

## The history information of QZS-4 operation

date	event	history							mass(kg) (*2)
			start(UT)	stop(UT)	duration	$\Delta V_x$	$\Delta V_y$	$\Delta V_z$	
2018/7/19 -7/21	orbit maintenance maneuver (*1)	UNLD	2018/7/19 21:50:27	2018/7/19 21:54:59					2347
		YS→ON	2018/7/19 22:14:25	2018/7/19 22:17:37					
		#1	2018/7/19 22:22:35	2018/7/19 22:24:05	0:01:30	-2.862	-0.031	0.033	
		#2	2018/7/20 05:52:50	2018/7/20 05:54:05	0:01:15	2.366	-0.011	0.022	
		#3	2018/7/21 05:10:58	2018/7/21 05:10:59	0:00:01	-0.011	0.000	0.000	
		UNLD	2018/7/21 05:14:03	2018/7/21 05:16:11					
		ON→YS	2018/7/21 05:20:14	2018/7/21 05:21:37					
		UNLD	2018/7/21 05:26:35	2018/7/21 05:28:35					
2018/10/21	change of Yaw Steering Status	Pseudo YS	2018/10/21 03:19:26	2018/10/21 03:32:06					
			2018/10/21 14:12:46	2018/10/21 14:24:22					
2018/10/22	change of Yaw Steering Status	Pseudo YS	2018/10/22 03:15:43	2018/10/22 03:35:27					
			2018/10/22 14:09:03	2018/10/22 14:26:15					
2018/10/23	change of Yaw Steering Status	Pseudo YS	2018/10/23 03:12:47	2018/10/23 03:39:19					
			2018/10/23 14:06:15	2018/10/23 14:31:43					
2018/10/24	change of Yaw Steering Status	Pseudo YS	2018/10/24 03:10:23	2018/10/24 03:41:35					
			2018/10/24 14:03:59	2018/10/24 14:34:31					
2018/10/25	change of Yaw Steering Status	Pseudo YS	2018/10/25 03:08:15	2018/10/25 03:43:19					
			2018/10/25 14:02:07	2018/10/25 14:36:39					
2018/10/26	change of Yaw Steering Status	Pseudo YS	2018/10/26 03:06:23	2018/10/26 03:44:47					
			2018/10/26 14:00:23	2018/10/26 14:38:31					
2018/10/27	change of Yaw Steering Status	Pseudo YS	2018/10/27 03:04:39	2018/10/27 03:46:07					
			2018/10/27 13:58:55	2018/10/27 14:40:07					
2018/10/28	change of Yaw Steering Status	Pseudo YS	2018/10/28 03:03:11	2018/10/28 03:47:11					
			2018/10/28 13:57:27	2018/10/28 14:41:35					
2018/10/29	change of Yaw Steering Status	Pseudo YS	2018/10/29 03:01:35	2018/10/29 03:48:07					
			2018/10/29 13:56:15	2018/10/29 14:42:55					
2018/10/30	change of Yaw Steering Status	Pseudo YS	2018/10/30 03:00:16	2018/10/30 03:48:56					
			2018/10/30 13:55:12	2018/10/30 14:44:16					
2018/10/31	change of Yaw Steering Status	Pseudo YS	2018/10/31 02:58:56	2018/10/31 03:49:44					
			2018/10/31 13:54:08	2018/10/31 14:45:28					
2018/11/1	change of Yaw Steering Status	Pseudo YS	2018/11/1 02:57:44	2018/11/1 03:50:24					
			2018/11/1 13:53:12	2018/11/1 14:46:32					
2018/11/2	change of Yaw Steering Status	Pseudo YS	2018/11/2 02:56:32	2018/11/2 03:50:56					
			2018/11/2 13:53:04	2018/11/2 14:46:48					
2018/11/3	change of Yaw Steering Status	Pseudo YS	2018/11/3 02:56:56	2018/11/3 03:49:52					
			2018/11/3 13:54:16	2018/11/3 14:45:52					
2018/11/4	change of Yaw Steering Status	Pseudo YS	2018/11/4 02:57:36	2018/11/4 03:48:32					
			2018/11/4 13:55:28	2018/11/4 14:44:56					
2018/11/5	change of Yaw Steering Status	Pseudo YS	2018/11/5 02:58:16	2018/11/5 03:47:20					
			2018/11/5 13:56:56	2018/11/5 14:43:52					
2018/11/6	change of Yaw Steering Status	Pseudo YS	2018/11/6 02:59:04	2018/11/6 03:45:52					
			2018/11/6 13:58:24	2018/11/6 14:42:20					
2018/11/7	change of Yaw Steering Status	Pseudo YS	2018/11/7 03:00:01	2018/11/7 03:44:33					
			2018/11/7 14:00:01	2018/11/7 14:41:29					

## The history information of QZS-4 operation

date	event	history							mass(kg) (*2)
			start(UT)	stop(UT)	duration	$\Delta V_x$	$\Delta V_y$	$\Delta V_z$	
2018/11/8	change of Yaw Steering Status	Pseudo YS	2018/11/8 03:00:57	2018/11/8 03:42:57					
			2018/11/8 14:01:53	2018/11/8 14:39:53					
2018/11/9	change of Yaw Steering Status	Pseudo YS	2018/11/9 03:02:01	2018/11/9 03:41:21					
			2018/11/9 14:03:53	2018/11/9 14:38:09					
2018/11/10	change of Yaw Steering Status	Pseudo YS	2018/11/10 03:03:13	2018/11/10 03:39:29					
			2018/11/10 14:06:17	2018/11/10 14:35:53					
2018/11/11	change of Yaw Steering Status	Pseudo YS	2018/11/11 03:04:33	2018/11/11 03:37:29					
			2018/11/11 14:09:05	2018/11/11 14:32:49					
2018/11/12	change of Yaw Steering Status	Pseudo YS	2018/11/12 03:06:01	2018/11/12 03:35:05					
			2018/11/12 14:12:41	2018/11/12 14:28:01					
2018/11/13	change of Yaw Steering Status	Pseudo YS	2018/11/13 03:07:53	2018/11/13 03:32:01					
			2018/11/13 14:18:33	2018/11/13 14:25:21					
2018/11/14	change of Yaw Steering Status	Pseudo YS	2018/11/14 03:10:17	2018/11/14 03:26:41					
2018/11/15	change of Yaw Steering Status	Pseudo YS	2018/11/15 03:13:38	2018/11/15 03:24:42					
2019/1/16	orbit maintenance maneuver (*1)	UNLD	2019/1/16 09:30:17	2019/1/16 09:37:21					2335
		YS→ON	2019/1/16 09:56:35	2019/1/16 09:57:43					
		#1-1	2019/1/16 10:04:45	2019/1/16 10:08:02	0:03:17	-3.176	-0.009	0.044	
		#1-2	2019/1/16 11:12:09	2019/1/16 11:15:25	0:03:16	-3.176	-0.007	0.043	
		#2-1	2019/1/16 17:34:55	2019/1/16 17:37:52	0:02:57	2.868	0.047	0.024	
		#2-2	2019/1/16 18:42:19	2019/1/16 18:45:15	0:02:56	2.868	0.045	0.024	
		#3	2019/1/16 23:06:55	2019/1/16 23:07:03	0:00:08	0.126	0.002	0.001	
		UNLD	2019/1/16 23:10:01	2019/1/16 23:12:09					
		ON→YS	2019/1/16 23:16:14	2019/1/16 23:19:51					
UNLD	2019/1/16 23:22:33	2019/1/16 23:24:41							
2019/4/12	change of Yaw Steering Status	Pseudo YS	2019/4/12 15:35:00	2019/4/12 15:41:56					
2019/4/13	change of Yaw Steering Status	Pseudo YS	2019/4/13 02:27:56	2019/4/13 02:33:32					
			2019/4/13 15:29:40	2019/4/13 15:44:12					
2019/4/14	change of Yaw Steering Status	Pseudo YS	2019/4/14 02:22:12	2019/4/14 02:36:12					
			2019/4/14 15:26:04	2019/4/14 15:48:04					
2019/4/15	change of Yaw Steering Status	Pseudo YS	2019/4/15 02:18:52	2019/4/15 02:39:56					
			2019/4/15 15:23:16	2019/4/15 15:50:52					
2019/4/16	change of Yaw Steering Status	Pseudo YS	2019/4/16 02:16:13	2019/4/16 02:43:17					
			2019/4/16 15:20:45	2019/4/16 15:52:45					
2019/4/17	change of Yaw Steering Status	Pseudo YS	2019/4/17 02:13:57	2019/4/17 02:45:33					
			2019/4/17 15:18:37	2019/4/17 15:54:13					
2019/4/18	change of Yaw Steering Status	Pseudo YS	2019/4/18 02:11:57	2019/4/18 02:47:25					
			2019/4/18 15:16:37	2019/4/18 15:55:25					
2019/4/19	change of Yaw Steering Status	Pseudo YS	2019/4/19 02:10:13	2019/4/19 02:48:53					
			2019/4/19 15:14:45	2019/4/19 15:56:21					
2019/4/20	change of Yaw Steering Status	Pseudo YS	2019/4/20 02:08:37	2019/4/20 02:50:13					
			2019/4/20 15:13:01	2019/4/20 15:57:09					
2019/4/21	change of Yaw Steering Status	Pseudo YS	2019/4/21 02:07:09	2019/4/21 02:51:25					
			2019/4/21 15:11:17	2019/4/21 15:57:49					
2019/4/22	change of Yaw Steering Status	Pseudo YS	2019/4/22 02:05:41	2019/4/22 02:52:21					
			2019/4/22 15:09:49	2019/4/22 15:58:21					

