Consider some quantity $Q(t')$.

$$[Q]_{ret} = Q(t_{ret})$$

$$\frac{\partial}{\partial t}[Q]_{ret} = \left(\frac{\partial Q}{\partial t'}\right)_{t'=t_{ret}} \frac{\partial t_{ret}}{\partial t}$$

$$= [\dot{Q}]_{ret}\left[\frac{1}{1-\vec{\beta}\cdot\hat{n}}\right]_{ret} = \left[\frac{\dot{Q}}{1-\vec{\beta}\cdot\hat{R}}\right]_{ret}$$

and

$$\nabla[Q]_{ret} = \nabla Q(\vec{x}, t_{ret})$$

$$= [\nabla Q]_{ret} + \left(\frac{\partial Q}{\partial t'}\right)_{t'=t_{ret}} \nabla t_{ret}$$

$$= [\nabla Q]_{ret} + [\dot{Q}]_{ret}\left(\frac{-\hat{R}/c}{1-\vec{\beta}\cdot\hat{R}}\right)$$

$$= \left[\left(\nabla - \frac{\vec{R}}{c(R-\vec{\beta}\cdot\vec{R})}\frac{\partial}{\partial t'}\right)Q\right]_{ret}$$