Subdifferential Regularity of Directionally Lipschitzian Functions

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Abstract. Formulas for the Clarke subdifferential are always expressed in the form of inclusion. The equality form in these formulas generally requires the functions to be directionally regular. This paper studies the directional regularity of the general class of extended-real-valued functions that are directionally Lipschitzian. Connections with the concept of subdifferential regularity are also established.