## The history information of QZS-4 operation

date	event	history							mass(kg) (*2)
			start(UT)	stop(UT)	duration	$\Delta V_x$	$\Delta V_y$	$\Delta V_z$	
2019/4/23	change of Yaw Steering Status	Pseudo YS	2019/4/23 02:04:21	2019/4/23 02:53:25					
			2019/4/23 15:08:21	2019/4/23 15:58:53					
2019/4/24	change of Yaw Steering Status	Pseudo YS	2019/4/24 02:03:10	2019/4/24 02:54:14					
			2019/4/24 15:06:54	2019/4/24 15:59:18					
2019/4/25	change of Yaw Steering Status	Pseudo YS	2019/4/25 02:02:06	2019/4/25 02:55:10					
			2019/4/25 15:05:34	2019/4/25 15:59:42					
2019/4/26	change of Yaw Steering Status	Pseudo YS	2019/4/26 02:01:18	2019/4/26 02:55:26					
			2019/4/26 15:05:26	2019/4/26 15:58:38					
2019/4/27	change of Yaw Steering Status	Pseudo YS	2019/4/27 02:02:06	2019/4/27 02:54:22					
			2019/4/27 15:05:50	2019/4/27 15:57:18					
2019/4/28	change of Yaw Steering Status	Pseudo YS	2019/4/28 02:03:02	2019/4/28 02:53:10					
			2019/4/28 15:06:14	2019/4/28 15:55:50					
2019/4/29	change of Yaw Steering Status	Pseudo YS	2019/4/29 02:03:58	2019/4/29 02:51:58					
			2019/4/29 15:06:38	2019/4/29 15:54:14					
2019/4/30	change of Yaw Steering Status	Pseudo YS	2019/4/30 02:05:10	2019/4/30 02:50:38					
			2019/4/30 15:07:10	2019/4/30 15:52:38					
2019/5/1	change of Yaw Steering Status	Pseudo YS	2019/5/1 02:06:22	2019/5/1 02:49:10					
			2019/5/1 15:07:42	2019/5/1 15:51:02					
2019/5/2	change of Yaw Steering Status	Pseudo YS	2019/5/2 02:07:43	2019/5/2 02:47:35					
			2019/5/2 15:08:23	2019/5/2 15:49:11					
2019/5/3	change of Yaw Steering Status	Pseudo YS	2019/5/3 02:09:19	2019/5/3 02:45:51					
			2019/5/3 15:09:11	2019/5/3 15:47:19					
2019/5/4	change of Yaw Steering Status	Pseudo YS	2019/5/4 02:11:03	2019/5/4 02:43:51					
			2019/5/4 15:10:07	2019/5/4 15:45:19					
2019/5/5	change of Yaw Steering Status	Pseudo YS	2019/5/5 02:13:03	2019/5/5 02:41:19					
			2019/5/5 15:11:11	2019/5/5 15:43:03					
2019/5/6	change of Yaw Steering Status	Pseudo YS	2019/5/6 02:15:35	2019/5/6 02:37:43					
			2019/5/6 15:12:23	2019/5/6 15:40:23					
2019/5/7	change of Yaw Steering Status	Pseudo YS	2019/5/7 02:18:55	2019/5/7 02:33:19					
			2019/5/7 15:13:59	2019/5/7 15:37:03					
2019/5/8	change of Yaw Steering Status	Pseudo YS	2019/5/8 02:24:47	2019/5/8 02:30:07					
			2019/5/8 15:15:59	2019/5/8 15:31:59					
2019/5/9	change of Yaw Steering Status	Pseudo YS	2019/5/9 15:18:55	2019/5/9 15:29:43					
2019/7/13 -7/14	orbit maintenance maneuver (*1)	UNLD	2019/7/13 21:56:56	2019/7/13 22:01:44					2325
		YS→ON	2019/7/13 22:21:23	2019/7/13 22:24:46					
		#1	2019/7/13 22:29:33	2019/7/13 22:34:19	0:04:46	-4.631	-0.050	0.053	
		#2	2019/7/14 05:59:47	2019/7/14 06:04:06	0:04:19	4.179	-0.019	0.039	
		#3	2019/7/14 10:58:49	2019/7/14 10:58:51	0:00:02	-0.037	0.000	0.000	
		UNLD	2019/7/14 11:12:40	2019/7/14 11:14:40					
		ON→YS	2019/7/14 11:14:43	2019/7/14 11:15:58					
		UNLD	2019/7/14 11:20:56	2019/7/14 11:22:56					
2019/10/11	change of Yaw Steering Status	Pseudo YS	2019/10/11 03:15:07	2019/10/11 03:20:35					
			2019/10/11 14:06:27	2019/10/11 14:12:59					
2019/10/12	change of Yaw Steering Status	Pseudo YS	2019/10/12 03:09:23	2019/10/12 03:23:15					
			2019/10/12 14:01:23	2019/10/12 14:15:31					

## The history information of QZS-4 operation

date	event	history							mass(kg) (*2)
			start(UT)	stop(UT)	duration	$\Delta V_x$	$\Delta V_y$	$\Delta V_z$	
2019/10/13	change of Yaw Steering Status	Pseudo YS	2019/10/13 03:05:55	2019/10/13 03:26:59					
			2019/10/13 13:58:11	2019/10/13 14:19:07					
2019/10/14	change of Yaw Steering Status	Pseudo YS	2019/10/14 03:03:15	2019/10/14 03:30:11					
			2019/10/14 13:55:39	2019/10/14 14:22:35					
2019/10/15	change of Yaw Steering Status	Pseudo YS	2019/10/15 03:00:59	2019/10/15 03:32:19					
			2019/10/15 13:53:31	2019/10/15 14:24:59					
2019/10/16	change of Yaw Steering Status	Pseudo YS	2019/10/16 02:59:00	2019/10/16 03:34:04					
			2019/10/16 13:51:40	2019/10/16 14:26:52					
2019/10/17	change of Yaw Steering Status	Pseudo YS	2019/10/17 02:57:08	2019/10/17 03:35:24					
			2019/10/17 13:50:04	2019/10/17 14:28:28					
2019/10/18	change of Yaw Steering Status	Pseudo YS	2019/10/18 02:55:24	2019/10/18 03:36:36					
			2019/10/18 13:48:36	2019/10/18 14:29:56					
2019/10/19	change of Yaw Steering Status	Pseudo YS	2019/10/19 02:53:56	2019/10/19 03:37:40					
			2019/10/19 13:47:08	2019/10/19 14:31:08					
2019/10/20	change of Yaw Steering Status	Pseudo YS	2019/10/20 02:52:28	2019/10/20 03:38:36					
			2019/10/20 13:45:56	2019/10/20 14:32:28					
2019/10/21	change of Yaw Steering Status	Pseudo YS	2019/10/21 02:51:00	2019/10/21 03:39:24					
			2019/10/21 13:44:52	2019/10/21 14:33:32					
2019/10/22	change of Yaw Steering Status	Pseudo YS	2019/10/22 02:49:48	2019/10/22 03:40:04					
			2019/10/22 13:43:48	2019/10/22 14:34:36					
2019/10/23	change of Yaw Steering Status	Pseudo YS	2019/10/23 02:48:28	2019/10/23 03:40:36					
			2019/10/23 13:42:52	2019/10/23 14:35:40					
2019/10/24	change of Yaw Steering Status	Pseudo YS	2019/10/24 02:47:17	2019/10/24 03:41:17					
			2019/10/24 13:42:05	2019/10/24 14:36:29					
2019/10/25	change of Yaw Steering Status	Pseudo YS	2019/10/25 02:47:09	2019/10/25 03:40:37					
			2019/10/25 13:43:01	2019/10/25 14:35:33					
2019/10/26	change of Yaw Steering Status	Pseudo YS	2019/10/26 02:47:41	2019/10/26 03:39:33					
			2019/10/26 13:44:05	2019/10/26 14:34:37					
2019/10/27	change of Yaw Steering Status	Pseudo YS	2019/10/27 02:48:21	2019/10/27 03:38:13					
			2019/10/27 13:45:17	2019/10/27 14:33:41					
2019/10/28	change of Yaw Steering Status	Pseudo YS	2019/10/28 02:49:01	2019/10/28 03:37:01					
			2019/10/28 13:46:37	2019/10/28 14:32:29					
2019/10/29	change of Yaw Steering Status	Pseudo YS	2019/10/29 02:49:49	2019/10/29 03:35:41					
			2019/10/29 13:47:57	2019/10/29 14:31:17					
2019/10/30	change of Yaw Steering Status	Pseudo YS	2019/10/30 02:50:37	2019/10/30 03:34:13					
			2019/10/30 13:49:25	2019/10/30 14:29:57					
2019/10/31	change of Yaw Steering Status	Pseudo YS	2019/10/31 02:51:33	2019/10/31 03:32:37					
			2019/10/31 13:51:09	2019/10/31 14:28:21					
2019/11/1	change of Yaw Steering Status	Pseudo YS	2019/11/1 02:52:38	2019/11/1 03:31:02					
			2019/11/1 13:53:10	2019/11/1 14:26:30					
2019/11/2	change of Yaw Steering Status	Pseudo YS	2019/11/2 02:53:42	2019/11/2 03:29:10					
			2019/11/2 13:55:18	2019/11/2 14:24:22					
2019/11/3	change of Yaw Steering Status	Pseudo YS	2019/11/3 02:55:02	2019/11/3 03:27:02					
			2019/11/3 13:57:58	2019/11/3 14:21:10					

