Indonesian election archive: institutions, candidates and results.

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ABSTRACT

This paper introduces an Election Data Archive built by a team of scholars and democratic NGO practitioners from Indonesia and the United States. This archive aims to address the calls of international democracy advocates by providing systematic, longitudinal election data across multiple levels of elected administration in Indonesia. We document the efforts of a leading civil society group, the Association for Elections and Democracy (Perludem), and its collaboration with the Indonesian Electoral Commission to supply voters with information before and after elections. The archive provides a collection of the laws governing elections to the Presidency and Vice Presidency, the Lower House of the National Legislature (DPR), the Upper House (DPD), regional legislatures and local heads from 1999 to 2024. Additionally, we provide candidate data and election results for the three most recent elections (2014, 2019, and 2024) covering the offices of the Presidency, Vice-Presidency, and both Houses.

Background & Summary

In June 2024, the Asian Network for Free Elections (ANFREL) published its final report on Indonesia's general election, held on February 14th 2024 . With nearly 280 million people, including about 205 million registered voters, Indonesia is the world's third-largest democracy, following the United States and India (1). ANFREL commended election authorities and voters for successfully managing an exceptionally complex, simultaneous election for the president and vice president, the two-chamber national legislature, and 38 provincial legislatures in a single day.

However, ANFREL also highlighted several concerns. These included voter difficulties with the electoral system's complexity and the overwhelming number of participants (report, p.37), controversial legal changes to the vice-presidential candidate's age requirements before the election (p.70), alleged misuse of state funds for campaigning (p.26), ethical violations by the Electoral Commission (Komisi Pemilihan Umum, KPU) (p.74), unregulated use of artificial intelligence during campaigns (p.85), and threats to press freedom, as reported by the Alliance of Independent Journalists (Aliansi Jurnalis Independen, AJI Indonesia) (p.38).

ANFREL's report concludes with recommendations for legal reforms, improvements in the electoral process, and enhanced voter access, information, and support. It specifically calls for:

> "citizen groups to uphold norms, enhance accountability, and drive reforms by utilizing existing mechanisms, influencing cultural changes, and advocating for reforms... A crucial step for local civil society groups is to transition from merely collecting and reporting isolated incidents of abuse to implementing a more systematic and structured approach to data collection, resulting in more robust findings." (2, 31)

The National Democratic Institute (NDI) Open Election Data Initiatives (OEDI) defines essential election data for long-term trend analysis in three main categories: a) information on the institutional framework of each election, b) pre-election data on candidates and processes, and c) post-election outcomes (ndi.org, openelectiondata.net). Providing permanent open access to data in all of these categories in the interest of democratic accountability is challenging, especially for early elections after Indonesia's re-democratization in 1999, when election result collection was not yet digitized for electronic dissemination.

Despite these challenges, Indonesia saw momentum for open access to election information after re-democratization. Civil society groups, in collaboration with the KPU, made significant progress in distributing voter information before elections

and publishing results afterward, a collaboration that continued until after the 2019 election. However, Indonesia's legal framework does not mandate information openness regarding pre-election candidate data. Moreover, public data distribution and maintenance depends on the commitment of election officials, who are reappointed every five years, bringing varying perspectives and commitments.

This article has as its main objective to create a publicly available Indonesian Election Archive (hereafter IEA)(3) that provides systematic, longitudinal election data across multiple levels of elected administration in Indonesia. These data include longitudinal data in all three key categories: a) institutional framework, b) pre-election candidate information, and c) post-election results. At the same time this project documents the collaboration between the Association for Elections and Democracy (Perludem), a leading Indonesian civil society group, with the KPU and U.S. scholars to make all of this information publicly available permanently.

Thus, the remainder of this introductory **Background** section outlines the main features of the Indonesian institutional system for electing representatives at various administrative levels, and recounts the KPU-Perludem collaboration to disseminate voter information and gather data. The three substantive sections following the introduction, concentrate on introducing the IEA data. These include a section on **Methods** where we detail the collection of the data; the **Data Record** section where we delineate the types of data included in the IEA and explain where these can be accessed; and the **Technical Validation** section where we explain the steps we took to verify the accuracy of the data provided in the IEA. The IEA data presented in this article is a standalone contribution. Furthermore, for interested readers, a Supplementary Appendix outlines a longer-term goal to compile Indonesian election information beyond the data provided here.

Indonesian elections framework.

To briefly outline the institutional framework, Indonesia is divided into five administrative units, as illustrated in Figure 1 (Reproduced (4), with permission from Cambridge University Press). Representatives are elected in three and a half administrative levels and appointed in one and a half. For the national level, elections are held for the President and Vice President, and two chambers of the national legislature: the Dewan Perwakilan Rakyat (DPR, People's Representative Council) and the Dewan Perwakilan Daerah (DPD, Regional Representative Council). Below the national level are 38 provinces, including two special regions (Aceh and Yogyakarta) and the capital, Jakarta. Of those, four were created in Papua before the 2024 election, increasing the total number of provinces from 34 to 38, the number of electoral districts from 80 to 84 and the lower level legislative (DPR) seats from 575 to 580.

Below the national level, each province elects a provincial legislature (Dewan Perwakilan Rakyat Daerah Provinsi, DPRD Provinsi or DPRD-I) and a Governor, except Yogyakarta, where the Governor's office is held by the hereditary sultanate. Provinces are further divided into regencies (Kabupaten) and cities (Kota), which elect municipal legislatures (DPRD Kabupaten/Kota or DPRD-II), Regents (Bupati), and Mayors (Walikota). Below these are sub-districts, whose heads are appointed civil servants, and rural villages, which elect their own heads. Urban villages, however, do not hold elections, as their heads are appointed civil servants. The IEA focuses on providing data for the election of national level representatives, the President and Vice president and the two houses of the national Legislature the DPD and the DPR.

While partial election results and some candidate information from recent Indonesian elections are available online, they remain scattered across various sources including KPU documents (at kpu.go.id), compilations by Indonesia's Statistics Office (BPS, at bps.go.id), the Global Elections Database (at globalelectionsdatabase.com), the Election Passport (electionpassport.com), and the Constituency-Level Elections Archive (electiondataarchive.org). In addition, various scholars who study Indonesia often provide the data they have worked with publicly on their websites. Similarly, numerous organizations provide information on the legal framework surrounding the elections. These include, for example The International Foundation for Electoral Systems (at ifes.org), and The Electoral Knowledge network (at aceproject.org). To our knowledge, no sites provide comprehensive election data that emphasize multiple elected bodies, align with the NDI's framework, maintain consistent granularity, or are systematized for examining trends and outcomes across time and diverse elected bodies.

