DATA ANALYST

Portfolio

Claudia Amelia Lomban

2024

Hi! I'm Claudia

Aspiring data analyst with skills in analysis, data processing, and visualization gained through student projects and self-study. Very interested in how insights from data can influence decision-making in various fields.

A Bachelor of Atmospheric and Planetary Science graduate who has developed knowledge in atmospheric science and astronomy. A lifelong learner who enjoys learning new things, especially in professional development and is detail-oriented.

Education

Aug 2019 - Jan 2024 Institut Teknologi Sumatera
Bachelor of Science. GPA 3.63/4.00
Atmospheric and Planetary Science

Course

Big Data using Python - Digitalent KOMINFO

Data Analytics - Cisco

Microsoft Excel - MySkill

Data Analyst Career Track - DQLab

SKILLS & ABILITIES

Excel
Data cleaning, Pivot Table, VLOOKUP, HLOOKUP, Interactive Charts, Descriptive Statistics

Python
Analytic solution (using Library: Numpy & Pandas), Visualization (Matplotlib), Define Functions & Classes

Structured Query Language
Agregate, Joins, Data Manipulation Language, Analyszing dataset with SQL queries

Power BI

Basic Visualization

Power BI

PROJECTS

Power BI

Superstore Data E-commerce

MySkill Excel Case Study
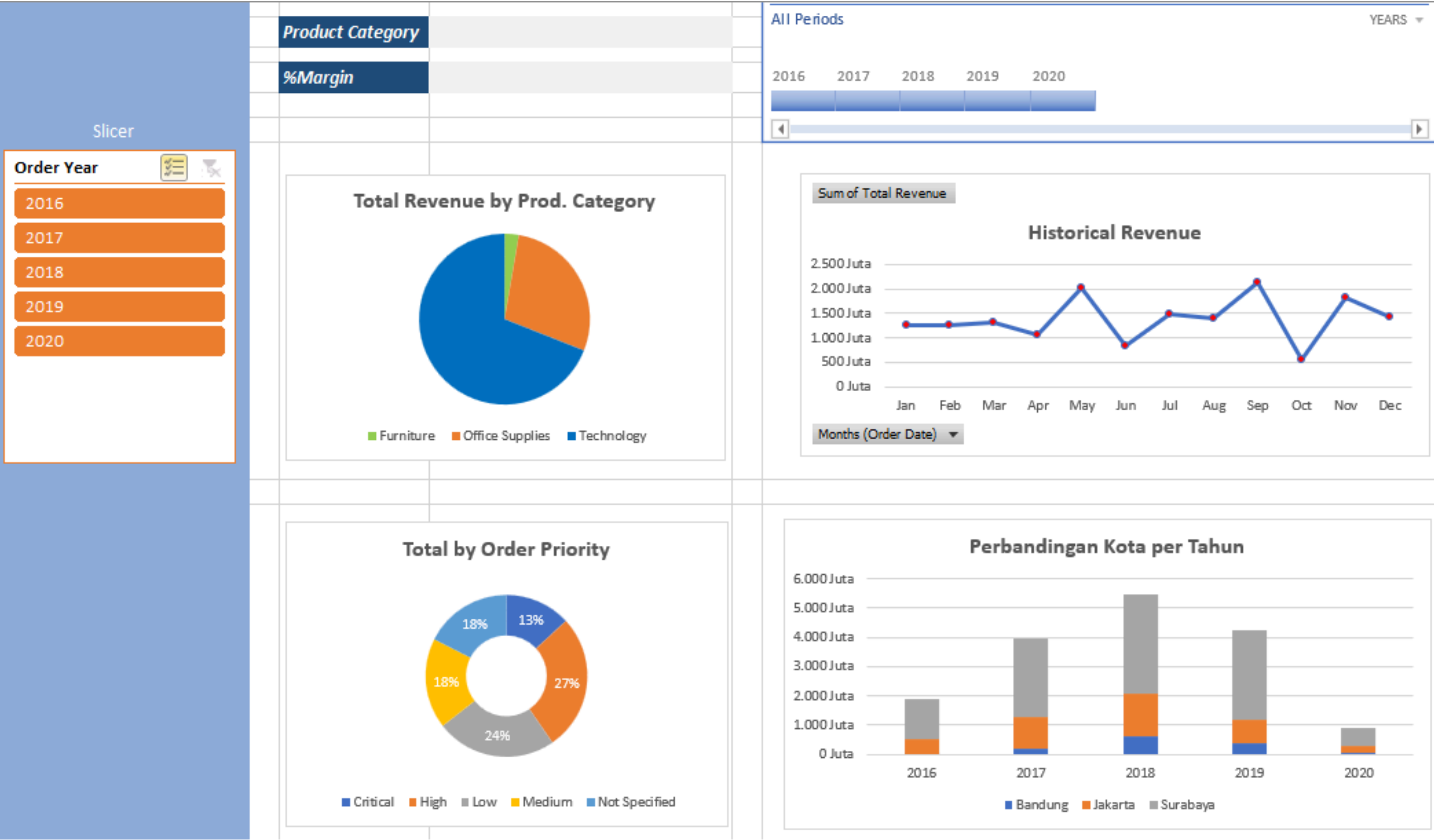
Tools: Microsoft Excel

