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POPDAT- project opportunities in studying the ionosphere wave-like density structures

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Vertical coupling in the Earth's ionosphere with adjacent zones from above and below is an actual subject with relatively high importance and practical application. In this sense, POPDAT(Problem-oriented Processing and Database Creation for Ionosphere Exploration)tools for ionosphere data evaluation and data mining could be a solution for further studies, carried out by the usage of large amount of past satellite and ground based data sets over prolonged periods of observations. As a part of this approach, within POPDAT Ionosphere Wave Service, we created wave catalogues of traveling ionospheric disturbances (TID) or more general, wave-like ionospheric disturbances, accessible for data mining and further data processing procedures. An introduction to the system configuration and the 'end user' opportunities of the POPDAT's TID service is given. This work should be a first step toward further dissemination and POPDAT usage, as an open access Internet service to the scientific community, especially created for the Earth's ionosphere studies.