plot Time: 00-362/00:00:00.000 to 00-363/00:00:00.000
Date of Plot: 5-Dec-100 9:47:54



GEM: G29

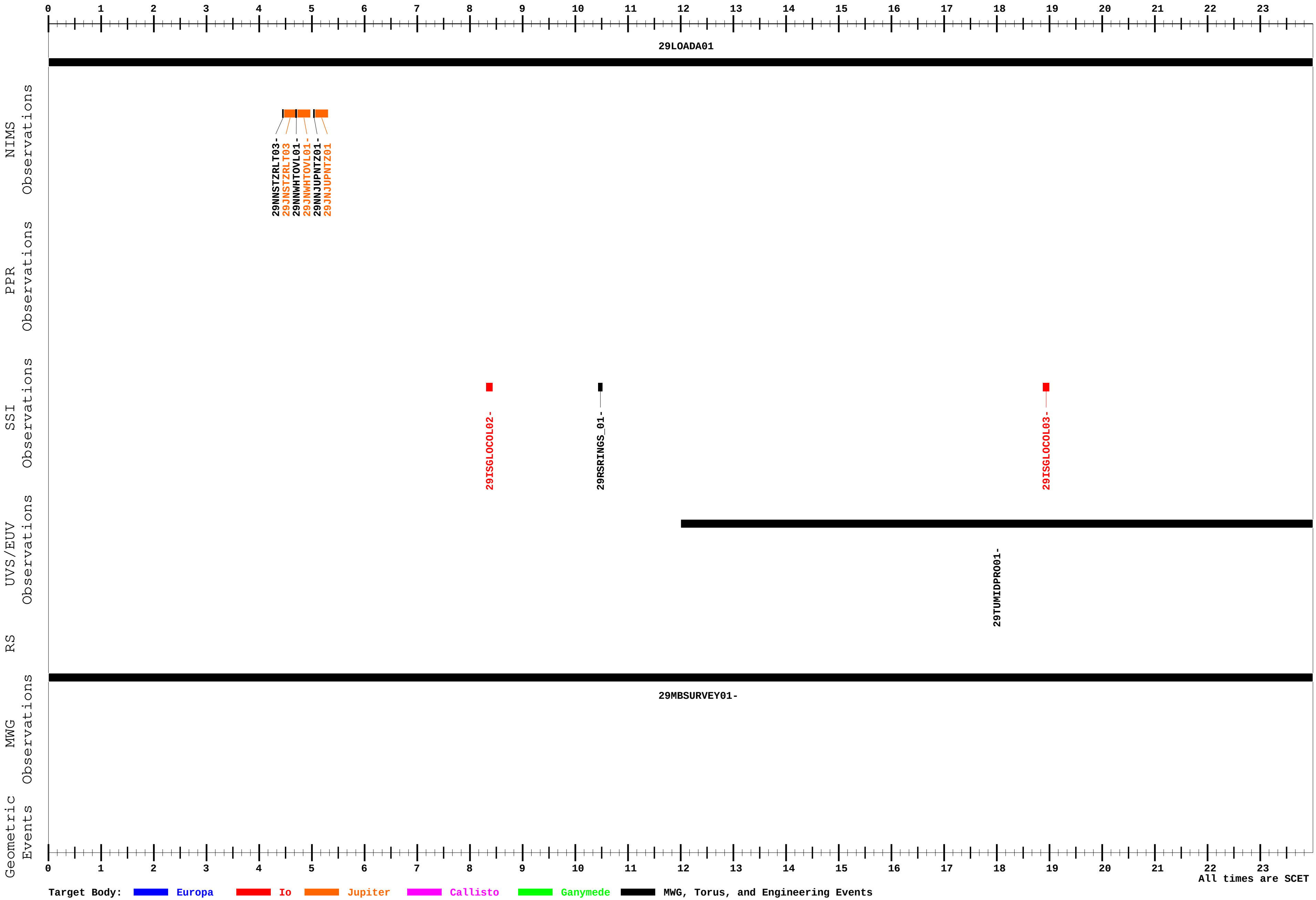
G29 ENCOUNTER
Plot Time: 00-363/00:00:00.000 to 00-364/00:00:00.000
Date of Plot: 5-Dec-100 9:47:54




G29 ENCOUNTER
Plot Time: 00-364/00:00:00.000 to 00-365/00:00:00.000
Date of Plot: 5-Dec-100 9:47:54
Geometric Events
MWG Observations
RS
UVS/EUV Observations
SSI Observations
PPR Observations
NIMS Observations
Target Body:
Europa
Io
Jupiter
Callisto
Ganymede
MWG, Torus, and Engineering Events
All times are SCET
29MBSURVEY01-
29JPNWGRS_01
29JPNSSTRP01
29IPSTP04703
29EPSTP10801
29IPSTP03704
29EPSTP08302
29ISGLOCOL01-
29EPSTP05203
29IPSTP01705
29ISPROMTH01
29EPSTP03704
29NPRCTCAL02
29NNGRWAKE01-
29JNGRWAKE01
29NNIWATCH02-
29INIWATCH02
29NNGRWAKE02-
29JNGRWAKE02
29NNNEBRLT01-
29JNNEBRLT01
29NNNTZRLT01-
29JNNTZRLT01
29NNSTZRLT01-
29JNSTZRLT01
29NNHTSPOT01-
29JNHTSPOT01
29NNHTSPOT02-
29JNHTSPOT02
29NNNTZRLT02-
29JNNTZRLT02
29NNSTZRLT02-
29JNSTZRLT02
29NNAURORA01-
29JNAURORA01
29JNLIMBRT01
29NNGLOBAL01-
29ENGLOBAL01
29NNAURORA02-
29JNAURORA02
29JNLIMBRT02
29NNAURORA03-
29JNAURORA03
29JNLIMBRT03
29NNAURORA04-
29JNAURORA04
29NNAURORA05-
29JNAURORA05
29NNAURORA06-
29JNAURORA06
29JNLIMBRT06
29NNAURORA07-
29JNAURORA07
29JNLIMBRT07
29NNAURORA08-
29JNAURORA08
29NNAURORA09-
29JNAURORA09
29NNAURORA10-
29JNAURORA10
29LOADA01
29TTA02
GEM: G29

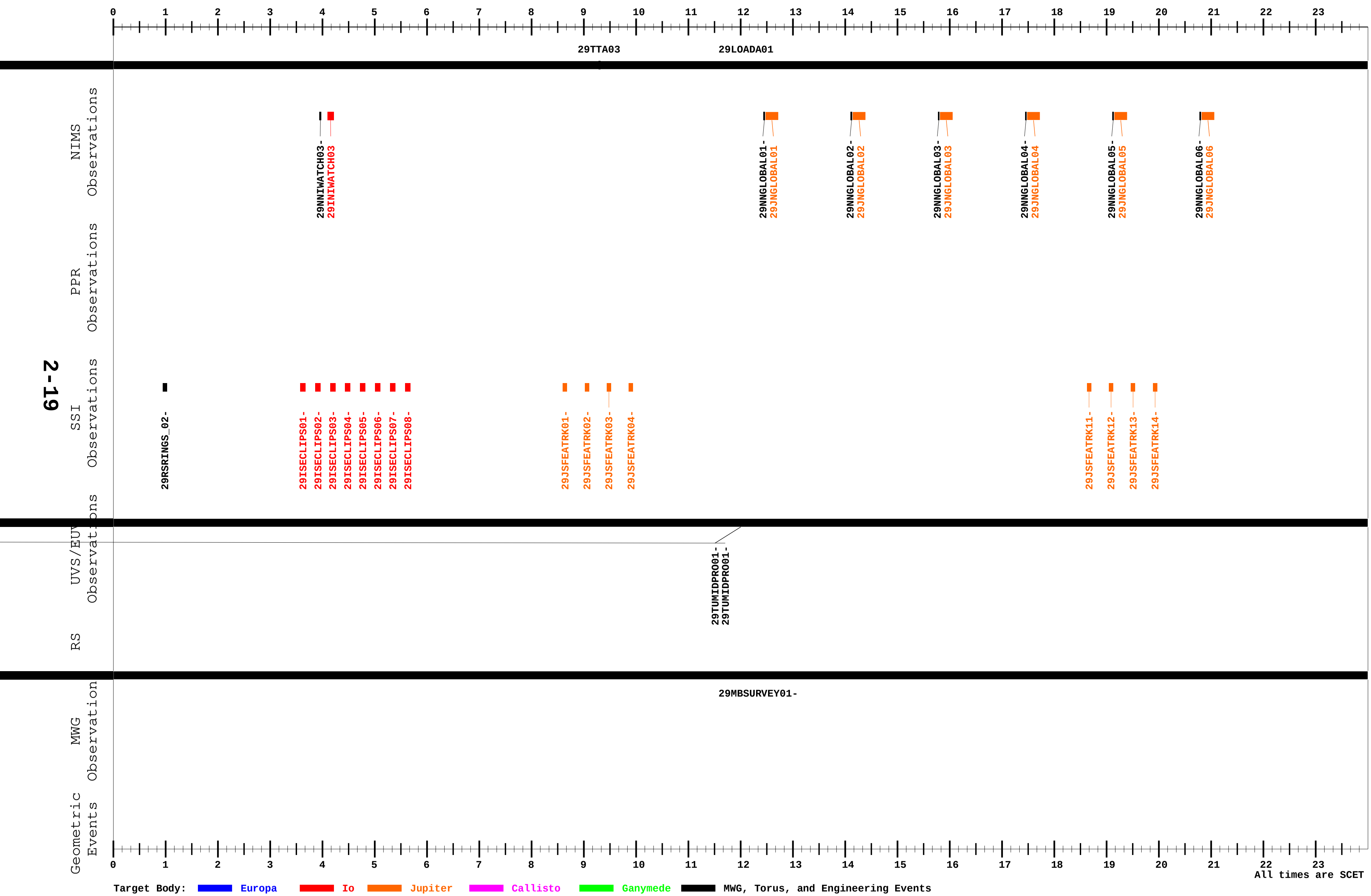
GEM: G29

G29 ENCOUNTER
Plot Time: 00-365/00:00:00.000 to 470-366/00:00:00.000
Date of Plot: 5-Dec-100 9:47:54



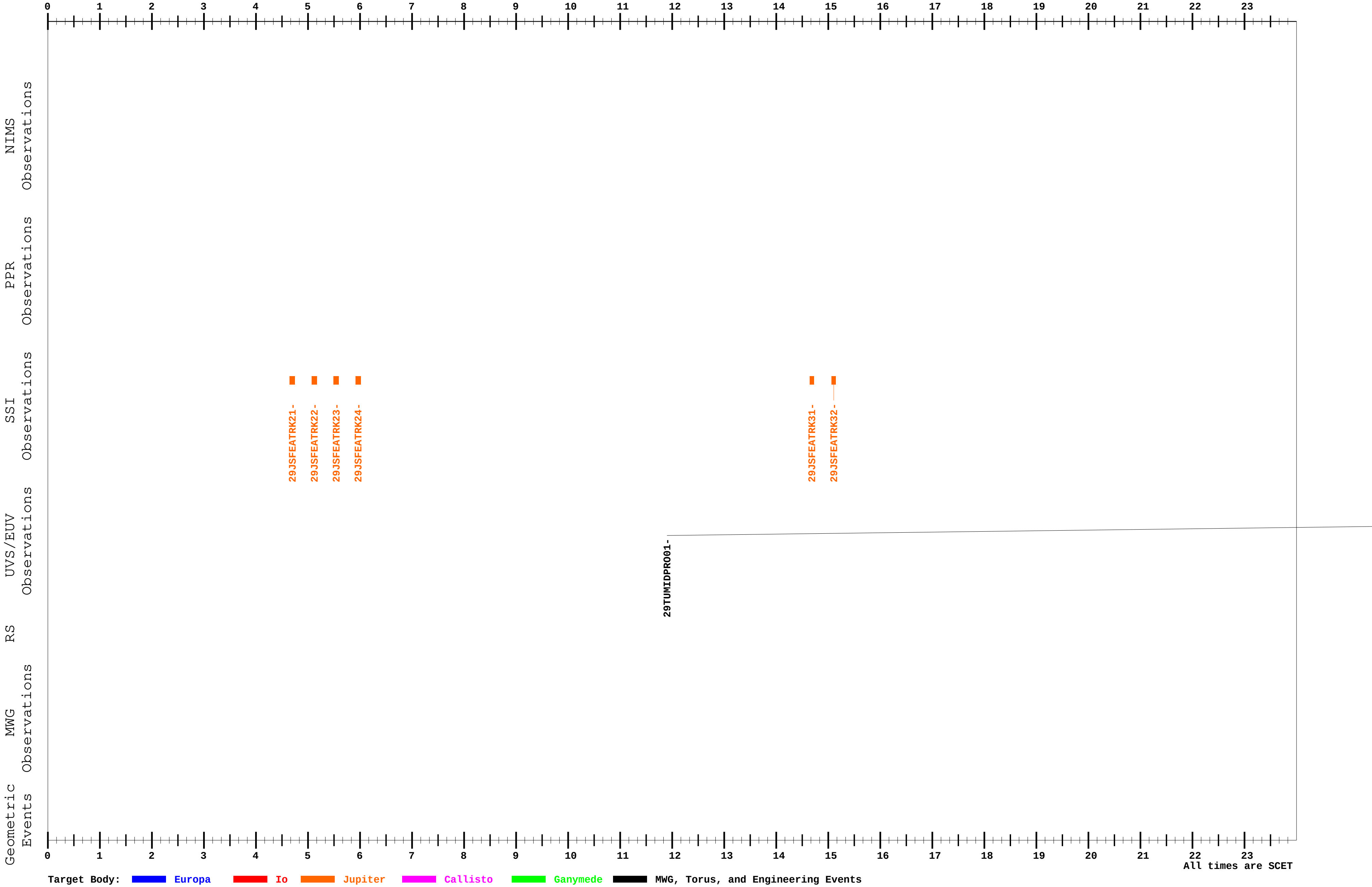
GEM: G29

G29 ENCOUNTER
Plot Time: 00-366/00:00:00.000 to 1-1/00:00:00.000
Date of Plot: 5-Dec-100 9:47:55



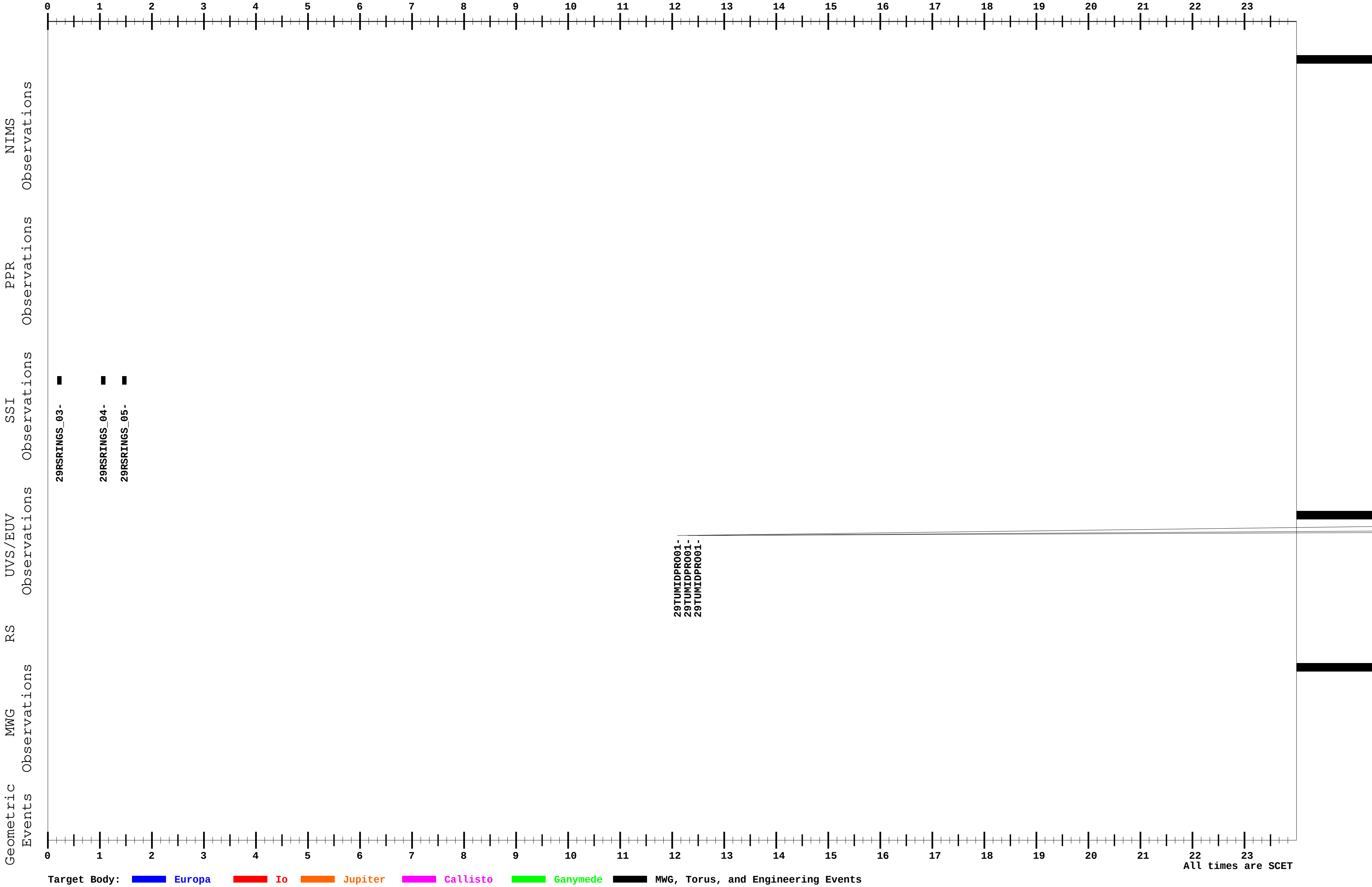
GEM: G29

G29 ENCOUNTER
Plot Time: 1-1/00:00:00.000 to 1-2/00:00:00.000
Date of Plot: 5-Dec-100 9:47:55



