Title: Functional equations and functional relations for the Euler double zeta-function
and its generalization of Eisenstein type

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We consider certain double series in two variables such as the Euler double zeta-function and its generalization of Eisenstein type. In the former part, we give some functional equations among these series, which are Eisenstein type analogues of a previous result on double zeta-functions given by the second-named author. We point out that, on certain hyperplanes, we can show functional equations of traditional symmetric type for these double series. In the latter part, we give some functional relations for these series and double series of another type involving hyperbolic functions. As special cases, we can obtain the known value-relation formulas for these series given by the third-named author recently.

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