



ESPOC COMMERCIAL ITEM PRICELIST

UPDATE: 28 AUGUST 2024

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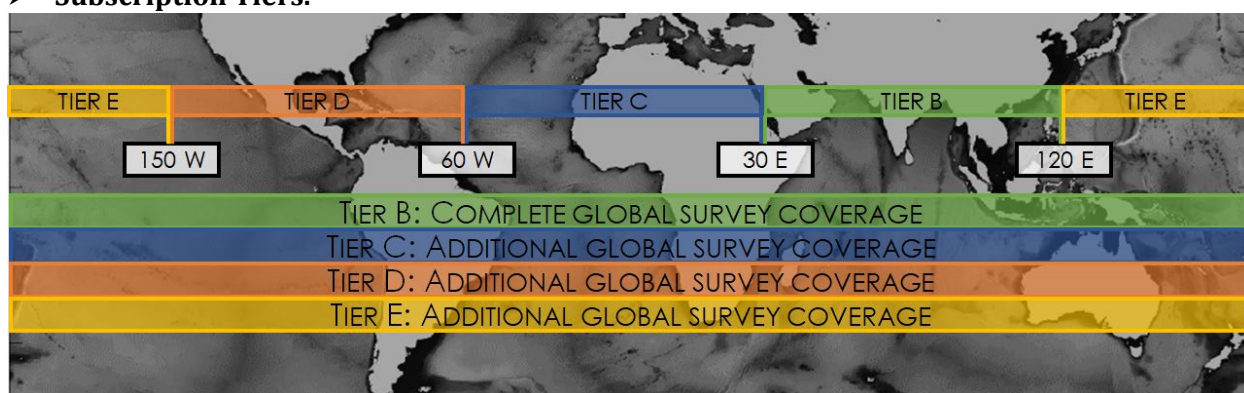
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2 SENSOR NETWORK DATA SUBSCRIPTION

Tier	Price Per Month
Tier A	\$90,000
Tier B	\$350,000
Tier C	\$630,000
Tier D	\$900,000
Tier E	\$1,142,000
Tier F	\$1,360,000

Terms and Conditions:

➤ Subscription Tiers.



Tier A – Consists of up to 28 dedicated robotic telescopes. All telescopes survey the GEO belt.

Tier B – Consists of up to 80 dedicated robotic telescopes. Includes a staring fence from 30E to 120E. Remainder of GEO belt covered by survey telescopes.

Tier C – Consists of up to 160 dedicated robotic telescopes. Includes the Tier B staring fence plus a staring fence from 60W to 30E. Remainder of GEO belt covered by survey telescopes.

Tier D – Consists of up to 240 dedicated robotic telescopes. Includes the Tier B and Tier C staring fences plus a staring fence from 150W to 60W. Remainder of GEO belt covered by survey telescopes.

Tier E – Consists of up to 320 dedicated robotic telescopes. Includes a staring fence covering the entire GEO belt. Plus, scopes for off-GEO scanning.

Tier F – Consists of up to 400 dedicated robotic telescopes. Includes a staring fence covering the entire GEO belt. Plus additional scopes for off-GEO scanning. *Available late 2020.*

- **Tasking.** Sensors collect observations from GEO and near-GEO objects. Subscription Service does not allow for direct tasking of scopes. Please refer to Sensor Tasking on Observation Data Price list for appropriate pricing.
- **Outages.** Exact number of scopes used each night varies due to weather and other outages.
- **Other Charges.**
 - An archive of data previously purchased is available for \$10K per archival copy.
- **12 Month Pricing.** Prices assume a 12 month subscription. Refer to Section 12 for less than 12 month pricing.

- **Data Rights.** Data is licensed and ExoAnalytic retains the intellectual property rights to the data. The following restrictions apply:
 - LDR - Limited Data Rights** – Data cannot be shared with subcontractors except support contractors working at the Prime facility on Prime computers. Government may not share data outside of acquiring Program. Government may share with SETA contractors. Not for resale. Limited Data Rights apply to all “Tier A” subscriptions and any subscription less than 12 months.
 - EDR - Expanded Data Rights** - Data can be shared with subcontractors. Government may share the data with any Government organization. Government may also share with contractors for Government Purpose Only. Government may not share data with other commercial entities for commercial purposes or foreign governments. Expanded Data Rights apply to “Tier B” subscriptions which are 12 months or longer. Please contact a sales representative for pricing for additional data rights.
- **Subject to Change.** Pricing and terms and conditions are subject to change. Please contact ExoAnalytic Solutions for pricing.
- **Additional Terms and Conditions.** Additional terms and conditions apply. Please refer to the “Sensor Network Data Subscription Terms and Conditions” document.