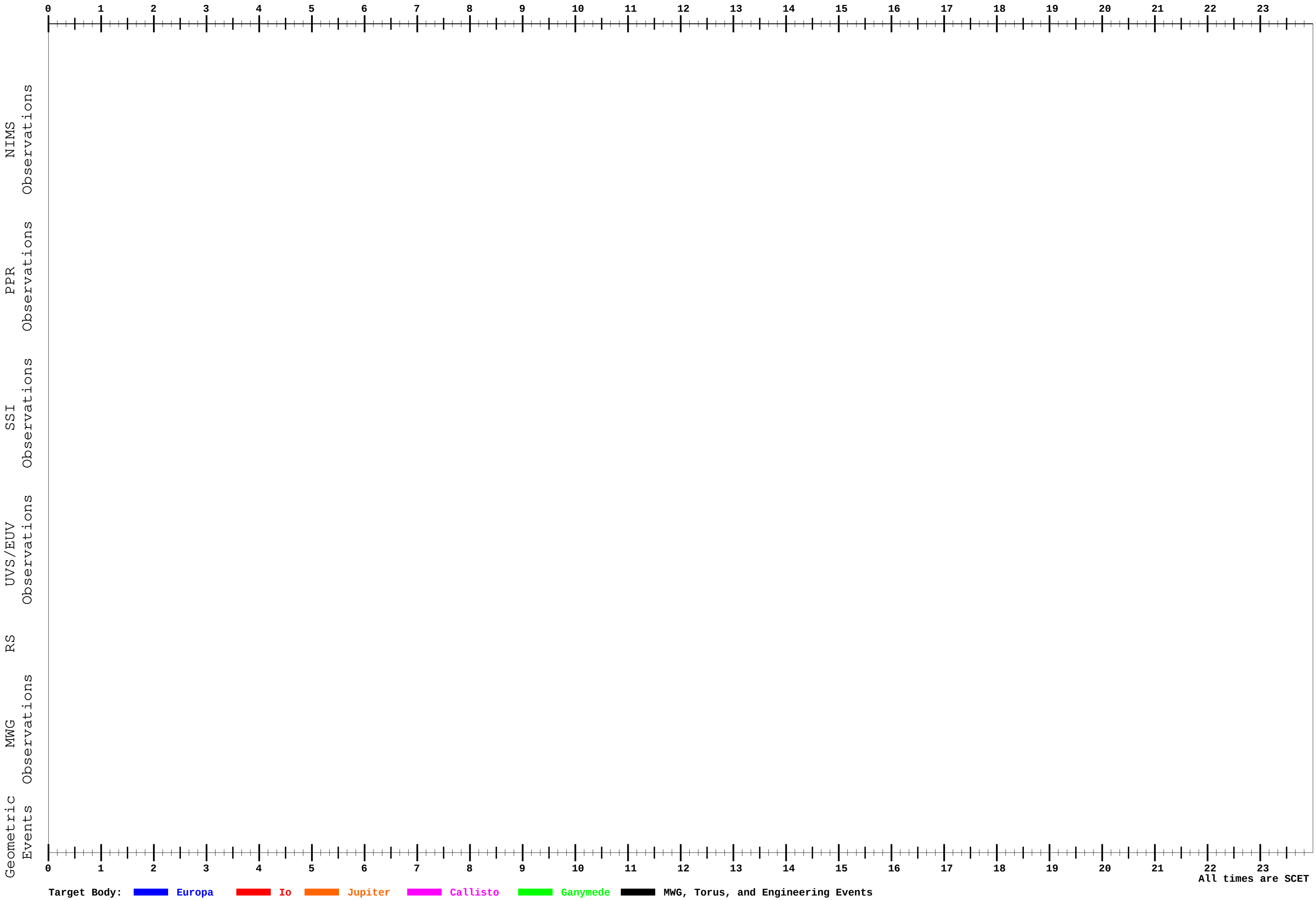
GEM: G29

G29 ENCOUNTER
Plot Time: 1-2/00:00:00.000 to 1-3/00:00:00.000
Date of Plot: 5-Dec-100 9:47:55



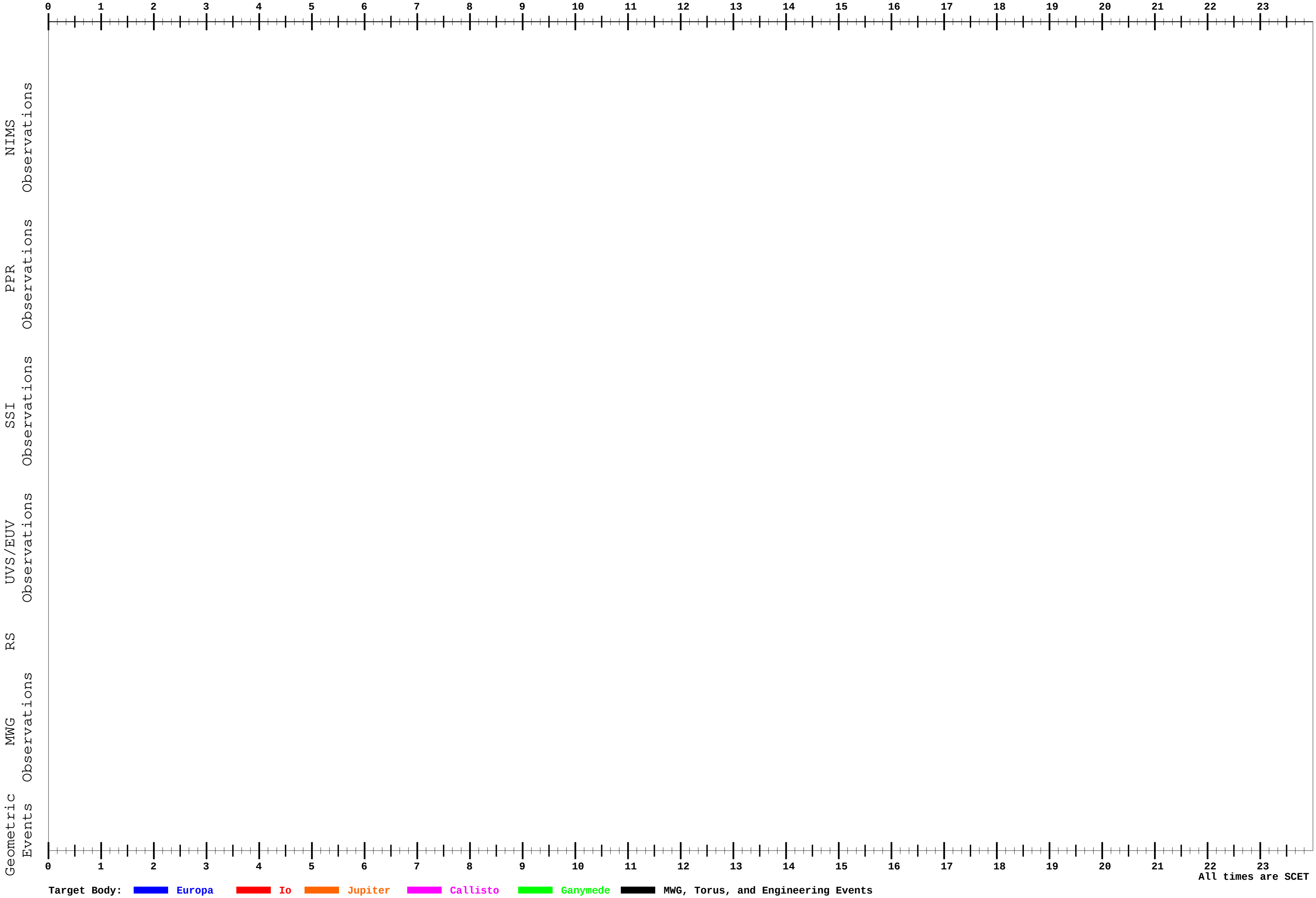
GEM: G29

G29 ENCOUNTER
Plot Time: 1-3/00:00:00.000 to 1-4/00:00:00.000
Date of Plot: 5-Dec-100 9:47:55

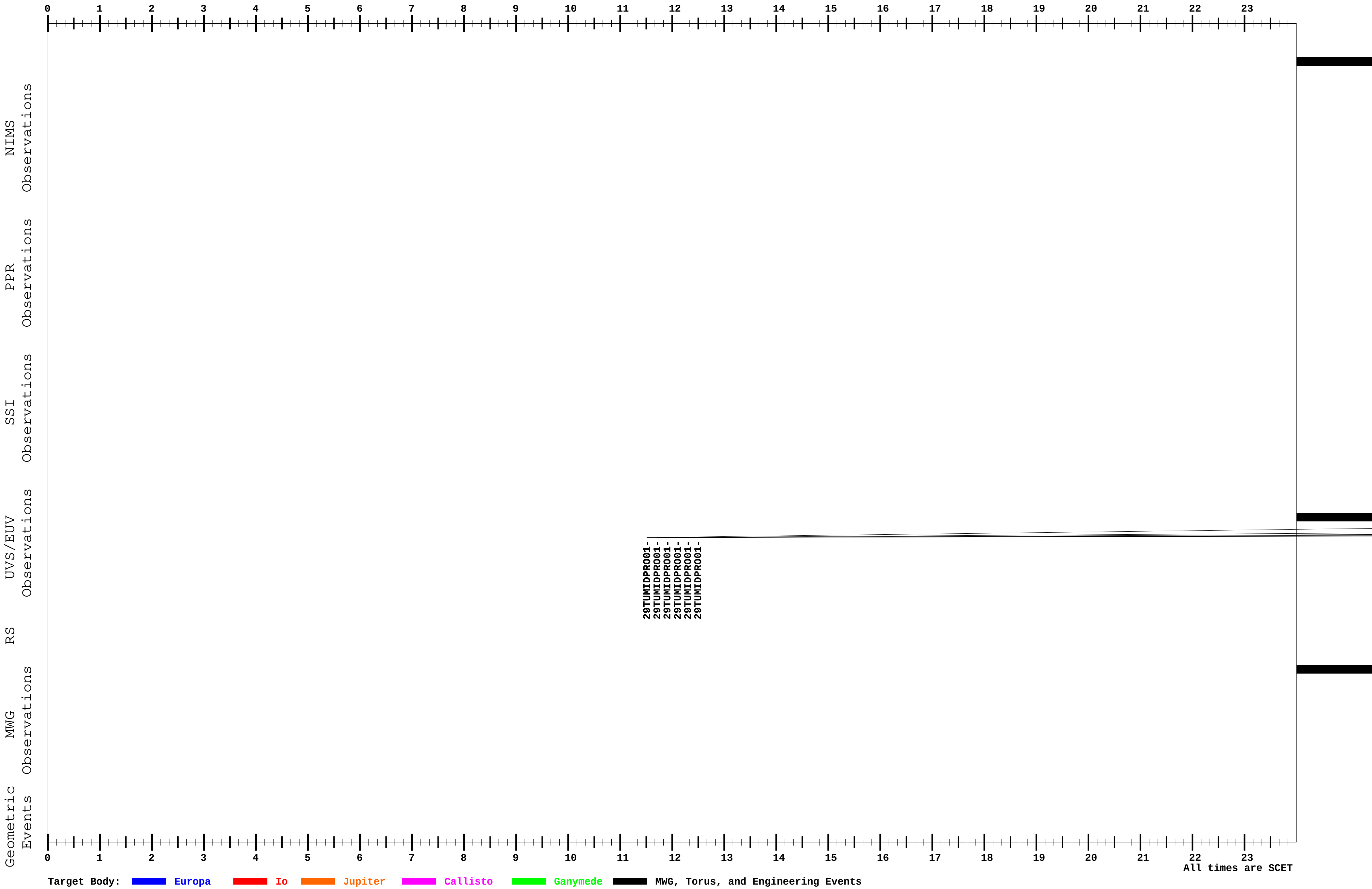


GEM: G29

G29 ENCOUNTER
Plot Time: 1-4/00:00:00.000 to 1-5/00:00:00.000
Date of Plot: 5-Dec-100 9:47:56

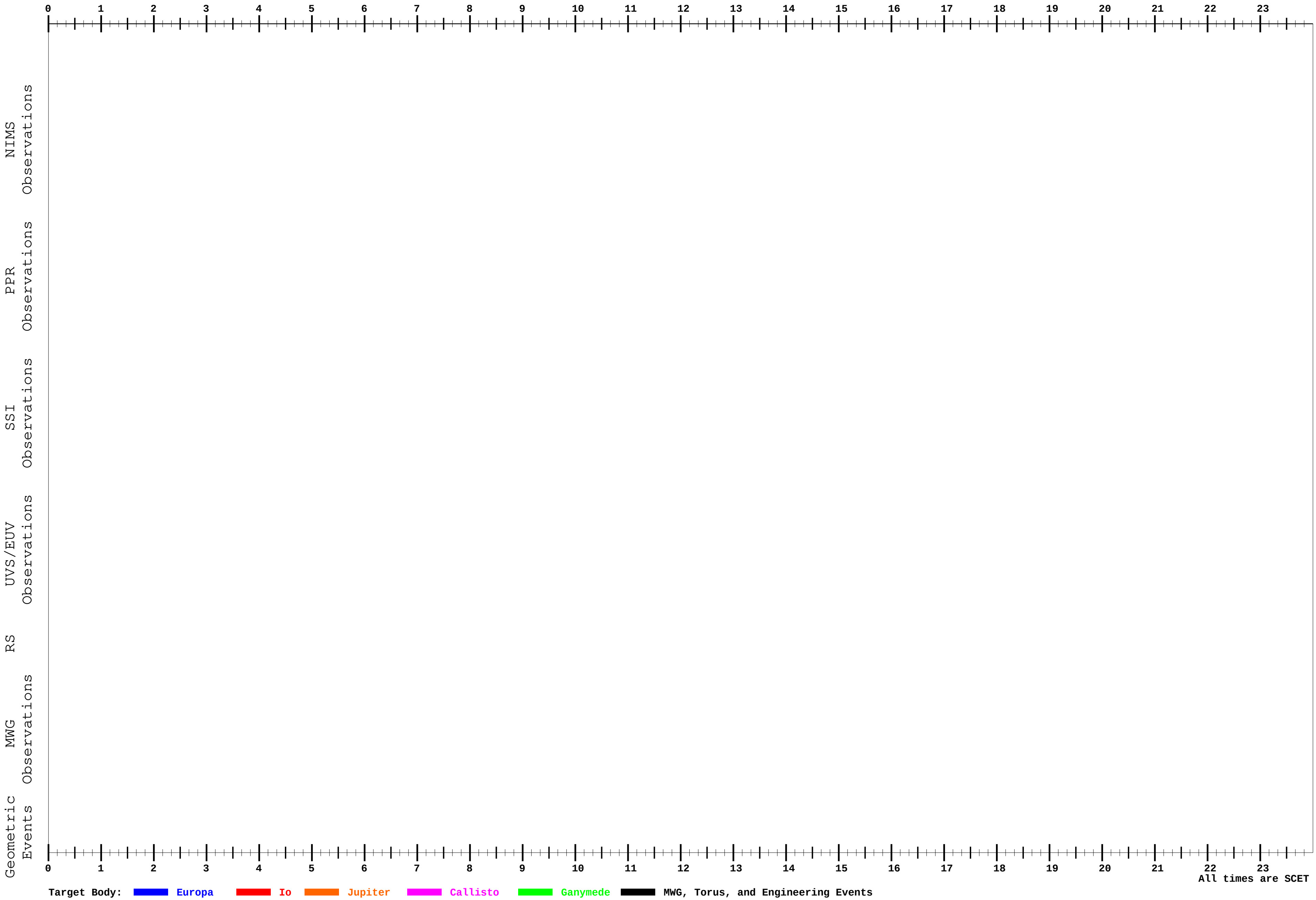


G29 ENCOUNTER
Plot Time: 1-5/00:00:00.000 to 1-6/00:00:00.000
Date of Plot: 5-Dec-100 9:47:56