## The history information of QZS-4 operation

date	event	history							mass(kg) (*2)
			start(UT)	stop(UT)	duration	$\Delta V_x$	$\Delta V_y$	$\Delta V_z$	
2019/11/4	change of Yaw Steering Status	Pseudo YS	2019/11/4 02:56:38	2019/11/4 03:24:38					
			2019/11/4 14:01:26	2019/11/4 14:16:38					
2019/11/5	change of Yaw Steering Status	Pseudo YS	2019/11/5 02:58:22	2019/11/5 03:21:34					
			2019/11/5 14:06:54	2019/11/5 14:14:06					
2019/11/6	change of Yaw Steering Status	Pseudo YS	2019/11/6 03:00:38	2019/11/6 03:16:38					
2019/11/7	change of Yaw Steering Status	Pseudo YS	2019/11/7 03:03:50	2019/11/7 03:14:30					
2020/1/10	orbit maintenance maneuver (*1)	UNLD	2020/1/10 10:04:38	2020/1/10 10:11:58					2316
		YS→ON	2020/1/10 10:31:47	2020/1/10 10:32:36					
		#1	2020/1/10 10:39:57	2020/1/10 10:44:46	0:04:49	-4.735	0.008	0.062	
		#2	2020/1/10 18:10:14	2020/1/10 18:14:29	0:04:15	4.179	0.051	0.033	
		#3	2020/1/10 23:09:14	2020/1/10 23:09:17	0:00:03	0.064	0.001	0.001	
		UNLD	2020/1/10 23:12:22	2020/1/10 23:14:22					
		ON→YS	2020/1/10 23:18:31	2020/1/10 23:21:40					
		UNLD	2020/1/10 23:24:54	2020/1/10 23:26:54					
2020/4/2	change of Yaw Steering Status	Pseudo YS	2020/4/2 02:24:09	2020/4/2 02:25:45					
			2020/4/2 15:26:17	2020/4/2 15:37:21					
2020/4/3	change of Yaw Steering Status	Pseudo YS	2020/4/3 02:16:49	2020/4/3 02:29:29					
			2020/4/3 15:22:17	2020/4/3 15:38:49					
2020/4/4	change of Yaw Steering Status	Pseudo YS	2020/4/4 02:13:21	2020/4/4 02:30:49					
			2020/4/4 15:19:13	2020/4/4 15:43:45					
2020/4/5	change of Yaw Steering Status	Pseudo YS	2020/4/5 02:10:41	2020/4/5 02:36:01					
			2020/4/5 15:16:49	2020/4/5 15:46:09					
2020/4/6	change of Yaw Steering Status	Pseudo YS	2020/4/6 02:08:33	2020/4/6 02:38:25					
			2020/4/6 15:14:33	2020/4/6 15:47:53					
2020/4/7	change of Yaw Steering Status	Pseudo YS	2020/4/7 02:06:33	2020/4/7 02:40:17					
			2020/4/7 15:12:41	2020/4/7 15:49:13					
2020/4/8	change of Yaw Steering Status	Pseudo YS	2020/4/8 02:04:50	2020/4/8 02:41:54					
			2020/4/8 15:10:50	2020/4/8 15:50:26					
2020/4/9	change of Yaw Steering Status	Pseudo YS	2020/4/9 02:03:14	2020/4/9 02:43:14					
			2020/4/9 15:09:14	2020/4/9 15:51:30					
2020/4/10	change of Yaw Steering Status	Pseudo YS	2020/4/10 02:01:46	2020/4/10 02:44:26					
			2020/4/10 15:07:38	2020/4/10 15:52:18					
2020/4/11	change of Yaw Steering Status	Pseudo YS	2020/4/11 02:00:26	2020/4/11 02:45:30					
			2020/4/11 15:06:10	2020/4/11 15:53:06					
2020/4/12	change of Yaw Steering Status	Pseudo YS	2020/4/12 01:59:06	2020/4/12 02:46:34					
			2020/4/12 15:04:50	2020/4/12 15:53:46					
2020/4/13	change of Yaw Steering Status	Pseudo YS	2020/4/13 01:57:54	2020/4/13 02:47:30					
			2020/4/13 15:03:30	2020/4/13 15:54:26					
2020/4/14	change of Yaw Steering Status	Pseudo YS	2020/4/14 01:56:50	2020/4/14 02:48:18					
			2020/4/14 15:02:18	2020/4/14 15:54:50					
2020/4/15	change of Yaw Steering Status	Pseudo YS	2020/4/15 01:55:46	2020/4/15 02:49:06					
			2020/4/15 15:00:58	2020/4/15 15:55:22					
2020/4/16	change of Yaw Steering Status	Pseudo YS	2020/4/16 01:55:23	2020/4/16 02:49:23					
			2020/4/16 15:01:15	2020/4/16 15:54:19					

## The history information of QZS-4 operation

date	event	history							mass(kg) (※2)
			start(UT)	stop(UT)	duration	$\Delta V_x$	$\Delta V_y$	$\Delta V_z$	
2020/4/17	change of Yaw Steering Status	Pseudo YS	2020/4/17 01:56:11	2020/4/17 02:48:19					
			2020/4/17 15:01:39	2020/4/17 15:52:59					
2020/4/18	change of Yaw Steering Status	Pseudo YS	2020/4/18 01:57:07	2020/4/18 02:47:15					
			2020/4/18 15:02:11	2020/4/18 15:51:47					
2020/4/19	change of Yaw Steering Status	Pseudo YS	2020/4/19 01:58:03	2020/4/19 02:46:11					
			2020/4/19 15:02:43	2020/4/19 15:50:19					
2020/4/20	change of Yaw Steering Status	Pseudo YS	2020/4/20 01:59:07	2020/4/20 02:44:59					
			2020/4/20 15:03:15	2020/4/20 15:48:51					
2020/4/21	change of Yaw Steering Status	Pseudo YS	2020/4/21 02:00:19	2020/4/21 02:43:39					
			2020/4/21 15:03:55	2020/4/21 15:47:23					
2020/4/22	change of Yaw Steering Status	Pseudo YS	2020/4/22 02:01:39	2020/4/22 02:42:11					
			2020/4/22 15:04:43	2020/4/22 15:45:47					
2020/4/23	change of Yaw Steering Status	Pseudo YS	2020/4/23 02:03:08	2020/4/23 02:40:36					
			2020/4/23 15:05:32	2020/4/23 15:44:04					
2020/4/24	change of Yaw Steering Status	Pseudo YS	2020/4/24 02:04:44	2020/4/24 02:38:44					
			2020/4/24 15:06:36	2020/4/24 15:42:12					
2020/4/25	change of Yaw Steering Status	Pseudo YS	2020/4/25 02:06:36	2020/4/25 02:36:36					
			2020/4/25 15:07:40	2020/4/25 15:40:12					
2020/4/26	change of Yaw Steering Status	Pseudo YS	2020/4/26 02:08:52	2020/4/26 02:33:48					
			2020/4/26 15:09:00	2020/4/26 15:37:48					
2020/4/27	change of Yaw Steering Status	Pseudo YS	2020/4/27 02:11:40	2020/4/27 02:28:28					
			2020/4/27 15:10:28	2020/4/27 15:34:52					
2020/4/28	change of Yaw Steering Status	Pseudo YS	2020/4/28 02:15:32	2020/4/28 02:26:28					
			2020/4/28 15:12:20	2020/4/28 15:29:32					
2020/4/29	change of Yaw Steering Status	Pseudo YS	2020/4/29 15:15:00	2020/4/29 15:27:32					
2020/4/30	change of Yaw Steering Status	Pseudo YS	2020/4/30 15:19:48	2020/4/30 15:24:20					
2020/7/11 -7/12 (*1)	orbit maintenance maneuver (*1)	UNLD	2020/7/11 22:00:46	2020/7/11 22:05:18					2306
		YS→ON	2020/7/11 22:24:41	2020/7/11 22:28:12					
		#1	2020/7/11 22:32:51	2020/7/11 22:37:39	0:04:48	-4.650	-0.016	0.055	
		#2	2020/7/12 06:03:07	2020/7/12 06:07:23	0:04:16	4.086	-0.042	0.040	
		#3	2020/7/12 11:02:07	2020/7/12 11:02:12	0:00:05	-0.072	0.000	0.001	
		UNLD	2020/7/12 11:05:18	2020/7/12 11:07:18					
		ON→YS	2020/7/12 11:11:24	2020/7/12 11:12:28					
2020/9/30	change of Yaw Steering Status	Pseudo YS	2020/9/30 14:05:20	2020/9/30 14:11:36					
2020/10/1	change of Yaw Steering Status	Pseudo YS	2020/10/1 03:10:16	2020/10/1 03:21:28					
			2020/10/1 14:00:16	2020/10/1 14:14:00					
2020/10/2	change of Yaw Steering Status	Pseudo YS	2020/10/2 03:06:24	2020/10/2 03:23:04					
			2020/10/2 13:57:04	2020/10/2 14:16:40					
2020/10/3	change of Yaw Steering Status	Pseudo YS	2020/10/3 03:03:28	2020/10/3 03:27:52					
			2020/10/3 13:54:32	2020/10/3 14:20:24					
2020/10/4	change of Yaw Steering Status	Pseudo YS	2020/10/4 03:01:04	2020/10/4 03:30:24					
			2020/10/4 13:52:16	2020/10/4 14:22:32					
2020/10/5	change of Yaw Steering Status	Pseudo YS	2020/10/5 02:58:56	2020/10/5 03:32:08					
			2020/10/5 13:50:24	2020/10/5 14:24:16					

## The history information of QZS-4 operation

date	event	history							mass(kg) (*2)
			start(UT)	stop(UT)	duration	$\Delta V_x$	$\Delta V_y$	$\Delta V_z$	
2020/10/6	change of Yaw Steering Status	Pseudo YS	2020/10/6 02:57:04	2020/10/6 03:33:36					
			2020/10/6 13:48:40	2020/10/6 14:25:52					
2020/10/7	change of Yaw Steering Status	Pseudo YS	2020/10/7 02:55:21	2020/10/7 03:34:49					
			2020/10/7 13:47:05	2020/10/7 14:27:05					
2020/10/8	change of Yaw Steering Status	Pseudo YS	2020/10/8 02:53:45	2020/10/8 03:35:53					
			2020/10/8 13:45:37	2020/10/8 14:28:17					
2020/10/9	change of Yaw Steering Status	Pseudo YS	2020/10/9 02:52:17	2020/10/9 03:36:49					
			2020/10/9 13:44:17	2020/10/9 14:29:21					
2020/10/10	change of Yaw Steering Status	Pseudo YS	2020/10/10 02:50:49	2020/10/10 03:37:37					
			2020/10/10 13:42:57	2020/10/10 14:30:17					
2020/10/11	change of Yaw Steering Status	Pseudo YS	2020/10/11 02:49:29	2020/10/11 03:38:25					
			2020/10/11 13:41:53	2020/10/11 14:31:21					
2020/10/12	change of Yaw Steering Status	Pseudo YS	2020/10/12 02:48:17	2020/10/12 03:38:57					
			2020/10/12 13:40:49	2020/10/12 14:32:09					
2020/10/13	change of Yaw Steering Status	Pseudo YS	2020/10/13 02:47:05	2020/10/13 03:39:37					
			2020/10/13 13:39:53	2020/10/13 14:33:05					
2020/10/14	change of Yaw Steering Status	Pseudo YS	2020/10/14 02:45:53	2020/10/14 03:40:01					
			2020/10/14 13:39:21	2020/10/14 14:33:21					
2020/10/15	change of Yaw Steering Status	Pseudo YS	2020/10/15 02:46:02	2020/10/15 03:39:14					
			2020/10/15 13:40:10	2020/10/15 14:32:26					
2020/10/16	change of Yaw Steering Status	Pseudo YS	2020/10/16 02:46:34	2020/10/16 03:38:02					
			2020/10/16 13:41:06	2020/10/16 14:31:30					
2020/10/17	change of Yaw Steering Status	Pseudo YS	2020/10/17 02:47:06	2020/10/17 03:36:50					
			2020/10/17 13:42:02	2020/10/17 14:30:26					
2020/10/18	change of Yaw Steering Status	Pseudo YS	2020/10/18 02:47:46	2020/10/18 03:35:38					
			2020/10/18 13:43:06	2020/10/18 14:29:14					
2020/10/19	change of Yaw Steering Status	Pseudo YS	2020/10/19 02:48:26	2020/10/19 03:34:18					
			2020/10/19 13:44:18	2020/10/19 14:28:02					
2020/10/20	change of Yaw Steering Status	Pseudo YS	2020/10/20 02:49:14	2020/10/20 03:32:50					
			2020/10/20 13:45:38	2020/10/20 14:26:34					
2020/10/21	change of Yaw Steering Status	Pseudo YS	2020/10/21 02:50:10	2020/10/21 03:31:22					
			2020/10/21 13:47:06	2020/10/21 14:25:06					
2020/10/22	change of Yaw Steering Status	Pseudo YS	2020/10/22 02:51:07	2020/10/22 03:29:47					
			2020/10/22 13:48:51	2020/10/22 14:23:23					
2020/10/23	change of Yaw Steering Status	Pseudo YS	2020/10/23 02:52:11	2020/10/23 03:27:55					
			2020/10/23 13:50:43	2020/10/23 14:21:23					
2020/10/24	change of Yaw Steering Status	Pseudo YS	2020/10/24 02:53:23	2020/10/24 03:25:55					
			2020/10/24 13:52:59	2020/10/24 14:18:43					
2020/10/25	change of Yaw Steering Status	Pseudo YS	2020/10/25 02:54:51	2020/10/25 03:23:39					
			2020/10/25 13:55:47	2020/10/25 14:13:15					
2020/10/26	change of Yaw Steering Status	Pseudo YS	2020/10/26 02:56:27	2020/10/26 03:20:51					
			2020/10/26 13:59:39	2020/10/26 14:11:39					
2020/10/27	change of Yaw Steering Status	Pseudo YS	2020/10/27 02:58:27	2020/10/27 03:15:31					

