

$$\Delta[\alpha/\mathrm{Fe}](\tau, x) = \frac{\mathrm{CvD12}(\tau, x, [\alpha/\mathrm{Fe}])}{\mathrm{CvD12}(\mathit{age}, x, [\alpha/\mathrm{Fe}]_{\odot})}$$

$$\mathrm{MIU}_{\mathrm{ext}}(\tau, x, [\alpha/\mathrm{Fe}]) \equiv \mathrm{MIU}(\tau, x) \times \Delta[\alpha/\mathrm{Fe}](\tau, x),$$