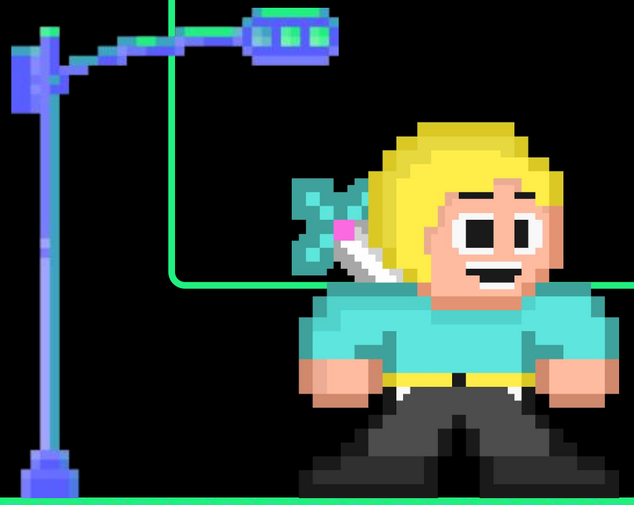
INTRODUCTION OSINT & MASINT UNTUK INVESTIGASI & JURNALISTIK

START



DISCALIMER

Materi ini disusun untuk tujuan informasi dan edukasi mengenai Keamanan Teknologi Informasi (IT Security) dan tidak dimaksudkan sebagai saran profesional, legal, atau keuangan. Penulis dan penyedia materi ini tidak bertanggung jawab atas kerusakan, kerugian, atau konsekuensi negatif yang timbul dari penerapan informasi atau teknik yang dibahas dalam materi ini.

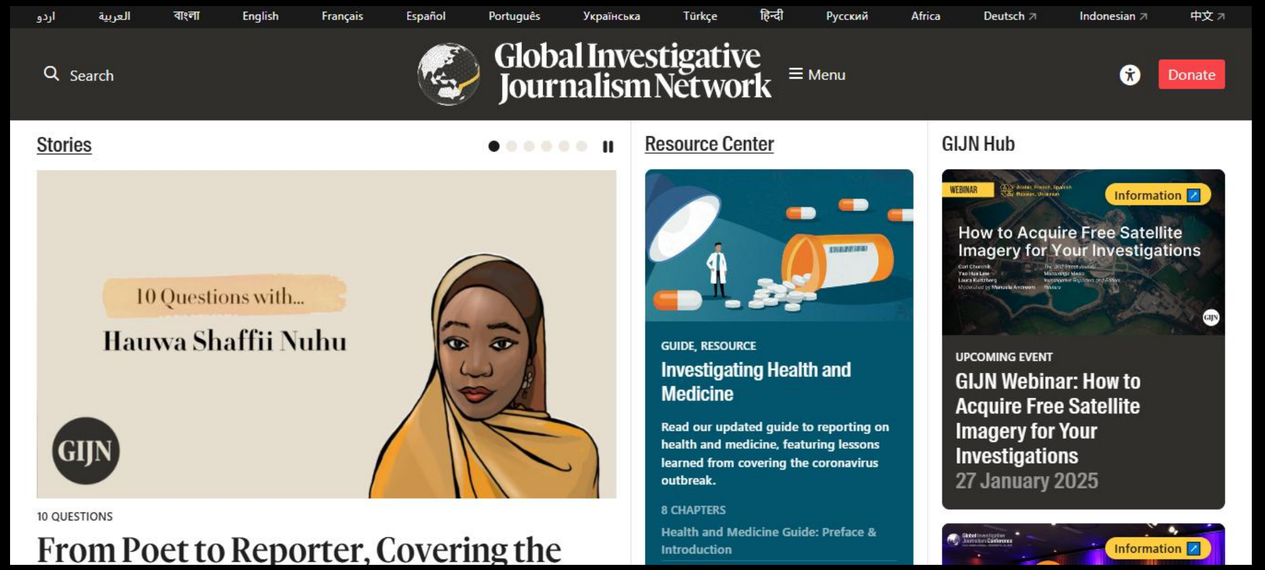
TOPIK

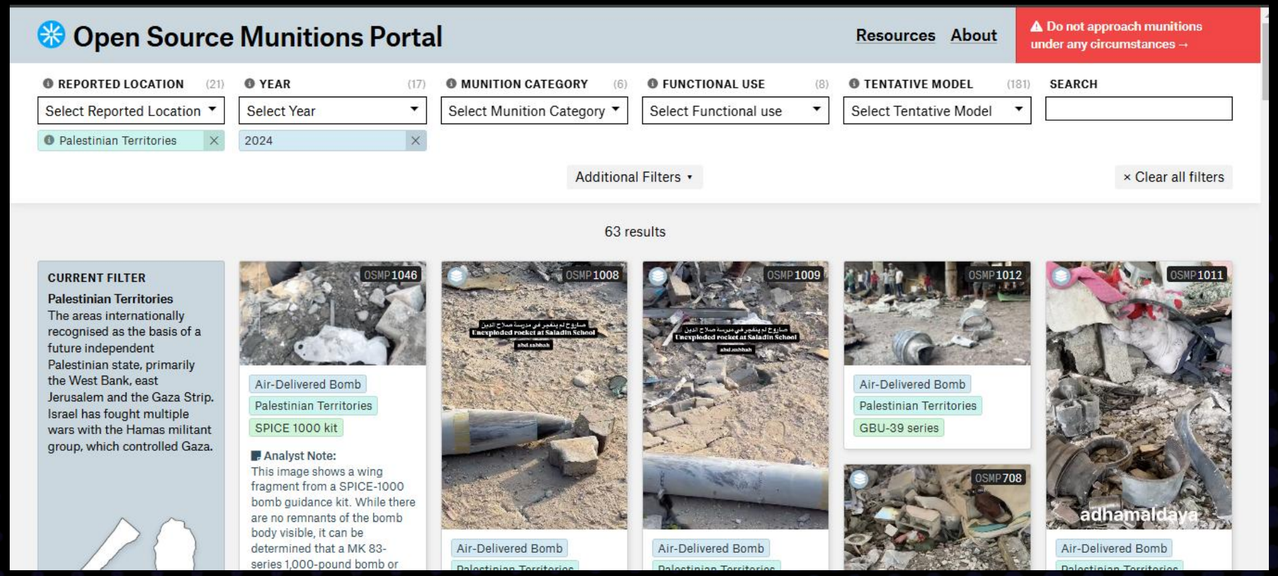
- ❑ Apa itu OSINT
- ❑ Apa itu MASINT
- ❑ Metodologi OSINT & MASINT
- ❑ Pemantauan data satelit
- ❑ Penentuan waktu
- ❑ Verifikasi data
- ❑ Geospatial & Geo Tagging
- ❑ Cheatsheet OSINT & Intermezo
- ❑ Bonus Resouces


SIGN IN
SIGN IN
OSINT?

DARIMANA DATA BERASAL?

- ❑ Sosial Media
- ❑ Publikasi
- ❑ Jurnal
- ❑ Manusia (HUMINT)
- ❑ Data broker
- ❑ Dataset & etc





OSINT UNTUK APA?

- Etika Hacking & Siber Security
- Jurnalisitik
- Militer
- Marketing
- Pendidikan
- Politik
- Screening & profiling
- Etc

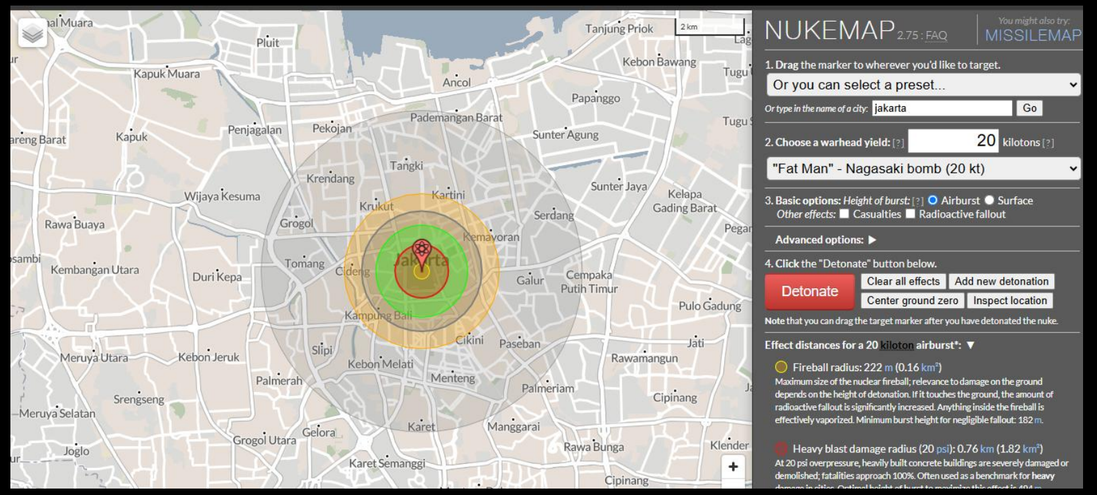
TANTANGAN DALAM OSINT

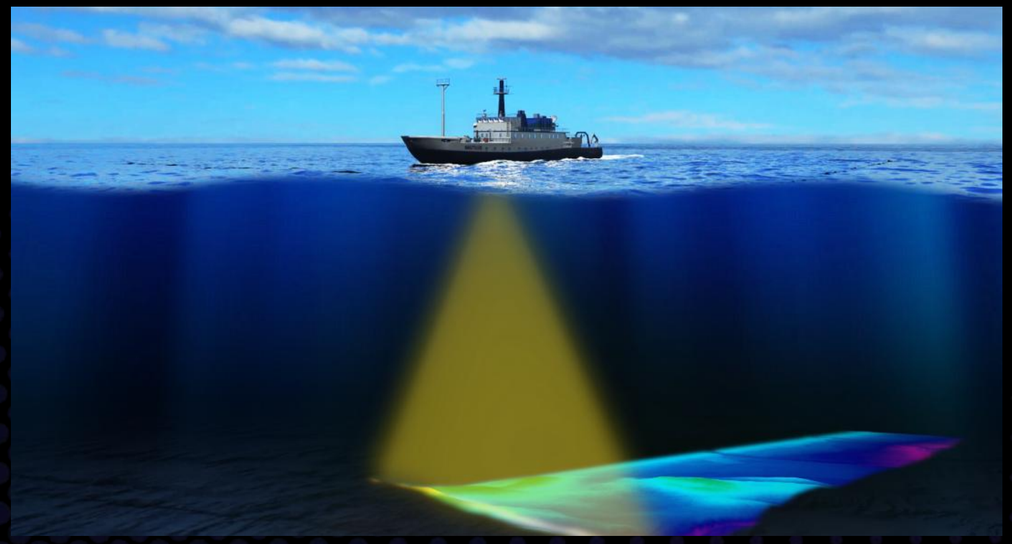
- Banyaknya informasi
- Disinformasi
- Etika dan privasi
- Data yang terbatas
- Geopolitik & Propaganda
- Hukum dari suatu wilayah
- Anonimitas identitas
- Tekanan & Psikologis
- Bot komen dan postingan serta akun bot (buzzer)