Government civil society collaboration to collect and distribute information in 2014 and 2019

Prior to the 2014 election, the KPU sought to enhance information access for voters, recognizing that over half of Indonesia's electorate is under 40 and technologically adept (5). To achieve this, the KPU collaborated with Perludem to digitize pre-election information and make it widely available. Perludem data enumerators organized and digitized KPU data, including candidate information, electoral district maps, and election regulations. This work spanned multiple regions, including Jakarta, Aceh, Bali, East Java, and Papua.

To further improve access, Perludem developed an Election Application Programming Interface (API)—a user-friendly, open data platform providing verified election information. Perludem also hosted a hackathon, inviting Indonesia's tech community to create applications based on the election API, accessible via smartphones and websites. This initiative inspired the KPU to develop its own API for disseminating election data, expanding public access further. After the 2014 election, the

KPU and Perludem formalized their collaboration through a Memorandum of Understanding to increase voter participation, enhance government accountability, support marginalized groups, and promote a healthy political ecosystem.

Before the 2019 election, Perludem, in collaboration with the KPU and Google Indonesia, launched a platform designed to centralize voter information, focusing on young, tech-savvy voters who actively use social media. The platform, pintarmemilih.org ("Smart Voting"), provided comprehensive election data but became inactive after the election, with information migrating to the main KPU website.

Methods

In response to calls from international election authorities for a tripartite collection of election-related information, the IEA systematizes and makes available data on: a) the institutional structure governing elections, b) pre-election candidate data, and c) post-election results. Specifically, we provide user-friendly access to:

- Laws defining the election framework, including nomination rules from 1999 to 2024.

- Pre-election candidate lists from 2014 to 2024 and

- Post-election results from 2014 to 2024 at various levels of detail.

The data collection employed a multi-pronged approach over time. First, Perludem staff collected documents during the collaboration with KPU described above, next Perludem and UMD researchers accessed public KPU websites pertaining to earlier elections (2014 and 2019) and downloaded PDF documents with official published candidate lists and results. For the latest election (2024) the team also scraped information in other formats from official KPU websites. Additional information was obtained from the website of the Indonesian Audit Board (Badan Badan Pemeriksa Keuangan (BPK)). Finally, the researchers on this project continue to work closely with KPU staff to source additional data where needed. Thus, some of the official documents used here were supplied directly by KPU staff. To facilitate tracing to the original sources of data provided in the IEA, the archive includes a file that for every variable provided for every office, specifies the official file and/or the website from where data for individual variables were sourced.

Importantly, the data that were all collected are all in the public domain. Specifically, in Indonesia, Law 14, 2008, on public information disclosure establishes the importance of transparency of government provided information. To further cement the public provision of government information, in 2012 the Indonesian government launched the Open Government Indonesia (OGI) initiative to address issues at the intersection of civil society and government, particularly electoral administration and voter information (ogi.bappenas.go.id). The OGI secretariat, including the KPU, collaborates with civil society organizations - including Perludem - to promote transparency, participation, innovation, accountability, and inclusiveness in governance and public services, including election governance.

Below we describe in greater detail how each part of the IEA data was compiled.

Institutional Data Collection

First, we compiled a list of elections held in Indonesia at the National, Provincial and Regency level. These are enumerated in Table 1. Following re-democratization, Indonesia held its first direct election for the national legislature's lower chamber in 1999, and the first direct presidential election in 2004. In 2009 and 2014, the President, both chambers of the national legislature, and the provincial legislatures were directly elected in the same year but at different times. The first simultaneous election for the President, both chambers of the national legislature, and provincial legislatures occurred in 2019, followed by the second in 2024.

Regional elections followed a different timeline. The first direct regional elections were held in 2005, with each province, regency, and city adhering to its own schedule. This temporal scattering created complexities in election management and dispute resolution. To address this, the government introduced simultaneous regional elections in three stages. In 2015 elections were held in 269 regions (thereof in 9 provinces, 224 regencies, and 36 cities). In 2017 elections were held in 101 regions (thereof in 7 provinces, 76 regencies, and 18 cities). In 2018 elections were held in 171 regions (thereof in 17 provinces, 115 regencies, and 39 cities). By 2020, the local governing bodies elected in 2015 reached their term limits, with those from 2017 and 2018 reaching theirs in 2022 and 2023, respectively. During this transitional phase, no regional elections were held in 2020, 2022, or 2023. Instead, interim caretakers governed these regions. The first simultaneous regional elections for all regions were held in November 2024.

Next we identified key documents governing nominations, election procedures, and the translation of votes into representation at the National, Provincial and Regional level. This collection does not include rulings on administrative borders or changes of these. The law on political parties clarifies nominations and is, therefore, also included. For all the listed election laws from re-democratization in 1999 to the 2024 elections, we collected original legal texts. These are all available via the

Legal Documentation and Information Network of the Audit Board of the Republic of Indonesia (jdih.bpk.go.id). Using the legal database of the Audit Board (https://peraturan.bpk.go.id/), we searched for each original legal text and downloaded the document once it had been located. Next we compiled the main body of all of the individual files into a single pdf file , collating all of the pertinent law in chronological order. The 2017 electoral law includes numerous appendices that were not included in the collated file but can be accessed on the website of the BPK.

Pre-Election and Post-Election Data

As the primary election organizer, the KPU is the main source for pre-election candidate information and post-election results. Because the data for the 2024 election were collected in real time, these data were obtained from the KPU website (kpu.go.id) and include candidate information and election results.

In contrast, the collection of longitudinal election data in Indonesia is exceedingly complex because these data were originally collated and transmitted between various administrative levels in a multitude of documents.

To give the reader an idea of the complexity of these data - including the multiple agencies and different levels at which the data have been collated and made publicly available over time - let us briefly describe the local collection. In 2004 and 2009 National level elections results were collected manually at the polling station via a form called C1. Polling station officials then sent the form along with aggregate counts to the sub-district. Sub-district officials verified poll counts and sent so-called form D, or sub-district level aggregates to the regency/city level. Regency/city level officials sent on, to the provincial level, a new form D, based on regency/city level aggregates. Province level officials aggregated regency/city level results for their province and sent to the National level. Finally, KPU national level officials aggregated provincial level results and made these public.