Microsoft Excel File

Processes

Data Cleaning: Missing values, typos, duplicates

Analysis: Descriptive statistics, identifying correlations

Visualization: Pivot chart and Dashboard

Description: This analysis wants to see the total revenue from various factors such as product category, city, time, and order priority.

Results: The highest revenue is obtained by the Technology product category, Surabaya city, and High order priority although the difference is not significant.

Store Sales Performance

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DQLab Project Data Analysis

Tools: SQL

Project File

Skill Set

Standard Query Syntax

SQL Aggregate Function

Generate Insights

Description:
This analysis wants to see the overall performance of sales and the effectiveness of promotions on sales.

years	product_category	sales	promotion_value	burn_rate_percentage
2009	Furniture	1745027412	78996003	4.53
2009	Technology	1642558409	76180871	4.64
2009	Office Supplies	1226286860	59153453	4.82
2010	Furniture	1354767316	63829920	4.71
2010	Technology	1590357771	77200401	4.85
2010	Office Supplies	1113975520	56476618	5.07
2011	Furniture	1458613848	69246612	4.75
2011	Office Supplies	1078619360	56288607	5.22
2011	Technology	1574802978	89076337	5.66
2012	Furniture	1382074684	61230785	4.43
2012	Technology	1834218794	95281046	5.19
2012	Office Supplies	1266689680	69355811	5.48

years	product_sub_category	sales
2009	Office Machines	756929580
2009	Chairs & Chairmats	756435500
2009	Binders and Binder Accessories	426069440
2009	Tables	404092392
2009	Telephones and Communication	398933509
2010	Office Machines	593093560
2010	Chairs & Chairmats	547953900
2010	Telephones and Communication	378938551
2010	Copiers and Fax	368002720
2010	Appliances	341896840
2011	Chairs & Chairmats	622962720
2011	Office Machines	545856280
2011	Tables	505875008
2011	Copiers and Fax	404074080
2011	Telephones and Communication	392194658
2012	Office Machines	811427140
2012	Chairs & Chairmats	654168740
2012	Telephones and Communication	422287514
2012	Tables	388993784
2012	Binders and Binder Accessories	363879200

Results: From 2009-2012, the sub-categories of office machines and chairs & chairmats were always in the top 2 based on total sales. Meanwhile, based on burn rate percentage, the furniture product category is always at the top even though the expected maximum burn rate percentage is 4.5% which indicates a very effective promotion.

