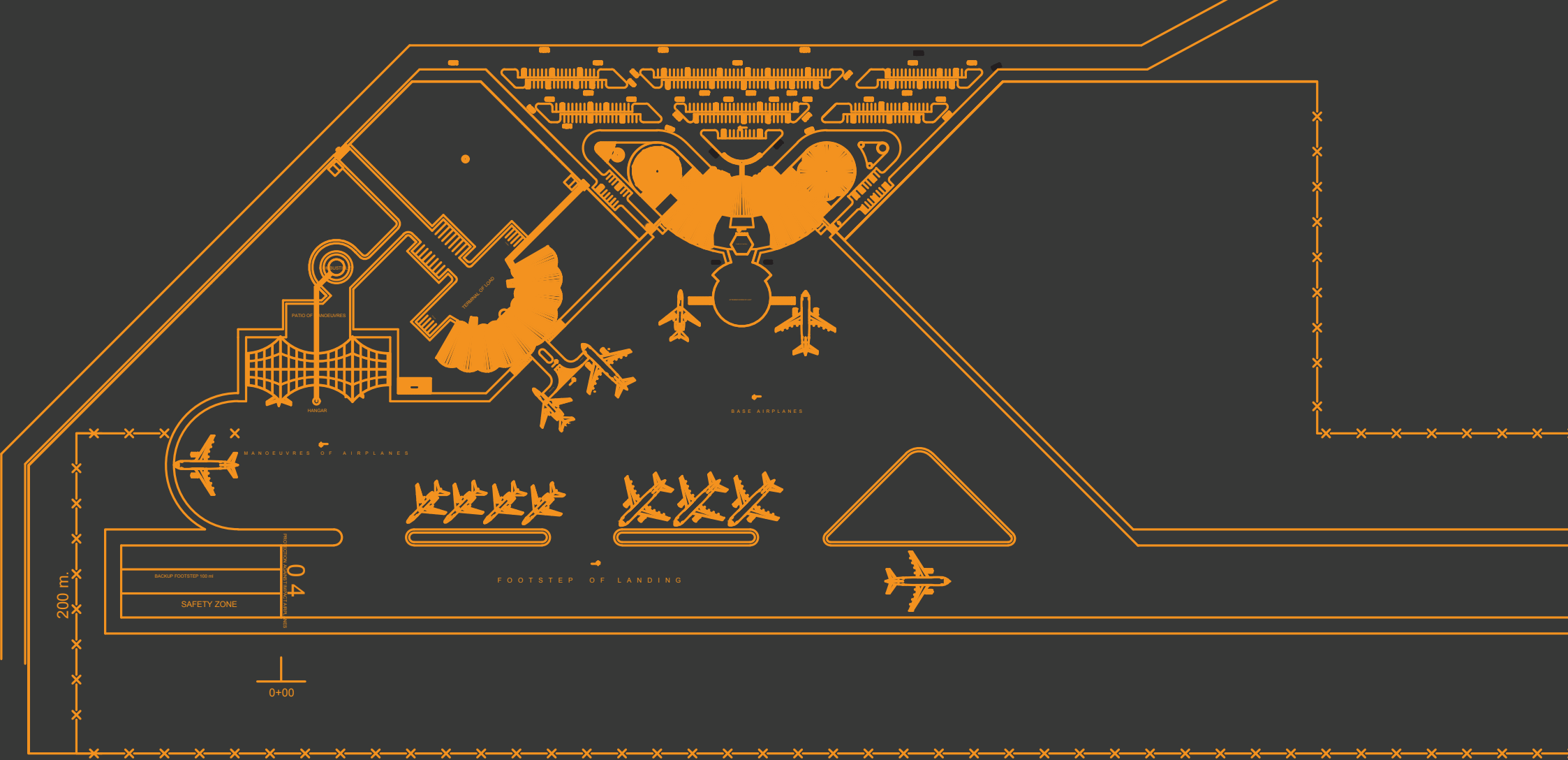


HARITAEVI

AVIATION DATA & SAFETY
CONSULTANCY & ENGINEERING SOLUTIONS

Short Story

2006
Established
Focusing on
Geospatial Information
Systems in Aviation

2014
The First Aeronautical
Studies in Turkey

2014
The First Airport
Safety Audits
in Turkey

2018
AeroDataMarket GIS
Software Using
Big Data in Aviation

2018
The First Traffic
Forecast Study in
Turkey

2016
ObstacleAnalyze an
Obstacle Management
Software

2021
Istanbul Office

2021
ETOD and Obstacle
Project of 21 Airport in
Malaysia

Our Aim

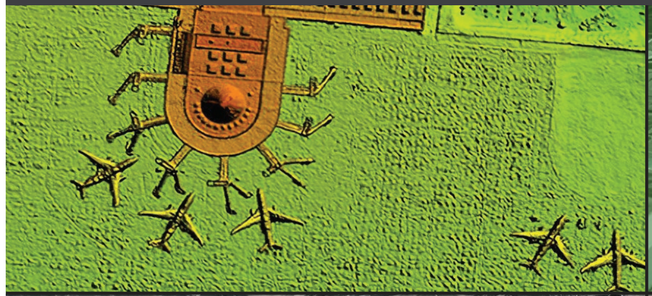
- Offer tailor-made aviation safety solutions
- Contribute to the digitalization of aviation
- Raise the awareness of aviation safety
- Create and prioritize safety culture
- Reserve the right of construction in BRA
- Add value to economy

Our Differences

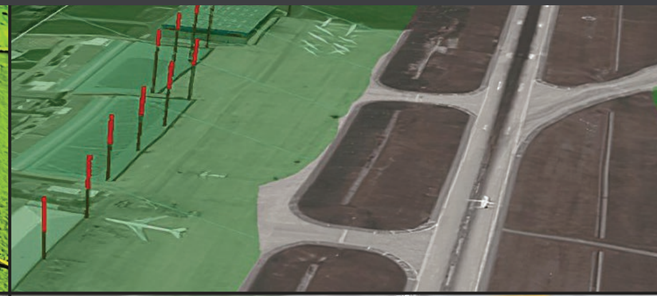
- Tailor-made Solutions
- Compliancy with ICAO and EASA Standards
- Digital Aviation Solutions Exclusive to Haritaevi
- Innovative R&D in Aviation
- Geographic Data Processing Capability in Aviation
- First and Leading Projects in Aviation Safety
- Multidisciplinary Team
- Consultants Accepted as an Authority in Their Field
- National and International Cooperation
- Close Relations with Civil Aviation Authorities, Airport Operators and Municipalities
- Property and Cadastral Knowledge of BRA

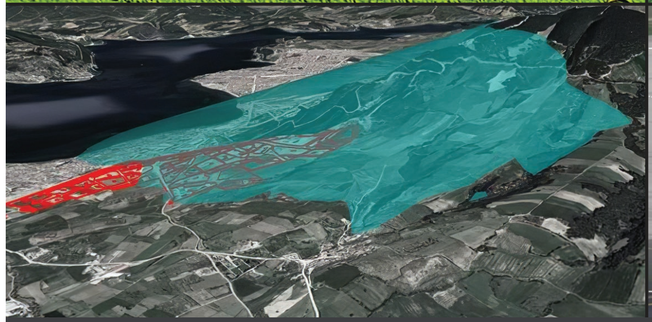
What do we do?

