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Dynamic yielding behind near-steady precursors YUKIO SANO[1], TOMOKAZU SANO, Osaka University — In materials where shocks induce large shear stresses, plastic flow occurs and the stress state becomes more isotropic. The resulting compressibility change causes a single shock wave to be unstable and to separate into a precursor and a follower, which is followed by a plastic wave. The analysis performed here demonstrates that followers C, I, II, R', and Rb appear in the decay process of the precursor in sequence, and that dynamic yielding occurs at the leading edges of the followers I, II, R', and Rb. Here the followers C, I, II, R', and Rb are the contraction wave, the degenerate contraction waves I, II, the subrarefaction wave R', and the rarefaction wave Rb.

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