Tingkat Penyelesaian Pendidikan di Indonesia

Data Badan Pusat Statistik

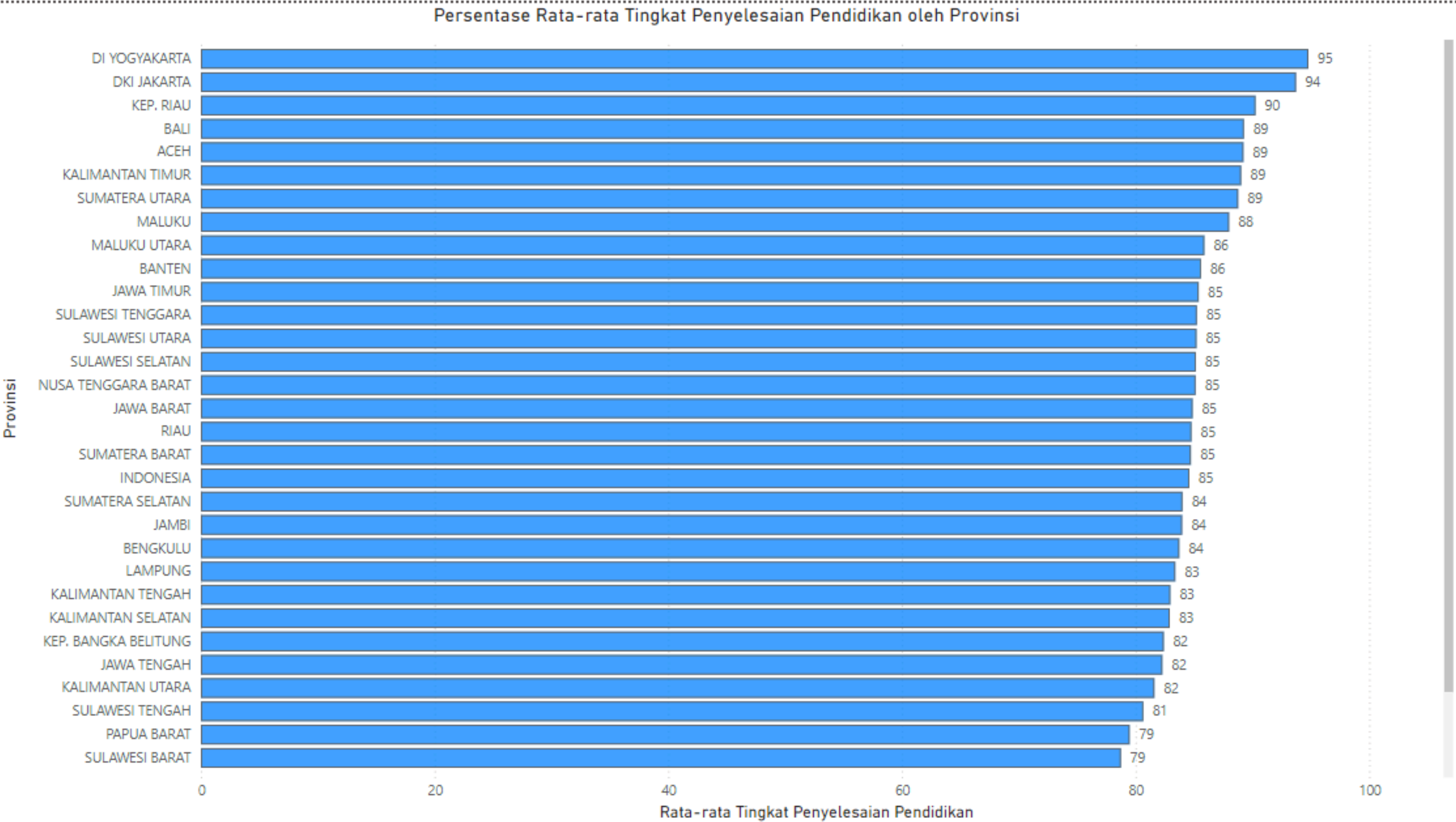Tools:
- Microsoft Excel
- Power BI

Project File

Processes
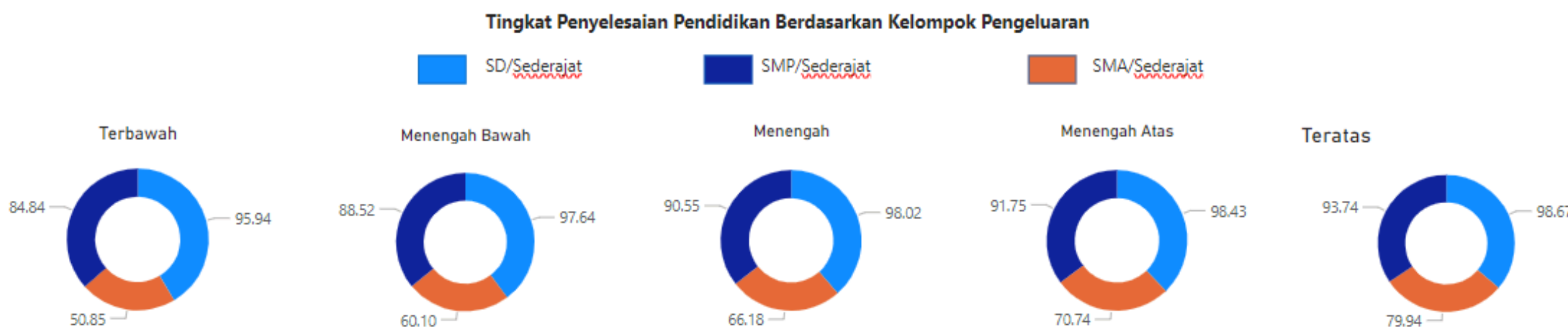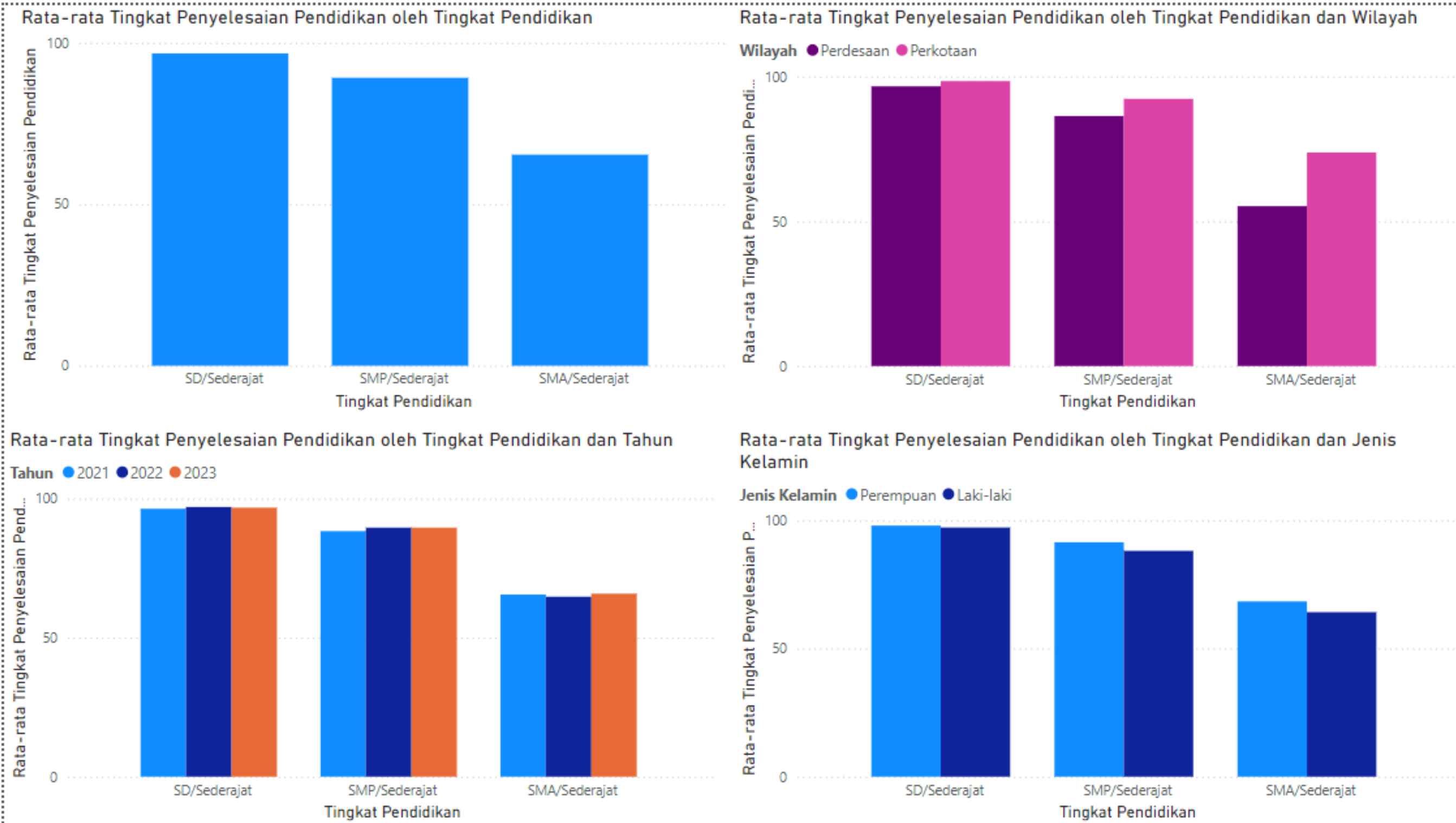
Preparing the data: convert to tabular format

Analysis: Descriptive statistics, identifying correlations

Data Visualization

Description: This analysis aims to see what percentage of Indonesia's population successfully completes the education level based on certain factors.

