$$\mathbb{R}^{\overline{\infty}} \xleftarrow[\text{Pois}]{\bowtie} \mathbb{R}^{\overline{\infty}} \boxtimes \mathbb{R}^{\overline{\infty}}$$

$$J \bowtie \jmath = \overset{+}{\underline{J}} \ltimes \jmath = \overset{+}{\underline{J}} \blacklozenge \overset{+}{\underline{\jmath}}$$

$$\underbrace{J \bowtie \jmath}_{m} = \underbrace{\overset{+}{\underline{J}} \ltimes \jmath}_{m} = \overset{+m}{\underline{J}}\ {}_{m}\underline{\jmath} = \overset{+m}{\underline{J}}\ {}_{m}\blacklozenge\ \overset{+m}{\underline{\jmath}} = \underbrace{\overset{+}{\underline{J}} \blacklozenge \overset{+}{\underline{\jmath}}}_{m}$$

$$\underline{J \overset{+}{\bowtie} \jmath} = \overset{+}{\underline{J}} \bowtie \overset{+}{\underline{\jmath}}$$

$$J \bowtie \jmath = \begin{bmatrix} \underline{dJ}\blacklozenge \\ \underline{d\jmath}\blacklozenge \end{bmatrix} \blacklozenge = \widehat{\underline{dJ}\blacklozenge} \ltimes \jmath$$

$$d\underline{J \bowtie \jmath} = \underline{dJ} \bowtie \underline{d\jmath}$$

$$\widehat{d\underline{J \bowtie \jmath}}\blacklozenge = \widehat{\underline{dJ}\blacklozenge} \bowtie \widehat{\underline{d\jmath}\blacklozenge}$$

$$\underline{dJ} \bowtie \underline{d\jmath} = \widehat{\underline{dJ}\blacklozenge} \ltimes \underline{d\jmath} - \widehat{\underline{d\jmath}\blacklozenge} \ltimes \underline{dJ} + d\begin{bmatrix} \underline{dJ}\blacklozenge \\ \underline{d\jmath}\blacklozenge \end{bmatrix} \blacklozenge$$

$$= d\underbrace{\widehat{\underline{dJ}\blacklozenge} \ltimes \jmath} - d\underbrace{\widehat{\underline{d\jmath}\blacklozenge} \ltimes J} + d\underbrace{\jmath \bowtie J} = d\underbrace{J \bowtie \jmath - \jmath \bowtie J + \jmath \bowtie J}$$