

PSI 3
Deep Space 1 [under construction]

Chamber parameters		Operational parameters		Optional equipment	
main chamber inner size D x H [m]	0.30 x 0.35	temperature range [K] stability [K]	233 - 323 +/- 0.1 4 stacked cold plates	temperature control	LAUDA Proline RP 1290 C temperature range 183 – 473 K
usable inner size L x W x H [m]	0.30 x 0.25 x 0.05 4 stacked cold plates	pressure [Pa]	1×10^{-7}	pressure sensors	400 L/s Noble Vaclon PCU $1.33 \times 10^{-7} - 1 \times 10^{-3}$ Pa
irradiation windows material D x t [m]	top lid window Suprasil 0.35 x 0.02	pumping units	IGP	leak test	Leybold Heraeus Ultratest M2 pressure range $10^1 - 10^{-4}$ Pa; Helium
optional interface ports D [m]	CF-F: 5 x DN40 3 x DN63 ISO-KF: 2 x DN40	irradiation source	1000 W, 2000 W polychromatic metal halogenide 254 nm Hg low pressure	spectral analysis	Bentham DMC150 measurement range 200-600 nm; smallest measuring step 0.5 nm
special features	—			gas	Argon, Nitrogen, Helium, customised gas mixtures
electrical connectors interfaces	—				

experiments performed: EURECA BIOSTACK, EXPOSE-E, -R mission ground reference tests