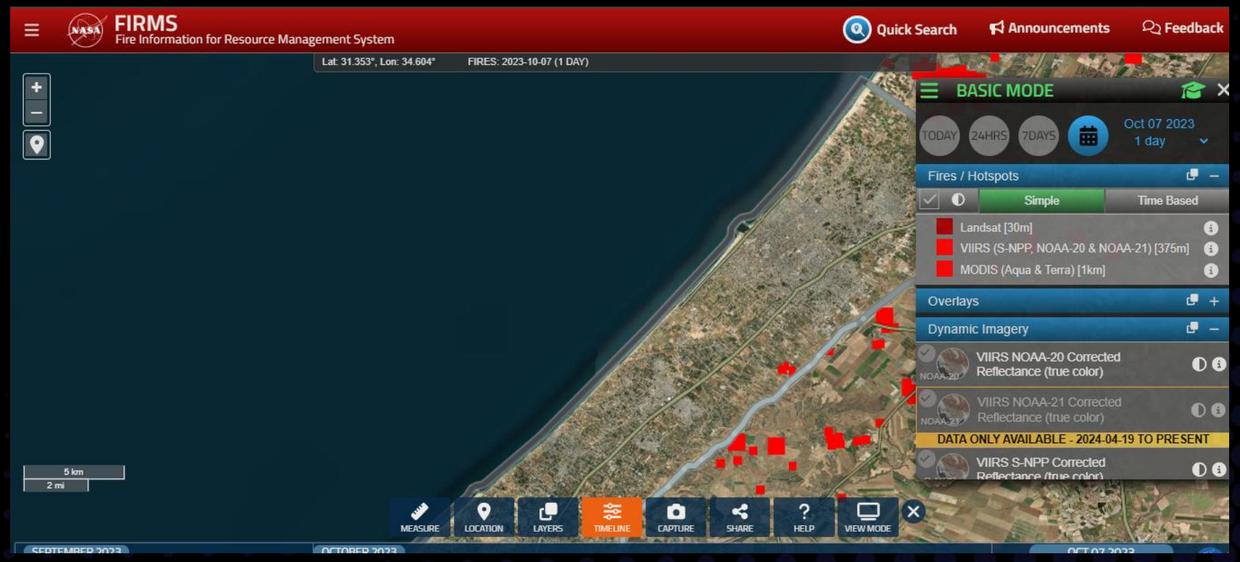

SIGN IN
SIGN IN
MASINT?

DARIMANA DATA BERASAL?

- Objek atau informasi yaang telah dikumpulkan
- Sensor
- Radiasi
- Tanda atau bekas suatu peristiwa
- Satelit
- Publikasi





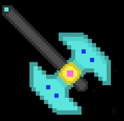


PEMANFAATAN MASINT

Pengukuran & Astronomi Int

Thermal, Udara, Bencana & Sensor Gas

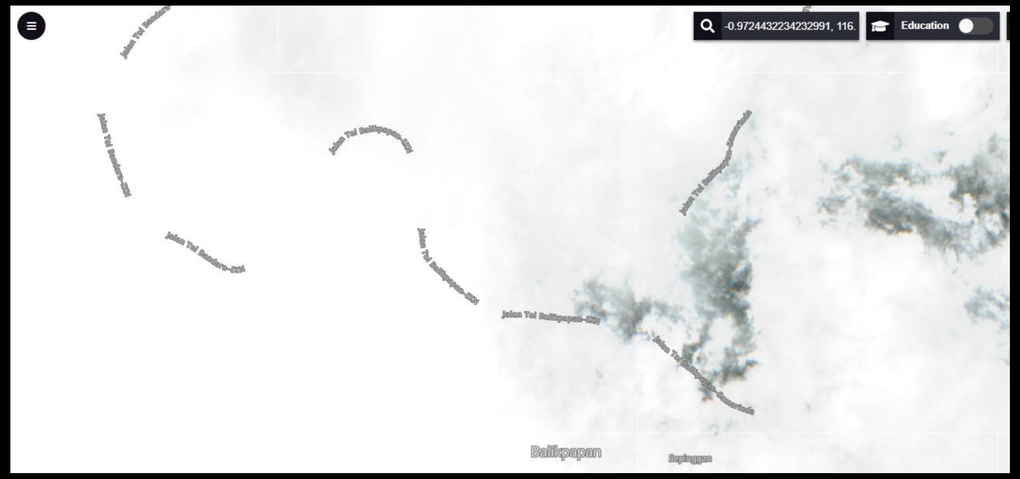
Deteksi Senjata & Milliter

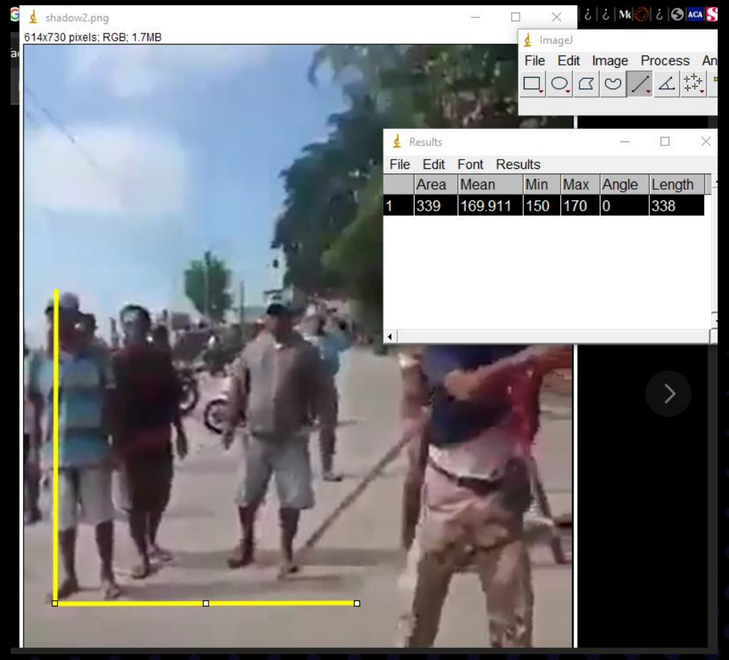


Geospatial (GIS) Int & Monitoring

TANTANGAN MASINT?

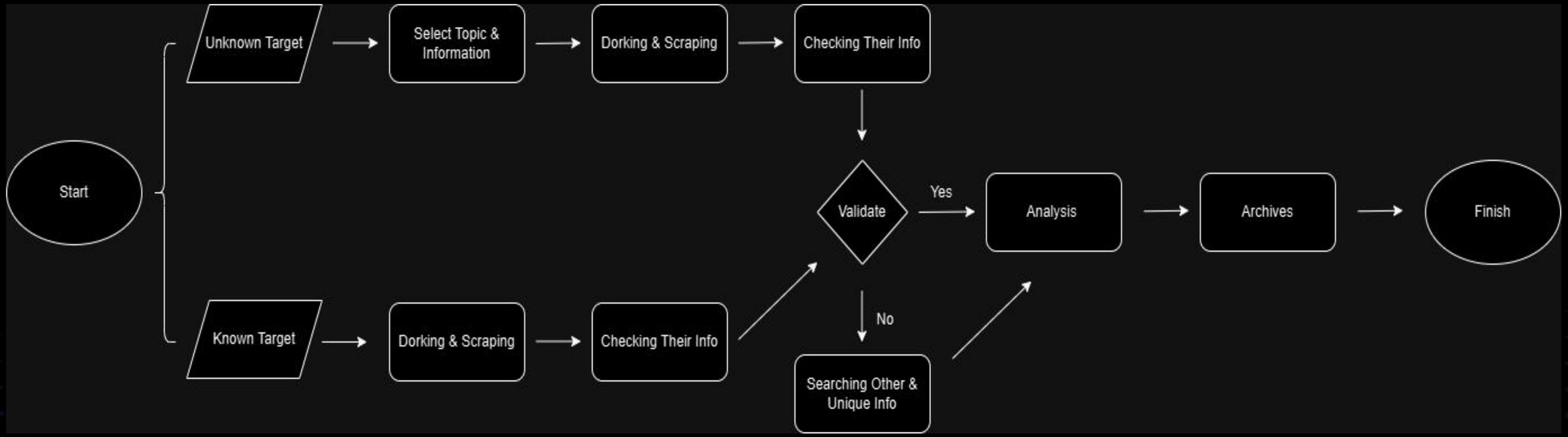
- Pengkajian data
- Banyaknya variabel
- Alat dan resouces yang memadai
- Keterbatasan data
- Pencarian data yang beresiko
- Gangguan pada sensor & satelit
- Akurasi atau legitmate
- Lingkungan & zona waktu





