Cluster manoeuvres: December 2019 - May 2020

V1, 15 August 2019

Spacecraft	*Science data stop*	*Science data re-start*	*Nominal manoeuvre time*
C2	15/09/2019 04:50	15/09/2019 10:11	15/09/2019 08:05:00
C3	15/09/2019 06:12	15/09/2019 11:33	15/09/2019 09:27:00
C1	15/09/2019 12:41	15/09/2019 18:02	15/09/2019 15:56:00
C2	17/09/2019 09:15	17/09/2019 14:36	17/09/2019 12:30:00
C3	17/09/2019 09:45	17/09/2019 15:06	17/09/2019 13:00:00
C4	17/09/2019 10:15	17/09/2019 15:36	17/09/2019 13:30:00
C1	17/09/2019 10:45	17/09/2019 16:06	17/09/2019 14:00:00
C2	26/09/2019 12:16	26/09/2019 17:37	26/09/2019 15:31:00
C3	26/09/2019 13:48	26/09/2019 19:09	26/09/2019 17:03:00
C4	26/09/2019 13:48	26/09/2019 19:09	26/09/2019 17:03:00
C1	26/09/2019 19:37	27/09/2019 00:58	26/09/2019 22:52:00
C3	10/12/2019 05:52	10/12/2019 11:13	10/12/2019 09:07:00
C1	10/12/2019 07:26	10/12/2019 12:47	10/12/2019 10:41:00
C3	19/12/2019 06:55	19/12/2019 12:16	19/12/2019 10:10:00
C1	19/12/2019 07:54	19/12/2019 13:15	19/12/2019 11:09:00
C1	08/01/2020 15:05	08/01/2020 20:26	08/01/2020 18:20:00
C2	19/01/2020 20:28	20/01/2020 01:49	19/01/2020 23:43:00
C1	19/01/2020 22:25	20/01/2020 03:46	20/01/2020 01:40:00
C3	19/01/2020 22:47	20/01/2020 04:08	20/01/2020 02:02:00
C2	31/01/2020 04:19	31/01/2020 09:40	31/01/2020 07:34:00
C1	31/01/2020 05:58	31/01/2020 11:19	31/01/2020 09:13:00
C3	31/01/2020 06:08	31/01/2020 11:29	31/01/2020 09:23:00
C3	02/05/2020 23:10	03/05/2020 04:31	03/05/2020 02:25:00
C1	03/05/2020 00:33	03/05/2020 05:54	03/05/2020 03:48:00
C2	03/05/2020 01:21	03/05/2020 06:42	03/05/2020 04:36:00
C3	09/05/2020 17:59	09/05/2020 23:20	09/05/2020 21:14:00
C1	09/05/2020 19:23	10/05/2020 00:44	09/05/2020 22:38:00
C2	09/05/2020 20:12	10/05/2020 01:33	09/05/2020 23:27:00
C3	18/05/2020 19:05	19/05/2020 00:26	18/05/2020 22:20:00
C1	18/05/2020 20:25	19/05/2020 01:46	18/05/2020 23:40:00
C2	18/05/2020 21:16	19/05/2020 02:37	19/05/2020 00:31:00
C2	01/06/2020 10:57	01/06/2020 16:18	01/06/2020 14:12:00

This table shows the periods around each manoeuvre during which JSOC will not plan collection of science data, and the nominal time of each manoeuvre within those periods. The span of the no-science data period is set by:

a) margins assigned by ESOC around each nominal manoeuvre time so as to specify a range within which they may adjust the manoeuvre to take account of latest orbit analysis;

b) margins used by JSOC to protect sensitive instruments (those with high voltage systems). Until 14/03/2019, the JSOC margins were typically 1 hour before the manoeuvre and 7 hours after the manoeuvre (and hence must be additional to the ESOC margins). From 14/03/2019, the JSOC margins are typically 1 hour before the manoeuvre and 2 hours after the manoeuvre. The HV instruments were typically off for another 1 hour after the end of no-science data taking period until 16/07/2019 manoeuvre. From the manoeuvre on 16/07/2017, the HV instruments are off for another 15 minutes instead of 1 hour.