The relationship between ionospheric parameters and solar proxies is changing – when?

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The relationship between ionospheric parameters and solar activity proxies has broadly been assumed to be stable. However, using data of foF2 from three European stations and foE from two European stations we show that this assumption is not correct. In more recent years the dependence of ionospheric parameters on solar proxies is steeper than in the past. The change is between 1994 and 1997 for foF2 and after 2000 for foE. Also the relationships among solar proxies have changed, which might indicate some solar changes perhaps responsible for the observed changes of the relationship between ionospheric parameters and solar proxies with implications to trend and climatological studies, and modeling.