## The history information of QZS-4 operation

date	event	history							mass(kg) (*2)
			start(UT)	stop(UT)	duration	$\Delta V_x$	$\Delta V_y$	$\Delta V_z$	
2020/10/28	change of Yaw Steering Status	Pseudo YS	2020/10/28 03:01:07	2020/10/28 03:13:39					
2020/10/29	change of Yaw Steering Status	Pseudo YS	2020/10/29 03:06:11	2020/10/29 03:10:27					
2021/1/9	orbit maintenance maneuver (*1)	UNLD	2021/1/9 09:43:57	2021/1/9 09:51:17					2297
		YS→ON	2021/1/9 10:11:09	2021/1/9 10:12:03					
		#1	2021/1/9 10:19:19	2021/1/9 10:24:10	0:04:51	-4.719	0.026	0.061	
		#2	2021/1/9 17:49:36	2021/1/9 17:53:53	0:04:17	4.178	0.036	0.032	
		#3	2021/1/9 22:48:35	2021/1/9 22:48:41	0:00:06	0.092	0.001	0.001	
		UNLD	2021/1/9 22:51:41	2021/1/9 22:53:49					
		ON→YS	2021/1/9 22:57:53	2021/1/9 23:01:07					
		UNLD	2021/1/9 23:04:13	2021/1/9 23:06:13					
2021/3/23	change of Yaw Steering Status	Pseudo YS	2021/3/23 02:19:50	2021/3/23 02:24:30					
			2021/3/23 15:25:42	2021/3/23 15:34:06					
2021/3/24	change of Yaw Steering Status	Pseudo YS	2021/3/24 02:14:14	2021/3/24 02:27:10					
			2021/3/24 15:21:02	2021/3/24 15:36:06					
2021/3/25	change of Yaw Steering Status	Pseudo YS	2021/3/25 02:10:54	2021/3/25 02:28:46					
			2021/3/25 15:17:50	2021/3/25 15:40:06					
2021/3/26	change of Yaw Steering Status	Pseudo YS	2021/3/26 02:08:14	2021/3/26 02:33:26					
			2021/3/26 15:15:18	2021/3/26 15:43:02					
2021/3/27	change of Yaw Steering Status	Pseudo YS	2021/3/27 02:06:06	2021/3/27 02:35:42					
			2021/3/27 15:13:10	2021/3/27 15:45:02					
2021/3/28	change of Yaw Steering Status	Pseudo YS	2021/3/28 02:04:06	2021/3/28 02:37:26					
			2021/3/28 15:11:10	2021/3/28 15:46:30					
2021/3/29	change of Yaw Steering Status	Pseudo YS	2021/3/29 02:02:23	2021/3/29 02:38:55					
			2021/3/29 15:09:27	2021/3/29 15:47:51					
2021/3/30	change of Yaw Steering Status	Pseudo YS	2021/3/30 02:00:47	2021/3/30 02:40:07					
			2021/3/30 15:07:43	2021/3/30 15:48:55					
2021/3/31	change of Yaw Steering Status	Pseudo YS	2021/3/31 01:59:19	2021/3/31 02:41:19					
			2021/3/31 15:06:15	2021/3/31 15:49:51					
2021/4/1	change of Yaw Steering Status	Pseudo YS	2021/4/1 01:57:51	2021/4/1 02:42:15					
			2021/4/1 15:04:47	2021/4/1 15:50:47					
2021/4/2	change of Yaw Steering Status	Pseudo YS	2021/4/2 01:56:31	2021/4/2 02:43:11					
			2021/4/2 15:03:27	2021/4/2 15:51:27					
2021/4/3	change of Yaw Steering Status	Pseudo YS	2021/4/3 01:55:19	2021/4/3 02:43:59					
			2021/4/3 15:02:07	2021/4/3 15:52:07					
2021/4/4	change of Yaw Steering Status	Pseudo YS	2021/4/4 01:54:07	2021/4/4 02:44:47					
			2021/4/4 15:00:55	2021/4/4 15:52:39					
2021/4/5	change of Yaw Steering Status	Pseudo YS	2021/4/5 01:53:03	2021/4/5 02:45:35					
			2021/4/5 14:59:43	2021/4/5 15:53:11					
2021/4/6	change of Yaw Steering Status	Pseudo YS	2021/4/6 01:52:08	2021/4/6 02:46:16					
			2021/4/6 14:59:04	2021/4/6 15:53:04					
2021/4/7	change of Yaw Steering Status	Pseudo YS	2021/4/7 01:52:24	2021/4/7 02:45:36					
			2021/4/7 14:59:36	2021/4/7 15:51:52					
2021/4/8	change of Yaw Steering Status	Pseudo YS	2021/4/8 01:53:12	2021/4/8 02:44:32					
			2021/4/8 15:00:00	2021/4/8 15:50:40					



## The history information of QZS-4 operation

date	event	history							mass(kg) (*2)
			start(UT)	stop(UT)	duration	$\Delta V_x$	$\Delta V_y$	$\Delta V_z$	
2021/4/9	change of Yaw Steering Status	Pseudo YS	2021/4/9 01:54:00	2021/4/9 02:43:28					
			2021/4/9 15:00:32	2021/4/9 15:49:20					
2021/4/10	change of Yaw Steering Status	Pseudo YS	2021/4/10 01:54:56	2021/4/10 02:42:16					
			2021/4/10 15:01:12	2021/4/10 15:48:00					
2021/4/11	change of Yaw Steering Status	Pseudo YS	2021/4/11 01:55:52	2021/4/11 02:41:04					
			2021/4/11 15:01:52	2021/4/11 15:46:40					
2021/4/12	change of Yaw Steering Status	Pseudo YS	2021/4/12 01:57:04	2021/4/12 02:39:44					
			2021/4/12 15:02:32	2021/4/12 15:45:12					
2021/4/13	change of Yaw Steering Status	Pseudo YS	2021/4/13 01:58:16	2021/4/13 02:38:16					
			2021/4/13 15:03:20	2021/4/13 15:43:36					
2021/4/14	change of Yaw Steering Status	Pseudo YS	2021/4/14 01:59:37	2021/4/14 02:36:41					
			2021/4/14 15:04:17	2021/4/14 15:41:53					
2021/4/15	change of Yaw Steering Status	Pseudo YS	2021/4/15 02:01:05	2021/4/15 02:34:49					
			2021/4/15 15:05:21	2021/4/15 15:40:01					
2021/4/16	change of Yaw Steering Status	Pseudo YS	2021/4/16 02:02:57	2021/4/16 02:32:33					
			2021/4/16 15:06:33	2021/4/16 15:38:01					
2021/4/17	change of Yaw Steering Status	Pseudo YS	2021/4/17 02:05:05	2021/4/17 02:29:45					
			2021/4/17 15:07:53	2021/4/17 15:35:29					
2021/4/18	change of Yaw Steering Status	Pseudo YS	2021/4/18 02:07:45	2021/4/18 02:24:33					
			2021/4/18 15:09:29	2021/4/18 15:32:25					
2021/4/19	change of Yaw Steering Status	Pseudo YS	2021/4/19 02:11:29	2021/4/19 02:22:41					
			2021/4/19 15:11:29	2021/4/19 15:27:37					
2021/4/20	change of Yaw Steering Status	Pseudo YS	2021/4/20 15:14:17	2021/4/20 15:25:37					
2021/7/9 -7/10 (*1)	orbit maintenance maneuver (*1)	UNLD	2021/7/9 21:45:16	2021/7/9 21:49:40					2287
		YS→ON	2021/7/9 22:09:01	2021/7/9 22:12:26					
		#1	2021/7/9 22:17:11	2021/7/9 22:22:00	0:04:49	-4.624	-0.034	0.054	
		#2	2021/7/10 05:47:27	2021/7/10 05:51:45	0:04:18	4.082	-0.027	0.039	
		#3	2021/7/10 10:46:28	2021/7/10 10:46:31	0:00:03	-0.060	-0.001	0.001	
		UNLD	2021/7/10 10:49:32	2021/7/10 10:51:40					
		ON→YS	2021/7/10 10:55:45	2021/7/10 10:56:42					
2021/9/20	change of Yaw Steering Status	Pseudo YS	2021/9/20 14:01:01	2021/9/20 14:10:13					
			2021/9/21 03:08:13	2021/9/21 03:18:13					
2021/9/21	change of Yaw Steering Status	Pseudo YS	2021/9/21 13:56:53	2021/9/21 14:11:49					
			2021/9/22 03:04:05	2021/9/22 03:19:57					
2021/9/22	change of Yaw Steering Status	Pseudo YS	2021/9/22 13:53:57	2021/9/22 14:15:09					
			2021/9/23 03:01:09	2021/9/23 03:24:29					
2021/9/23	change of Yaw Steering Status	Pseudo YS	2021/9/23 13:51:25	2021/9/23 14:18:05					
			2021/9/24 02:58:45	2021/9/24 03:27:01					
2021/9/24	change of Yaw Steering Status	Pseudo YS	2021/9/24 13:49:17	2021/9/24 14:19:57					
			2021/9/25 02:56:37	2021/9/25 03:28:53					
2021/9/25	change of Yaw Steering Status	Pseudo YS	2021/9/25 13:47:17	2021/9/25 14:21:25					
			2021/9/26 02:54:46	2021/9/26 03:30:30					
2021/9/26	change of Yaw Steering Status	Pseudo YS	2021/9/26 13:45:34	2021/9/26 14:22:46					

