$$\longrightarrow H^{p-1}(U) \bigoplus H^{p-1}(V) \xrightarrow{g} H^{p-1}(U \cap V) \xrightarrow{\delta} H^{p}(\mathcal{M}) \xrightarrow{f} H^{p}(U) \bigoplus H^{p}(V) \longrightarrow \dots$$

$$\downarrow^{n_{p-1} \cdot (\Phi_{U}, \Phi_{V})} \qquad \downarrow^{n_{p-1} \cdot (\Phi_{U \cap V})} \qquad \downarrow^{n_{p} \cdot \Phi_{\mathcal{M}}} \qquad \downarrow^{n_{p} \cdot (\Phi_{U} \oplus \Phi_{V})}$$

$$\longrightarrow H^{n-(p-1)}_{c}(U)^{*} \bigoplus H^{n-(p-1)}_{c}(V)^{*} \xrightarrow{j^{*}} H^{n-(p-1)}_{c}(U \cap V)^{*} \xrightarrow{\delta^{*}_{c}} H^{n-p}_{c}(\mathcal{M})^{*} \xrightarrow{i^{*}} H^{n-p}_{c}(U)^{*} \bigoplus H^{n-p}_{c}(V)^{*} \longrightarrow \dots$$