$$0 \longrightarrow \ker[(\pi_{i})_{S}] \longrightarrow (S, ?)_{\mathcal{T}} \xrightarrow{0} 0$$

$$\downarrow^{(\kappa_{i})_{*}} \longrightarrow (S, X_{i})_{\mathcal{T}} \xrightarrow{(\pi_{i})_{S}} FS \longrightarrow 0$$

$$\downarrow^{(\phi_{i})_{*}} \qquad \qquad \downarrow$$

$$0 \longrightarrow \ker[(\pi_{i+1})_{S}] \longrightarrow (S, X_{i+1})_{\mathcal{T}} \xrightarrow{(\pi_{i+1})_{S}} FS \longrightarrow 0$$