## The history information of QZS-4 operation

date	event	history							mass(kg) (*2)
			start(UT)	stop(UT)	duration	$\Delta V_x$	$\Delta V_y$	$\Delta V_z$	
2021/9/27	change of Yaw Steering Status	Pseudo YS	2021/9/27 02:53:02	2021/9/27 03:31:42					
			2021/9/27 13:43:58	2021/9/27 14:23:50					
2021/9/28	change of Yaw Steering Status	Pseudo YS	2021/9/28 02:51:26	2021/9/28 03:32:46					
			2021/9/28 13:42:30	2021/9/28 14:24:54					
2021/9/29	change of Yaw Steering Status	Pseudo YS	2021/9/29 02:49:50	2021/9/29 03:33:42					
			2021/9/29 13:41:10	2021/9/29 14:25:50					
2021/9/30	change of Yaw Steering Status	Pseudo YS	2021/9/30 02:48:30	2021/9/30 03:34:38					
			2021/9/30 13:39:50	2021/9/30 14:26:46					
2021/10/1	change of Yaw Steering Status	Pseudo YS	2021/10/1 02:47:10	2021/10/1 03:35:18					
			2021/10/1 13:38:38	2021/10/1 14:27:34					
2021/10/2	change of Yaw Steering Status	Pseudo YS	2021/10/2 02:45:50	2021/10/2 03:35:58					
			2021/10/2 13:37:26	2021/10/2 14:28:14					
2021/10/3	change of Yaw Steering Status	Pseudo YS	2021/10/3 02:44:38	2021/10/3 03:36:30					
			2021/10/3 13:36:30	2021/10/3 14:29:02					
2021/10/4	change of Yaw Steering Status	Pseudo YS	2021/10/4 02:43:35	2021/10/4 03:37:03					
			2021/10/4 13:35:27	2021/10/4 14:29:43					
2021/10/5	change of Yaw Steering Status	Pseudo YS	2021/10/5 02:42:55	2021/10/5 03:36:55					
			2021/10/5 13:35:51	2021/10/5 14:29:03					
2021/10/6	change of Yaw Steering Status	Pseudo YS	2021/10/6 02:43:27	2021/10/6 03:35:51					
			2021/10/6 13:36:31	2021/10/6 14:27:59					
2021/10/7	change of Yaw Steering Status	Pseudo YS	2021/10/7 02:43:59	2021/10/7 03:34:39					
			2021/10/7 13:37:19	2021/10/7 14:26:55					
2021/10/8	change of Yaw Steering Status	Pseudo YS	2021/10/8 02:44:39	2021/10/8 03:33:27					
			2021/10/8 13:38:15	2021/10/8 14:25:43					
2021/10/9	change of Yaw Steering Status	Pseudo YS	2021/10/9 02:45:19	2021/10/9 03:32:15					
			2021/10/9 13:39:11	2021/10/9 14:24:31					
2021/10/10	change of Yaw Steering Status	Pseudo YS	2021/10/10 02:46:07	2021/10/10 03:30:55					
			2021/10/10 13:40:23	2021/10/10 14:23:11					
2021/10/11	change of Yaw Steering Status	Pseudo YS	2021/10/11 02:46:55	2021/10/11 03:29:27					
			2021/10/11 13:41:35	2021/10/11 14:21:43					
2021/10/12	change of Yaw Steering Status	Pseudo YS	2021/10/12 02:47:52	2021/10/12 03:27:52					
			2021/10/12 13:42:56	2021/10/12 14:20:08					
2021/10/13	change of Yaw Steering Status	Pseudo YS	2021/10/13 02:48:48	2021/10/13 03:26:16					
			2021/10/13 13:44:32	2021/10/13 14:18:24					
2021/10/14	change of Yaw Steering Status	Pseudo YS	2021/10/14 02:49:52	2021/10/14 03:24:24					
			2021/10/14 13:46:16	2021/10/14 14:16:16					
2021/10/15	change of Yaw Steering Status	Pseudo YS	2021/10/15 02:51:04	2021/10/15 03:22:24					
			2021/10/15 13:48:32	2021/10/15 14:13:36					
2021/10/16	change of Yaw Steering Status	Pseudo YS	2021/10/16 02:52:32	2021/10/16 03:20:00					
			2021/10/16 13:51:04	2021/10/16 14:08:24					
2021/10/17	change of Yaw Steering Status	Pseudo YS	2021/10/17 02:54:16	2021/10/17 03:16:56					
			2021/10/17 13:54:40	2021/10/17 14:06:40					
2021/10/18	change of Yaw Steering Status	Pseudo YS	2021/10/18 02:56:24	2021/10/18 03:12:16					
2021/10/19	change of Yaw Steering Status	Pseudo YS	2021/10/19 02:59:21	2021/10/19 03:10:17					

## The history information of QZS-4 operation

date	event	history							mass(kg) (*2)
			start(UT)	stop(UT)	duration	$\Delta V_x$	$\Delta V_y$	$\Delta V_z$	
2022/1/5	orbit maintenance maneuver (*1)	UNLD	2022/1/5 09:47:38	2022/1/5 09:54:50					2278
		YS→ON	2022/1/5 10:14:39	2022/1/5 10:15:28					
		#1	2022/1/5 10:22:49	2022/1/5 10:27:33	0:04:44	-4.594	0.043	0.058	
		#2	2022/1/5 17:53:04	2022/1/5 17:57:18	0:04:14	4.048	0.021	0.030	
		UNLD	2022/1/5 21:47:39	2022/1/5 21:49:47					
		ON→YS	2022/1/5 21:54:20	2022/1/5 21:57:53					
		UNLD	2022/1/5 22:00:43	2022/1/5 22:02:43					
2022/3/13	change of Yaw Steering Status	Pseudo YS	2022/3/13 02:17:07	2022/3/13 02:24:27					
			2022/3/13 15:25:47	2022/3/13 15:31:23					
2022/3/14	change of Yaw Steering Status	Pseudo YS	2022/3/14 02:12:35	2022/3/14 02:26:27					
			2022/3/14 15:20:19	2022/3/14 15:34:03					
2022/3/15	change of Yaw Steering Status	Pseudo YS	2022/3/15 02:09:31	2022/3/15 02:29:15					
			2022/3/15 15:16:59	2022/3/15 15:37:23					
2022/3/16	change of Yaw Steering Status	Pseudo YS	2022/3/16 02:06:59	2022/3/16 02:32:43					
			2022/3/16 15:14:27	2022/3/16 15:40:59					
2022/3/17	change of Yaw Steering Status	Pseudo YS	2022/3/17 02:04:52	2022/3/17 02:34:44					
			2022/3/17 15:12:20	2022/3/17 15:43:08					
2022/3/18	change of Yaw Steering Status	Pseudo YS	2022/3/18 02:03:00	2022/3/18 02:36:28					
			2022/3/18 15:10:20	2022/3/18 15:44:52					
2022/3/19	change of Yaw Steering Status	Pseudo YS	2022/3/19 02:01:16	2022/3/19 02:37:48					
			2022/3/19 15:08:44	2022/3/19 15:46:20					
2022/3/20	change of Yaw Steering Status	Pseudo YS	2022/3/20 01:59:40	2022/3/20 02:39:00					
			2022/3/20 15:07:08	2022/3/20 15:47:32					
2022/3/21	change of Yaw Steering Status	Pseudo YS	2022/3/21 01:58:12	2022/3/21 02:40:04					
			2022/3/21 15:05:40	2022/3/21 15:48:36					
2022/3/22	change of Yaw Steering Status	Pseudo YS	2022/3/22 01:56:52	2022/3/22 02:41:00					
			2022/3/22 15:04:20	2022/3/22 15:49:40					
2022/3/23	change of Yaw Steering Status	Pseudo YS	2022/3/23 01:55:32	2022/3/23 02:41:48					
			2022/3/23 15:03:00	2022/3/23 15:50:28					
2022/3/24	change of Yaw Steering Status	Pseudo YS	2022/3/24 01:54:20	2022/3/24 02:42:36					
			2022/3/24 15:01:48	2022/3/24 15:51:16					
2022/3/25	change of Yaw Steering Status	Pseudo YS	2022/3/25 01:53:09	2022/3/25 02:43:25					
			2022/3/25 15:00:37	2022/3/25 15:51:57					
2022/3/26	change of Yaw Steering Status	Pseudo YS	2022/3/26 01:52:05	2022/3/26 02:44:05					
			2022/3/26 14:59:33	2022/3/26 15:52:29					
2022/3/27	change of Yaw Steering Status	Pseudo YS	2022/3/27 01:51:09	2022/3/27 02:44:53					
			2022/3/27 14:58:29	2022/3/27 15:53:01					
2022/3/28	change of Yaw Steering Status	Pseudo YS	2022/3/28 01:50:53	2022/3/28 02:44:37					
			2022/3/28 14:59:09	2022/3/28 15:51:57					
2022/3/29	change of Yaw Steering Status	Pseudo YS	2022/3/29 01:51:41	2022/3/29 02:43:33					
			2022/3/29 14:59:41	2022/3/29 15:50:45					
2022/3/30	change of Yaw Steering Status	Pseudo YS	2022/3/30 01:52:21	2022/3/30 02:42:29					
			2022/3/30 15:00:21	2022/3/30 15:49:41					
2022/3/31	change of Yaw Steering Status	Pseudo YS	2022/3/31 01:53:09	2022/3/31 02:41:25					
			2022/3/31 15:01:01	2022/3/31 15:48:21					

