Thruster Report

Magnetic Field: **500 mT**
Anode Power: **844 W**
Anode Current: **8.0 A**
Propellant: **Argon 1.499 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
15.8 mN	9.9 %	1076.5 sec	22	2.08	2.9 mN	1.4 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	0.7 mN	0.7 mN	0.2 mN	0.5 mN	0.4 mN	0.8 mN
DOF	6	6	6	31	4	4

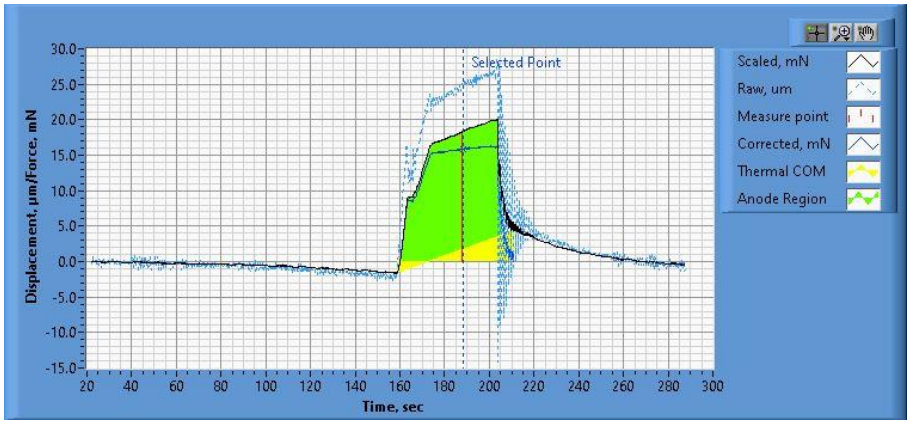

Figure 1. Thrust Plot

File Name: Philtech Data 2024.11.27_12.27.09.csv

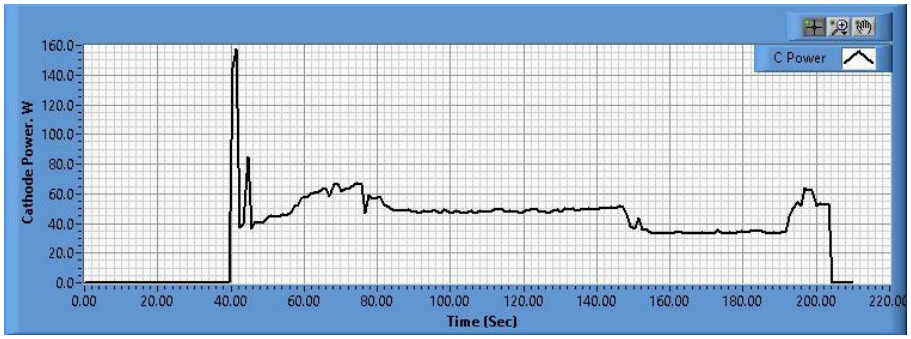

Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.11.27_12.27.21.csv

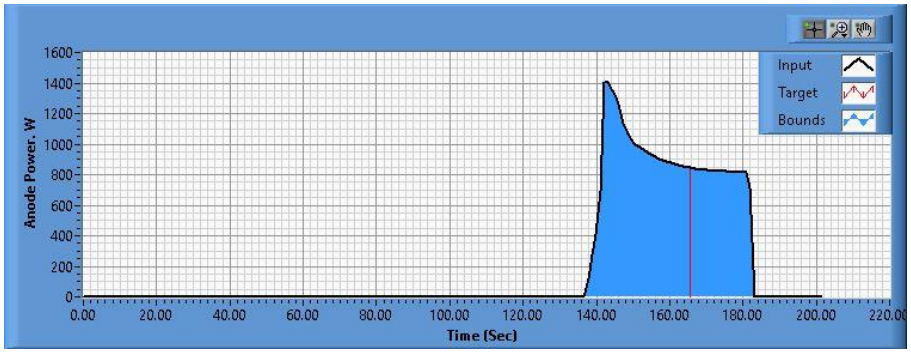

Figure 3. Anode Power Plot

File Name: PSU A Data 2024.11.27_12.27.31.csv

Pre-Cal. Information

File Name: Magnet_Flow_1_5_Philtech Data 2024.11.26_19.35.05.csv

Start/Stop times (24 h): 19:35:33 19:39:18
Sensitivity: 1.59 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-0.384 mN	0.001 mN/s	0.629	1.124 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
-0.2 mN	21.3 mN	39.3 mN	59.8 mN	80.0 mN	100.8 mN	79.4 mN	58.7 mN	38.1 mN	21.0 mN	0.4 mN

Post-Cal. Information

File Name: Philtech Data 2024.11.27_12.27.09.csv

Start/Stop times (24 h): 12:33:41 12:37:25
Sensitivity: 1.61 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
0.475 mN	-0.022 mN/s	0.621	1.063 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
0.1 mN	21.1 mN	38.7 mN	59.9 mN	79.7 mN	100.9 mN	79.4 mN	59.7 mN	38.3 mN	21.0 mN	0.6 mN