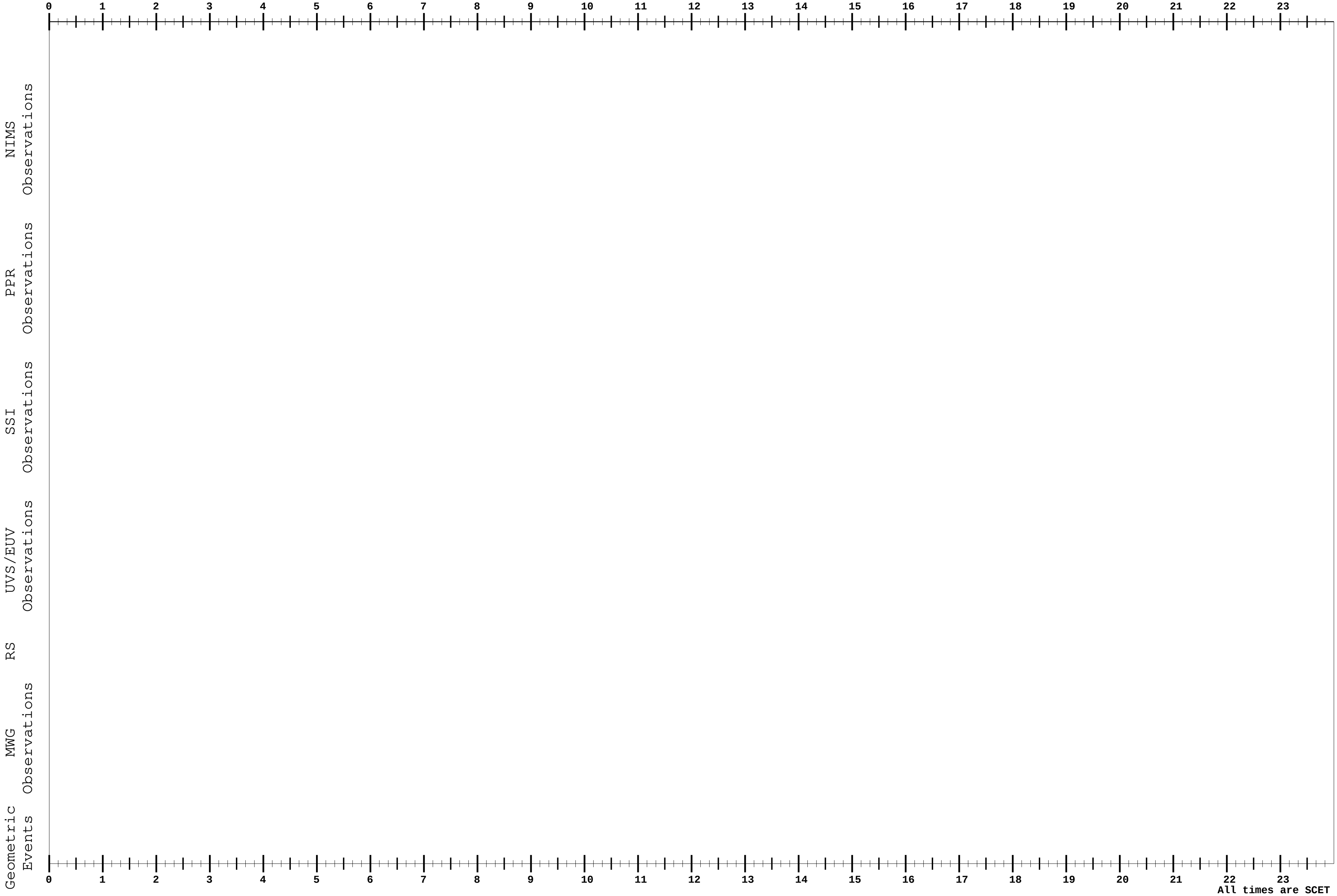
GEM: G29

G29 ENCOUNTER
Plot Time: 1-6/00:00:00.000 to 1-7/00:00:00.000
Date of Plot: 5-Dec-100 9:47:56



GEM: G29

G29 ENCOUNTER
Plot Time: 1-7/00:00:00.000 to 1-8/00:00:00.000
Date of Plot: 5-Dec-100 9:47:56



GEM: G29

G29 ENCOUNTER
Plot Time: 1-8/00:00:00.000 to 1-9/00:00:00.000
Date of Plot: 5-Dec-100 9:47:56

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

NIMS Observations

PPR Observations

SSI Observations

UVS/EUV Observations

RS

MWG Observations

Geometric Events

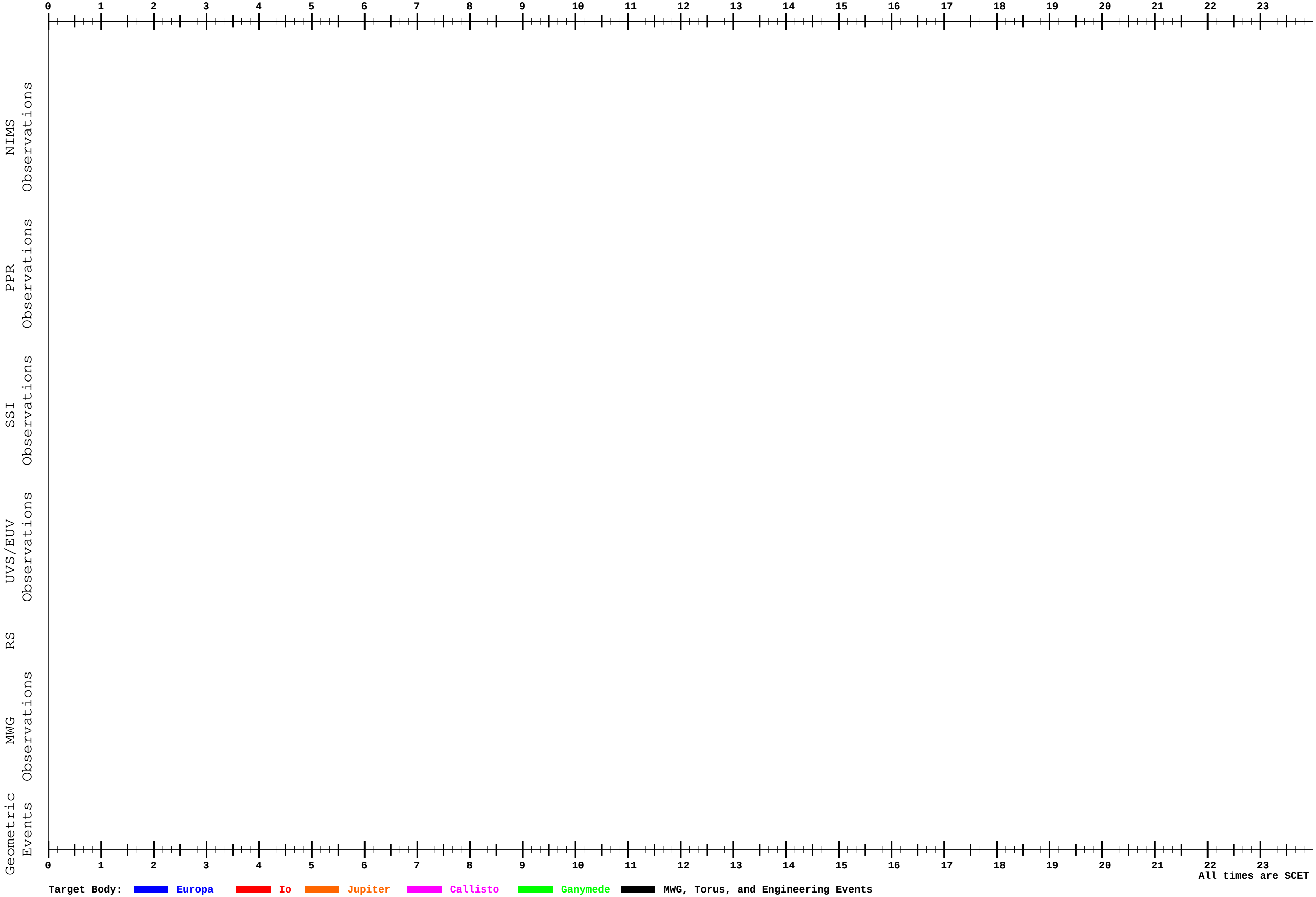
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

All times are SCET

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

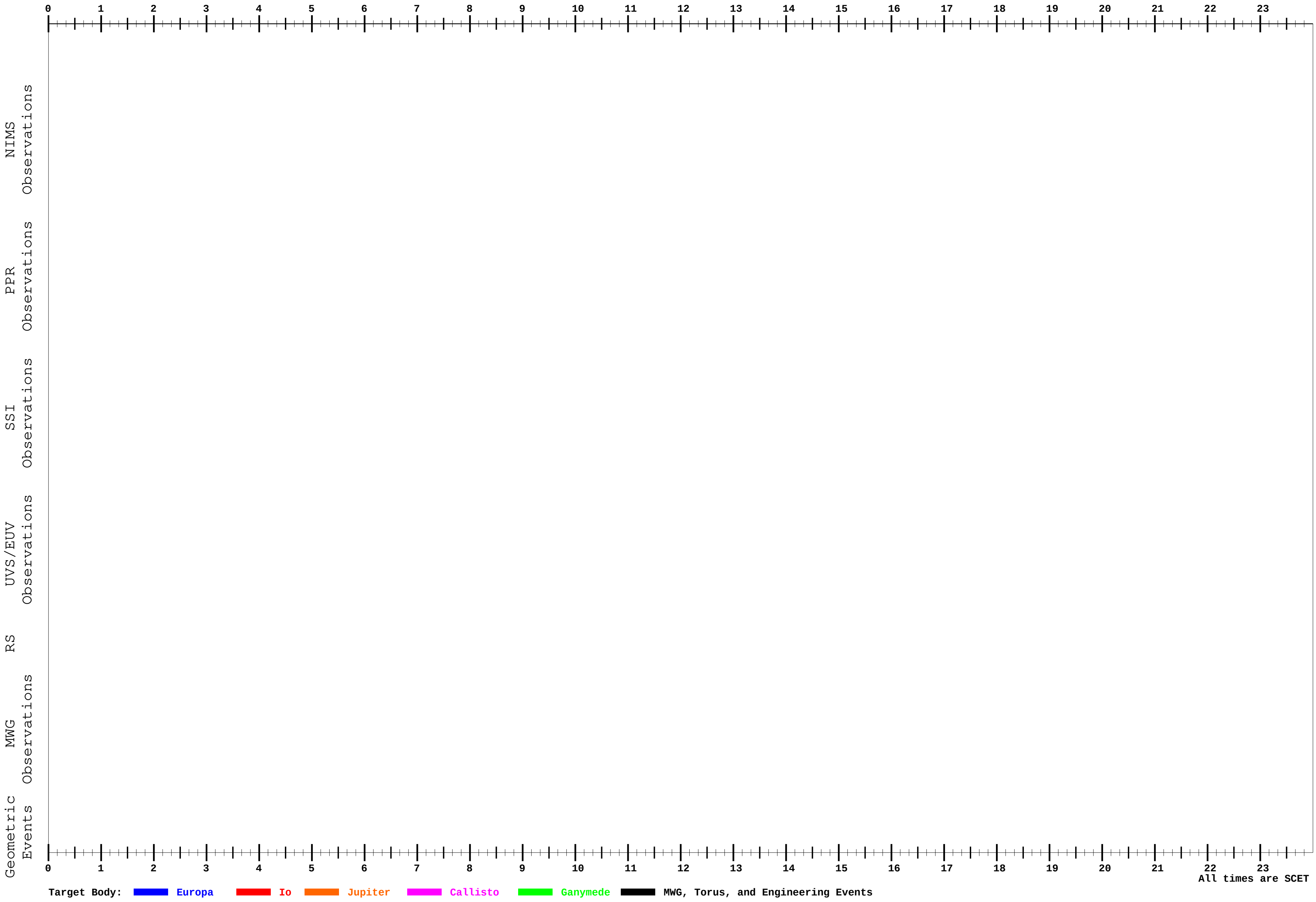
GEM: G29

G29 ENCOUNTER
Plot Time: 1-9/00:00:00.000 to 1-10/00:00:00.000
Date of Plot: 5-Dec-100 9:47:56



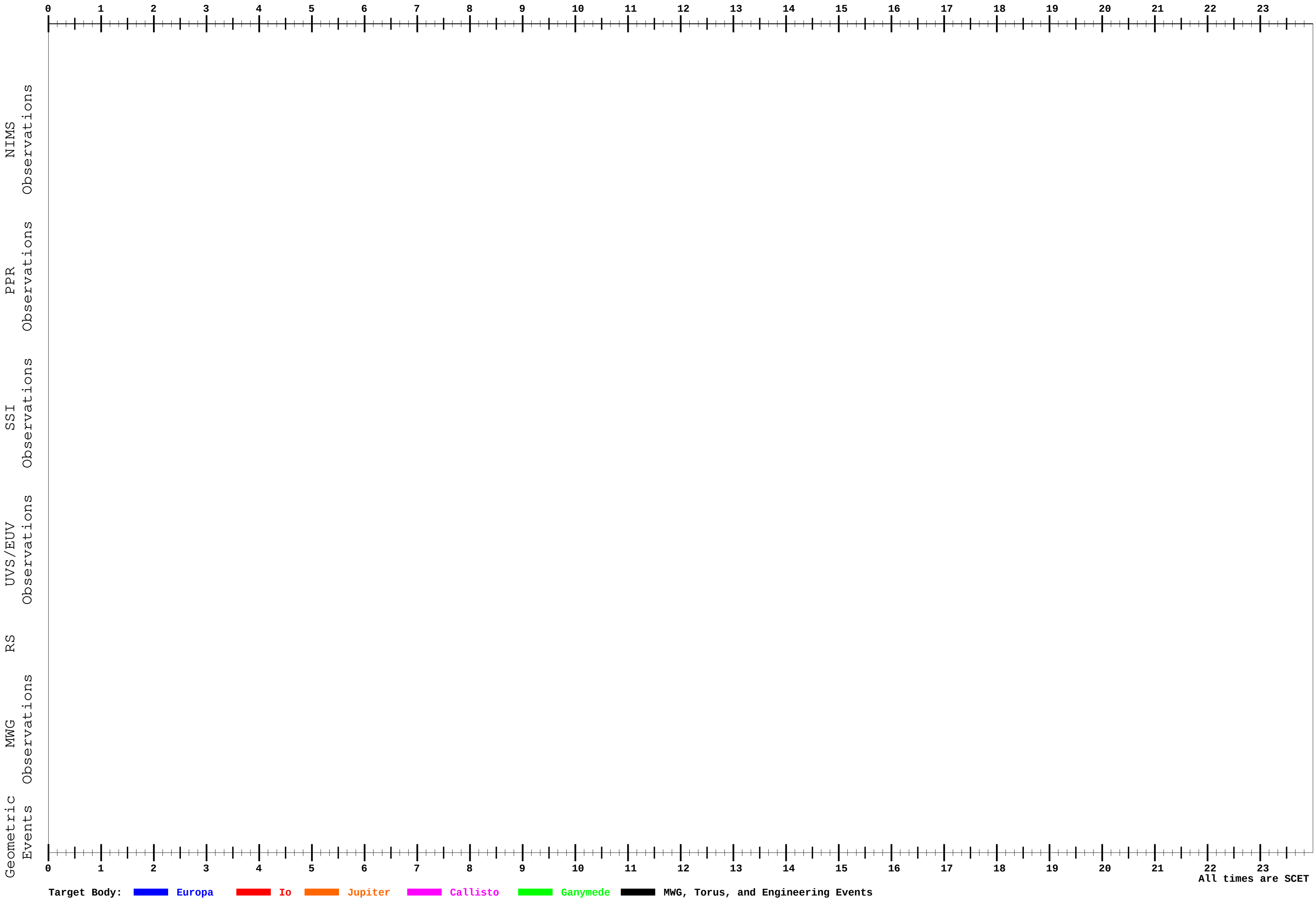
GEM: G29

G29 ENCOUNTER
Plot Time: 1-10/00:00:00.000 to 1-11/00:00:00.000
Date of Plot: 5-Dec-100 9:47:57



