Abstract: We propose a logic of abduction that (i) provides an appropriate formalization of the explanatory conditional, and that (ii) captures the defeasible nature of abductive inference. For (i), we argue that explanatory conditionals are non-classical, and rely on Brian Chellas's work on conditional logics for providing an alternative formalization of the explanatory conditional. For (ii), we make use of the adaptive logics framework for modeling defeasible reasoning. We show how our proposal allows for a more natural reading of explanatory relations, and how it overcomes problems faced by other systems in the literature.