3 OBSERVATION DATA

Product Type	Product	Pricing
Bulk Historic Data	Observation Data – Astrometric Only (LDR)	\$0.40 per observation
	Observation Data – Astrometric Only (EDR)	\$0.70 per observation
	Observation Data –Photometric Only (LDR)	\$0.40 per observation
	Observation Data –Photometric Only (EDR)	\$0.70 per observation
	Observation Data –Astrometric and Photometric (LDR)	\$0.75 per observation
	Observation Data –Astrometric and Photometric (EDR)	\$1.25 per observation
	Observation Data –Astrometric and Photometric + Image Chips (LDR)	\$1.50 per observation
	Observation Data –Astrometric and Photometric + Image Chips (EDR)	\$3.00 per observation
	Historical Sensor Full Image Data	\$20,000 per night
	HARRIER Data – Frame-Stacked Data	\$12.00 per observation
Dedicated Telescope (List-Based Tasking with Next Morning Delivery)	Single Telescope Data (EDR)	\$2,000 per night
		\$20,000 per month
	Single Telescope Data (UDR)	\$4,000 per night
		\$40,000 per month
	Single Telescope Data (PS)	\$8,000 per night
		\$80,000 per month
	Single Telescope Data with Image Chips (EDR)	\$3,600 per month
		\$25,000 per month
	Single Telescope Data with Image Chips (UDR)	\$6,400 per night
		\$50,000 per month
Single Telescope Data with Image Chips (PS)	\$12,800 per night	
	\$100,000 per month	
Dedicated Telescope Add-on: Orbit Determination	\$1000/\$2000 per object per day EDR/UDR	
	50% surcharge for monthly	
HARRIER Telescope Data (EDR)	\$19,250 per night	

		\$165,000 per month
Continuous Dynamic Track Support	Data from Single Telescope plus Orbits	\$3,000 per night
		\$10,000 per week
		\$30,000 per month
		\$250,000 per year
Advanced Tracking Support	ExoAnalytic will maintain independent custody of non-public, uncataloged, objects without a cue. Includes Astrometrics, Photometrics, Image Chips, and Orbits delivered in near real time.	\$60,000 per month
Dynamically Taskable Scope (Machine-to-Machine Taskable with 15 minute Delivery)	Single Telescope Data (EDR)	\$10,250 per night
		\$30,000 per month
	Single Telescope Data with Image Chips (EDR)	\$17,725 per night
		\$50,000 per month
	Add-on: Orbit Determination Next Day Delivery (EDR)	\$925 per object for daily
		50% surcharge for monthly
Dedicated Telescope for LEO (List-Based Tasking with Second Day Delivery)	LEO Tracking (EDR)	\$7,500 per night

Terms and Conditions:

- **Data Rights.** Data is licensed and ExoAnalytic retains the intellectual property rights to the data. Licensee has certain data rights which are donated by LDR, EDR or UDR. Licensing data with more data rights is more expensive. The following restrictions apply:

LDR - Limited Data Rights – Data cannot be shared with subcontractors except support contractors working at the Prime facility on Prime computers. Government may not share the data outside of the acquiring Program. Government may share with SETA contractors only. Not for resale.

EDR - Expanded Data Rights - Data can be shared with subcontractors and Government agencies. Government may share data with other Government agencies. Government may also share with contractors for Government Purpose Only. Government may not share data with other commercial entities. Not for resale outside of the Federal Government. Data resold or transferred to Government must be transferred with “Government Purpose Rights” only.

UDR - Unlimited Data Rights – Data can be shared with subcontractors. Data may be resold. Government obtains Unlimited Data Rights.

PS – Private Sale – Data is collected exclusively for customers. Data does not appear in ExoAnalytic’s catalog after collection.

