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# Aircraft data and Covid-19: impact and mitigation measures at ECMWF

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## Abstract

Meteorological reports from aircraft are an important source of data for global weather forecasting. Their largest impact is in the upper troposphere at short-range as determined from observing system experiments.

Due to the pandemic the number of aircraft reports reduced by about 75% between mid-March and mid-April 2020, recovering somewhat to almost 50% of normal by July 2020. However it is difficult to see any evidence of degradation in forecast skill - partly because forecast skill varies on daily, monthly and annual time-scales.

New satellite data became available during 2020 and ECMWF started using European Mode-S aircraft winds to mitigate the loss of standard aircraft reports. So, despite the downturn in aviation we are now using more aircraft reports over Europe than before the pandemic.

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