Thruster Report

Magnetic Field: **500 mT**
Anode Power: **392 W**
Anode Current: **4.0 A**
Propellant: **Argon 1.500 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
8.0 mN	5.4 %	543.2 sec	19	2.09	2.8 mN	1.4 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	0.7 mN	0.7 mN	0.3 mN	0.2 mN	0.4 mN	0.8 mN
DOF	6	6	6	31	4	4

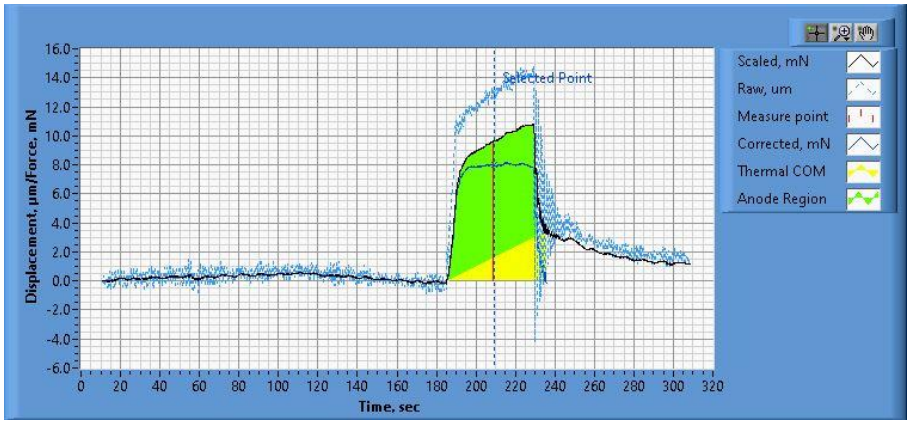

Figure 1. Thrust Plot

File Name: Philtech Data 2024.11.27_17.11.04.csv

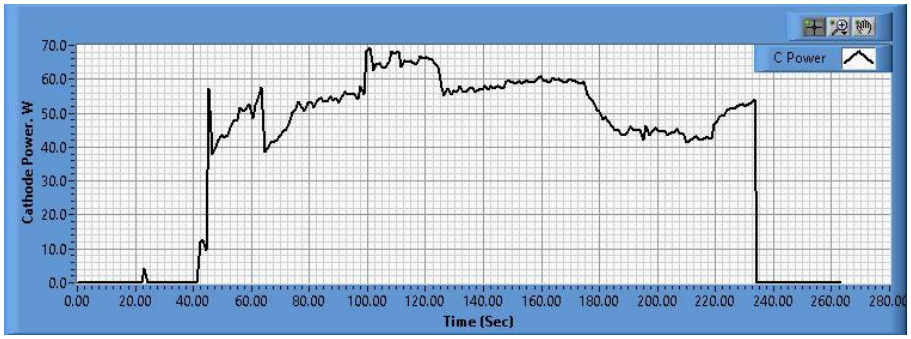

Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.11.27_17.11.14.csv

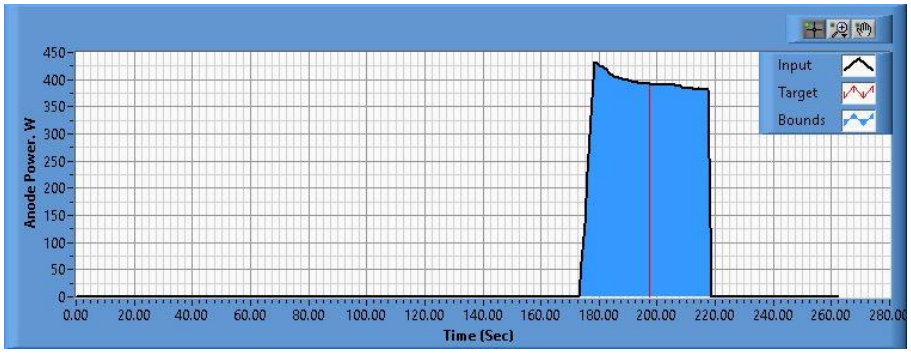

Figure 3. Anode Power Plot

File Name: PSU A Data 2024.11.27_17.11.15.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_17.11.04.csv

Start/Stop times (24 h): 17:18:25 17:22:03
Sensitivity: 1.60 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-1.714 mN	-0.023 mN/s	0.627	1.225 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
0.0 mN	21.2 mN	39.1 mN	60.1 mN	79.8 mN	100.9 mN	78.2 mN	58.8 mN	38.2 mN	20.5 mN	0.7 mN