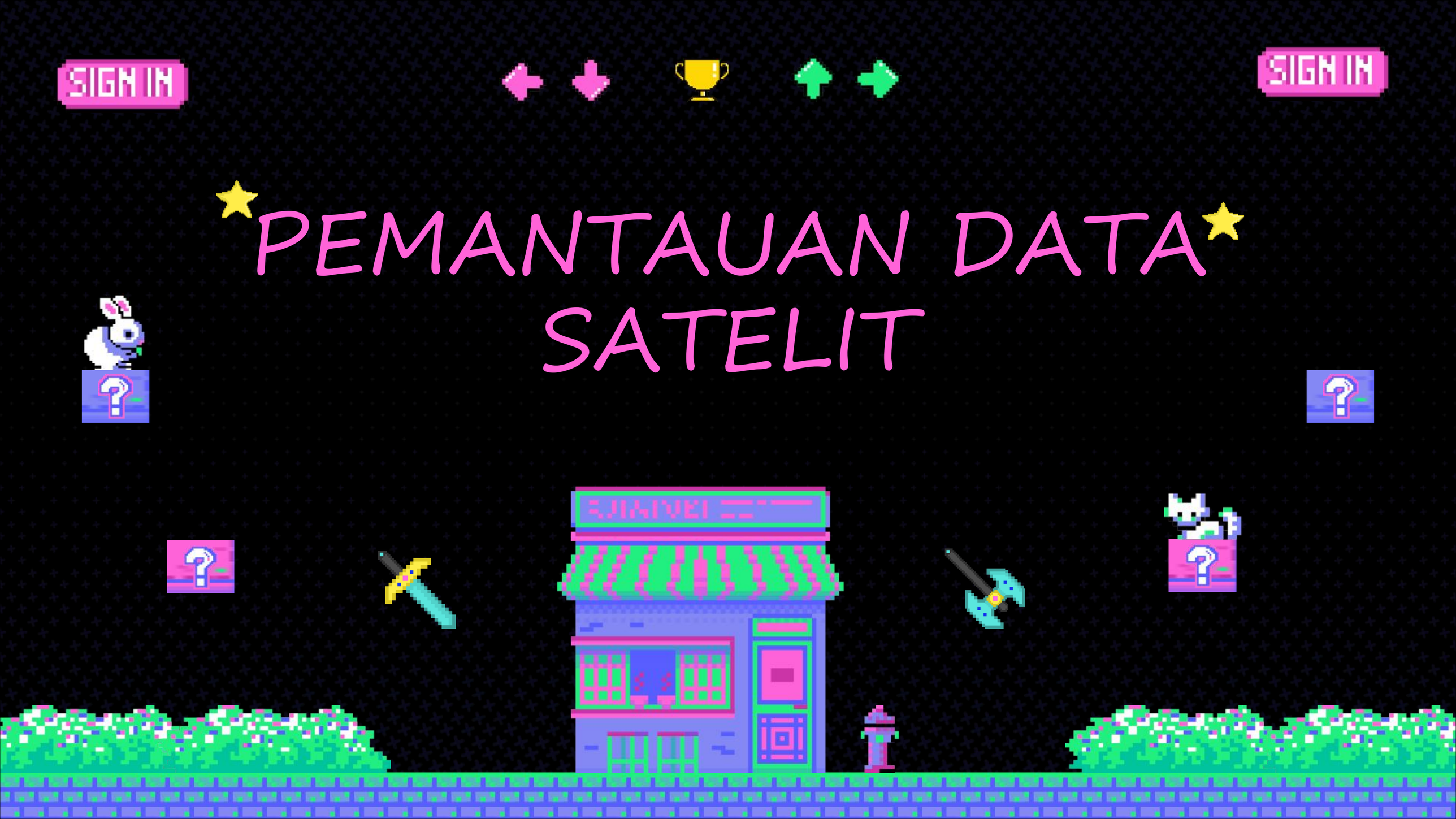
METODOLOGI

OSINT - ATTACK VECTOR



Jieyab89 Wiki

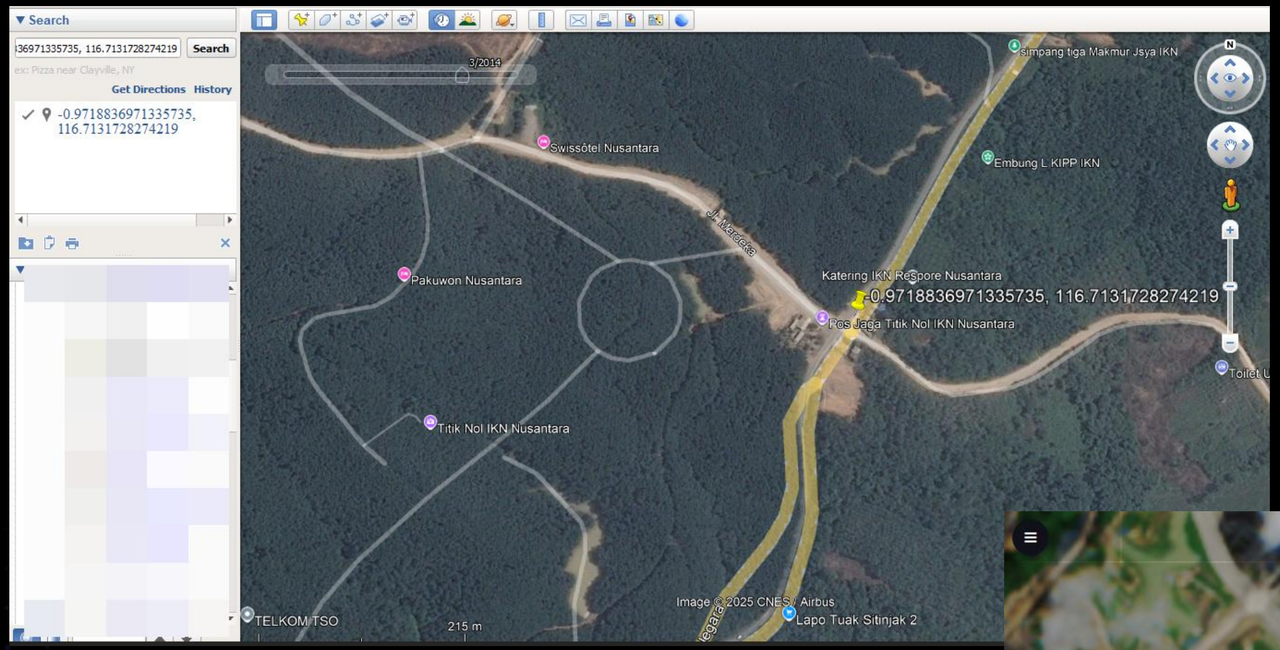
PEMANTAUAN DATA SATELIT



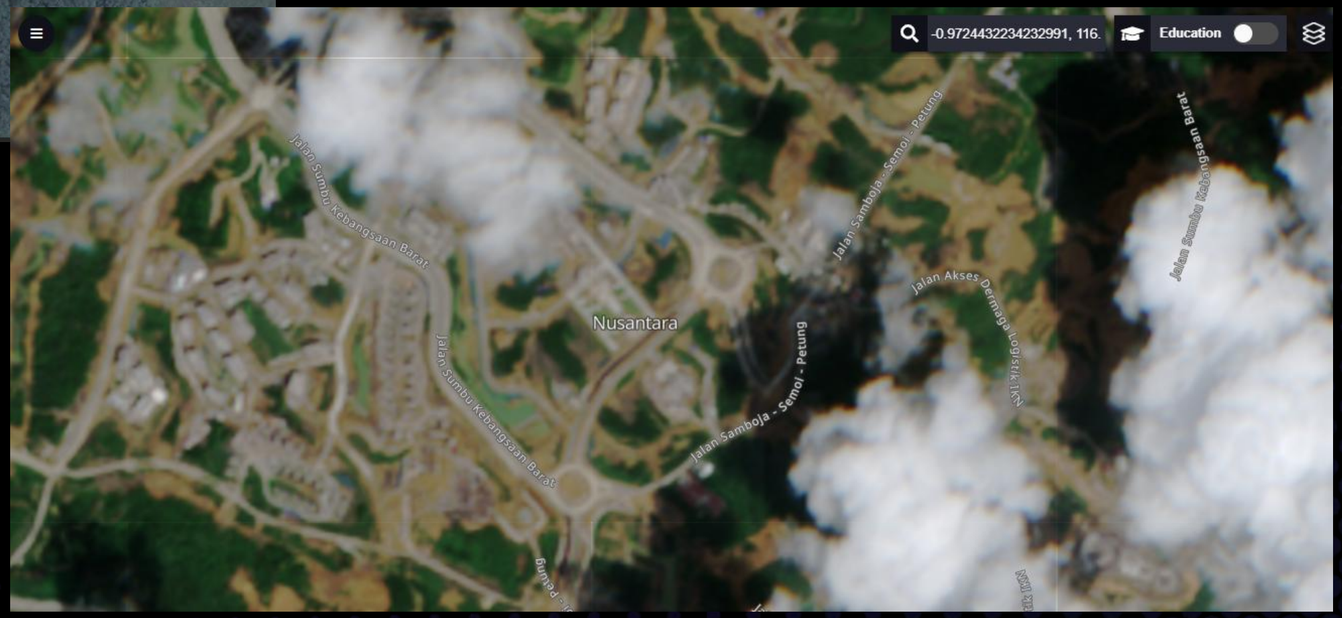
CARA PEMANTAUAN & PENCARIAN

- Tentukan objek
- Pahami karakteristik tiap satelit
- Pahami karakteristik tiap sensor
- Pahami karakteristik tiap platform GIS
- Tentukan data yang akan dianalisis
- Validasi data
- Arsip data

