Contour plots for $M_{\rm MYT} \rightarrow D_{\rm j}$

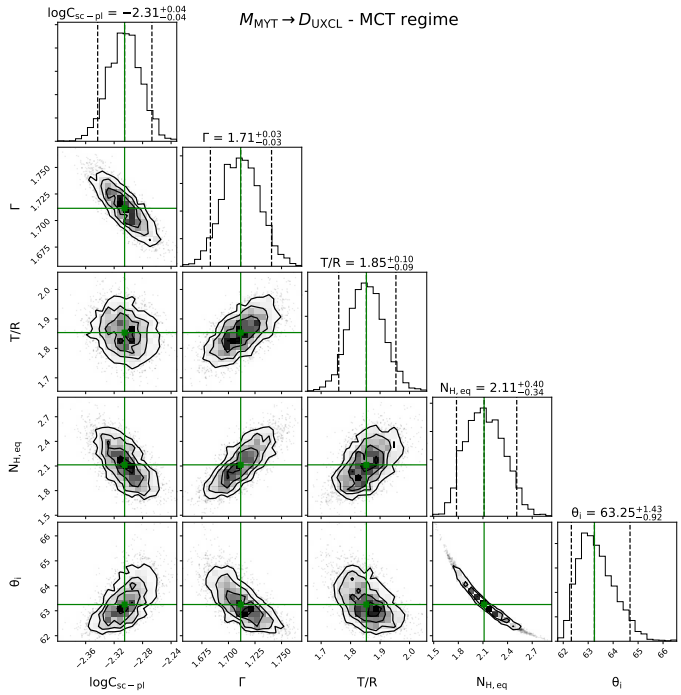

Figure 1: Contours for $M_{\rm MYT} \rightarrow D_{\rm UXCL}$ analysis in the MCT regime, with $N_{\rm H,los} = 100$ as input. The plots returned $N_{\rm H,los} = 91.8$ and $\chi^2/{\rm dof} = 1.07$, however mild residuals remain in the CRH region.

