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Search for an additional Higgs-like boson decaying to WW or ZZ in the mass range 145 to 1000 GeV

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A search for additional Higgs-like bosons in the H to WW and H to ZZ decay channels is reported, for Higgs boson masses in the range $145 < m_H < 1000$ GeV. The search is based upon proton-proton collision data samples corresponding to an integrated luminosity of up to 5.1 fb^{-1} at $\sqrt{s} = 7$ TeV and up to 19.3 fb^{-1} at $\sqrt{s} = 8$ TeV, recorded by the CMS experiment at the LHC. Several final states of the H to WW and H to ZZ decays are analyzed. Upper limits for the search for a heavy resonance in the context of an electroweak singlet extension of the standard model are presented. Additionally, the combined upper limits at 95% confidence level on the products of the cross section and branching fraction exclude a standard-model-like Higgs boson in the range $145 < m_H < 1000$ GeV

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