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## An advantage of magnetic index $\eta$ to show high local disturbances in ionosphere during quiet day conditions.

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We analysed data of ionospheric characteristics (foE, foEs, foF2, h'E, h'F2) during 30-day long quiet day conditions (Kp = 0-2) in 2004. We found correlations between high local disturbances in ionosphere during very quiet days and high values of magnetic index  $\eta$ . The coexistence of E sporadic layer or high local disturbances of the foE during magnetically very quiet days with large values of magnetic index  $\eta$  will be shown. The not large amount of analysed quiet days and area limited only to Europe and South Africa are not enough to prove thesis that  $\eta$  index is perfect to predict existence of E sporadic layer.