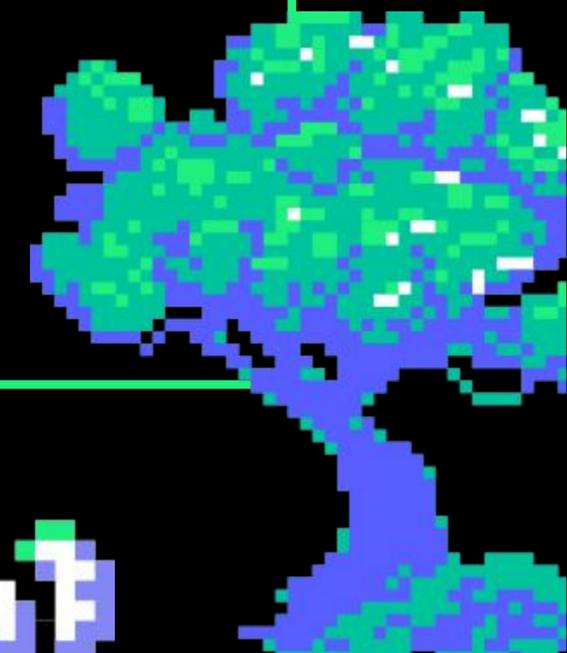
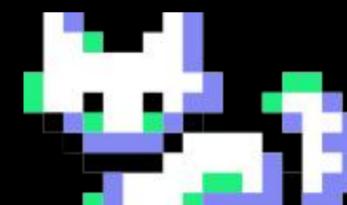


INTRODUCTION OSINT & MASINT
UNTUK INVESTIGASI &
JURNALISTIK

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

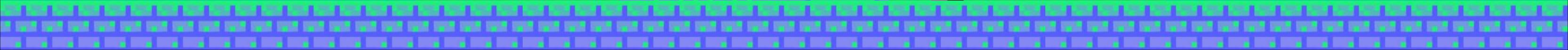
- Apa itu OSINT
- Apa itu MASINT
- Metodologi OSINT & MASINT
- Pemantauan data satelit
- Penentuan waktu
- Verifikasi data
- Geospatial & Geo Tagging
- Cheatsheet OSINT & Intermezo
- Bonus Resouces

SIGN IN

SIGN IN



OSINT?



DARIMANA DATA BERASAL?

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



Global Investigative Journalism Network

Stories

10 Questions with... Hauwa Shaffii Nuhu

Resource Center

Investigating Health and Medicine

GIJN Hub

How to Acquire Free Satellite Imagery for Your Investigations

Open Source Munitions Portal

REPORTED LOCATION (21) YEAR (17) MUNITION CATEGORY (6) FUNCTIONAL USE (8) TENTATIVE MODEL (181) SEARCH

63 results

Air-Delivered Bomb, Palestinian Territories, SPICE 1000 kit

Analyst Note: This image shows a wing fragment from a SPICE-1000 bomb guidance kit. While there are no remnants of the bomb body visible, it can be determined that a MK 83-series 1,000-pound bomb or

OSINT UNTUK APA?

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



TANTANGAN DALAM OSINT

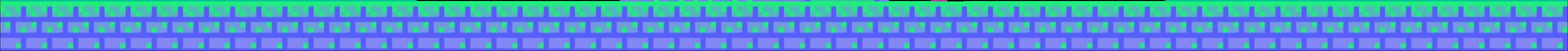
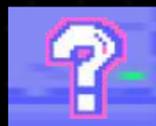
- Banyaknya informasi
- Disinformasi
- Etika dan privasi
- Data yang terbatas
- Geopolitik & Propaganda
- Hukum dari suatu wilayah
- Anonimitas identitas
- Tekanan & Psikologis
- Bot komen dan postingan serta akun bot (buzzer)

SIGN IN

SIGN IN

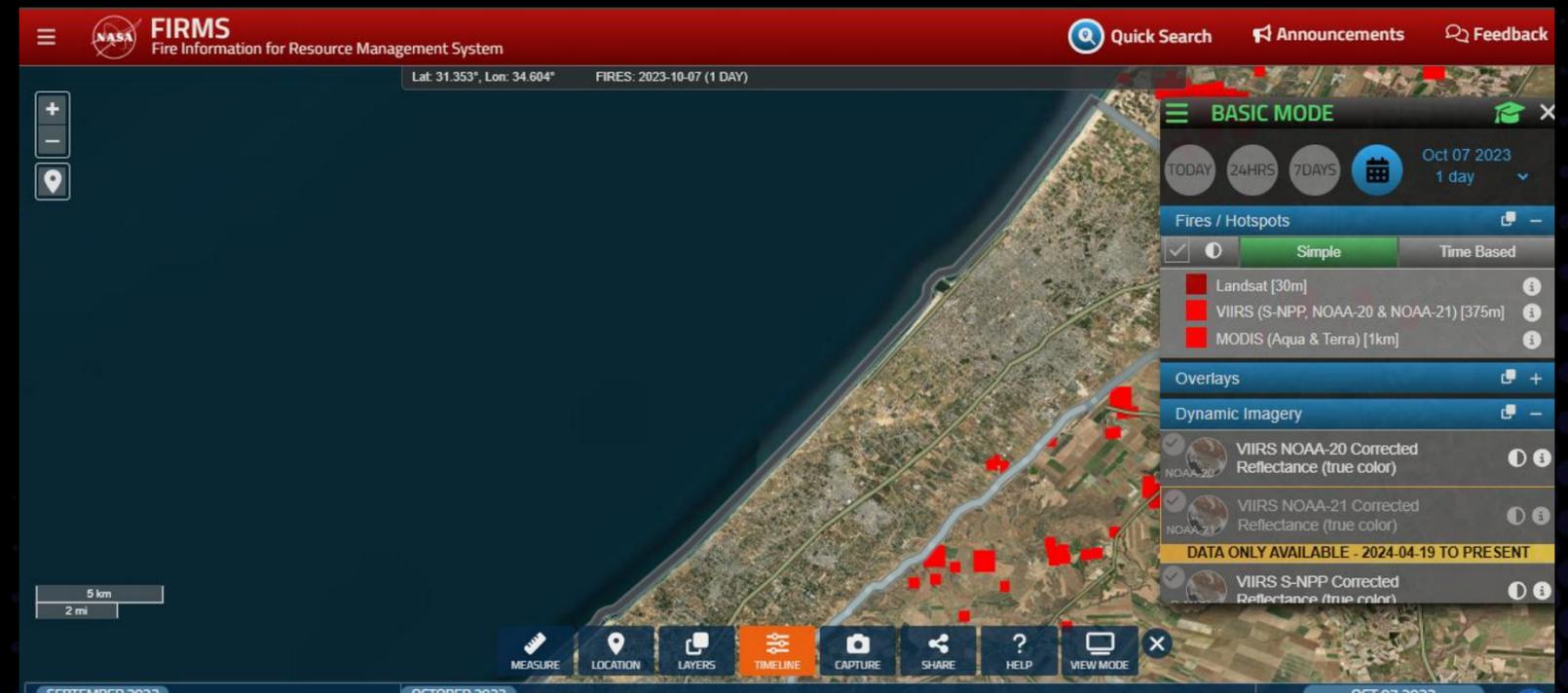
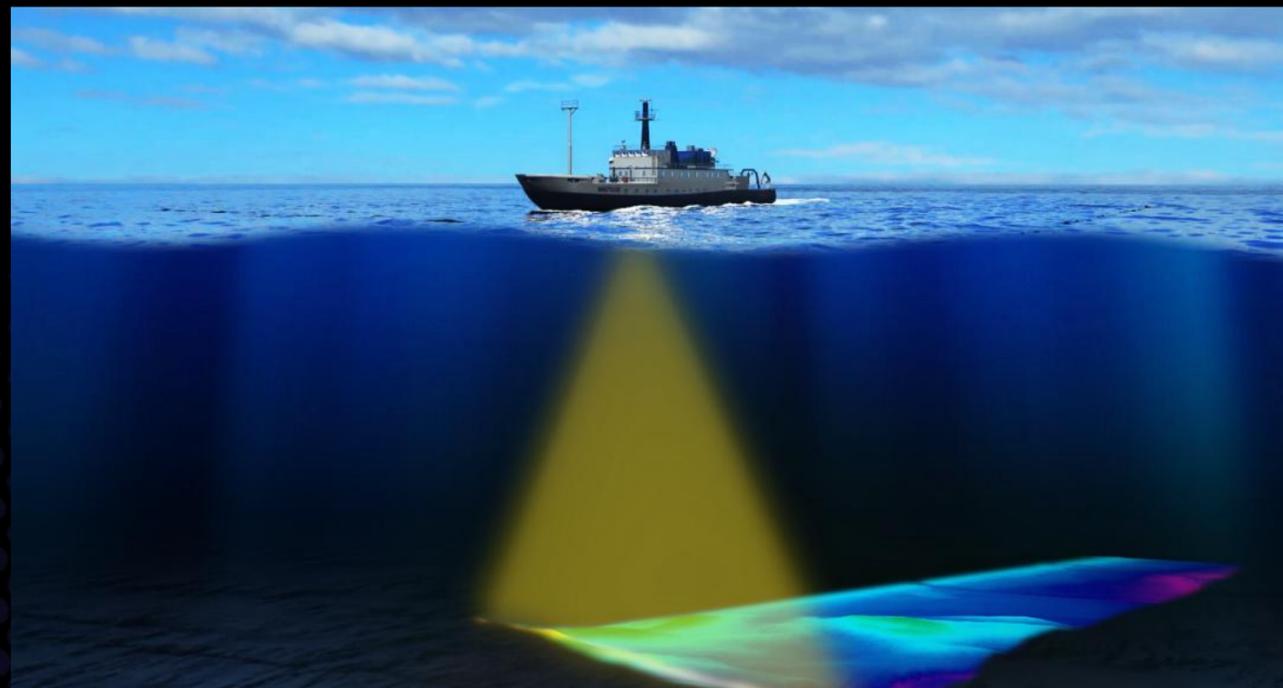
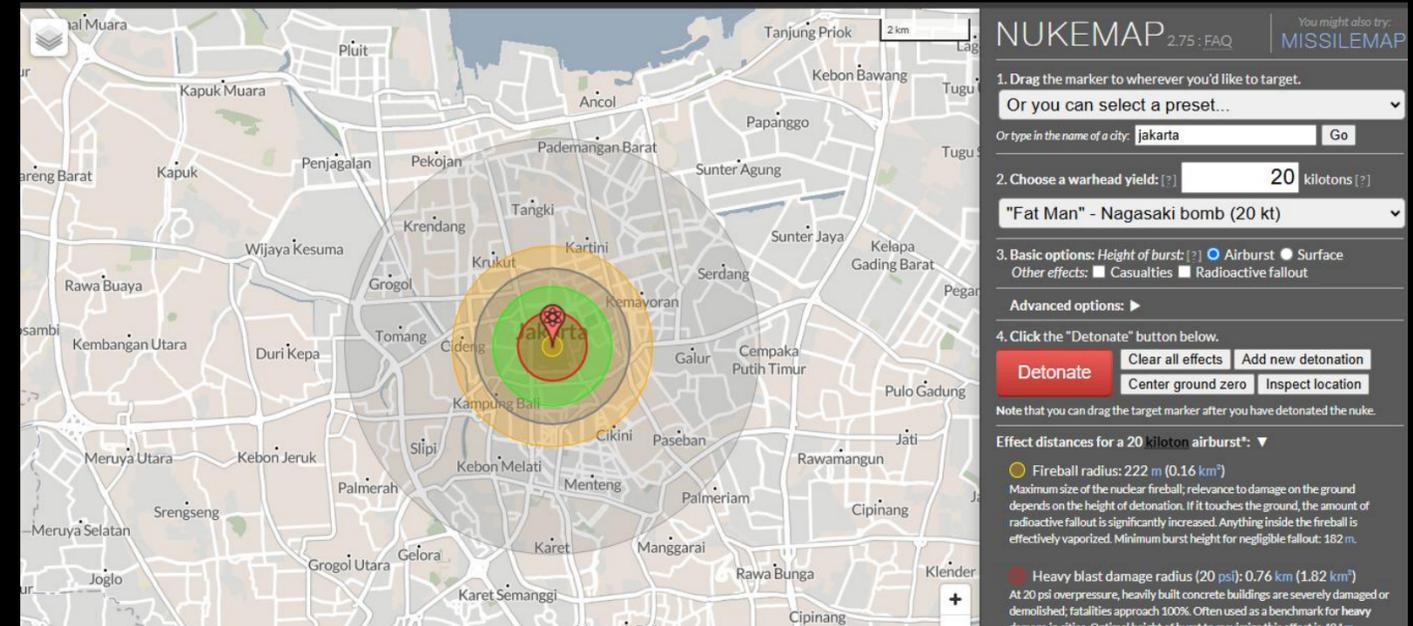