In 2014, election results were manually counted as before, with the addition of polling officials sending form C1 (aggregate results) to KPU officials at the regency/city level for scanning. These scans were forwarded to the national KPU data center, which published form C1 on the public counting system (situng) without calculating aggregates. Public access to situng later became unstable. In 2017, provincial elections maintained manual counting, but the KPU also published every iteration of form D on situng alongside form C1.

In the 2019 simultaneous election, the manual counting remained as did KPU publication of all forms C1 and every iteration of form D on situng. Subsequently, the 2020, simultaneous local elections retained manual counting, but the publication system shifted from situng to sirecap, a mobile app. Polling officials photographed form C1 using sirecap, which aggregated the data. After verification, results were sent to the national data center, and the KPU published the polling station count with C1 photos at infopemilu.kpu.id. In 2024, manual counting and C1 publication on the KPU website continued unchanged.

To further complicate matters, the mandate of the KPU does not extend to maintaining a public archive of election information for prior elections. Therefore, some KPU documents made publicly available around past elections can no longer be accessed on the web or were only ever made publicly available offline. Consequently, while the IEA provides consistent information for each office over time, the level of aggregation and the origin of the source documents varies.

Specifically, as described above, for the 2014 and 2019 elections, IEA data collection benefited from a collaboration between Perludem and the KPU. Perludem affiliates systematized KPU data and worked with the election tribunal to make it publicly accessible. Thus, much of the IEA collection of data for elections prior to 2024 originates from a great variety of original KPU documents that were made public in some form during the 2014 and 2019 collaboration between KPU and Perludem that Perludem staff archived at the time.

IEA researchers found other official documents on the web pages described above that are not actively maintained but had not yet been retired. We scraped these websites and PDF documents to extract pertinent information, which was then cleaned, verified and organized to align with data from previous elections, ensuring comparability at the appropriate level of granularity. Finally, and importantly when requested KPU staff endeavor to make original documents from their (currently) offline archive of past elections available to fill any holes that we find in our data collection.

Data Records

The dataset is available at the Open Science Framework (OSF)(DOI 10.17605/OSF.IO/HJQZD). Table 2 lists the archive files. The first file "Election_Law", contains qualitative information that is the law governing the electoral framework of Indonesia. Next, are three quantitative election information files, pertaining to each of the offices covered in the archive, respectively the Presidency and the Vice Presidency (Pres_VP), the Upper house of the National legislature (DPD), and the Lower House of the National Legislature (DPR). Each of these files is described in greater detail below. Two additional files are included in the archive. First is a file entitled "Codebook", the second auxiliary file included, is titled "Sourcebook".

The codebook includes a project description, details the bibliographic citation and explains where the data can be accessed, and lists the variables in each of the quantitative files and describes them. Altogether, in addition to a version number, the quantitative files contain 16 variables listed in 3. Identifier variables including election, year, month and province are common to all three quantitative election files. As detailed in the table, other variables are provided for some and not other elections

as appropriate. For example, DPD candidates all run as independents, therefore, no party information is provided for DPD elections. To make this data collection as compatible with earlier efforts as possible the codebook format and the provision of the quantitative data on the lower house of the national legislature closely follows the format of the earlier CLEA data collection on the lower house of the Indonesian legislature. This is with permission from CLEA directors who, in turn, intend to link to the IEA so that users can obtain the greatest coverage of Indonesian elections (A. Hicken, personal email communication, 5-30-25).

Because of the variety of the source files described above - to facilitate tracing of the information contained in each variable in each of the quantitative documents to their source - the source-book details,by year and office, the source of the variable information as shown in Table 12. The Table illustrates that the source documents vary between office, and sometimes between variables for a given office. Furthermore, the source documents vary between election years for each office. If the source document for a given variable for a given office contains information at a level more disaggregate than the level at which the information is being provided, we aggregate the information to the appropriate level (province for the presidency and the DPD and district for the DPR).

Notably, all of our sources are official, either websites or PDF documents, and sometimes several different documents are available per election for cross-validation. The source-book is not a comprehensive list of all the documents we consulted but does provide at least one definitive source for each variable, per office and year.

Archive data on Institutions

The first data file made available in this archive includes a compilation of laws defining the institutional framework of Indonesia's elections. This framework is highly complex and has undergone significant changes since re-democratization at the turn of the century. Earlier studies provide valuable insights into administrative structures and changes before, during (6; 7), and after re-democratization (4; 8; 9; 10).

Table 4 lists the pertinent laws included in this archive, organized by relevant office and indicating whether they apply to current or past elections. In total, 16 distinct laws have shaped the principal features of elections at the three administrative levels(eight offices), for which data are collated and made public at the national level. These levels and offices are the Presidency, the lower level legislature (DPR), the upper level legislature (DPD), the provincial level legislature (DPRD-I), Governor, the district level legislature (DPRD-II), and Regent/Mayor. Village-level elections, held on varying schedules with results collected locally only, fall outside the scope of our work.

Many of the laws address multiple offices. Table 4 organization clarifies which laws contain provisions relevant to specific offices of interest. Additionally, the last row highlights four key laws on the organization and structure of political parties, as these are critical for understanding electoral candidate nominations and the regulation of the parties.

For effective longitudinal analysis of election-related data in Indonesia, it is crucial to understand these administrative structures and their evolution over time. The collected laws detail several significant changes to the electoral framework between 1999 and 2024. These include foundational shifts, such as the introduction of direct elections for previously unelected or indirectly elected bodies and an increase in the number of administrative districts. Additionally, the rules governing elections have evolved, including changes to the legal threshold for entering the national legislature, a shift from a closed-list to an open-list system, and the gradual implementation of gender quota legislation. Adding complexity, rules regarding candidate nominations has evolved over time. These changes are documented in the election and party legislation included in the archive.

The collection provided here includes all of the law listed in Table 4, organized chronologically in a single pdf file. The file name is: "Election law chronological".

Archive data on Elections: Candidates and Results

The next three data files made available in the archive are in CSV format. The files contain information on three elected offices, respectively the President and Vice President, the Upper House of the National Legislature (DPD), and the Lower House of the National Legislature (DPR). Each file is labeled for the office and each contains information for the 2014, 2019, and 2024 elections. One exception here is the DPD Valid and Invalid Votes for the 2024 election, where official results have yet to be released. The granularity of the data varies by office. Presidential data and data for the DPD, is organized by province, and for the DPR by the district.

