

$$\begin{array}{ccccc}
 (\mathbf{Set}^{\Delta^{\mathrm{op}}})^{\rightarrow} & \times & (\mathbf{Set}^{\Delta^{\mathrm{op}}})^{\rightarrow} & \xrightarrow{\quad \wedge \quad} & (\mathbf{Set}^{\Delta^{\mathrm{op}}})^{\rightarrow} \\
 \mathrm{cok} \downarrow \dashv \uparrow & & \mathrm{cok} \downarrow \dashv \uparrow & & \mathrm{cok} \downarrow \dashv \uparrow \\
 (\mathbf{Set}^{\Delta^{\mathrm{op}}})_{+} & \times & (\mathbf{Set}^{\Delta^{\mathrm{op}}})_{+} & \xrightarrow{\quad \wedge \quad} & (\mathbf{Set}^{\Delta^{\mathrm{op}}})_{+}
 \end{array}$$