MASINT?



DARIMANA DATA BERASAL?

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



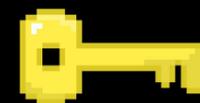
PEMANFAATAN MASINT



Pengukuran & Astronomi
Int



Thermal, Udara, Bencana &
Sensor Gas



Deteksi Senjata & Milliter



Geospatial (GIS) Int &
Monitoring

TANTANGAN MASINT?

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

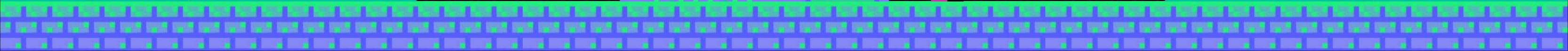


SIGN IN

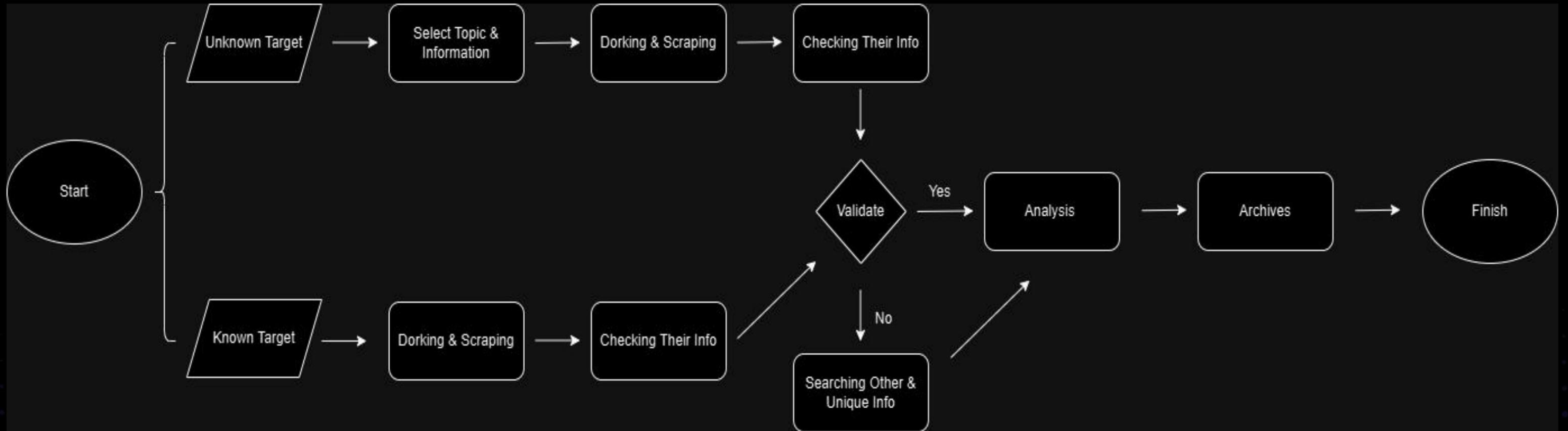
SIGN IN



METODOLOGI



OSINT - ATTACK VECTOR



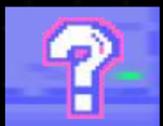
Jieyab89 Wiki

SIGN IN

SIGN IN



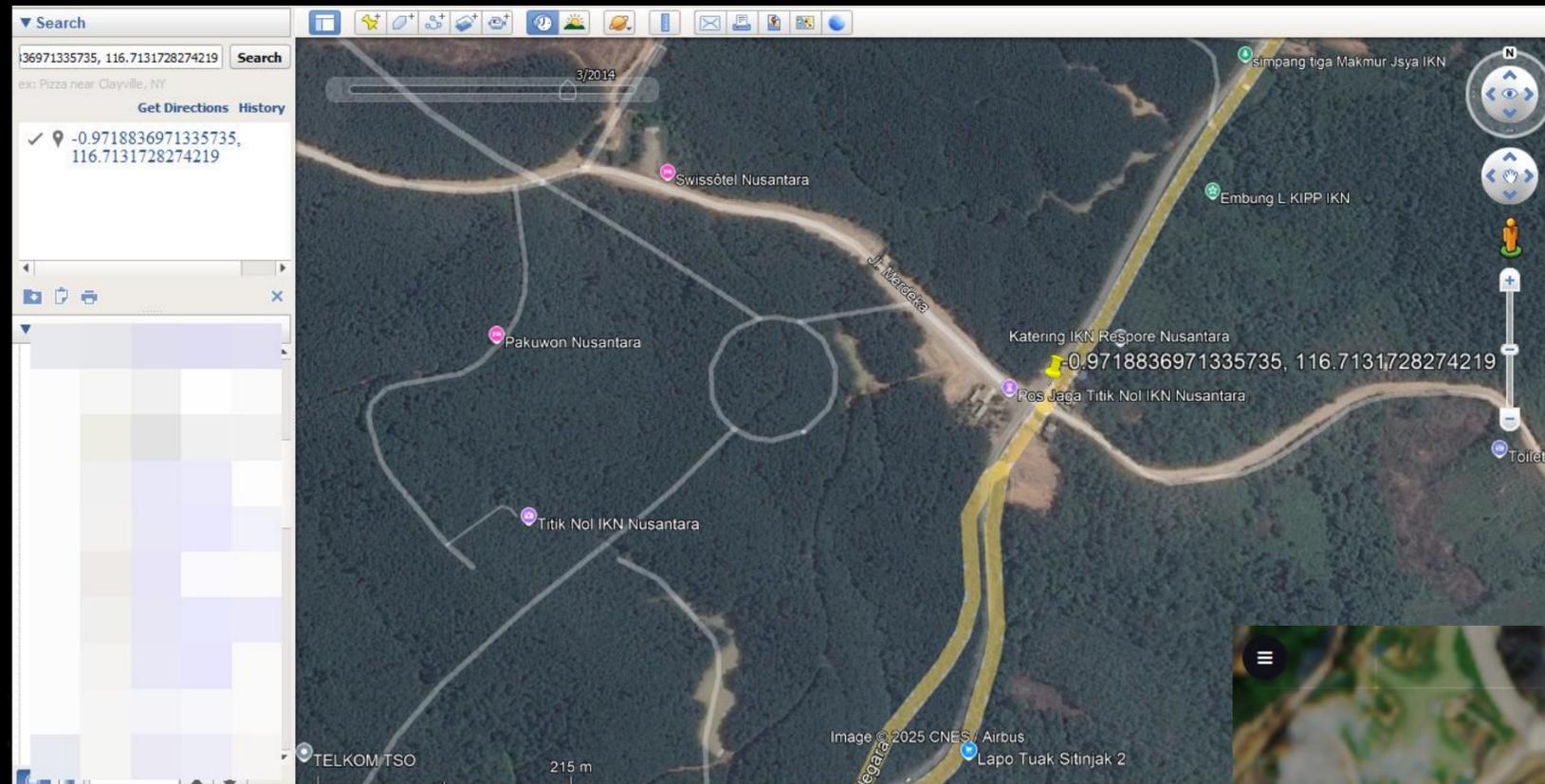
★ PEMANTAUAN DATA ★ SATELIT



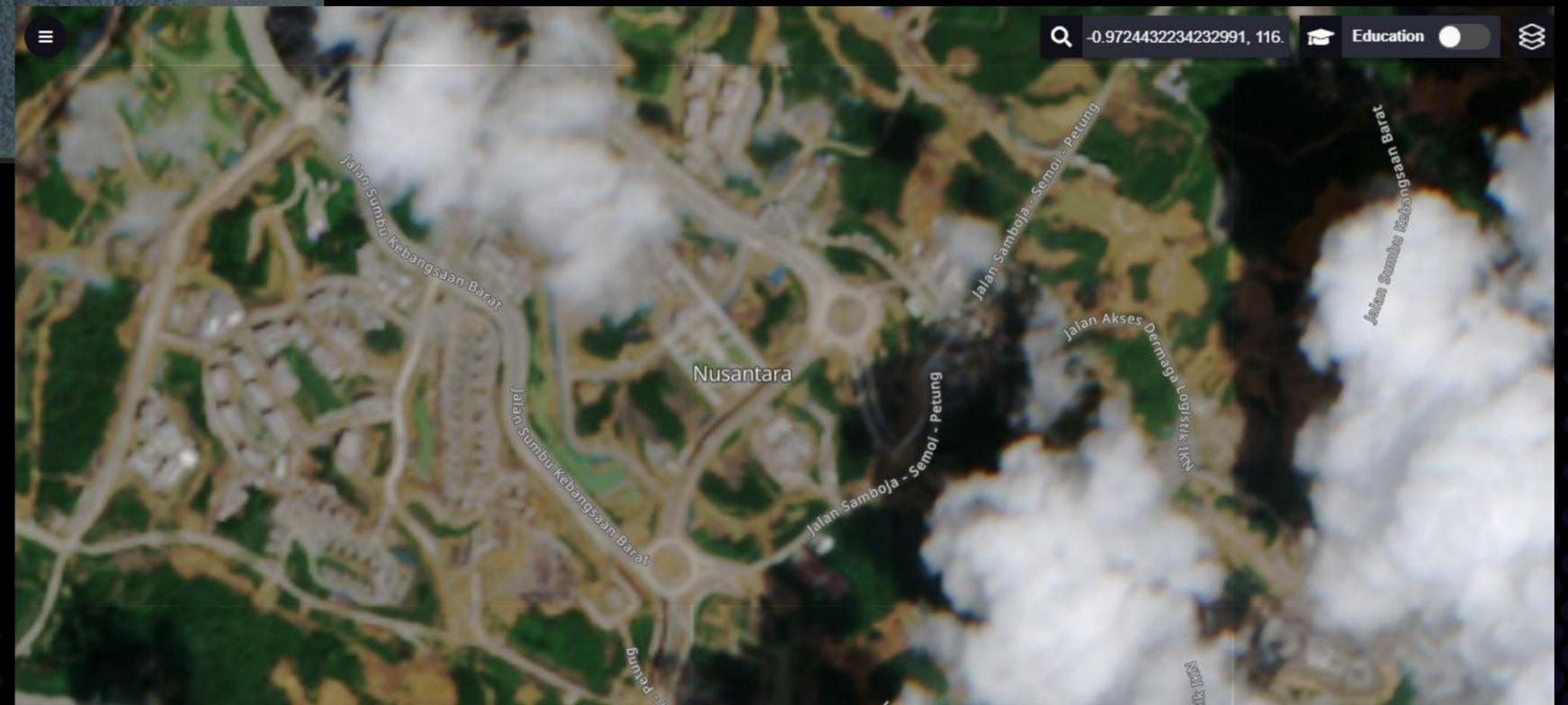
CARA PEMANTAUAN & PENCARIAN