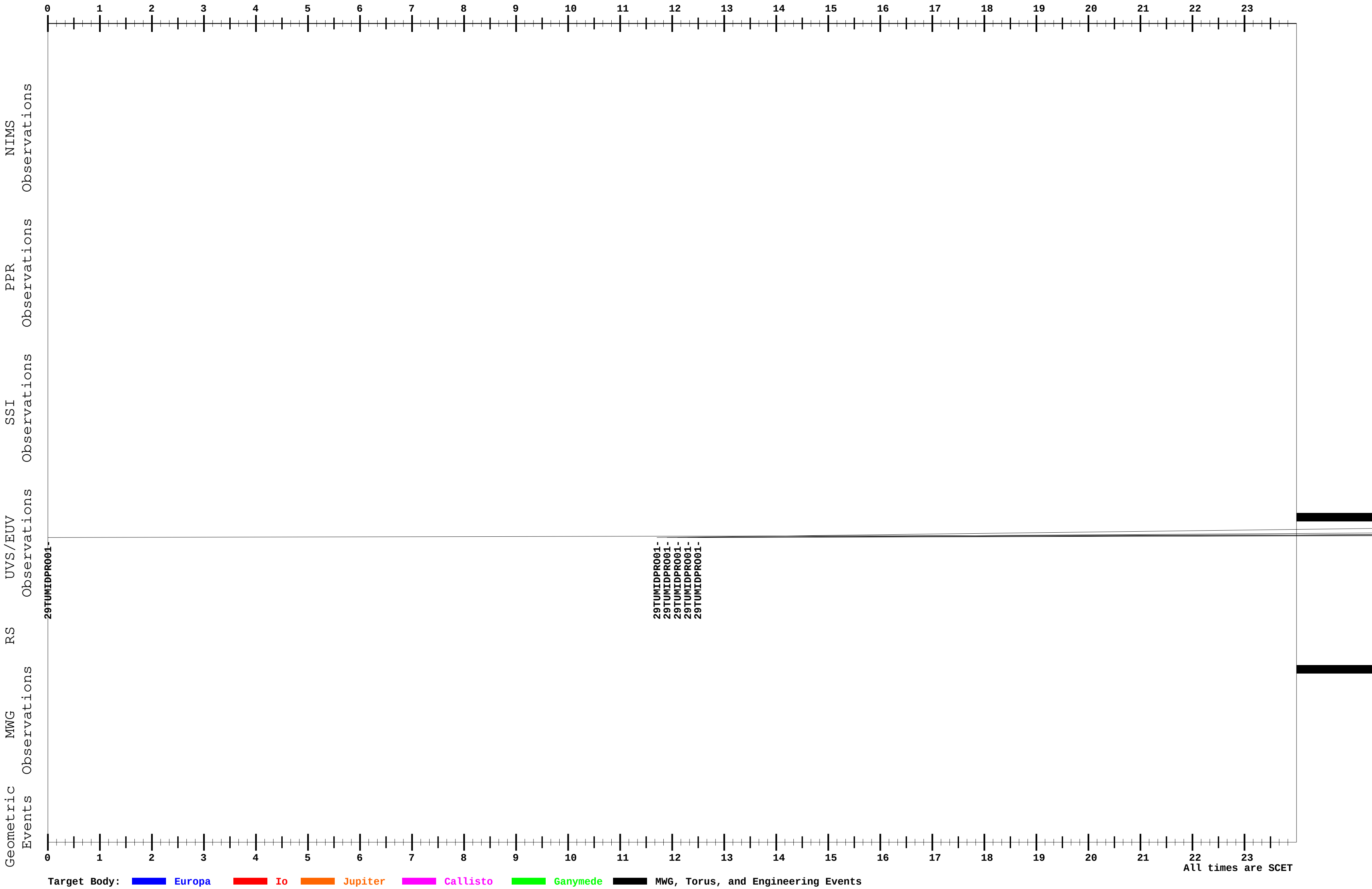
GEM: G29

G29 ENCOUNTER
Plot Time: 1-11/00:00:00.000 to 1-12/00:00:00.000
Date of Plot: 5-Dec-100 9:47:57

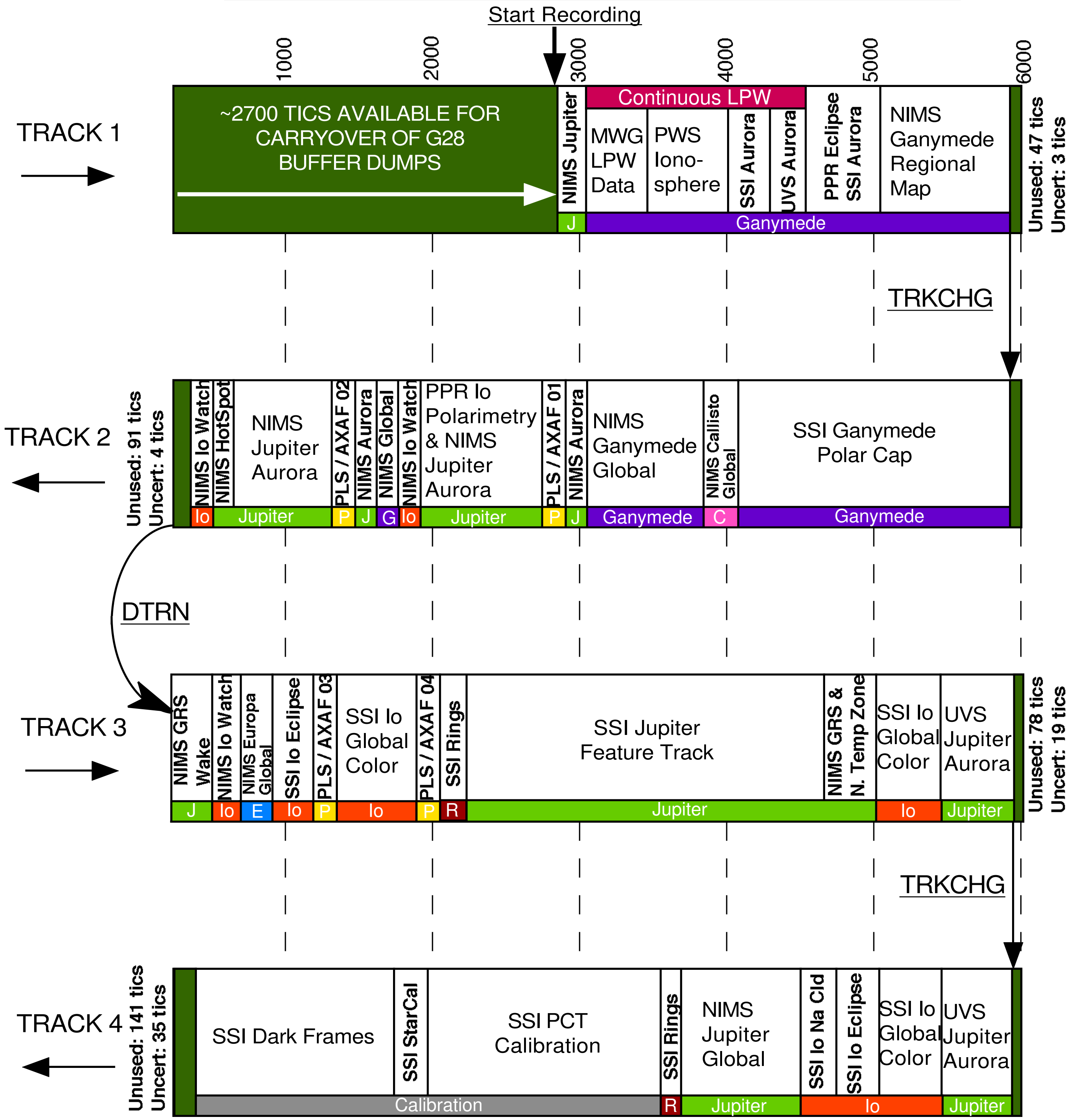


GEM: G29

G29 ENCOUNTER
Plot Time: 1-12/00:00:00.000 to 1-13/00:00:00.000
Date of Plot: 5-Dec-100 9:47:57

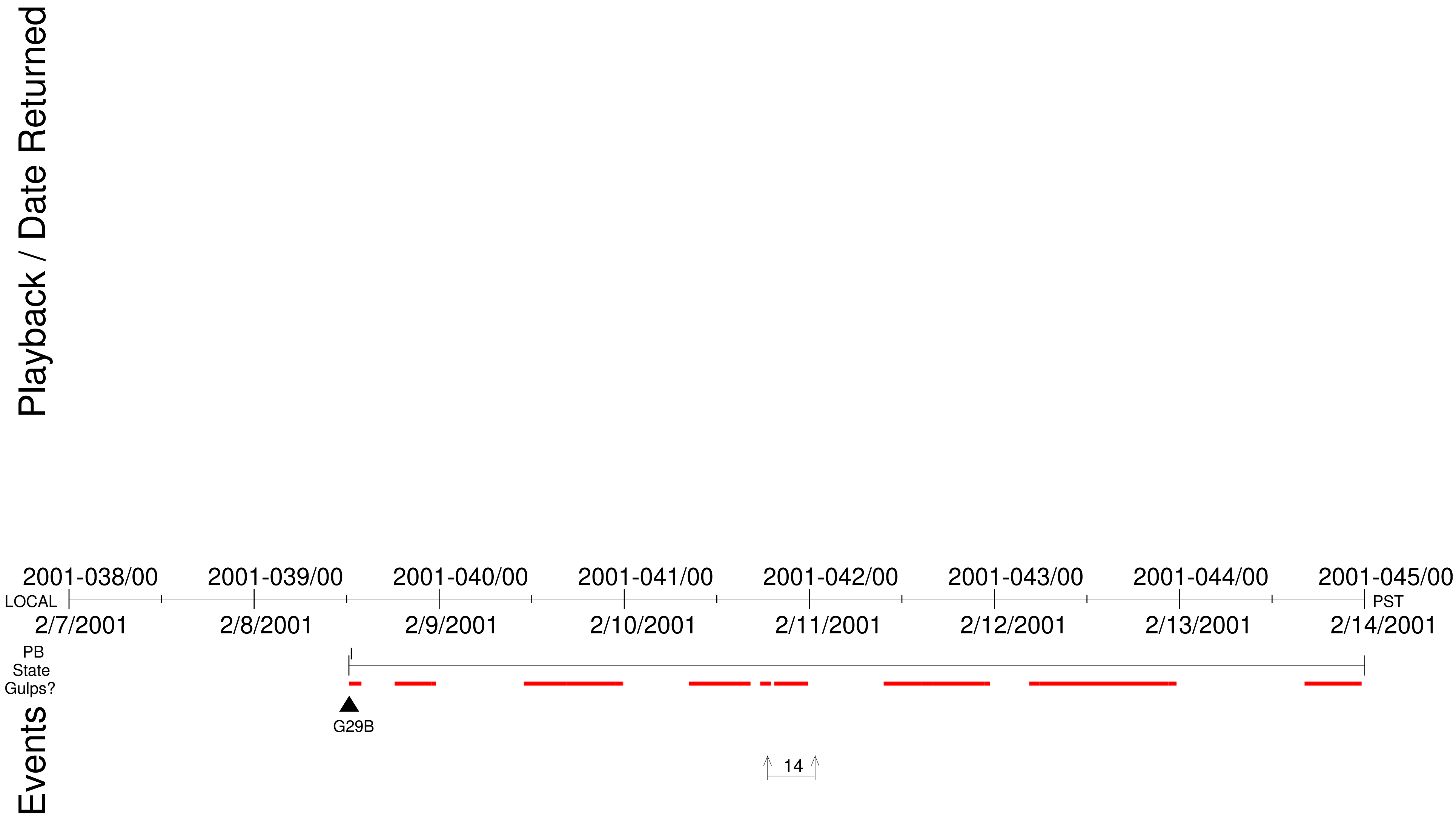


G29 ENCOUNTER HIGH-LEVEL TAPEMAP



J. Gross, 6/7/99

G29PED



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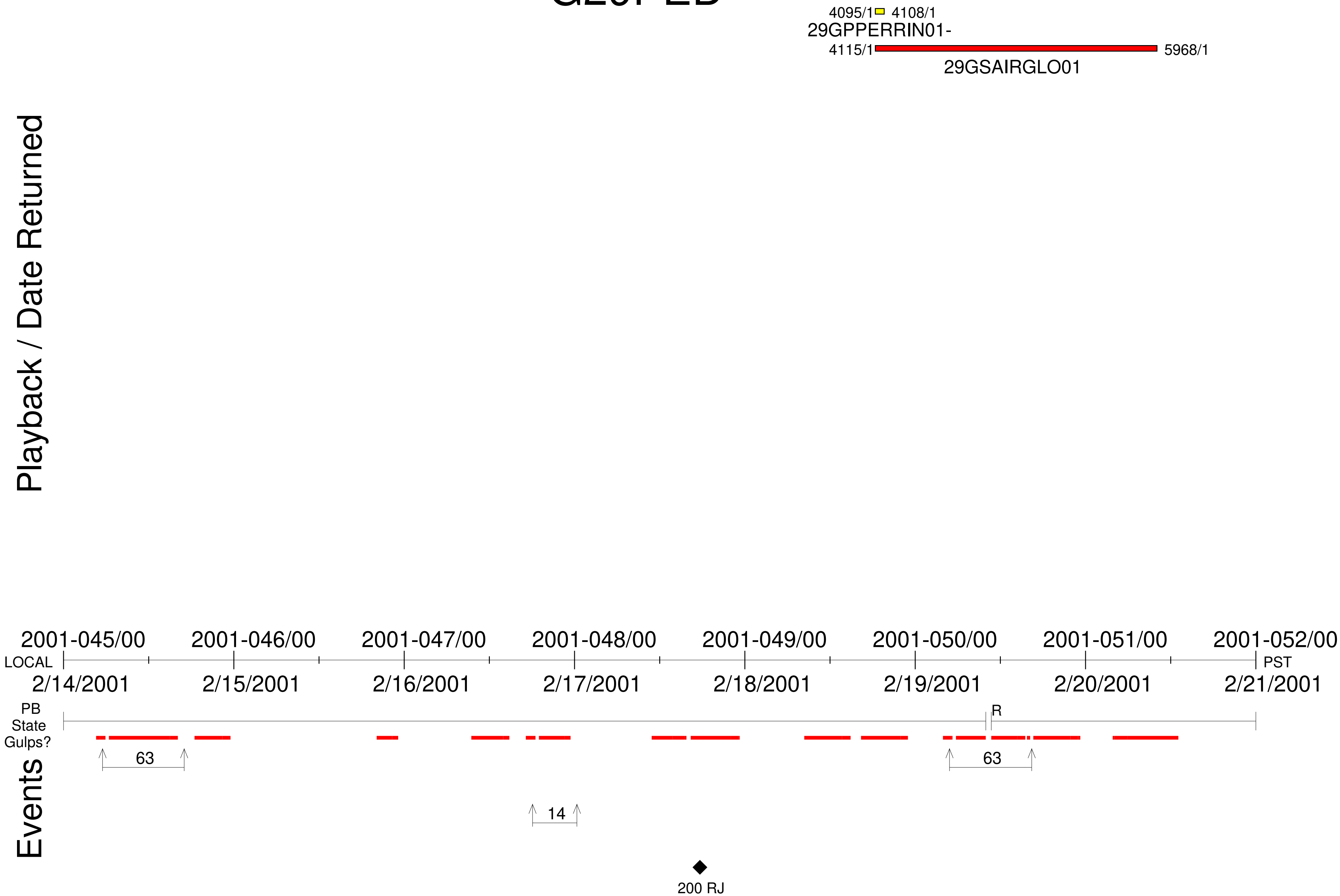
Fri Feb 16 14:42:47 2001, Page 1 of 10

