

At-a-Glance



Location advantage:

Southern Hemisphere site under **Bortle 1** skies, ~**270** clear nights p.a.



Altitude:

~**1 570 m** in the Great Karoo;
dry, stable atmosphere.



Ops resilience:

Automated enclosures; backup power;
dual-path connectivity.



Security:

Fenced compound; CCTV;
controlled access.



Regulatory:

Within the **Sutherland Central Astronomy Advantage Area** (optical lighting protections); **outside** the **Karoo Central Astronomy Advantage Area** (KCAAA) radio-protection zone — **RF up-/downlinks permitted** subject to **ICASA** (*Independent Communications Authority of South Africa*) **licensing** and site EM guidelines.



Find us / Get in touch



Coordinates ~ -32.39°, 20.65°
(Sutherland plateau)



Contacts:



zulualpha.co.za



@ZuluAlphaStar



info@zulualpha.co.za



@ZuluAlpha



+27 82 531 8171



@ZuluAlphaStar

© ZuluAlpha (Pty) Ltd. All rights reserved.



Remote Telescope &
Ground-Station Hosting
in South Africa

Southern Hemisphere coverage.
Ultra-dark skies.
Secure, engineered ops.



zulualpha.co.za

Sutherland · Northern Cape · South Africa

Why ZuluAlpha for Satellite & Comms?



Optical ground-station ready. Purpose-built pads and custom roll-off or dome solutions ($\approx 3-7$ m span) for **lasercom**, beaconing, and testbeds.



SSA & debris-tracking sensors. High SNR, repeatable conditions for cross-hemisphere coverage.



Networked by design. Committed fibre back-haul in progress + **dual-path** interim (fixed-wireless + Starlink Business) with **client VLAN/VPN** options.



Power autonomy. Large **LiFePO₄** solar plant with diesel-gen backup and DC-UPS backbone.



On-site engineers. 24/7 monitoring; hands-on assistance for installs, swaps, and troubleshooting.



South-north complementarity. Close the **southern-hemisphere coverage gap** for your network.

ENTERPRISE OPTIONS

Formal SLAs, static IPs, increased on-site storage, spares cabinets, and secure client racks on request.

What we Host

Optical terminals & OGS pads

- * Lasercom terminals, beacon lasers, calibration targets.
- * Private domes or shared roll-off bays; environmental monitoring; safe-mode automation (wind/rain/cloud/UPS thresholds).

Space-domain-awareness payloads

- * Debris-tracking imagers, photometric & astrometric systems, survey cameras.

Small RF (uplink & downlink)

- * Site is outside the Karoo Central Astronomy Advantage Area (KCAAA) radio-protection zone, so RF up-/downlinks are feasible subject to ICASA licensing, band/ERP constraints, and site EM guidelines. Licences remain with the client; we provide guidance and site tech packs.

Connectivity & compute

- * Fibre back-haul (committed, installing) with SLA tiers; interim dual-path (fixed-wireless + Starlink Business).
- * Ethernet hand-off per pad; client VPN; optional on-pad control PC or rack slot.
- * Scheduled high-throughput data windows for bulk transfers. Dedicated bandwidth on request. Remote console (KVM) access to your control PC.

Power & environment

- * AC distribution per pad; surge protection; UPS-protected controls.
- * Routine environmental telemetry (met, cloud, SQM, seeing logs) exposed to clients.

Security & access

- * 2.4 m perimeter, PTZ/IR CCTV to redundant NVR + cloud.
- * Access-controlled gate; pier-level smart locks (optional); escorted access by arrangement.

Roadmap & How to Engage

Roadmap (high-level)

- * Q1 2026: Permitting & construction of fenced, powered compound; fibre back-haul procurement & installation.
- * Q2 2026: First client equipment intake & acceptance testing.
- * Q3-Q4 2026 & 2027: Scale-out of additional pads & capacity upgrades.

How to engage

1. Discuss requirements. Optical/RF footprint, power, bandwidth, SLA.
2. Provisioning plan. Pad spec, enclosure type, connectivity, compliance checklist.
3. Reserve & deploy. Shipment, install, on-sky/online acceptance; hand-over to ops.

Contracting

- * Flexible terms with enterprise options. Volume/academic pricing by arrangement.
- * We can assist with ICASA submissions (client remains licence holder).
- * Guidance for Astronomy Geographic Advantage (AGA) lighting/dust compliance.

Scan the QR or visit zulualpha.co.za to request a tech pack or site call.

