

Several minor corrections have been made to the manuscript as follows:

Line 2: "Water source tracing can provide additional insight into flood dynamics by accounting for flow pathways of each model boundary condition".

Line 18: "Dottori et al., ~~2021~~2022" [updated reference]

Lines 70, 84, 137, 373, 379: "Eqn." changed to "Eq."

Lines 70, 84, 137, 373, 379: use of "Eqn." changed to "Eq."

Line 84: "Following this, once flows between cells are calculated and depths updated, our water tracing method proceeds as follows:"

Line 103: "...using the notation of Eq. (1) and

Line 149: "This is used as part of the solution to Eq. (6) and (7) to update..."

Line 177: "However, using Eq. (15)..."

Line 201: changed "0.57% to 0.5%" to "0.5% to 0.57%"

Line 208: "The simulation began on 08 January 2005, 00:00-~~AM~~, for 120 hours"

Line 209: "Flood water mixing is shown in RGB colour space, using Eq. (15) to..."

Line 222: "~~and~~-intertidal area"

Line 224: "...New Brighton/ Southshore)~~,~~ It has been designated..."

Line 234: "...close to the mean annual flood level (Environment Canterbury, 2023~~LAWA~~), and Heathcote River peaked at 14:00 with 28.1 m³/s of flow, an Annual Exceedance Probability of less than 0.1 (Environment Canterbury, 2023~~LAWA~~)." [updated references]

Line 239: "...rivers 1.87 and 1.04 m³/s, respectively (LAWA, 2023)." [added year]

Line 259: "...recognised as a key factor..."

Line 270: "...through yellow (equal~~ly~~ mixed) ..."

Line 286: "as per Eq. (14)"

Line 338: "... as each cell is treated as fully mixed ..."

Line 342: " contaminants sources within a ..."

Line 381: " according to Eq. (1)"