- 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

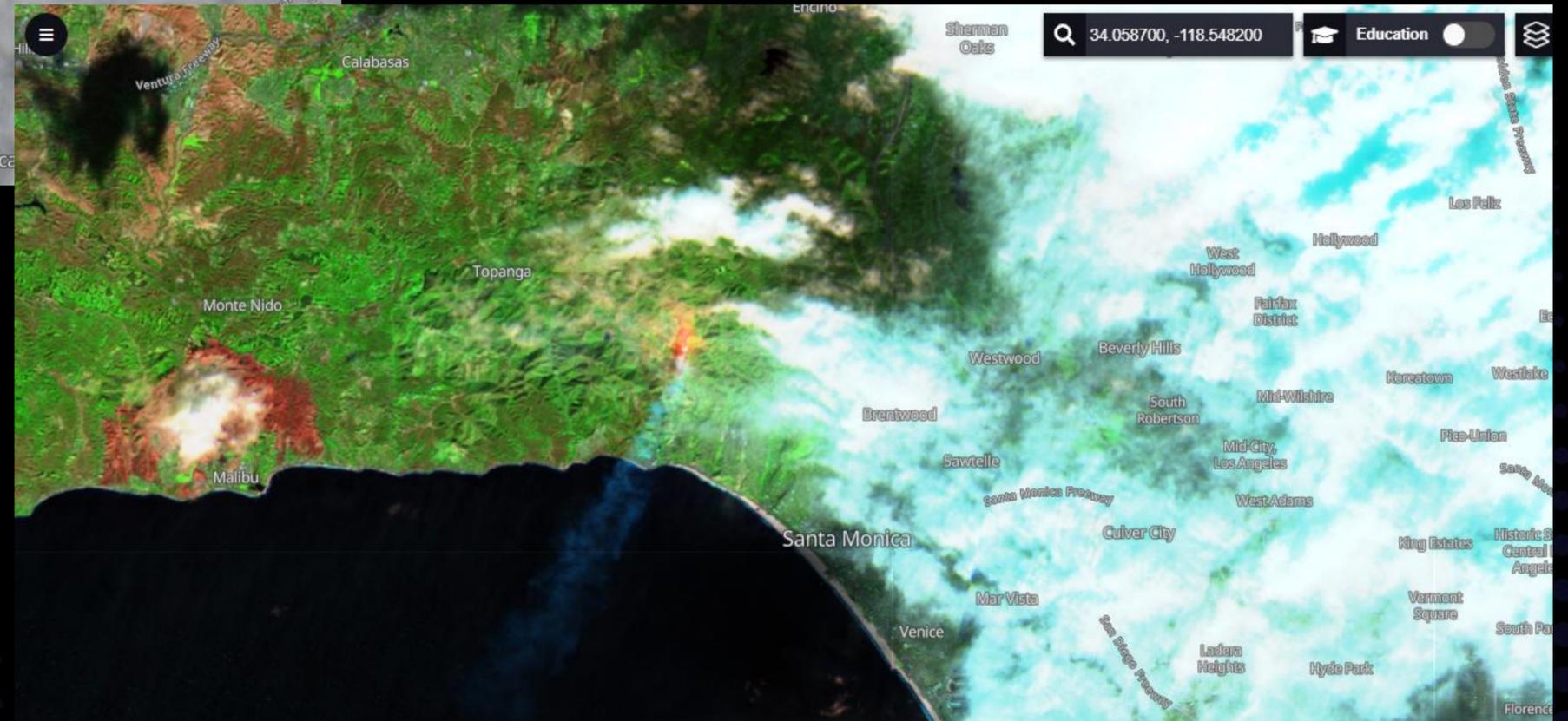


ID IKN 2025

STUDI KASUS 2

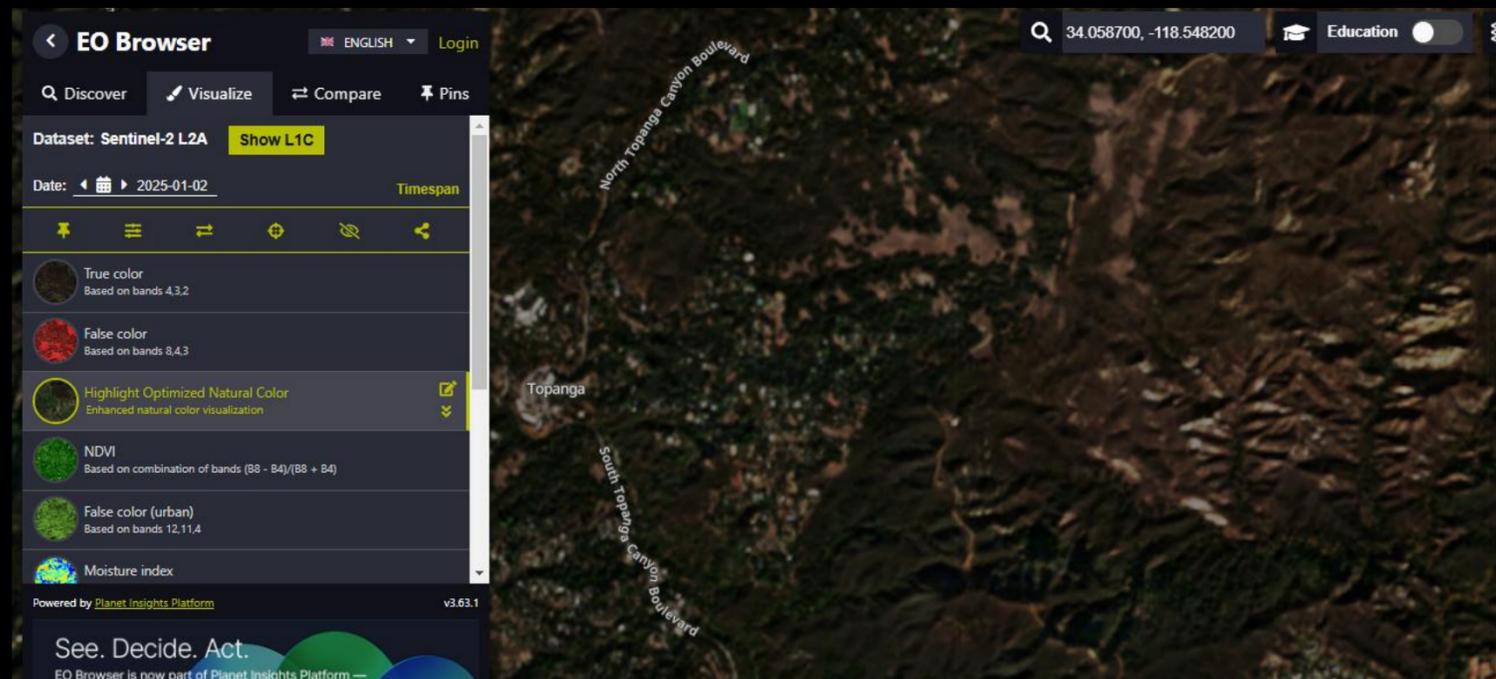


Los Angeles 7 Jan 2025

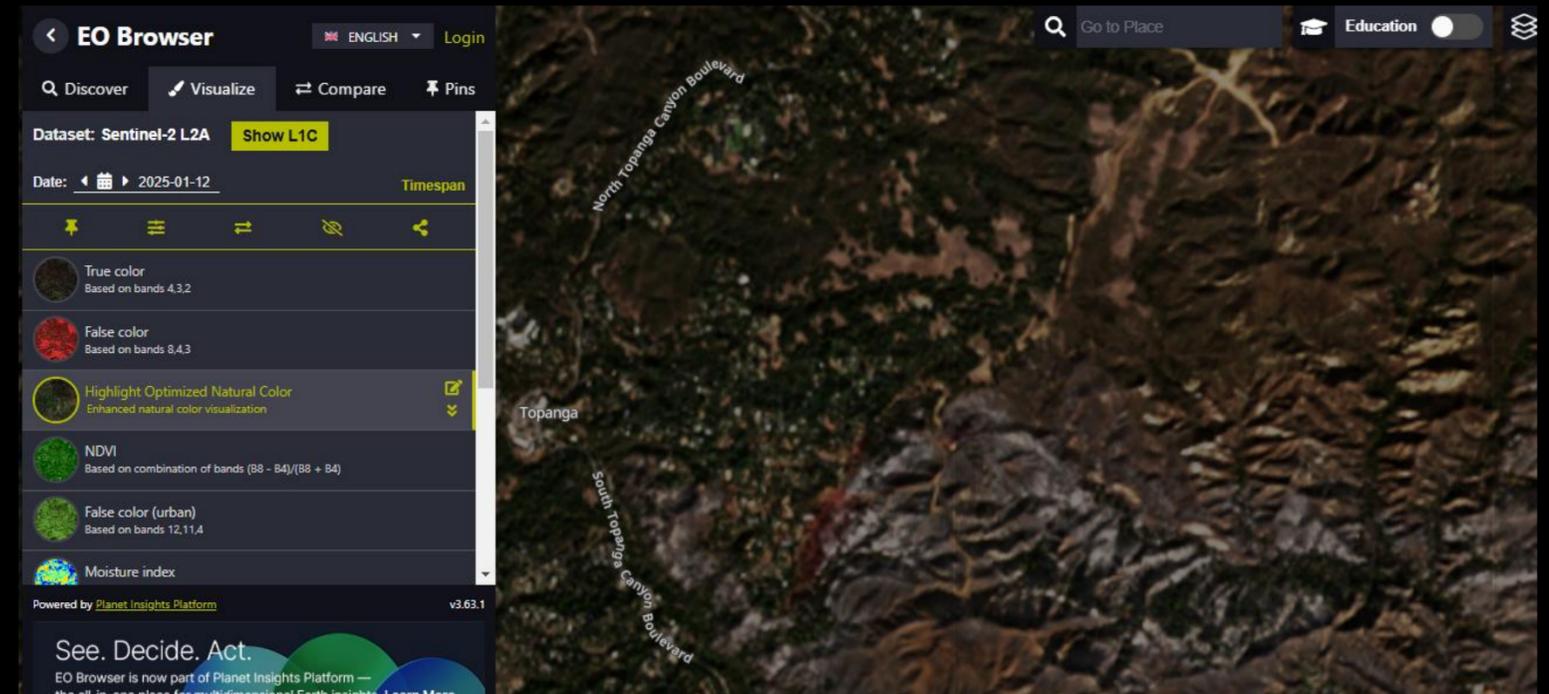


Los Angeles 7 Jan 2025

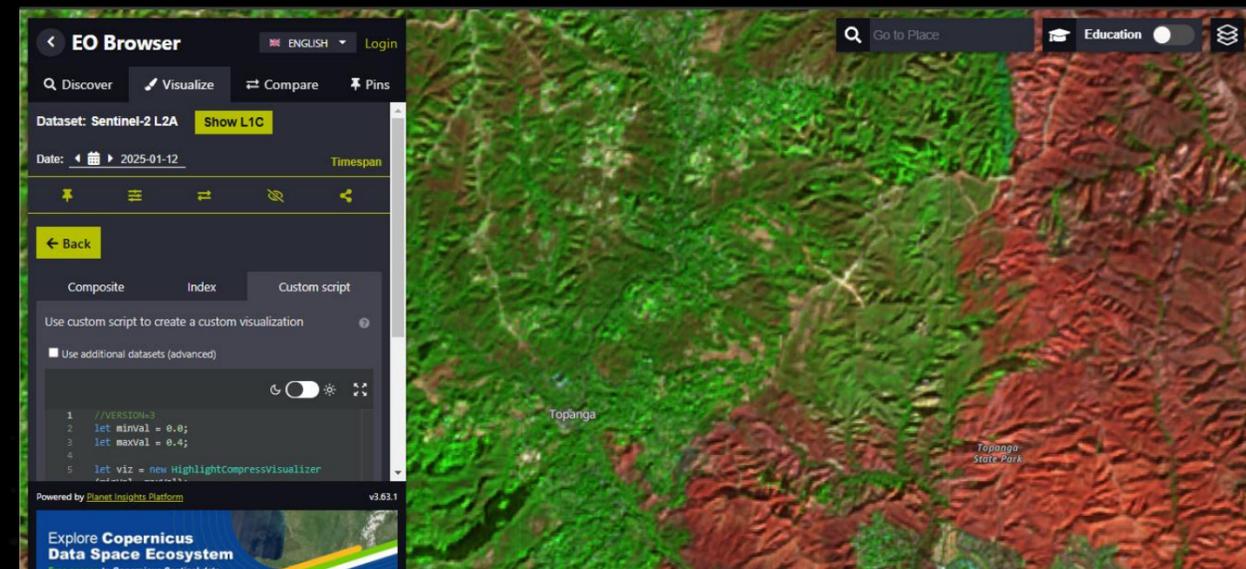
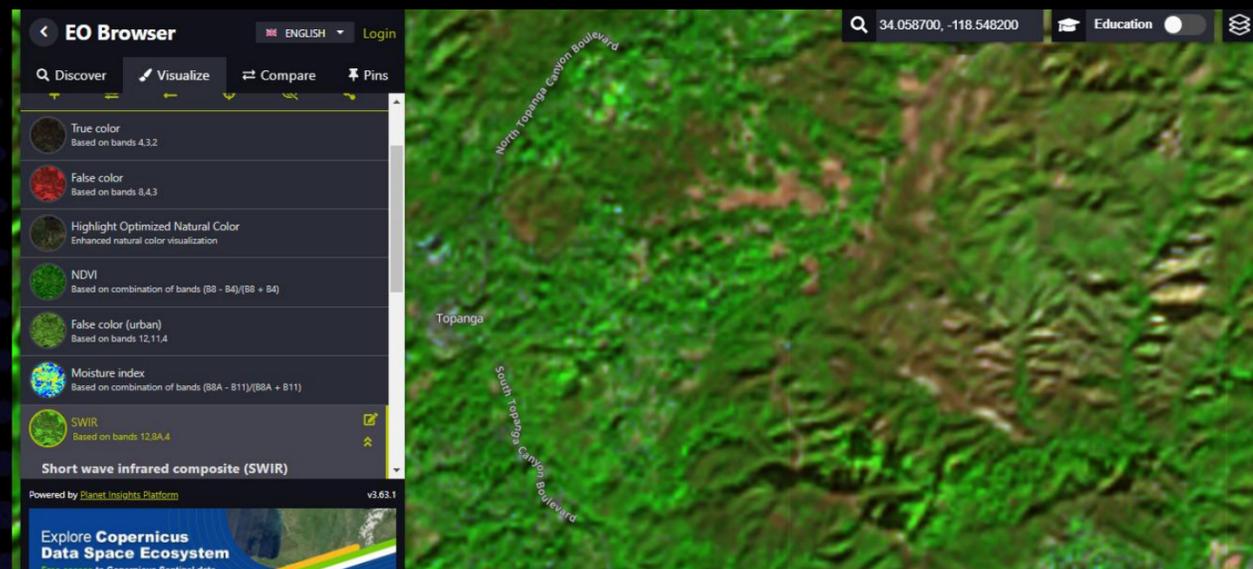
STUDI KASUS 2.1



Los Angeles 2 Jan 2025



Los Angeles 12 Jan 2025

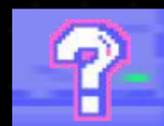


SIGN IN

SIGN IN



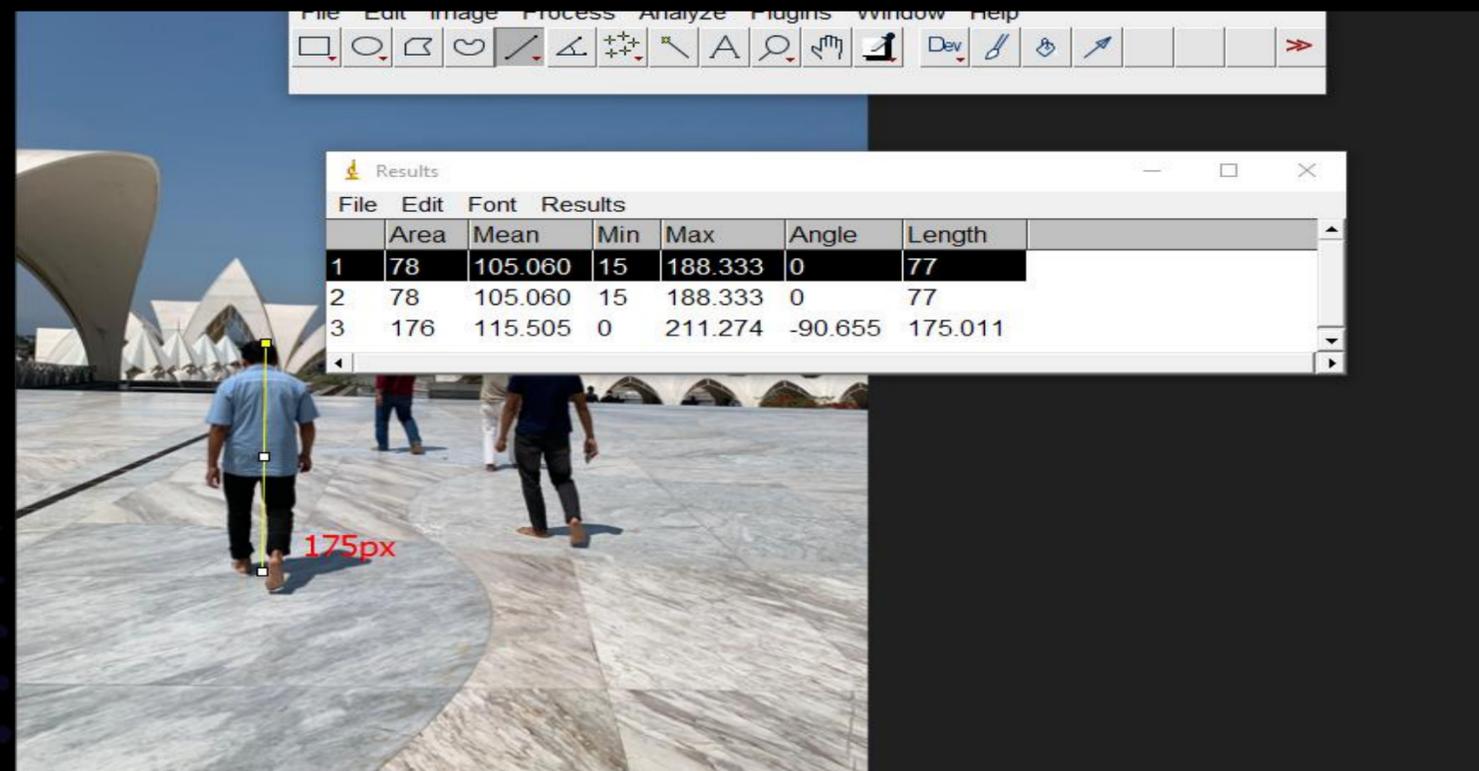
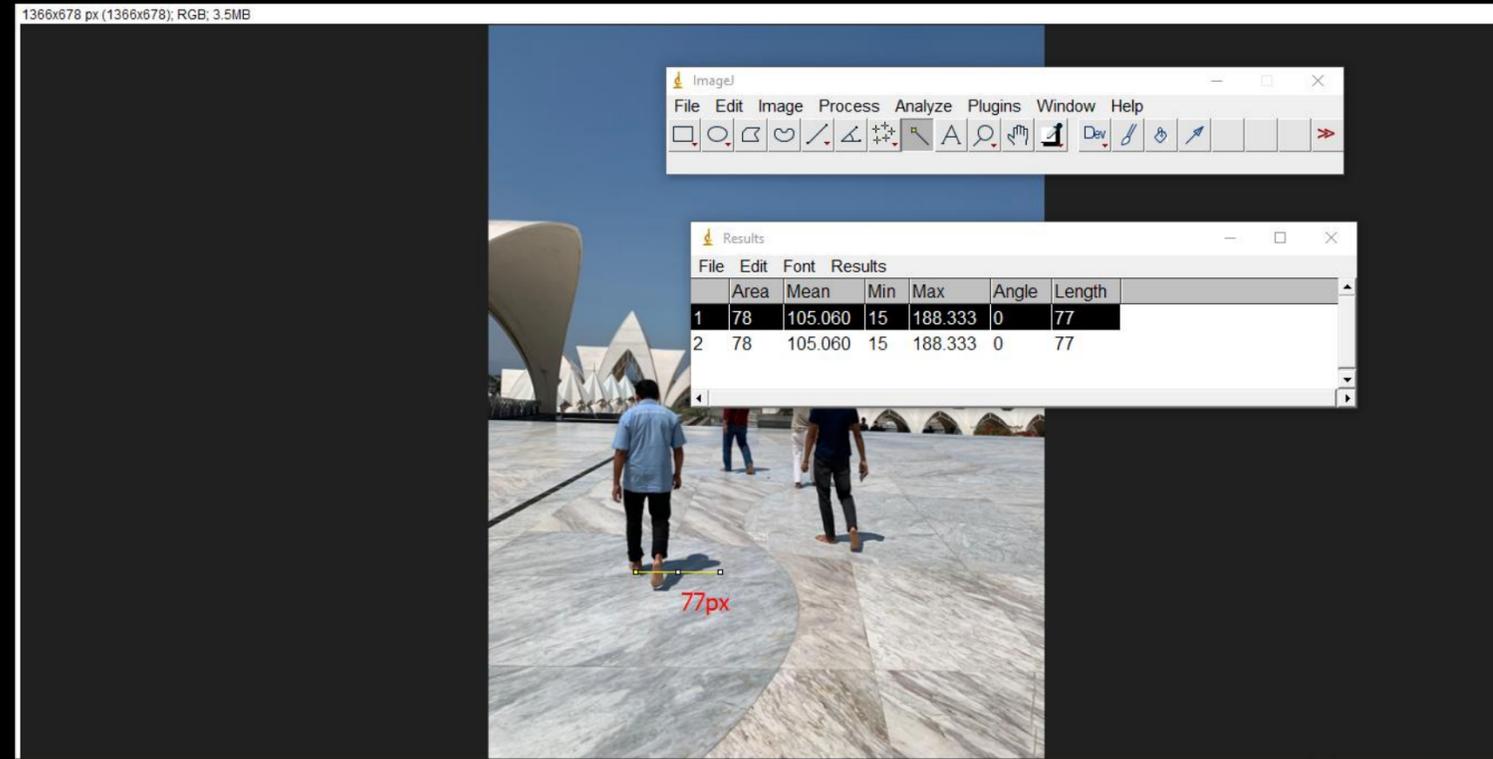
PENGUKURAN WAKTU



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

00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00

here Partial solar eclipse: 22.07.2028 | 91.5% [more](#)

Computation path of the sun for:
Cimincrang, Gedebage, Jawa Barat, IDN
15.Aug.2024 12:25 UTC+7 [LIVE](#)

Solar data for the selected location

Dawn:	05:35:45
Sunrise:	05:56:56
Culmination:	11:53:38
Sunset:	17:50:26
Dusk:	18:11:35
Daylight duration:	11h53m30s
Distance [km]:	151,507,524
Altitude:	67.76°
Azimuth:	339.53°
Shadow length [m]:	0.02
at an object level [m]:	0.046

[Reverse Calculation](#)

Geodata for the selected location

Height:	671m	Set Lat/Lon
Lat:	S 6°56'53.51"	-6.94820°
Lng:	E 107°42'14.76"	107.70410°
UTM:	48M 798812 9231124	
TZ:	Asia/Jakarta WIB	

