



















## 5. CONCLUSION

Aerospace has successfully developed a high-fidelity SDA scene simulator that can be used for a variety of applications and studies. The scene simulator includes sensor lab-measured performance, target radiometry, stellar color corrections, elevated backgrounds due to non-rejected stray light and the natural sky background, all other relevant phenomenological effects, and sensor CONOPS to assess sensor hardware performance and mission data processing pipelines. These simulated images help ensure that algorithms extract targets correctly and that electro-optical sensors and mission data processing meet mission requirements. The flexibility of the tool allows the user to create specific scenarios to stress systems and determine the correct CONOPS for the mission needs. The TRADIX scene simulator provides the SDA community a capability for testing ground or onboard mission processing algorithms and pipelines to a high fidelity and helps reduce risk on systems at any point in the lifecycles of sensor hardware and mission data processing software, from concept development to operations.

## 6. REFERENCES

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