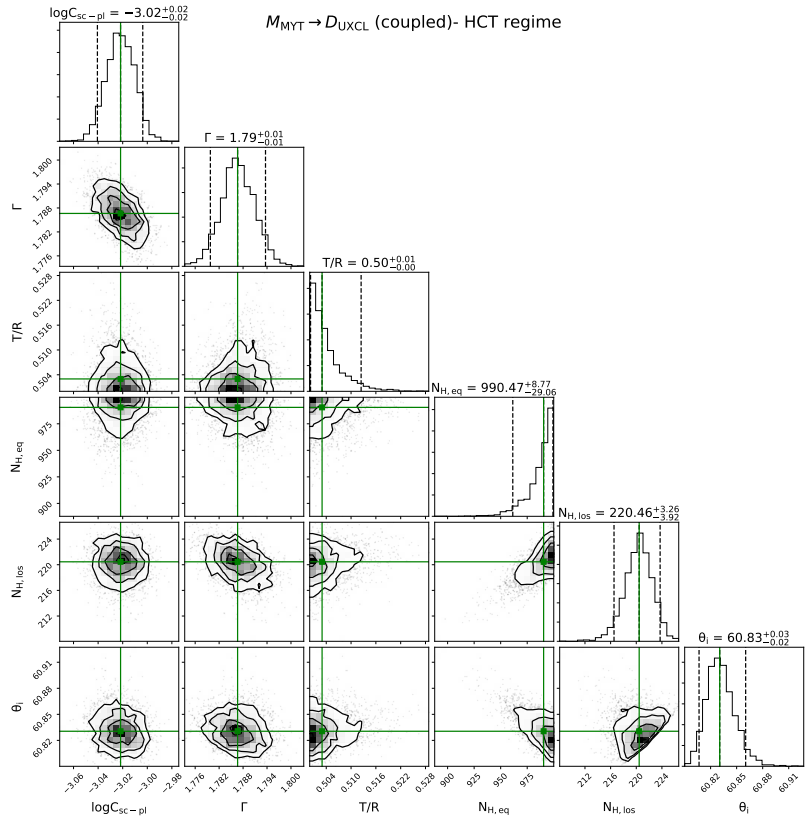

Figure 2: Contours for $M_{\rm MYT} \rightarrow D_{\rm UXCL}$ analysis in the HCT regime in the coupled configuration, for the case where the data was simulated under UXCLUMPY with $C_{\rm frac} = 0.4$ and $N_{\rm H,los} = 500$ as input. $T/R = 0.5$ is consistent with the lower limit of the prior. The comparitively low value of $N_{\rm H,los} = 200$ and very low value of T/R suggests that, T/R not $N_{\rm H,los}$ is instrumental in reducing the the zeroth order continuum. Emision lines were ignored and we get $\chi^2/{\rm dof} = 1.35$

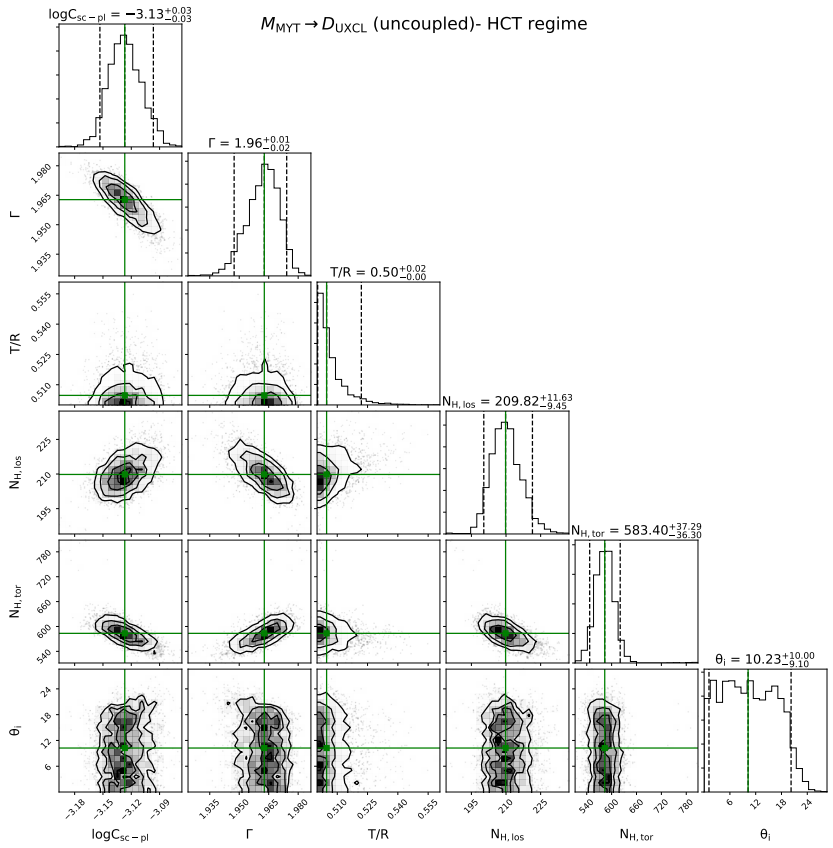

Figure 3: Contours for $M_{\rm MYT} \rightarrow D_{\rm UXCL}$ analysis in the HCT regime in the uncoupled configuration, for the case where the data was simulated under UXCLUMPY with $C_{\rm frac} = 0.4$ and $N_{\rm H,los} = 500$ as input. $T/R = 0.5$ is consistent with the lower limit of the prior. The comparritively low value of $N_{\rm H,los} = 200$ and very low value of T/R suggests that, T/R not $N_{\rm H,los}$ is instrumental in reducing the the zeroth order continuum. Emision lines were ignored and we get $\chi^2/{\rm dof} = 1.18$

