

Thruster Report

Magnetic Field: 199 mT
Anode Power: 382 W
Anode Current: 6.0 A
Propellant: Argon 2.000 mg/s

Thruster Details: Nagoya magnet, LaB6 cathode, 1 mm orifice, copper anode, 80 mm internal diameter.

Thrust	Thrust Eff.	ISP	Total DOF	Coverage Factor	Exp. Uncertainty	Std. Uncertainty
7.8 mN	4.0 %	397.2 sec	14	2.11	2.8 mN	1.3 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	1.1 mN	0.5 mN	0.2 mN	0.3 mN	0.2 mN	0.4 mN
DOF	6	6	6	31	4	4

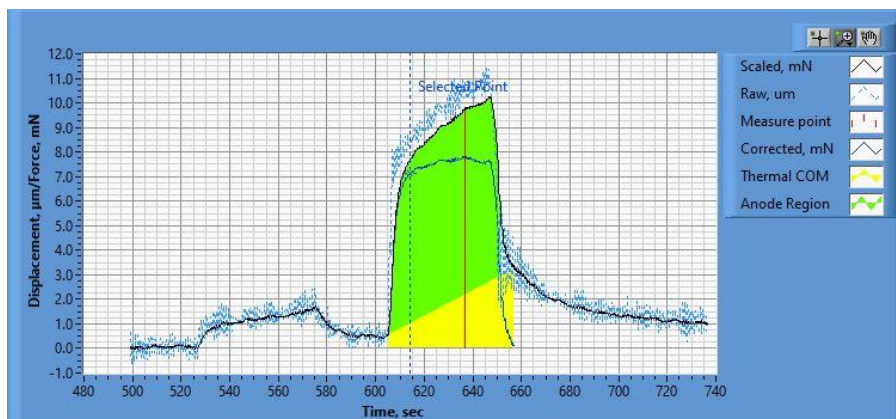


Figure 1. Thrust Plot

File Name: Philtech Data 2024.09.18_10.20.29.csv

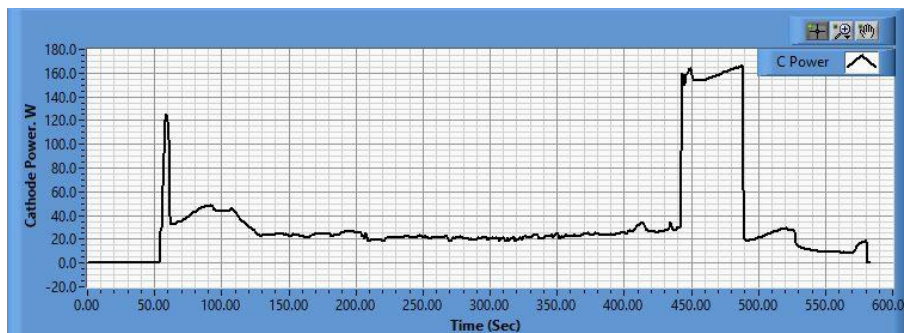
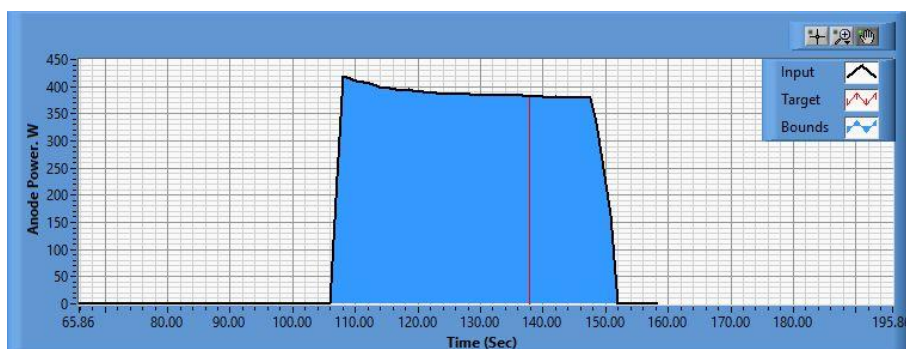


Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.09.18_10.21.47.csv

**Figure 3. Anode Power Plot**

File Name: PSU A Data 2024.09.18_10.28.48.csv

Pre-Cal. Information

File Name: BaseLine_with_Magnet_Philtech Data 2024.09.18_09.28.52.csv

Start/Stop times (24 h): 09:29:04 09:32:49

Sensitivity: 1.29 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-0.836 mN	0.009 mN/s	0.777	1.150 mN

Plateau values:

Weight 0	Weight 1	Weight 2	Weight 3	Weight 4	Weight 5	Weight 4	Weight 3	Weight 2	Weight 1	Weight 0
-0.6 mN	13.1 mN	27.7 mN	40.9 mN	51.9 mN	67.9 mN	51.3 mN	40.6 mN	26.7 mN	12.6 mN	-0.1 mN

Post-Cal. Information

File Name: Philtech Data 2024.09.18_10.20.29.csv

Start/Stop times (24 h): 10:34:59 10:38:44

Sensitivity: 1.28 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-0.707 mN	-0.003 mN/s	0.780	1.151 mN

Plateau values:

Weight 0	Weight 1	Weight 2	Weight 3	Weight 4	Weight 5	Weight 4	Weight 3	Weight 2	Weight 1	Weight 0
-0.5 mN	12.9 mN	28.0 mN	41.1 mN	52.0 mN	67.8 mN	51.3 mN	40.5 mN	26.5 mN	11.9 mN	-0.7 mN