STUDI KASUS 1

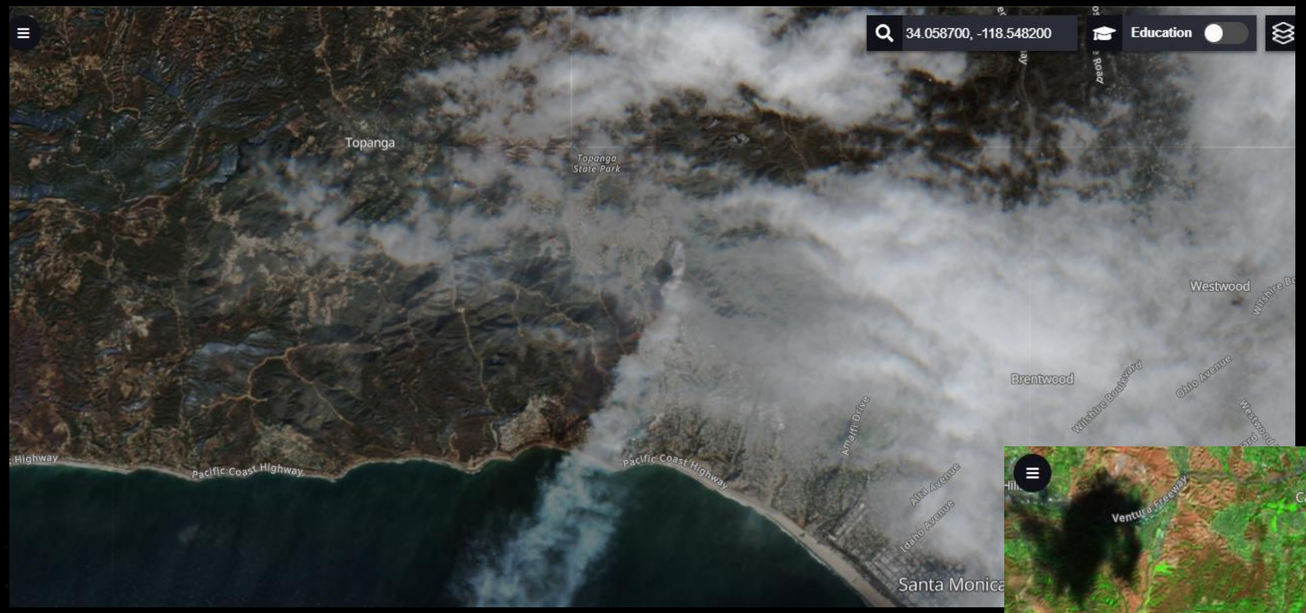


ID IKN 2014

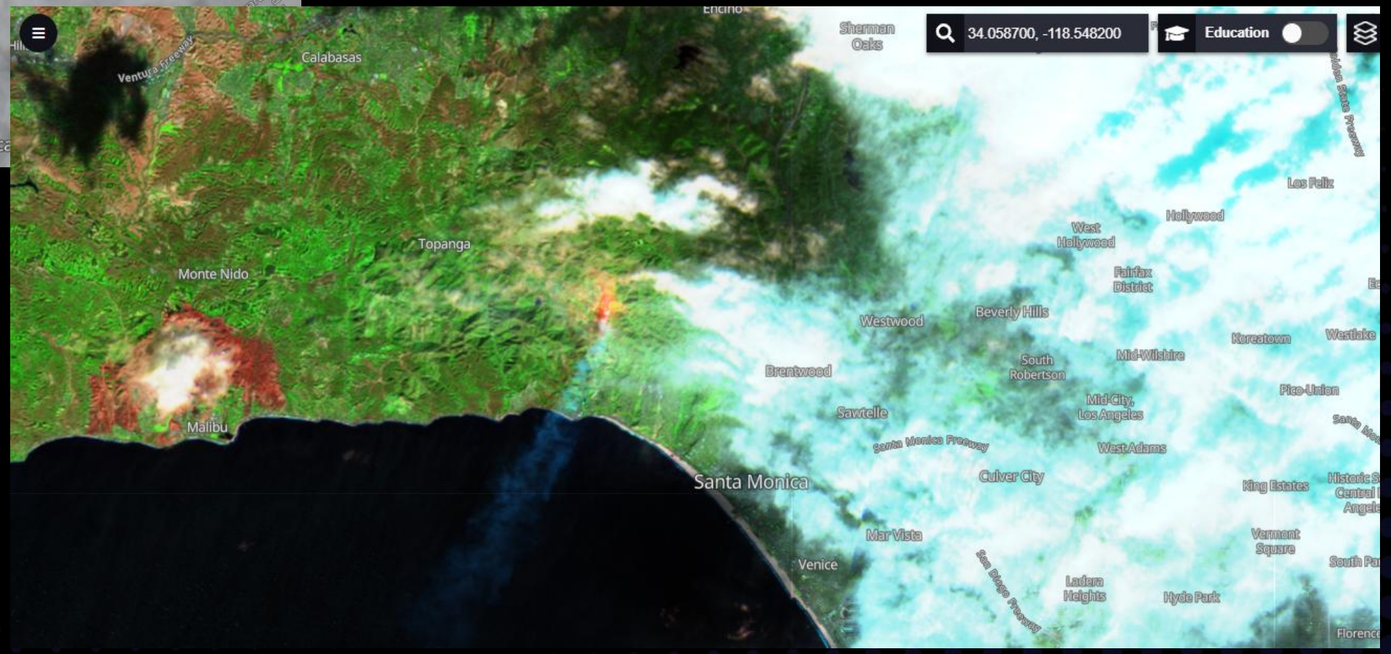


ID IKN 2025

STUDI KASUS 2

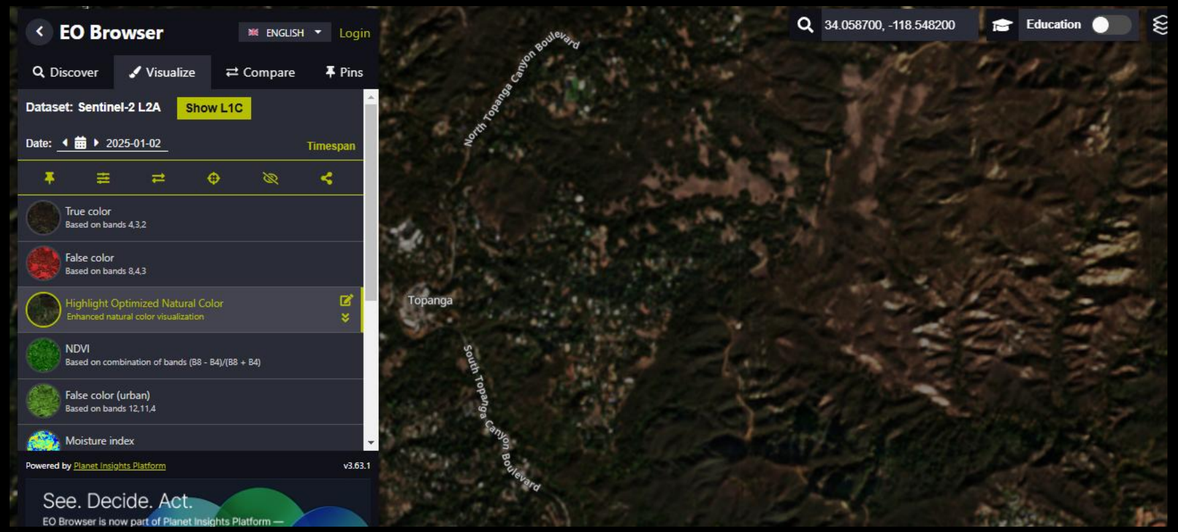


Los Angeles 7 Jan 2025

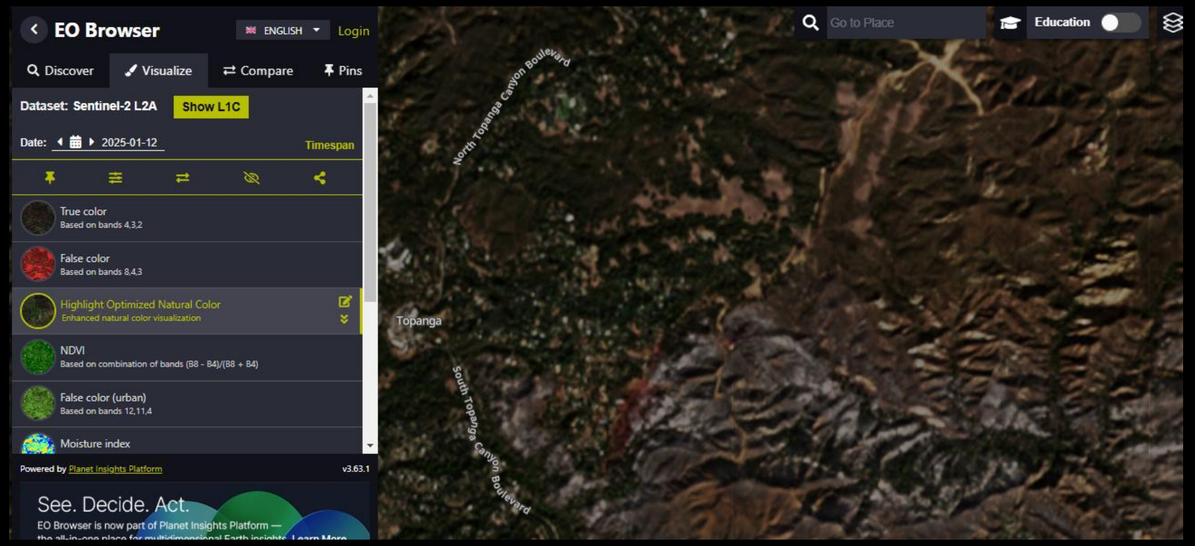


Los Angeles 7 Jan 2025

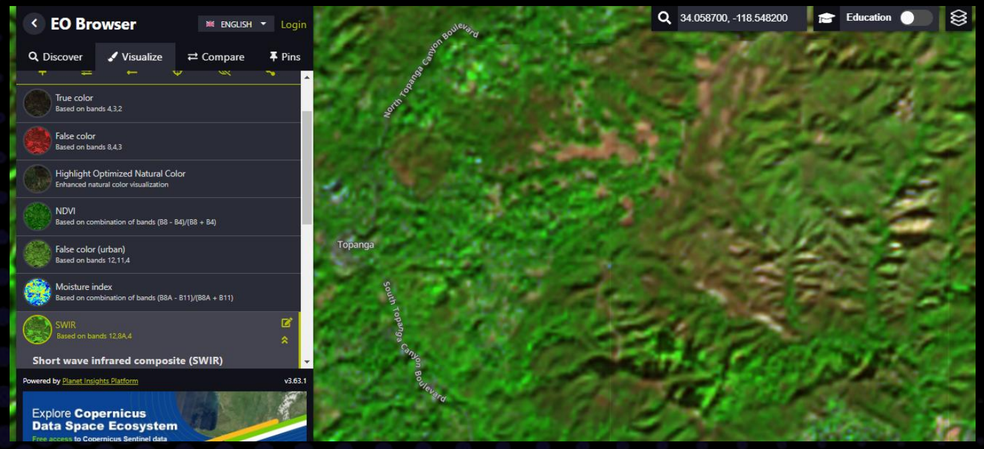
STUDI KASUS 2.1



Los Angeles 2 Jan 2025



Los Angeles 12 Jan 2025

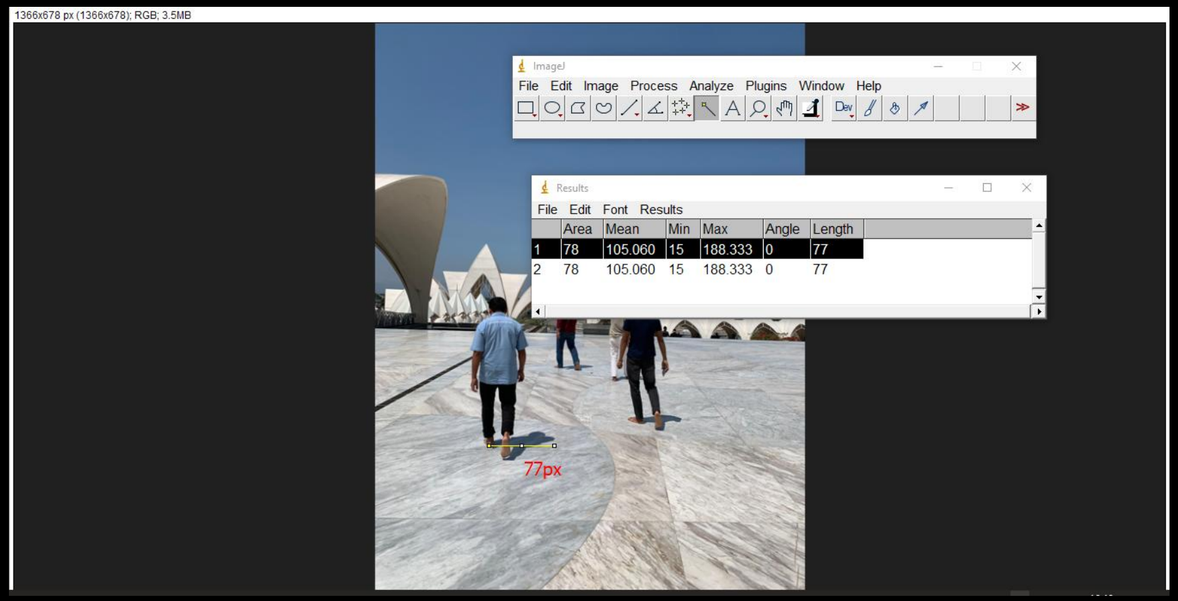


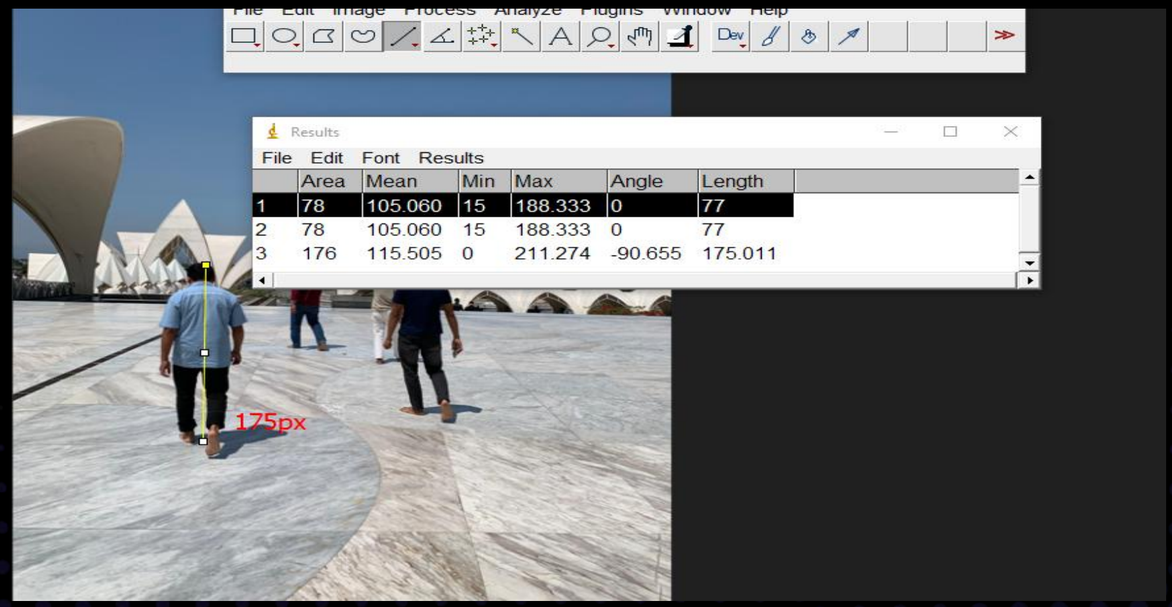

SIGN IN
SIGN IN
PENGUKURAN
WAKTU

CARA MENENTUKAN WAKTU

- Terdapat arah matahari atau bayangan
- Terdapat objek
- Menentukan titik lokasi
- Usahakan arah objek & bayangan tegak lurus dengan kamera
- Tanggal harus diketahui
- Gambar masih orisinil tidak ada unsur edit atau kamera cembung
- Tentukan tools pixel measurement
- Jika ada bayangan pastikan bayangan pada di tempat datar

