

GPS Air and **Novant Health** partnered
to conduct a test to improve the efficacy of a low
performing air handler

The goal was to increase the efficiency of the system through
remediation, with the installation of a GPS Air Coil Efficiency System



Air Handler Specs:

Trane 28,000 CFM custom system

Filtration: Two stages, MERV 7 and MERV 15

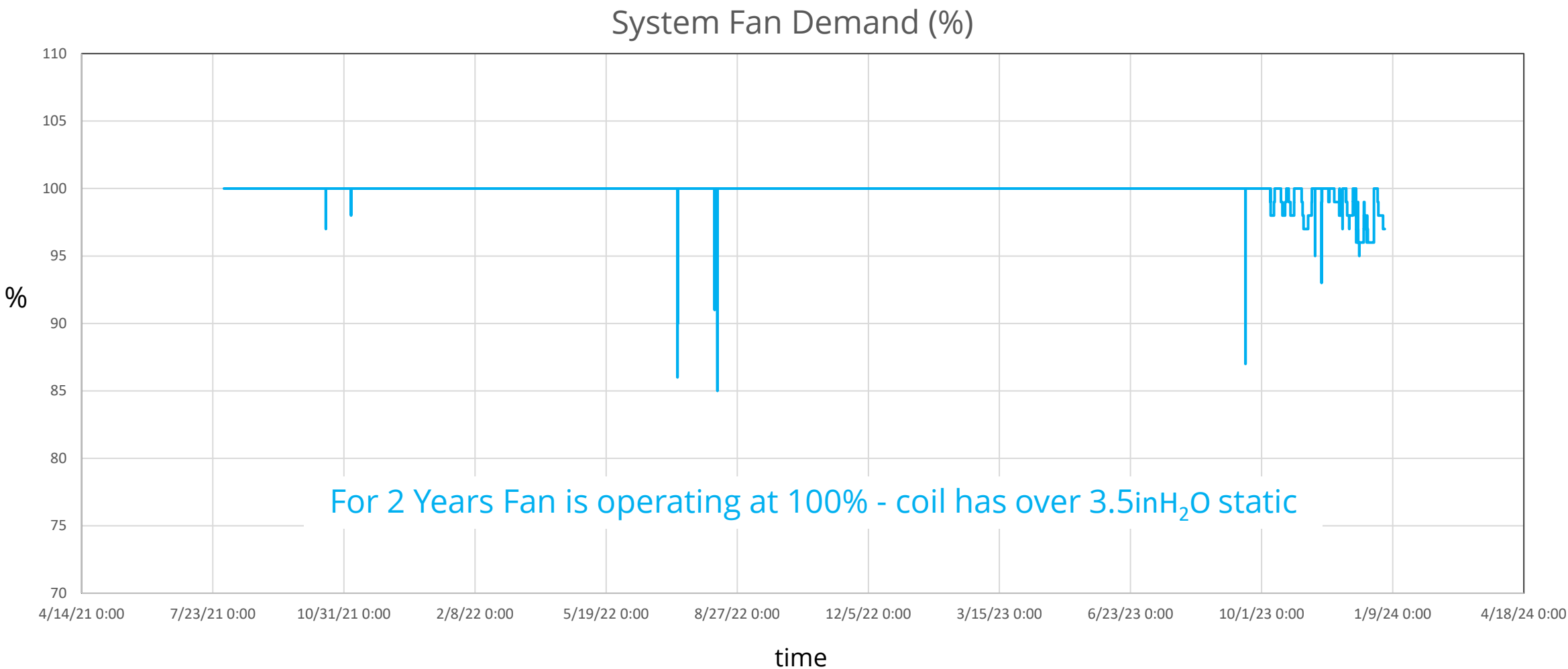
Air Mix Ratio: 80% return air, 20% outdoor air