## The history information of QZS-4 operation

date	event	history							mass(kg) (*2)
			start(UT)	stop(UT)	duration	$\Delta V_x$	$\Delta V_y$	$\Delta V_z$	
2022/4/1	change of Yaw Steering Status	Pseudo YS	2022/4/1 01:54:05	2022/4/1 02:40:13					
			2022/4/1 15:01:41	2022/4/1 15:47:09					
2022/4/2	change of Yaw Steering Status	Pseudo YS	2022/4/2 01:55:10	2022/4/2 02:39:02					
			2022/4/2 15:02:30	2022/4/2 15:45:50					
2022/4/3	change of Yaw Steering Status	Pseudo YS	2022/4/3 01:56:14	2022/4/3 02:37:34					
			2022/4/3 15:03:26	2022/4/3 15:44:22					
2022/4/4	change of Yaw Steering Status	Pseudo YS	2022/4/4 01:57:26	2022/4/4 02:36:06					
			2022/4/4 15:04:22	2022/4/4 15:42:46					
2022/4/5	change of Yaw Steering Status	Pseudo YS	2022/4/5 01:58:54	2022/4/5 02:34:22					
			2022/4/5 15:05:26	2022/4/5 15:41:02					
2022/4/6	change of Yaw Steering Status	Pseudo YS	2022/4/6 02:00:30	2022/4/6 02:32:30					
			2022/4/6 15:06:38	2022/4/6 15:39:10					
2022/4/7	change of Yaw Steering Status	Pseudo YS	2022/4/7 02:02:22	2022/4/7 02:30:06					
			2022/4/7 15:07:58	2022/4/7 15:36:54					
2022/4/8	change of Yaw Steering Status	Pseudo YS	2022/4/8 02:04:30	2022/4/8 02:26:54					
			2022/4/8 15:09:34	2022/4/8 15:34:14					
2022/4/9	change of Yaw Steering Status	Pseudo YS	2022/4/9 02:07:26	2022/4/9 02:22:30					
			2022/4/9 15:11:34	2022/4/9 15:28:54					
2022/4/10	change of Yaw Steering Status	Pseudo YS	2022/4/10 02:11:43	2022/4/10 02:20:15					
			2022/4/10 15:14:07	2022/4/10 15:27:11					
2022/4/11	change of Yaw Steering Status	Pseudo YS	2022/4/11 15:18:15	2022/4/11 15:24:23					
2022/7/6 -7/7	orbit maintenance maneuver (*1)	UNLD	2022/7/6 21:43:46	2022/7/6 21:48:02					2269
		YS→ON	2022/7/6 22:07:12	2022/7/6 22:10:31					
		#1	2022/7/6 22:15:22	2022/7/6 22:20:09	0:04:47	-4.565	-0.049	0.053	
		#2	2022/7/7 05:45:40	2022/7/7 05:49:52	0:04:12	3.954	-0.018	0.037	
		#3	2022/7/7 10:44:38	2022/7/7 10:44:41	0:00:03	-0.050	-0.001	0.001	
		UNLD	2022/7/7 10:47:46	2022/7/7 10:49:46					
		ON→YS	2022/7/7 10:53:55	2022/7/7 10:54:47					
UNLD	2022/7/7 11:00:18	2022/7/7 11:02:18							
2022/9/9	change of Yaw Steering Status	Pseudo YS	2022/9/9 14:08:26	2022/9/9 14:10:42					
2022/9/10	change of Yaw Steering Status	Pseudo YS	2022/9/10 14:01:46	2022/9/10 14:13:38					
2022/9/11	change of Yaw Steering Status	Pseudo YS	2022/9/11 03:09:54	2022/9/11 03:19:30					
			2022/9/11 13:58:10	2022/9/11 14:14:42					
2022/9/12	change of Yaw Steering Status	Pseudo YS	2022/9/12 03:05:38	2022/9/12 03:21:14					
			2022/9/12 13:55:22	2022/9/12 14:18:34					
2022/9/13	change of Yaw Steering Status	Pseudo YS	2022/9/13 03:02:43	2022/9/13 03:25:31					
			2022/9/13 13:52:59	2022/9/13 14:20:51					
2022/9/14	change of Yaw Steering Status	Pseudo YS	2022/9/14 03:00:11	2022/9/14 03:28:11					
			2022/9/14 13:50:51	2022/9/14 14:22:27					
2022/9/15	change of Yaw Steering Status	Pseudo YS	2022/9/15 02:58:03	2022/9/15 03:30:11					
			2022/9/15 13:48:51	2022/9/15 14:23:39					
2022/9/16	change of Yaw Steering Status	Pseudo YS	2022/9/16 02:56:11	2022/9/16 03:31:39					
			2022/9/16 13:47:07	2022/9/16 14:24:43					
2022/9/17	change of Yaw Steering Status	Pseudo YS	2022/9/17 02:54:27	2022/9/17 03:32:51					
			2022/9/17 13:45:23	2022/9/17 14:25:39					

## The history information of QZS-4 operation

date	event	history							mass(kg) (*2)
			start(UT)	stop(UT)	duration	$\Delta V_x$	$\Delta V_y$	$\Delta V_z$	
2022/9/18	change of Yaw Steering Status	Pseudo YS	2022/9/18 02:52:51	2022/9/18 03:33:55					
			2022/9/18 13:43:47	2022/9/18 14:26:27					
2022/9/19	change of Yaw Steering Status	Pseudo YS	2022/9/19 02:51:15	2022/9/19 03:34:51					
			2022/9/19 13:42:19	2022/9/19 14:27:15					
2022/9/20	change of Yaw Steering Status	Pseudo YS	2022/9/20 02:49:47	2022/9/20 03:35:39					
			2022/9/20 13:40:59	2022/9/20 14:27:55					
2022/9/21	change of Yaw Steering Status	Pseudo YS	2022/9/21 02:48:28	2022/9/21 03:36:28					
			2022/9/21 13:39:40	2022/9/21 14:28:36					
2022/9/22	change of Yaw Steering Status	Pseudo YS	2022/9/22 02:47:16	2022/9/22 03:37:00					
			2022/9/22 13:38:28	2022/9/22 14:29:08					
2022/9/23	change of Yaw Steering Status	Pseudo YS	2022/9/23 02:45:56	2022/9/23 03:37:40					
			2022/9/23 13:37:24	2022/9/23 14:29:40					
2022/9/24	change of Yaw Steering Status	Pseudo YS	2022/9/24 02:44:52	2022/9/24 03:38:04					
			2022/9/24 13:36:12	2022/9/24 14:30:12					
2022/9/25	change of Yaw Steering Status	Pseudo YS	2022/9/25 02:44:04	2022/9/25 03:38:12					
			2022/9/25 13:36:12	2022/9/25 14:29:40					
2022/9/26	change of Yaw Steering Status	Pseudo YS	2022/9/26 02:44:28	2022/9/26 03:37:08					
			2022/9/26 13:36:44	2022/9/26 14:28:36					
2022/9/27	change of Yaw Steering Status	Pseudo YS	2022/9/27 02:45:00	2022/9/27 03:35:56					
			2022/9/27 13:37:24	2022/9/27 14:27:24					
2022/9/28	change of Yaw Steering Status	Pseudo YS	2022/9/28 02:45:40	2022/9/28 03:34:44					
			2022/9/28 13:38:04	2022/9/28 14:26:04					
2022/9/29	change of Yaw Steering Status	Pseudo YS	2022/9/29 02:46:13	2022/9/29 03:33:25					
			2022/9/29 13:38:53	2022/9/29 14:24:53					
2022/9/30	change of Yaw Steering Status	Pseudo YS	2022/9/30 02:47:01	2022/9/30 03:32:05					
			2022/9/30 13:39:49	2022/9/30 14:23:25					
2022/10/1	change of Yaw Steering Status	Pseudo YS	2022/10/1 02:47:41	2022/10/1 03:30:45					
			2022/10/1 13:40:45	2022/10/1 14:21:57					
2022/10/2	change of Yaw Steering Status	Pseudo YS	2022/10/2 02:48:37	2022/10/2 03:29:09					
			2022/10/2 13:41:57	2022/10/2 14:20:21					
2022/10/3	change of Yaw Steering Status	Pseudo YS	2022/10/3 02:49:33	2022/10/3 03:27:33					
			2022/10/3 13:43:09	2022/10/3 14:18:37					
2022/10/4	change of Yaw Steering Status	Pseudo YS	2022/10/4 02:50:37	2022/10/4 03:25:41					
			2022/10/4 13:44:45	2022/10/4 14:16:37					
2022/10/5	change of Yaw Steering Status	Pseudo YS	2022/10/5 02:51:41	2022/10/5 03:23:41					
			2022/10/5 13:46:29	2022/10/5 14:14:13					
2022/10/6	change of Yaw Steering Status	Pseudo YS	2022/10/6 02:53:09	2022/10/6 03:21:25					
			2022/10/6 13:48:37	2022/10/6 14:11:01					
2022/10/7	change of Yaw Steering Status	Pseudo YS	2022/10/7 02:54:46	2022/10/7 03:18:38					
			2022/10/7 13:51:26	2022/10/7 14:06:38					
2022/10/8	change of Yaw Steering Status	Pseudo YS	2022/10/8 02:56:38	2022/10/8 03:13:26					
			2022/10/8 13:55:26	2022/10/8 14:04:30					
2022/10/9	change of Yaw Steering Status	Pseudo YS	2022/10/9 02:59:18	2022/10/9 03:11:42					
2022/10/10	change of Yaw Steering Status	Pseudo YS	2022/10/10 03:04:22	2022/10/10 03:08:30					

