عنوان مقاله:

Evaluation of GPM-IMERG-V۰۶ satellite precipitation product performance over Iran

محل انتشار:

دومین کنفرانس بین المللی علم اطلاعات جغرافیایی بنیادها و کاربردهای بین رشته ای (سال: 1400)

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خلاصه مقاله:

Rainfall is an important parameter in monitoring and forecasting meteorological drought; because it is one of the complex and vital elements of the atmosphere and plays an important role in recharging the seas, rivers, and aquifers. Due to the importance of precipitation data in hydrological studies and the challenges of rainfall grid stations, the application of satellite precipitation products in the last decade has been considered by researchers. Accordingly, in this study, the sixth edition of the GPM-IMERG Final Run satellite precipitation product was evaluated and compared with the precipitation data of synoptic stations on a monthly scale between ۲۰۰۸ and ۲۰۱۹ over Iran. For this purpose, ۸۱ synoptic stations were selected and three statistical tests of the correlation coefficient, efficiency factor, and root mean square error were used to evaluate satellite data. The results show a high correlation between this product and ground data in most parts of the country, especially in the eastern regions and the Zagros highlands. Moreover, the error of this product increases in the Caspian coastline and some other rainy situations. On the other hand, the efficiency of this product is very desirable in the eastern and western provinces of the country.

کلمات کلیدی:

Efficiency Factor, GPM_IMERG, Iran, Remote Sensing, Synoptic Stations

لینک ثابت مقاله در پایگاه سیویلیکا: