Parameter	Training Range	Description
$Y_{ m proto}$	0.27-0.286	Protosolar He abundance, sets the mean planetary abundance
$T_{1\mathrm{bar}}(\mathrm{K})$	159-190	Temperature at 1 bar, setting the envelope's adiabat
$Z_1 = Z_2$	0.005-0.06	Envelope (atmospheric) metallicity
$P_{12}(Mbar)$	0.5-5	Transition pressure between the envelopes, where He rain occurs.
$m_{ m dilute}$	0.11-0.6	Dilute core extent in normailzed mass
$Z_{ m dilute}$	0.01-0.45	Maximum dilute core metallicity
$r_{\rm core}(r/R_{\rm J})$	0-0.12	Compact core (100% heavy elements) normalized radius