

Servicios a la Navegación Aérea
Gerencia ATM
Gestión de Información Aeronáutica



eAIP
VENEZUELA
Publicación de Información de Aeronáutica Electrónica
Electronic Aeronautical Information Publication



SNA
Servicios a la Navegación Aérea



ETOD
VENEZUELA

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CTA

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Teléfono: +58-212-3034514 / Celular: +58-414-0135419



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de Venezuela

Ministerio del Poder Popular
para el Transporte

Instituto Nacional de
Aeronáutica Civil

Servicios a la
Navegación Aérea





ETOD

- ✓ Base de Datos Interoperable
- ✓ Representación Digital de Terreno y Obstáculos.





Venezuela hacia el ETOD

2006

LEVANTAMIENT
O
TOPOGRAFICO
OBSTACULOS Y
TERRENO

2016

ADQUISICION
SOFTWARE
ETOD

2017

CAPACITACION
PERSONAL Y
PRUEBAS
PILOTOS

2018

REVALIDACION
DEL DATO

CARGA DE LOS
DATOS

2019

PUBLICACION
DE LOS
DATOS

GENERACION
DE CARTAS



2006

**LEVANTAMIENTO
TOPOGRAFICO
OBSTACULOS Y TERRENO**



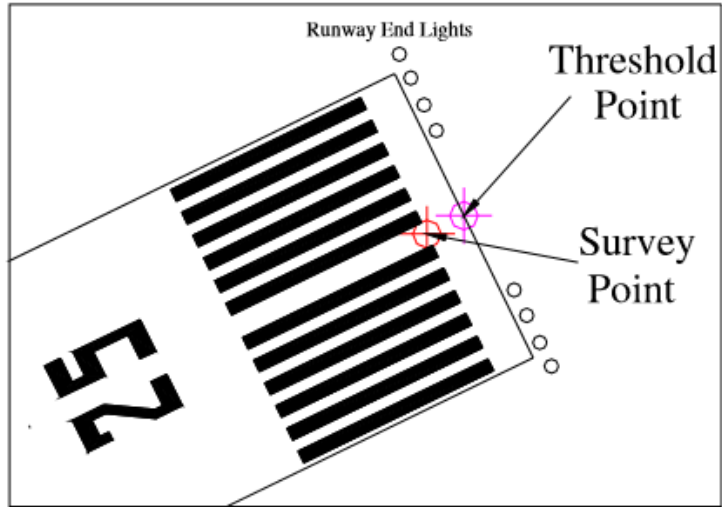
| | | | |
|----------------------------|----------------------------|-------------------------------|---------|
| PROJECT: | PUERTO ORDAZ AIRPORT | STATION REFERENCE: | SVPR-01 |
| DATE OF SURVEY: | 08 th June 2006 | METHOD OF SURVEY: | GPS |



INTEGRIDAD Y EXACTITUD ANEXO 15



THRESHOLD 25



THRESHOLD 25 (SURVEY POINT)





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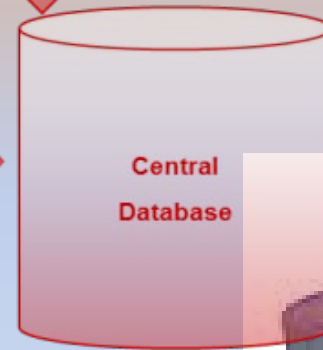
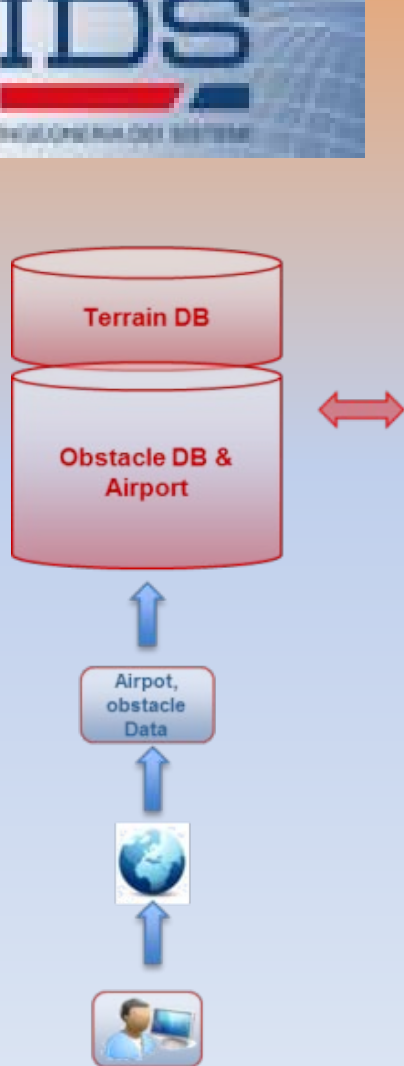
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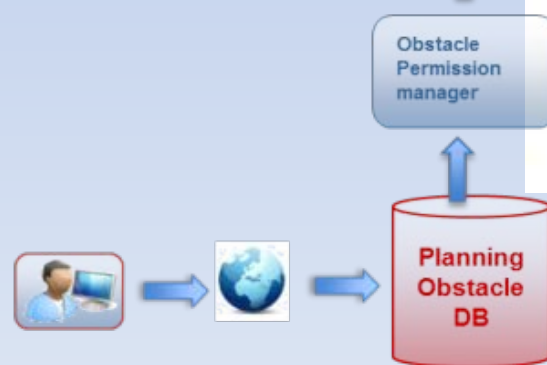


2016

ADQUISICION DE SOFTWARE



eTOD workshop





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2017

CAPACITACION PERSONAL Y PRUEBAS PILOTOS



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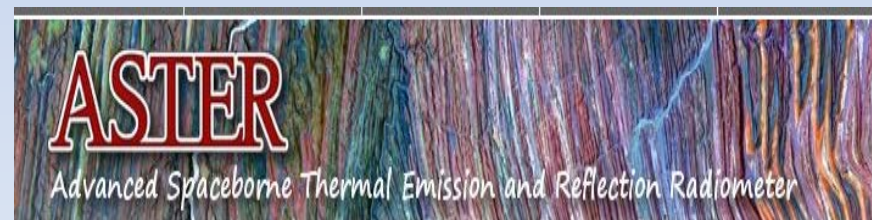
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TERRENO



