

As long as they are “real” features that potentially have some relevance (and aren’t arbitrarily changing in their composition over time), I’d prefer you leave them in the future. Maybe add another json list of “risky features” to identify them. Non-correlation (or changing correlation) with the target isn’t necessarily a huge red flag just by itself is it? (I would find that rather expected.) I assume the true value of many features is only uncovered via its (possibly non-linear) relationships to other features that you won’t see in isolated correlation analysis of single features vs the target (such simple linear relationships we aren’t supposed to be relying on anyway). Don’t try to child-proof the data, just put a warning on it if you’re worried about it. (And maybe expand the “train” labeled eras out to era 800 or so to encourage training of more recent eras.) After all, with TC we aren’t even primarily being judged on correlation with the target anymore, and there are a whole bunch of targets!