- **Non-Exclusivity.** ExoAnalytic may license the same data to additional parties without licensee's consent or knowledge.
- **Recent Data Premiums and Minimum Purchase.** Recent Data is any data which is less than 2 months old. Recent data is available for purchase and is subject to a 50% premium and a \$150,000 minimum purchase. Recent data is also subject to a \$5k per night minimum price.
 - **Example.** Observation Data –Astrometric and Photometric (EDR) is available for \$1.25 per observation as “Historical Data” and costs \$1.88 per observation as “Recent Data”. A \$80K minimum purchase applies to bulk historic observation data and a \$150K minimum purchase applies to bulk recent observation data.
- **Historic Data Minimum Purchase.** Historic Data is any data which is at least 2 months old.
 - There is an \$80,000 minimum purchase for bulk historic observation data.
- **Subject to Change.** Pricing and terms and conditions are subject to change. Please contact ExoAnalytic Solutions for pricing.
- **Additional Terms and Conditions.** Additional terms and conditions apply. Please refer to the “Observation Data Terms and Conditions” document.

4 EXOTRACK

ExoAnalytic provides Commercial Satellite Owners and Operators with tracking services on a per satellite basis. This service is for GEO satellites only and does not include GTOs or dynamic operations (such as frequent maneuvers or proximity operations).

Description of Services:

- Dashboard and Orbit Service
 - Provides current orbit
 - Access to online dashboard
- Observation Service
 - Provides observation data
 - Revisit Rate of approximately 2 hours during the night
- Ephemerides Service
 - Provides current orbit
 - Access to online dashboard
 - Provides backward and forward prediction
 - Includes optional maneuver plan
- Ephemerides and Conjunction Alert Service
 - Provides current orbit
 - Access to online dashboard
 - Provides backward and forward prediction
 - Includes optional maneuver plan
 - Provides conjunction alerts for safety of flight
- Add on: Dedicated Tracking
 - Provides orbit updates every ~1-2 hours during collection for rapid post-maneuver estimates.
- Add on: GTO Tracking
 - Provides orbit updates every ~1 day

Service Name	Price Per Satellite
Dashboard and Orbit Service	\$1000 per month
Observation Service	\$3000 per month
Ephemerides Service	\$2500 per month
Ephemerides and Conjunction Alert Service	\$4500 per month
Add-on: Dedicated Tracking	\$2250 per day
Add-on: GTO Tracking	\$1000 per day or \$15000 per month

5 ESPOC CATALOG SERVICE

Tier	Price Per Month
Tier D	\$787,000
Tier E	\$985,000
Tier F	\$1,175,000

Catalog includes delivery of orbits generated using a pre-determined number of telescopes. The underlying observations are not delivered with this product.

Terms and Conditions:

➤ **Catalog Service.**

Tier D – Catalog based on collections from 240 dedicated robotic telescopes.

Tier E – Catalog based on collections from 320 dedicated robotic telescopes.

Tier F – Catalog based on collections from 400 dedicated robotic telescopes. *Available late-2020.*

➤ **Add-On Services. ESPOC Catalog Alerts**

○ Notifies on the following information:

- new objects
- missing objects
- objects that make a maneuver larger than normal station-keeping
- objects that leave their slot and are now relocating
- objects that move into graveyard orbit
- objects that start or stop tumbling
- objects that become much brighter or dimmer than their historical signature
- objects that approached another object

○ Includes one full-time on-site analyst, as required

○ Price: \$150,000 per month

➤ **12 Month Pricing.** Prices assume a 12 month subscription. Refer to Section 12 for less than 12 month pricing.

➤ **Data Rights.** Data can be shared with subcontractors. Government may share the data with any Government organization. Government may also share with contractors for Government Purpose Only. Government may not share data with other commercial entities for commercial purposes or foreign governments. Expanded Data Rights apply to “Tier B” subscriptions which are 12 months or longer. Please contact a sales representative for pricing for additional data rights.

➤ **Subject to Change.** Pricing and terms and conditions are subject to change. Please contact ExoAnalytic Solutions for pricing.

➤ **Additional Terms and Conditions.** Additional terms and conditions apply. Please refer to the “ESPOC Catalog Service Terms and Conditions” document.