More solar data & Photovoltaic

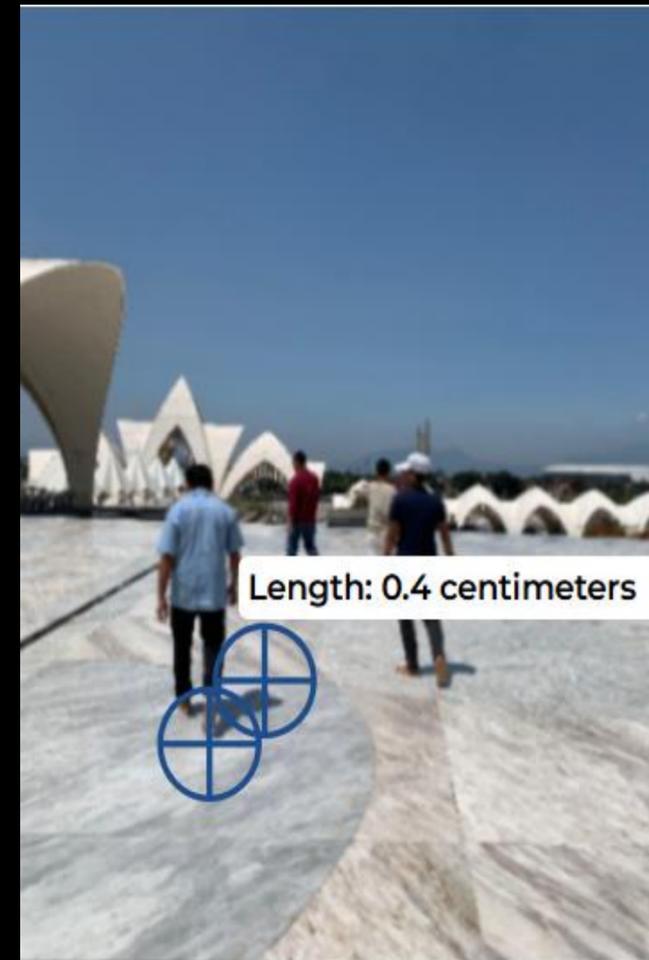
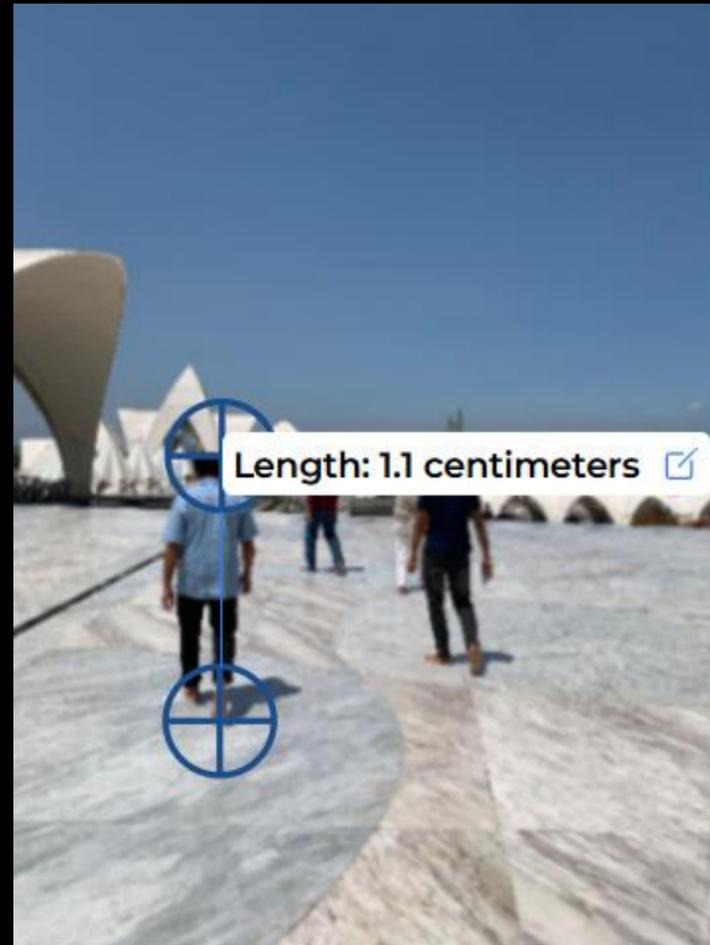
Galeri Rasulullah MRAJ

Taman Air Mar

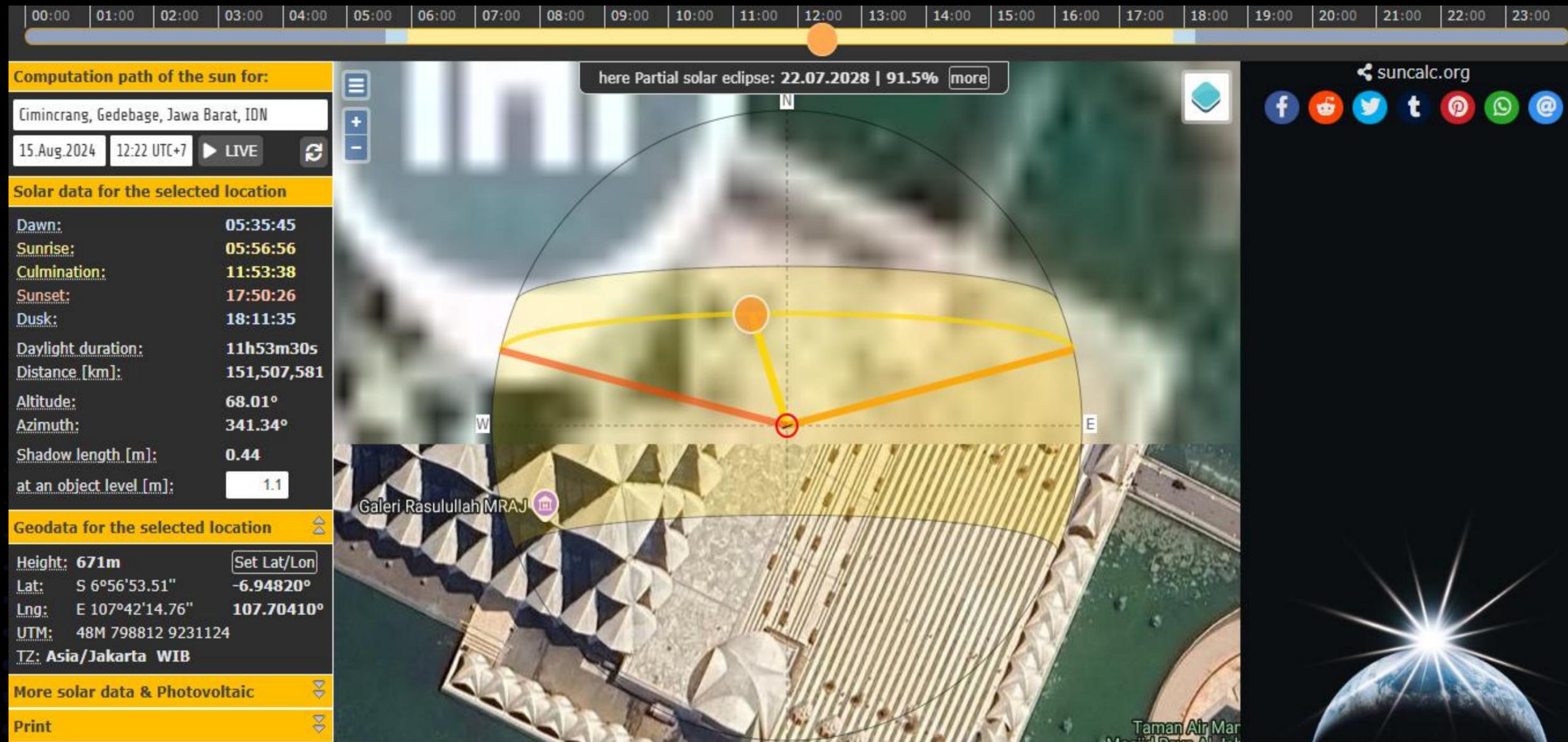
suncalc.org

f r t p w @

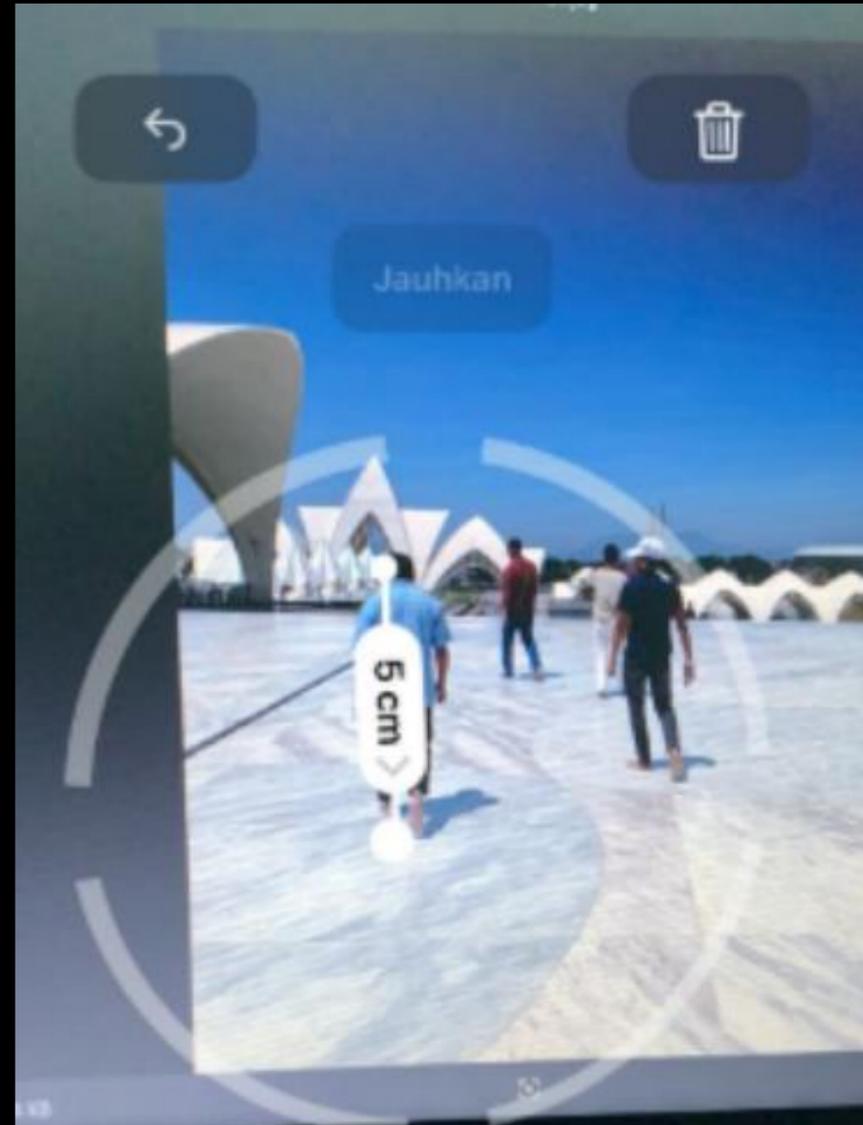
STUDI KASUS 2 - IMAGE MEASURE



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

00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00

Computation path of the sun for:
Cimincrang, Gedebage, Jawa Barat, IDN
15.Aug.2024 12:18 UTC+7 LIVE

Solar data for the selected location

Dawn:	05:35:45
Sunrise:	05:56:56
Culmination:	11:53:38
Sunset:	17:50:26
Dusk:	18:11:35
Daylight duration:	11h53m30s
Distance [km]:	151,507,657
Altitude:	68.31°
Azimuth:	343.83°
Shadow length [m]:	0.02
at an object level [m]:	0.05

