The authors have convincingly addressed my comments in their reply.

Concerning the statement "However, representing temporal changes in terms of splines or similar non-linear functions could lead to smoother time derivatives and/or changes in the frequency content of the signal, which should be avoided for example in GIC-related studies", let me just note that in Marsal et al (2020) it is discussed the importance of the inter-knot frequency selection of the spline expansion. A previous knowledge of the largest frequencies of the target phenomena to be modeled is suggested, and we recommend that the corresponding Nyquist frequency can be used as an upper bound for such inter-knot frequency.

My recommendation is to accept the paper for publication.

Best wishes,

J.M. Torta