

## Cluster manoeuvres: November 2022 - November 2023

ESOC version v034, 15 September 2022

<b>Spacecraft</b>	<b>Science data stop</b>	<b>Science data re-start</b>	<b>Nominal manoeuvre time</b>
C3	14/11/2022 07:25	14/11/2022 12:46	14/11/2022 10:40:00
C4	16/11/2022 05:23	16/11/2022 10:44	16/11/2022 08:38:00
C3	16/11/2022 06:27	16/11/2022 11:48	16/11/2022 09:42:00
C3	23/11/2022 01:09	23/11/2022 06:30	23/11/2022 04:24:00
C3	04/01/2023 23:24	05/01/2023 04:45	05/01/2023 02:39:00
C3	11/01/2023 18:11	11/01/2023 23:32	11/01/2023 21:26:00
C3	20/01/2023 19:16	21/01/2023 00:37	20/01/2023 22:31:00
C3	27/01/2023 14:09	27/01/2023 19:30	27/01/2023 17:24:00
C3	03/02/2023 08:57	03/02/2023 14:18	03/02/2023 12:12:00
C2	19/02/2023 04:54	19/02/2023 10:15	19/02/2023 08:09:00
C1	23/02/2023 17:33	23/02/2023 22:54	23/02/2023 20:48:00
C1	19/04/2023 00:41	19/04/2023 06:02	19/04/2023 03:56:00
C2	19/04/2023 00:37	19/04/2023 05:58	19/04/2023 03:52:00
C1	28/04/2023 01:01	28/04/2023 06:22	28/04/2023 04:16:00
C2	28/04/2023 01:09	28/04/2023 06:30	28/04/2023 04:24:00
C2	17/09/2023 12:25	17/09/2023 17:46	17/09/2023 15:40:00
C2	06/11/2023 06:19	06/11/2023 11:40	06/11/2023 09:34:00
C2	17/11/2023 13:19	17/11/2023 18:40	17/11/2023 16:34:00

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.