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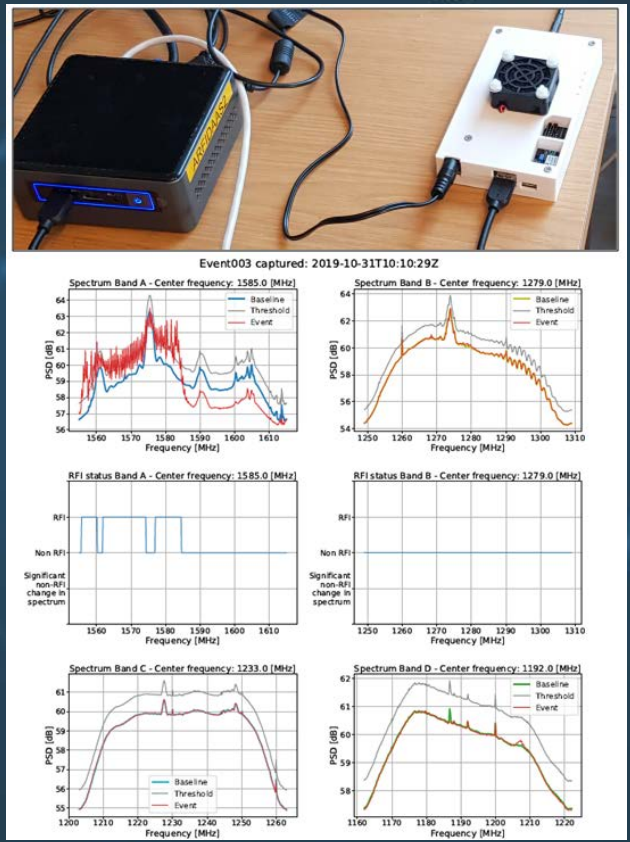
ARFIDAAS

The Advanced RFI Detection Analysis and Alerting System (ARFIDAAS) was a Norwegian effort to produce a system capable of monitoring all L-band GNSS signals simultaneously for interference, and when detected to rapidly analyze the spectrum and send reporting data to site stakeholders via email. Additional future analysis of the captured data was provided by an automatic cloud upload function whereby all collected data from the international deployment was gathered centrally for later use.



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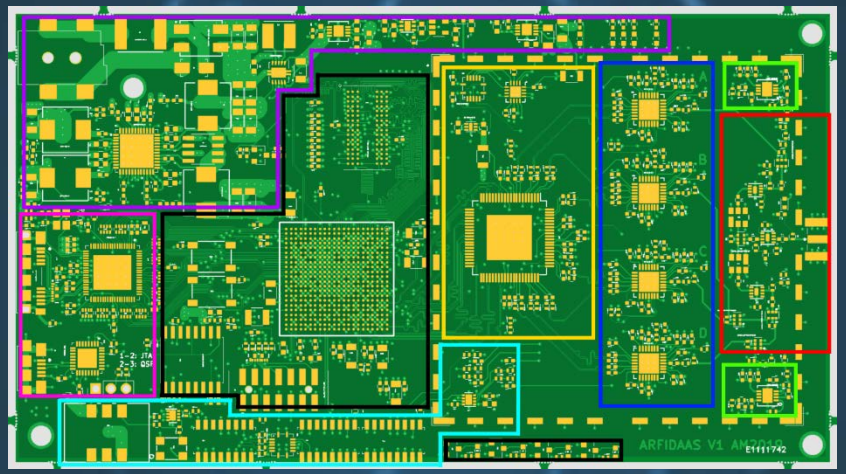
Element 3

The ARFIDAAS project began in March 2019, reached deployment by September 2019, and was concluded successfully in March 2020.

The ARFIDAAS project developed a fully custom, GNSS specialized quad band RF Front-End with RFI detection specialized features including direct in-band power measurement, and onboard production of bit histograms. The custom developed software for triggering, analysis and reporting runs on an off the shelf low cost computer, keeping per site deployment costs including a quad band GNSS antenna below two thousand Euro.



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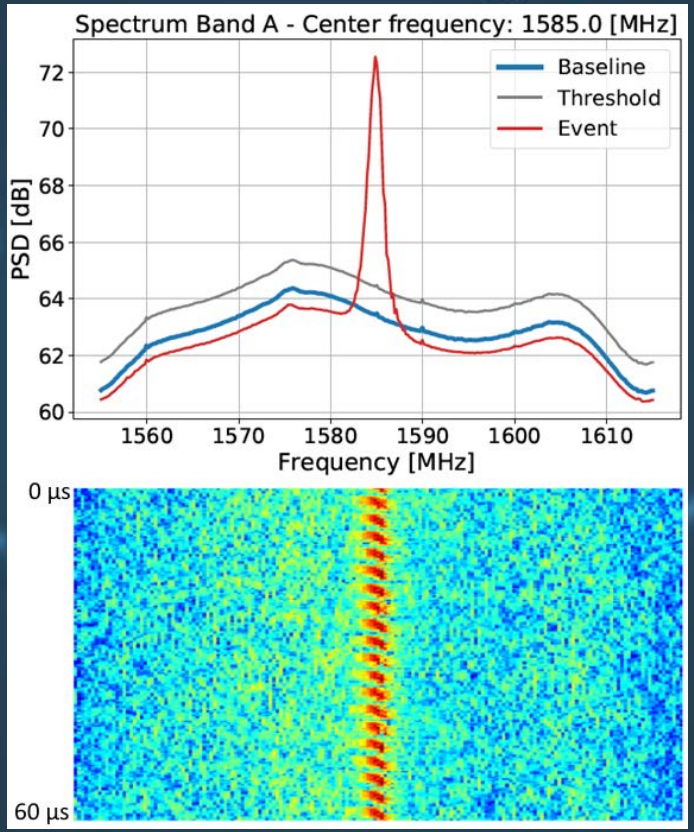
The main benefit of the NAVISP program in this case is related to the realization of an activity which supports Norway's cooperation agreement on satellite navigation between the European union and its member states and the Kingdom of Norway.

The way forward for the ARFIDAAS system involves the enhancement of the amount of data available to stakeholders to further help them evaluate the intention of the RFI signals detected, through for example reporting of the fine-grained time structure of emissions.



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