

Data Processing Summary	
Center	GFZ
General	
Satellite	Sentinel-3A
Version	v01
DOI	https://doi.org/10.5880/GFZ_ORBIT/PSO/L74_D_v01 https://doi.org/10.5880/GFZ_ORBIT/PSO/L74_DS_v01
Software	
Name and version	EPOS-OC (v6.74)
Arc cut	
Arc lengths	7 days
Handle of Manoeuvres	Manoeuvres are calibrated in the POD process
Reference System	
Polar motion and UT1	IERS C04 14
Pole model	Linear Meanpole (J. Ries 07/2017)
Precession/Nutation	IERS 2010 Conventions
Satellite reference	
Mass and center of gravity	Variable
Attitude Model	Quaternions
Gravity	
Gravity field (static)	EIGEN-6C4 (120x120)
Gravity field (time varying)	n/a
Solid Earth tides	IERS 2010
Ocean tides	FES2014 (12x12)
Atmospheric gravity	AOD1B RL06 (180x180)
Atmospheric tides	BB2003
Earth pole tide	IERS 2010
Ocean pole tide	Desai (30x30)
Third bodies	FERRARI77, DE430
Surface forces and empiricals	
Radiation Pressure model	Macro model
Radiation pressure coefficient	1 linear scaling per arc estimated
Earth radiation	Heurtel
Earth radiation parametrization	fixed 1.0
Atmospheric density model	MSISE-90
Drag coefficients	1 scaling factor every 3h
1/rev empiricals	1/rev (sin/cos) along- and cross-track direction every 12h
Other empiricals	n/a
DORIS measurements	
Weighting factor	0.042 cm/s
Elevation angle cut-off	10 deg
Down-weighting law	n/a
SAA handling	downweighted by factor of 10
Observations	2 GHz integrated Doppler count
DORIS parameters	
Troposphere	Vienne Mapping Function
Troposphere Scaling	1 scaling factor per station per pass
Frequency Offset	1 frequency offset per station per pass estimated
Timebias	Derived from SLR one per arc
Stationcoordinates	DPOD2014 + PSD
Station ocean loading	FES2004
SLR measurements	
Weighting factor	1 cm (only for DS multi technique orbits)
Elevation angle cut-off	10 deg
Down-weighting law	n/a
SLR parameters	
Troposphere	Mendes-Pavlis 2004
Rangebias	1 global rangebias estimated
Stationcoordinates	SLRF2014 + PSD
Station ocean loading	FES2004