

BepiColombo

**FLIGHT REPORTS
of MPO-MAG**

BC-MAG-TR-1005

Issue: 2 Revision: 1

2022-12-16

**OVERVIEW OF
AVAILABLE MPO-MAG DATA
AND
DATA QUALITY ASSESSMENT**

Mission Phase:	VGA-1
Time Period:	October 12, 2020 - October 17, 2020

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1 Introduction

This document provides information about all available data and its quality for the time period between October 12, 2020 until October 17, 2020. This covers the Mission Phase Venus Gravity Assist 1 (VGA-1).

For every year, month and day where measurement data are available overview plots have been created. The data availability plots show all data calibration levels available. The science modes of the data are distinguished by different colors. An overview table of available data completes the data overview.

Furthermore a list of known relevant events happening onboard the s/c is present to give a hint, where the data quality might be diminished by s/c interference.

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1.1 Relevant Events for MPOMAG

Switch on	Switch off	EVENTS	VISIBLE	REFERENCE
2020-10-14T03:59	2020-10-14T03:48	<p>2020-10-12T08:20 to 2020-10-15T14:0: temperature transients induced changing s/c attitude visible on MTM S/A see attached plots in MOR #88. Check also: MPO S/A TEMP, MOSIF Radiator</p> <p>Safety switch off/on of MPO-MAG prior C/A MPO-MAG set to 128 Hz 2020-10-15T04:07 Check IB Illumination according to MCAM pic 2020-10-15T03:58:32 : C/A 10721 km above surface. 2020-10-15T03:59: switch MPO-MAG back to 16 Hz</p>		<p>MOR #88</p> <p>- DR 15-10 MOR #88</p>

