Thruster Report

Magnetic Field: **133 mT**
Anode Power: **251 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
2.9 mN	1.1 %	198.1 sec	27	2.07	2.5 mN	1.2 mN

Thrust-Stand Uncertainty Components

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

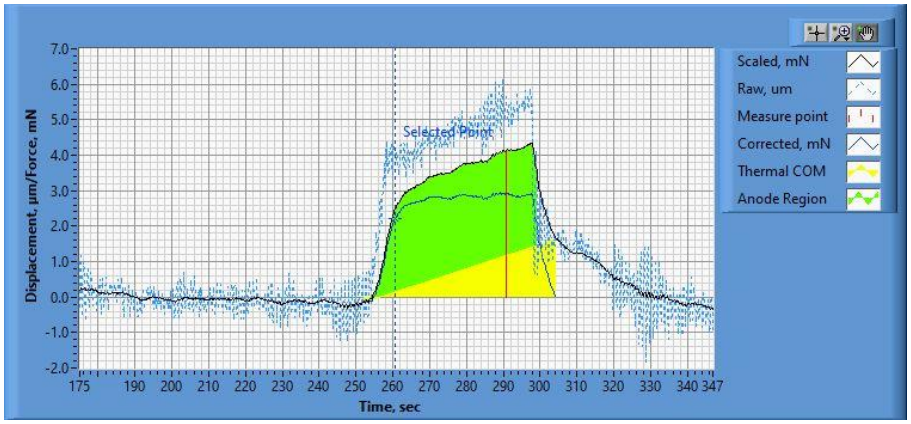

Figure 1. Thrust Plot

File Name: Philtech Data 2024.11.29_12.08.34.csv

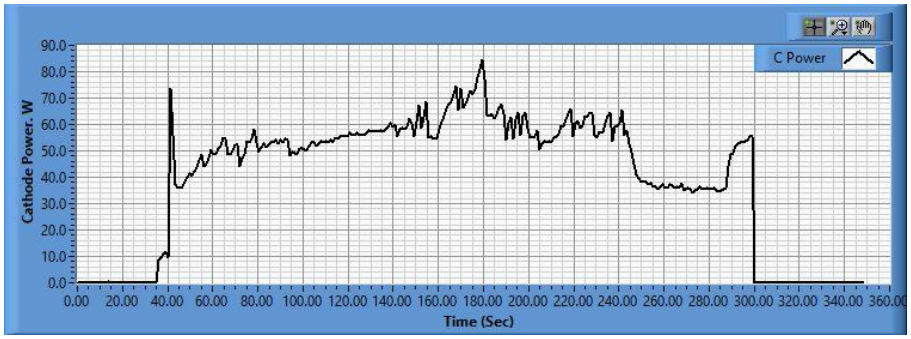

Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.11.29_12.08.43.csv

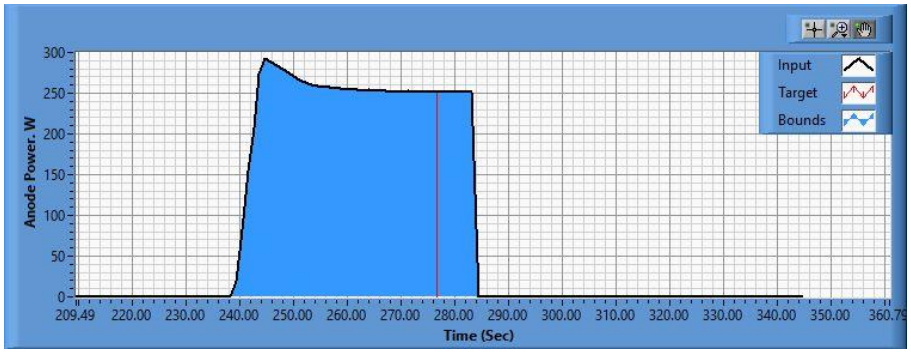

Figure 3. Anode Power Plot

File Name: PSU A Data 2024.11.29_12.08.48.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 2024.11.29_12.08.34.csv

Start/Stop times (24 h): 12:17:08 12:20:51
Sensitivity: 1.49 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
0.653 mN	-0.000 mN/s	0.671	1.065 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	39.4 mN	59.8 mN	79.9 mN	101.0 mN	78.9 mN	59.3 mN	38.2 mN	20.7 mN	0.7 mN