75HP Blower Motor



System Fan Demand - Historical Data

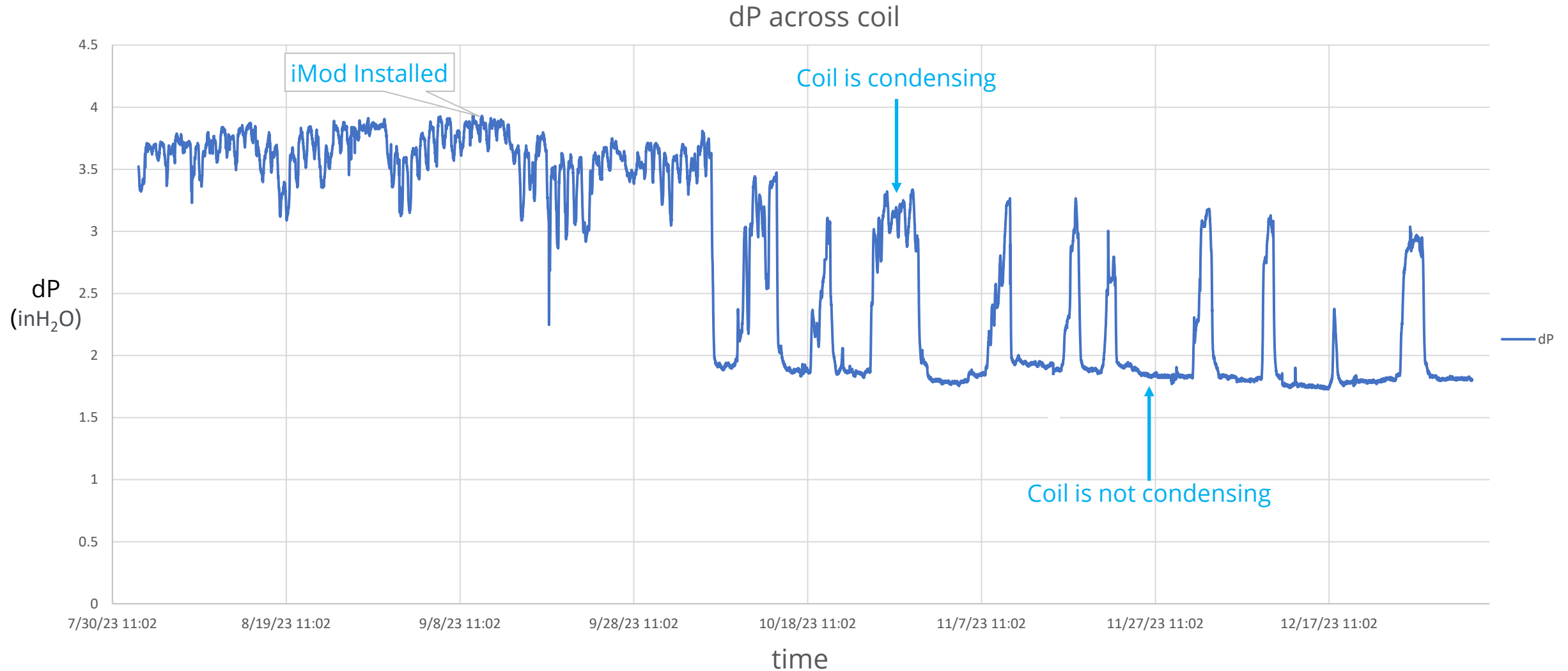
- Over 2 years of data provided by Novant
- System air moving fan ran at 100% capacity for 2+ years
- Prior to install, the fan was operating
- Fan began to operate below 100% in a matter of weeks after the [GPS Coil Efficiency Solution](#) was installed



