

Polaris Prism: API & Data-Source Signup Checklist

Do these first

1. **Decide how you'll use Earth Engine now.** A commercial pitch to Polaris doesn't qualify for the free noncommercial tier. Commercial use goes through a Google Cloud billing account on the *Limited* plan (pay per use) or *Basic* (\$500/mo). The cheaper option is to skip GEE and read ESA WorldCover COGs straight from AWS (no key needed).
2. **Get the free keys and accounts (about 30 minutes):** NASS Quick Stats API key, Destatis GENESIS account and API token, OS Data Hub account and project key, LandIS Portal account. Get a FAOSTAT developer login only if you need the API, because its API now rejects calls that have no token.
3. **Take RPA Land Parcels out of the production plan.** Only PSGA bodies and farmers/agents can get them. Use **CROME 2024** (crop map), **RPA Parcel Points** (both OGL) and HM Land Registry INSPIRE polygons (OGL plus OS terms) instead.
4. **Don't take production layers from MAGIC.** Its OS basemap and many downloads come under the PSGA End User Licence. Get each layer from the organisation that publishes it (usually Defra DSP or Natural England, under OGL).
5. **Add a "Data sources & licences" panel to the app before the pitch.** It should include OGL and OS credit lines, dl-de/by-2-0 (Destatis), GeoNutzV (BGR), CC BY 4.0 (WorldCover, Thünen, FAOSTAT), the Copernicus statement, and the NASS "not endorsed" notice.

