Thruster Report

Magnetic Field: **1000 mT**
Anode Power: **1004 W**
Anode Current: **8.0 A**
Propellant: **Argon 1.999 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
25.3 mN	16.0 %	1292.3 sec	14	2.11	4.1 mN	1.9 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	0.7 mN	0.6 mN	0.4 mN	0.3 mN	1.1 mN	1.3 mN
DOF	6	6	6	31	4	4

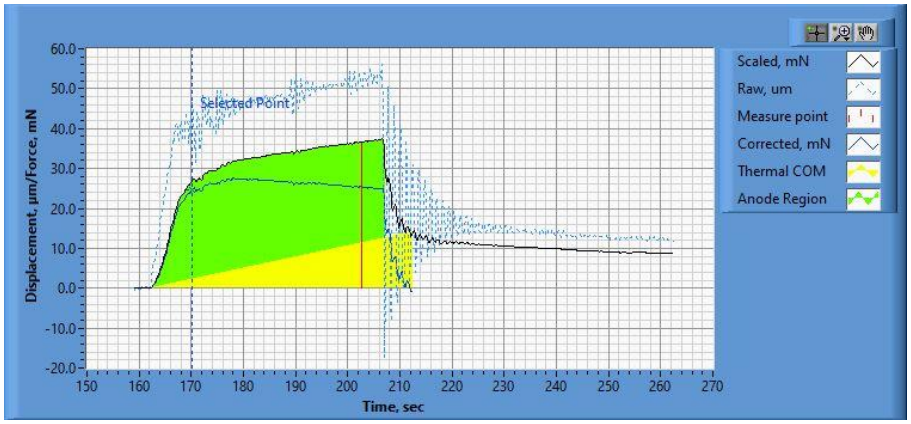

Figure 1. Thrust Plot

File Name: Philtech Data 2024.11.21_17.27.09.csv

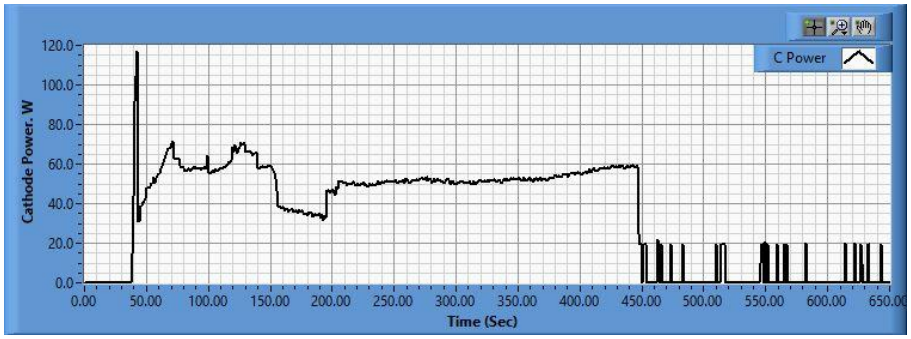

Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.11.21_17.27.20.csv

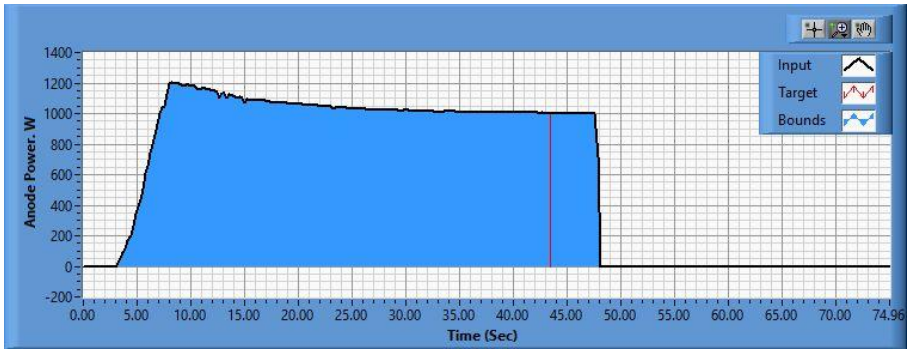

Figure 3. Anode Power Plot

File Name: PSU A Data 2024.11.21_17.29.48.csv

Pre-Cal. Information

File Name: MagnetOn_Flow_2_0_Philtech Data 2024.11.20_13.22.28.csv

Start/Stop times (24 h): 13:22:50 13:26:34
Sensitivity: 1.66 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
0.137 mN	0.000 mN/s	0.601	1.019 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	22.3 mN	40.0 mN	61.1 mN	81.2 mN	101.2 mN	80.4 mN	60.4 mN	39.0 mN	22.1 mN	0.5 mN

Post-Cal. Information

File Name: Philtech Data 2024.11.21_17.27.09.csv

Start/Stop times (24 h): 17:33:57 17:37:33
Sensitivity: 1.72 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-6.138 mN	-0.040 mN/s	0.581	1.321 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
2.4 mN	20.3 mN	38.2 mN	61.0 mN	81.8 mN	101.2 mN	80.4 mN	59.7 mN	39.3 mN	21.3 mN	1.4 mN