Thruster Report

Magnetic Field: **1000 mT**
Anode Power: **214 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
5.9 mN	4.1 %	300.2 sec	19	2.09	4.2 mN	2.0 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	0.8 mN	1.3 mN	0.2 mN	0.3 mN	0.8 mN	1.0 mN
DOF	6	6	6	31	4	4

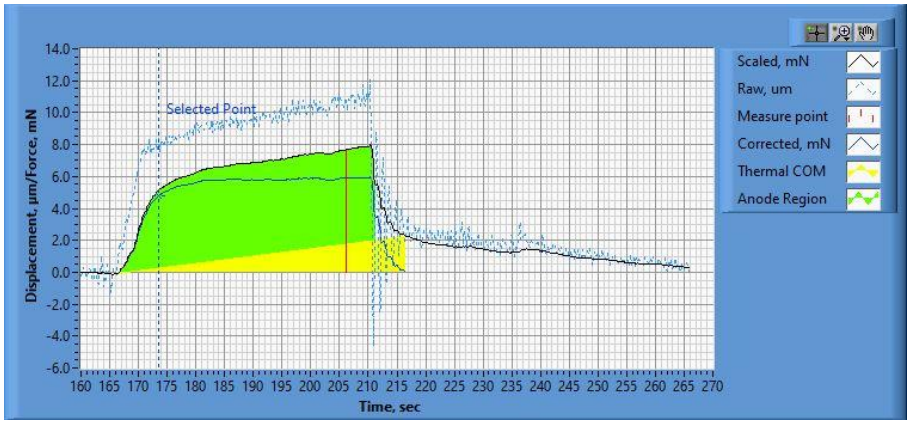

Figure 1. Thrust Plot

File Name: Philtech Data 2024.11.15_08.59.28 - truncated.csv

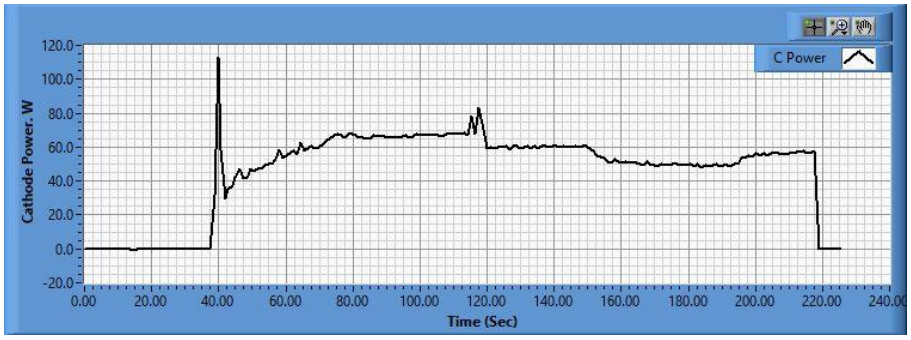

Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.11.15_08.59.44.csv

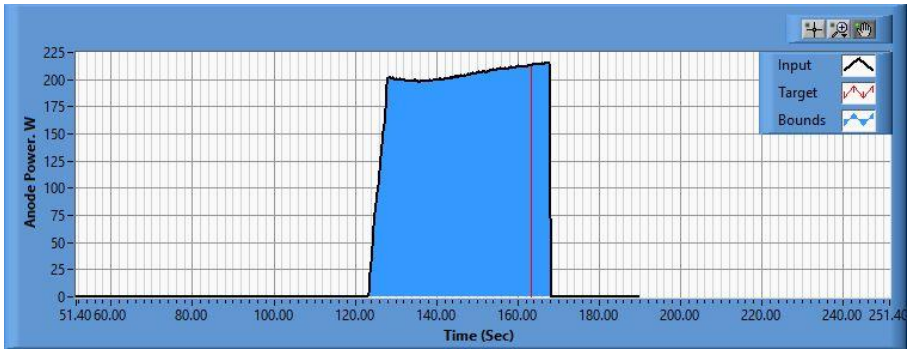

Figure 3. Anode Power Plot

File Name: PSU A Data 2024.11.15_09.00.11.csv

Pre-Cal. Information

File Name: MagnetOn_Noflow_Philtech Data 2024.11.14_16.40.23.csv

Start/Stop times (24 h): 16:40:26 16:42:21
Sensitivity: 1.62 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-0.544 mN	-0.020 mN/s	0.618	1.270 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	21.9 mN	39.4 mN	60.5 mN	81.0 mN	100.6 mN	79.6 mN	59.0 mN	38.2 mN	20.9 mN	1.5 mN

Post-Cal. Information

File Name: Philtech Data 2024.11.15_08.59.28.csv

Start/Stop times (24 h): 09:06:22 09:08:22
Sensitivity: 1.68 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
0.700 mN	-0.053 mN/s	0.594	1.193 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	21.1 mN	38.7 mN	60.2 mN	81.4 mN	101.2 mN	80.0 mN	59.4 mN	37.7 mN	21.5 mN	0.2 mN