

I. INTRODUCTION

Global navigation satellite systems (GNSS) - one of the simplest and cheapest methods of navigation in modern society. This is not surprising - the users only have to purchase a receiver, since the main system is free and publicly available (the constellation owners pay cost of maintaining the system). Over the years of its work, satellite navigation has been used in different spheres of society, including transport, agriculture, tourism, navigation, etc. Despite the fact that the system was originally designed to be used on the surface of the Earth or near the lower Earth orbits that is called Terrestrial service volume (TSV), GNSS can be used for navigation in the near- Earth space that was named space service volume (SSV).

Use of satellite navigation on low Earth orbits

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