AIRPORT SAFETY AUDIT



AERODROME DATA COLLECTION





AERONAUTICAL STUDIES

AIRPORT DESIGN & ENGINEERING

Partners & Accreditations

Certified/Accepted By Authorities

Military Authorities

- Turkish Ministry Of National Defense
- Turkish Air Force Command
- Turkish Naval Forces Command
- Military Airport Commands

Civil Authorities

- Turkish Directorate General Of Civil Aviation
- Turkish General Directorate of State Airports
- Malaysia Civil Aviation Authorities
- North Macedonia Civil Aviation Authorities
- Romania Civil Aviation Authorities

Professional Background

HAVACILIK ÇALIŞMALARI İÇİN
UZMAN KURULUŞ YETKİ BELGESİ

EXPERT INSTITUTION AUTHORIZATION CERTIFICATE FOR AERONAUTICAL STUDIES

Belge No./Certificate No.
1

Bu yetki belgesi ile
This is to certify that

Haritaevi Bilişim İnternet Harita Elektronik Danışmanlık Sanayi Ticaret Limited Şirketi

"Havalanları ve Çevresinde Yapılacak Havacılık Çalışması ve Gölgeleme Talimatı (SHT-HÇG)" kapsamında "Mânia Kriterleri" türünde yapılacak olan havacılık çalışmalarını yapmaya yetkili kılınmıştır.

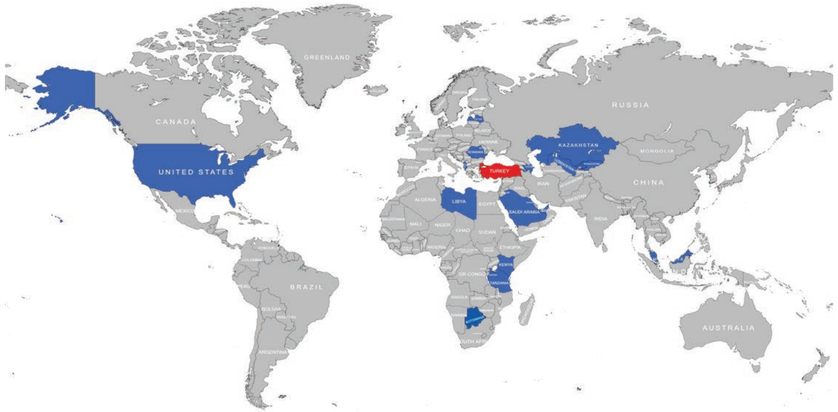
is authorized to conduct aeronautical studies on the type of "Obstacle Criteria" in the context of the "Directive on Aeronautical Studies and Shielding Principles to be Conducted on and in the Vicinity of Aerodromes".

Bu yetki belgesi başkasına devredilemez; yetki şartları sağlandığı, iade edilmediği, geri alınmadığı veya iptal edilmediği sürece belge tarihinden itibaren her yıl temdit işlemi yaptırılması şartıyla geçerlidir.

This certificate is not transferrable and it is valid unless the authorization conditions are maintained, or it is revoked, disclaimed or cancelled, provided the renewal process is completed every year from the date of issue.

Yetkilendirme Tarihi: 9 Şubat 2018
Date of Issue: 9 February 2018

Genel Müdür V.
Acting Director General



Some Customers & References

Havaalanı İşletme ve Havacılık Endüstrileri A.Ş.

