BlueSim

Since 2005, government and commercial customers have relied on the unique modeling, simulation and analysis provided by Maxar BlueSim suite of tools. BlueSim allows analysts to provide their customers with physics-based metrics describing system performance, architecture analysis and collection satisfaction. At every program phase—from conception to operation and beyond—BlueSim gives analysts the tools they need to achieve mission success.

Features and benefits

Multi-int collaborative scheduler
- Collaboratively models EO/IR, RADAR, SIGINT, MTI and MASINT payloads
- Integrated space, air and ground assets

Variable fidelity
- Customization allows for analysis at the system of systems, system and subsystem levels
- Allows for meaningful analysis at every stage of the program life cycle including conception, design and operation

Agile software baseline
- Easily accommodated new assets, payloads and requirements scenarios
- Allows for trade studies for a wide variety of variables, such as orbit, payload, agility, power and more

Detailed sensor laydowns
Detailed analysis

- **Advanced metrics** detailing sensor performance, flight profiling, attitude, collection satisfaction, force sizing, architecture and more
- **Respected vignette analysis** provides insight on system performance against real-world problem sets
- **Intelligence value functions** provide the ultimate effectiveness evaluation
- **Machine learning algorithms** allow for improved collection through in-line simulation
- **Uncovering value** from captured and missed collection through hidden Markov models, Bayesian networks and stochastic learning methods

INTEGRATED ANALYSIS TOOLS

- BlueNet. Network modeling for complete TCPED process analysis
- BlueStrike. Weapons arrival characteristics and strike success metrics
- BlueAxe. SSA threat modeling
- BlueSig. Detailed RF emitter and collector modeling

Fully instantiated DoD and IC vignett

1. **FIND**
   - Intelligence collection
   - Detection

2. **FIX**
   - Focus sensors
   - Locate
   - Identify
   - Determine time available

3. **TRACK**
   - Prioritize intelligence, surveillance and reconnaissance
   - Maintain track
   - Update time available

4. **TARGET**
   - Deconflict
   - Target area clearance
   - Risk assessment
   - Select method
   - Decide

5. **ENGAGE**
   - Order engagement
   - Transmit order
   - Monitor/manage
   - Strike

6. **ASSESS**
   - Assess
   - Report results
   - Re-attack recommendations

- Intelligence collection
- Detection

- Focus sensors
- Locate
- Identify
- Determine time available