Reverse Calculation

Geodata for the selected location

Height:	671m	Set Lat/Lon
Lat:	S 6°56'53.51"	-6.94820°
Lng:	E 107°42'14.76"	107.70410°
UTM:	48M 798812 9231124	
TZ:	Asia/Jakarta WIB	

More solar data & Photovoltaic

here Partial solar eclipse: 22.07.2028 | 91.5% more

Galeri Rasulullah MRAJ

Taman Air Mar

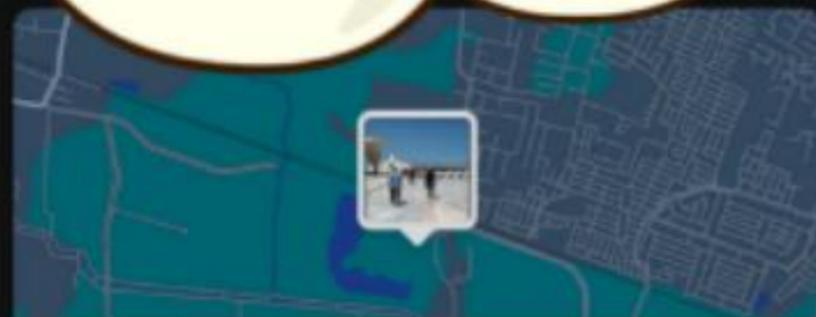
CHECK DATA - TIME MEASURE



Tambah Teks

Kamis, 15 Agustus 2024 pukul 12.18

Sesuaikan



Kota Bandung - Cimincrang

Sesuaikan

Perkiraan waktu nya adalah sekitar pukul 12.00 - 13.00 WIB

SIGN IN

SIGN IN



VERIFIKASI DATA



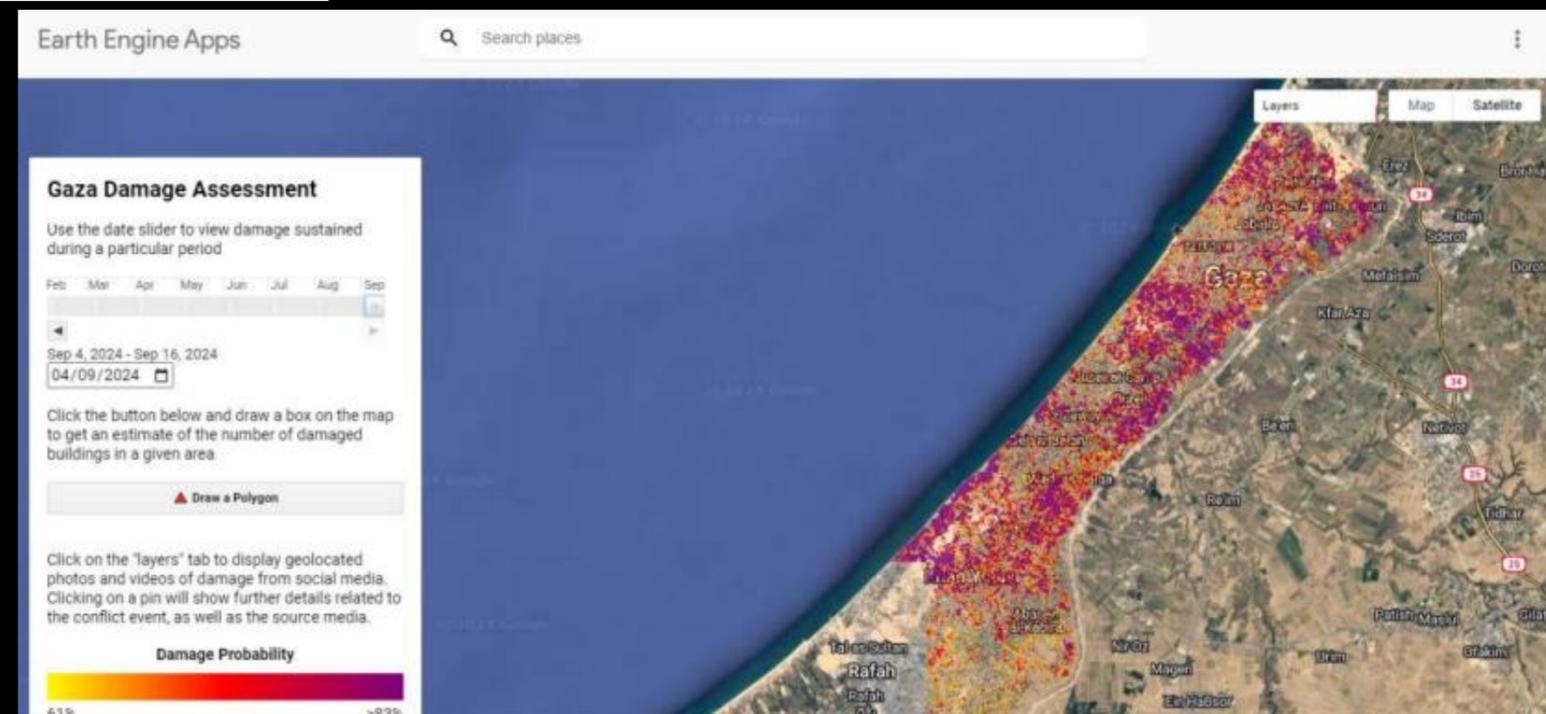
TEKNIK VERIFIKASI DATA

- 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



DATA TECHFORPALESTINE



DATA DAMAGE GEE BELLINGCAT

APA YANG HARUS DILAKUKAN?

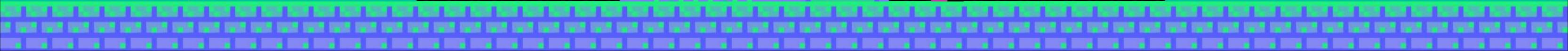
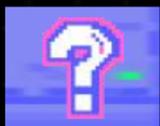
- Melakukan parsing data
- Pencarian data
- Pententuan 5W + 1H
- Analisis
- Pengumpulan data untuk pembandingan
- Arsip data dan pengumpulan bukti yang ada
- Verifikasi data e.g geolocate & time measure
- Pelaporan dan kesimpulan

SIGN IN

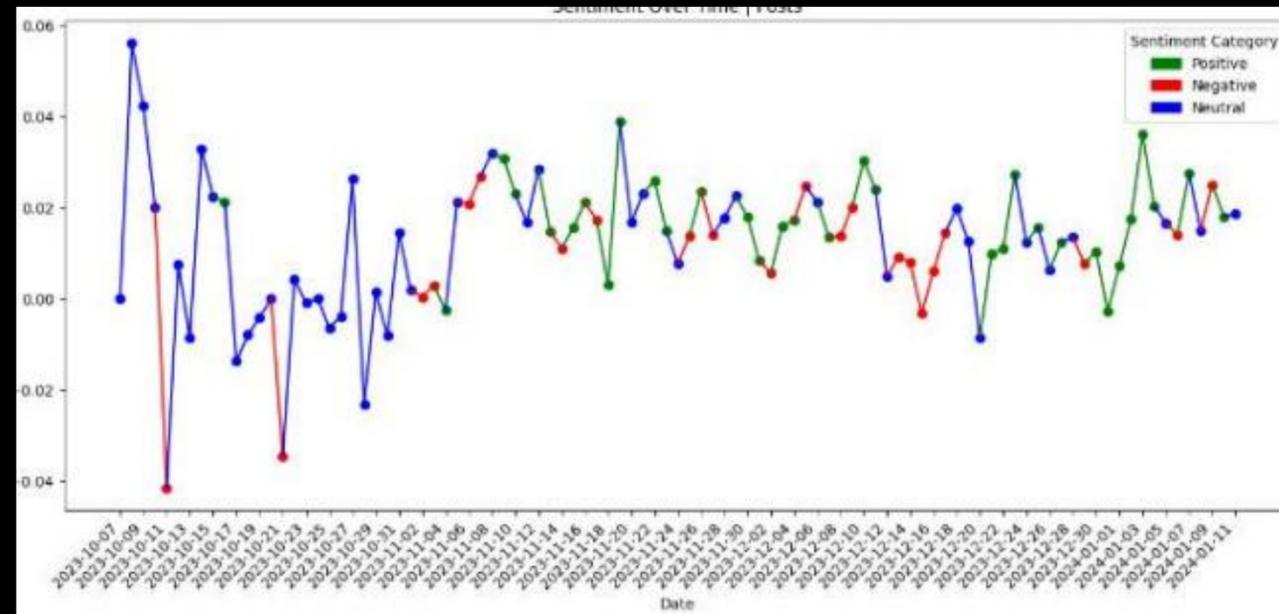
SIGN IN



EXAMPLE



PENCARIAN INFORMASI



20		Hughes / Raytheon BGM-71 TOW / TOW-2 Anti-Tank Guided Missile (ATGM) System 1970
21		IMI B-300 Reusable Anti-Tank (AT) Rocket System 1900
22		IMI MAPATS (Man-Portable Anti-Tank System) Man-Portable Anti-Tank (AT) Missile System 1984
23		Ingram MAC-10 (M10) Submachine Gun (SMG) 1970
24		IWI Galil ACE Assault Rifle / Assault Carbine / Battle Rifle 2008
25		IWI Galil ARM / SAR Assault Rifle / Carbine / Submachine Gun (SMG) / Designated Marksman Rifle (DMR) 1973
26		IWI Galil MAR (Micro Assault Rifle / Micro-Galil) Compact Assault Rifle / Carbine 1995
27		IWI Galil Marksman Assault Rifle Mark 1 Assault Rifle / Designated Marksman Rifle (DMR) 1995