Cluj Avram Iancu International Airport

Kale resources

DESTEK GROUP

SEYHAN BELEDİYESİ

KEPEZ BELEDİYESİ

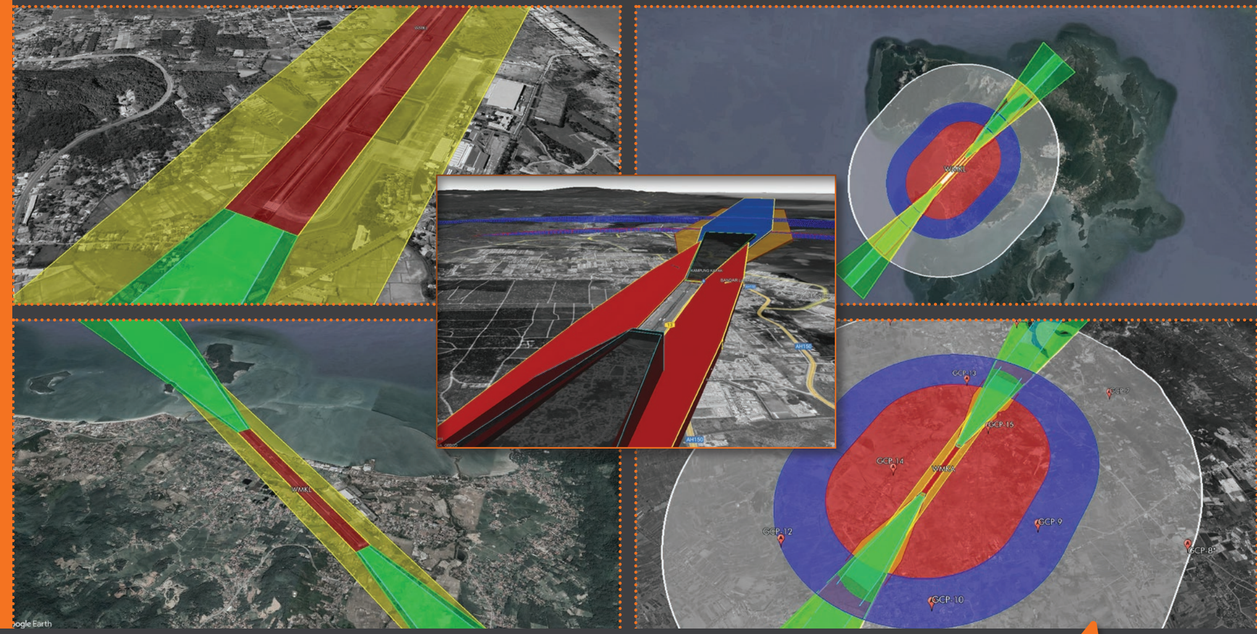
ORTAHİSAR BELEDİYESİ 2014 TRABZON

Some Work Completions

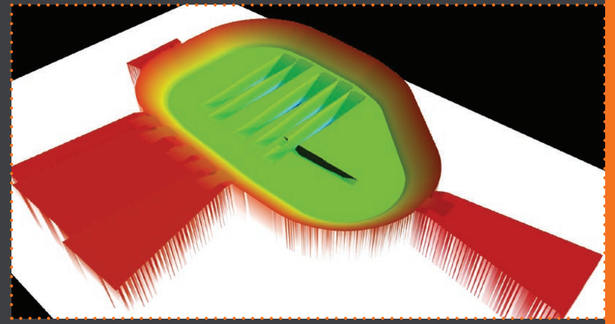
- Malaysia Electronic Terrain & Obstacle Data (ONGOING)
- ICAO Annex14 Standards Safety Audit İstanbul New Airport
- Sabiha Gökçen Airport Aeronautical Studies-Kartal
- Electronic Obstacle Management System (ObstacleAnalyze)-CAA
- Building Restricted Area Webservice for Cadastral Authorities & Municipalities
- ICAO Annex14 Standards Safety Audit Kahramanmaraş Airport
- ICAO Annex14 Standards Safety Audit Antalya Airport
- Sabiha Gökçen Airport Runway Safety Aeronautical Study
- Sabiha Gökçen Airport(C) Taxiway Slope Aeronautical Study
- Sabiha Gökçen Radar Tower Aeronautical Study
- İstanbul Atatürk (IST) Airport Aeronautical Study
- Airport Terminal Simulation Software - General Directorate of SAA
- İstanbul Kartal Aeronautical Study
- Cape Town International Airport 2017-2022 Traffic Forecast
- Sabiha Gökçen Airport (SAW) 2017-2037 Traffic Forecast
- Eskişehir Air Force Base Odunpazarı Aeronautical Study
- Trabzon Shielding Project
- Şanlıurfa GAP Airport Obstacle Measurements

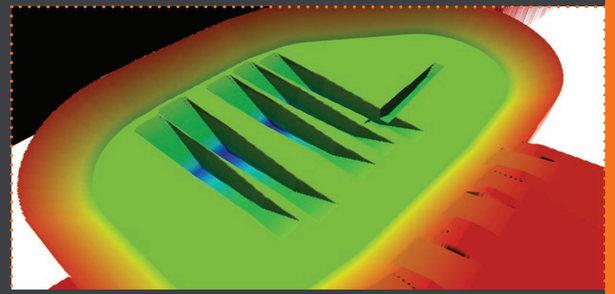
(ONGOING)

Malaysia Electronic Terrain & Obstacle Data

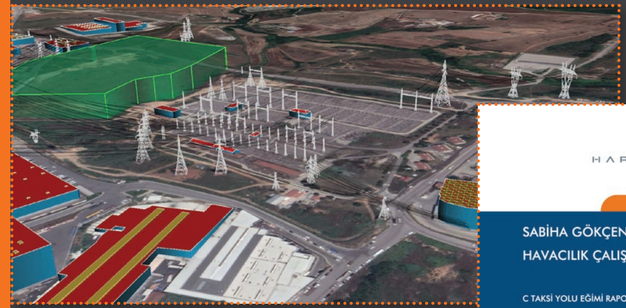


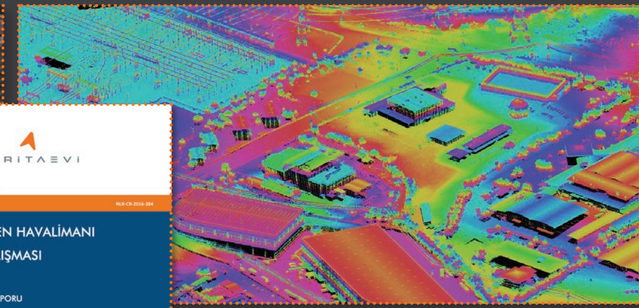
Annex14 Standards Safety Audit Istanbul New Airport