The files include information on names and gender of all candidates running for office in any of the years covered. Between 2014 and 2024, over 24.6K candidates competed in DPR elections. Tables 5, 6, and 7 detail the number of candidates by party and gender for the 2014, 2019, and 2024 elections, respectively. On average, most parties had slightly more male than female candidates, with a gender ratio of approximately 1.6 males to every female candidate. The current DPR candidate data also includes party affiliation for each candidate as this information was systematically collected across elections. For DPD elections during the same period, the data records over 2.5K individual candidates.

The files also include post-election data for the offices of President and Vice President, the DPR, and the DPD. In line with the presentation of the candidate data, results for the Presidency and the DPD are presented at the provincial level since the

248 President represents the entire country, and the DPD represents provinces. Consistent with earlier data collections (e.g., CLEA),
249 DPR election results are presented at the district level.

Technical validation

251 The law collection contains original documents obtained from official sources as detailed above. Consequently, technical
252 validation of this collection consisted of curation rather than checking of the content. Curation of the legal collection was led by
253 the Perludem expert team with input from other team members. At the margins, which legal documents are essential is based
254 on some judgment calls - for example - the present collection does not include regulations on administrative boundary changes
255 but does include all major legislation affecting the principal architecture of each election. The IEA only provides the legal
256 texts in Indonesian only - consequently no verification of translation was necessary. Users who do not speak Indonesia are
257 encouraged to look to the sources noted earlier, such as the Carter center and IFES, for English translations of the law.

258 Technical validation of the three quantitative files was extensive. By and large, the data were sourced from the official
259 election tribunal in Indonesia (KPU). Some of the data was scraped from the tribunal's websites using r or python code written
260 specifically for this purpose, other was scraped from official documents publishing results using python code written specifically
261 for this purpose. In some cases Perludem staff recorded the quantitative information from the PDF files by hand.

262 The entered numerical data were validated in multiple ways and cross-checked by multiple people. While one member of
263 the team might assemble a given file, another member would cross-check the data with the original sources and internally across
264 the document. The quantitative information is of two kinds. First are static variables that denote year and month, geographic
265 unit and elected office. These were entered and checked by different members of the team. Second, are variables that contain
266 variable quantitative date. Generally speaking, the cross-checking of the variable quantitative data consisted of cross-checking
267 whether sums of numbers added up correctly and correcting any instances where this was not the case by referring back to
268 the original documents. Specifically, Table 13 lists these variables and explains how they were validated. The first column
269 lists the variables themselves. These are Registered Voters (RV), Valid Votes (VV), Invalid Voted (IVV), Candidate Votes
270 (CV), Total Party Votes (TPV), and SEATS. To check the first three (RV,VV,IV) we calculated the difference between RV and
271 the sume of VV and IVV in the geographic unit at which the votes were reported. For the Presidential and Vice Presidential
272 Election and the Upper House of the National Legislature (DPD) this geographic unit is the province, for the Lower House of
273 the Legislature (DPR) this geographic unit is the District. If the difference was anything other than 0 all three numbers were
274 cross-referenced with the original document. Candidate votes were validated by summing all candidate votes in a geographic
275 unit and subtracting the number of valid votes in the geographic unit from the sum of candidate votes. Total Party Votes were
276 validated by summing the total party votes in a geographic unit and subtracting from that sum the number of valid votes in that
277 geographic unit. Similarly, if the sum was anything other than 0 the source document was referenced for a correction.

278 SEATS were checked by summing the total number of seats allocated and subtracting the legally mandated number of total
279 of seats overall in a given year. Seats were also checked against the known allocation of seats to a party. Tables 8, 9, and 10
280 summarize DPR results by party for elections from 2014 to 2024. Of the 24,601 candidates who competed across these three
281 cycles, 1,715 were elected. Seat allocation was also checked by summing the number of seats and subtracting it from the known
282 district magnitude in a given district (DPR). Table 11 provides an example of district-level data, showing that in Jakarta District
283 1, six candidates from five different parties were elected to the DPR in 2024. For DPD elections the total number of upper
284 house members elected in each province was compared to the legally mandated number for each province.

285 Occasionally a discrepancy could not be resolved with a reference to an original document. In such cases we searched for
286 and collected additional official documents (sometimes at different levels of aggregation) to resolve the differences uncovered
287 during the technical validation.

288 In addition to numerical data, the information in the IEA includes information on candidates running for each office. Each
289 election in Indonesia sees thousands of candidates competing for seats in the DPR, and the DPD. For example, in the 2024
290 election, 9,917 candidates vied for seats in the DPR alone across 84 electoral districts. The candidate data was similarly sourced
291 from multiple websites and documents. Technical validation of this data consisted of ensuring consistency between candidate
292 names and gender, as recorded in the original sources. This process is handled differently for each election. Since candidate
293 information for the 2024 election remains available on the KPU website, we directly scraped candidate data from the site,
294 which already includes gender information. For the 2019 and 2014 elections, gender information was assigned based on official
295 source documents and cross-validated by at least three people to ensure accuracy. We retained the formatting of candidate
296 names as recorded in the original documents, which typically includes their academic degrees or religious titles.

Code availability

298 Because of the structure of scraped web-pages we used AI assisted scrapers such as the Instant Data Scraper without writing
299 additional code. Much of the data from official documents was manually transcribed by Perludem staff. For documents

that were scraped we wrote python code. Because the documents vary substantially the code we have made available at
https://github.com/jkbirnir/IEA shows scraping of one type of document but can be modified for other documents.

References

1. Buchholz, K. The world's biggest democracies. *Statista* (2024).

2. Rosales, B., Antiquerra, J. R. & Rana, D. M. *Beyond Power: Upholding the Rule of Law amid Democratic Adversities. Final Report of the ANFREL International Expert Election Observation Mission (IEEOM) to the 2024 Indonesian General Elections* (The Asian Network for Free Elections (ANFREL), Bankok Thailand, 2024).

3. Agustyati, K. N. *et al.* Indonesia election archive. *Nat. Sci. Data* (2025).

4. Birnir, J. K. & Şatana, N. S. *Alternatives in Mobilization Ethnicity, Religion, and Political Conflict* (Cambridge University Press, New York, London, 2022).

5. Wilson, R. & de Acosta, R. How indonesia's future is in the hands of young voters, in 5 charts. *CNN* (2024).

6. Hicken, A. & Kasuya, Y. A guide to the constitutional structures and electoral systems of East, South and Southeast Asia. *Elect. Stud.* **22**, 121–151 (2003).