Persentase Rata-rata Tingkat Penyelesaian Pendidikan oleh Provinsi

Provinsi	Rata-rata Tingkat Penyelesaian Pendidikan
DI YOGYAKARTA	95
DKI JAKARTA	94
KEP. RIAU	90
BALI	89
ACEH	89
KALIMANTAN TIMUR	89
SUMATERA UTARA	89
MALUKU	88
MALUKU UTARA	86
BANTEN	86
JAWA TIMUR	85
SULAWESI TENGGARA	85
SULAWESI UTARA	85
SULAWESI SELATAN	85
NUSA TENGGARA BARAT	85
JAWA BARAT	85
RIAU	85
SUMATERA BARAT	85
INDONESIA	85
SUMATERA SELATAN	84
JAMBI	84
BENGKULU	84
LAMPUNG	83
KALIMANTAN TENGAH	83
KALIMANTAN SELATAN	83
KEP. BANGKA BELITUNG	82
JAWA TENGAH	82
KALIMANTAN UTARA	82
SULAWESI TENGAH	81
PAPUA BARAT	79
SULAWESI BARAT	79

Results: Based on the province, the highest level of education completion is in Yogyakarta with 89%, the lowest is Papua with 61%, while Central Kalimantan is at 83%.
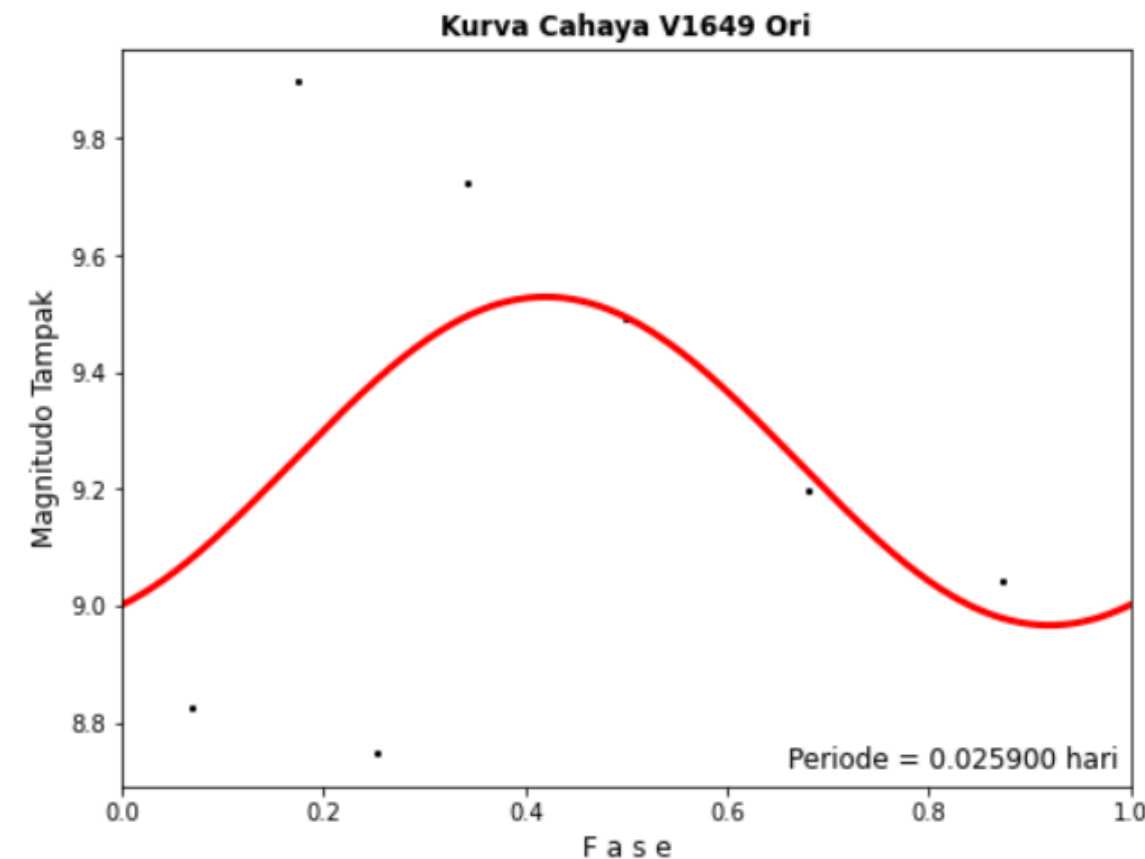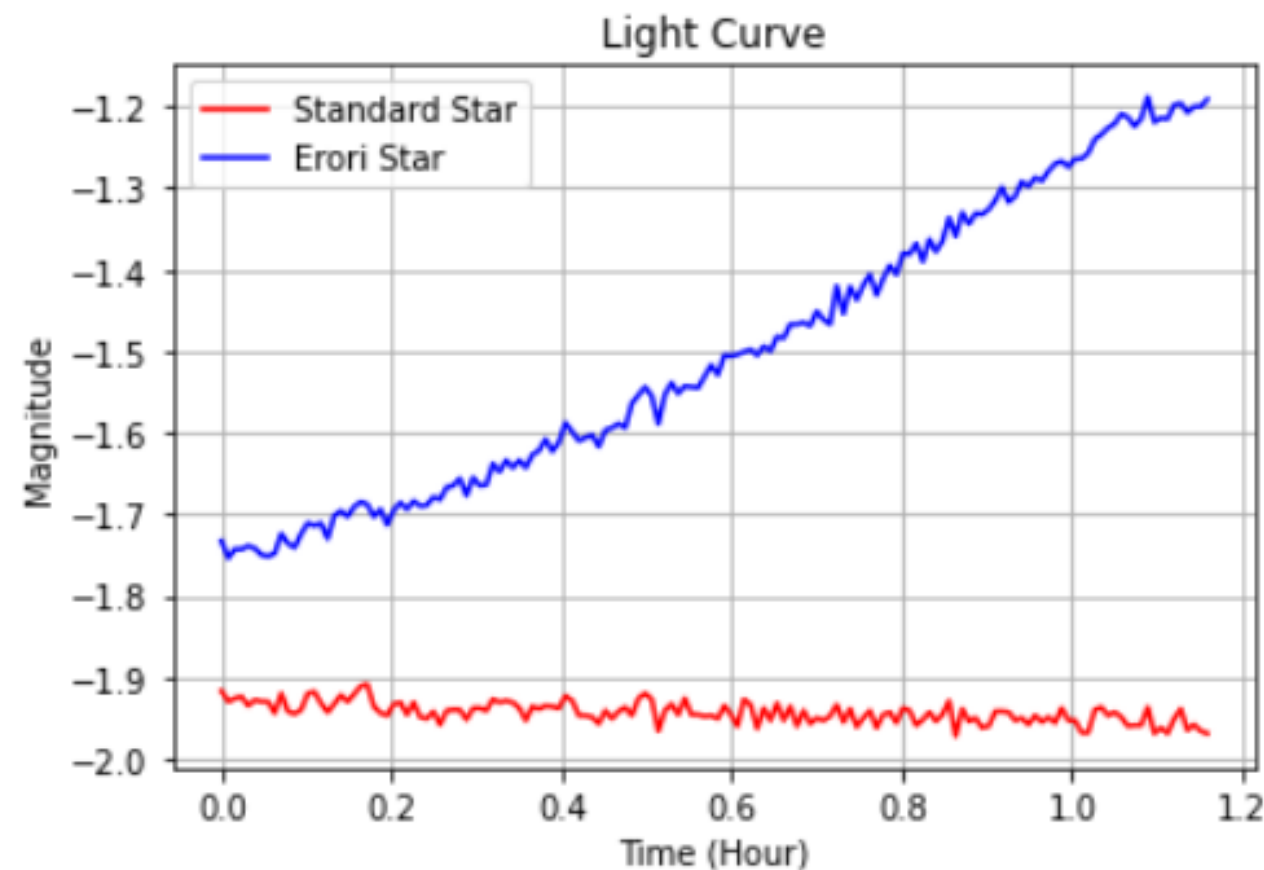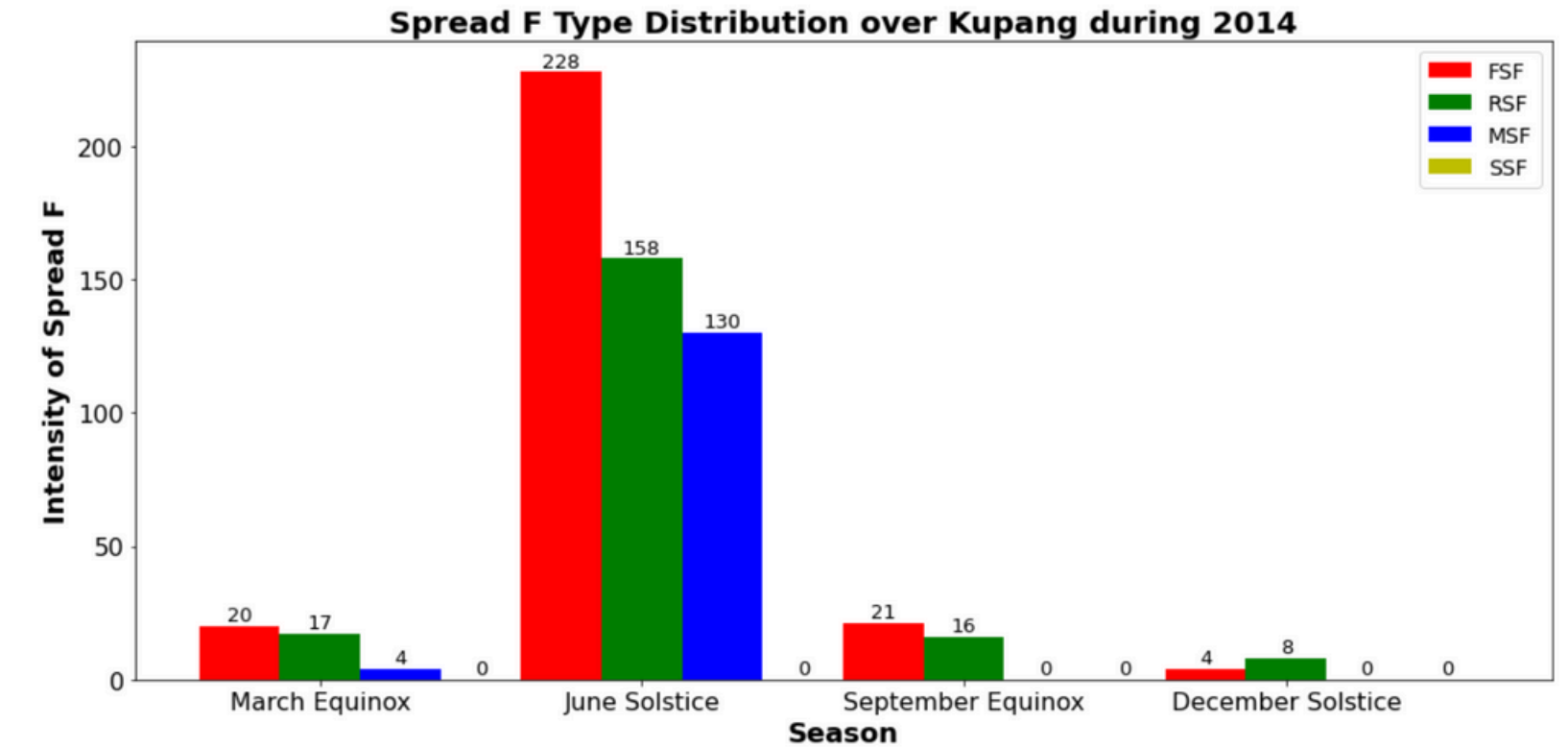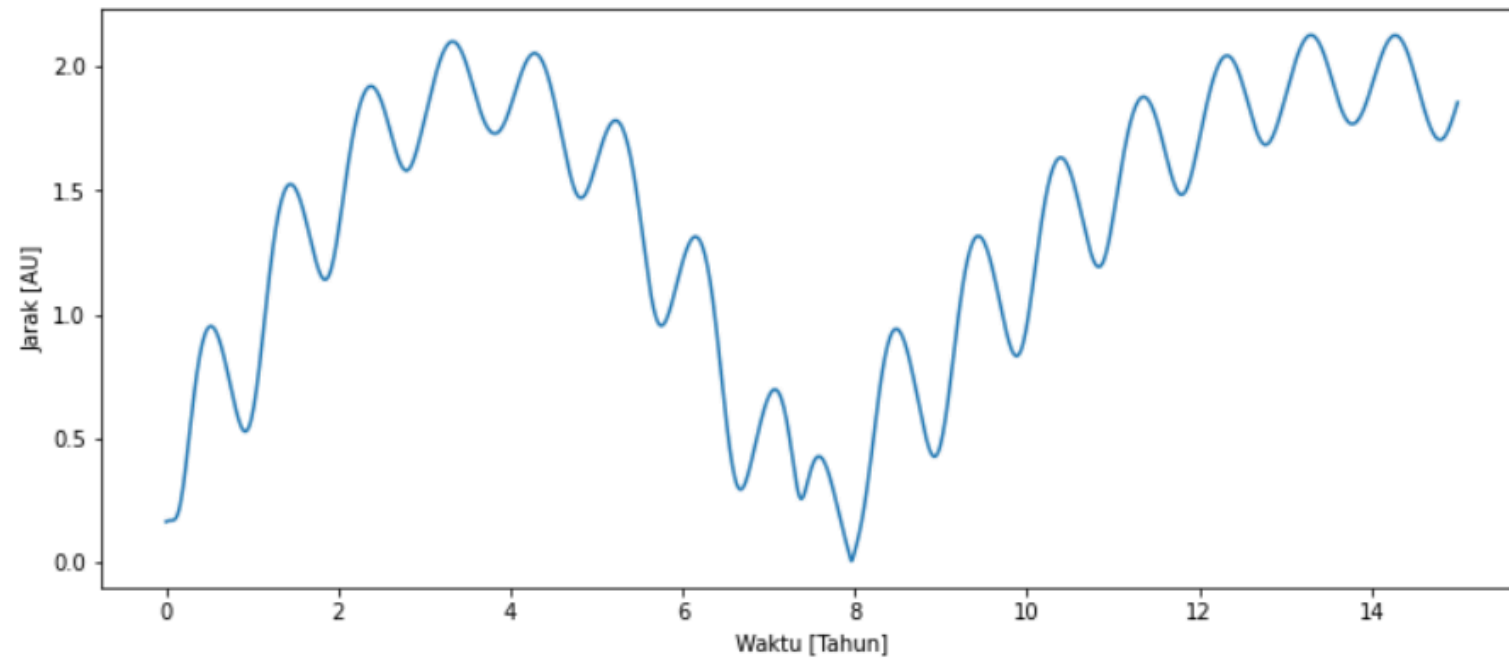
Rata-rata Tingkat Penyelesaian Pendidikan oleh Tingkat Pendidikan