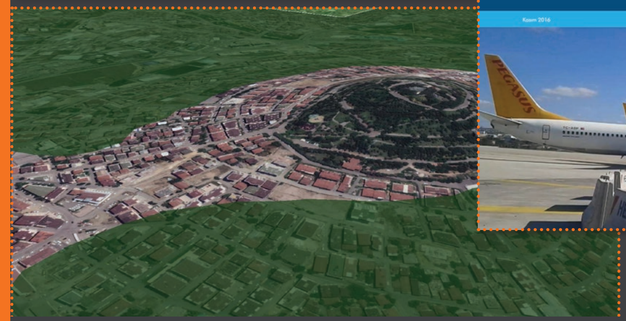


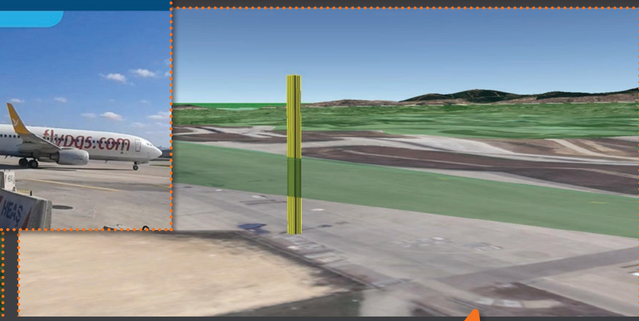


Sabiha Gökçen Airport Aeronautical Studies - Kartal



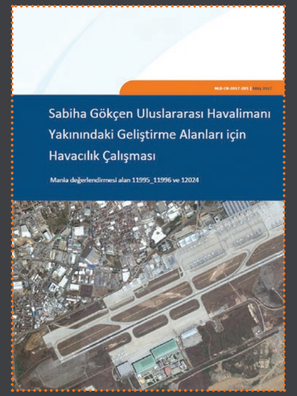






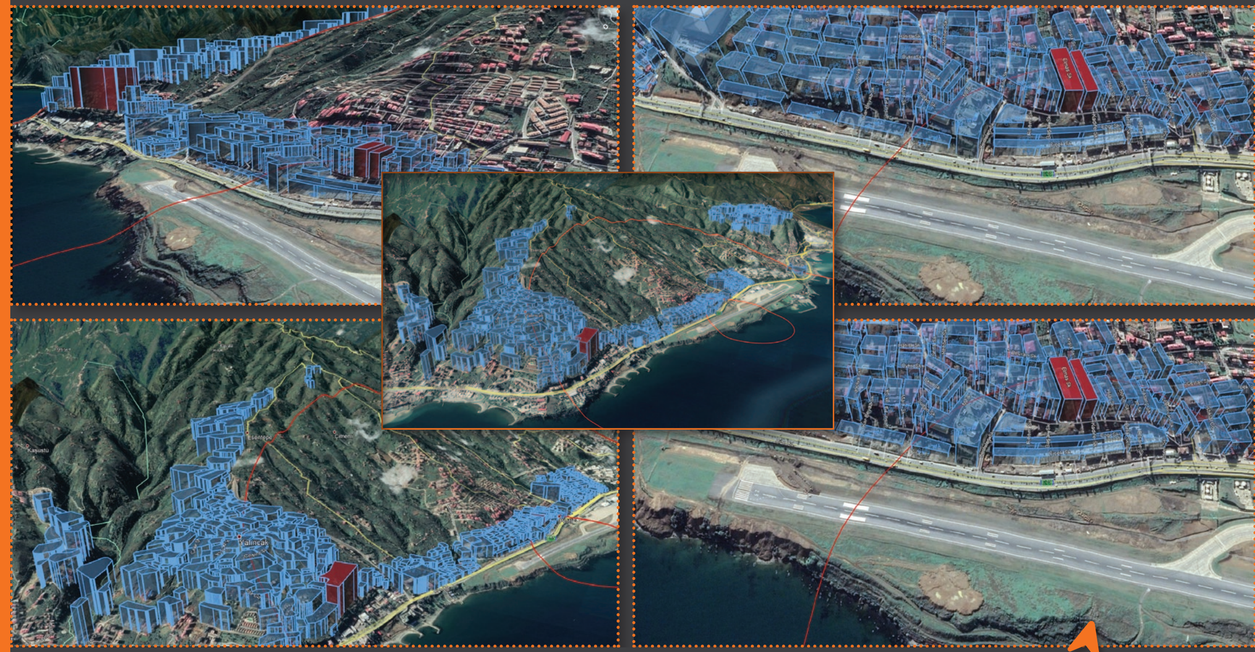
Some Work Completions

Istanbul Kartal Aeronautical Study



Some Work Completions

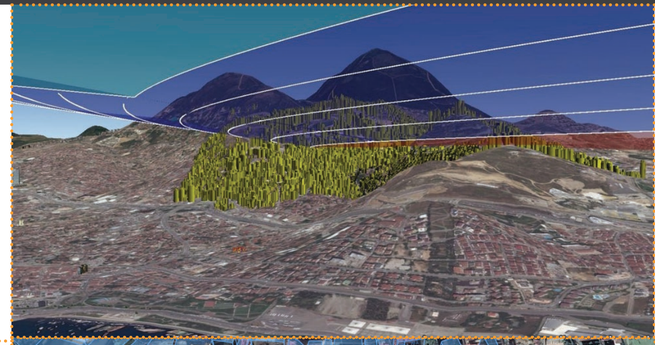
Trabzon Shielding Project

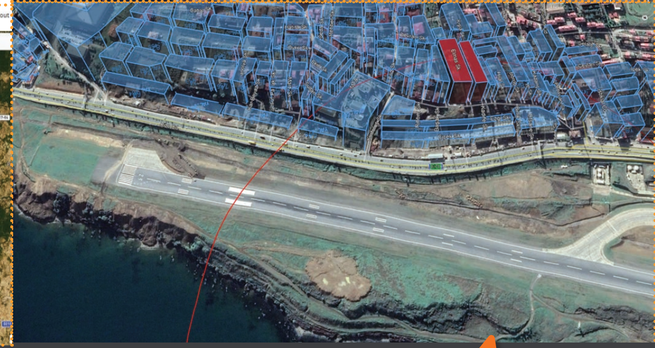


Aeronautical Data

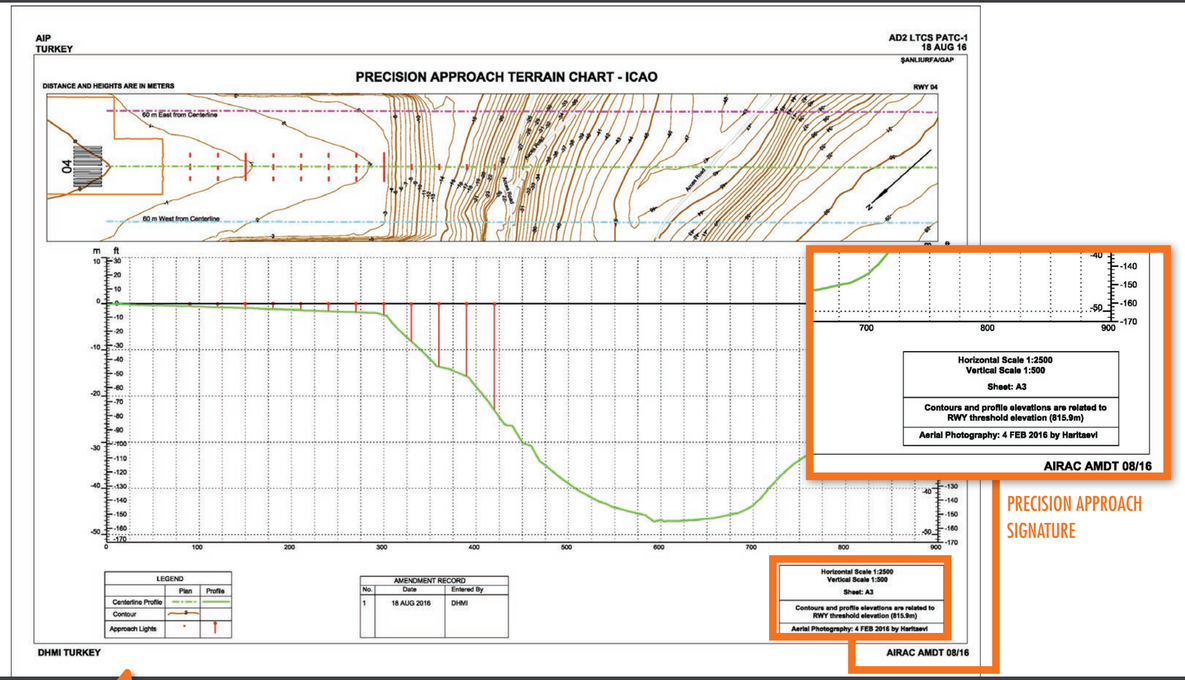
- Obstacle Management and Analysis
- Creating Vertical Obstacle Database
- ICAO Quality Aerodrome Data Collection Management
- E-TOD Standardization
- AIP Data Creation
- Type A, Type B Charts
- Precision Approach Charts