6 DATA PLUS CATALOG DISCOUNTED RATES

Tier	Price Per Month
Tier D	\$1,350,000
Tier E	\$1,632,000
Tier F	\$1,942,500

Refer to Terms and Conditions for Sensor Network Data Subscription and ESPOC Catalog Service

7 EXOALERT

Product Description: ExoAnalytic AI-assisted human-in-the-Loop Exploitation and Reporting Tool (ExoALERT) is a human-machine workflow integration solution that operates 24/7 on EGTN data collected for thousands of space objects scanning persistently for anomalies. ExoALERT autonomously processes 30TB of raw data each day (for approximately 4,500 objects) into real-time alerts that are read into ExoMaps and subsequently exported as PowerPoint and PDF files. ExoALERT is designed to manage leaks and false alarms by introducing human interactions only where needed for reviewing real-time alerts to override the AI/ML reasoning and inference engine. In practice, the system produces approximately a dozen alerts per hour and human interaction is typically limited to review of alerts prior to report publication.

ExoALERT includes:

- Alerts generated using all available ESPOC data to create a complete picture of GEO belt activity.
- Real-time notification of alerts
- Government purpose rights or equivalent.

Product Price:

- \$10,000 per satellite per month

Terms and Conditions:

- **Subject to Change.** Pricing and terms and conditions are subject to change.
- **Additional Terms and Conditions.** Additional terms and conditions apply. Please refer to the “ExoALERT Terms and Conditions” document.

7.1 EXOALERT BULK PRICING

ExoAnalytic offers bulk pricing for ExoALERT service:

Object Number	Price Per Object Per Month
1 - 20	\$ 10,000
21 - 40	\$ 9,000
41 - 60	\$ 8,000
61 - 80	\$ 7,000
81 - 100	\$ 6,000
101+	\$ 5,000

Example 1: ExoALERT services for 30 objects is (20*\$10,000) + (10*\$9,000) = \$290,000 per month

Example 2: ExoALERT service for 75 objects is (20*\$10,000) + (20*\$9,000) + (20*\$8,000) + (15*\$7,000) = \$645,000 per month

8 THE ESPOC REPORT

Product Description: The ESPOC Report is a Geo belt activity report that reports abnormal behaviors of objects in or near the geosynchronous belt. The report is available anywhere from daily to monthly and alerts its users to the following:

- new objects
- missing objects
- objects that make a maneuver larger than normal station-keeping
- objects that leave their slot and are now relocating
- objects that move into graveyard orbit
- objects that start or stop tumbling
- objects that become much brighter or dimmer than their historical signature
- objects that approached another object

The ESPOC Report Includes:

- An analysis report which uses all available ESPOC Tier D data (240+ telescopes) to generate a complete picture of GEO belt activity.
- Note: Tier C observation data is not delivered with this product.
- Report subscription delivered monthly, weekly or daily.

Product Price:

- Weekly Report, 4 Regions: \$145,000 per week
- Monthly Report, 1 Region: \$240,000 per month
- Monthly Report, 4 Regions: \$415,000 per month
- Daily report: \$1,600,000 per month

Terms and Conditions:

- **Subject to Change.** Pricing and terms and conditions are subject to change. Please contact ExoAnalytic Solutions for pricing.
- **Data Rights.** Data is licensed with Expanded Data Rights. Data can be shared with subcontractors. Government may share the data with any Government organization. Government may also share with contractors for Government Purpose Only. Government may not share data with other commercial entities.
- **Additional Terms and Conditions.** Subject to other Terms and Conditions.

9 CONSULTING AND EVENT SERVICES

Item	Price
ESpOC Subject Matter Expert	\$250/hour
Event Support	\$30,000 per day

ESpOC Subject Matter Expert: Individual with ESpOC subject matter expertise who can assist you with analysis and training at a customer facility using customer tools and data.

Event Support includes:

- Analysis Support from 4 ESpOC Subject Matter Experts
 - Analysts have access to all Historical Data
 - Analysts have access to ESpOC Catalog tools
- Telescope Tasking (up to 4 scopes per day)
- Data from Telescopes with Government Purpose Rights
- PowerPoint Charts with Government Purpose Rights