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2 2020

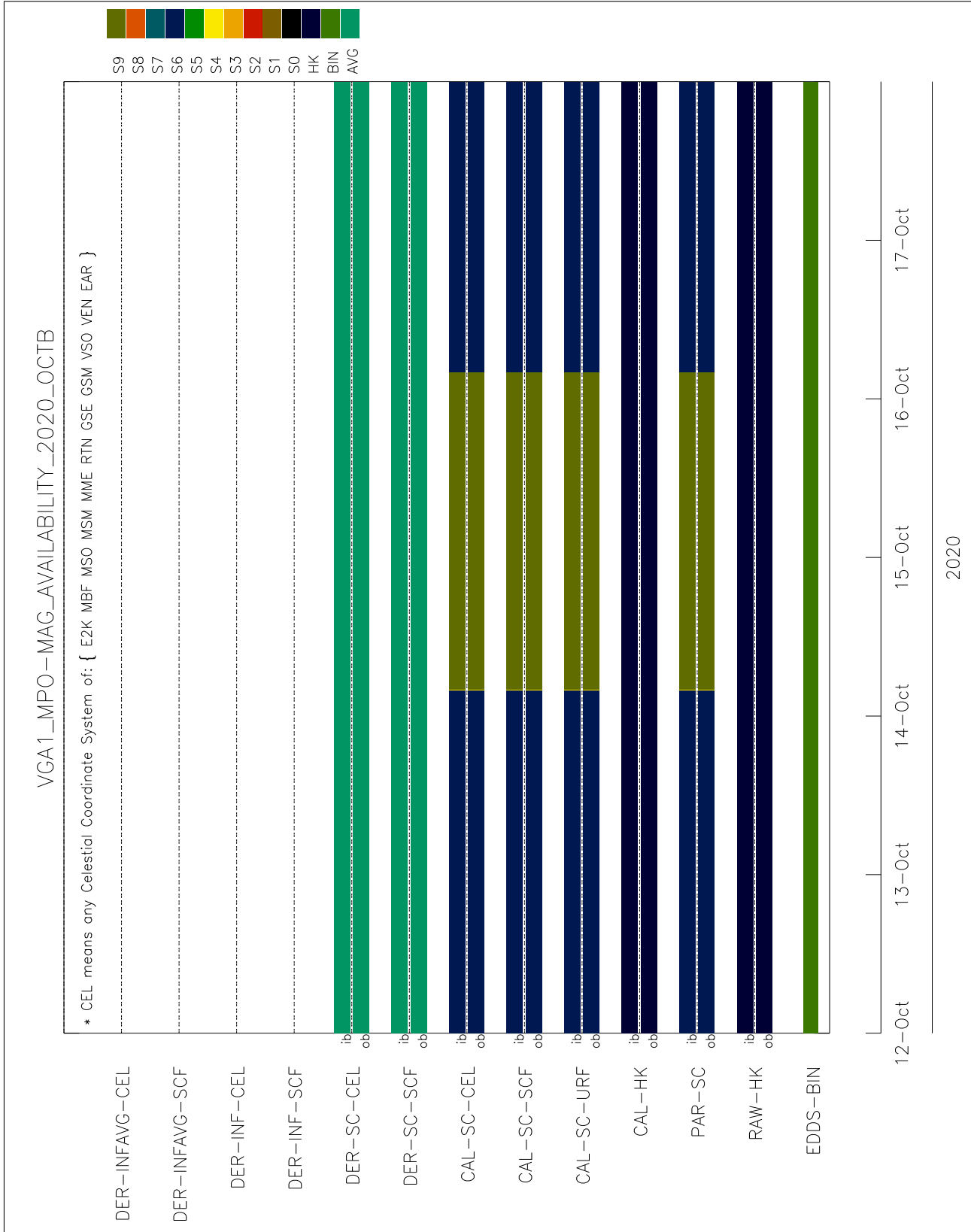


Figure 1: Overview October 2020

DATE	CALIBRATION LEVEL	COORDINATES	SAMPLE RATES (Hz)
2020-10-12	edds_bin	URF	all available
2020-10-12	raw_hk_ob	URF	standard HK rate
2020-10-12	cal_hk_ob	URF	standard HK rate
2020-10-12	par_sc_ob	URF	16
2020-10-12	cal_sc_ob	URF	16
2020-10-12	cal_sc_ob	SCF	16
2020-10-12	cal_sc_ob	E2K VSO	16
2020-10-12	der_sc_ob	URF	N / A
2020-10-12	der_sc_ob	SCF	AVG
2020-10-12	der_sc_ob	E2K VSO	AVG
2020-10-12	raw_hk_ib	URF	standard HK rate
2020-10-12	cal_hk_ib	URF	standard HK rate
2020-10-12	par_sc_ib	URF	16
2020-10-12	cal_sc_ib	URF	16
2020-10-12	cal_sc_ib	SCF	16
2020-10-12	cal_sc_ib	E2K VSO	16
2020-10-12	der_sc_ib	URF	N / A
2020-10-12	der_sc_ib	SCF	AVG
2020-10-12	der_sc_ib	E2K VSO	AVG
2020-10-12	der_inf	URF	N / A
2020-10-12	der_inf	SCF	N / A
2020-10-12	der_inf		MISSING!!
2020-10-13	edds_bin	URF	all available
2020-10-13	raw_hk_ob	URF	standard HK rate
2020-10-13	cal_hk_ob	URF	standard HK rate
2020-10-13	par_sc_ob	URF	16
2020-10-13	cal_sc_ob	URF	16
2020-10-13	cal_sc_ob	SCF	16
2020-10-13	cal_sc_ob	E2K VSO	16
2020-10-13	der_sc_ob	URF	N / A
2020-10-13	der_sc_ob	SCF	AVG
2020-10-13	der_sc_ob	E2K VSO	AVG
2020-10-13	raw_hk_ib	URF	standard HK rate
2020-10-13	cal_hk_ib	URF	standard HK rate
2020-10-13	par_sc_ib	URF	16
2020-10-13	cal_sc_ib	URF	16
2020-10-13	cal_sc_ib	SCF	16
2020-10-13	cal_sc_ib	E2K VSO	16
2020-10-13	der_sc_ib	URF	N / A
2020-10-13	der_sc_ib	SCF	AVG
2020-10-13	der_sc_ib	E2K VSO	AVG
2020-10-13	der_inf	URF	N / A
2020-10-13	der_inf	SCF	N / A
2020-10-13	der_inf		MISSING!!