Rata-rata Tingkat Penyelesaian Pendidikan oleh Tingkat Pendidikan dan Wilayah

Wilayah ● Perdesaan ● Perkotaan

Rata-rata Tingkat Penyelesaian Pendidikan oleh Tingkat Pendidikan dan Tahun

Tahun ● 2021 ● 2022 ● 2023

Rata-rata Tingkat Penyelesaian Pendidikan oleh Tingkat Pendidikan dan Jenis Kelamin

Jenis Kelamin ● Perempuan ● Laki-laki

Tingkat Penyelesaian Pendidikan Berdasarkan Kelompok Pengeluaran

■ SD/Sederajat ■ SMP/Sederajat ■ SMA/Sederajat

Terbawah — 84.84 / 95.94 / 50.85
Menengah Bawah — 88.52 / 97.64 / 60.10
Menengah — 90.55 / 98.02 / 66.18
Menengah Atas — 91.75 / 98.43 / 70.74
Teratas — 93.74 / 98.67 / 79.94

Results: The higher the level of education, the lower the completion rate. Women appear to complete more education than men. In addition, disparities are seen between rural and urban areas. Differences in education levels become more pronounced towards secondary school, which may be related to the number of schools, equitable distribution of facilities, and economic factors. It can be seen that 79% of the top group completed high school, while only 50% of the bottom group did.

Python on Student Projects

Institut Teknologi Sumatera

Some examples of python applications in astronomy.

Click on the image or project file link

Project File

Certificate

Certificate's Link

Thank you.

Claudia Amelia Lomban

2024

Let's Connect

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