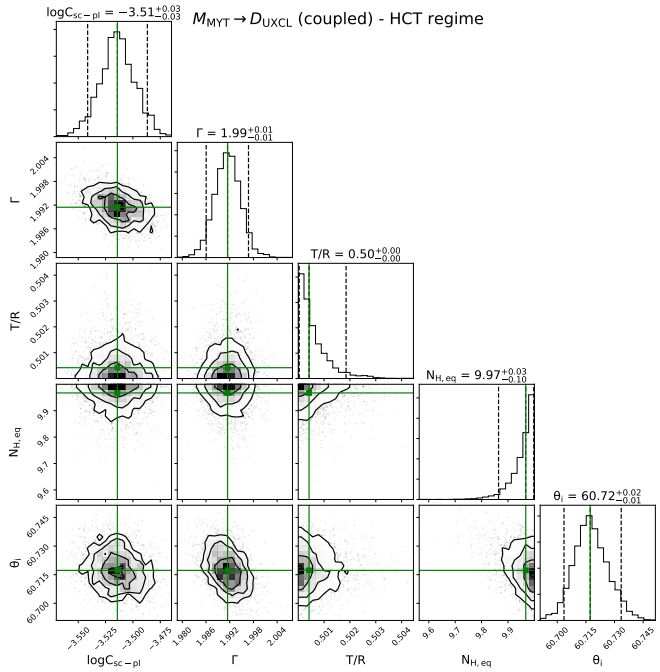

Figure 4: Contours for $M_{\rm MYT} \rightarrow D_{\rm UXCL}$ analysis in the HCT regime in the coupled configuration, for the case where the data was simulated under UXCLUMPY with $C_{\rm frac} = 0.0$ and $N_{\rm H,los} = 500$ as input. $T/R = 0.5$ and $N_{\rm H,los} \simeq 200$ the reasons are same as that explained in figure 2. Emission lines were ignored and we get $\chi^2/{\rm dof} = 1.98$.

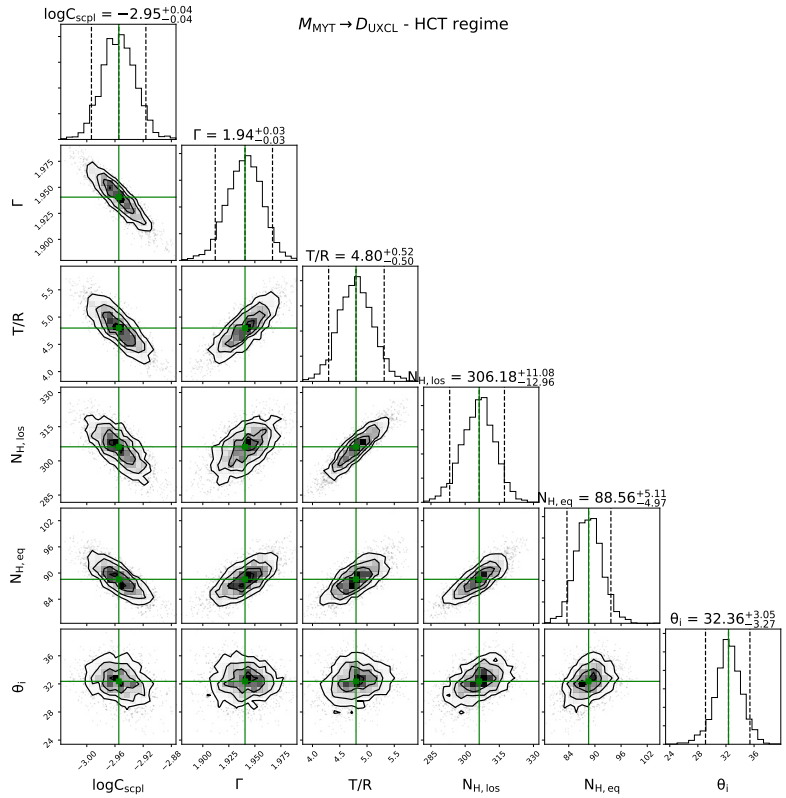

Figure 5: Contours for $M_{\rm MYT} \rightarrow D_{\rm UXCL}$ analysis in the HCT regime in the uncoupled configuration, for the case where the data was simulated under UXCLUMPY with $C_{\rm frac} = 0.0$ and $N_{\rm H,los} = 500$ as input. $T/R = 4.8$ suggests that the zeroth-order continuum adjusts itself to replicate the CRH. Emision lines were ignored and we get $\chi^2/{\rm dof} = 1.11$.