G29PED



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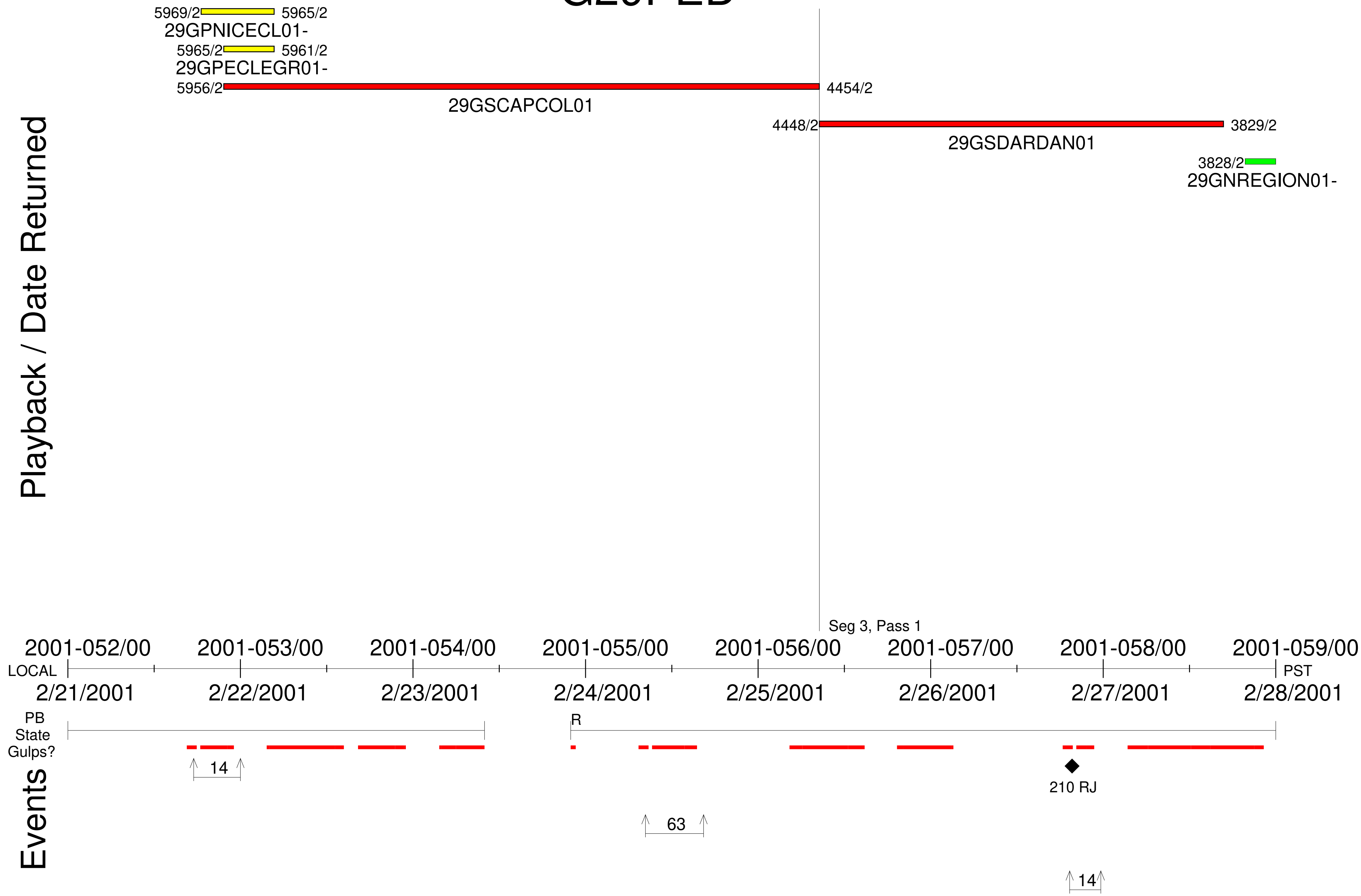
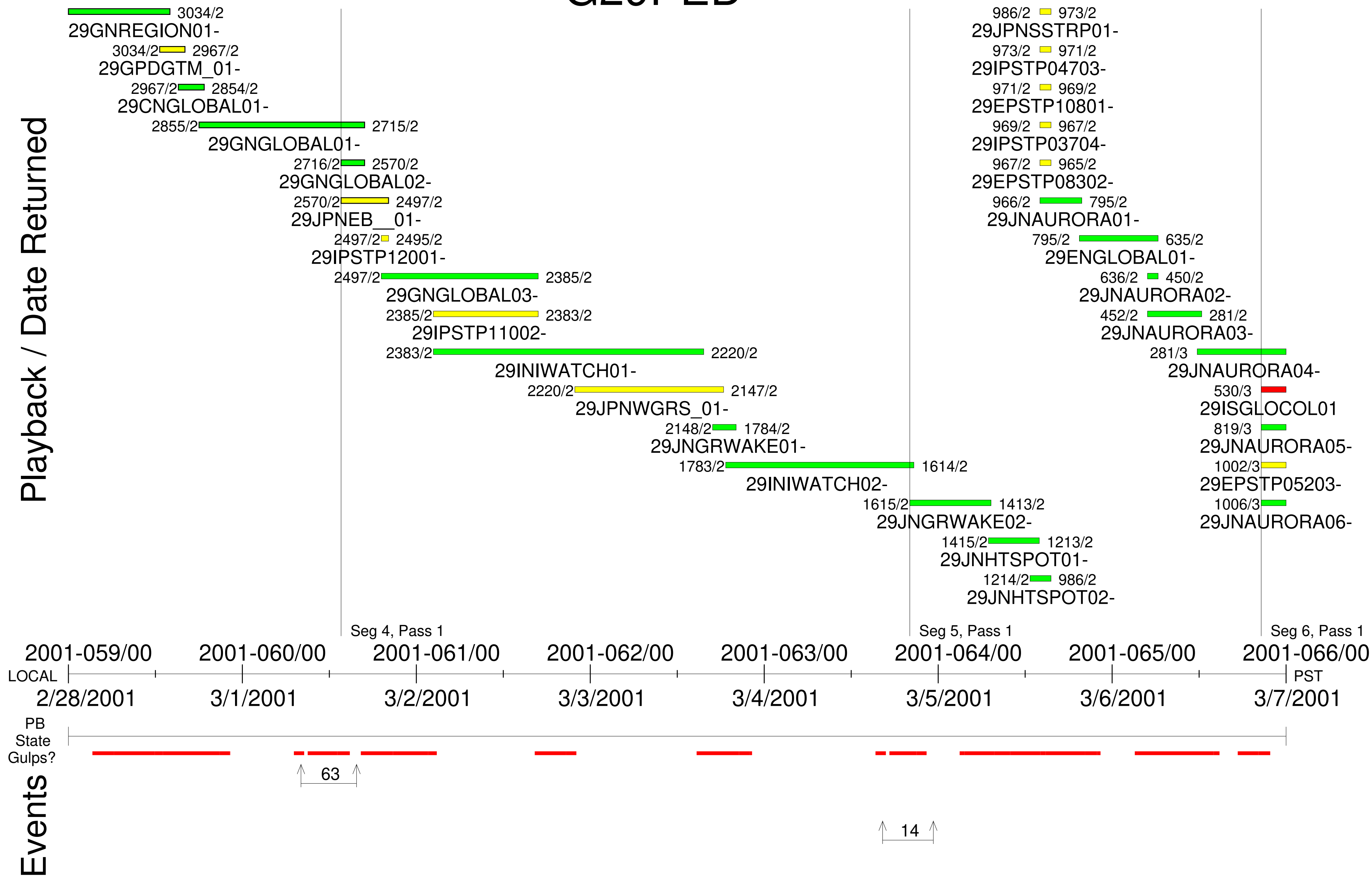
Fri Feb 16 14:42:47 2001, Page 2 of 10

G29PED



Playback / Date Returned
5969/2
5965/2
29GPNICECL01-
5965/2
5961/2
29GPECLEGR01-
5956/2
4454/2
29GSCAPCOL01
4448/2
3829/2
29GSDARDAN01
3828/2
29GNREGION01-
Seg 3, Pass 1
2001-052/00
2001-053/00
2001-054/00
2001-055/00
2001-056/00
2001-057/00
2001-058/00
2001-059/00
LOCAL
PST
2/21/2001
2/22/2001
2/23/2001
2/24/2001
2/25/2001
2/26/2001
2/27/2001
2/28/2001
PB
State
Gulps?
R
14
210 RJ
63
14
Events

G29PED



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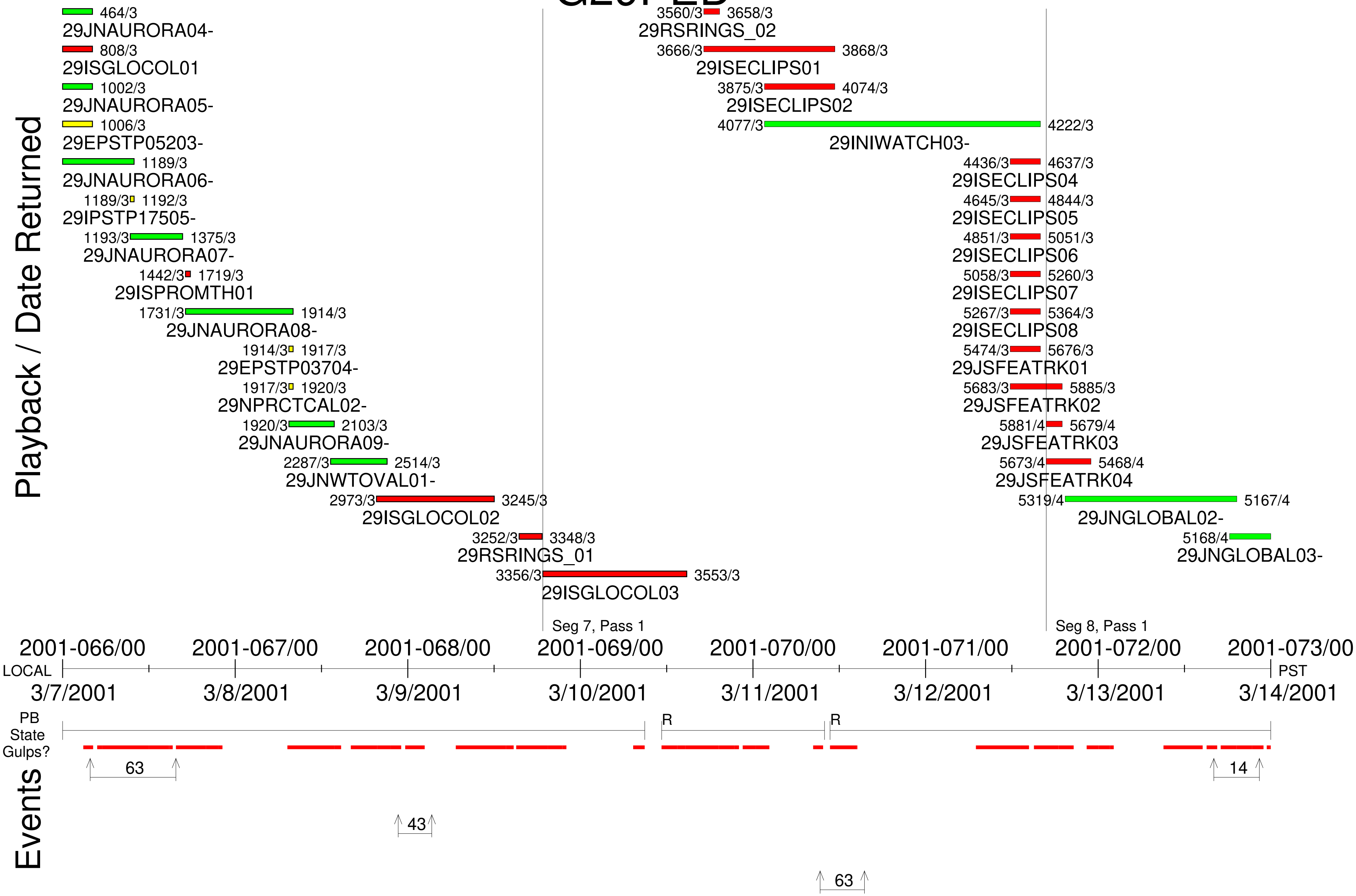
Fri Feb 16 14:42:47 2001, Page 4 of 10

G29PED



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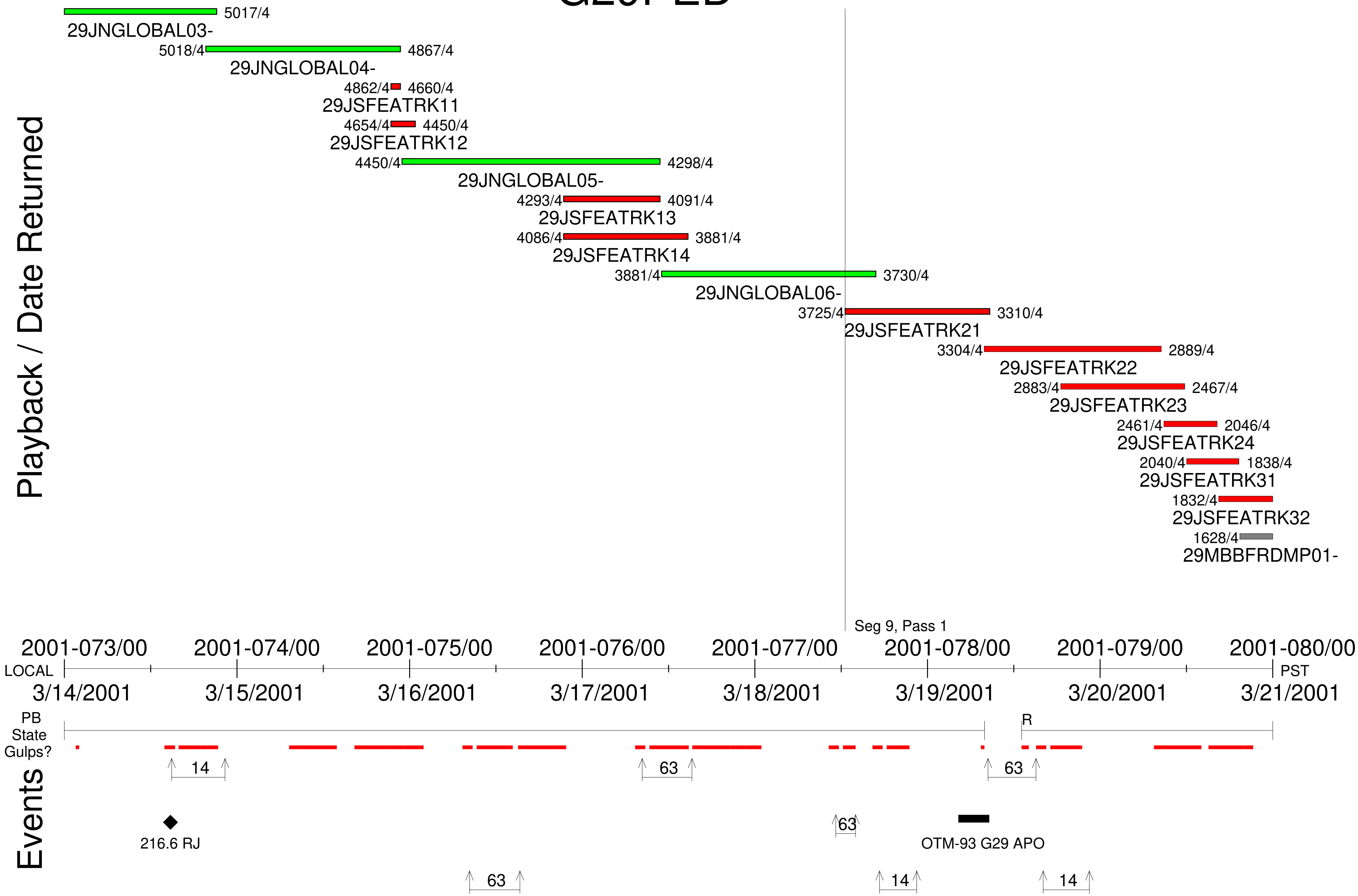

