$$\cdots \xrightarrow{\psi_{3,4}} X_3 \xrightarrow{\psi_{2,3}} X_2 \xrightarrow{\psi_{1,2}} X_1 \xrightarrow{\psi_{0,1}} X_0$$

$$\cdots \longrightarrow \operatorname{im}(\psi_{\infty,3}) \longrightarrow \operatorname{im}(\psi_{\infty,2}) \longrightarrow \operatorname{im}(\psi_{\infty,1}) \longrightarrow \operatorname{im}(\psi_{\infty,0})$$