✓ Source	What it gives you	Key / registration	Cost & licence (commercial use)	First thing to do
UK				
☐ 10 OS OpenData / OS Data Hub	GB terrain (OS Terrain 50), Open Zoomstack basemap, boundaries and names. OS has no open land-parcel product.	Downloads: none APIs: free key Downloads need no key. The Maps, Vector Tile and NGD APIs need a free account and project API key.	OpenData plan: free and unlimited. Premium plan: up to £1,000/month of free transactions, then paid (OS Places not included). OGL v3. Credit: "Contains OS data © Crown copyright and database right [year]".	Create an account at osdatahub.os.uk on the OpenData plan, create a project and copy the key. Get bulk files from api.os.uk/downloads/v1 .
☐ 11 Defra DSP: Predictive ALC (England)	Farmland grades 1–5, with 3a/3b split (new in 2026, replaces Provisional ALC). 1:250k, for strategic use, not field scale.	None WMS, WFS, WCS and OGC API Features all work without a key (tested).	Free. Open Government Licence (not restricted). Credit Defra under OGL.	Switch the demo layer to OGC API Features: environment.data.gov.uk/dataset/a817d96f...
☐ 12 LandIS Portal (Cranfield): NATMAP / Soilscales	National Soil Map of England and Wales (Vector 1:250k, Soilscales, 1 km and 5 km grids) and soil-series properties.	Free account You need a free portal login and must accept the EULA.	Free since April 2026 (confirmed). "Public Data" is under the LandIS Open Licence : commercial use OK with the required attribution. "Restricted" sets allow no commercial use. Extra thematic data is paid (soilsitereports.co.uk).	Register at landis-cranfield-portal.hub.arcgis.com . Check that each dataset you need is marked Public and copy the EULA attribution text.
☐ 13 MAGIC map layers	Viewer for 400+ Defra-family environmental layers (designations, habitats).	None to view MAGIC isn't a production API.	Licence differs by layer. The OS basemap and many downloads are OS-derived (PSGA End User Licence), so commercial reuse needs an OS licence.	Use it to find layers only. Get each one from the publisher (Defra DSP / Natural England Open Data, OGL). magic.defra.gov.uk
☐ 14 RPA Land Parcels	Registered field parcels, land covers and hedges in England.	Not available to you Only PSGA members and farmers/agents (DSP login) can access them.	OS PSGA / Public Sector End User Licence. Defra DSP says: "not currently available to other users".	Remove from the plan. Use CROME 2024 and RPA Parcel Points (both OGL, on DSP) instead. DSP licence FAQ
Germany				
☐ 7 Destatis GENESIS-Online	Official farm-structure, land-use and livestock statistics. Kreis-level data is in the Regionaldatenbank.	Free registration Data calls need a login or API token. POST only since 15 Jul 2025 (GET and SOAP switched off).	Free. dl-de/by-2-0 . Credit: "Statistisches Bundesamt (Destatis), GENESIS-Online, [date]; dl-de/by-2-0".	Register at www-genesis.destatis.de , copy your API token and make sure all calls are POST. Examples: github.com/StatistischesBundesamt
☐ 8 Thünen crop-type maps (Zenodo)	Annual national crop-type maps for Germany, 2017–2025 (2025 is preliminary, v301). COG raster; vector for some years.	None Direct Zenodo download. The streaming COG URL is only "provided on request".	Free. CC BY 4.0 . Credit the authors and Thünen-Institut. Provided "as is".	Download the latest COG and host it yourself: zenodo.org/records/17181503
☐ 9 BGR soil map (BÜK1000 etc.)	Soil map of Germany at 1:1M (71 units: depth, texture, water regime). Coarse, but fine for territory scoring.	None SHP/TIFF downloads and a WMS.	Free. Federal geodata terms (GeoNutzV , not dl-de), so commercial use is fine with credit: "BÜK1000 V2.1, (C) BGR, Hannover, 2013".	Download SHP: download.bgr.de/.../buek1000de_v21.zip . WMS: services.bgr.de/wms/boden/buek1000de
USA				
☐ 1 USDA NASS Quick Stats API	US crop, livestock and Census of Agriculture figures by state and county.	Free key You get it by email straight away after accepting the ToS. Max 50,000 records per call.	Free, public domain. You must show: "This product uses the NASS API but is not endorsed or certified by NASS."	Request a key at quickstats.nass.usda.gov/api and keep it server-side as an env var.
☐ 2 Cropland Data Layer (CroplandCROS / CropScape)	Annual crop-type raster for the lower 48 states: 10 m from 2024 (30 m version also available). 2025 CDL released 27 Feb 2026.	None CropScape GetCDLFile/GetCDLStat, WMS and WCS all work without a key (tested).	Free, public domain. Credit USDA NASS. CropScape is hosted by GMU with no SLA.	Cache county stats and rasters; don't make live calls. Docs: nassgeodata.gmu.edu/CropScape/devhelp . Portal: croplandcros.scinet.usda.gov
☐ 3 USGS TNM Access API & 3DEP	US elevation (DEM tiles, point queries, lidar) used for slope and terrain scoring.	None Confirmed keyless: TNM Access and the Elevation Point Query Service both answer without a key.	Free, public domain. Credit: "3DEP data courtesy of the U.S. Geological Survey".	Work out slope in advance from 1/3" DEM tiles listed by tnmaccess.nationalmap.gov/api/v1 . Don't make one point query per request at scale.
☐ 4 MRLC Annual NLCD (WMS/WCS)	Annual 30 m land cover for the lower 48 states, 1985–2025 (Collection 1.2), plus change and impervious layers.	None WMS and WCS on the USGS GeoServer.	Free, public domain. Credit MRLC/USGS.	Use WCS to get raw class codes (WMS only gives colours): mrlc.gov/data-services-page
Global / Europe-wide				
☐ 5 Copernicus CLMS / EEA Discomap: CORINE	44-class European land cover (CLC2018, 100 m raster / 25 ha vector), covering the UK and DE.	Services: none Downloads: free login Discomap map services have no key. CLMS portal downloads need registration.	Free, including commercial use. You must state: "Generated using European Union's Copernicus Land Monitoring Service information".	Register at land.copernicus.eu and download CLC2018 once. Service: image.discomap.eea.europa.eu/.../Corine/CLC2018
☐ 6 ESA WorldCover (AWS / GEE / Terrascope)	10 m global land cover for 2020 (v100) and 2021 (v200), 11 classes.	AWS: none GEE: Cloud project Terrascope public WMS/WMTS: no key (old WMS retired; new titiler.terrascope.be/wms). Viewer downloads need a free account.	Data free, CC BY 4.0 . Credit: "© ESA WorldCover project 2021 / Contains modified Copernicus Sentinel data (2021) processed by ESA WorldCover consortium". GEE commercial use is paid: Limited (usage fees), Basic \$500/mo, Professional \$2,000/mo.	Read COGs from s3://esa-worldcover (- -no-sign-request). Only open a paid GEE plan if you need GEE compute.
☐ 15 FAO FAOSTAT	Country-level crop and livestock production. Useful context and benchmarks, not territory scoring.	Bulk: none API: free login The API returns 401 without a token. Tokens come from the developer portal and last 60 minutes.	Free. CC BY 4.0 plus FAO Statistical Database Terms of Use (attribute FAO).	Use the bulk CSVs and refresh them yearly: faostat.fao.org/en/#data . API login: #developer-portal

Key: **green** no key needed · **amber** free signup or paid option · **red** not licensable for Polaris Prism. "Public domain" = US federal data, free for commercial use. Credit anyway.
Before production: keep every key server-side and proxy the calls. Cache or self-host static rasters (CDL, NLCD, WorldCover, Thünen, CORINE, BÜK). Record each licence and credit line in the app's About/credits panel. Check licences again before each client release.