KINGDOM OF SAUDI ARABIA
GENERAL AUTHORITY OF CIVIL AVIATION
SAUDI AIR NAVIGATION SERVICES
AERONAUTICAL INFORMATION MANAGEMENT

Data Product Specification

of KSA Terrain Dataset for Area1

Version	1.0
This version	https://aimss.sans.com.sa
Latest version	NIL
Published	2025-10-02
Language	English
Extent of the data product	Entire KSA
Topic category	Transportation
Keywords	AIP

Abstract of the data product
The aeronautical data of the KSA terrain data set for Area 1 are collected and published according to GACAR Part 175.

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Amendment Record

Version	Date	Reason of change	Changed section
1.0	2025-10-02	Creation of the document	All

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1. About the data product specification	
Title	Data product specification for KSA Terrain Data Set for Area1
This version	https://aimss.sans.com.sa
Latest version	*NIL*
Published	2025-10-02
Updated	Based on AIRAC cycle as needed
Language	English
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Web location	https://aimss.sans.com.sa
Format	Geotiff
Maintenance	The data product specification is reviewed and updated as required.
Handling restrictions	*Not applicable*
Terms and definitions	See GACAR Part 175.
Abbreviations	DS Data Set EPSG European Petroleum Survey Group ISO International Organization for Standardization KSA Kingdom of Saudi Arabia NIL None or I have nothing to send to you Universal UTC Time Coordinated UTF-8 8-bit Unicode Transformation Format For additional abbreviations, see GACAR Part 1 and KSA AIP.
2. Identification and purpose of the data product	
Official title	KSA Terrain Data Set for Area 1
Alternative title	*Not applicable*
ID	NXXEYY.tiff XX: Latitude YY: Longitude
Abstract	The product contains the terrain data set for Entire KSA for Area 1, which is compliant with the requirements laid down in GACAR part 175.

Purpose	The purpose of the data product is to provide Entire KSAArea1 terrain data for air navigation applications. GACAR Part 175 provides possible uses of the data. It is the responsibility of the users to determine if the data product meets their needs.
Topic category	Transportation
Keywords	Terrain
Spatial representation	Vector
Spatial resolution	*Not applicable*
Supplemental information	*NIL*
Restrictions	For aviation use only.
Extent	OEJD FIR
3. Data content and structure	
Narrative description	The data model for aeronautical data follows the model defined in GACAR Part 175.
Application schema	NIL
Feature catalogue	See point 2 (Abstract)
4. Reference system	
Spatial reference system	Horizontal reference system: WGS-84, EPSG: 4326 Vertical reference system: Mean See Level using EGM-2008 datum.
Temporal reference system	Gregorian Calendar, UTC

5. Data quality	
Requirement 1	Data quality element: Accuracy Data quality measure: The accuracy requirements are specified in Appendix 1 to GACAR Part 175 – Aeronautical Data Catalogue and are based on a 90% confidence level.
Requirement 2	Data quality element: Resolution Data quality measure: The resolution requirements are specified in Appendix 1 to GACAR Part 175 – Aeronautical Data Catalogue.
Requirement 3	Data quality element: Assurance (Integrity) Data quality measure: The integrity requirements are specified in Appendix 1 to GACAR Part 175 – Aeronautical Data Catalogue. The procedures for processing aeronautical data have been setup to meet the integrity requirements.
Requirement 4	Data quality element: Traceability Data quality measure: All actions applied to the aeronautical data have been recorded. The traceability records are available on request.
6. Data capture and production	
Description	Terrain coverage areas have been created according to GACAR part 175.
Guide	*NIL*
Inclusion criteria	Terrain data is provided with 90m post spacing.
Data acquisition and processing	The data was captured and processed with Synthetic Aperture radar
7. Maintenance of the data	
Description	Terrain Data Set for Area 1 - KSA is updated based on AIRAC cycle as needed.
Frequency	As needed
User defined	*NIL*
8. Portrayal rules	
Portrayal rules	*Not applicable*
9. Data delivery	
Format name	Geotiff
Format version	Not applicable
Format specification	Geotiff
File structure	Not applicable

Language	English
Transfer size	*Not applicable*
Medium name	*Not applicable*
Other delivery	*Not applicable*
Service property	*Not applicable*
10. Metadata	
Specification	ISO 19115, Geographic information – Metadata
Encoding	ISO 19115, Geographic information – Metadata
Metadata elements	The metadata is included in the data set as described in GACAR Part 175 §175.147 Metadata requirements. The following metadata is provided: • The names of the organization or entities providing the data set; • The date and time when the data set was provided. • Period of validity of the data set; and • Any limitations with regard to the use of the data set.
11. Additional information	
Additional information	Not applicable