STUDI KASUS 1 - IMAGE J





STUDI KASUS 1.1 - IMAGE J

OBJECT

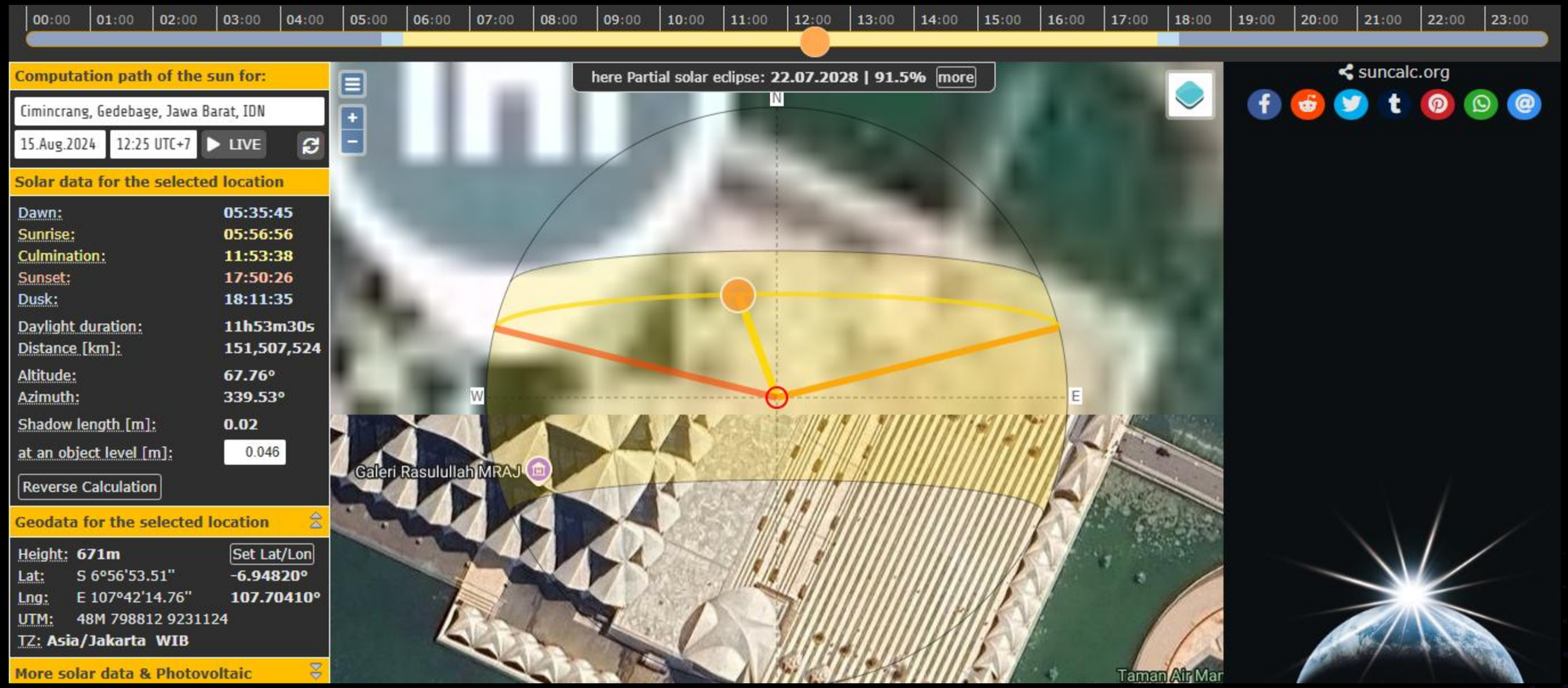
175.011px = 4.630499375 CM

Shadow

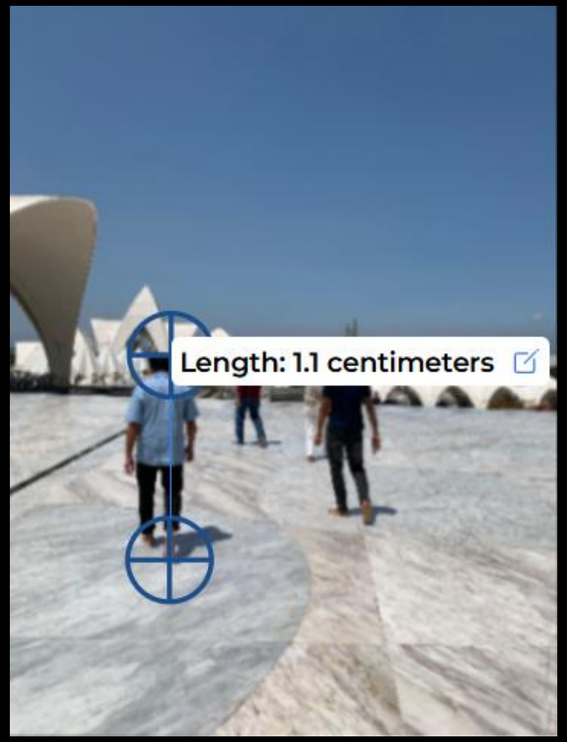
77px = 2.037292 CM

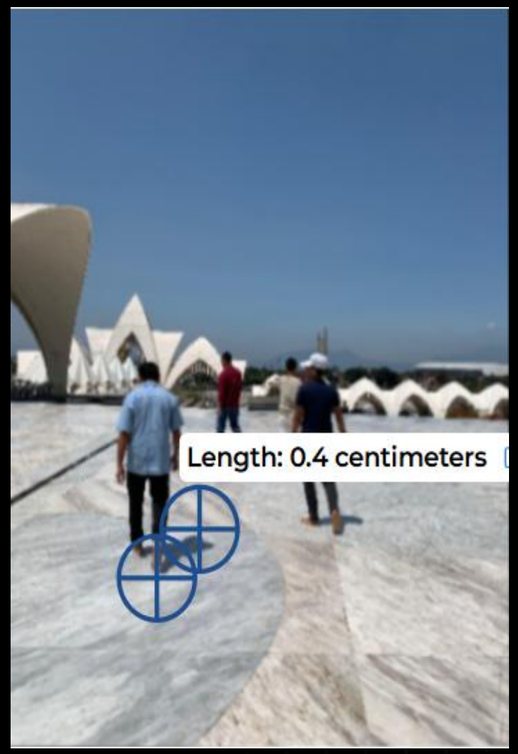
Convert ke M

Object = 0,04630499375 M
Shadow = 0,02037292 M

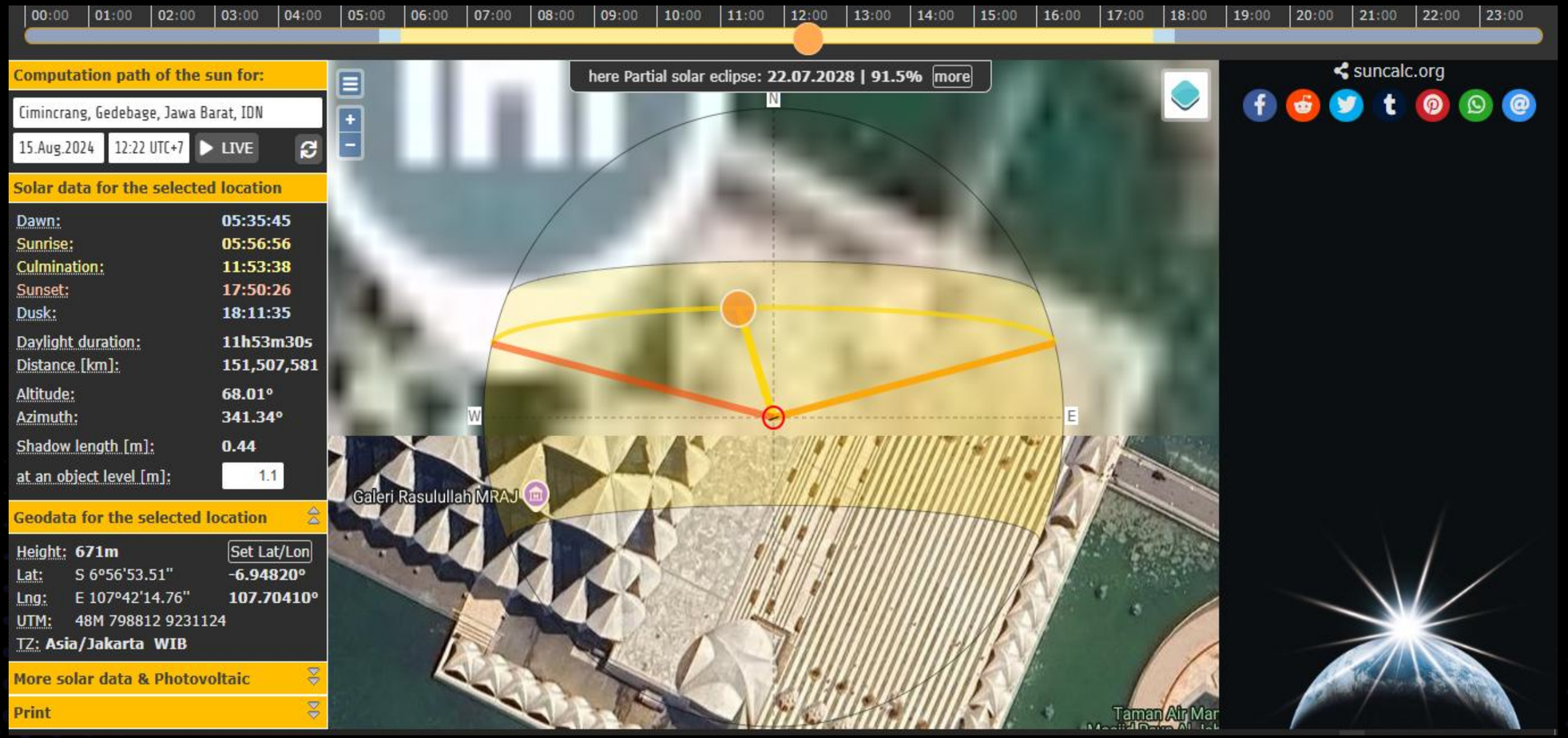


STUDI KASUS 2 - IMAGE MEASURE

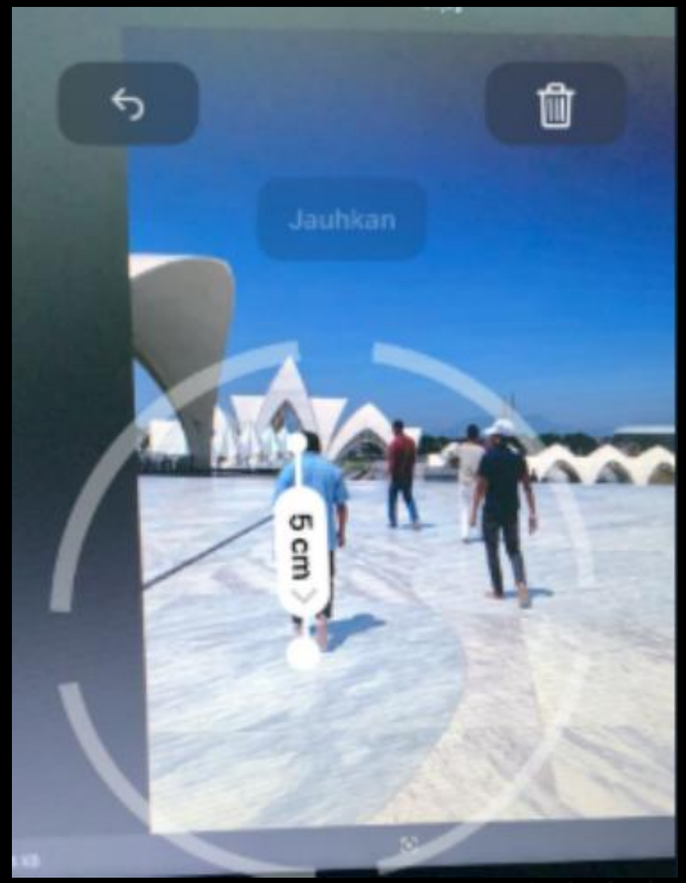




STUDI KASUS 2.1 - IMAGE MEASURE



STUDI KASUS 3 - APPLE MEASURE



STUDI KASUS 3.1 - APPLE MEASURE

OBJECT

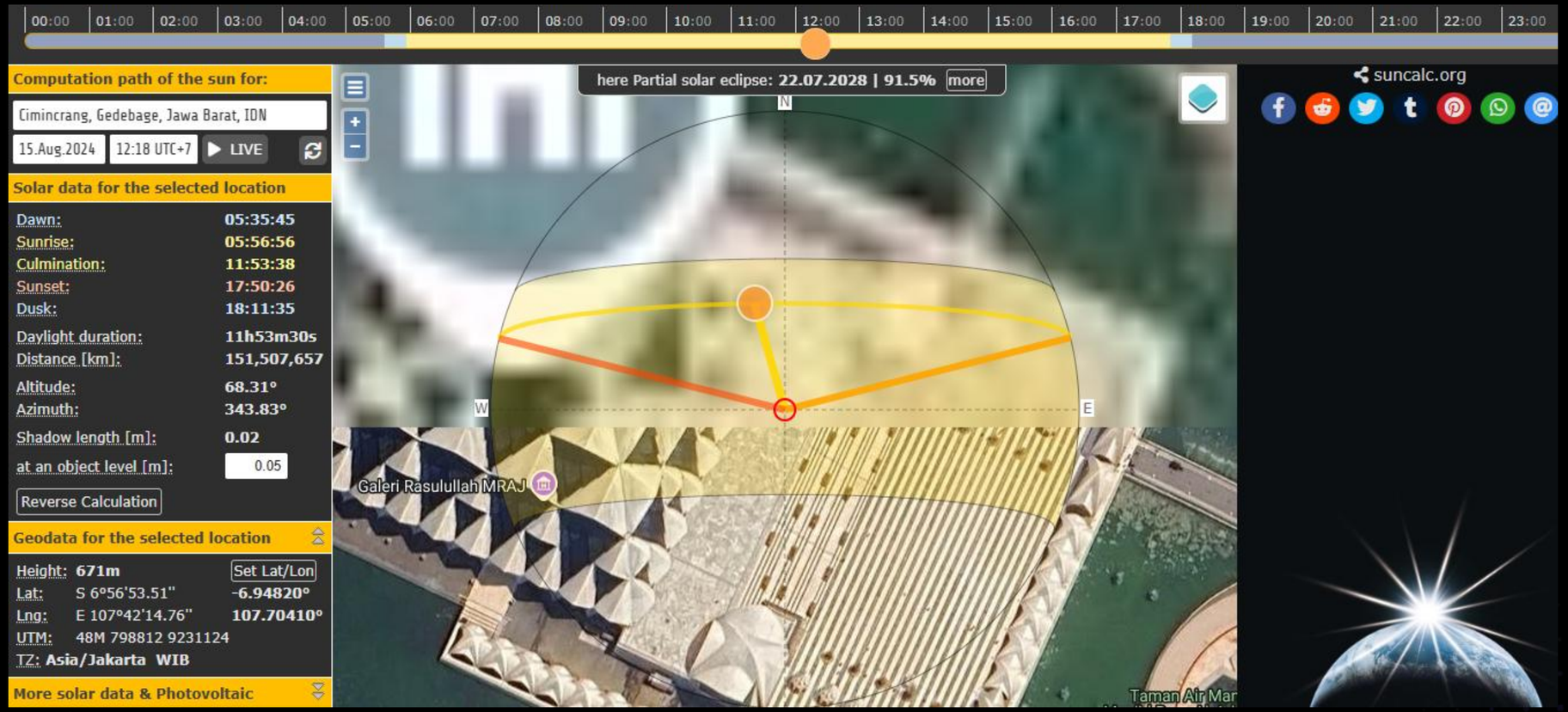
5 CM

Shadow

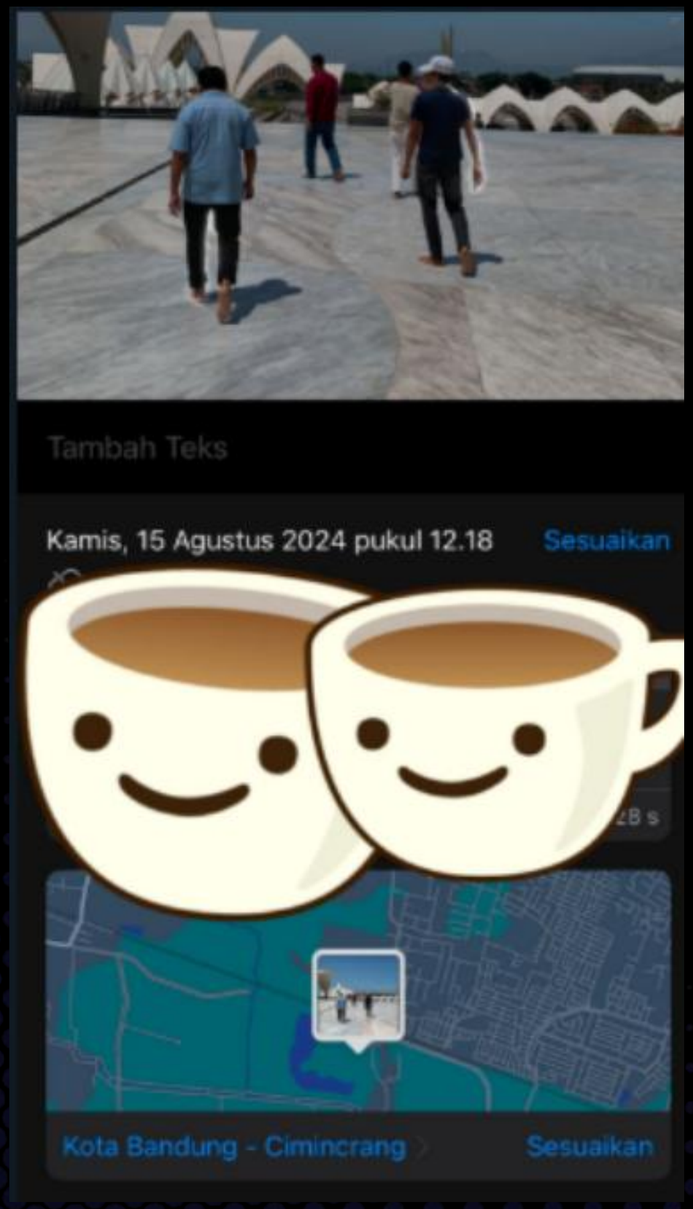
1 CM

Convert ke M

Object = 0,05
Shadow = 0,01



CHECK DATA - TIME MEASURE



Perkiraan waktu nya adalah sekitar pukul 12.00 - 13.00 WIB

SIGN IN

SIGN IN

VERIFIKASI DATA

TEKNIK VERIFIKASI DATA

- ❑ Terdapat unsur 5W + 1H
- ❑ Cari sumber yang berbeda
- ❑ Pahami BIAS
- ❑ Verifikasi dokumen atau dataset yang ada
- ❑ Check darimana sumber tersebut?
- ❑ Mengapa atau alasan adanya topik (narasi) tersebut?
- ❑ Check AI atau deepfake
- ❑ Parsing data dengan text intelijen seperti sentimen, waktu, akun (Knowing patern)
- ❑ Check data broker archiver (web archiver & etc)

STUDI KASUS

E1681 | fx PS0120

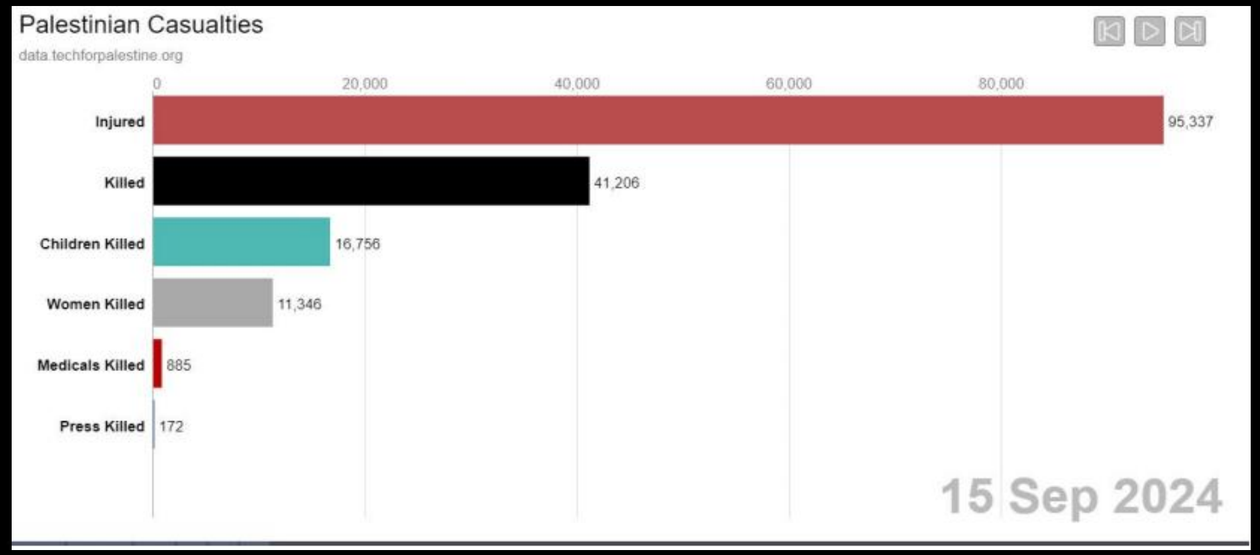
	A	B	C	D	E	F	G	H
1								
2	Palestine	Gaza Strip	Deir El Balah	PSE	PS0265	PS02	January	2016