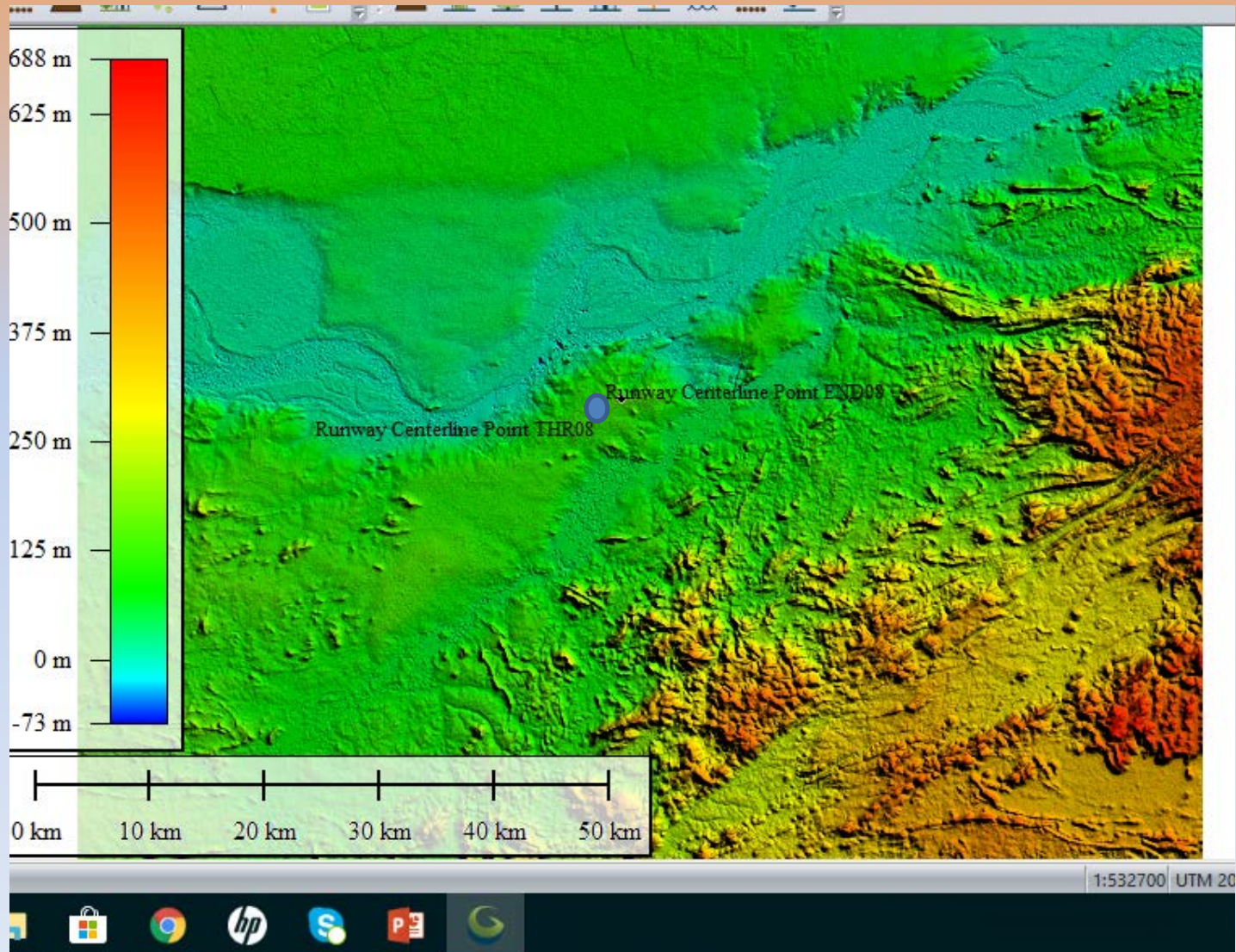
GlobalMapper
GIS - ONLY BETTER





✓ **DTM VENEZUELA**

✓ **DTM 45KM DEL ARP DEL AD**





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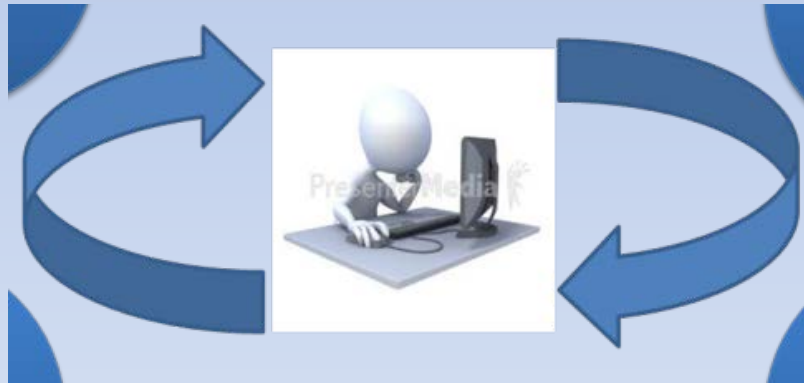


OBSTACULOS





CARGA DE DATOS





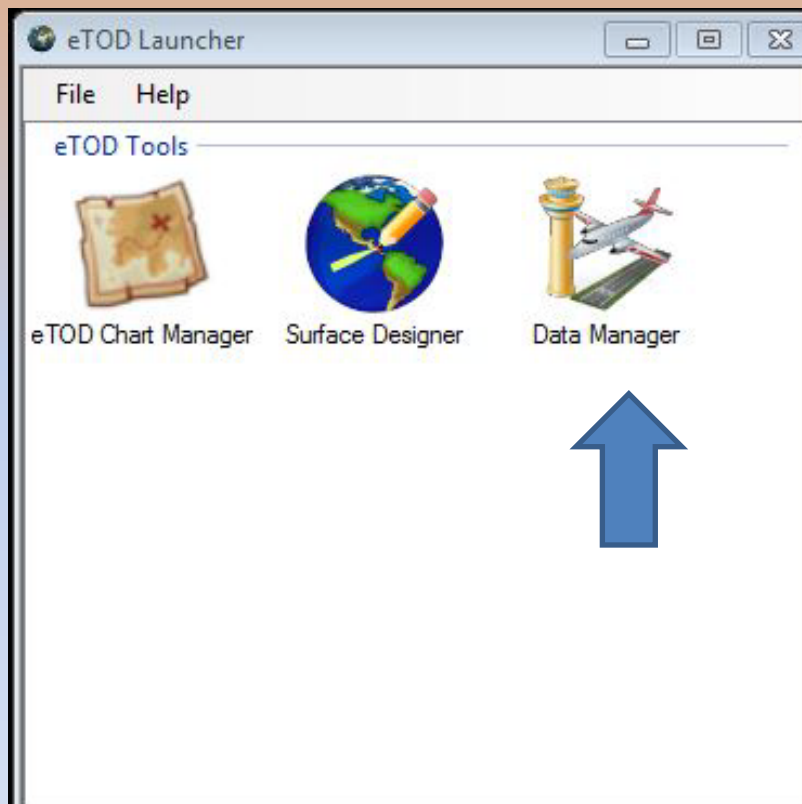
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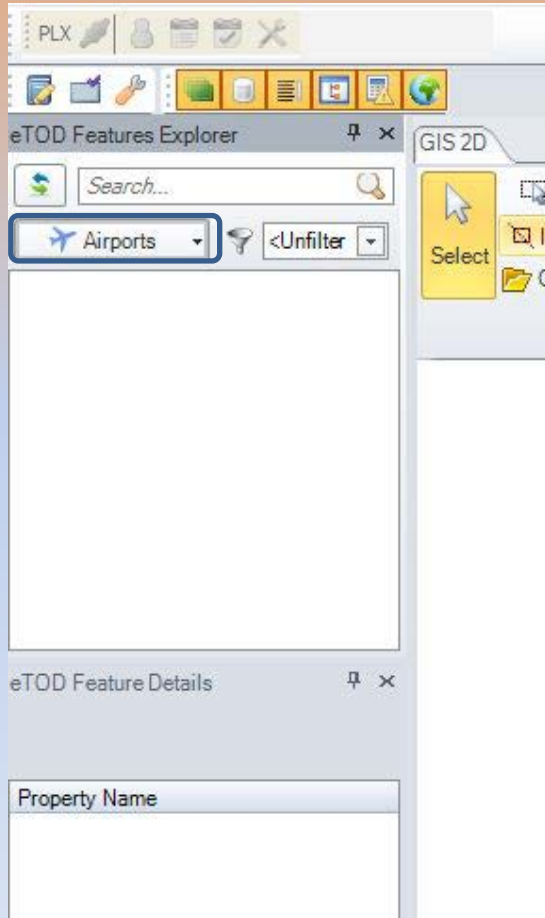
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DATA MANAGER







eTOD Features Explorer

Search...

