# Types of Alternative Data

1. **Satellite & Geospatial Data**
   * **Oil storage tank fill levels**: Hedge funds buy satellite imagery of shadows inside floating-roof tanks to estimate crude inventories before official reports.
   * **Retail parking lots**: Car counts outside Walmart or Target can indicate store traffic.
   * **Port activity**: Satellite or AIS ship tracking data reveals import/export volumes.
2. **Aviation & Maritime Data**
   * **Private jet flights**: Watching when corporate jets land at small airports near M&A targets, suppliers, or factories can hint at deals or executive visits.
   * **Cargo ships**: Tracking bulk carriers or container ships shows demand in commodities, manufacturing, and retail.
3. **Web & Digital Exhaust**
   * **App usage data**: How often people use Uber, TikTok, or PayPal can signal earnings trends.
   * **Web traffic**: Measuring visits to e-commerce sites like Amazon or Shopify sellers.
   * **Job postings**: Hiring trends can reveal expansion plans.
4. **Social Media & Sentiment**
   * **Headlines / Twitter / Reddit / TikTok**: Crowd sentiment often moves small-caps or meme stocks.
   * **NLP analysis** of news headlines can detect shifts in tone toward a company or sector.
5. **Corporate & Government Records**
   * **Patents filed**: Can show R&D direction.
   * **Supply chain imports/exports**: Customs records reveal sourcing trends.
   * **Regulatory filings**: Sometimes show details before earnings.

**📈 How It’s Used to Outperform**

* **Front-running official data**: Example → Using oil tank images to predict EIA crude inventory before release.
* **Detecting sales momentum**: Example → Counting iPhone shipments in Chinese customs records before Apple earnings.
* **M&A signals**: Example → A company jet visiting a smaller rival’s HQ could suggest acquisition talks.
* **Sentiment trading**: Using real-time news/social feeds to detect market mood shifts faster than analysts.

**⚠️ Challenges & Caveats**

* **Data cost**: High-quality alt-data (like satellite feeds) can be very expensive.
* **Signal vs. noise**: A lot of “cool” data doesn’t translate into tradable signals.
* **Compliance**: Must avoid **MNPI** (material non-public information). Alt-data should come from legally accessible, public or anonymized sources.
* **Lag**: Some free data sources aren’t as timely as what hedge funds pay for.

✅ **Free or cheap data sources you can start with:**

* **ADS-B Exchange** → Private jet tracking.
* **MarineTraffic (free tier)** → Ship movements.
* **Google Trends** → Consumer interest.
* **Reddit/Twitter sentiment scrapers** → Retail trader mood.
* **Yahoo Finance API / SEC EDGAR** → Basic filings & news flow.