Thruster Report

Magnetic Field: **133 mT**
Anode Power: **131 W**
Anode Current: **2.0 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
1.5 mN	0.6 %	100.2 sec	22	2.08	2.4 mN	1.2 mN

Thrust-Stand Uncertainty Components

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

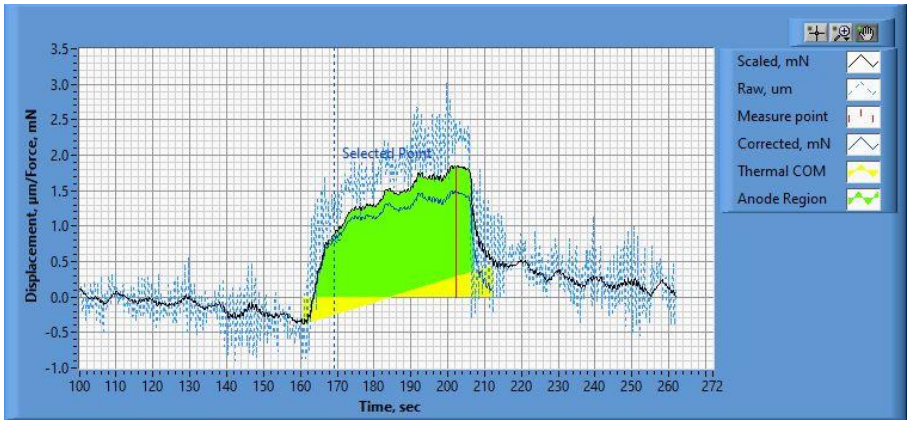

Figure 1. Thrust Plot

File Name: Philtech Data 2024.11.30_13.10.05.csv

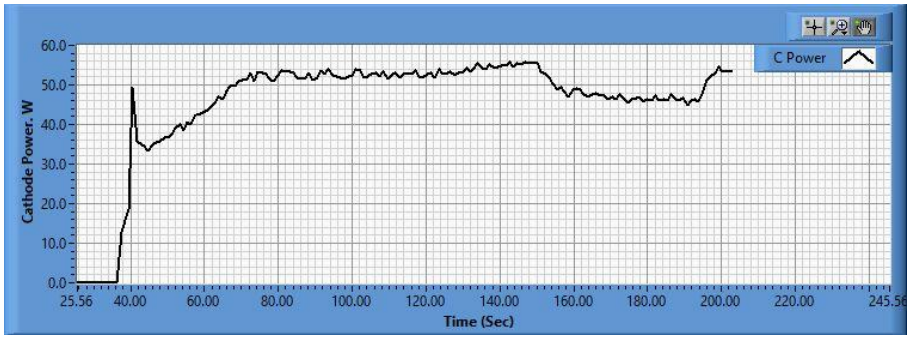

Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.11.30_13.10.16.csv

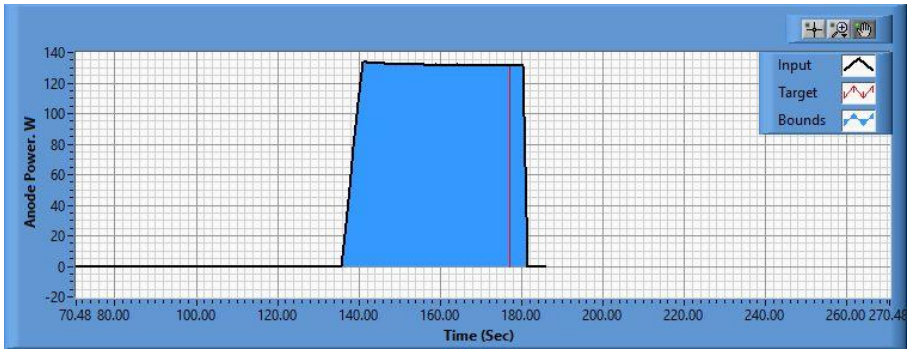

Figure 3. Anode Power Plot

File Name: PSU A Data 2024.11.30_13.10.30.csv

Pre-Cal. Information

File Name: Magnet_NoFlow_Philtech Data 2024.11.29_02.16.29.csv

Start/Stop times (24 h): 02:16:35 02:20:20
Sensitivity: 1.51 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-0.355 mN	-0.006 mN/s	0.662	1.086 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	21.2 mN	39.5 mN	59.4 mN	79.5 mN	100.9 mN	79.0 mN	59.2 mN	38.7 mN	20.8 mN	0.9 mN

Post-Cal. Information

File Name: Philtech Data 2024.11.30_13.10.05.csv

Start/Stop times (24 h): 13:17:20 13:21:07
Sensitivity: 1.50 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
0.086 mN	0.004 mN/s	0.669	1.172 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	21.0 mN	39.0 mN	59.8 mN	79.6 mN	100.9 mN	78.3 mN	58.7 mN	37.5 mN	20.2 mN	-0.2 mN