10 ESPOC ENTERPRISE SOLUTIONS PRICE LIST

Product	Pricing
ESPOC Complete: Command Center w/ExoMaps <ul style="list-style-type: none"> • ESPOC Command Center Module • ExoMaps • Ability to ingest historic data, if available • Ability to ingest real-time image feed, if available • Ability to ingest near real-time data feed, if available • Ability to task any purchased Dedicated Telescopes 	\$100K per month *Volume Discounts Below
ESPOC Command Center Only <ul style="list-style-type: none"> • Ability to ingest real-time image feed, if available • Ability to task any purchased Dedicated Telescopes 	\$50K per month *Volume Discounts Below
ExoMaps <ul style="list-style-type: none"> • Ability to ingest historic data, if available • Ability to ingest near real-time data feed, if available 	\$50K per month *Volume Discounts Below
Offline ESPOC Command Center <ul style="list-style-type: none"> • Ideal for High-Side Installation • Ability to ingest orbits, if available • Offline capability – does not ingest real-time feed or task Dedicated Telescopes 	\$250K per year *Volume Discounts Below
ESPOC Catalog and Alert Tools <ul style="list-style-type: none"> • Alert Tools Module • BruteCorr/BruteStack Modules 	\$600K per month
ESPOC S3 (Sensor & Site Status)	\$20K per month add-on to the Command Center
ESPOC Dynamic Task Manager	\$15K per month with monthly Dedicated Scope service
Exo6Sim	\$50K per month standalone or \$25K per month as an ESPOC add-on

Terms and Conditions:

- **Subject to Change.** Pricing and terms and conditions are subject to change. Please contact ExoAnalytic Solutions for pricing.
- **Additional Terms and Conditions.** Additional terms and conditions apply. Please refer to the “ESPOC Command Center Terms and Conditions” document.
- **Volume Discounts.** Please refer to the “ESPOC Enterprise Solutions Volume Discounts” located in Section 9 of this document.

11 ESPOC ENTERPRISE SOLUTIONS VOLUME DISCOUNTS

Enterprise Editions			
Price Per Site/Location	Up to 3 Seats (Monthly Price)	Up to 10 Seats (Monthly Price)	Up to 25 Seats (Monthly Price)
ExoMaps	\$ 75,000	\$ 150,000	\$ 250,000
ESpOC Command Center	\$ 75,000	\$ 150,000	\$ 250,000
ESpOC Complete	\$ 150,000	\$ 300,000	\$ 500,000

Note: ESpOC Complete includes: ExoMaps and ESpOC Command Center

Volume Pricing: SpaceFront				
Item Name	Up to 10 Seats (Monthly Price)	Up to 25 Seats (Monthly Price)	Up to 50 Seats (Monthly Price)	Up to 100 Seats (Monthly Price)
SpaceFront	\$ 25,000	\$ 40,000	\$ 65,000	\$ 115,000

Volume Pricing: Offline ESpOC	
Description	Yearly Price
First License	\$ 250,000
Second License	\$ 200,000
Third License	\$ 150,000
Fourth License	\$ 100,000
Each Additional License	\$ 50,000

12 SENSOR SYSTEMS

PACKAGE 1: ESPOC14 INTEGRATED SENSOR SYSTEM

Superior System Performance

- Observe objects as dim as 18.5 V-mag
- ~1 degree field of view
- ~5-10 second data rate
- Astrometric accuracy ~0.2 arcseconds
- Photometric accuracy ~0.1 V-mag

Sensor systems include:

- Automated dome system fully installed
- Telescope – 14” class
- Camera
- Computer Equipment
- Software Licenses - Image Processing Suite, Telescope and Camera Control Module
- Installation of pier and equipment
- One week of one-on-one training for up to 5 people

Customer must provide concrete pad, internet access, and electricity

Price: \$500,000

Add-on Services:

1. Training Class –
 - a. Two trainers will conduct a one week training class for up to 20 participants. Can be conducted at customer location or at an ExoAnalytic facility.
 - b. Price: \$18,000 per training week
2. Routine Maintenance
 - a. Quarterly cleaning
 - b. Training for on-site staff in weekly cleaning procedures
 - c. Quarterly diagnostic testing: includes checking and adjusting focus, visual inspection of images, looking for potential equipment failures
 - d. Replacement equipment installed as needed
 - e. Price: \$30,000 per year per sensor system
3. Diagnostic Services: \$225/hr plus travel costs
4. Repair Services: \$225/hr plus travel and material costs

PACKAGE 2: HARRIER INTEGRATED SENSOR SYSTEM

Designed for Dim Object Detection

- Observe objects as dim as 20.0 V-mag
- ~1 degree field of view
- ~5-10 second data rate
- Astrometric accuracy ~0.2 arcseconds
- Photometric accuracy ~0.1 V-mag

Sensor systems include:

- Automated roll-off roof system fully installed
- 10 Telescopes – 14” class
- Cameras
- Computer Equipment
- Software Licenses - Image Processing Suite, Telescope and Camera Control Module
- Includes HARRIER Image Processing Suite
- Installation of 10 piers and equipment
- Training for on-site staff in weekly cleaning procedures
- One week of one-on-one training for up to 5 people

Customer must provide concrete pad, internet access, and electricity

Price: \$5,500,000 for HARRIER14-10. Individual HARRIER14-1s are available for \$550,000 per sensor.