Feature Types SVVA - Valencia

Features

- Obstacle (269)
 - SVVA_2084
 - SVVA_2085
 - SVVA_2086
 - SVVA_2087
 - SVVA_2088
 - SVVA_2089
 - SVVA_2090
 - SVVA_2091

eTOD Feature Details

Obstacle SVVA_2084

| Property Name | Value |
|----------------------|-----------------|
| Survey campaign name | SVVA - SVA_2006 |
| identifier | SVVA_2084 |
| name | SVVA_2084 |
| type | Tree. [TREE] |
| description | TREE |
| lighted | No. [NO] |
| lightingDescription | |
| markingICAOStandard | Other [OTHER] |
| markingDescription | |
| group | No. [NO] |
| length | |
| ICAO Area | |
| lengthUom | M [M] |
| width | |
| widthUom | M [M] |
| radius | |
| radiusUom | M [M] |
| lightingICAOStandard | |



GIS 2D SWVA_obstacles_UTM.csv

Obstacle Error list

| Obstacle | Action | Survey campaign... | identifier | name | type | description | lighted | lightingDescription | marking/CAOStan... | markingDescription | group |
|--------------------------|--------------------------|--------------------|------------------|-----------------|---------------|----------------|------------------|-----------------------|-----------------------|-----------------------|-----------|
| ⊖ | <input type="checkbox"/> | IGNORE | SWVA_2000 | SWVA_2000 | Pole. [POLE] | WINDSLEEVE | No. [NO] | | Other [OTHER] | | No. [NO] |
| Obsta... | Obstacle identifier | Obstacle | sequence | geometryType | designator | verticalExtent | verticalExtentUm | verticalExtentAccu... | verticalExtentAccu... | type | construct |
| ⊖ | <input type="checkbox"/> | SWVA_2000 | -1 | 1 | POINT [POINT] | SWVA_2000 | 3.065 | M [M] | M [M] | Other [OTHER] | |
| Obsta... | Obstacle part iden... | ETOD_VERTICAL... | ETOD_ELEVATIO... | ETOD_GEOIDUN... | ObstaclePart | sequence | path | Datum | latitude | longitude | originl |
| <input type="checkbox"/> | SWVA_2000 - SV... | | | 16.24 | -1 | 1 | GRC [GRC] | | 10° 08' 56.0452" N | 067° 55' 13.0702" ... | |
| + | <input type="checkbox"/> | IGNORE | SWVA_2002 | SWVA_2002 | Pole. [POLE] | APRON_LIGHT | No. [NO] | | Other [OTHER] | | No. [NO] |
| + | <input type="checkbox"/> | IGNORE | SWVA_2003 | SWVA_2003 | Pole. [POLE] | APRON_LIGHT | No. [NO] | | Other [OTHER] | | No. [NO] |
| + | <input type="checkbox"/> | IGNORE | SWVA_2004 | SWVA_2004 | Pole. [POLE] | APRON_LIGHT | No. [NO] | | Other [OTHER] | | No. [NO] |
| + | <input type="checkbox"/> | IGNORE | SWVA_2005 | SWVA_2005 | Pole. [POLE] | APRON_LIGHT | No. [NO] | | Other [OTHER] | | No. [NO] |
| + | <input type="checkbox"/> | IGNORE | SWVA_2006 | SWVA_2006 | Pole. [POLE] | APRON_LIGHT | No. [NO] | | Other [OTHER] | | No. [NO] |



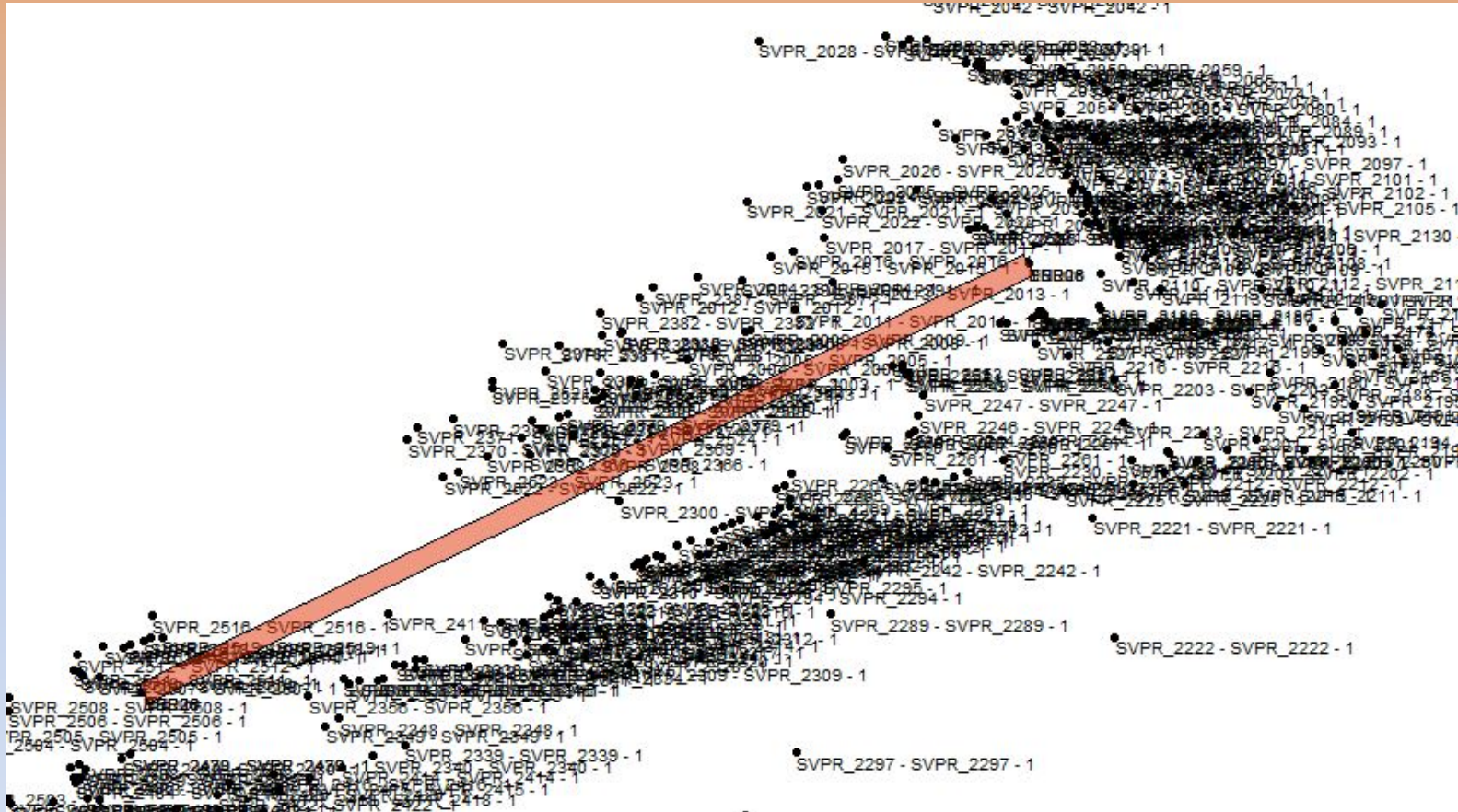
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GIS





