

Feature	Google Maps Static API	ESRI (ArcGIS)	Mapbox	Google Earth Engine
Endpoint / ID	maps.googleapis.com/maps/api/staticmap	services.arcgisonline.com/.../World_Imagery	mapbox/satellite-v9	COPERNICUS/S2_SR(Sentinel-2)
Actual Data Source	Hybrid: 1.CNES/Airbus& Maxar(Satellite) 2.Aircraft(in cities like Surat/Mumbai)	Aggregated Basemap: 1.Maxar(Vivid/Metro products) 2.TerraColor(Earthstar Geographics) 3.Community Maps(local gov aerial data)	Maxar(Vivid Basic & Vivid Advanced products) Note: Mapbox explicitly lists Maxar as their primary satellite partner.	ESA (European Space Agency) (Public Government Data)
Native Resolution	~15 cm(Aerial) ~30-50 cm(Satellite)	~30-50 cm(Standard) ~15 cm(In select "Community Map" areas)	~50 cm(Standard) ~30 cm(High-res tiers)	10 meters(Multispectral)
Can you see panels?	YES (Best Clarity). Aerial data reveals individual modules & wiring.	YES. Good for general detection, but edges can be softer than Google's aerial.	YES, but often has more "color correction" (saturation) which can hide subtle textures.	NO. A standard 1.6m <sup>2</sup> panel is invisible. A 100m <sup>2</sup> roof is just 1 pixel.
Revisit Rate	Low.Images are typically 1-3 years old.	Low.Updated every 1-3 years.	Low.Updated every 1-3 years.	High.New image every 5-10 days.
Cost (3k images)	Free(\$200 credit covers ~100k requests).	Free(for non-commercial use via REST API).	Free(50k requests/month free tier).	Free(for research/non-commercial).