7. Reilly, B. Electoral Systems and Party Systems in East Asia. *J. East Asian Stud.* **7**, 185–202 (2007).

8. Shair-Rosenfield, S. The alternative incumbency effect: Electing women legislators in Indonesia. *Elect. Stud.* **31**, 576–587 (2012).

9. Butt, S. *The Constitutional Court and Democracy in Indonesia* (BRILL, 2015).

10. Allen, N. W. Effects of the electoral system. In Herron, E. S., J, P. R. & Shugart, M. S. (eds.) *The Oxford Handbook of Electoral Systems* (Oxford University Press, NY, 2018).

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Author contributions statement

K.A., H.P., J.B., N.O. and I.K. collected and verified the data. J.B. and H.O. systematized and analyzed the data. J.B. and H.O. wrote the text with substantive input from K.A, and H.P.. J.B. created the digital archive. F.R. helped design the Perludem portal of which the election archive is a part. All authors reviewed the manuscript.

Competing interests

The authors have no conflicts of interest to report.

Figures & Tables

Figure 1. Administrative levels in Indonesia

National level

Provincial level

Regency or City level

Sub-district level

Rural Village
or
Urban Village
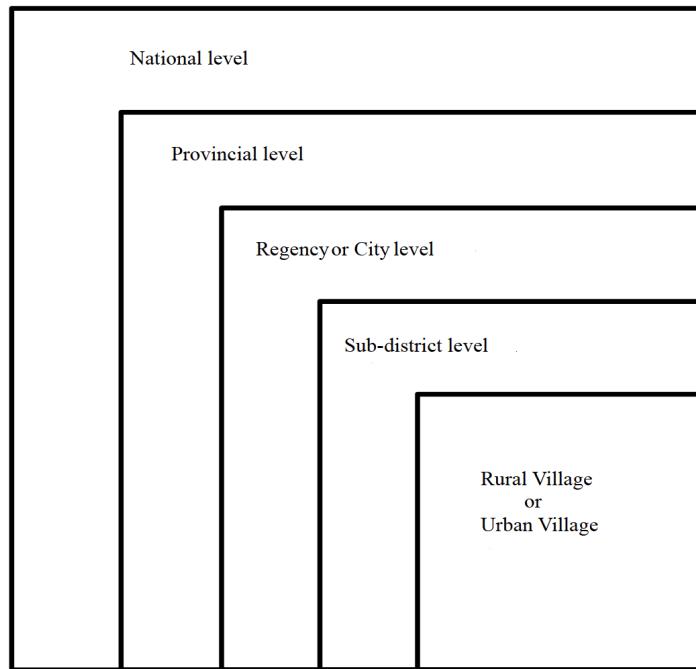
Table 1. Election schedule for the three most aggregate levels of administration from 1999-2025

Schedule	Elected Office
Prior to 1999	All
1999	Directly elected DPD, DPRD-Provinsi l
2004	DPR, First election for DPD, First direct election of President, DPRD-Provinsi
2005 -2008	2005 First direct elections of local head (Governors, Mayors, Regents) 2006-2008 additional staggered elections of local heads
2009	President, DPR, DPD, DPRD-Provinsi
2010-2013	Staggered elections of local heads
2014	President, DPR, DPD, DPRD-Provinsi
2015	First simultaneous election of local heads
2017	Second local head simultaneous
2018	Third local head simultaneous
2019	President, DPR, DPD, DPRD-Provinsi
2020	local head simultaneous
2024	President, DPR, DPD, DPRD-Provinsi
2024	Local head simultaneous election
2025	President, DPR, DPD, DPRD-Provinsi, local heads

Table 2. The files in the IEA

File name	File Content	File Type
Election_Law	Legal Texts	PDF
Pres_VP	Candidate info., election results	CSV
DPD	Candidate info., election results	CSV
DPR	Candidate info., election results	CSV
Codebook	Info. on Project and Variables	PDF
Sourcebook	Information on sources	CSV

Table 3. Codebook variables

Abbreviation	Variable Name	Election
ID	Election Identifier	All
YR	Election Year	All
MN	Election Month	All
PROV	Province Name	All
DIST_N	District Name	DPR
DIST_C	District Code	DPR
PTY_N	Party Name	DPR
PTY_C	Party Code	DPR
CAN_N	Candidate Name	All
CAN_G	Candidate Gender	All
RV	Registered Voters	All
VV	Valid Votes	All
IVV	Invalid Votes	All
CV	Candidate Votes	Pres_VP, DPD
TPV	Total Party Votes	DPR
SEAT	Seats Won	DPD, DPR

Table 4. Institutions: Law Number and year

Office	Current	Prior	Prior	Prior	Prior
President	7/2017	8/2012	42/2008	23/2003	3/1999
DPR	7/2017	8/2012	10/2008	12/2003	3/1999
DPD	7/2017	8/2012	10/2008	12/2003	3/1999
DPRD-I	7/2017	8/2012	10/2008	12/2003	3/1999
DPRD-II	7/2017	8/2012	10/2008	12/2003	3/1999
Governor	10/2016	1/2015	22/2014	32/2004	22/1999
Regent/Mayor	10/2016	1/2015	22/2014	32/2004	22/1999
Political Parties	2/2011		2/2008	31/2002	2/1999

Table 5. Count of DPR Candidates in 2014 elections by party and gender

Party	Male	Female
Amanat Nasional	351	208
Bulan Bintang	351	205
Demokrasi Indonesia Perjuangan	360	200
Demokrat	355	205
Gerakan Indonesia Raya	354	203
Golongan Karya	358	202
Hati Nurani Rakyat	355	203
Keadilan Dan Persatuan Indonesia	339	200
Keadilan Sejahtera	301	191
Kebangkitan Bangsa	348	210
NasDem	333	226
Persatuan Pembangunan	334	214

Table 6. Count of DPR Candidates in 2019 elections by party and gender

Party	Male	Female
Berkarya	341	213
Demokrat	350	223
Garuda	116	110
Gerindra	364	211
Golkar	357	217
Hanura	250	177
NasDem	354	221
PAN	356	219
PBB	308	177
PDIP	358	215
Perindo	347	221
PKB	355	220
PKPI	61	76
PKS	321	212
PPP	321	233
PSI	300	274

Table 7. Count of DPR Candidates in 2024 elections by party and gender

Party	Male	Female
Buruh	370	210
Demokrat	378	202
Garuda	334	236
Gelora	253	143
Gerindra	370	210
Golkar	383	197
Hanura	298	187
Nasdem	380	200
PAN	364	216
PBB	277	193
PDIP	388	192
Perindo	348	231
PKB	376	204
PKN	327	198
PKS	367	213
PPP	366	214
PSI	355	225
Ummat	307	205