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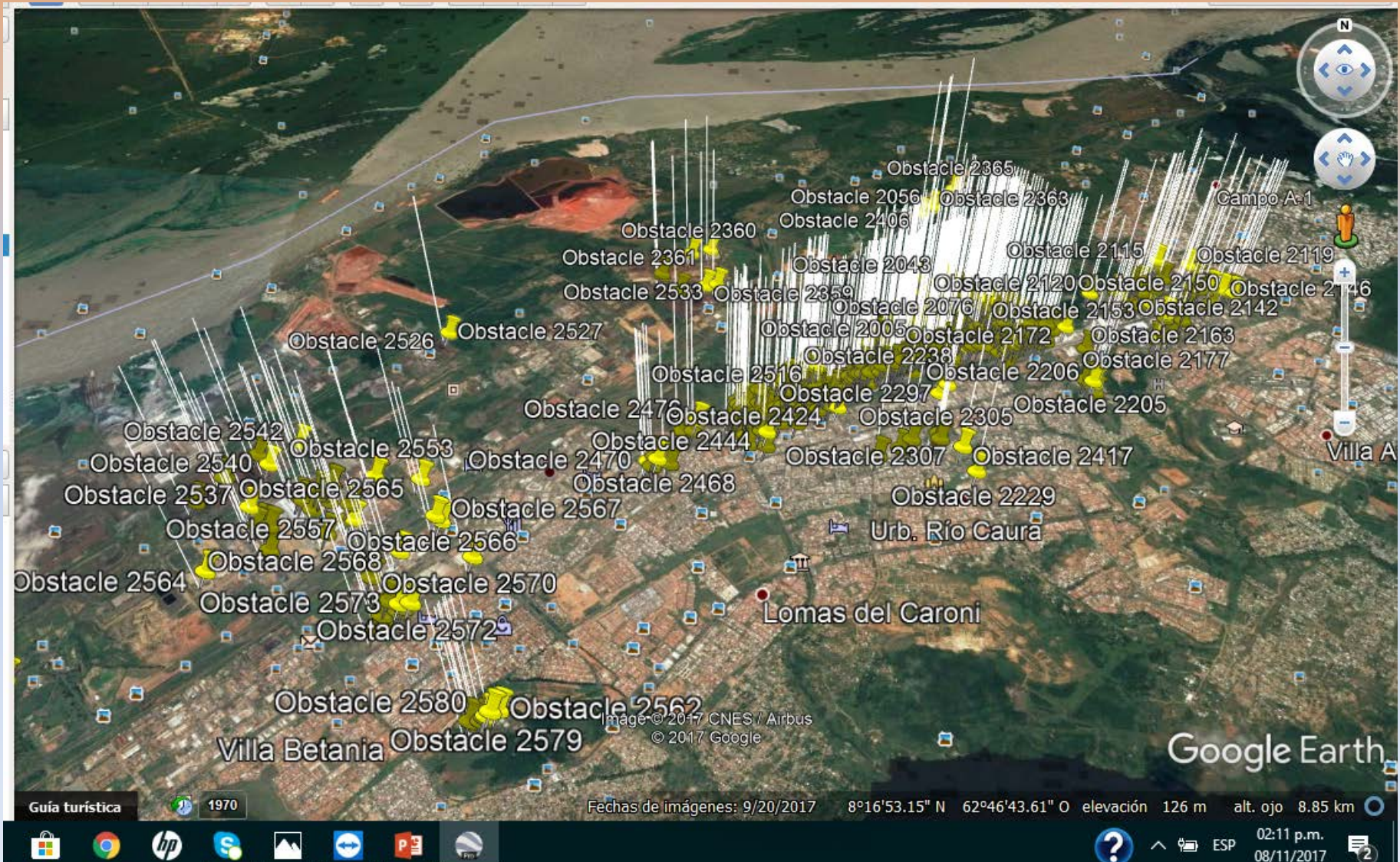
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KMZ/KML







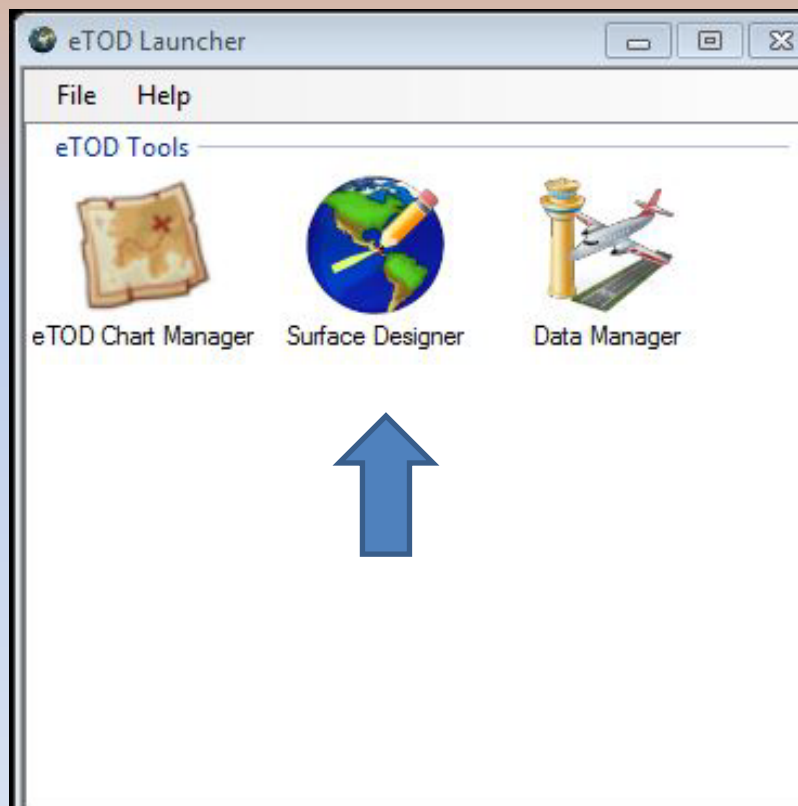
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MODULO ETOD





Aerodrome Designer Launcher

File Tools Help

Project Parameters

Aerodrome surfaces project name: SVVA

Description:

Parameter Values

Delivery Airport Regulation

Projection: U19W

Regulation: ICAO-ANNEX15

Effective Date: Sunday, January 01, 2012

Source: 1/1/2012 - INITIAL LOAD

Aerodrome Parameters

Airport: SVVA

Physical Runways: 10-28

OK Cancel



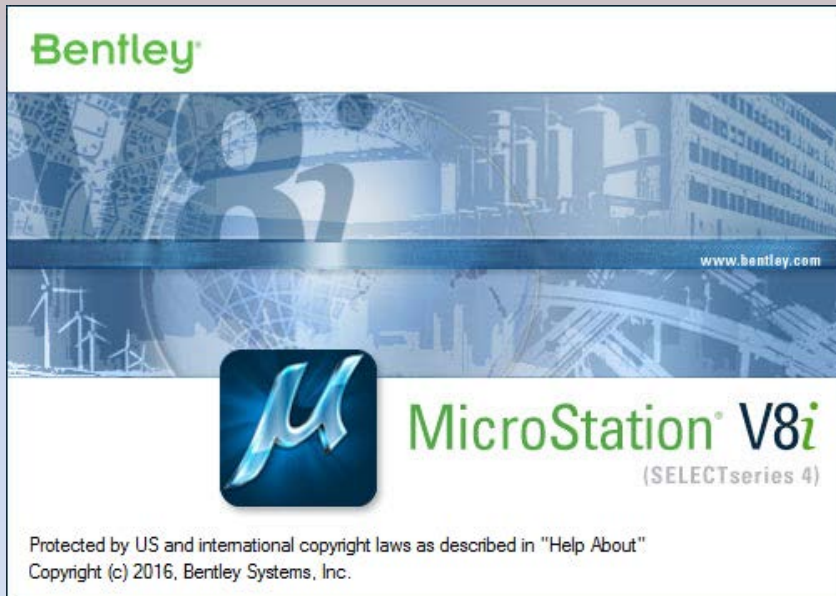
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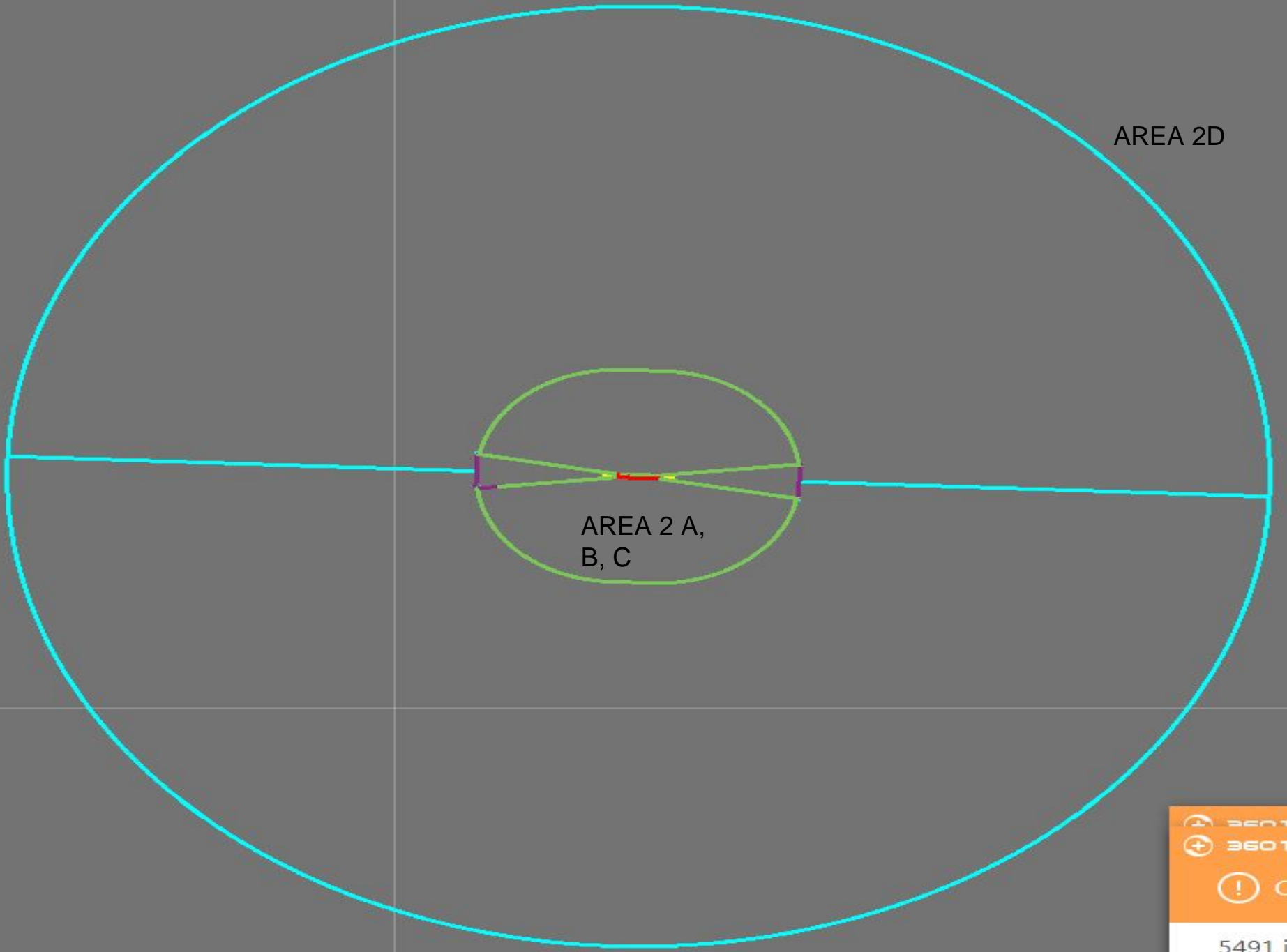
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DISEÑO DE SUPERFICIES



