

Thruster Report

Magnetic Field: 199 mT
Anode Power: 549 W
Anode Current: 10.0 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
12.5 mN	7.1 %	638.5 sec	19	2.09	2.5 mN	1.2 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	0.6 mN	0.8 mN	0.3 mN	0.3 mN	0.5 mN	0.0 mN
DOF	6	6	6	31	4	4

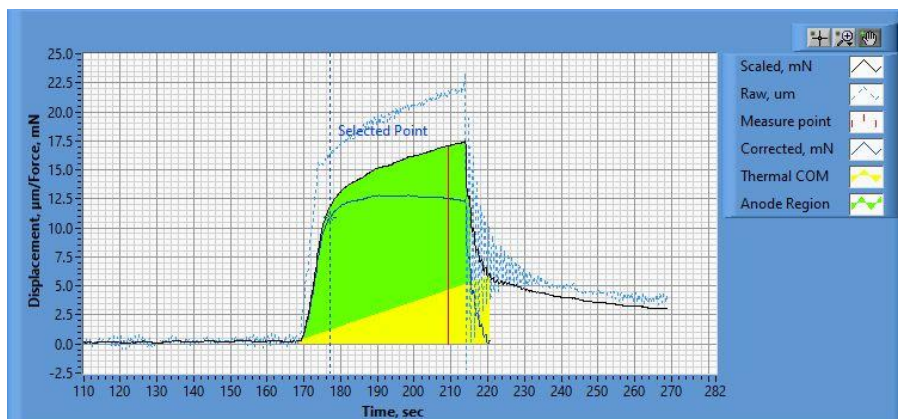


Figure 1. Thrust Plot

File Name: Philtech Data 2024.11.30_20.02.07.csv

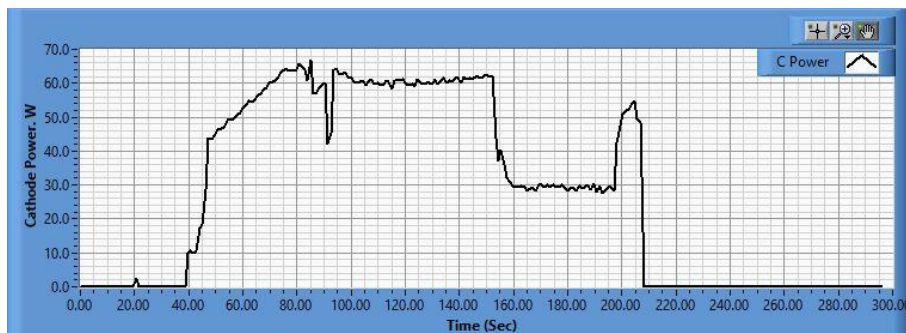
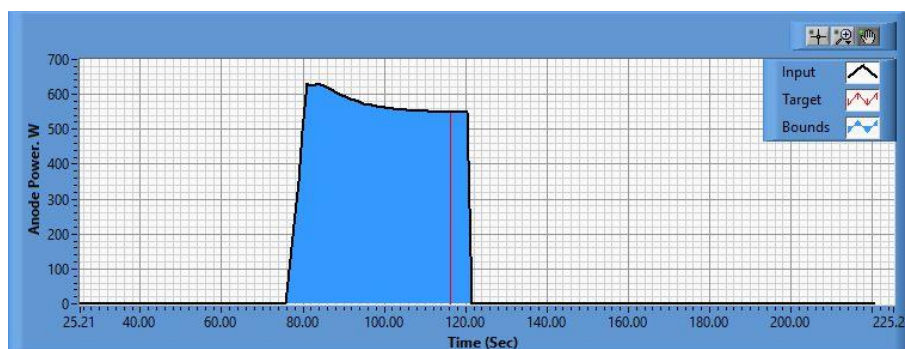


Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.11.30_20.02.23.csv

**Figure 3. Anode Power Plot**

File Name: PSU A Data 2024.11.30_20.03.40.csv

Pre-Cal. Information

File Name: Magnet_Flow_2_0_Philtech Data 2024.11.30_19.57.42.csv

Start/Stop times (24 h): 19:57:48 20:01:33

Sensitivity: 1.50 $\mu\text{m}/\text{mN}$

Offset	Drift	Scale Factor	Scale Std.Dev
-0.331 mN	0.000 mN/s	0.665	1.095 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
-0.3 mN	20.9 mN	39.1 mN	60.2 mN	79.7 mN	101.0 mN	79.0 mN	59.4 mN	38.0 mN	20.7 mN	0.9 mN

Post-Cal. Information

File Name: Philtech Data 2024.11.30_20.02.07.csv

Start/Stop times (24 h): 20:09:05 20:12:52

Sensitivity: 1.51 $\mu\text{m}/\text{mN}$

Offset	Drift	Scale Factor	Scale Std.Dev
-1.716 mN	0.001 mN/s	0.663	0.997 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	20.7 mN	39.3 mN	60.0 mN	79.9 mN	101.0 mN	79.3 mN	59.7 mN	38.0 mN	20.7 mN	0.8 mN