## The history information of QZS-4 operation

date	event	history							mass(kg) (※2)
			start(UT)	stop(UT)	duration	$\Delta V_x$	$\Delta V_y$	$\Delta V_z$	
2023/1/3	orbit maintenance maneuver (*1)	UNLD	2023/1/3 09:30:09	2023/1/3 09:37:29					2260
		YS→ON	2023/1/3 09:57:17	2023/1/3 09:58:07					
		#1	2023/1/3 10:05:27	2023/1/3 10:10:15	0:04:48	-4.630	0.050	0.058	
		#2	2023/1/3 17:35:42	2023/1/3 17:40:00	0:04:18	4.115	0.020	0.030	
		#3	2023/1/3 22:34:44	2023/1/3 22:34:47	0:00:03	0.049	0.000	0.000	
		UNLD	2023/1/3 22:37:53	2023/1/3 22:39:53					
		ON→YS	2023/1/3 22:44:00	2023/1/3 22:47:11					
		UNLD	2023/1/3 22:50:17	2023/1/3 22:52:25					
2023/3/3	change of Yaw Steering Status	Pseudo YS	2023/3/3 02:14:00	2023/3/3 02:22:08					
2023/3/4	change of Yaw Steering Status	Pseudo YS	2023/3/4 02:09:37	2023/3/4 02:23:53					
			2023/3/4 15:17:29	2023/3/4 15:28:57					
2023/3/5	change of Yaw Steering Status	Pseudo YS	2023/3/5 02:06:33	2023/3/5 02:26:41					
			2023/3/5 15:13:45	2023/3/5 15:30:41					
2023/3/6	change of Yaw Steering Status	Pseudo YS	2023/3/6 02:04:01	2023/3/6 02:29:45					
			2023/3/6 15:10:57	2023/3/6 15:35:45					
2023/3/7	change of Yaw Steering Status	Pseudo YS	2023/3/7 02:01:53	2023/3/7 02:31:45					
			2023/3/7 15:08:41	2023/3/7 15:38:17					
2023/3/8	change of Yaw Steering Status	Pseudo YS	2023/3/8 01:59:53	2023/3/8 02:33:13					
			2023/3/8 15:06:41	2023/3/8 15:40:09					
2023/3/9	change of Yaw Steering Status	Pseudo YS	2023/3/9 01:58:01	2023/3/9 02:34:25					
			2023/3/9 15:04:57	2023/3/9 15:41:45					
2023/3/10	change of Yaw Steering Status	Pseudo YS	2023/3/10 01:56:25	2023/3/10 02:35:29					
			2023/3/10 15:03:21	2023/3/10 15:43:05					
2023/3/11	change of Yaw Steering Status	Pseudo YS	2023/3/11 01:54:50	2023/3/11 02:36:26					
			2023/3/11 15:01:54	2023/3/11 15:44:10					
2023/3/12	change of Yaw Steering Status	Pseudo YS	2023/3/12 01:53:22	2023/3/12 02:37:22					
			2023/3/12 15:00:26	2023/3/12 15:45:14					
2023/3/13	change of Yaw Steering Status	Pseudo YS	2023/3/13 01:52:02	2023/3/13 02:38:02					
			2023/3/13 14:59:14	2023/3/13 15:46:10					
2023/3/14	change of Yaw Steering Status	Pseudo YS	2023/3/14 01:50:42	2023/3/14 02:38:42					
			2023/3/14 14:58:02	2023/3/14 15:46:58					
2023/3/15	change of Yaw Steering Status	Pseudo YS	2023/3/15 01:49:22	2023/3/15 02:39:22					
			2023/3/15 14:56:50	2023/3/15 15:47:38					
2023/3/16	change of Yaw Steering Status	Pseudo YS	2023/3/16 01:48:18	2023/3/16 02:40:02					
			2023/3/16 14:55:38	2023/3/16 15:48:18					
2023/3/17	change of Yaw Steering Status	Pseudo YS	2023/3/17 01:47:14	2023/3/17 02:40:34					
			2023/3/17 14:54:34	2023/3/17 15:48:58					
2023/3/18	change of Yaw Steering Status	Pseudo YS	2023/3/18 01:46:34	2023/3/18 02:40:34					
			2023/3/18 14:54:58	2023/3/18 15:48:02					
2023/3/19	change of Yaw Steering Status	Pseudo YS	2023/3/19 01:47:15	2023/3/19 02:39:31					
			2023/3/19 14:55:31	2023/3/19 15:46:59					
2023/3/20	change of Yaw Steering Status	Pseudo YS	2023/3/20 01:47:47	2023/3/20 02:38:27					
			2023/3/20 14:56:11	2023/3/20 15:45:47					
2023/3/21	change of Yaw Steering Status	Pseudo YS	2023/3/21 01:48:35	2023/3/21 02:37:15					
			2023/3/21 14:56:51	2023/3/21 15:44:43					

## The history information of QZS-4 operation

date	event	history							mass(kg) (*2)
			start(UT)	stop(UT)	duration	$\Delta V_x$	$\Delta V_y$	$\Delta V_z$	
2023/3/22	change of Yaw Steering Status	Pseudo YS	2023/3/22 01:49:15	2023/3/22 02:36:03					
			2023/3/22 14:57:39	2023/3/22 15:43:23					
2023/3/23	change of Yaw Steering Status	Pseudo YS	2023/3/23 01:50:11	2023/3/23 02:34:43					
			2023/3/23 14:58:27	2023/3/23 15:42:03					
2023/3/24	change of Yaw Steering Status	Pseudo YS	2023/3/24 01:51:07	2023/3/24 02:33:15					
			2023/3/24 14:59:23	2023/3/24 15:40:35					
2023/3/25	change of Yaw Steering Status	Pseudo YS	2023/3/25 01:52:11	2023/3/25 02:31:47					
			2023/3/25 15:00:27	2023/3/25 15:39:07					
2023/3/26	change of Yaw Steering Status	Pseudo YS	2023/3/26 01:53:23	2023/3/26 02:30:03					
			2023/3/26 15:01:31	2023/3/26 15:37:23					
2023/3/27	change of Yaw Steering Status	Pseudo YS	2023/3/27 01:54:52	2023/3/27 02:28:12					
			2023/3/27 15:02:44	2023/3/27 15:35:24					
2023/3/28	change of Yaw Steering Status	Pseudo YS	2023/3/28 01:56:28	2023/3/28 02:25:56					
			2023/3/28 15:04:12	2023/3/28 15:33:16					
2023/3/29	change of Yaw Steering Status	Pseudo YS	2023/3/29 01:58:28	2023/3/29 02:23:08					
			2023/3/29 15:05:48	2023/3/29 15:30:36					
2023/3/30	change of Yaw Steering Status	Pseudo YS	2023/3/30 02:00:52	2023/3/30 02:17:56					
			2023/3/30 15:07:40	2023/3/30 15:25:40					
2023/3/31	change of Yaw Steering Status	Pseudo YS	2023/3/31 02:04:12	2023/3/31 02:16:04					
			2023/3/31 15:10:12	2023/3/31 15:23:24					
2023/4/1	change of Yaw Steering Status	Pseudo YS	2023/4/1 15:14:28	2023/4/1 15:20:44					
2023/6/30 -7/1	orbit maintenance maneuver (*1)	UNLD	2023/6/30 21:44:40	2023/6/30 21:48:56					2252
		YS→ON	2023/6/30 22:08:02	2023/6/30 22:11:17					
		#1	2023/6/30 22:16:12	2023/6/30 22:20:59	0:04:47	-4.574	-0.049	0.053	
		#2	2023/7/1 05:46:28	2023/7/1 05:50:44	0:04:16	4.037	-0.019	0.038	
		UNLD	2023/7/1 09:41:12	2023/7/1 09:43:12					
		ON→YS	2023/7/1 09:47:45	2023/7/1 09:48:53					
UNLD	2023/7/1 09:54:08	2023/7/1 09:56:08							
2023/8/30	change of Yaw Steering Status	Pseudo YS	2023/8/30 14:01:12	2023/8/30 14:07:52					
2023/8/31	change of Yaw Steering Status	Pseudo YS	2023/8/31 13:56:24	2023/8/31 14:09:44					
2023/9/1	change of Yaw Steering Status	Pseudo YS	2023/9/1 03:04:40	2023/9/1 03:12:48					
			2023/9/1 13:53:12	2023/9/1 14:10:32					
2023/9/2	change of Yaw Steering Status	Pseudo YS	2023/9/2 03:00:08	2023/9/2 03:14:56					
			2023/9/2 13:50:24	2023/9/2 14:14:48					
2023/9/3	change of Yaw Steering Status	Pseudo YS	2023/9/3 02:57:04	2023/9/3 03:18:56					
			2023/9/3 13:48:08	2023/9/3 14:16:40					
2023/9/4	change of Yaw Steering Status	Pseudo YS	2023/9/4 02:54:32	2023/9/4 03:21:52					
			2023/9/4 13:46:00	2023/9/4 14:18:08					
2023/9/5	change of Yaw Steering Status	Pseudo YS	2023/9/5 02:52:24	2023/9/5 03:24:00					
			2023/9/5 13:44:00	2023/9/5 14:19:12					
2023/9/6	change of Yaw Steering Status	Pseudo YS	2023/9/6 02:50:33	2023/9/6 03:25:37					
			2023/9/6 13:42:09	2023/9/6 14:20:17					
2023/9/7	change of Yaw Steering Status	Pseudo YS	2023/9/7 02:48:49	2023/9/7 03:26:57					
			2023/9/7 13:40:33	2023/9/7 14:21:05					

## The history information of QZS-4 operation

date	event	history							mass(kg) (*2)
			start(UT)	stop(UT)	duration	$\Delta V_x$	$\Delta V_y$	$\Delta V_z$	
2023/9/8	change of Yaw Steering Status	Pseudo YS	2023/9/8 02:47:13	2023/9/8 03:28:09					
			2023/9/8 13:38:57	2023/9/8 14:21:53					
2023/9/9	change of Yaw Steering Status	Pseudo YS	2023/9/9 02:45:45	2023/9/9 03:29:05					
			2023/9/9 13:37:29	2023/9/9 14:22:33					
2023/9/10	change of Yaw Steering Status	Pseudo YS	2023/9/10 02:44:25	2023/9/10 03:30:01					
			2023/9/10 13:36:09	2023/9/10 14:23:05					
2023/9/11	change of Yaw Steering Status	Pseudo YS	2023/9/11 02:43:05	2023/9/11 03:30:49					
			2023/9/11 13:34:49	2023/9/11 14:23:45					
2023/9/12	change of Yaw Steering Status	Pseudo YS	2023/9/12 02:41:45	2023/9/12 03:31:29					
			2023/9/12 13:33:29	2023/9/12 14:24:09					
2023/9/13	change of Yaw Steering Status	Pseudo YS	2023/9/13 02:40:41	2023/9/13 03:32:09					
			2023/9/13 13:32:17	2023/9/13 14:24:41					
2023/9/14	change of Yaw Steering Status	Pseudo YS	2023/9/14 02:39:30	2023/9/14 03:32:42					
			2023/9/14 13:31:14	2023/9/14 14:25:06					
2023/9/15	change of Yaw Steering Status	Pseudo YS	2023/9/15 02:38:42	2023/9/15 03:32:58					
			2023/9/15 13:31:06	2023/9/15 14:24:34					
2023/9/16	change of Yaw Steering Status	Pseudo YS	2023/9/16 02:39:14	2023/9/16 03:31:54					
			2023/9/16 13:31:30	2023/9/16 14:23:22					
2023/9/17	change of Yaw Steering Status	Pseudo YS	2023/9/17 02:39:54	2023/9/17 03:30:50					
			2023/9/17 13:32:02	2023/9/17 14:22:10					
2023/9/18	change of Yaw Steering Status	Pseudo YS	2023/9/18 02:40:26	2023/9/18 03:29:38					
			2023/9/18 13:32:42	2023/9/18 14:20:58					
2023/9/19	change of Yaw Steering Status	Pseudo YS	2023/9/19 02:41:14	2023/9/19 03:28:26					
			2023/9/19 13:33:22	2023/9/19 14:19:38					
2023/9/20	change of Yaw Steering Status	Pseudo YS	2023/9/20 02:41:54	2023/9/20 03:27:06					
			2023/9/20 13:34:10	2023/9/20 14:18:10					
2023/9/21	change of Yaw Steering Status	Pseudo YS	2023/9/21 02:42:50	2023/9/21 03:25:46					
			2023/9/21 13:34:58	2023/9/21 14:16:42					
2023/9/22	change of Yaw Steering Status	Pseudo YS	2023/9/22 02:43:39	2023/9/22 03:24:19					
			2023/9/22 13:36:03	2023/9/22 14:15:07					
2023/9/23	change of Yaw Steering Status	Pseudo YS	2023/9/23 02:44:43	2023/9/23 03:22:43					
			2023/9/23 13:37:15	2023/9/23 14:13:23					
2023/9/24	change of Yaw Steering Status	Pseudo YS	2023/9/24 02:45:47	2023/9/24 03:20:51					
			2023/9/24 13:38:35	2023/9/24 14:11:31					
2023/9/25	change of Yaw Steering Status	Pseudo YS	2023/9/25 02:47:07	2023/9/25 03:18:59					
			2023/9/25 13:40:11	2023/9/25 14:09:15					
2023/9/26	change of Yaw Steering Status	Pseudo YS	2023/9/26 02:48:35	2023/9/26 03:16:35					
			2023/9/26 13:42:11	2023/9/26 14:06:19					
2023/9/27	change of Yaw Steering Status	Pseudo YS	2023/9/27 02:50:11	2023/9/27 03:13:47					
			2023/9/27 13:44:35	2023/9/27 14:01:23					
2023/9/28	change of Yaw Steering Status	Pseudo YS	2023/9/28 02:52:19	2023/9/28 03:08:51					
			2023/9/28 13:47:55	2023/9/28 13:59:31					
2023/9/29	change of Yaw Steering Status	Pseudo YS	2023/9/29 02:55:07	2023/9/29 03:06:59					
2023/9/30	change of Yaw Steering Status	Pseudo YS	2023/9/30 03:01:24	2023/9/30 03:03:16					



