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## Evidence of the production of three massive vector bosons using the ATLAS detector

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A search for the production of three massive vector bosons in WWW, WWZ and WZZ final states is presented, using proton-proton collision data collected by the ATLAS experiment at  $\sqrt{s}=13$  TeV. The analysis utilises multiple search channels. WWW production is probed using a fully-leptonic decay channel, with three-charged leptons and missing transverse momentum, and a semi-leptonic decay channel with two-charged leptons and two hadronic jets. WWZ production is probed in both a fully leptonic decay channel (four charged leptons) and a semi-leptonic decay channel (three leptons and two hadronic jets), whereas WZZ production is probed using a semi-leptonic decay channel (four charged leptons and two hadronic jets). The signal strengths in each channel are extracted and combined in a global fit. The data are found to be in good agreement with the SM expectations.

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