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Rain rate estimation is a vital information required in weather forecasting and most notably in flash flood warnings. While the ground based meteorological radars are the first choice to provide this information, presence of signal blockage of rough terrain and regions that are not covered by the useful range of those radars is a fact in many radar networks. On the other hand, PR-OBS-3 satellite based rainfall rate product which takes advantage of both IR imagery of geostationary satellite and MW sounders of low earth orbiting meteorological satellites is a good candidate for filling those gaps.

In this study, rain rate estimations of those two products are compared for some stratiform and convective precipitations. This comparison also includes the use of ground-truth precipitation measurements. Selection of precipitation cases are tried to include SRI products of both single polarization and dual-polarization C-Band radars of TSMS radar network. Results are discussed to assess in which conditions this satellite based product performs acceptable as an operational rain rate tool to provide information for regions where there is no SRI product available.