## The history information of QZS-4 operation

date	event	history							mass(kg) (※2)
			start(UT)	stop(UT)	duration	$\Delta V_x$	$\Delta V_y$	$\Delta V_z$	
2023/12/31	orbit maintenance maneuver (*1)	UNLD	2023/12/31 09:28:07	2023/12/31 09:35:19					2243
		YS→ON	2023/12/31 09:55:16	2023/12/31 09:56:13					
		#1	2023/12/31 10:03:26	2023/12/31 10:08:18	0:04:52	-4.697	0.050	0.059	
		#2	2023/12/31 17:33:43	2023/12/31 17:38:00	0:04:17	4.133	0.021	0.030	
		#3	2023/12/31 22:32:43	2023/12/31 22:32:48	0:00:05	0.080	0.000	0.001	
		UNLD	2023/12/31 22:35:52	2023/12/31 22:37:52					
		ON→YS	2023/12/31 22:42:02	2023/12/31 22:45:18					
		UNLD	2023/12/31 22:48:24	2023/12/31 22:50:24					
2024/2/21	change of Yaw Steering Status	Pseudo YS	2024/2/21 02:15:26	2024/2/21 02:21:02					
2024/2/22	change of Yaw Steering Status	Pseudo YS	2024/2/22 02:10:14	2024/2/22 02:23:10					
			2024/2/22 15:19:10	2024/2/22 15:24:30					
2024/2/23	change of Yaw Steering Status	Pseudo YS	2024/2/23 02:06:54	2024/2/23 02:24:14					
			2024/2/23 15:13:34	2024/2/23 15:27:18					
2024/2/24	change of Yaw Steering Status	Pseudo YS	2024/2/24 02:04:15	2024/2/24 02:28:39					
			2024/2/24 15:10:15	2024/2/24 15:31:03					
2024/2/25	change of Yaw Steering Status	Pseudo YS	2024/2/25 02:01:51	2024/2/25 02:30:39					
			2024/2/25 15:07:43	2024/2/25 15:34:39					
2024/2/26	change of Yaw Steering Status	Pseudo YS	2024/2/26 01:59:43	2024/2/26 02:32:15					
			2024/2/26 15:05:35	2024/2/26 15:36:55					
2024/2/27	change of Yaw Steering Status	Pseudo YS	2024/2/27 01:57:51	2024/2/27 02:33:27					
			2024/2/27 15:03:43	2024/2/27 15:38:39					
2024/2/28	change of Yaw Steering Status	Pseudo YS	2024/2/28 01:55:59	2024/2/28 02:34:23					
			2024/2/28 15:01:59	2024/2/28 15:40:15					
2024/2/29	change of Yaw Steering Status	Pseudo YS	2024/2/29 01:54:23	2024/2/29 02:35:19					
			2024/2/29 15:00:31	2024/2/29 15:41:35					
2024/3/1	change of Yaw Steering Status	Pseudo YS	2024/3/1 01:52:47	2024/3/1 02:36:07					
			2024/3/1 14:59:03	2024/3/1 15:42:39					
2024/3/2	change of Yaw Steering Status	Pseudo YS	2024/3/2 01:51:20	2024/3/2 02:36:48					
			2024/3/2 14:57:44	2024/3/2 15:43:44					
2024/3/3	change of Yaw Steering Status	Pseudo YS	2024/3/3 01:50:00	2024/3/3 02:37:28					
			2024/3/3 14:56:32	2024/3/3 15:44:40					
2024/3/4	change of Yaw Steering Status	Pseudo YS	2024/3/4 01:48:40	2024/3/4 02:38:00					
			2024/3/4 14:55:20	2024/3/4 15:45:28					
2024/3/5	change of Yaw Steering Status	Pseudo YS	2024/3/5 01:47:20	2024/3/5 02:38:32					
			2024/3/5 14:54:08	2024/3/5 15:46:16					
2024/3/6	change of Yaw Steering Status	Pseudo YS	2024/3/6 01:46:08	2024/3/6 02:39:04					
			2024/3/6 14:53:04	2024/3/6 15:46:56					
2024/3/7	change of Yaw Steering Status	Pseudo YS	2024/3/7 01:45:04	2024/3/7 02:39:36					
			2024/3/7 14:52:56	2024/3/7 15:46:32					
2024/3/8	change of Yaw Steering Status	Pseudo YS	2024/3/8 01:45:28	2024/3/8 02:38:24					
			2024/3/8 14:53:36	2024/3/8 15:45:28					
2024/3/9	change of Yaw Steering Status	Pseudo YS	2024/3/9 01:46:00	2024/3/9 02:37:12					
			2024/3/9 14:54:16	2024/3/9 15:44:24					
2024/3/10	change of Yaw Steering Status	Pseudo YS	2024/3/10 01:46:41	2024/3/10 02:36:01					
			2024/3/10 14:55:05	2024/3/10 15:43:13					

## The history information of QZS-4 operation

date	event	history							mass(kg) (*2)
			start(UT)	stop(UT)	duration	$\Delta V_x$	$\Delta V_y$	$\Delta V_z$	
2024/3/11	change of Yaw Steering Status	Pseudo YS	2024/3/11 01:47:21	2024/3/11 02:34:41					
			2024/3/11 14:55:53	2024/3/11 15:42:01					
2024/3/12	change of Yaw Steering Status	Pseudo YS	2024/3/12 01:48:09	2024/3/12 02:33:21					
			2024/3/12 14:56:49	2024/3/12 15:40:41					
2024/3/13	change of Yaw Steering Status	Pseudo YS	2024/3/13 01:48:57	2024/3/13 02:31:53					
			2024/3/13 14:57:45	2024/3/13 15:39:21					
2024/3/14	change of Yaw Steering Status	Pseudo YS	2024/3/14 01:49:53	2024/3/14 02:30:17					
			2024/3/14 14:58:49	2024/3/14 15:37:45					
2024/3/15	change of Yaw Steering Status	Pseudo YS	2024/3/15 01:50:57	2024/3/15 02:28:33					
			2024/3/15 15:00:01	2024/3/15 15:36:01					
2024/3/16	change of Yaw Steering Status	Pseudo YS	2024/3/16 01:52:17	2024/3/16 02:26:41					
			2024/3/16 15:01:21	2024/3/16 15:34:09					
2024/3/17	change of Yaw Steering Status	Pseudo YS	2024/3/17 01:53:45	2024/3/17 02:24:33					
			2024/3/17 15:02:49	2024/3/17 15:31:53					
2024/3/18	change of Yaw Steering Status	Pseudo YS	2024/3/18 01:55:30	2024/3/18 02:22:02					
			2024/3/18 15:04:34	2024/3/18 15:29:14					
2024/3/19	change of Yaw Steering Status	Pseudo YS	2024/3/19 01:57:38	2024/3/19 02:18:02					
			2024/3/19 15:06:34	2024/3/19 15:23:54					
2024/3/20	change of Yaw Steering Status	Pseudo YS	2024/3/20 02:00:26	2024/3/20 02:14:26					
			2024/3/20 15:09:14	2024/3/20 15:22:10					
2024/3/21	change of Yaw Steering Status	Pseudo YS	2024/3/21 02:05:22	2024/3/21 02:11:38					
			2024/3/21 15:14:10	2024/3/21 15:18:58					
2024/6/24 -6/25 (*1)	orbit maintenance maneuver (*1)	UNLD	2024/6/24 21:42:46	2024/6/24 21:46:54					2234
		YS→ON	2024/6/24 22:05:48	2024/6/24 22:09:24					
		#1	2024/6/24 22:13:59	2024/6/24 22:18:47	0:04:48	-4.550	-0.049	0.052	
		#2	2024/6/25 05:44:16	2024/6/25 05:48:30	0:04:13	4.032	-0.019	0.038	
		#3	2024/6/25 10:43:14	2024/6/25 10:43:20	0:00:06	0.096	0.000	0.001	
		UNLD	2024/6/25 10:45:34	2024/6/25 10:48:22					
		ON→YS	2024/6/25 10:52:31	2024/6/25 10:53:40					
		UNLD	2024/6/25 10:58:54	2024/6/25 11:00:54					

(\*1) The  $\Delta V$  information shows the planned value.

(\*2) This information includes the analysis error.