Thruster Report

Magnetic Field: **750 mT**
Anode Power: **188 W**
Anode Current: **2.0 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
4.7 mN	3.0 %	241.1 sec	13	2.11	3.2 mN	1.5 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	0.7 mN	0.6 mN	0.2 mN	0.3 mN	0.5 mN	1.1 mN
DOF	6	6	6	31	4	4

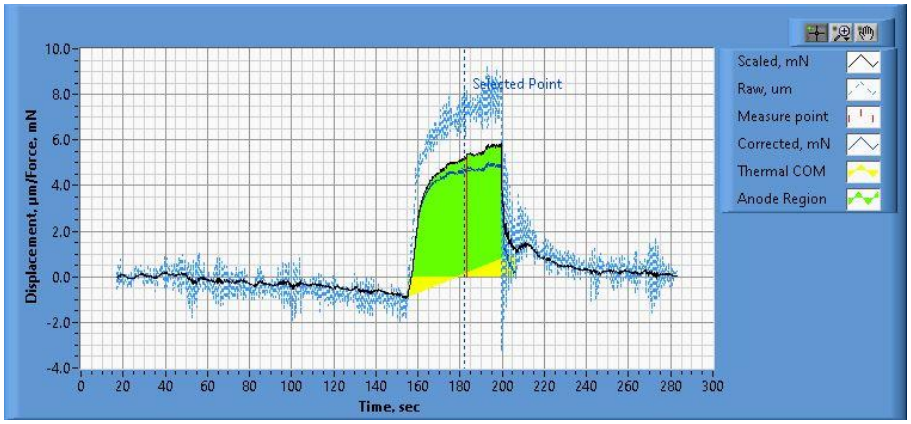

Figure 1. Thrust Plot

File Name: Philtech Data 2024.11.25_18.46.20.csv

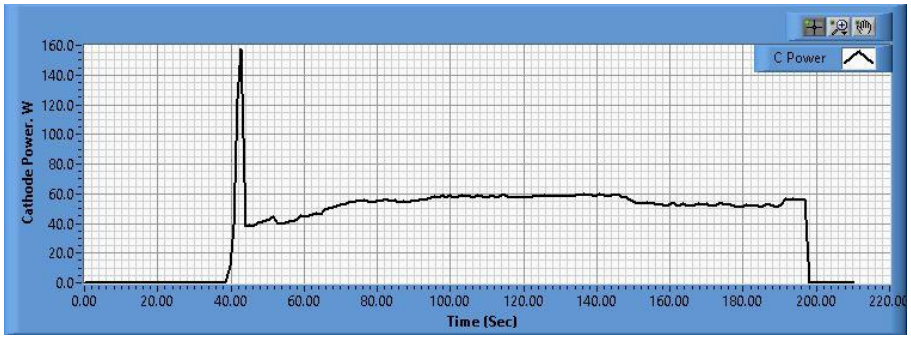

Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.11.25_18.46.30.csv

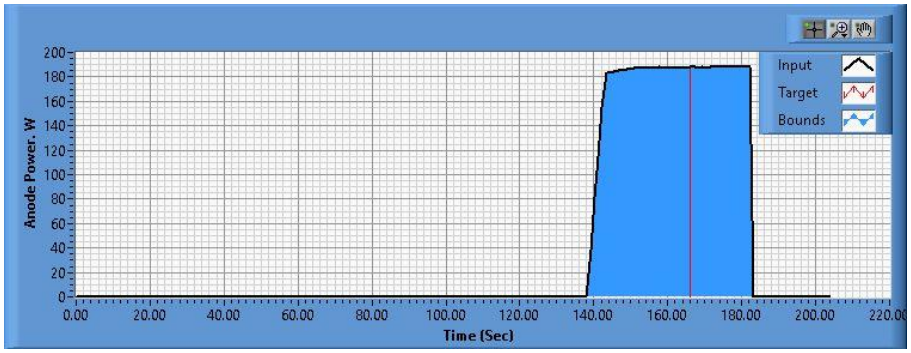

Figure 3. Anode Power Plot

File Name: PSU A Data 2024.11.25_18.46.37.csv

Pre-Cal. Information

File Name: Magnet_Flow_2_0_Philtech Data 2024.11.22_15.27.11.csv

Start/Stop times (24 h): 15:27:21 15:31:06
Sensitivity: 1.62 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
0.798 mN	0.003 mN/s	0.617	0.925 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	20.9 mN	39.2 mN	59.8 mN	80.9 mN	101.1 mN	80.1 mN	59.1 mN	38.7 mN	20.6 mN	1.0 mN

Post-Cal. Information

File Name: Philtech Data 2024.11.25_18.46.20.csv

Start/Stop times (24 h): 18:52:56 18:56:50
Sensitivity: 1.68 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-0.939 mN	-0.031 mN/s	0.596	1.125 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	20.8 mN	38.0 mN	60.0 mN	80.0 mN	100.9 mN	80.2 mN	60.0 mN	38.8 mN	22.1 mN	0.4 mN