

## Cluster manoeuvres: September 2023 - February 2024

ESOC version v036, 18 September 2023

<b>Spacecraft</b>	<b>Science data stop</b>	<b>Science data re-start</b>	<b>Nominal manoeuvre time</b>
C2	17/09/2023 13:19	17/09/2023 18:40	17/09/2023 16:34:00
C2	06/11/2023 07:28	06/11/2023 12:49	06/11/2023 10:43:00
C2	17/11/2023 14:48	17/11/2023 20:09	17/11/2023 18:03:00
C2	15/01/2024 08:46	15/01/2024 15:57	15/01/2024 12:56:00
C2	16/01/2024 08:14	16/01/2024 15:25	16/01/2024 12:24:00
C2	24/01/2024 09:46	24/01/2024 16:57	24/01/2024 13:56:00
C2	25/01/2024 09:17	25/01/2024 16:28	25/01/2024 13:27:00
C2	01/02/2024 04:00	01/02/2024 11:11	01/02/2024 08:10:00
C2	02/02/2024 10:50	02/02/2024 18:01	02/02/2024 15:00:00

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 16/07/2019, the HV instruments are off for another 15 minutes instead of 1 hour.

**c) For the manoeuvres on SC2 in January-February 2024, all instruments will be switched off for the whole duration of the manoeuvres and manoeuvres margins/duration are increased by 55 minutes at the start and at the end of the manoeuvres window.**