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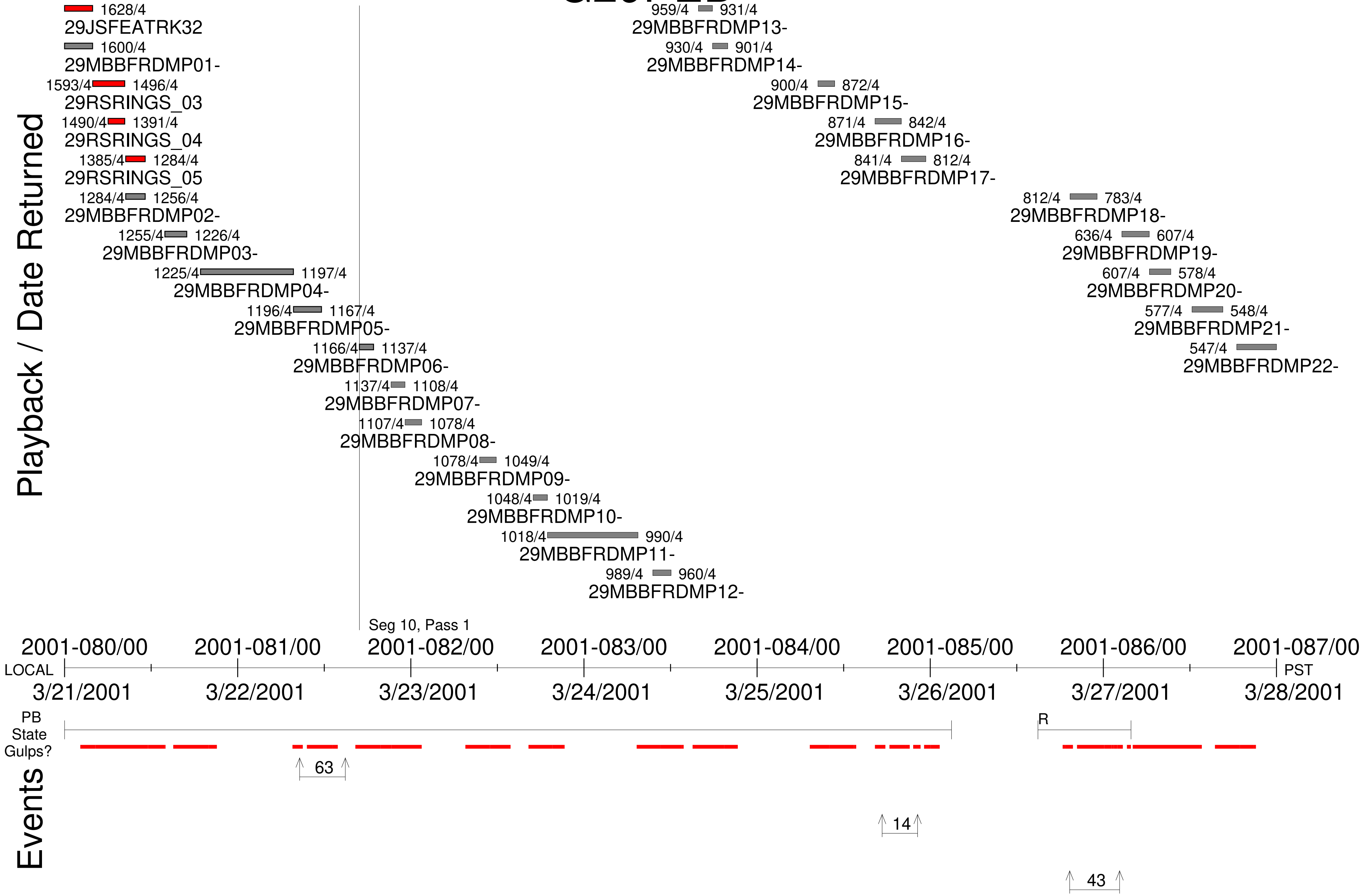
Fri Feb 16 14:42:47 2001, Page 6 of 10

G29PED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29JSFEATRK32
1600/4
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1593/4 1496/4
29RSRINGS_03
1490/4 1391/4
29RSRINGS_04
1385/4 1284/4
29RSRINGS_05
1284/4 1256/4
29MBBFRDMP02-
1255/4 1226/4
29MBBFRDMP03-
1225/4 1197/4
29MBBFRDMP04-
1196/4 1167/4
29MBBFRDMP05-
1166/4 1137/4
29MBBFRDMP06-
1137/4 1108/4
29MBBFRDMP07-
1107/4 1078/4
29MBBFRDMP08-
1078/4 1049/4
29MBBFRDMP09-
1048/4 1019/4
29MBBFRDMP10-
1018/4 990/4
29MBBFRDMP11-
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29MBBFRDMP12-
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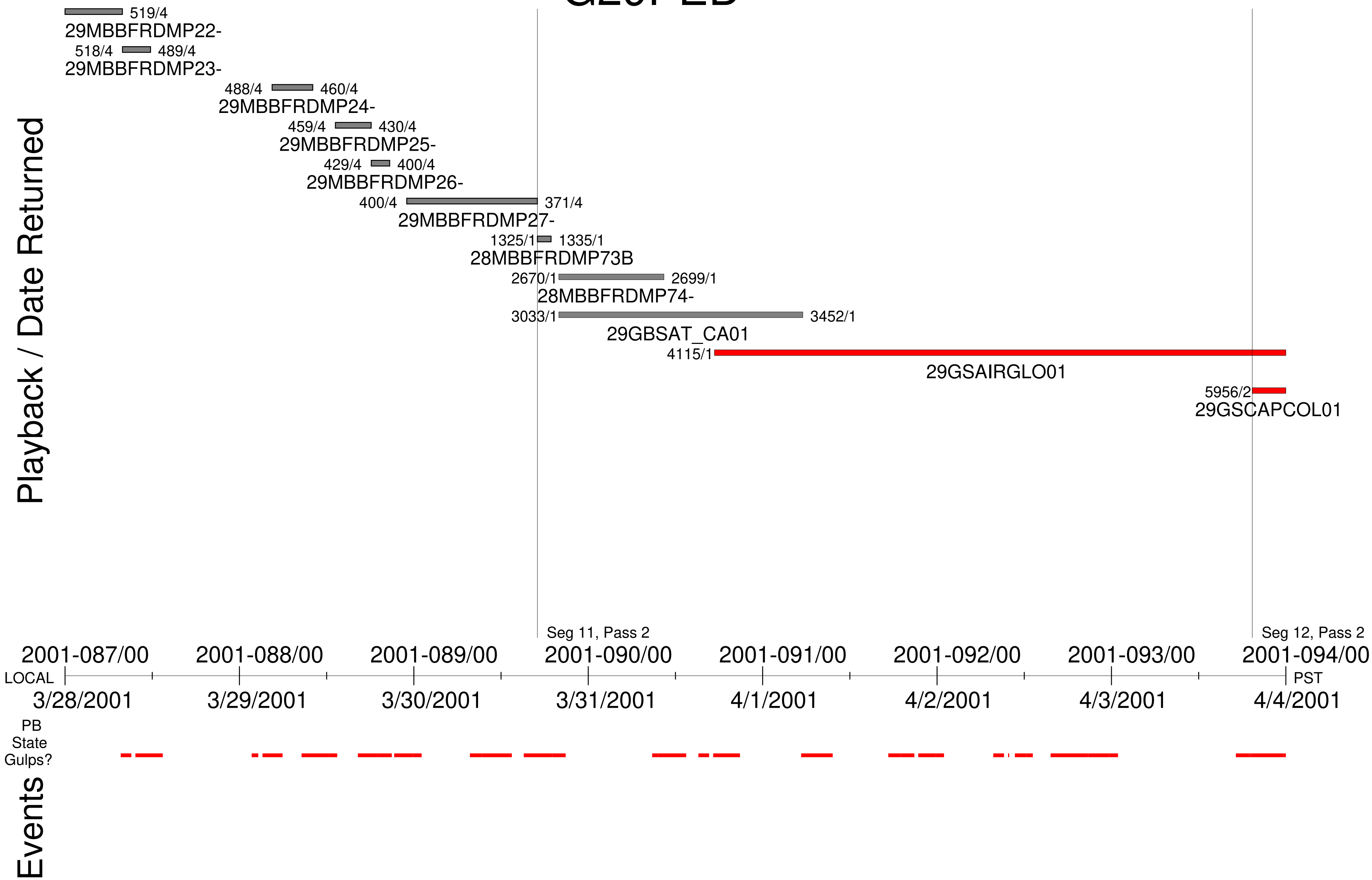

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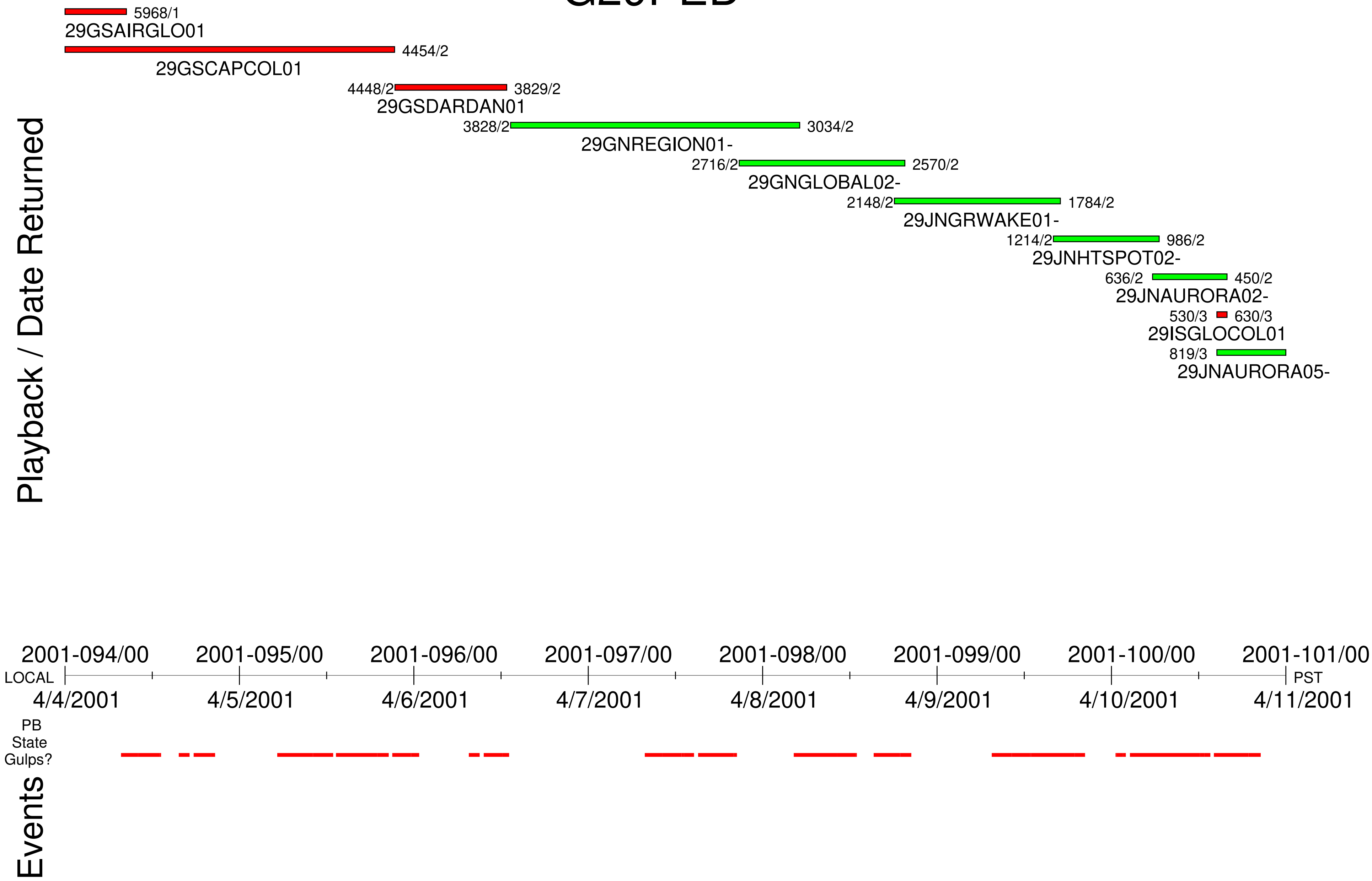

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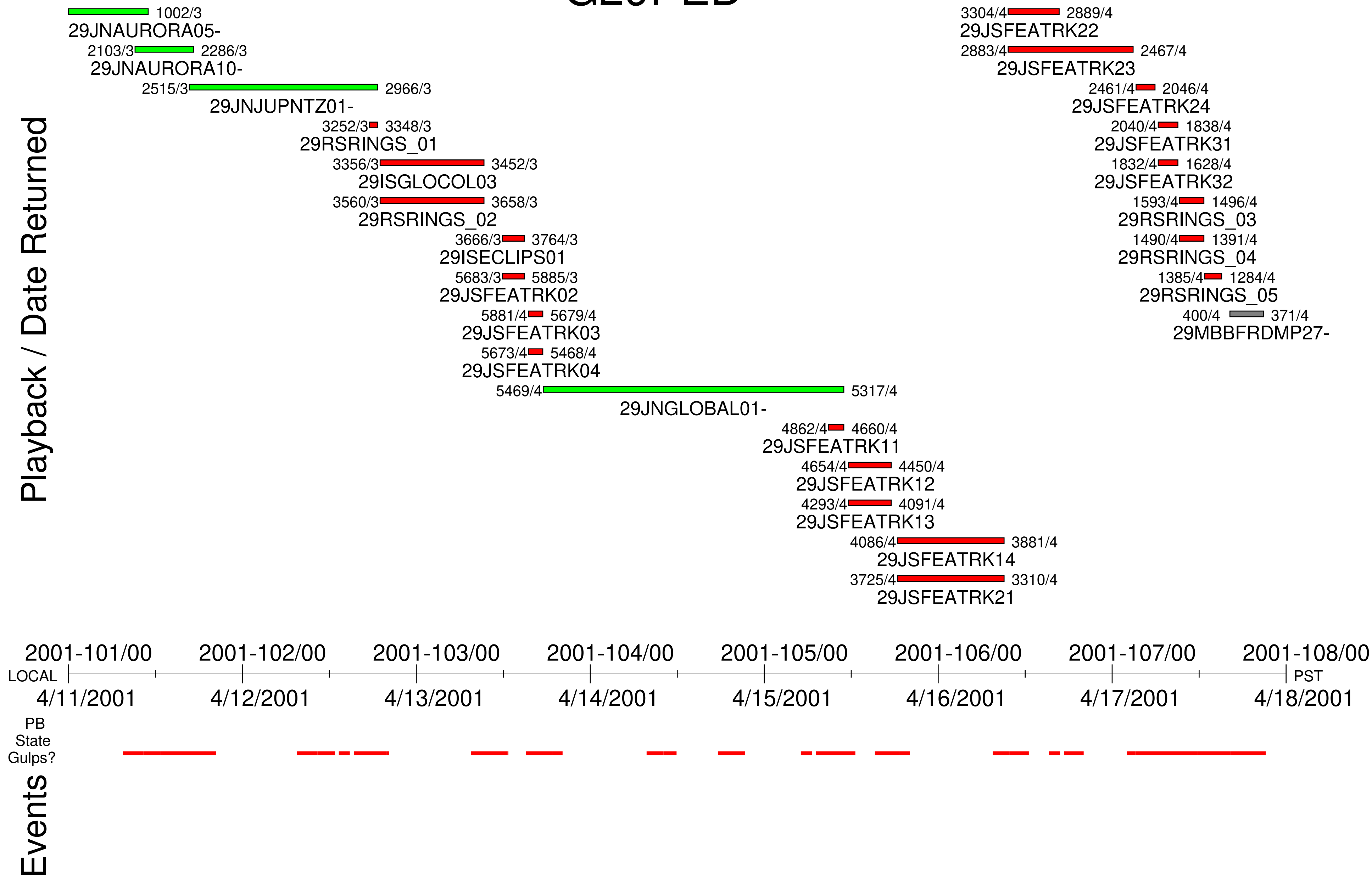