Obstacle Analysis



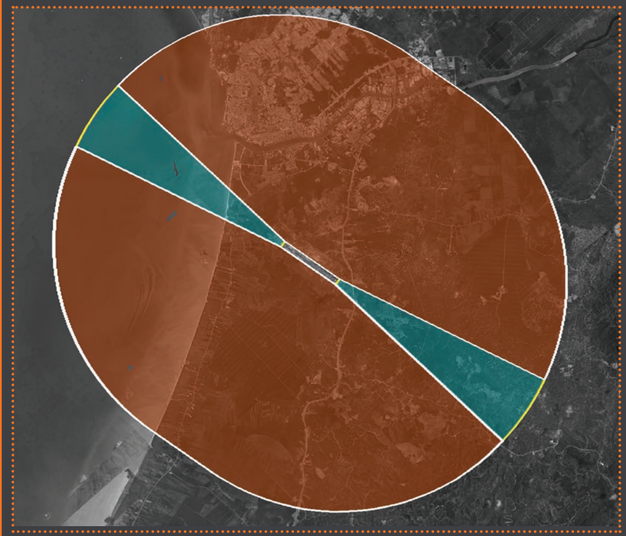


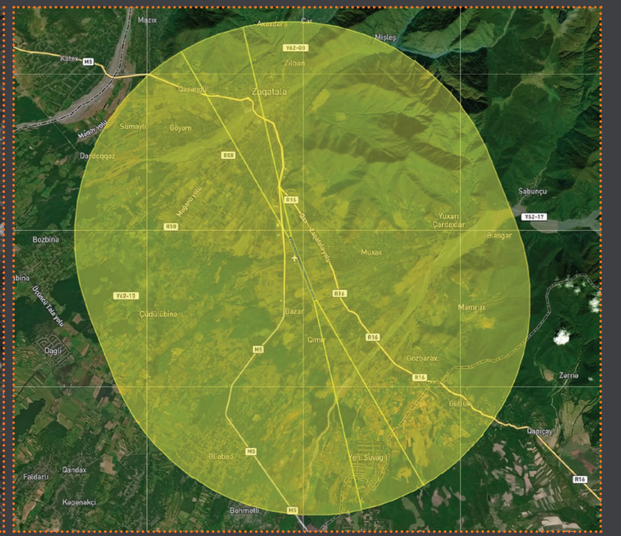
Precision Approach Charts



PRECISION APPROACH SIGNATURE

ETOD





Shielding Studies

BRA Analysis

ICAO Annex 14
Vol 1 Clause5.3.5.

Obstacle protection surface

Note.— The following specifications apply to T-VASIS, AT-VASIS, PAPI and APAPI.

5.3.5.42 An obstacle protection surface shall be established when it is intended to provide a visual approac indicator system.

5.3.5.43 The characteristics of the obstacle protection surface, i.e. origin, divergence, length and slop correspond to those specified in the relevant column of Table 5-3 and in Figure 5-21.

5.3.5.44 New objects or extensions of existing objects shall not be permitted above an obstacle protection except when, in the opinion of the appropriate authority, the new object or extension would be shielded by an immovable object.

Note.— Circumstances in which the shielding principle may reasonably be applied are described in the Airport S Manual *(Doc 9137), Part 6.*

5.3.5.45 Existing objects above an obstacle protection surface shall be removed except when, in the opinio appropriate authority, the object is shielded by an existing immovable object, or after aeronautical study it is determi the object would not adversely affect the safety of operations of aeroplanes.

Aviation Study Results

Approval date	21.04.2017
Building Level	229 - Permissible height above sea level for the structure, if any, based on the results of the Aviation Study.
Build Height	21 - According to the results of the Aviation Study, if any, it is the height of the structure that can be built at this point from the ground. Approximate value depending on floor height.

Shading Study Results

Approval date	
Building Level	0 - Permissible height above sea level for the structure, based on the results of the Shading Study, if any.
Build Height	0 - According to the results of the Sheilding Study if any, it is the height of the structure that can be built at this point from the ground. Approximate value depending on floor height.

Airport Safety

Movements

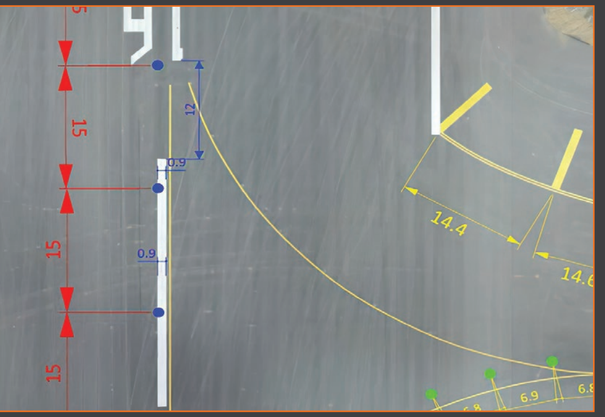
Compliance to Physical Standards

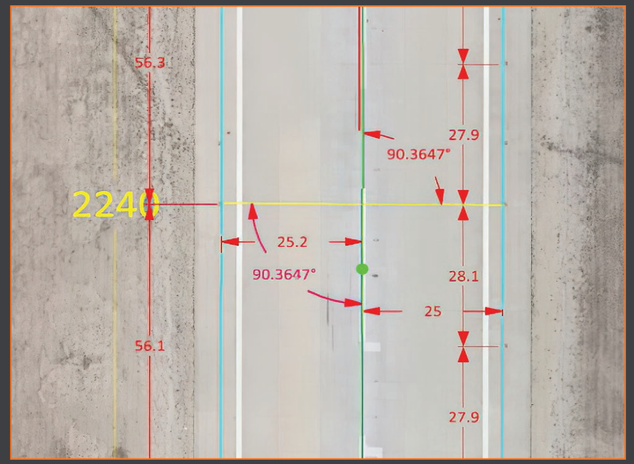
UAV-Based Solutions

Aerodrome Certification Process

AIP Integrity

Physical Characteristics





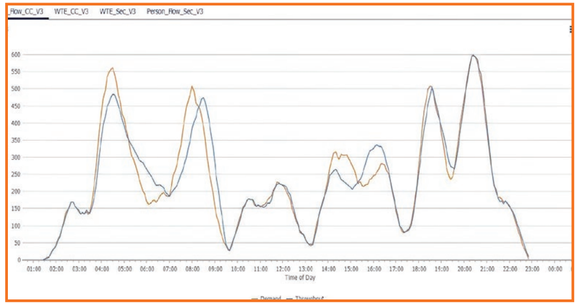
Safety Audit For Airports

- A comprehensive report based on detailed analysis
- Up-to-date maps (both in print and digital in CAD formats [such as dwg, dgn])
- Photogrammetric images (stereo photo, orthophoto, etc.)
- Digital data produced depending on the chosen method, air lidar, ground lidar etc.
- 4D (x,y,z,t) point cloud data
- Cross sections, boy sections etc. 4D analysis data (contents to be agreed in scope)

