Thruster Report

Magnetic Field: **1000 mT**
Anode Power: **510 W**
Anode Current: **4.0 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
12.8 mN	10.8 %	873.8 sec	14	2.10	3.3 mN	1.6 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	0.9 mN	0.4 mN	0.2 mN	0.3 mN	0.6 mN	1.0 mN
DOF	6	6	6	31	4	4

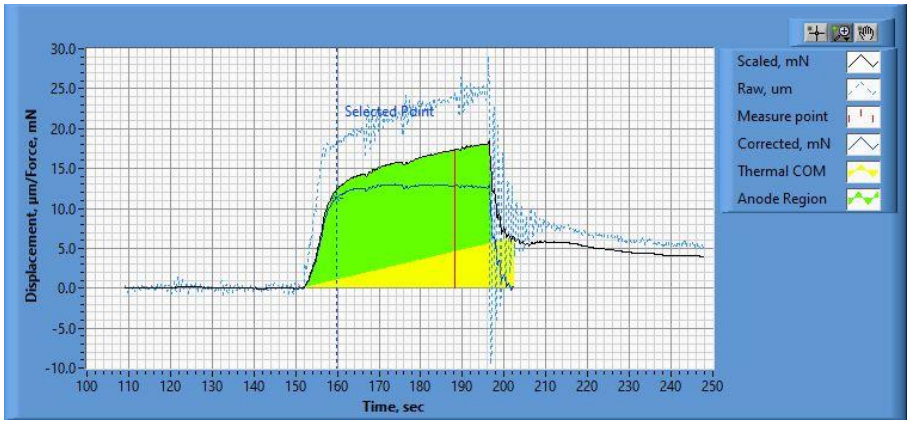

Figure 1. Thrust Plot

File Name: Philtech Data 2024.11.13_10.24.01.csv

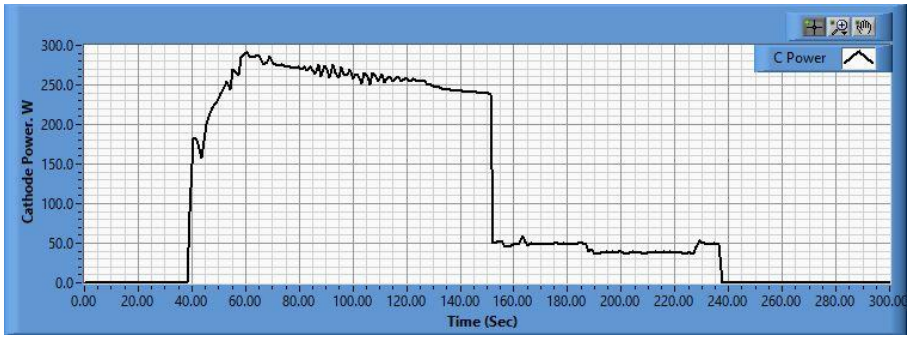

Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.11.13_10.23.30.csv

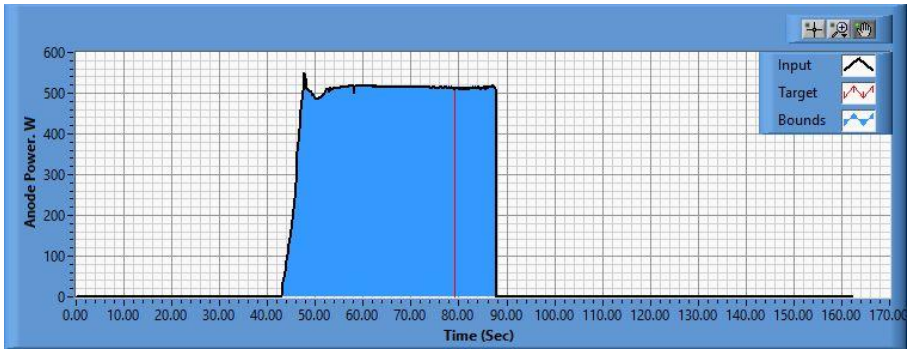

Figure 3. Anode Power Plot

File Name: PSU A Data 2024.11.13_10.25.50.csv

Pre-Cal. Information

File Name: Philtech Data 2024.11.13_10.10.01.csv

Start/Stop times (24 h): 10:10:05 10:13:50
Sensitivity: 1.57 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-0.100 mN	0.000 mN/s	0.635	0.995 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	38.4 mN	60.4 mN	80.5 mN	100.8 mN	79.9 mN	59.8 mN	37.9 mN	20.5 mN	-0.1 mN

Post-Cal. Information

File Name: Philtech Data 2024.11.13_10.24.01.csv

Start/Stop times (24 h): 10:30:49 10:34:35
Sensitivity: 1.69 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-2.477 mN	-0.031 mN/s	0.593	1.164 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
-0.6 mN	21.6 mN	38.8 mN	61.0 mN	82.0 mN	101.2 mN	80.5 mN	59.7 mN	38.4 mN	21.7 mN	0.8 mN