Differential Pressure (dP) Data

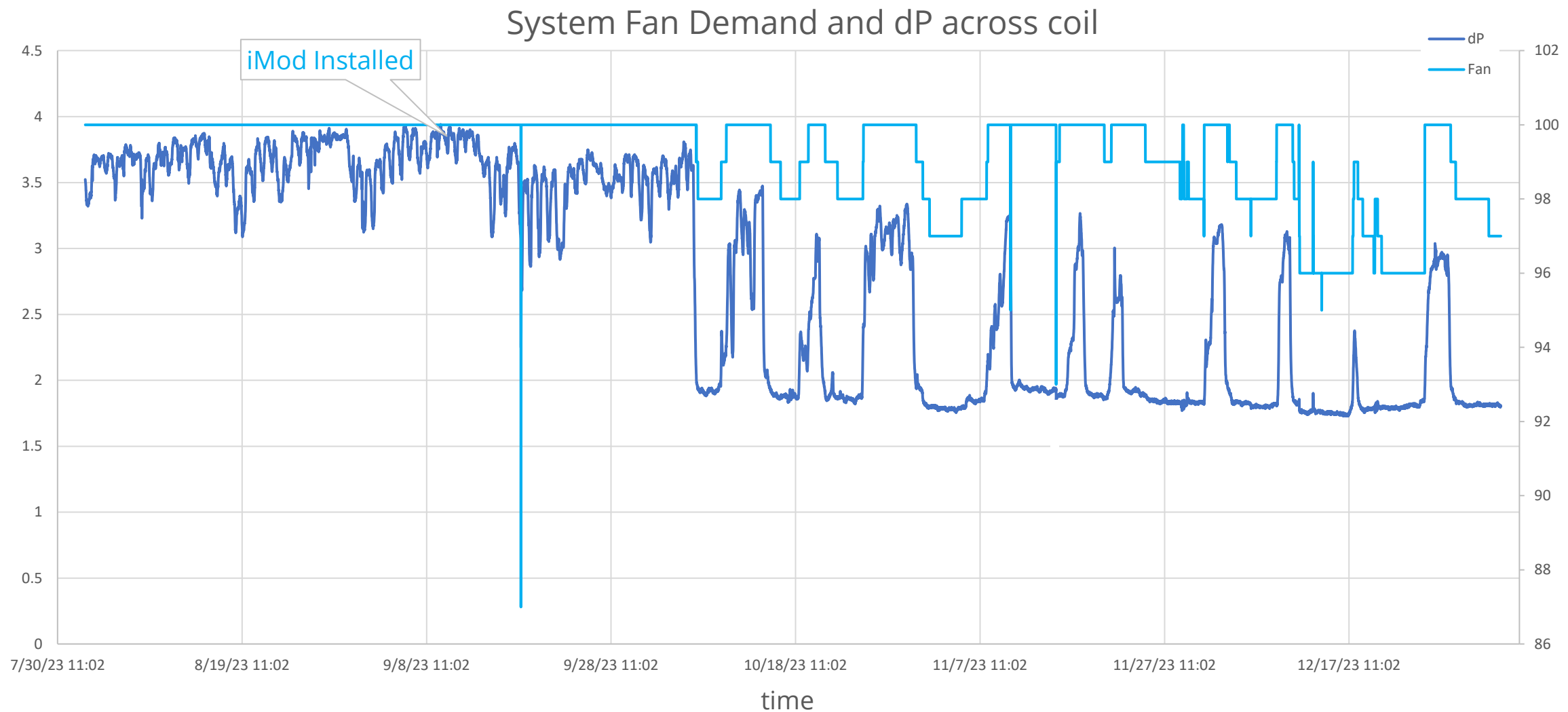
Before GPS Coil Efficiency the Static pressure (dark blue line) was ~3.5"WC when the coil was condensing