Airport Development

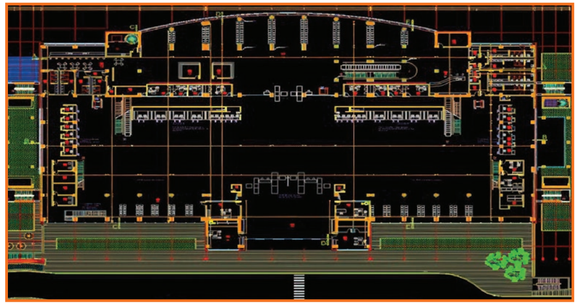
- Airport Site Selection
- Airport Simulation
- Airport Optimization

Airport Mapping & Airport Simulation



WORK COMPLETION CERTIFICATE
(CONTRACTOR)

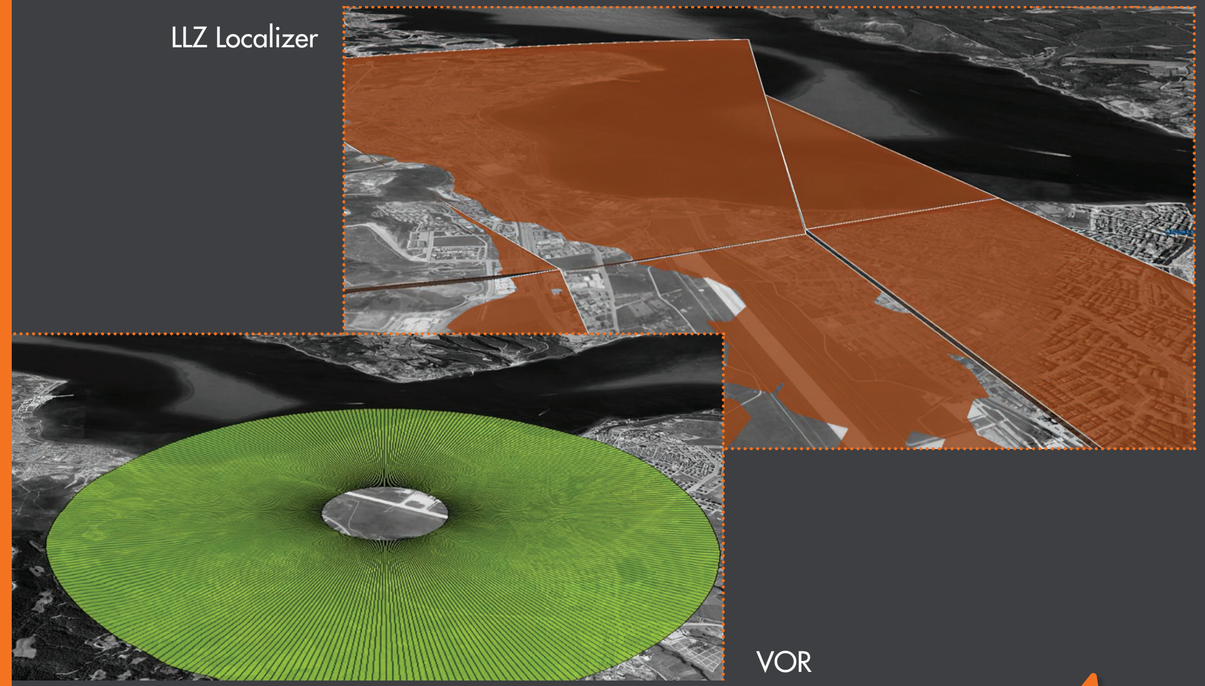
Number: 2018/543242-3236394-1-1		Date: 019APR 2019
1	Contracting entity	GENERAL DIRECTORATE OF STATE AIRPORTS AUTHORITY (DHMI) Department of Procurement and Supply
2	Name of work and, if any, tender registration number	Terminal Capacity Simulation Program. 2018/543242
3	Definition of the work	Hourly terminal capacity calculations are carried out by our Strategy Development Department at our airports in line with the needs. As a result of the calculations made, the bottlenecks in the terminal buildings are identified and solutions are offered, if any. It is important to carry out and follow up the mentioned capacity calculations regularly, to ensure the desired efficiency and to work with a scenario. Accordingly, a simulation program installation work will be procured for more extensive capacity works, analysis of many alternatives by working with scenarios, monitoring of reflection of solution suggestions on terminal capacity and passenger comfort, and investment needs (number of area and processors (number of x-ray, check-in, gate, baggage conveyor etc.)).
4	Name and surname or commercial name of the	HARİTAEVİ BİLİŞİM İNTERNET HARİTA



CNS Analysis

- Simulation of the Navaids
- Site Selection and Feasibility Studies
- ILS Category Upgrades