Add-on Services:

1. Training Class –
 - a. Two trainers will conduct a one week training class for up to 20 participants. Can be conducted at customer location or at an ExoAnalytic facility.
 - b. Price: \$18,000 per training week
2. Routine Maintenance –
 - a. Quarterly cleaning
 - b. Quarterly diagnostic testing: includes checking and adjusting focus, visual inspection of images, looking for potential equipment failures
 - c. Replacement equipment installed as needed
 - d. Price: \$180,000 per year per HARRIER system
3. Diagnostic Services: \$225/hr plus travel costs
4. Repair Services: \$225/hr plus travel and material costs

13 TESTBED OPERATIONS

ExoAnalytic offers testbed operations which allow customers to test their algorithms in real-time inside of ExoAnalytic's processing chain. Requires observation data from one or more ExoAnalytic Dedicated Scopes (Monthly), priced separately.

- ESpOC Sensor Testbed
 - Algorithms can be inserted in ESpOC sensor-level processing chain
 - Algorithms can access pixel-level data or detection, as appropriate
 - Customer receives observations generated using customer-provided algorithm
 - Setup Cost: one-time \$50K setup fee per algorithm
 - Recurring Cost: \$15K per month per sensor operation fee
- ESpOC Fusion Testbed
 - Algorithms can be inserted into the ESpOC Fusion processing chain
 - Algorithms can access detection or catalog orbits, as appropriate
 - Customer receives output generated from algorithms
 - Setup Cost: one-time \$50K setup fee per algorithm
 - Recurring Cost: \$15K per month per sensor operation fee

14 SPOT PRICING

This pricelist covers products purchased as part of micro transactions. Micro transactions are purchases that do not meet the required bulk or frequency requirements.

Product Type	Product	Pricing
Sensor Network Data Subscription (Non-taskables)	Tier A – 28 Scopes (LDR)	\$14,200 per night
	Tier B – 80 Scopes (EDR)	\$55,000 per night
	Tier C – 160 Scopes (EDR)	\$100,000 per night
	Tier D – 240 Scopes (EDR)	\$142,850 per night
	Tier E – 320 Scopes (EDR)	\$181,350 per night
	Tier F – 400 Scopes (EDR)	\$215,825 per night
Dedicated Telescope (List Based Tasking with Next Morning Delivery)	Single Telescope Data (EDR)	\$2,000 per night
	Single Telescope Data (UDR)	\$4,000 per night
	Single Telescope Data with Image Chips (EDR)	\$3,600 per night
	Single Telescope Data with Image Chips (UDR)	\$7,200 per night
	Add-on: Orbit Determination	\$1000 per object per day for EDR or \$2000 per object per day for UDR
	HARRIER Telescope Data (EDR)	\$19,250 per night
Dynamically Taskable Scope (Machine-to-Machine Taskable with 15 minute Delivery)	Single Telescope Data (EDR)	\$10,250 per night
	Single Telescope Data with Image Chips (EDR)	\$17,725 per night
	Add-on: Orbit Determination Next Day Delivery (EDR)	\$925 per object
Post-Event Data	Recent Data – up to 10,000 observations (EDR)	\$150,000
	Recent Data – more than 10,000 observations (EDR)	\$1.50 per observation
	Historic Data – up to 8,000 observations (EDR)	\$80,000
	Historic Data – more than 8,000 observations (EDR)	\$1.00 per observation
ESpOC Catalog Service	Tier D – Generated with 240 Scopes	\$125,000 per night
	Tier E – Generated with 320 Scopes	\$158,350 per night
	Tier F – Generated with 400 Scopes	\$188,250 per night

Terms and Conditions:

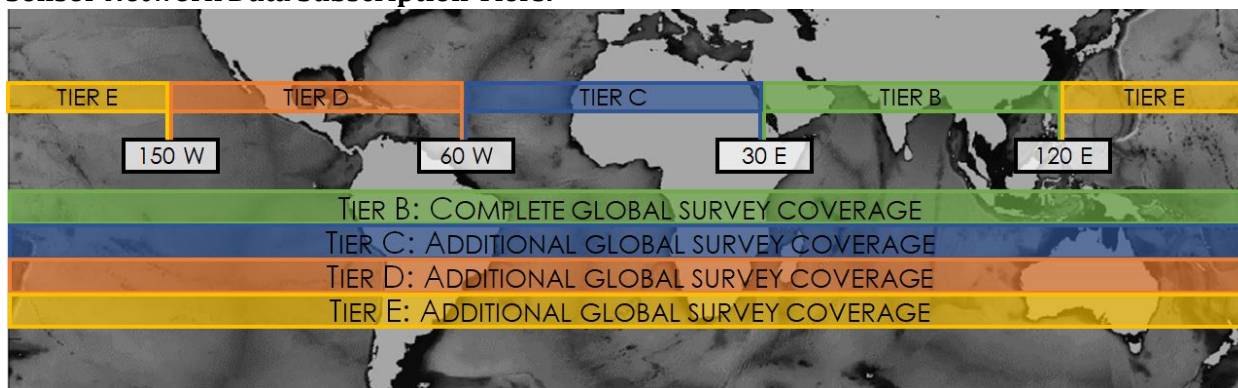
- **Data Rights.** Data is licensed and ExoAnalytic retains the intellectual property rights to the data. All data licensed with EDR or Government Purpose Right unless otherwise noted. The following restrictions apply:

LDR - Limited Data Rights – Data cannot be shared with subcontractors except support contractors working at the Prime facility on Prime computers. Government may not share the data outside of the acquiring Program. Government may share with SETA contractors only. Not for resale.

EDR - Expanded Data Rights - Data can be shared with subcontractors and Government agencies. Government may share data with other Government agencies. Government may also share with contractors for Government Purpose Only. Government may not share data with other commercial entities. Not for resale outside of the Federal Government. Data resold or transferred to Government must be transferred with “Government Purpose Rights” only.

UDR - Unlimited Data Rights – Data can be shared with subcontractors. Data may be resold. Government obtains Unlimited Data Rights.

- **Sensor Network Data Subscription Tiers.**



Tier A – Consists of up to 28 dedicated robotic telescopes. All telescopes survey the GEO belt.

Tier B – Consists of up to 80 dedicated robotic telescopes. Includes a staring fence from 30E to 120E. Remainder of GEO belt covered by survey telescopes.

Tier C – Consists of up to 160 dedicated robotic telescopes. Includes the Tier B staring fence plus a staring fence from 60W to 30E. Remainder of GEO belt covered by survey telescopes.

Tier D – Consists of up to 240 dedicated robotic telescopes. Includes the Tier B and Tier C staring fences plus a staring fence from 150W to 60W. Remainder of GEO belt covered by survey telescopes.

Tier E – Consists of up to 320 dedicated robotic telescopes. Includes a staring fence covering the entire GEO belt. Plus scopes for off-GEO scanning.

Tier F – Consists of up to 400 dedicated robotic telescopes. Includes a staring fence covering the entire GEO belt. Plus additional scopes for off-GEO scanning. *Available late 2020.*

- **Tasking.** Sensors collect observations from GEO and near-GEO objects. Sensor Network Subscription Service does not allow for direct tasking of scopes.
- **Catalog Service.**
 - Tier D** – Catalog based on collections from 240 dedicated robotic telescopes.
 - Tier E** – Catalog based on collections from 320 dedicated robotic telescopes.
 - Tier F** – Catalog based on collections from 400 dedicated robotic telescopes. *Available late-2020.*
 - Observations not delivered as part of catalog service.
- **Non-Exclusivity.** ExoAnalytic may license the same data to additional parties without licensee’s consent or knowledge.
- **Definitions:**
 - **Recent Data.** Data which is less than two months old.
 - **Historic Data.** Historic data is any data which is more than two months old.
- **Subject to Change.** Pricing and terms and conditions are subject to change. Please contact ExoAnalytic Solutions for pricing.
- **Additional Terms and Conditions.** Additional terms and conditions apply. Please refer to the “Observation Data Terms and Conditions” document.

