

## The history information of QZS-2 operation

date	event	history							mass(kg) (#2)
			start(UT)	stop(UT)	duration	$\Delta V_x$	$\Delta V_y$	$\Delta V_z$	
2018/11/17	orbit maintenance maneuver (*1)	UNLD	2018/11/17 9:21:34	2018/11/17 9:27:42					2302
		YS→ON	2018/11/17 9:47:50	2018/11/17 9:49:50					
		#1-1	2018/11/17 9:56:00	2018/11/17 9:58:59	0:02:59	-2.840	0.010	0.039	
		#1-2	2018/11/17 11:03:23	2018/11/17 11:06:23	0:03:00	-2.840	0.013	0.039	
		#2	2018/11/17 17:58:42	2018/11/17 18:03:41	0:04:59	4.850	0.033	0.063	
		#3	2018/11/17 22:58:02	2018/11/17 22:58:08	0:00:06	0.096	0.001	0.001	
		UNLD	2018/11/17 23:18:14	2018/11/17 23:52:14					
ON→YS	2018/11/17 23:42:43	2018/11/17 23:45:48							
2018/12/3	change of Yaw Steering Status	Pseudo YS	2018/12/3 1:39:11	2018/12/3 1:50:15					
2018/12/4	change of Yaw Steering Status	Pseudo YS	2018/12/4 1:31:19	2018/12/4 1:55:43					
			2018/12/4 14:27:59	2018/12/4 14:45:03					
2018/12/5	change of Yaw Steering Status	Pseudo YS	2018/12/5 1:25:43	2018/12/5 1:59:03					
			2018/12/5 14:21:19	2018/12/5 14:53:03					
2018/12/6	change of Yaw Steering Status	Pseudo YS	2018/12/6 1:21:11	2018/12/6 2:00:55					
			2018/12/6 14:16:23	2018/12/6 14:56:07					
2018/12/7	change of Yaw Steering Status	Pseudo YS	2018/12/7 1:17:11	2018/12/7 2:02:07					
			2018/12/7 14:12:23	2018/12/7 14:58:15					
2018/12/8	change of Yaw Steering Status	Pseudo YS	2018/12/8 1:13:28	2018/12/8 2:02:48					
			2018/12/8 14:12:23	2018/12/8 14:59:44					
2018/12/9	change of Yaw Steering Status	Pseudo YS	2018/12/9 1:10:08	2018/12/9 2:03:12					
			2018/12/9 14:06:16	2018/12/9 15:00:08					
2018/12/10	change of Yaw Steering Status	Pseudo YS	2018/12/10 1:08:56	2018/12/10 2:01:20					
			2018/12/10 14:07:28	2018/12/10 14:56:56					
2018/12/11	change of Yaw Steering Status	Pseudo YS	2018/12/11 1:09:28	2018/12/11 1:57:52					
			2018/12/11 14:09:03	2018/12/11 14:53:20					
2018/12/12	change of Yaw Steering Status	Pseudo YS	2018/12/12 1:10:08	2018/12/12 1:54:00					
			2018/12/12 14:11:12	2018/12/12 14:48:56					
2018/12/13	change of Yaw Steering Status	Pseudo YS	2018/12/13 1:11:28	2018/12/13 1:49:36					
			2018/12/13 14:14:16	2018/12/13 14:43:20					
2018/12/14	change of Yaw Steering Status	Pseudo YS	2018/12/14 1:13:20	2018/12/14 1:44:24					
			2018/12/14 14:19:28	2018/12/14 14:33:52					
2018/12/15	change of Yaw Steering Status	Pseudo YS	2018/12/15 1:16:32	2018/12/15 1:36:00					
			-	-					
2019/5/17 -5/18	orbit maintenance maneuver (*1)	UNLD	2019/5/17 21:49:57	2019/5/17 21:53:17				2294	
		YS→ON	2019/5/17 22:10:12	2019/5/17 22:13:47					
		#1	2019/5/17 22:18:22	2019/5/17 22:22:45	0:04:23	-4.039	-0.012		0.053
		#2	2019/5/18 5:48:51	2019/5/18 5:52:16	0:03:25	3.267	-0.013		0.035
		#3	2019/5/18 10:47:26	2019/5/18 10:47:29	0:00:03	0.056	0.000		0.001
		UNLD	2019/5/18 10:50:37	2019/5/18 10:52:37					
		ON→YS	2019/5/18 10:56:43	2019/5/18 10:57:31					
2019/5/30	change of Yaw Steering Status	Pseudo YS	2019/5/30 13:50:22	2019/5/30 14:04:14					
2019/5/31	change of Yaw Steering Status	Pseudo YS	2019/5/31 13:43:18	2019/5/31 14:09:42					
2019/6/1	change of Yaw Steering Status	Pseudo YS	2019/6/1 2:40:30	2019/6/1 3:01:58					
			2019/6/1 13:37:50	2019/6/1 14:12:14					