LLZ Localizer



VOR

Obstacle Analysis

- User-Friendly
- Easy Integration
- Easy Info-Access
- Labor-Saving

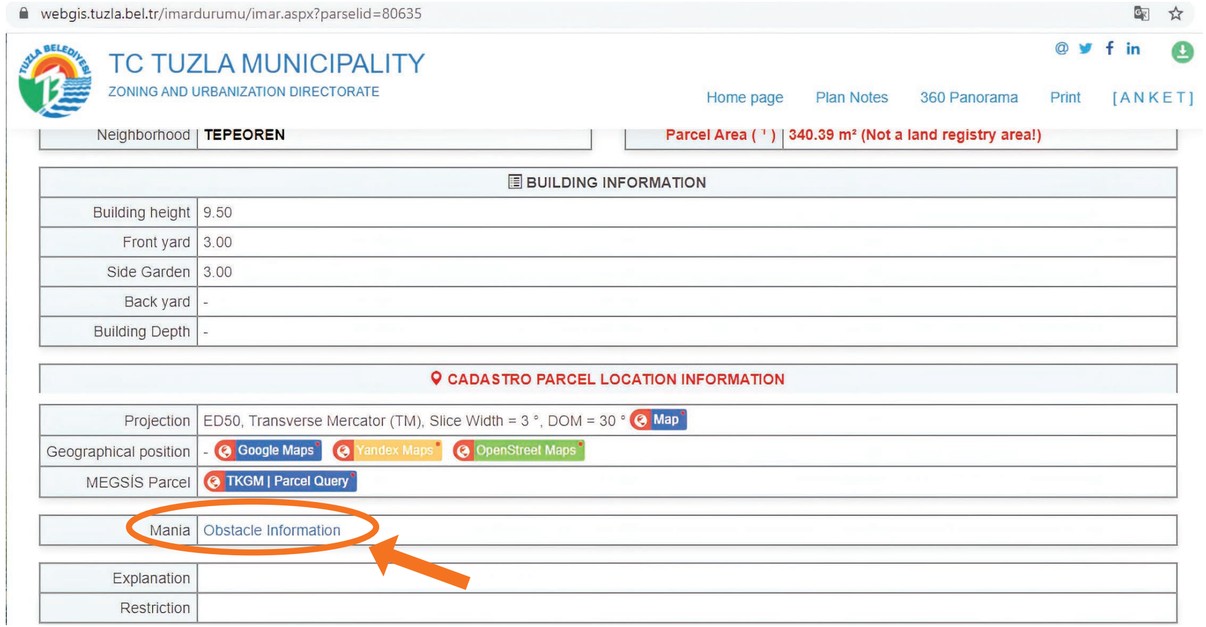
- Manage NOTAM
- Peak Analysis
- Surface Analysis
- Import KML
- CNS Surfaces
- Obstacle Limitation Surfaces
- Annex15 Surfaces
- Permissible Building Heights

Why Webservice for the Authorities?

www.obstacleanalyze.com

usa.obstacleanalyze.com

All Airports in The USA



webgis.tuzla.bel.tr/imardurumu/imar.aspx?parselid=80635

TC TUZLA MUNICIPALITY
ZONING AND URBANIZATION DIRECTORATE

Home page | Plan Notes | 360 Panorama | Print | [ANKET]

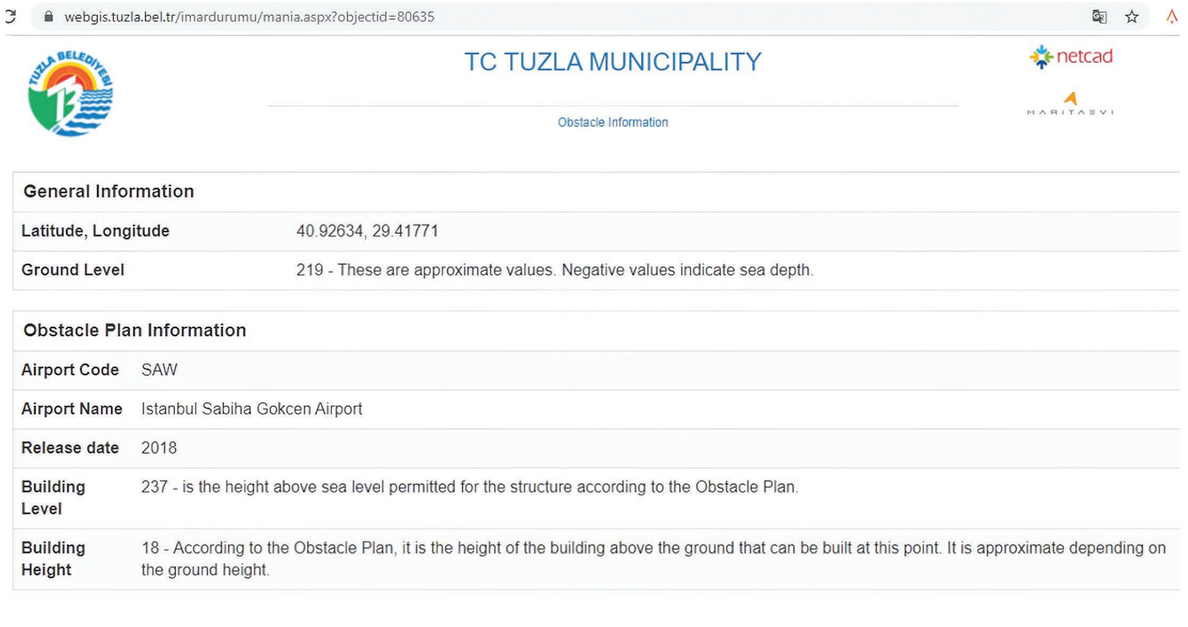
Neighborhood	TEPEOREN	Parcel Area (¹)	340.39 m² (Not a land registry area!)

BUILDING INFORMATION

Building height	9.50
Front yard	3.00
Side Garden	3.00
Back yard	-
Building Depth	-

CADASTRO PARCEL LOCATION INFORMATION

Projection	ED50, Transverse Mercator (TM), Slice Width = 3 °, DOM = 30 ° Map
Geographical position	- Google Maps Yandex Maps OpenStreet Maps
MEGSİS Parcel	TKGM | Parcel Query
Mania	Obstacle Information
Explanation	
Restriction	



webgis.tuzla.bel.tr/imardurumu/mania.aspx?objectid=80635

TC TUZLA MUNICIPALITY

Obstacle Information

netcad HARİTAEVİ

General Information

Latitude, Longitude	40.92634, 29.41771
Ground Level	219 - These are approximate values. Negative values indicate sea depth.

Obstacle Plan Information

Airport Code	SAW
Airport Name	Istanbul Sabiha Gokcen Airport
Release date	2018
Building Level	237 - is the height above sea level permitted for the structure according to the Obstacle Plan.
Building Height	18 - According to the Obstacle Plan, it is the height of the building above the ground that can be built at this point. It is approximate depending on the ground height.

Webservice for Authorities

Aviation Study Results	
Approval date	21.04.2017
Building Level	229 - Permissible height above sea level for the structure, if any, based on the results of the Aviation Study.
Build Height	21 - According to the results of the Aviation Study, if any, it is the height of the structure that can be built at this point from the ground. Approximate value depending on floor height.