3	Palestine	Gaza Strip	Rafah	PSE	PS0275	PS02	January	2016
4	Palestine	West Bank	Ramallah and Al Bireh	PSE	PS0130	PS01	January	2016
5	Palestine	West Bank	Al Quds	PSE	PS0140	PS01	January	2016
6	Palestine	West Bank	Jenin	PSE	PS0101	PS01	January	2016
7	Palestine	West Bank	Tubas	PSE	PS0105	PS01	January	2016
8	Palestine	West Bank	Tulkarm	PSE	PS0110	PS01	January	2016
9	Palestine	Gaza Strip	Gaza City	PSE	PS0260	PS02	January	2016
10	Palestine	Gaza Strip	Khan Yunis	PSE	PS0270	PS02	January	2016
11	Palestine	West Bank	Nablus	PSE	PS0115	PS01	January	2016
12	Palestine	West Bank	Salfit	PSE	PS0125	PS01	January	2016
13	Palestine	Gaza Strip	North Gaza	PSE	PS0255	PS02	January	2016
14	Palestine	West Bank	Bethlehem	PSE	PS0145	PS01	January	2016
15	Palestine	West Bank	Hebron	PSE	PS0150	PS01	January	2016
16	Palestine	West Bank	Jericho	PSE	PS0135	PS01	January	2016
17	Palestine	West Bank	Qalqilya	PSE	PS0120	PS01	January	2016
18	Palestine	Gaza Strip	Deir El Balah	PSE	PS0265	PS02	February	2016
19	Palestine	Gaza Strip	Rafah	PSE	PS0275	PS02	February	2016
20	Palestine	West Bank	Ramallah and Al Bireh	PSE	PS0130	PS01	February	2016
21	Palestine	West Bank	Al Quds	PSE	PS0140	PS01	February	2016
22	Palestine	West Bank	Jenin	PSE	PS0101	PS01	February	2016
23	Palestine	West Bank	Tubas	PSE	PS0105	PS01	February	2016
24	Palestine	West Bank	Tulkarm	PSE	PS0110	PS01	February	2016
25	Palestine	Gaza Strip	Gaza City	PSE	PS0260	PS02	February	2016

