AFP (ATLAS Forward Protons) is a new detector system in ATLAS that studies events with elastically scattered protons at very small angles. It consists of four Roman pot stations at a distance of 205 m and 217 m from the interaction point on both sides of the ATLAS detector.

- 4 Si tracker pixel modules with 3-d sensors (ATLAS IBL) at each station.
- Each Si module contains 26880 pixels (250 µm x 50 µm).
- ToF counters for background reduction in the first station of each arm.
- For data taking the sensors are moved into the beamline with the edge of the sensors separated from the beam by 20 σ of the beam size (4-8 mm).

The first arm of AFP with trackers only was taken into operation this year. The full detector will be completed during the LHC winter shutdown of 2016/2017. The LTB connects to the tracker modules via flat ribbon cables. The RCE connects to the HSIO’s FPGA through a custom protocol called PGP. An optoboard between AFP stations in the tunnel interfaces between the optical and electrical signals.

**System Architecture**

- **ATLAS Run Control** communicates with the **AFP DAQ** and **TDQ** through **ROBIN**.
- **ATLAS Run Control** sends commands to the **RCE** and receives monitoring data via **RCF** (Remote Call Framework).
- The **RCE** connects to the **HSIO’s FPGA** through a custom protocol called **PGP**.
- **Configuration/calibration data/monitoring** via **HSIO/RCE/Server**.

**Conclusion and Outlook**

AFP had a successful start as a new detector in ATLAS this year. The AFP trigger and readout system has been performing smoothly and efficiently within the ATLAS framework. In the coming winter shutdown the DAQ will be upgraded to include the second arm of AFP as well as the readout of the time-of-flight detector, building on the same technology as the current system.