FORMATO DGN



AREA 2D

AREA 2 A,
B, C

360 TOT
360 TOT
! Cle

5491 jun
click the





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ANALISIS DATOS



Current Geographic Coordinate System

Assessment Report

Label:

Creation Date:

Target:

Obstacles (269) Nav aids Terrain (1)

Results: 269

| Result | Surface | Target | Obs Designator | Obs Name | Obs Type | Geom Type | Min Clearance | Extra data | Latitude | Longitude | Elevation | Obs De |
|---------|---------|--------|----------------|-----------|----------|-----------|---------------|------------|--------------------|----------------------|-----------|--------|
| Outside | Area4 | 10 | SVVA_2000 | SVVA_2000 | POLE | POINT | N/A | | N 10° 08' 56.0452" | W 067° 55' 13.070... | 433.240 | WINDS |
| Outside | Area4 | 10 | SVVA_2002 | SVVA_2002 | POLE | POINT | N/A | | N 10° 09' 12.9183" | W 067° 55' 26.553... | 452.670 | APROM |
| Outside | Area4 | 10 | SVVA_2003 | SVVA_2003 | POLE | POINT | N/A | | N 10° 09' 12.7969" | W 067° 55' 24.276... | 452.900 | APROM |
| Outside | Area4 | 10 | SVVA_2004 | SVVA_2004 | POLE | POINT | N/A | | N 10° 09' 12.7185" | W 067° 55' 22.010... | 453.550 | APROM |
| Outside | Area4 | 10 | SVVA_2005 | SVVA_2005 | POLE | POINT | N/A | | N 10° 09' 12.5804" | W 067° 55' 19.308... | 453.420 | APROM |
| Outside | Area4 | 10 | SVVA_2006 | SVVA_2006 | POLE | POINT | N/A | | N 10° 09' 12.4233" | W 067° 55' 16.973... | 452.710 | APROM |
| Outside | Area4 | 10 | SVVA_2007 | SVVA_2007 | POLE | POINT | N/A | | N 10° 09' 12.8728" | W 067° 55' 14.564... | 449.160 | APROM |
| Outside | Area4 | 10 | SVVA_2008 | SVVA_2008 | POLE | POINT | N/A | | N 10° 09' 14.4606" | W 067° 55' 14.422... | 449.150 | APROM |
| Outside | Area4 | 10 | SVVA_2009 | SVVA_2009 | POLE | POINT | N/A | | N 10° 09' 15.0742" | W 067° 55' 07.667... | 449.010 | APROM |
| Outside | Area4 | 10 | SVVA_2010 | SVVA_2010 | POLE | POINT | N/A | | N 10° 09' 13.1866" | W 067° 55' 07.761... | 448.960 | APROM |
| Outside | Area4 | 10 | SVVA_2011 | SVVA_2011 | POLE | POINT | N/A | | N 10° 09' 11.3066" | W 067° 55' 07.849 | 448.910 | APROM |

Project must be saved to save the assessment analysis

Generate report Save project Save interference Close



OBSTACULOS QUE PENETRAN

Assessment Report

Label: Creation Date:

Target: SWA (7 surfaces)

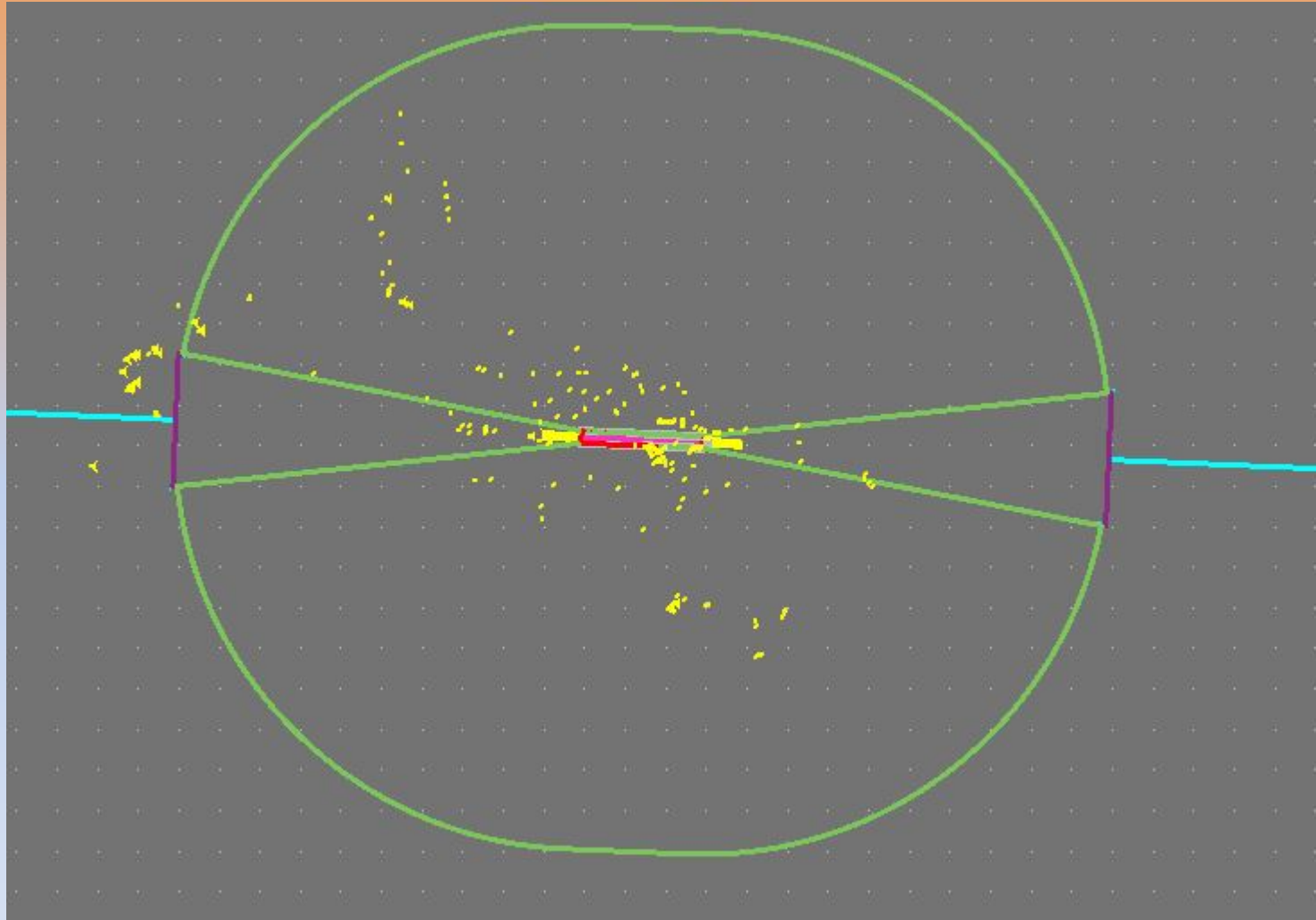
Obstacles (269) Nav aids Terrain (1)