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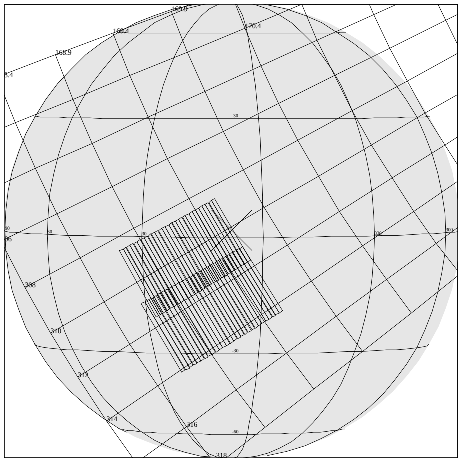

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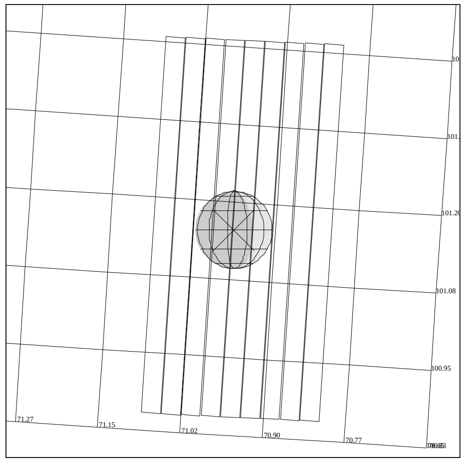

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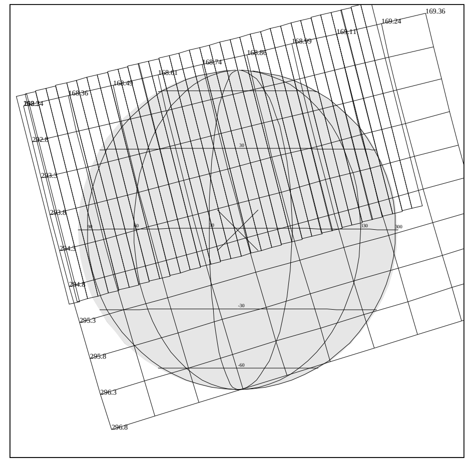

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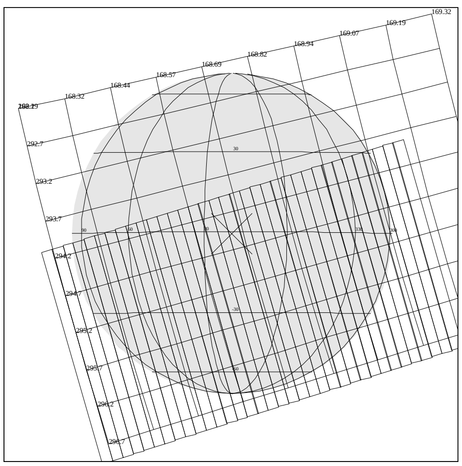

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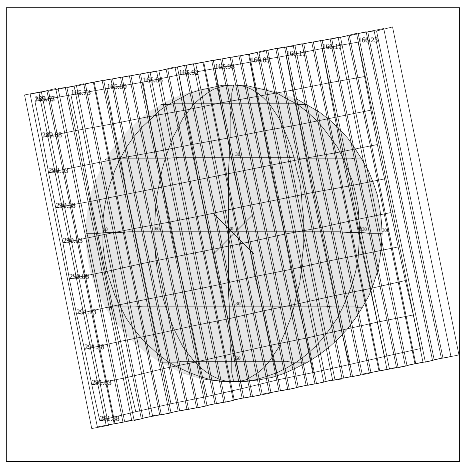

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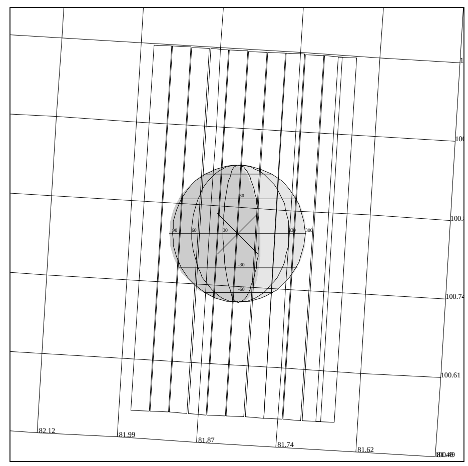

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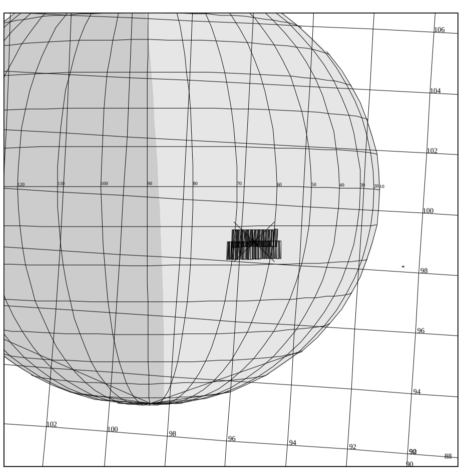

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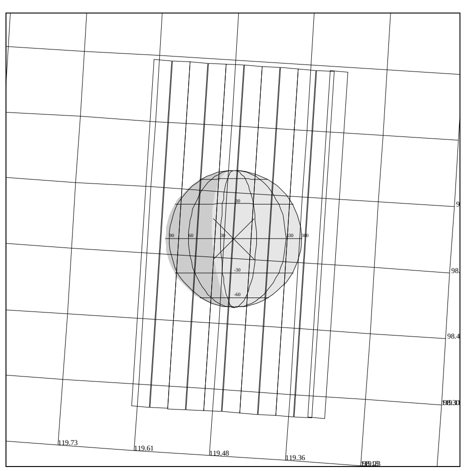

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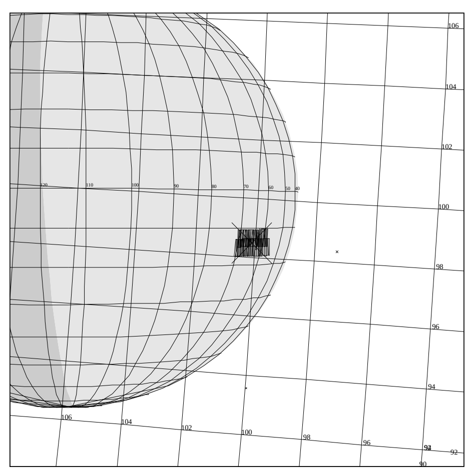

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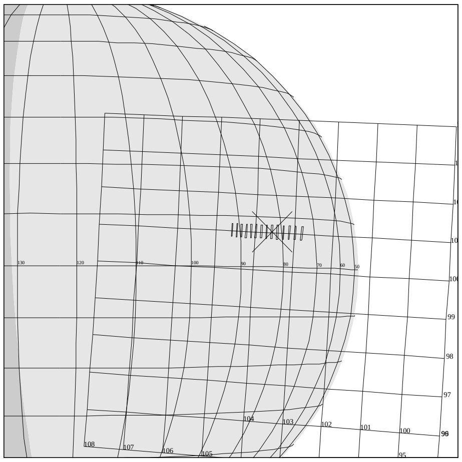

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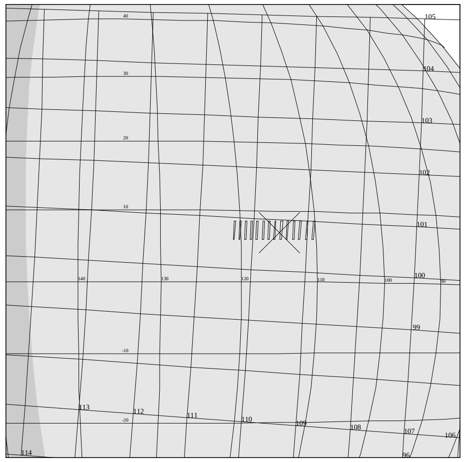

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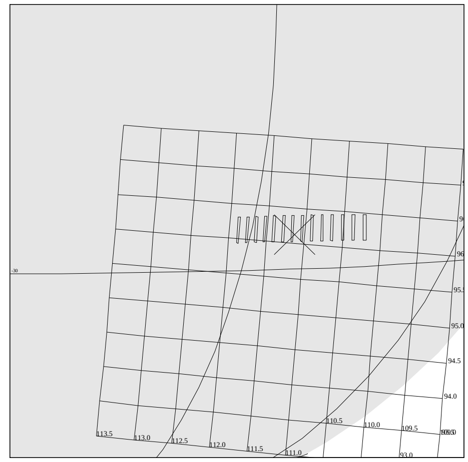

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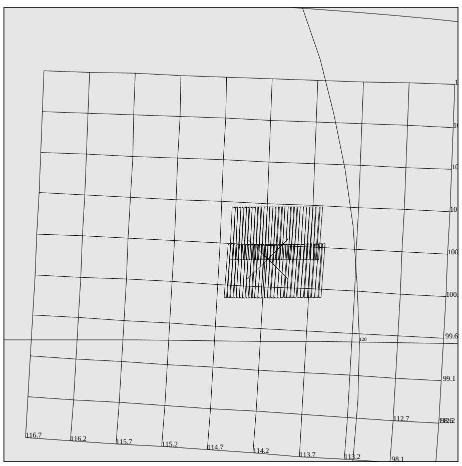

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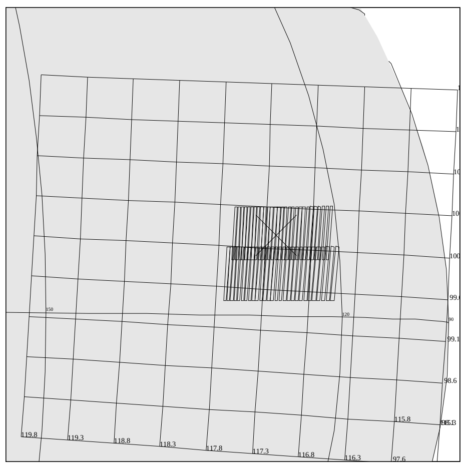

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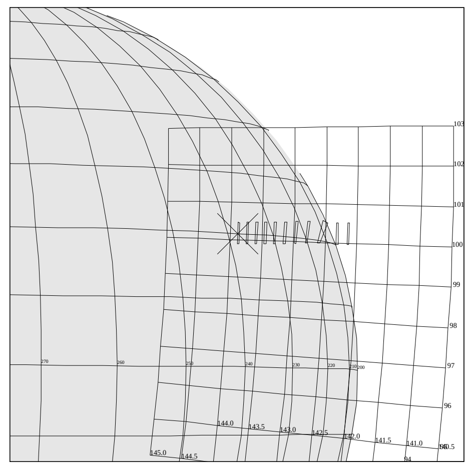

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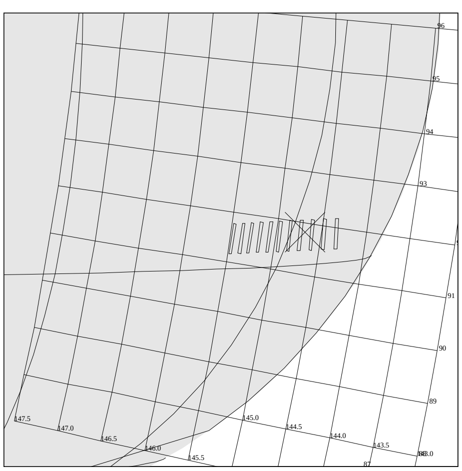

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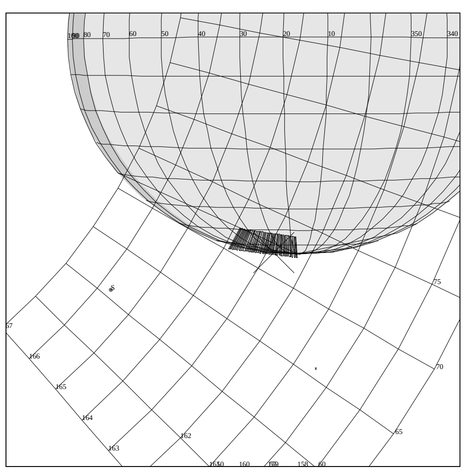

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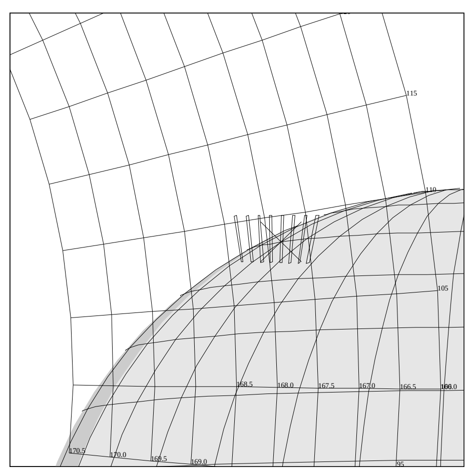

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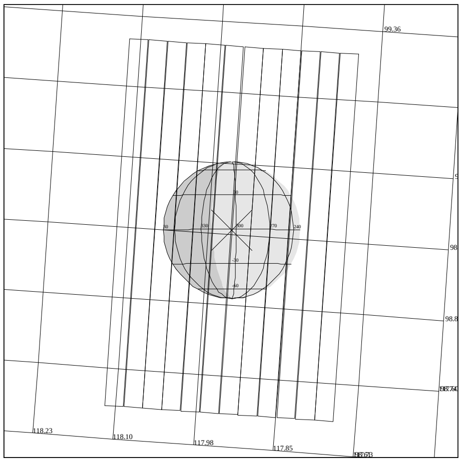

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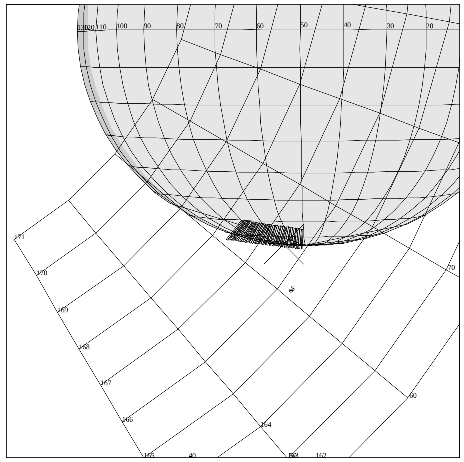

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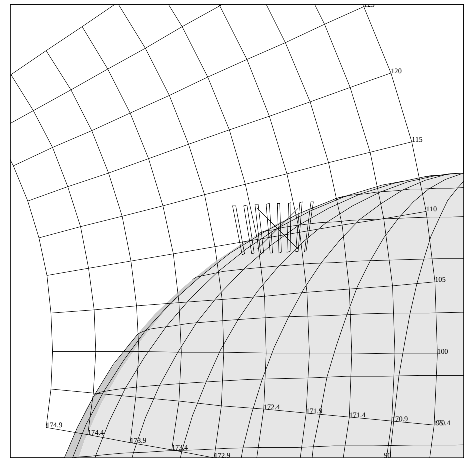

