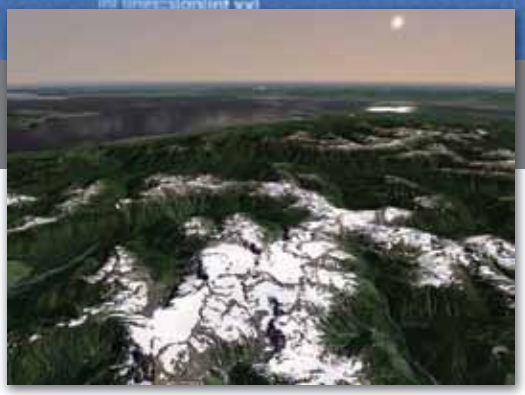
QUANTUM3D®
Technology for Solutions

GeoScapeSE®

CONUS OTW ER



Optimize Your Image Generation Solutions

Covering the entire conterminous United States (CONUS), an area of 1047 geocell, the GeoScapeSE CONUS OTW ER terrain database is based on 10m geo-specific imagery of the entire conterminous U.S. with multiple, high-resolution Areas of Interest (AOIs) that support precision low- level training tasks. The CONUS OTW ER is optimized for conterminous U.S. (lower 48 states) Out-the-Window (OTW) fixed-wing and rotorcraft training and mission rehearsal applications that employ Quantum3D Independence Image Generation Solutions.

Ideal for a Variety of Applications

To support low-level flight and mission-specific training, the GeoScapeSE CONUS OTW ER database includes numerous Areas of Interest (AOIs) built from 5m, 1m and higher resolution geo-specific imagery with geo-specific models and cultural features that are optimized for training purposes. Included among the AOIs are select training/test for takeoff and landing training, as well as cross country flight and navigation training and a variety of specific training missions to accommodate low-level precision strike and air-to-air training scenarios. All geo-specific imagery is orthorectified, color balanced, and co- registered for earth truth fidelity.

The GeoScapeSE CONUS OTW ER Difference

Like the GeoScapeSE WWDB (Worldwide Database), GeoScapeSE CONUS OTW ER has also been optimized as a binary formatted, runtime database for use on Quantum3D's image generators. With geo-specific imagery (as opposed to most companies' geo-typical imagery), users will receive the best quality imagery available with color matching and balancing between adjacent data sets.

GeoScapeSE CONUS OTW ER has been designed to accommodate technology insertion. Customers may insert their own AOIs without regenerating the entire geocell database.

Features / Benefits

- **Geo-Specific Imagery** – Unlike many of today's synthetic environment platforms that use "geo-typical" graphics to approximate reality, GeoScapeSE CONUS OTW ER delivers actual, or "geo-specific," imagery at 10m.
- **Environment Flexibility** – Can be used in a myriad of ways—for out-the-window (OTW), night vision goggles (NVG), infrared (IR), electro-optical (EO), and radar real-time simulation. The database is optimized for fixed and rotary wing flight applications.
- **Designed for Open Architecture Technology Insertion** – Similar to Quantum3D IG Solutions, GeoScapeSE CONUS OTW ER has been designed to accommodate technology insertion— both to improve the quality of the database by keeping it current, and to support the addition of new AOIs to support additional training areas and tasks.
- **License and Sensor Simulation Options** – GeoScapeSE CONUS OTW ER is available as a binary formatted, runtime database optimized for Quantum3D Independence IG Solutions and is typically licensed on a per IG basis. Material classified textures for GeoScapeSE CONUS OTW ER to enable correlated IR, NVG or EO/IR simulation, as well as radar versions for Camber Radar Toolkit are available.

