

STN P	Geografické informácie Kalibrácia a validácia údajov diaľkového snímania a odvodených produktov Časť 2: Radar so syntetickou apertúrou (SAR) (ISO/TS 19124-2: 2025)	STN P CEN ISO/TS 19124-2 01 9365
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Geographic information - Calibration and validation of remote sensing data and derived products - Part 2: Synthetic aperture radar (SAR) (ISO/TS 19124-2:2025)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 03/26

Táto predbežná slovenská technická norma je určená na overenie. Prípadné pripomienky pošlite do decembra 2027 Úradu pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky.

Obsahuje: CEN ISO/TS 19124-2:2025, ISO/TS 19124-2:2025

142140



Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2026
Slovenská technická norma a technická normalizačná informácia je chránená zákonom č. 60/2018 Z. z. o technickej normalizácii v znení neskorších predpisov.

TECHNICAL SPECIFICATION
SPÉCIFICATION TECHNIQUE
TECHNISCHE SPEZIFIKATION

CEN ISO/TS 19124-2

December 2025

ICS 35.240.70

English Version

**Geographic information - Calibration and validation of
remote sensing data and derived products - Part 2:
Synthetic aperture radar (SAR) (ISO/TS 19124-2:2025)**

Information géographique - Calibration et validation
des données de télédétection et produits dérivés -
Partie 2: Radar à synthèse d'ouverture (SAR) (ISO/TS
19124-2:2025)

Geoinformation - Kalibrierung und Validierung von
Fernerkundungsdaten und abgeleiteten Produkten -
Teil 2: SAR (ISO/TS 19124-2:2025)

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

CEN ISO/TS 19124-2:2025 (E)

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European foreword

This document (CEN ISO/TS 19124-2:2025) has been prepared by Technical Committee ISO/TC 211 "Geographic information/Geomatics" in collaboration with Technical Committee CEN/TC 287 "Geographic Information" the secretariat of which is held by BSI.

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Endorsement notice

The text of ISO/TS 19124-2:2025 has been approved by CEN as CEN ISO/TS 19124-2:2025 without any modification.



Technical Specification

ISO/TS 19124-2

Geographic information — Calibration and validation of remote sensing data and derived products —

Part 2: Synthetic aperture radar (SAR)

*Information géographique — Calibration et validation des
données de télédétection et produits dérivés —*

Partie 2: Radar à synthèse d'ouverture (SAR)

**First edition
2025-12**

ISO/TS 19124-2:2025(en)



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CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

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ISO/TS 19124-2:2025(en)**Foreword**

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ISO/TS 19124-2:2025(en)

Introduction

Remote sensing is one of the major data sources for geographic information. As a kind of active imaging radar sensor, SAR has the ability to observe the earth in both day and night, and for almost all weather conditions. As a result, SAR data and their derived products have been widely used in various fields such as disaster monitoring, geological mapping, environmental protection, etc.

Such applications can integrate SAR data from different suppliers and different sensors. The quality of those data and products is essential for the success of such applications. Calibration and validation are the fundamental processes to assess and improve the data quality and ensure the Earth observing (EO) data and derived products from different sources are comparable and interoperable.

The calibration and validation include the SAR sensors themselves, SAR data collected by sensors, and products derived from SAR data. ISO/TC 211 has developed the ISO 19159 series of Technical Specifications to cover the calibration of sensor hardware and validation of the calibration results. ISO/TS 19159-3 is about calibration and validation of SAR/InSAR sensors. The ISO 19124 series standardizes calibration and validation of remote sensing data and products:

- ISO/TS 19124-1 addresses the overall framework and common calibration and validation processes related to EO data and derived products from different types of remote sensors.
- This document (ISO/TS 19124-2) standardizes the calibration and validation of SAR data and their derived products.

Geographic information — Calibration and validation of remote sensing data and derived products —

Part 2: Synthetic aperture radar (SAR)

1 Scope

This document defines the calibration and validation of Earth observing (EO) data acquired by synthetic aperture radar (SAR) sensors and products derived from SAR data. The specified SAR sensors include general working modes and advanced working modes.

In this document, calibration addresses the process to correct the data, not only geometrically and radiometrically, but also characteristically for qualitative and quantitative applications. Validation addresses an evaluation of the quality and accuracy of the calibrated data and derived products.

This document also addresses the associated metadata related to calibration and validation that has not been defined in other geographic information International Standards.

This document does not apply to the calibration of SAR sensors and validation of SAR sensor calibration, which are covered by ISO/TS 19159-3. However, the calibration and validation procedure can be also applied and referenced among others.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/TS 19124-1, *Geographic information — Calibration and validation of remote sensing data and derived products — Part 1: Fundamentals*

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