Table 8. Number of DPR Seats by Party, 2014 election

Party name	Number of seats
Partai Amanat Nasional	46
Partai Bulan Bintang	0
Partai Demokrasi Indonesia Perjuangan	108
Partai Demokrat	61
Partai Gerakan Indonesia Raya	73
Partai Golongan Karya	91
Partai Hati Nurani Rakyat	16
Partai Keadilan Sejahtera	43
Partai Keadilan dan Persatuan Indonesia	0
Partai Kebangkitan Bangsa	48
Partai Nasional Demokrat	35
Partai Persatuan Pembangunan	39

Table 9. Number of DPR Seats by Party, 2019 election

Party name	Number of seats
Partai Amanat Nasional	44
Partai Berkarya	0
Partai Bulan Bintang	0
Partai Demokrasi Indonesia Perjuangan	128
Partai Demokrat	54
Partai Gerakan Indonesia Raya	78
Partai Gerakan Perubahan Indonesia	0
Partai Golongan Karya	85
Partai Hati Nurani Rakyat	0
Partai Keadilan Sejahtera	50
Partai Keadilan dan Persaatuan Indonesia	0
Partai Kebangkitan Bangsa	58
Partai Nasdem	59
Partai Persatuan Indonesia	0
Partai Persatuan Pembangunan	19
Partai Solidaritas Indonesia	0

Table 10. Number of DPR Seats by Party, 2024 election

Party name	Number of seats
Partai Amanat Nasional	48
Partai Bulan Bintang	0
Partai Buruh	0
Partai Demokrasi Indonesia Perjuangan	110
Partai Demokrat	44
Partai Garda Republik Indonesia	0
Partai Gelombang Rakyat Indonesia	0
Partai Gerakan Indonesia Raya	86
Partai Golongan Karya	102
Partai Hati Nurani Rakyat	0
Partai Keadilan Sejahtera	53
Partai Kebangkitan Bangsa	68
Partai Kebangkitan Nusantara	0
Partai Nasdem	69
Partai Perindo	0
Partai Persatuan Pembangunan	0
Partai Solidaritas Indonesia	0
Partai Ummat	0

Table 11. Number of DPR Seats by Party in Jakarta District 1, 2024 election

Party name	Number of seats
Partai Amanat Nasional	1
Partai Bulan Bintang	0
Partai Buruh	0
Partai Demokrasi Indonesia Perjuangan	1
Partai Demokrat	0
Partai Garda Republik Indonesia	0
Partai Gelombang Rakyat Indonesia	0
Partai Gerakan Indonesia Raya	1
Partai Golongan Karya	0
Partai Hati Nurani Rakyat	0
Partai Keadilan Sejahtera	2
Partai Kebangkitan Bangsa	1
Partai Kebangkitan Nusantara	0
Partai Nasdem	0
Partai Perindo	0
Partai Persatuan Pembangunan	0
Partai Solidaritas Indonesia	0
Partai Ummat	0

Table 12. Sourcebook: Sample list of variable source documents

Election Identifier	Year	Geography	Candidate Name Source Document	Registered Voters Source Document
PRES_VP	2014	Province	Hasil Penghitungan Perolehan Suara Dari Setiap Provinsi dan Luar negeri Dalam pemilu Presiden dan Wakil Presiden Tahun 2014	Same
DPD	2014	Province	Keputasan Komisi Pemilihan Umum Nomor: 411/kpts/KPU/Tahun 2014	Berita Acara Rekapitulasi Hasil Penghitungan Perolehan Suara Calon Anggota DPD Pemilu Tahun 2014
DPR	2014	District	Berita Acara Rekapitulasi Hasil Penghitungan Perolehan Suara Calon Anggota DPR Pemilu 2014 (Model DD)	Same

Table 13. Validation of variable quantitative information

Variables	Method of validating	Discrepancy solution
RV, VV, IVV	RV - (VV+IVV) = 0 in Geographic Unit	If the sum is not 0 all numbers are checked manually against the original documents
CV	CV - VV = 0 in Geographic Unit	If the sum is not 0 all numbers are checked manually against the original documents
TPV	TPV - VV = 0	If the sum is not 0 all numbers are checked manually against the original documents
SEAT	District Magn. - SEAT = 0 in Geographic Unit	If the sum is not 0 all numbers are checked manually against the original documents

1 Supplementary Appendix

This supplementary appendix contains some suggestions about data usability for interested readers. Furthermore, while the data presented in this article is a standalone contribution, the Indonesian election data archive is an ongoing project. We briefly discuss the future objectives of this program below.

Data access and usability

The current IEA data files can be used to examine changes in party support over time, including geographically for elections held in 2014, 2019 and 2024 when merged with common shapefiles -using the provincial and district level geographic identifiers included in as variables in each of the files. For example, Figures 2, 3 and display provincial-level maps of presidential election results for the three cycles, with shading and labels indicating vote shares by candidate for each province.[1]

In addition to being available on the OSF website as explained in the paper, the data is available through the link "Indonesia Election Archive" at the Perludem website data.electionhouse.org. The data can also be accessed through the personal websites of the individual authors including johannabirnir.com. For V1 and future versions clickable links lead to the same types of files as described in this article but will be updated over time with more elections and greater granularity.

Future versions

This paper outlines the initial efforts of a collaborative team of scholars and democratic NGO practitioners from Indonesia and the United States. Although the data presented here constitutes a standalone project, the team is actively working to expand the archive to include additional elections and enhance the granularity of the data.

The overarching aim of the archive is to respond to the needs of international democracy advocates by offering comprehensive data in three key domains: the institutional framework, pre-election candidate information, and post-election results. In Version 1, we have compiled and made publicly available institutional data in the form of election-related legislation, covering the period from Indonesia's re-democratization in 1999 through the 2024 elections. We also provide candidate and results data for the three most recent election cycles (2014, 2019, and 2024), encompassing the Presidential and Vice Presidential races, the Lower House of the National Legislature (DPR), and the Upper House (DPD). At this time official DPD results are available for 2014 and 2019 only.

The long-term vision of the project is to establish a centralized repository of information for anyone studying or engaged with Indonesian elections. This includes tracing the evolution of institutional frameworks, documenting pre-election candidate details, and analyzing post-election outcomes. While the current archive covers data for 2014, 2019, and 2024, we plan to enrich it with greater detail and extend its historical scope to include earlier elections for these national bodies.