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DATE	CALIBRATION LEVEL	COORDINATES	SAMPLE RATES (Hz)		
2020-10-14	edds_bin	URF	all available		
2020-10-14	raw_hk_ob	URF	standard HK rate		
2020-10-14	cal_hk_ob	URF	standard HK rate		
2020-10-14	par_sc_ob	URF	4	16	128
2020-10-14	cal_sc_ob	URF	4	16	128
2020-10-14	cal_sc_ob	SCF	4	16	128
2020-10-14	cal_sc_ob	E2K VSO	4	16	128
2020-10-14	der_sc_ob	URF	N / A		
2020-10-14	der_sc_ob	SCF	AVG		
2020-10-14	der_sc_ob	E2K VSO	AVG		
2020-10-14	raw_hk_ib	URF	standard HK rate		
2020-10-14	cal_hk_ib	URF	standard HK rate		
2020-10-14	par_sc_ib	URF	4	16	128
2020-10-14	cal_sc_ib	URF	4	16	128
2020-10-14	cal_sc_ib	SCF	4	16	128
2020-10-14	cal_sc_ib	E2K VSO	4	16	128
2020-10-14	der_sc_ib	URF	N / A		
2020-10-14	der_sc_ib	SCF	AVG		
2020-10-14	der_sc_ib	E2K VSO	AVG		
2020-10-14	der_inf	URF	N / A		
2020-10-14	der_inf	SCF	N / A		
2020-10-14	der_inf		MISSING!!		
2020-10-15	edds_bin	URF	all available		
2020-10-15	raw_hk_ob	URF	standard HK rate		
2020-10-15	cal_hk_ob	URF	standard HK rate		
2020-10-15	par_sc_ob	URF	128		
2020-10-15	cal_sc_ob	URF	128		
2020-10-15	cal_sc_ob	SCF	128		
2020-10-15	cal_sc_ob	E2K VSO	128		
2020-10-15	der_sc_ob	URF	N / A		
2020-10-15	der_sc_ob	SCF	AVG		
2020-10-15	der_sc_ob	E2K VSO	AVG		
2020-10-15	raw_hk_ib	URF	standard HK rate		
2020-10-15	cal_hk_ib	URF	standard HK rate		
2020-10-15	par_sc_ib	URF	128		
2020-10-15	cal_sc_ib	URF	128		
2020-10-15	cal_sc_ib	SCF	128		
2020-10-15	cal_sc_ib	E2K VSO	128		
2020-10-15	der_sc_ib	URF	N / A		
2020-10-15	der_sc_ib	SCF	AVG		
2020-10-15	der_sc_ib	E2K VSO	AVG		
2020-10-15	der_inf	URF	N / A		
2020-10-15	der_inf	SCF	N / A		
2020-10-15	der_inf		MISSING!!		

DATE	CALIBRATION LEVEL	COORDINATES	SAMPLE RATES (Hz)	
2020-10-16	edds_bin	URF	all available	
2020-10-16	raw_hk_ob	URF	standard HK rate	
2020-10-16	cal_hk_ob	URF	standard HK rate	
2020-10-16	par_sc_ob	URF	16	128
2020-10-16	cal_sc_ob	URF	16	128
2020-10-16	cal_sc_ob	SCF	16	128
2020-10-16	cal_sc_ob	E2K VSO	16	128
2020-10-16	der_sc_ob	URF	N / A	
2020-10-16	der_sc_ob	SCF		AVG
2020-10-16	der_sc_ob	E2K VSO		AVG
2020-10-16	raw_hk_ib	URF	standard HK rate	
2020-10-16	cal_hk_ib	URF	standard HK rate	
2020-10-16	par_sc_ib	URF	16	128
2020-10-16	cal_sc_ib	URF	16	128
2020-10-16	cal_sc_ib	SCF	16	128
2020-10-16	cal_sc_ib	E2K VSO	16	128
2020-10-16	der_sc_ib	URF	N / A	
2020-10-16	der_sc_ib	SCF		AVG
2020-10-16	der_sc_ib	E2K VSO		AVG
2020-10-16	der_inf	URF	N / A	
2020-10-16	der_inf	SCF	N / A	
2020-10-16	der_inf		MISSING!!	
2020-10-17	edds_bin	URF	all available	
2020-10-17	raw_hk_ob	URF	standard HK rate	
2020-10-17	cal_hk_ob	URF	standard HK rate	
2020-10-17	par_sc_ob	URF	16	
2020-10-17	cal_sc_ob	URF	16	
2020-10-17	cal_sc_ob	SCF	16	
2020-10-17	cal_sc_ob	E2K VSO	16	
2020-10-17	der_sc_ob	URF	N / A	
2020-10-17	der_sc_ob	SCF		AVG
2020-10-17	der_sc_ob	E2K VSO		AVG
2020-10-17	raw_hk_ib	URF	standard HK rate	
2020-10-17	cal_hk_ib	URF	standard HK rate	
2020-10-17	par_sc_ib	URF	16	
2020-10-17	cal_sc_ib	URF	16	
2020-10-17	cal_sc_ib	SCF	16	
2020-10-17	cal_sc_ib	E2K VSO	16	
2020-10-17	der_sc_ib	URF	N / A	
2020-10-17	der_sc_ib	SCF		AVG
2020-10-17	der_sc_ib	E2K VSO		AVG
2020-10-17	der_inf	URF	N / A	
2020-10-17	der_inf	SCF	N / A	
2020-10-17	der_inf		MISSING!!	