— Return — Prev 19 of 530 Next —

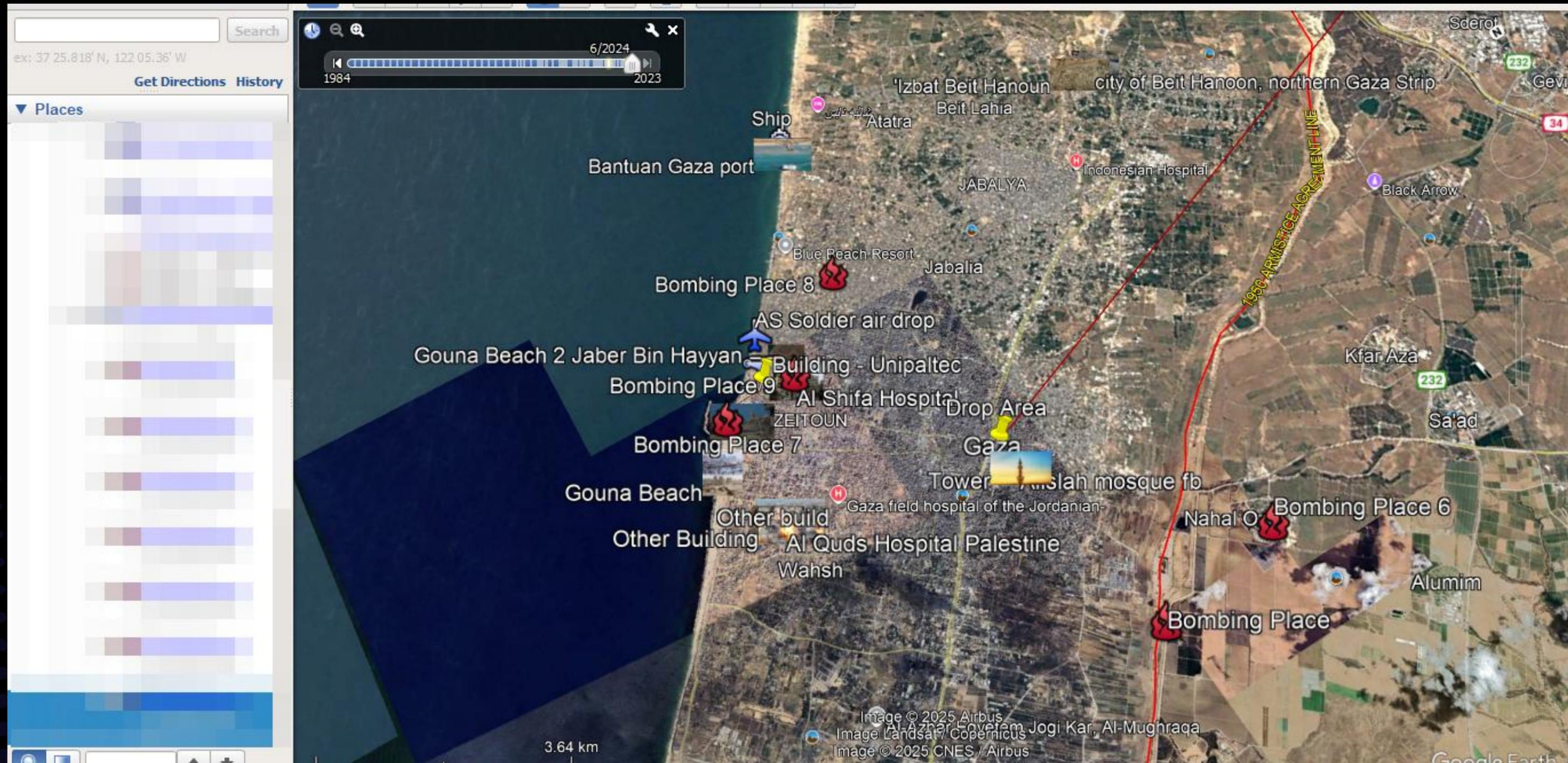
ID	OSRP 728
DATE	3 June 2024
SOURCE	Israeli Air Force
REPORTED LOCATION	Israel
YEAR	2024
MUNITION CATEGORY	Air-Delivered Bomb
FUNCTIONAL USE	Blast Munition Fragmentation Munition
TENTATIVE MODEL	GBU-31 JDAM
BASE COLOUR	Green Grey / Silver
CONDITION	Undelivered Munition Unfunctioned Munition Whole
GUIDANCE	Guided Munition
DOMAIN	Air-to-Surface
FINIS CHARACTERISTIC	Stripped Fins Multiple Fins

OCHA United Nations Office for the Coordination of Humanitarian Affairs ABOUT US COORDINATION UPDATES PUBLICATIONS DATA FUNDING DONATE

REPORTED IMPACT SINCE 7 OCTOBER 2023

<p>PALESTINIANS</p> <p>38,295+</p> <p>Reported killed</p> <p>MoH Gaza, in addition to 553 in the West Bank (OCHA) and ~1,000 in Israel, including people involved in the 7 October attack (Israeli authorities)</p>	<p>ISRAELIS</p> <p>1,200+</p> <p>Reported killed</p> <p>The estimate, which includes foreign nationals, has been changed by the Israeli sources.</p>	<p>DAMAGE AND IDPS</p> <p>70,000+</p> <p>Housing units destroyed in Gaza</p> <p>MoPHW</p>
<p>~88,241</p> <p>Reported injured</p> <p>MoH Gaza</p>	<p>~5,432</p> <p>Reported injured</p> <p>Israeli authorities, including foreign nationals</p>	<p>1.9 million</p> <p>Displaced in Gaza</p> <p>UN estimation</p>

GEOLOCATE & MASINT



TANTANGAN

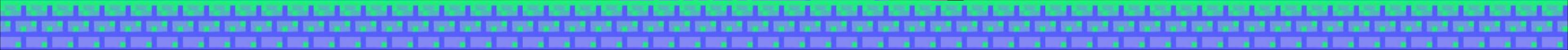
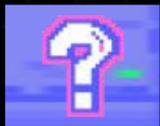
- ❑ Disinformasi & propaganda
- ❑ Deepfake atau AI
- ❑ Bot atau buzer account
- ❑ Keterbatasan data atau sumber daya
- ❑ Keterbatasan wewenang
- ❑ Time consuming
- ❑ Manipulasi data
- ❑ Tekanan atau ancaman
- ❑ BIAS
- ❑ Etika & privasi

SIGN IN

SIGN IN



★ INTERMEZO & CHEAT SHEETS ★



TOOLS

□ General

- Maltego
- Tool scrapper
- Data broker
- Archive site

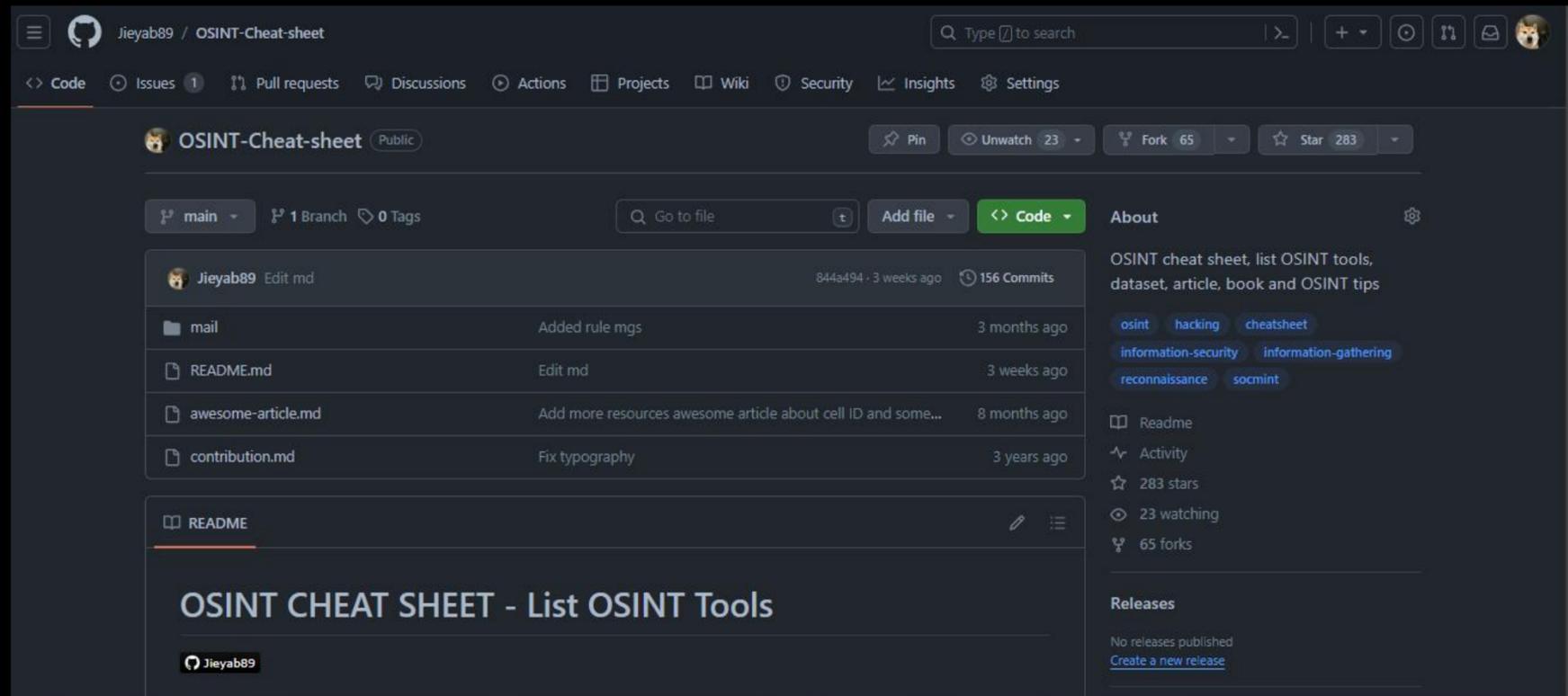
□ SOCMINT

- 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