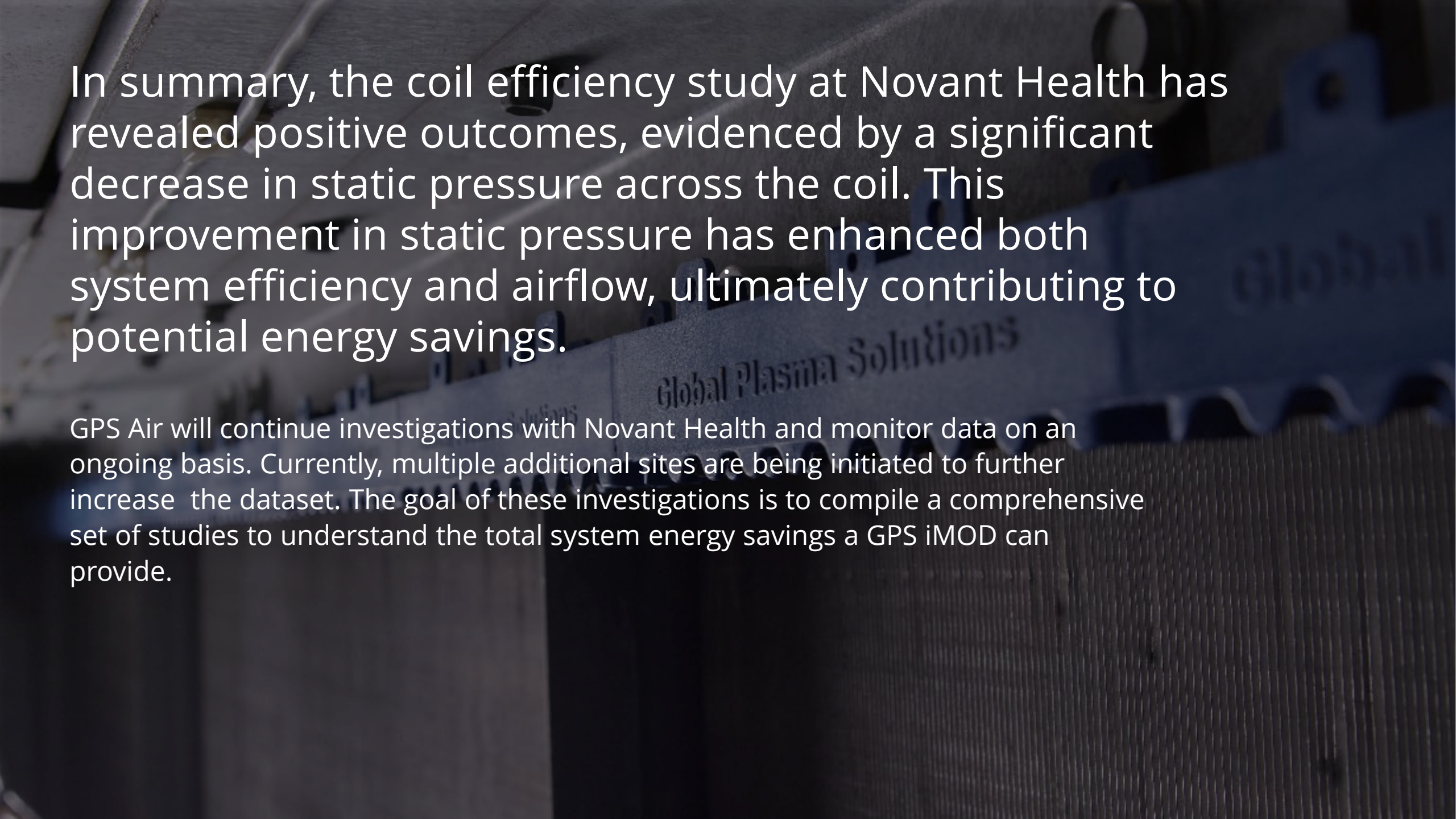
- Pressure sensors installed on 08/01/23
- IMOD® installed 08/30/23 (not energized)
- iMOD energized 09/14/23



System Fan Demand with Differential Pressure Data

Every time the coil condenses the static pressure reduces.
The demand on the fan continues to reduce after each condensing cycle.



The background of the slide is a dark, close-up photograph of a medical device. A blue plastic component with a wavy edge is visible on the right side. The text 'Global Plasma Solutions' is printed in a light blue or white font on a dark surface in the center and right portions of the image. The overall lighting is dim, creating a professional and technical atmosphere.

In summary, the coil efficiency study at Novant Health has revealed positive outcomes, evidenced by a significant decrease in static pressure across the coil. This improvement in static pressure has enhanced both system efficiency and airflow, ultimately contributing to potential energy savings.

GPS Air will continue investigations with Novant Health and monitor data on an ongoing basis. Currently, multiple additional sites are being initiated to further increase the dataset. The goal of these investigations is to compile a comprehensive set of studies to understand the total system energy savings a GPS iMOD can provide.