Shading Study Results	
Approval date	
Building Level	0 - Permissible height above sea level for the structure, based on the results of the Shading Study, if any.
Build Height	0 - According to the results of the Sheilding Study, if any, it is the height of the structure that can be built at this point from the ground. Approximate value depending on floor height.

türkiye.gov.tr "Devletin Kısayolu"

SHGM DGCA

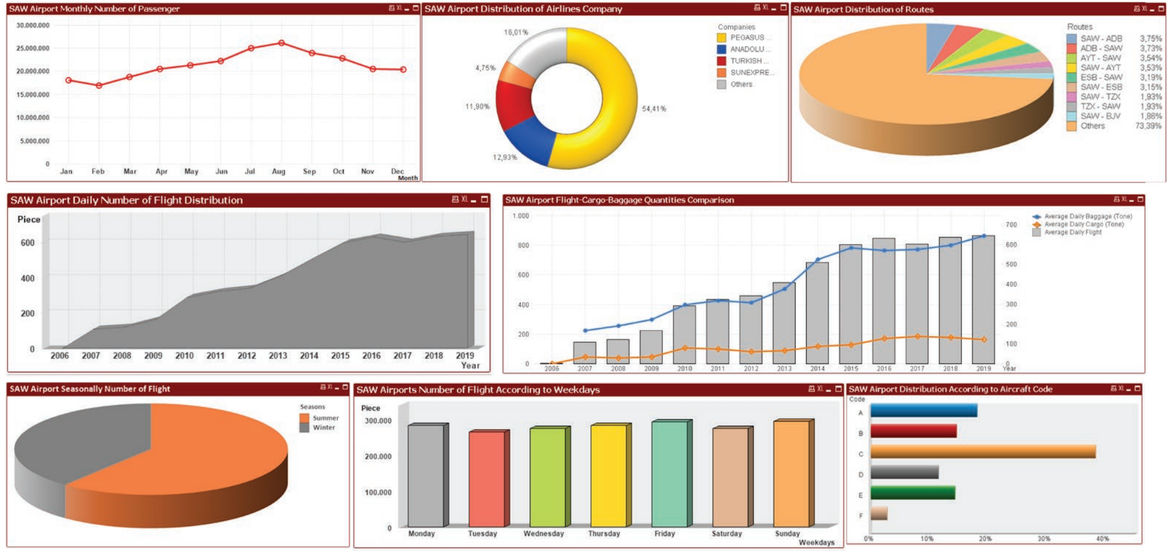
ÇİĞLİ BELEDİYESİ

KARESİ BELEDİYESİ

TUZLA BELEDİYESİ

Sabiha Gökçen Airport (SAW)

- SCENARIO-BASED FORECASTS
- PEAK ANALYSIS
- AIRPORT ROUTE ANALYSIS
- CATCHMENT AREA ANALYSIS

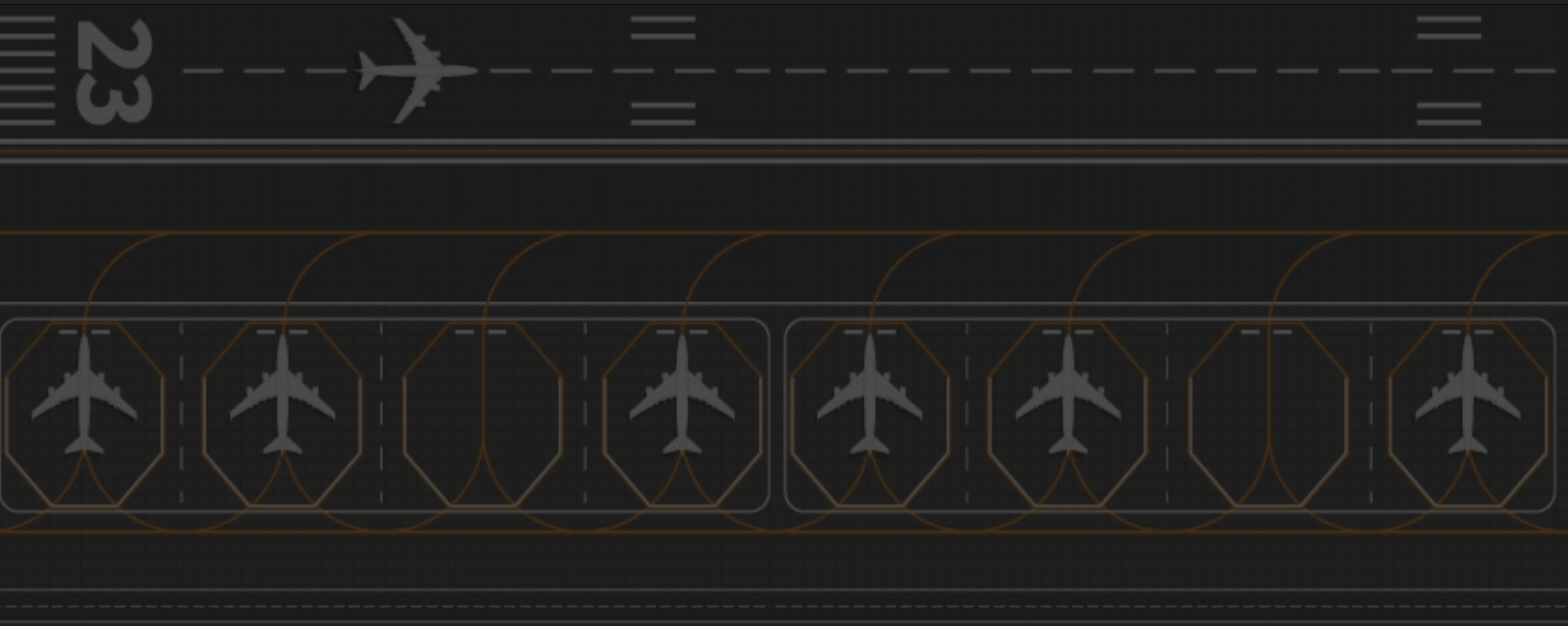


Aero Data Management

- Attributes Of Aerodromes
- Runways, Taxiways, Aprons
- Attributes of the Heliports
- The Paragliding Points
- NOTAM
- Educational Institutions for Aviation,
- Landing and Take-off Areas,
- Landing Strips for Aircraft and Helicopters,
- Locations of Balloon Businesses
- UAV Flight Sites and Features
- Noise Maps
- Aviation Accident Statistics
- Important Biodiversity Areas (IBA)
- Bird Migration Routes and Timing
- Solid Waste Storage Facilities

Sponsored ICAO/ACI OLS Symposium

HARITAEVI



+(90) 312 266 66 98
haritaevi@haritaevi.com | **www.haritaevi.com**
Eskişehir Yolu, Mustafa Kemal District Maidan Office, Block A, 3rd Floor, Apt #14, 06530 Çankaya / Ankara / Turkey