GeoScapeSE CONUS OTW ER Database:

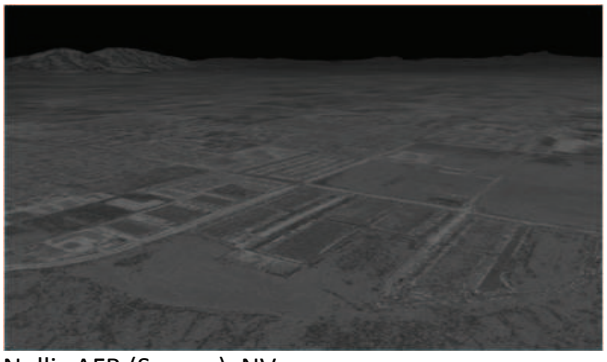
- **Base Resolution Data**
  - -Covers Entire Conterminous U.S. with Partial Extended Coverage Along Border Regions
  - -10m Harris-Image Links True Terrain Geo-specific Imagery Developed and Processed Specifically for Visual Simulation Applications
  - -1,047 Total Geocells

- **Medium Resolution Data**
  - -5m Geospecific Imagery
  - -16 Geocell California-Nevada Test Range Coverage
  - -3-13nm Radius Around AOIs (5nm Radius is Typical)

- **High Resolution Data**
  - -1m or Better Geospecific Imagery
    - AOIs
      - ° Nellis AFB, NV (259sqkm)
      - ° Edwards AFB, CA (595sqkm)
      - ° Tonopah AFB, NV (430sqkm)
      - ° Indian Springs AFB, NV (117sqkm)
      - ° Tinker AFB, OK (171sqkm)
      - ° Whiteman AFB, MO (171sqkm)
      - ° Carswell AFB, TX (64sqkm)
      - ° Ft Worth Alliance AP, TX (64sqkm)
      - ° NAS Patuxent River, MD (64sqkm)
      - ° NAS Norfolk/Oceana, VA (536sqkm)
      - ° NAS Whiting/Santa Rosa, FL (100sqkm)
      - ° Camp Pendleton MCB, CA (100sqkm)
      - ° Mojave Airport, CA (1072sqkm)
      - ° Langley AFB, VA (264sqkm)
      - ° Tyndall AFB, FL (203sqkm)
      - ° Dover AFB (246sqkm)
      - ° Dobbins AFB, GA (268sqkm)
      - ° SeaTac Airport, WA (221sqkm)
    - AOI 2D/3D Hand Modeling for Added Realism and Real World Fidelity
      - ° Modeled to Level D Standard
      - ° Runways
      - ° Taxiways
      - ° Runway Lighting
      - ° Runway Markings
      - ° Base Buildings
      - ° Hangers
      - ° Towers
    - Customer-Specific AOIs May be Added Upon Customer Request—Contact Quantum3D for Details.
  - -Enhanced Generic AOI High Resolution Airfields
    - Runways Correctly Oriented (Including Multiple Runways)
    - Real World Runway Markings and Lighting Systems
    - Geotypical Textures
    - Geospecific 3D Hangers and Control Tower
    - Generic AOIs
      - ° Andalusia, AL
      - ° Crestview/Bob Sikes Airport, FL
      - ° Dothan, AL
      - ° Eglin AFB, FL
      - ° Florala, AL
      - ° Ft Rucker, AL
      - ° Gulfport Biloxi International Airport, MS
      - ° Jacksonville NAS, FL
      - ° Keesler AFB, MS
      - ° Marianna Municipal Airport, FL
      - ° Maxwell AFB, AL
      - ° Mayport NAF, FL
      - ° Mobile Downtown, AL
      - ° Mobile Regional, AL
      - ° Panama City Bay County International AP, FL
      - ° Pensacola NAS, FL
      - ° Pensacola Regional, FL
      - ° Tallahassee Regional, FL

- **Terrain Elevation Data - USGS Level I DTED (3 Arsec; 100m)**
- **Output Projection - WGS - 84 Geocentric Standard; Other Projections Available - Contact Quantum3D for Details**
- **Output Format - Binary Optimized for Operation on Quantum3D IGs; Other Formats including CTDB and OpenFlight available - Contact Quantum3D for Details**

NAS Whiting, FL



Nellis AFB (Sensor), NV

Note: GeoScapeSE CONUS OTW ER database may contain material that is subject to U.S. Export Control. Export to foreign countries may require U.S. Government authorization. This product may not be transferred, transshipped on a non-continuous voyage, or otherwise be disposed of in any country, either in their original form or after being incorporated into other end-items, without the prior written approval of the U.S. Department of State.

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