

The history information of QZS-1 operation

| date               | event                              | history |                    |                    |          |              |              |              | mass(kg)<br>(*2) |
|--------------------|------------------------------------|---------|--------------------|--------------------|----------|--------------|--------------|--------------|------------------|
|                    |                                    |         | start(UT)          | stop(UT)           | duration | $\Delta V_x$ | $\Delta V_y$ | $\Delta V_z$ |                  |
| 2018/8/14          | change of attitude mode            | YS→ON   | 2018/8/14 10:02:32 | 2018/8/14 10:31:39 |          |              |              |              |                  |
| 2018/9/10<br>-9/11 | orbit maintenance maneuver<br>(*1) | UNLD    | 2018/9/10 23:50:42 | 2018/9/10 23:56:50 |          |              |              |              | 2241             |
|                    |                                    | #1      | 2018/9/11 0:12:15  | 2018/9/11 0:18:40  | 0:06:25  | -2.264       | -0.081       | -0.049       |                  |
|                    |                                    | #2      | 2018/9/11 7:42:55  | 2018/9/11 7:48:00  | 0:05:05  | 1.723        | 0.034        | -0.061       |                  |
| 2018/9/14          | change of attitude mode            | ON→YS   | 2018/9/14 7:59:10  | 2018/9/14 8:16:46  |          |              |              |              |                  |
| 2018/9/18          | orbit maintenance maneuver<br>(*1) | YS→ON   | 2018/9/18 12:37:19 | 2018/9/18 12:38:38 |          |              |              |              | 2241             |
|                    |                                    | #1      | 2018/9/18 12:55:42 | 2018/9/18 12:56:36 | 0:00:54  | -0.318       | -0.011       | -0.007       |                  |
| 2018/9/23          | change of attitude mode            | ON→YS   | 2018/9/23 8:24:31  | 2018/9/23 8:55:10  |          |              |              |              |                  |
| 2019/2/8           | change of attitude mode            | YS→ON   | 2019/2/8 10:04:01  | 2019/2/8 10:33:30  |          |              |              |              |                  |
| 2019/3/10<br>-3/11 | orbit maintenance maneuver<br>(*1) | UNLD    | 2019/3/10 11:56:34 | 2019/3/10 12:00:18 |          |              |              |              | 2237             |
|                    |                                    | #1      | 2019/3/10 12:16:52 | 2019/3/10 12:23:55 | 0:07:03  | -2.425       | 0.062        | -0.088       |                  |
|                    |                                    | #2      | 2019/3/10 19:47:27 | 2019/3/10 19:53:20 | 0:05:53  | 2.037        | -0.057       | -0.042       |                  |
|                    |                                    | #3      | 2019/3/11 0:30:43  | 2019/3/11 0:31:04  | 0:00:21  | -0.119       | 0.003        | -0.004       |                  |
| 2019/3/19          | change of attitude mode            | ON→YS   | 2019/3/19 8:04:21  | 2019/3/19 8:35:09  |          |              |              |              |                  |
| 2019/8/10          | change of attitude mode            | YS→ON   | 2019/8/10 9:50:14  | 2019/8/10 10:19:22 |          |              |              |              |                  |
| 2019/9/06<br>-9/07 | orbit maintenance maneuver<br>(*1) | UNLD    | 2019/9/6 23:35:13  | 2019/9/6 23:41:05  |          |              |              |              | 2233             |
|                    |                                    | #1      | 2019/9/6 23:56:37  | 2019/9/7 0:03:36   | 0:06:59  | -2.472       | -0.087       | -0.054       |                  |
|                    |                                    | #2      | 2019/9/7 7:26:55   | 2019/9/7 7:33:18   | 0:06:23  | 2.174        | 0.042        | -0.077       |                  |
|                    |                                    | #3      | 2019/9/7 12:10:20  | 2019/9/7 12:10:53  | 0:00:33  | -0.190       | -0.007       | -0.004       |                  |
| 2019/9/20          | change of attitude mode            | ON→YS   | 2019/9/20 8:04:02  | 2019/9/20 8:35:25  |          |              |              |              |                  |

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

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