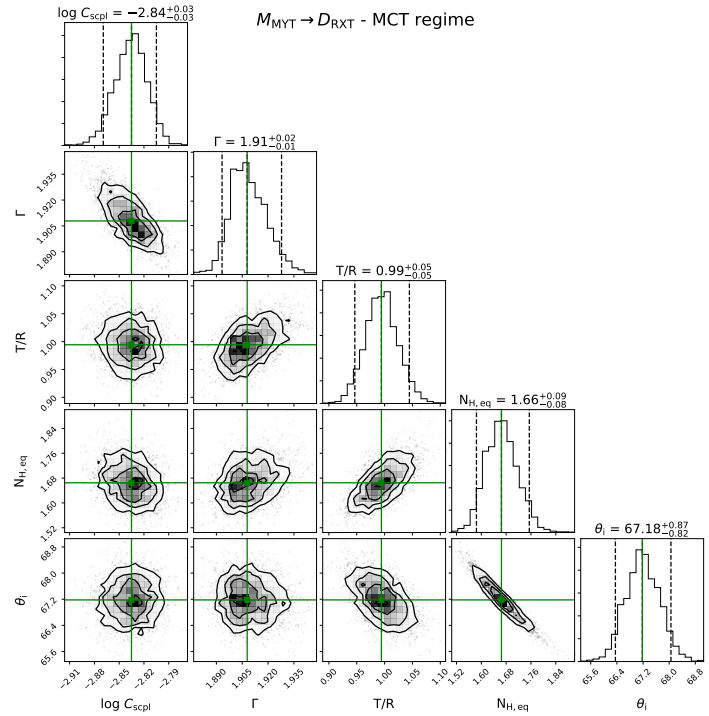

Figure 6: Contours for $M_{\rm MYT} \rightarrow D_{\rm RXT}$ analysis in the MCT regime, with $N_{\rm H,los} \simeq 100$ as input. Both the T/R and $N_{\rm H,los}$ are consistent and $\chi^2/{\rm dof} = 1.15$. The difference in the scattered continuum is the reason for the observed differences in $N_{\rm H,eq}$ and $\theta_{\rm i}$.

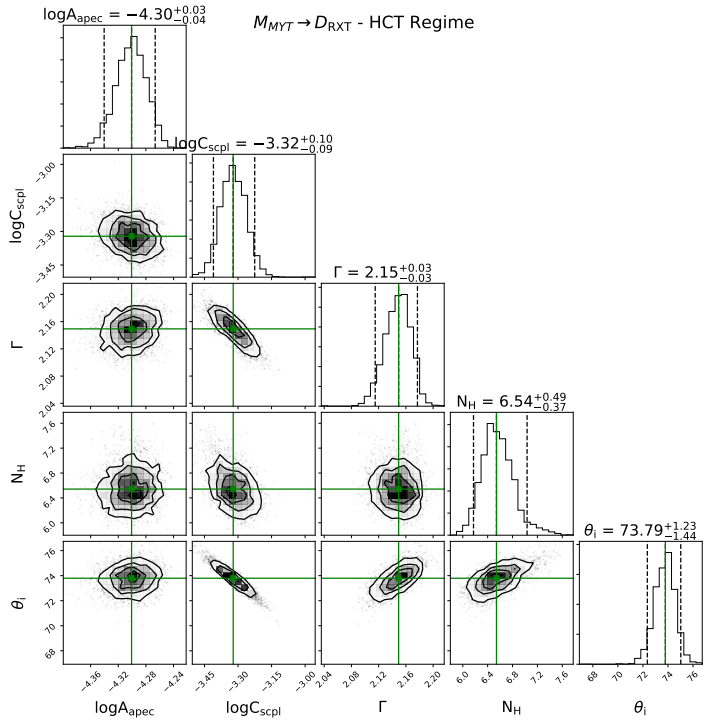

Figure 7: Contours for $M_{\rm MYT} \rightarrow D_{\rm RXT}$ analysis in the HCT regime, with $N_{\rm H,los} = 500$ as input.The difference in the scattered continuum is the reason for the observed differences in $N_{\rm H,eq}$ and $\theta_{\rm i}$. The χ^2/dof = 1.17, when fit with the softband emission lines are not included.