OCHA HUMANTARIAN DATA EXCHANGE

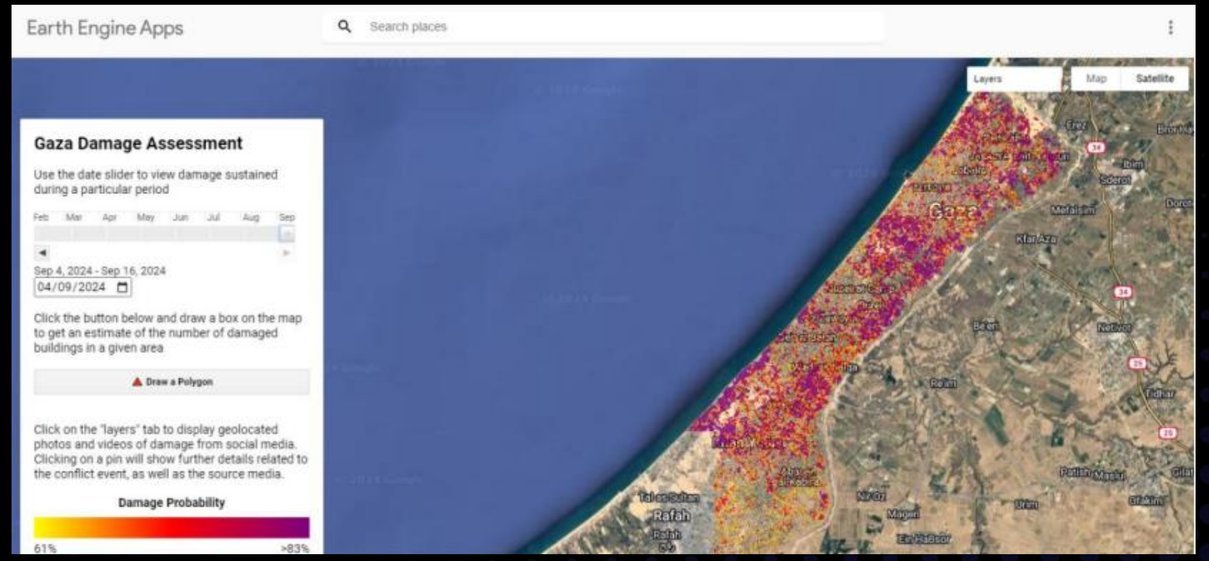
E1681 | fx PS0120

	A	B	C	D	E	F	G	H
1658	Palestine	Gaza Strip	Khan Yunis	PSE	PS0270	PS02	August	2024
1659	Palestine	West Bank	Nablus	PSE	PS0115	PS01	August	2024
1660	Palestine	West Bank	Salfit	PSE	PS0125	PS01	August	2024
1661	Palestine	Gaza Strip	North Gaza	PSE	PS0255	PS02	August	2024
1662	Palestine	West Bank	Bethlehem	PSE	PS0145	PS01	August	2024
1663	Palestine	West Bank	Hebron	PSE	PS0150	PS01	August	2024
1664	Palestine	West Bank	Jericho	PSE	PS0135	PS01	August	2024
1665	Palestine	West Bank	Qalqilya	PSE	PS0120	PS01	August	2024
1666	Palestine	Gaza Strip	Deir El Balah	PSE	PS0265	PS02	Septembe	2024
1667	Palestine	Gaza Strip	Rafah	PSE	PS0275	PS02	Septembe	2024
1668	Palestine	West Bank	Ramallah and Al Bireh	PSE	PS0130	PS01	Septembe	2024
1669	Palestine	West Bank	Al Quds	PSE	PS0140	PS01	Septembe	2024
1670	Palestine	West Bank	Jenin	PSE	PS0101	PS01	Septembe	2024
1671	Palestine	West Bank	Tubas	PSE	PS0105	PS01	Septembe	2024
1672	Palestine	West Bank	Tulkarm	PSE	PS0110	PS01	Septembe	2024
1673	Palestine	Gaza Strip	Gaza City	PSE	PS0260	PS02	Septembe	2024
1674	Palestine	Gaza Strip	Khan Yunis	PSE	PS0270	PS02	Septembe	2024
1675	Palestine	West Bank	Nablus	PSE	PS0115	PS01	Septembe	2024
1676	Palestine	West Bank	Salfit	PSE	PS0125	PS01	Septembe	2024
1677	Palestine	Gaza Strip	North Gaza	PSE	PS0255	PS02	Septembe	2024
1678	Palestine	West Bank	Bethlehem	PSE	PS0145	PS01	Septembe	2024
1679	Palestine	West Bank	Hebron	PSE	PS0150	PS01	Septembe	2024
1680	Palestine	West Bank	Jericho	PSE	PS0135	PS01	Septembe	2024
1681	Palestine	West Bank	Qalqilya	PSE	PS0120	PS01	Septembe	2024
1682								

STUDI KASUS



DATA TECHFORPALESTINE



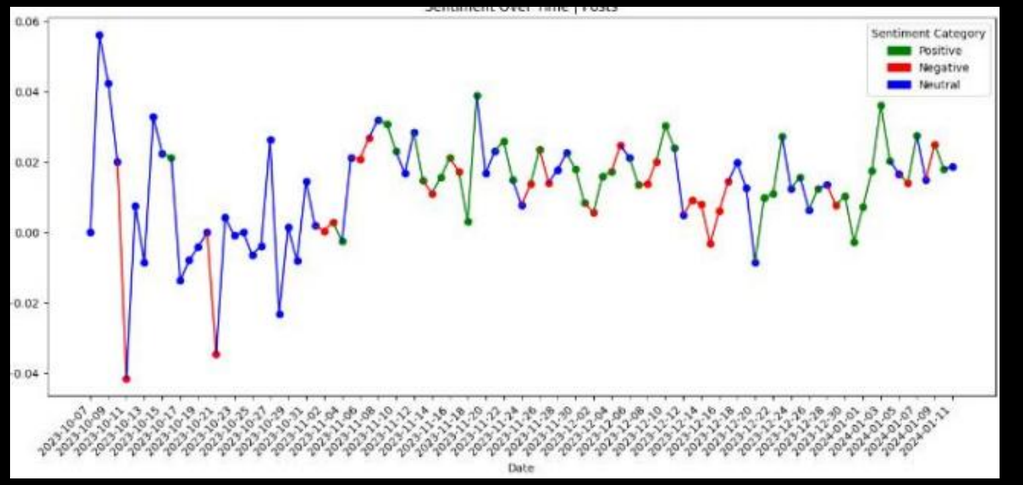
DATA DAMAGE GEE BELLINGCAT

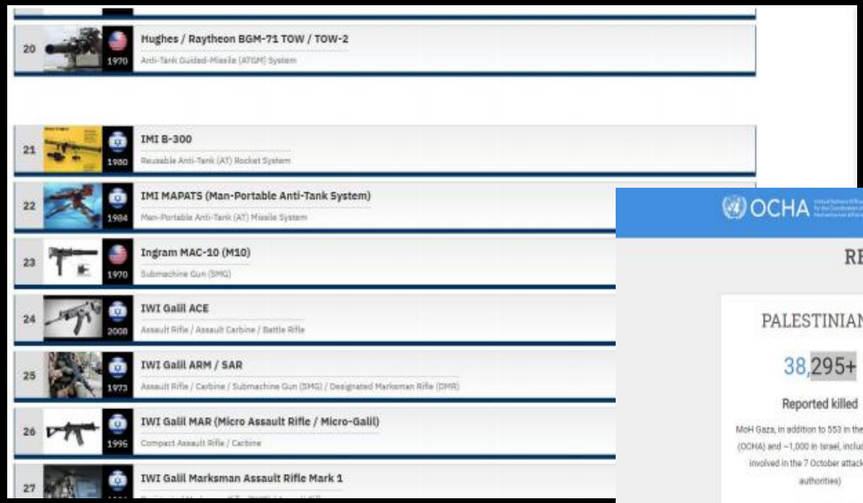
APA YANG HARUS DILAKUKAN?