## The history information of QZS-2 operation

date	event	history							mass(kg) (※2)
			start(UT)	stop(UT)	duration	$\Delta V_x$	$\Delta V_y$	$\Delta V_z$	
2019/6/2	change of Yaw Steering Status	Pseudo YS	2019/6/2 2:34:14	2019/6/2 3:07:02					
			2019/6/2 13:33:18	2019/6/2 14:13:34					
2019/6/3	change of Yaw Steering Status	Pseudo YS	2019/6/3 2:29:18	2019/6/3 3:09:34					
			2019/6/3 13:29:10	2019/6/3 14:14:22					
2019/6/4	change of Yaw Steering Status	Pseudo YS	2019/6/4 2:25:11	2019/6/4 3:11:11					
			2019/6/4 13:25:27	2019/6/4 14:14:47					
2019/6/5	change of Yaw Steering Status	Pseudo YS	2019/6/5 2:21:27	2019/6/5 3:12:23					
			2019/6/5 13:21:51	2019/6/5 14:14:55					
2019/6/6	change of Yaw Steering Status	Pseudo YS	2019/6/6 2:18:31	2019/6/6 3:12:39					
			2019/6/6 13:20:15	2019/6/6 14:12:55					
2019/6/7	change of Yaw Steering Status	Pseudo YS	2019/6/7 2:19:19	2019/6/7 3:09:11					
			2019/6/7 13:20:23	2019/6/7 14:09:19					
2019/6/8	change of Yaw Steering Status	Pseudo YS	2019/6/8 2:20:23	2019/6/8 3:05:27					
			2019/6/8 13:20:47	2019/6/8 14:05:19					
2019/6/9	change of Yaw Steering Status	Pseudo YS	2019/6/9 2:22:07	2019/6/9 3:01:11					
			2019/6/9 13:21:27	2019/6/9 14:00:55					
2019/6/10	change of Yaw Steering Status	Pseudo YS	2019/6/10 2:24:31	2019/6/10 2:55:51					
			2019/6/10 13:22:55	2019/6/10 13:55:51					
2019/6/11	change of Yaw Steering Status	Pseudo YS	2019/6/11 2:28:15	2019/6/11 2:46:55					
			2019/6/11 13:25:11	2019/6/11 13:49:03					
2019/6/12	change of Yaw Steering Status	Pseudo YS	2019/6/12 13:29:59	2019/6/12 13:40:31					
2019/11/14	orbit maintenance maneuver (※1)	UNLD	2019/11/14 9:32:44	2019/11/14 9:39:08					2288
		YS→ON	2019/11/14 9:59:39	2019/11/14 10:00:42					
		#1	2019/11/14 10:07:49	2019/11/14 10:11:25	0:03:36	-3.348	0.020	0.042	
		#2	2019/11/14 17:38:15	2019/11/14 17:40:59	0:02:44	2.659	0.027	0.024	
		#3	2019/11/14 22:36:27	2019/11/14 22:36:35	0:00:08	0.130	0.001	0.001	
		UNLD	2019/11/14 22:39:32	2019/11/14 22:41:40					
		ON→YS	2019/11/14 22:45:46	2019/11/14 22:49:14					
2019/11/29	change of Yaw Steering Status	Pseudo YS	2019/11/29 1:39:42	2019/11/29 1:51:42					
2019/11/30	change of Yaw Steering Status	Pseudo YS	2019/11/30 1:31:58	2019/11/30 1:57:26					
			2019/11/30 14:29:18	2019/11/30 14:49:50					
2019/12/1	change of Yaw Steering Status	Pseudo YS	2019/12/1 1:26:14	2019/12/1 2:00:30					
			2019/12/1 14:22:46	2019/12/1 14:55:42					
2019/12/2	change of Yaw Steering Status	Pseudo YS	2019/12/2 1:21:34	2019/12/2 2:02:14					
			2019/12/2 14:17:42	2019/12/2 14:58:38					
2019/12/3	change of Yaw Steering Status	Pseudo YS	2019/12/3 1:17:18	2019/12/3 2:03:10					
			2019/12/3 14:13:34	2019/12/3 15:00:30					
2019/12/4	change of Yaw Steering Status	Pseudo YS	2019/12/4 1:13:34	2019/12/4 2:03:42					
			2019/12/4 14:09:50	2019/12/4 15:01:50					
2019/12/5	change of Yaw Steering Status	Pseudo YS	2019/12/5 1:09:58	2019/12/5 2:03:58					
			2019/12/5 14:08:06	2019/12/5 15:01:02					
2019/12/6	change of Yaw Steering Status	Pseudo YS	2019/12/6 1:09:34	2019/12/6 2:01:02					
			2019/12/6 14:09:18	2019/12/6 14:57:26					

