

**PSI 1**  
**LEO (Low Earth Orbit)**

Chamber parameters		Operational parameters		Optional equipment	
main chamber inner size D x H [m]	0.50 x 0.50	temperature range [K] stability [K]	248 – 353 +/- 0.1 shroud cold plate	temperature control	LAUDA Proline RP 1290 C temperature range 183 – 473 K
usable inner size D x H [m]	0.50 x 0.35	pressure [Pa]  pumping units	5 x 10 <sup>-5</sup>  rotary vane pump Duo35A + HiPace 700	pressure sensors  leak test	TPG 262 Full Range Gauge  Leybold Heraeus Ultratest M2 pressure range 10 <sup>1</sup> - 10 <sup>-4</sup> Pa; Helium
irradiation windows material D x t [m]	vertical window Herasil 0.47 x 0.10	irradiation source	1000 W, 2000 W polychromatic metal halogenide	spectral analysis	Bentham DMC150 measurement range 200 - 600 nm smallest measuring step 0.5 nm
optional interface ports D [m]	CF-F: 4 x DN40 4 x DN63 1 x DN160				
special features	mass spectrometer Prisma™ 80			gas	Argon, Nitrogen, Helium, customised gas mixtures, in facility mixing capability
electrical connectors interfaces	—				

**experiments performed:** MATROSHKA preflight tests, BioDiv