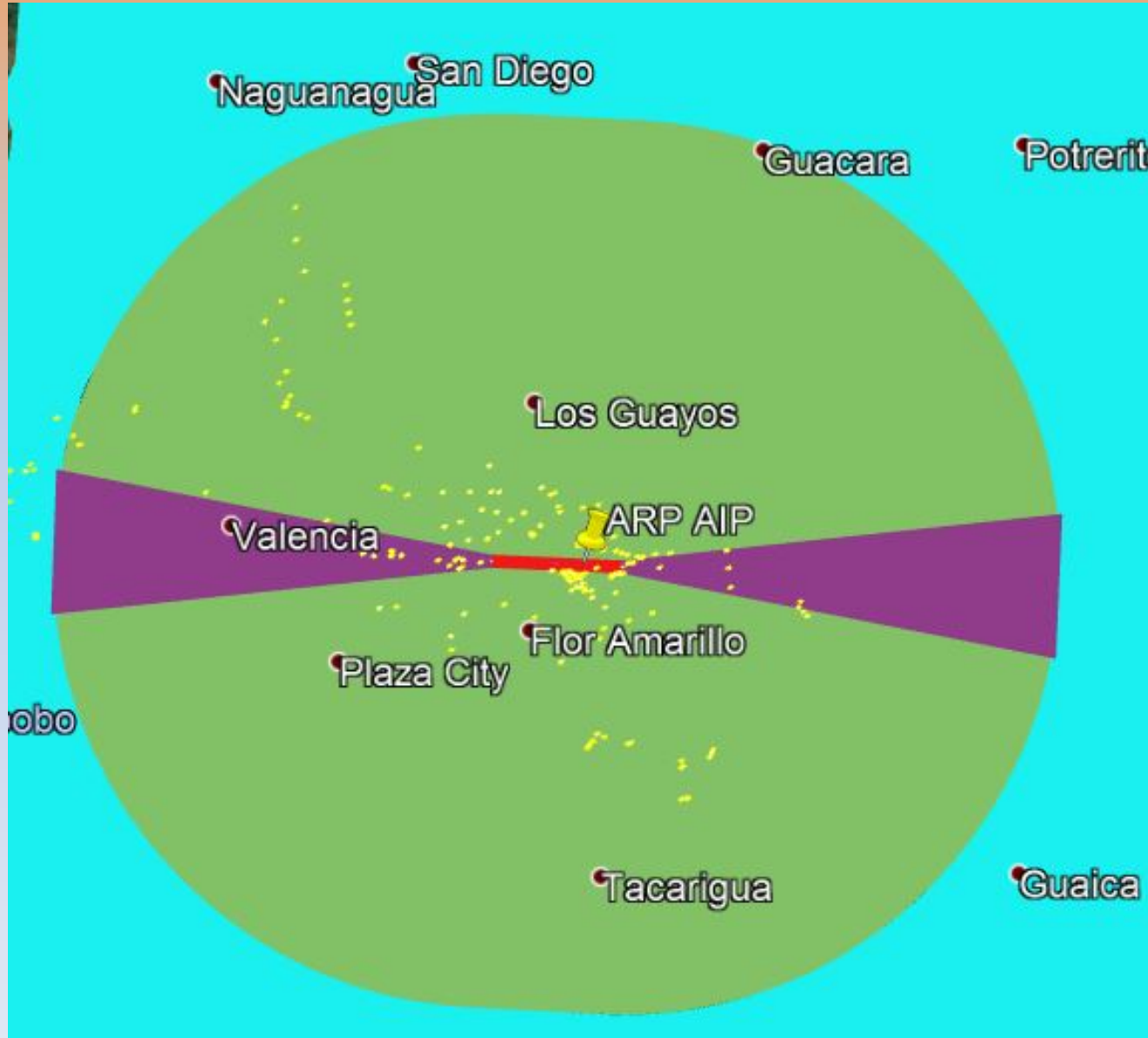
Penetrating Results: 213

| Result | Surface | Target | Obs Designator | Obs Name | Obs Type | Geom Type | Min Clearance | Extra data | Latitude | Longitude | Elevation | Obs De |
|-------------|---------|--------|----------------|-----------|----------|-----------|---------------|------------|--------------------|----------------------|-----------|--------|
| Penetrating | Area4 | 10 | SWVA_2260 | SWVA_2260 | TREE | POINT | -13.58 | | N 10° 09' 03.5235" | W 067° 56' 57.302... | 445.580 | TREE |
| Penetrating | Area4 | 10 | SWVA_2261 | SWVA_2261 | TREE | POINT | -13.21 | | N 10° 09' 03.1572" | W 067° 56' 57.893... | 445.210 | TREE |
| Penetrating | Area4 | 10 | SWVA_2262 | SWVA_2262 | TREE | POINT | -12.8 | | N 10° 09' 02.5770" | W 067° 56' 53.689... | 444.800 | TREE |
| Penetrating | Area4 | 10 | SWVA_2263 | SWVA_2263 | TREE | POINT | -12.16 | | N 10° 09' 02.0595" | W 067° 56' 53.046... | 444.160 | TREE |
| Penetrating | Area4 | 10 | SWVA_2264 | SWVA_2264 | TREE | POINT | -8.1 | | N 10° 09' 00.4221" | W 067° 56' 40.004... | 440.100 | TREE |
| Penetrating | Area4 | 10 | SWVA_2265 | SWVA_2265 | TREE | POINT | -8.87 | | N 10° 09' 00.3452" | W 067° 56' 40.077... | 440.870 | TREE |
| Penetrating | Area4 | 10 | SWVA_2266 | SWVA_2266 | TREE | POINT | -12.86 | | N 10° 09' 02.1495" | W 067° 56' 58.984... | 444.860 | TREE |
| Penetrating | Area4 | 28 | SWVA_2086 | SWVA_2086 | TREE | POINT | -7.67 | | N 10° 08' 56.3814" | W 067° 54' 25.752... | 433.670 | TREE |
| Penetrating | Area2a | 10-28 | SWVA_2000 | SWVA_2000 | POLE | POINT | -3.035 | | N 10° 08' 56.0452" | W 067° 55' 13.070... | 433.240 | WINDS |
| Penetrating | Area2a | 10-28 | SWVA_2027 | SWVA_2027 | TREE | POINT | -9.63 | | N 10° 08' 52.4231" | W 067° 54' 55.879... | 438.780 | TREE |
| Penetrating | Area2a | 10-28 | SWVA_2029 | SWVA_2029 | TREE | POINT | 7.928 | | N 10° 08' 52.3586" | W 067° 54' 56.565 | 437.120 | TRFF |