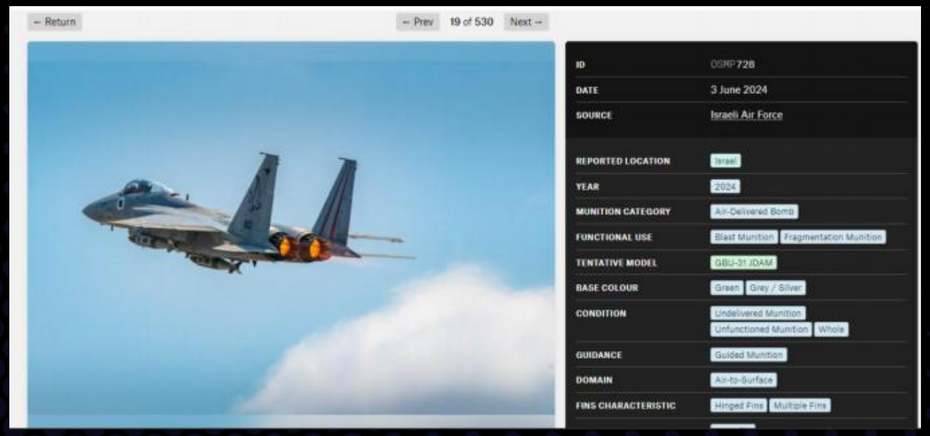
- ❑ Melakukan parsing data
- ❑ Pencarian data
- ❑ Pententuan 5W + 1H
- ❑ Analisis
- ❑ Pengumpulan data untuk pembanding
- ❑ Arsip data dan pengumpulan bukti yang ada
- ❑ Verifikasi data e.g geolocate & time measure
- ❑ Pelaporan dan kesimpulan


SIGN IN
SIGN IN
EXAMPLE

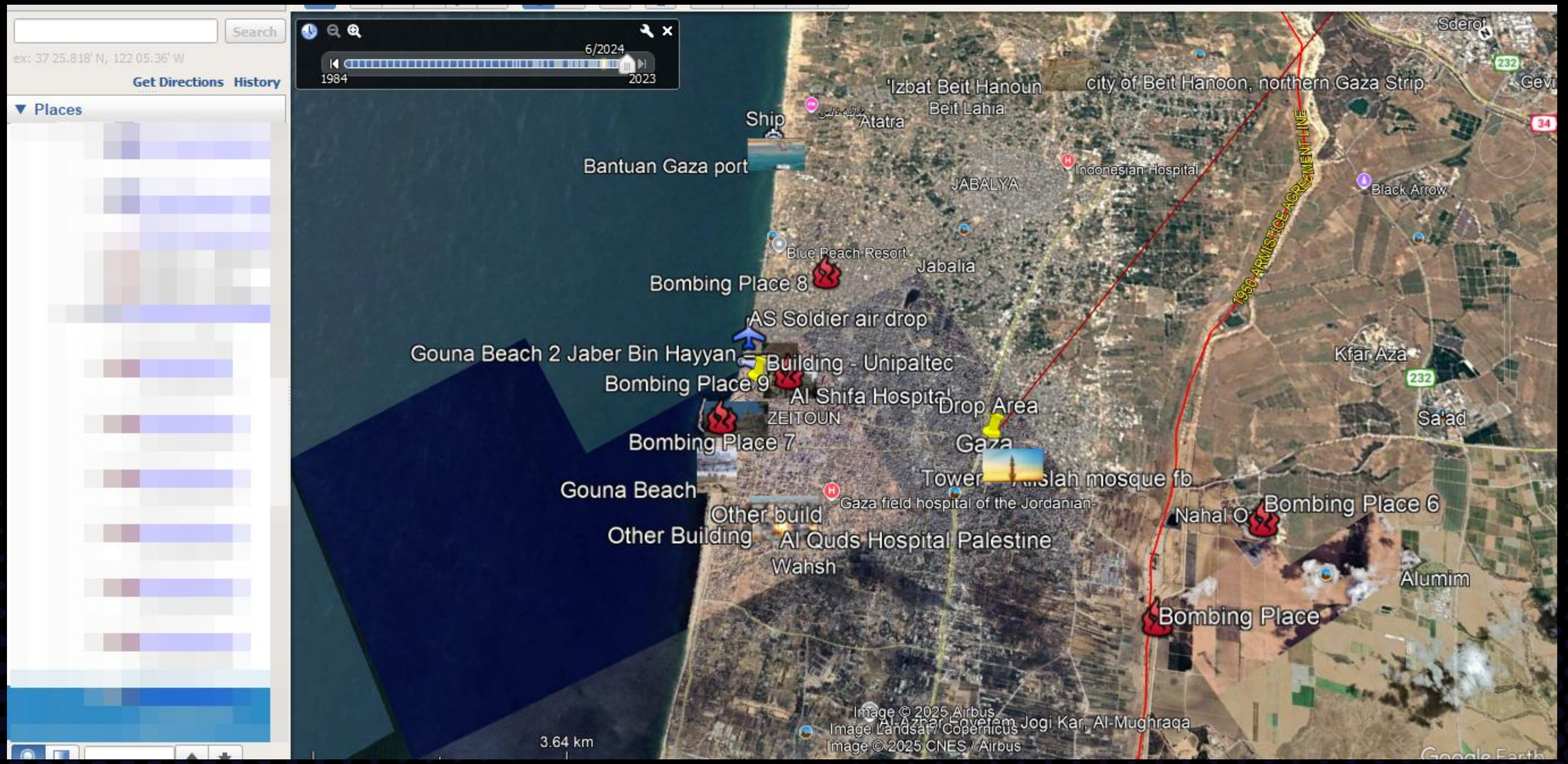
PENCARIAN INFORMASI



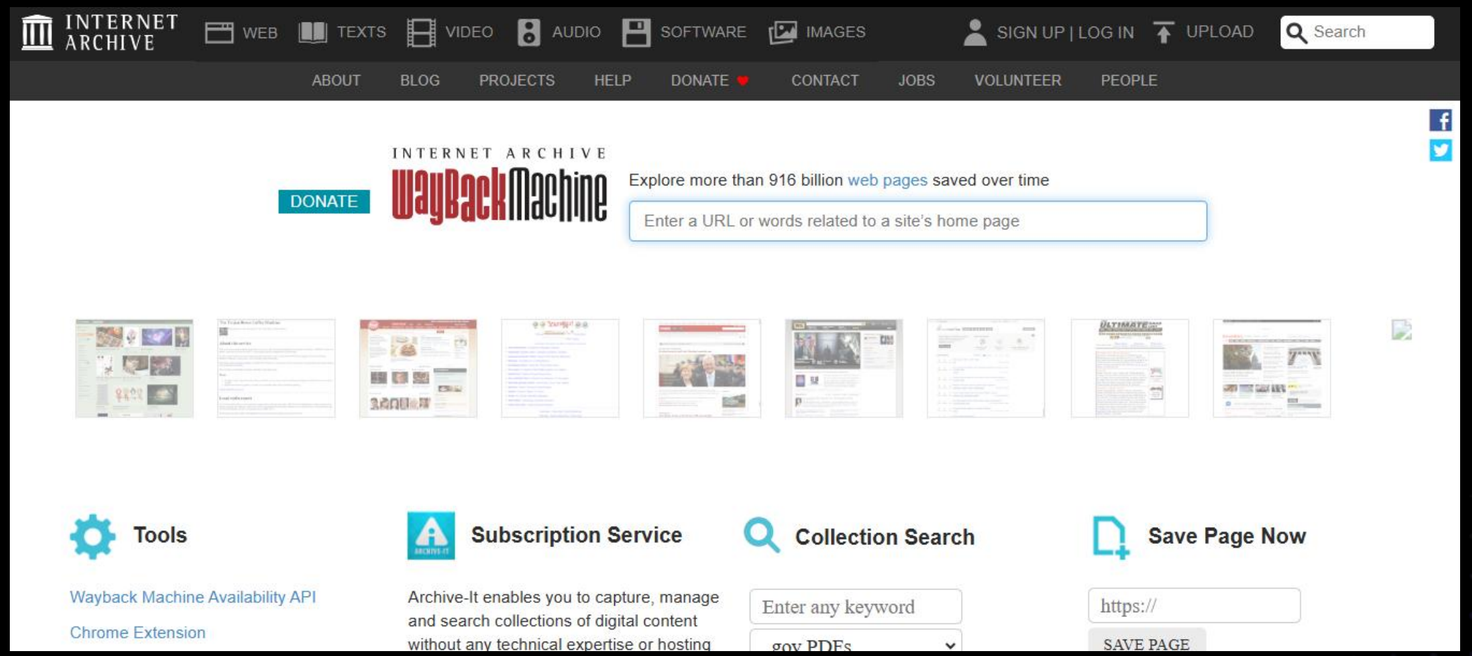




GEOLOCATE & MASINT



REPORTING & ARSIP



TANTANGAN

- Disinformasi & propaganda
- Deepfake atau AI
- Bot atau buzer account
- Keterbatasan data atau sumber daya
- Keterbatasan wewenang
- Time consuming
- Manipulasi data
- Tekanan atau ancaman
- BIAS
- Etika & privasi


SIGN IN
SIGN IN
INTERMEZO & CHEAT SHEETS

TOOLS

❑ General

- Maltego
- Tool scrapper
- Data broker
- Archive site

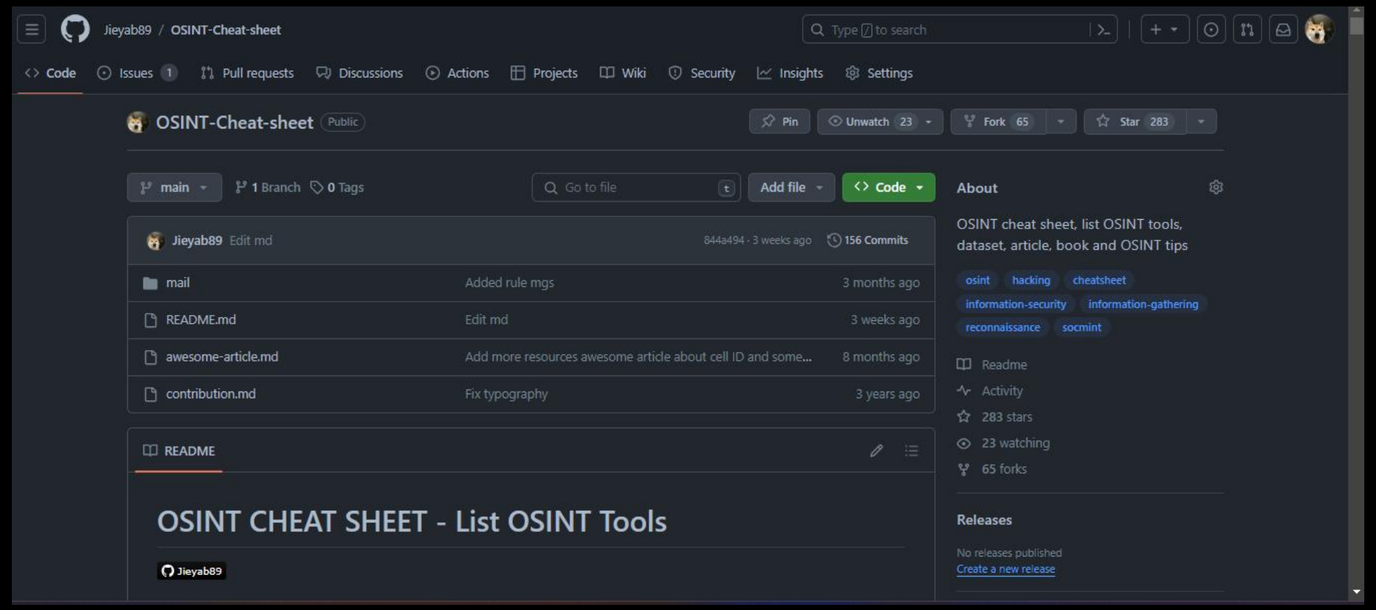
❑ SOCMINT

- Twitterdeck
- Spokeo
- Holehe
- Maltego

❑ MASINT

- Satelite Imagery
- Nasa firms
- Image j, Image measurement, apple measure

Free Resources & Book



OSINT CHEAT SHEET

Table of Content

- Web Intel
- SOCMINT
- SIGINT
- Collection Dataset
- GEOINT
- Darkweb Intel
- CTI
- Cryptocurrency Intel

Free Resources & Book

OSINT Handbook

Table of Content

- Intro about cyber threats intelligence
- Technique cyber threats intelligence
- Platform cyber threats intelligence
- Sample files and case study
- Prevent OSINT technique
- Real case and live target
- Prevent cyber threats
- Social engineering
- Intro about OSINT
- OSINT technique
- Spiderfoot tool
- Maltego tool
- Bonus
- Quiz


LOGOUT
LOGOUT
THANK YOU