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Some reliability aspects of determination the position in navigational systems

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The method of estimation of the navigation systems fixes accuracy is well known both in navigation and geodesy as well. The estimation of errors measurements statistics being the random variables enables evaluate some probabilities which are measures of the system accuracy. The paper presents the suggestion of three new measures of determining the coordinates accuracy related to reliability characteristics. In contrast to the common applied approach in which the single measurement error is a random variable, in approach presented here the distributions of working times and times of failures were taken under statistics estimation. It enables to define some new statistics measures related to the navigational solution.