Project must be saved to save the assessment analysis

Generate report Save project Save interference Close







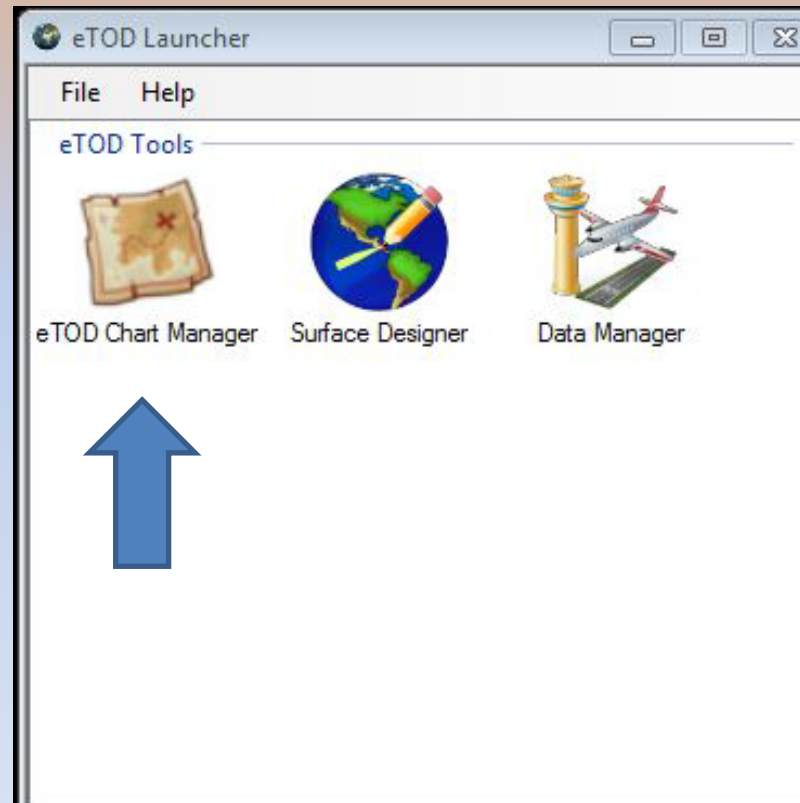
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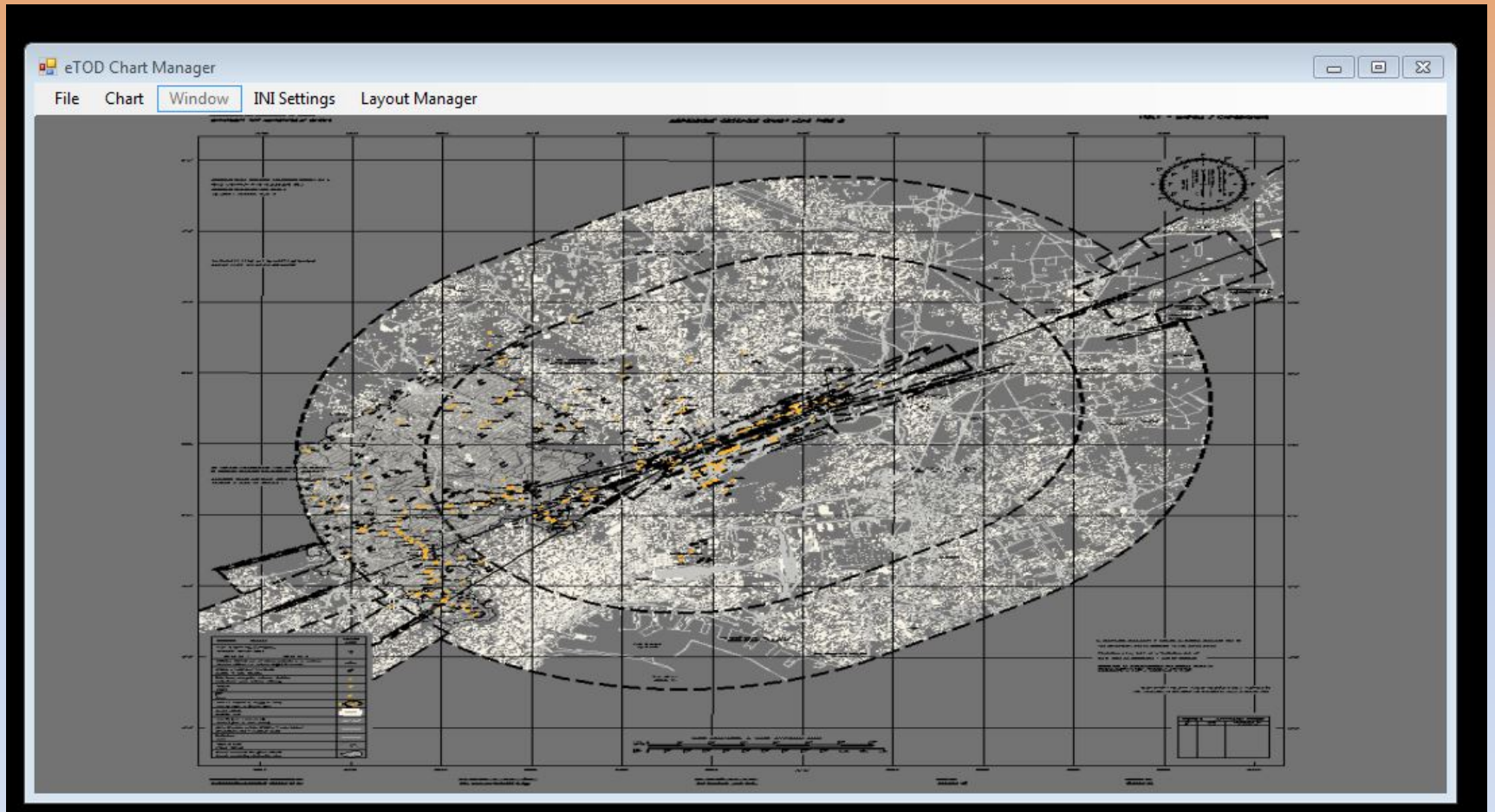
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PRODUCTO FINAL eTOD







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PLANO DE AD TIPO A



Change Attributes - Main Task

PLANO DE OBSTACULOS DE AERODROMO TIPO A
AERODROME OBSTACLES CHART TYPE A

Ciudad Guayana
Gral. Manuel Carlos Piar
(Intl. del Orinoco)

Dimensiones y elevaciones en metros
Dimensions and elevations in metres

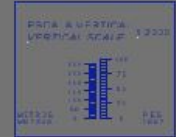
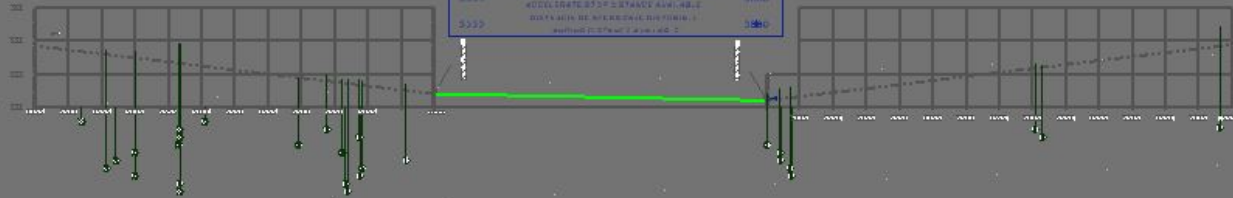
(LIMITACIONES DE UTILIZACION / LIMITATIONS OF USE)