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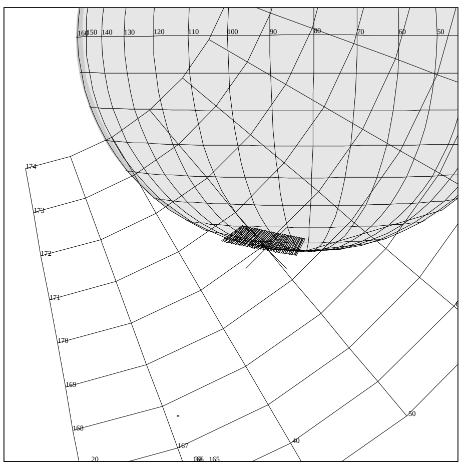

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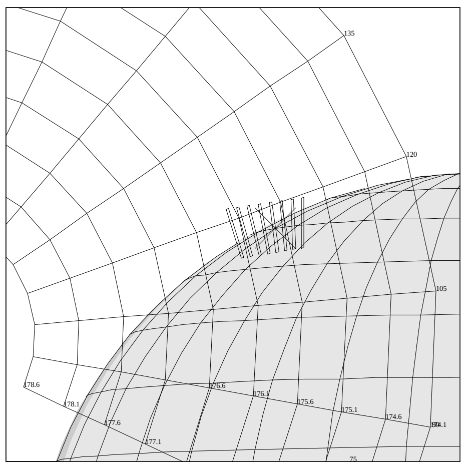

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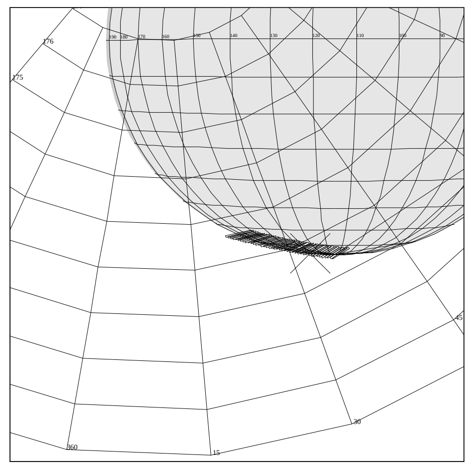

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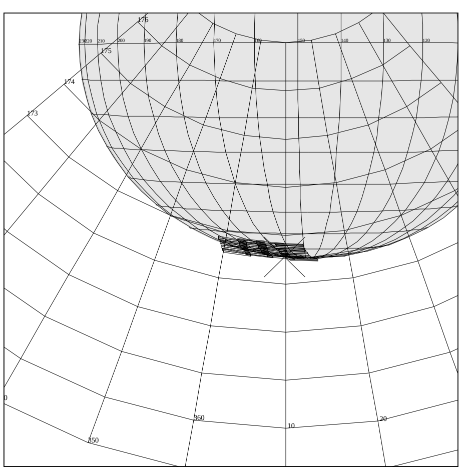

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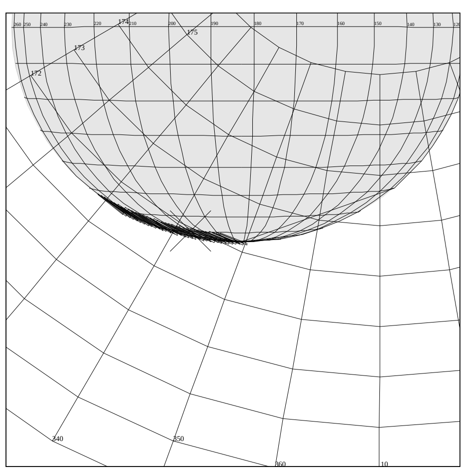

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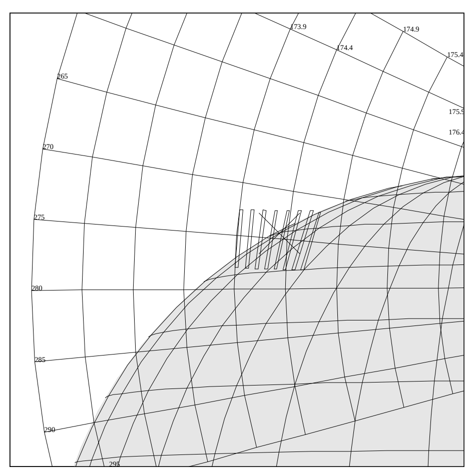

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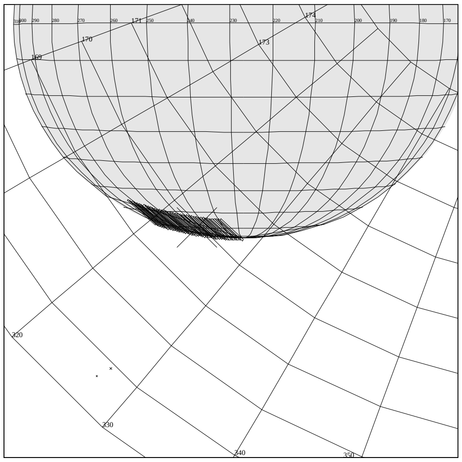

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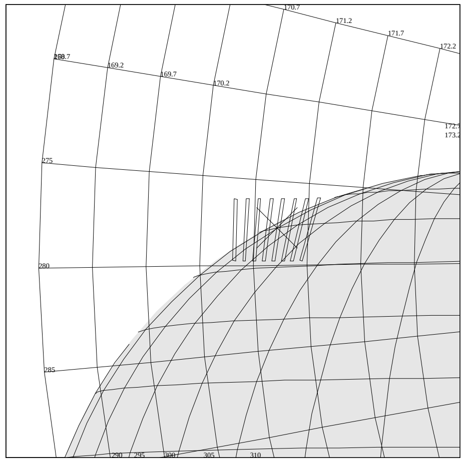

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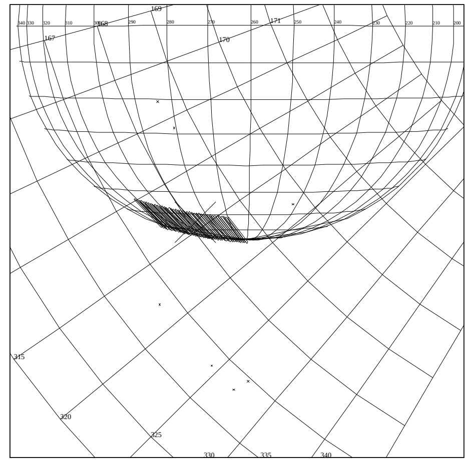

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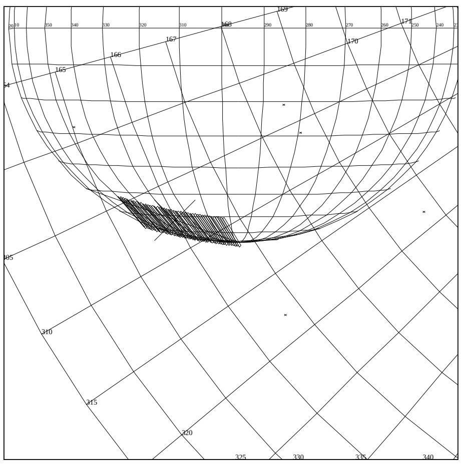

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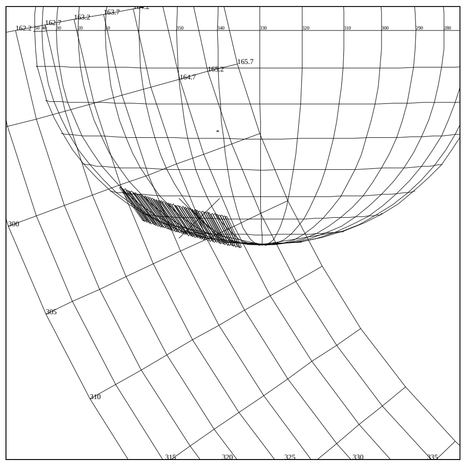

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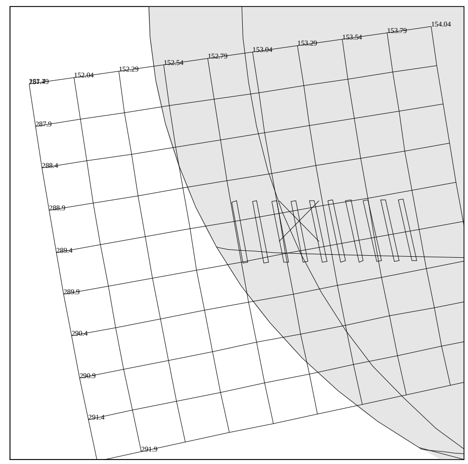

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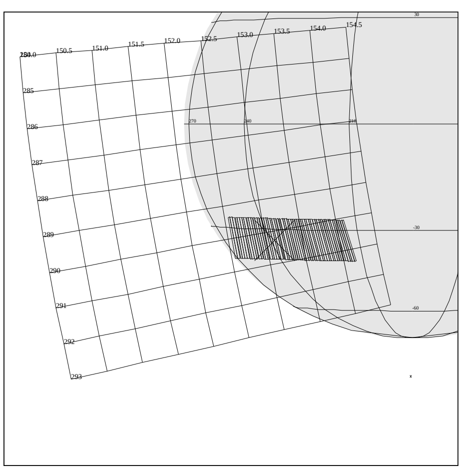

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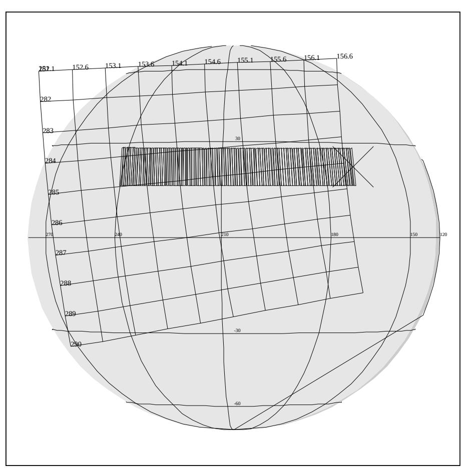

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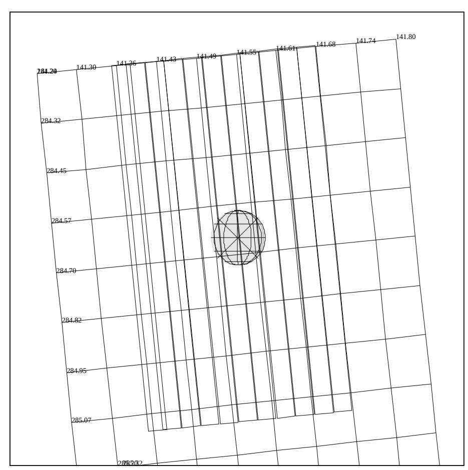

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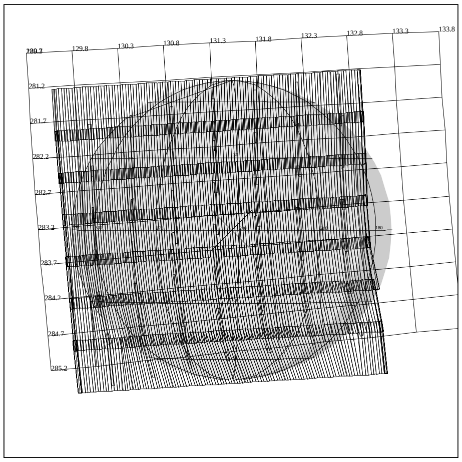

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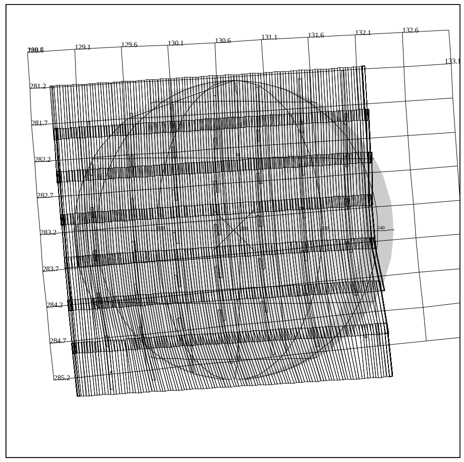

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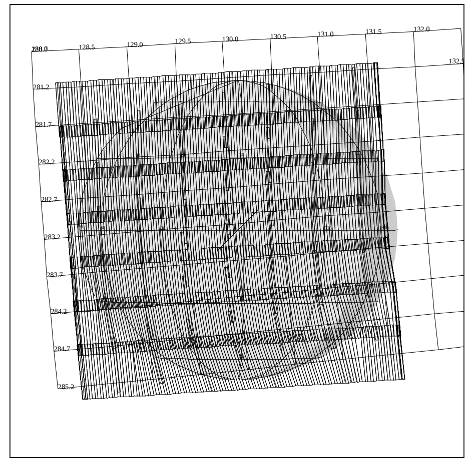

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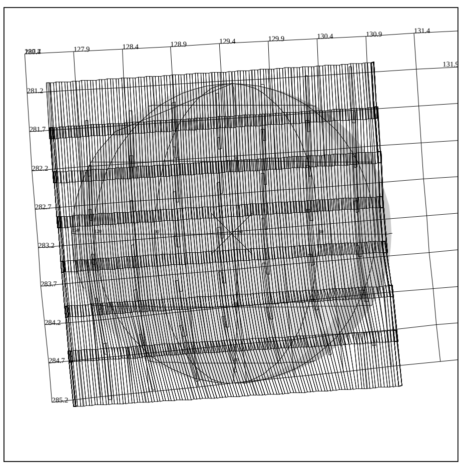

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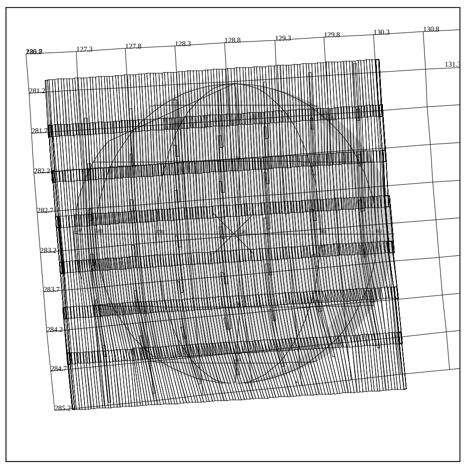

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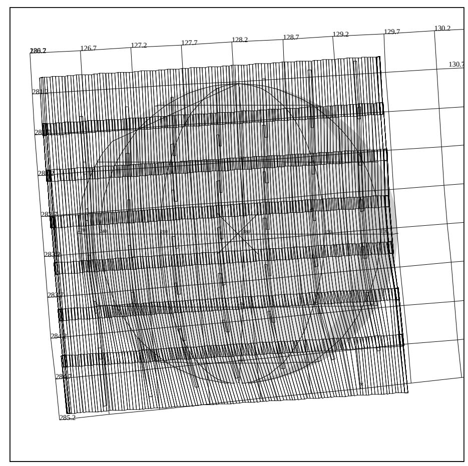

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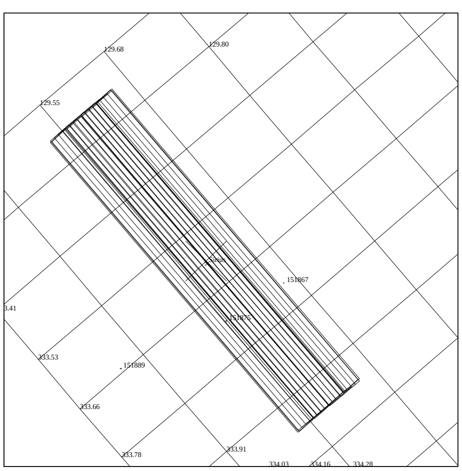

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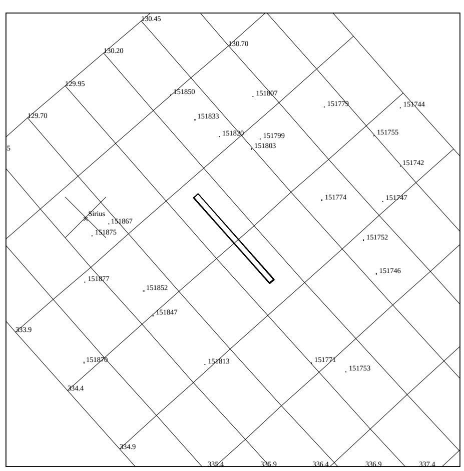

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