

Radio monitoring station investigates interference with integrated 5G base stations

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How to reduce interference between 5G base stations and FSS earth stations?

To reduce the interference between 5G base stations (BSs) and FSS earth station (ES), a guard band protection method is proposed. Additionally, the distance and angular protection methods are amalgamated. The performances are evaluated by simulation in realistic 3GPP. Also, the impacts of four antenna types are analysed for a 5G BS.

Will 5G interference occur if a base station is near the ground?

Even if the 5G radiation meets all the relevant regulatory specifications, interference could still occur if the base station is near the ground terminal.

Does 5G network coexist with Fixed Satellite Service (FSS)?

In this paper, the coexistence between fifth generation (5G) network and fixed satellite service (FSS) is investigated. To reduce the interference between 5G base stations (BSs) and FSS earth station (ES), a guard band protection method is proposed. Additionally, the distance and angular protection methods are amalgamated.

Can guard band protection solve the interference for 5g/fss coexistence?

The numerical results show that the guard band protection can solve the interference for the 5G/FSS coexistence, when the distance protection is combined. In addition, when the hybrid protection method is employed, the coexistence between 5G BS and FSS ES is guaranteed.

1. Introduction

This study investigates the impact of 5G base stations (BS) on RAs through airborne measurements conducted using a helicopter above and around a 5G BS, suggesting a viable ...

In this manuscript, we present a novel deployment protection method aimed at safeguarding aeronautical radio altimeters (RAs) from interference caused by fifth-generation ...

This report describes work performed by the National Telecommunications and Information Administration

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(NTIA); the Federal Aviation Administration (FAA); the wireless carrier T ...

Abstract: In this manuscript, we present a novel deployment protection method aimed at safeguarding aeronautical radio altimeters (RAs) from interference caused by fifth-generation ...

Compared to its predecessors, the utilization of radio beams at the base transceiver stations (BTS) in 5G networks introduces an entirely new set of considerations encompassing ...

The invention discloses a 5G base station supervision and interference investigation system, which comprises a vehicle-mounted 5G monitoring and direction-finding subsystem and a 5G ...

In this study, we primarily focus on the interference of 5G base stations with radio altimeters and the fundamental 5G emission. The impact of 5G interference on radio altimeters is a novel and ...

In this manuscript, we present a novel deployment protection method aimed at safeguarding aeronautical radio altimeters (RAs) from ...

To reduce the interference between 5G base stations (BSs) and FSS earth station (ES), a guard band protection method is proposed. Additionally, the distance and angular ...

Widespread adoption of 5G systems may interfere with fixed satellite service (FSS) earth stations operating in nearby frequency bands. Some countries and region.

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