The next version of the archive will feature additional candidate-level election results for the DPR, enabling more robust longitudinal analysis. Beyond this, we aim to systematically incorporate data from all elections listed in Indonesia's national election schedule. Ultimately, we intend to include candidate and results data from regional elections as well. For a comprehensive roadmap of the archive's planned development, readers are encouraged to consult Table **??**, which outlines Indonesia's election schedule across the three administrative tiers: National, Provincial, and Regency/City.

This ambitious ttable reflects both the complexity and the scale of constructing a longitudinal electoral data archive for Indonesia. Nevertheless, the release of Version 1 marks a significant milestone toward that goal and is intended to serve as a valuable resource for both scholars and practitioners.

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[1]Kalimantan Utara, established as a province in 2012, was not treated as a separate electoral district until the 2019 election. Thus, in the 2014 election map, the province is grayed out, as its votes were still counted under its previous jurisdiction.
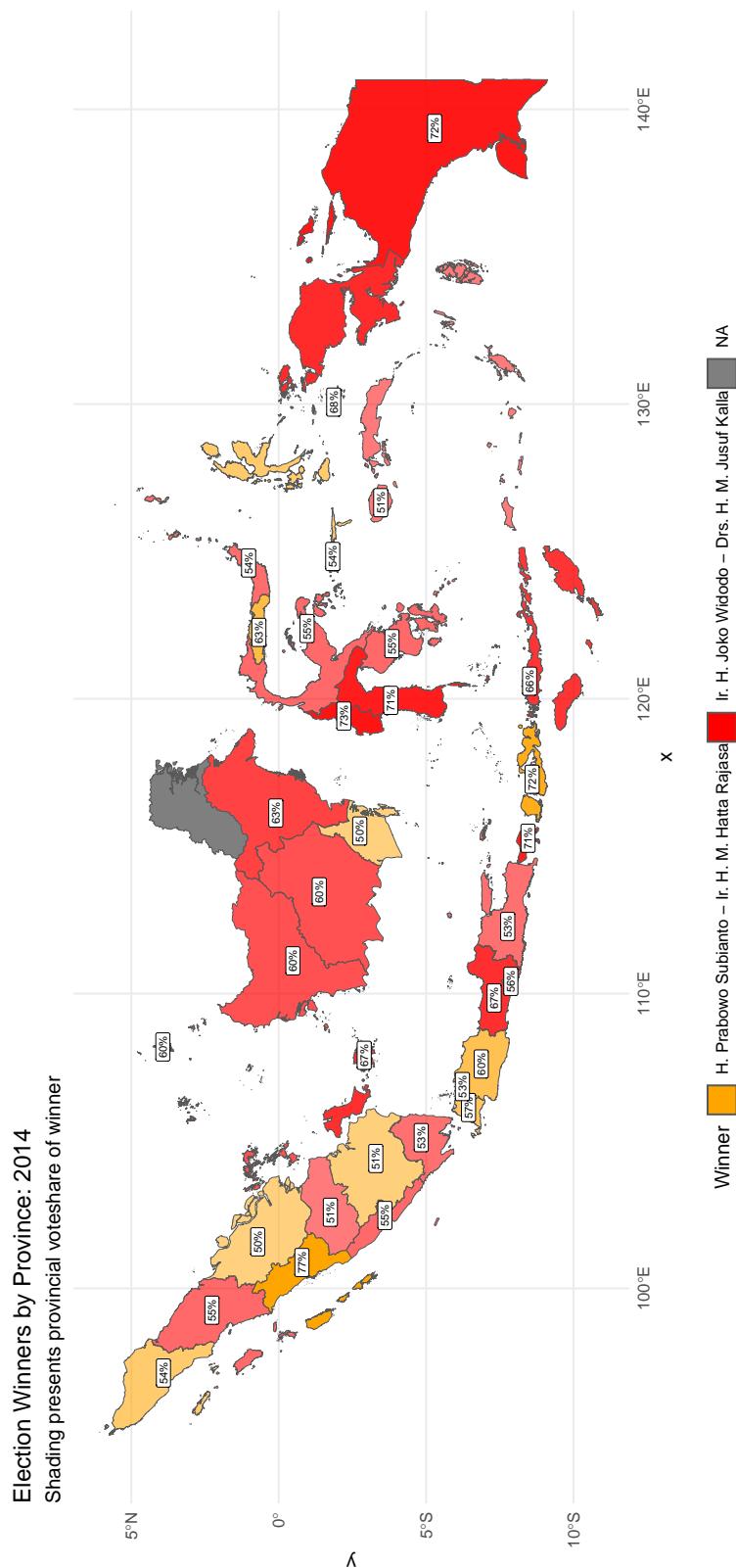
Figure 2. Election results for the 2014 Indonesian presidential election. The colors indicate which candidate pair had the majority of votes in a province. Shading and labels indicate the percentage vote share in that province for the winning candidate. Darker shades indicate more support.
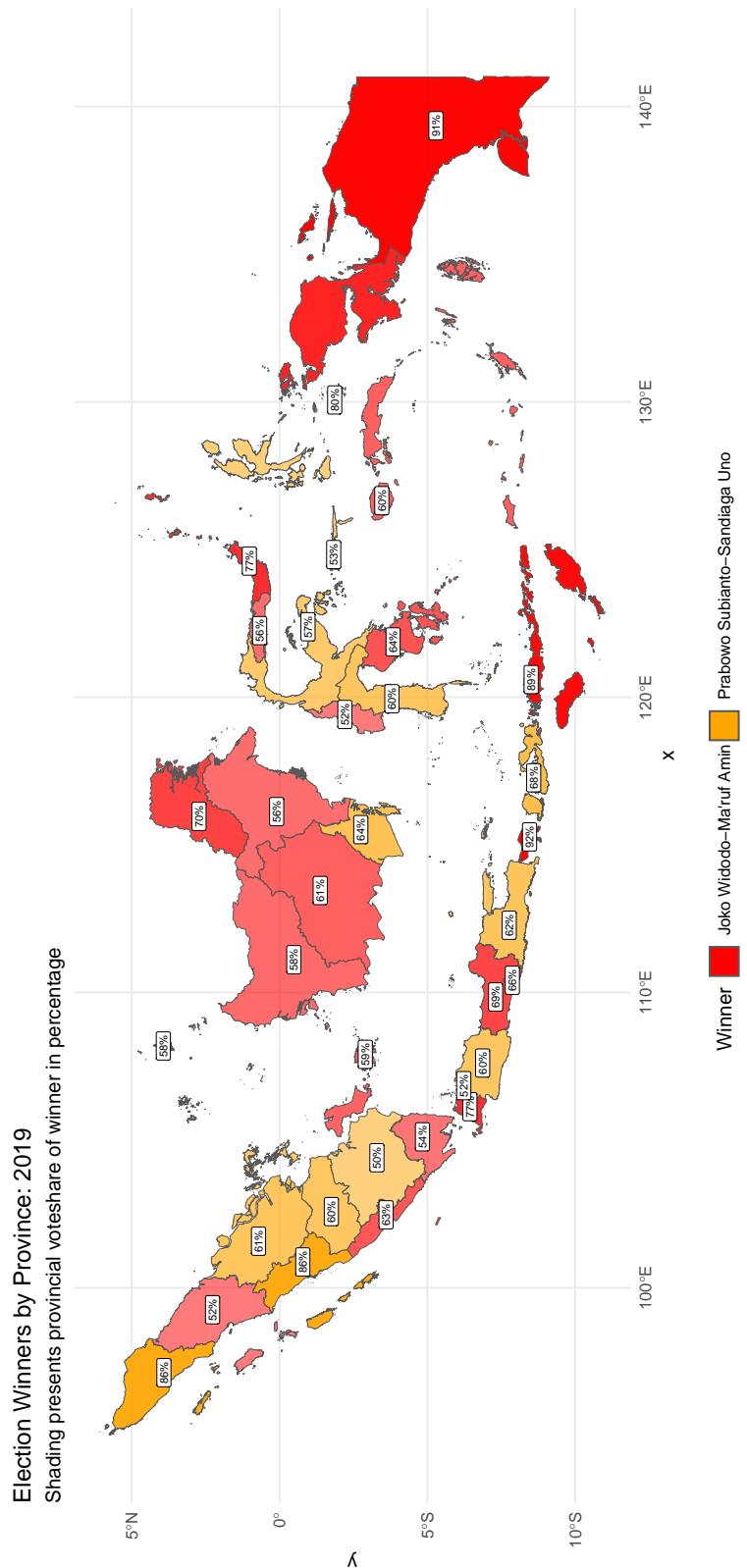
Figure 3. Election results for the 2019 Indonesian presidential election. The colors indicate which candidate pair had the majority of votes in a province. Shading and labels indicate the percentage vote share in that province for the winning candidate. Darker shades indicate more support.
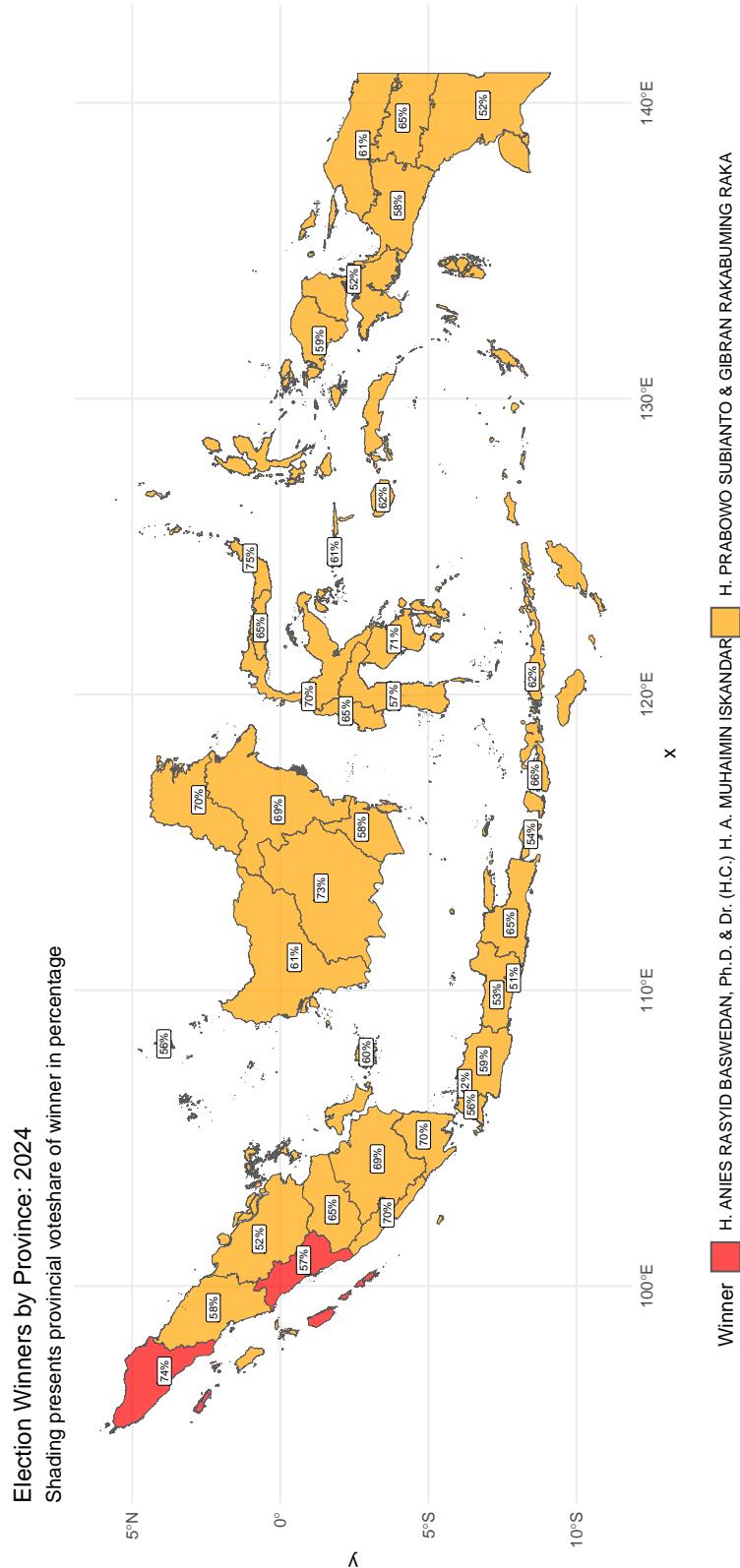
Figure 4. Election results for the 2024 Indonesian presidential election. The colors indicate which candidate pair had the majority of votes in a province. Shading and labels indicate the percentage vote share in that province for the winning candidate. Darker shades indicate more support.