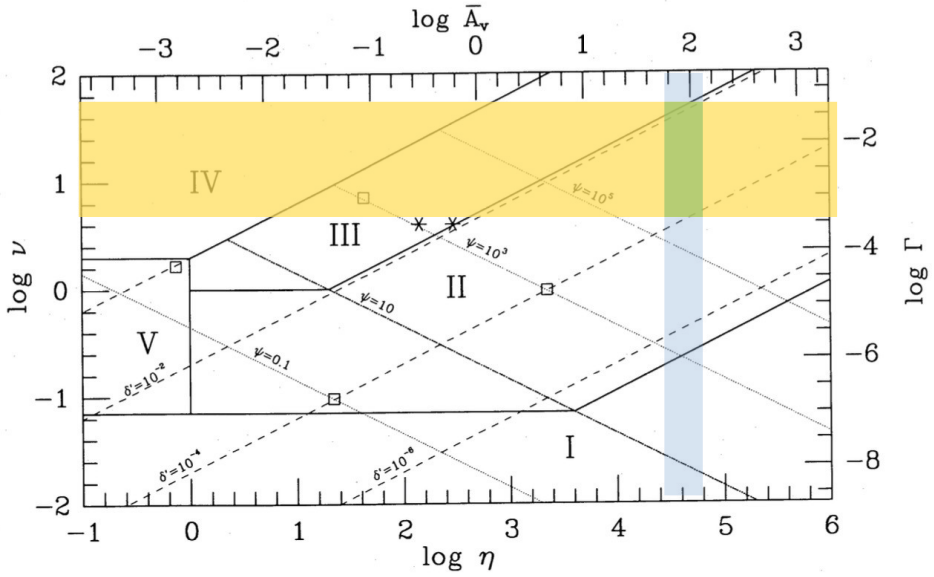

FIG. 1.—Initial cloud parameter space as discussed in § II*b*: ν and Γ are parameters describing the relative density of the ionizing radiation field at the cloud position and the initial cloud gas density; Γ can be interpreted as an ionization parameter, whereas ν is a measure for the initial I-front–driven shock velocity; $\eta = r_0 n_0/(4.4 \times 10^{18}\ \mathrm{cm}^{-2})$ is the dimensionless initial cloud column density; and $\bar{A}_V$ is the mean visual extinction of the cloud. For clouds in region I the incident ionizing flux has a negligible dynamical effect on the cloud; clouds in region I are usually not found inside H II regions. Clouds in region II will be compressed by an ionization-shock front. The shock velocity is limited to c_i for clouds in region III. Clouds in region IV will be ionized completely by the initial R-type I-front. Clouds in region V do get compressed by an IS-front, but their evolution is intrinsically time-dependent. The parameter ψ is a measure for the absorption efficiency of the photoevaporating gas: for $\psi \gg 10$, most of the incident photons get absorbed before reaching the I-front. The parameter δ' is the width of the instantly ionized cloud layer relative to the cloud diameter. The open squares indicate the locations of the clouds displayed in Fig. 8: *left*, Fig. 8*a*; *lower*, Fig. 8*b*; *top*, Fig. 8*c*; *right*, Fig. 8*d*. The line dividing region I from regions II and V is for an initial cloud temperature of 100 K or a magnetic field with $b = 0.6$. The stars refer to two example clouds of 1 and 10 solar masses 10 pc from the center of the Rosette Nebula.