15 ESPOC SOFTWARE LICENSES

UPDATE: FEBRUARY 14, 2024

Product	Single Scope/Sensor Monthly Fee	Additional Collocated Sensors (price per scope) Monthly Fee
ESpOC Image Processing Suite	\$50,000	\$10,000
ESpOC Operator Package I - Standalone <ul style="list-style-type: none"> Includes User Interface Module, Image Processing Suite, Telescope and Camera Control Module 	\$40,000	\$12,000
ExoAnalytic Catalog Maintenance Tool Suite (ExoCat) <ul style="list-style-type: none"> RSO Correlation Orbit Determination Maneuver Detection 	\$50,000	
ESpOC Autonomous Survey & Tracker Module	\$12,000	\$8,000
Harrier Advanced Image Processing Suite	\$40,000	

Terms and Conditions:

- **Subject to Change.** Pricing and terms and conditions are subject to change. Please contact ExoAnalytic Solutions for pricing.
- **Single Scope/Sensor Monthly Fee.** Fee applies to each unique site. For example, an ESpOC Operator Package I license for a site with 4 telescopes would cost \$70K per month (\$40K plus 3*\$10K).
- **Harrier Advanced Image Processing Suite.** Only one license required per site, regardless of number of collocated sensors. Each telescope in the Harrier System must be equipped with the ESpOC Image Processing Suite.
- **Additional Terms and Conditions.** Subject to User License Agreement or other Terms and Conditions.

16 GALLEON FULL IMAGE

UPDATE: FEBRUARY 14, 2024

Full Image GALLEON provides collection of full images:

- 40-70 degree Field of View simultaneous viewing
- \$20,000 per day
- \$400,000 per month

17 LAUNCH CONJUNCTION ASSESSMENT SERVICE

UPDATE: SEPTEMBER 14, 2021

Product	Unit Name	Per Unit Price
Launch CA Service (Unclassified only)	Per Launch	\$25,000
Launch CA Service Subscription (Unclassified only, up to 10 launches per month)	Month	\$100,000
Launch CA Service Subscription (Unclassified only, up to 150 launches per year)	Year	\$1,000,000
Add On to Monthly or Yearly Subscription: Launch CA Service (Unclassified) Additional Launch	Per Launch	\$2,000
Launch CA Service Subscription (SECRET, up to 150 launches for yearly)	Year	\$1,800,000
Add On to SECRET Yearly Subscription: Launch CA Service (SECRET) Additional Launch	Per Launch	\$4,000

Terms and Conditions:

- **Subject to Change.** Pricing and terms and conditions are subject to change. Please contact ExoAnalytic Solutions for pricing.
- **SECRET Level Launch CA:** Available with a yearly commitment only. Service billed per month (\$150,000 per month)
- **Additional Terms and Conditions.** Subject to Launch CA Terms and Conditions.

18 CATALOG RECONCILIATION SERVICE

UPDATE: JUNE 28, 2024

ExoAnalytic's Catalog Reconciliation Service compares, verifies and integrates data from available space object catalogs to create a unified and accurate representation of the space environment. This service produces a fully reconciled catalog that includes ExoAnalytic's fully independent orbits (purchased separately), space-track.org orbits, and our customer's orbits (if any). Our process utilizes algorithms to characterize multiple catalogs and fuse them into a master catalog that utilizes NORAD ID for common objects, establishing unique IDs for individual UCTs (handle when one object has two different tracks or IDs), with processes to mitigate "ghost" objects (false alarm detections in catalogs, not real objects), and processes to mitigate cross-tags (same ID applied to two different objects). Our catalog reconciliation process produces the most accurate information available to support conjunction warning processes.

Catalog Reconciliation Description:

- Service compares, verifies, and integrates data from all available space object catalogs to create a unified and accurate representation of the space environment.
- Service provides access to a repeatable catalog reconciliation process that enables continuous evaluation and fusion of numerous space object catalogs.
- Service creates a master catalog of the best available orbits for resident space objects (RSOs), that support core conjunction warning, re-entry prediction, launch collision avoidance.
- Service hosted on a cloud-based website that allows the user to:
 - display a dashboard with summary metrics of the available catalogs
 - inspect the reconciliation process via displays of algorithm results
 - access the manual instances of the backend tools used in the automated reconciliation processes
- Service allows the user to download orbit information either manually or via an API for the best or chosen orbit for a given object.

Product Price: \$250,000 per month.

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