## The history information of QZS-2 operation

date	event	history							mass(kg) (#2)
			start(UT)	stop(UT)	duration	$\Delta V_x$	$\Delta V_y$	$\Delta V_z$	
2019/12/7	change of Yaw Steering Status	Pseudo YS	2019/12/7 1:10:06	2019/12/7 1:57:10					
			2019/12/7 14:11:02	2019/12/7 14:53:26					
2019/12/8	change of Yaw Steering Status	Pseudo YS	2019/12/8 1:10:54	2019/12/8 1:53:02					
			2019/12/8 14:13:26	2019/12/8 14:48:38					
2019/12/9	change of Yaw Steering Status	Pseudo YS	2019/12/9 1:12:22	2019/12/9 1:48:22					
			2019/12/9 14:16:54	2019/12/9 14:41:50					
2019/12/10	change of Yaw Steering Status	Pseudo YS	2019/12/10 1:14:39	2019/12/10 1:42:23					
			2019/12/10 14:24:15	2019/12/10 14:32:31					
2019/12/11	change of Yaw Steering Status	Pseudo YS	2019/12/11 1:18:55	2019/12/11 1:33:03					
2020/5/9 -5/10	orbit maintenance maneuver (*1)	UNLD	2020/5/9 21:52:03	2020/5/9 21:55:23					2282
		YS→ON	2020/5/9 22:12:26	2020/5/9 22:15:53					
		#1	2020/5/9 22:20:36	2020/5/9 22:24:11	0:03:35	-3.264	-0.020	0.042	
		#2	2020/5/10 5:51:02	2020/5/10 5:53:45	0:02:43	2.599	-0.005	0.028	
		#3	2020/5/10 10:49:15	2020/5/10 10:49:20	0:00:05	0.079	0.000	0.001	
		UNLD	2020/5/10 10:52:19	2020/5/10 10:54:27					
		ON→YS	2020/5/10 10:58:32	2020/5/10 10:59:37					
	UNLD	2020/5/10 11:04:51	2020/5/10 11:06:59						
2020/5/25	change of Yaw Steering Status	Pseudo YS	2020/5/25 13:42:13	2020/5/25 13:58:37					
2020/5/26	change of Yaw Steering Status	Pseudo YS	2020/5/26 2:41:33	2020/5/26 2:51:41					
			2020/5/26 13:35:33	2020/5/26 14:04:37					
2020/5/27	change of Yaw Steering Status	Pseudo YS	2020/5/27 2:32:37	2020/5/27 2:58:45					
			2020/5/27 13:30:21	2020/5/27 14:06:45					
2020/5/28	change of Yaw Steering Status	Pseudo YS	2020/5/28 2:26:45	2020/5/28 3:02:29					
			2020/5/28 13:25:41	2020/5/28 14:07:57					
2020/5/29	change of Yaw Steering Status	Pseudo YS	2020/5/29 2:22:05	2020/5/29 3:04:45					
			2020/5/29 13:21:33	2020/5/29 14:08:29					
2020/5/30	change of Yaw Steering Status	Pseudo YS	2020/5/30 2:17:57	2020/5/30 3:06:05					
			2020/5/30 13:17:49	2020/5/30 14:08:45					
2020/5/31	change of Yaw Steering Status	Pseudo YS	2020/5/31 2:14:21	2020/5/31 3:07:01					
			2020/5/31 13:14:13	2020/5/31 14:08:45					
2020/6/1	change of Yaw Steering Status	Pseudo YS	2020/6/1 2:13:09	2020/6/1 3:05:17					
			2020/6/1 13:14:13	2020/6/1 14:05:01					
2020/6/2	change of Yaw Steering Status	Pseudo YS	2020/6/2 2:14:05	2020/6/2 3:01:41					
			2020/6/2 13:14:29	2020/6/2 14:01:17					
2020/6/3	change of Yaw Steering Status	Pseudo YS	2020/6/3 2:15:25	2020/6/3 2:57:33					
			2020/6/3 13:15:09	2020/6/3 13:57:01					
2020/6/4	change of Yaw Steering Status	Pseudo YS	2020/6/4 2:17:26	2020/6/4 2:52:46					
			2020/6/4 13:16:14	2020/6/4 13:52:22					
2020/6/5	change of Yaw Steering Status	Pseudo YS	2020/6/5 2:20:38	2020/6/5 2:46:14					
			2020/6/5 13:18:06	2020/6/5 13:46:30					
2020/6/6	change of Yaw Steering Status	Pseudo YS	2020/6/6 2:26:38	2020/6/6 2:36:54					
			2020/6/6 13:21:42	2020/6/6 13:37:02					