VARACION MAGNETICA
MAGNETIC VARIATION 14 W 2015

DISTANCIAS SEPARACIONES DISTANCES

| | | | |
|---------|--------------------|---------|-------|
| RAVY 25 | 20700 M (67913 FT) | RAVY 15 | 14000 |
| 5335 | 16500 M (54134 FT) | 14000 | 14000 |
| 5335 | 14000 M (45932 FT) | 14000 | 14000 |
| 5335 | 11500 M (37764 FT) | 14000 | 14000 |
| 5335 | 9000 M (29232 FT) | 14000 | 14000 |
| 5335 | 6500 M (21327 FT) | 14000 | 14000 |



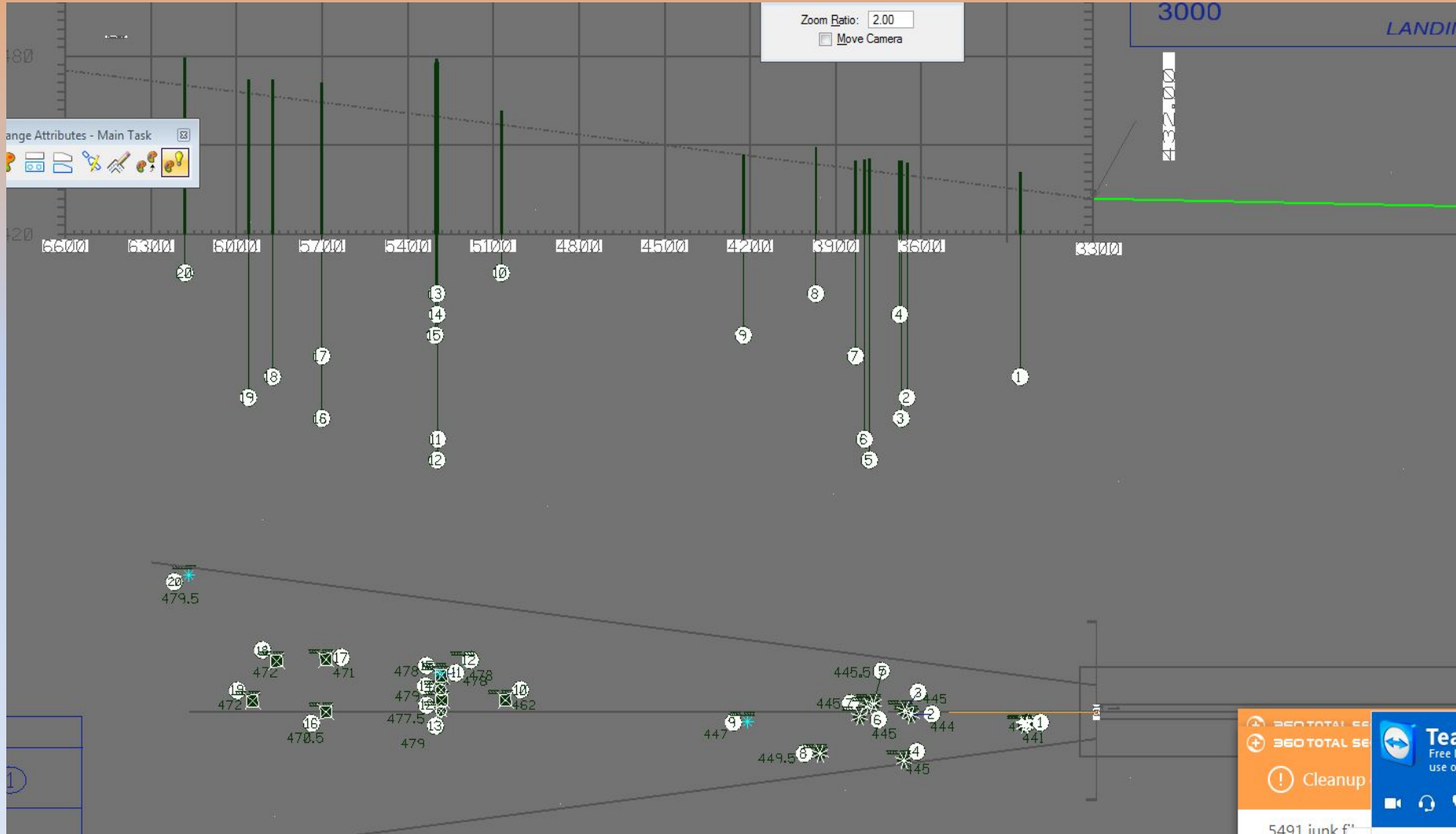
LEYENDA (LEGEND)

| | |
|-------|-------|
| XXXXX | XXXXX |
| XXXXX | XXXXX |
| XXXXX | XXXXX |
| XXXXX | XXXXX |
| XXXXX | XXXXX |
| XXXXX | XXXXX |
| XXXXX | XXXXX |
| XXXXX | XXXXX |
| XXXXX | XXXXX |
| XXXXX | XXXXX |



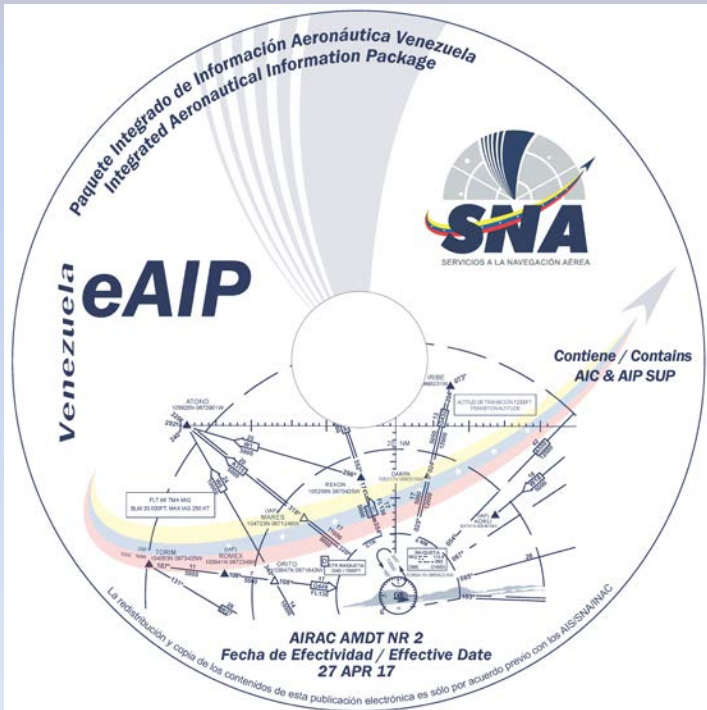
REGISTRO DE ENMIENDA (AMENDMENT RECORD)

| | |
|-------|-----------|
| 17704 | 304000000 |
| 0470 | 007000000 |





PROXIMAMENTE





PUBLICAR



Publicaciones Vigentes

| Cambie el número | La entrada de datos en vigor | Fecha de publicación | Descripción |
|---------------------------------|------------------------------|----------------------|-------------|
| AIRAC AMDT NR 1 | 15 OCT 2015 | 20 AUG 2015 | |

Proxima Publicacion

| Cambie el número | La entrada de datos en vigor | Fecha de publicación | Descripción |
|---------------------------------|------------------------------|----------------------|-------------|
| AIRAC AMDT NR 2 | 27 APR 2017 | 02 MAR 2017 | |

Publicacion Expirada (Archivo)

Consulte las siguientes enmiendas a la AIP archivos se ponen a disposición con fines de información solamente y no puede ser utilizado para el uso del sistema operativo.

| Cambie el número | La entrada de datos en vigor | Fecha de publicación | Descripción |
|-----------------------------|------------------------------|----------------------|-------------|
| 5TA EDICION | 05 FEB 2015 | 11 DEC 2014 | |





PREGUNTAS