## The history information of QZS-2 operation

date	event	history							mass(kg) (※2)
			start(UT)	stop(UT)	duration	$\Delta V_x$	$\Delta V_y$	$\Delta V_z$	
2020/11/10	orbit maintenance maneuver (※1)	UNLD	2020/11/10 9:28:03	2020/11/10 9:34:27					2275
		YS→ON	2020/11/10 9:55:07	2020/11/10 9:55:53					
		#1	2020/11/10 10:03:17	2020/11/10 10:06:58	0:03:41	-3.426	0.030	0.047	
		#2	2020/11/10 17:33:44	2020/11/10 17:36:32	0:02:48	2.730	0.009	0.035	
		#3	2020/11/10 22:31:57	2020/11/10 22:32:06	0:00:09	0.133	0.000	0.002	
		UNLD	2020/11/10 22:35:07	2020/11/10 22:37:07					
		ON→YS	2020/11/10 22:41:17	2020/11/10 22:44:57					
UNLD	2020/11/10 22:47:39	2020/11/10 22:49:39							
2020/11/24	change of Yaw Steering Status	Pseudo YS	2020/11/24 1:36:52	2020/11/24 1:49:00					
2020/11/25	change of Yaw Steering Status	Pseudo YS	2020/11/25 1:28:52	2020/11/25 1:54:44					
			2020/11/25 14:26:36	2020/11/25 14:48:20					
2020/11/26	change of Yaw Steering Status	Pseudo YS	2020/11/26 1:23:09	2020/11/26 1:57:49					
			2020/11/26 14:20:05	2020/11/26 14:53:49					
2020/11/27	change of Yaw Steering Status	Pseudo YS	2020/11/27 1:18:21	2020/11/27 1:59:25					
			2020/11/27 14:15:01	2020/11/27 14:56:29					
2020/11/28	change of Yaw Steering Status	Pseudo YS	2020/11/28 1:14:13	2020/11/28 2:00:29					
			2020/11/28 14:10:45	2020/11/28 14:58:21					
2020/11/29	change of Yaw Steering Status	Pseudo YS	2020/11/29 1:10:21	2020/11/29 2:01:01					
			2020/11/29 14:07:09	2020/11/29 14:59:33					
2020/11/30	change of Yaw Steering Status	Pseudo YS	2020/11/30 1:06:53	2020/11/30 2:01:17					
			2020/11/30 14:05:57	2020/11/30 14:58:05					
2020/12/1	change of Yaw Steering Status	Pseudo YS	2020/12/1 1:07:01	2020/12/1 1:57:41					
			2020/12/1 14:07:09	2020/12/1 14:54:29					
2020/12/2	change of Yaw Steering Status	Pseudo YS	2020/12/2 1:07:33	2020/12/2 1:53:49					
			2020/12/2 14:08:53	2020/12/2 14:50:13					
2020/12/3	change of Yaw Steering Status	Pseudo YS	2020/12/3 1:08:29	2020/12/3 1:49:33					
			2020/12/3 14:11:25	2020/12/3 14:45:01					
2020/12/4	change of Yaw Steering Status	Pseudo YS	2020/12/4 1:10:05	2020/12/4 1:44:29					
			2020/12/4 14:15:25	2020/12/4 14:37:09					
2020/12/5	change of Yaw Steering Status	Pseudo YS	2020/12/5 1:12:37	2020/12/5 1:37:41					
2020/12/6	change of Yaw Steering Status	Pseudo YS	2020/12/6 1:17:57	2020/12/6 1:28:29					

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

(※2) This information includes the analysis error.