

Review of tally sheets and electoral documents

Venezuelan Presidential Election 2024

Bogota, Colombia, August 3, 2024

1. Official results available: As of August 2, 2024, the CNE of Venezuela has not made the tally sheets (*actas* in Spanish) of the July 28, 2024 election public. It has only released two bulletins with aggregated results, indicating incumbent candidate Nicolás Maduro as the winner of the election.

The first bulletin was issued on the night of the election, based on the information contained in 80% of the tally sheets. The second bulletin was issued five days later, on August 2, with 96.87% of the tally sheets and a total of 12,335,883 votes. This bulletin confirms the victory of incumbent candidate Nicolás Maduro with a total of 6,408,844 votes (51.95%), compared to 5,326,104 votes for candidate Edmundo González (43.18%).

2. General election data: Our analysis considers the following general election data:

- Electronic voting machines available: 30,026
- Tally sheets to be issued: 30,026
- Complete Electoral Register: 21,620,705
- Electoral Register of Venezuelans abroad: 69,211

3. Published electoral tally sheets: Because official electoral tally sheets have not been published by the CNE of Venezuela, on July 29, 2024, the opposition candidate's team created the website <https://resultadosconvzla.com>, available to the public, which shows data and documents related to the election based on information from 24,532 polling stations (81.7% of the total). On this website, users can download an image file of the respective tally sheet of each of the polling stations that have been aggregated, which include names, ID numbers, and signatures of the members of the polling station, as well as a QR Code and a HASH Code at the end.

4. Review of the published electoral tally sheets: Given that it is the only disaggregated information available, the Electoral Observation Mission – MOE Colombia conducted an analysis of the data contained in these tally sheets.

a) **Creation of a database:** Using the script¹ that Andrés Snitkofsky, Javier Smaldone, and Niv Sardi made available to the public², the information of 21,952 tally sheets were downloaded into a database. The database is disaggregated at various levels, down to the voting center and polling station.

¹ A *script* is a set of programming instructions that are executed within a specific environment.

² Snitkofsky, Smaldone and Sardi. (2024). Available at: https://drive.google.com/drive/folders/1S0Sz-3x0Jn9VL0_HK_-sDDSY_oE6mclH.

b) **Variables incorporated into the database:** After identifying each tally sheet's unique code, it was mapped onto the political division of the Bolivarian Republic of Venezuela. The variables contained in the database are as follows:

Table 1. VZLA 2024 - MOE Results Database Coding Book

Variable	Tipo Variable	Descripción
1 Acta	Numerical	Unique Code from Tally Sheet
2 Estado	Numerical	State Code
3 Nom_ESTADO	Text	State Name
4 Municipio	Numerical	Municipality Code
5 Code_MPIO	Numerical	Aggregate Code State and Municipality
6 Nom_Municipio	Text	Municipality name
7 Parroquia	Numerical	Parish Code
8 Code_PARROQ	Numerical	Aggregate Code State, municipality and parish
9 Nom_Parroquia	Text	Parish name
10 Centro de Votación	Text	Voting Center code
11 Code_CENTROVOT	Numerical	Código agregado del Estado, municipio, parroquian y centro de votación
12 Nom_CENTROVOT	Text	Voting center Name
13 Mesa	Numerical	Polling station number
14 Code_MESA	Numerical	aggregate code Stat, municipality, Parish and polling station number
15 CensoELEC	Numerical	electoral census by polling station
16 NN	Numerical	Unidentified coding
17 Maduro	Numerical	Votes obtained by Nicolas Maduro
18 Martinez	Numerical	Votes obtained by Luis Eduardo Martinez
19 Bertucci	Numerical	Votes obtained by Javier Bertucci
20 Brito	Numerical	Votes obtained by candidato José Brito
21 Ecarri	Numerical	Votes obtained by Antonio Ecarri
22 Fermin	Numerical	Votes obtained by Claudio Fermín
23 Ceballos	Numerical	Votes obtained by Daniel Ceballos
24 Gonzalez	Numerical	Votes obtained by Edmundo Gonzalez
25 Marquez	Numerical	Votes obtained by Enrique Márquez
26 Rausseo	Numerical	Votes obtained by Benjamín Rausseo
27 Ganador	Numerical	Winning candidate by polling station
28 Mesas empate	Dichotomous variable Empate= two or more candidates has the same number of votes Hay Ganador= One of the candidates has more votes than the others	Dichotomous identification of whether the table records a tie between two candidates
29 Mesas en "Cero" Gonzalez	Dichotomous variable Mesa en Cero= The polling station has no votes by Edmundo Gonzalez OK= the polling station registers at least one vote for the candidate Edmundo Gonzalez	Dichotomous identification if there are tables with zero votes for candidate Edmundo Gonzalez.
30 Mesas en "Cero" Maduro	Dichotomous variable Mesa en Cero= The polling station has no votes by Nicolas Maduro OK= the polling station registers at least one vote for the candidate Nicolás Maduro.	Dichotomous identification if there are tables with zero votes for candidate Nicolás Maduro.
31 Total Votación	Numerical	Sum of votes by candidates
32 %Participación	percentage Total Votación/CensoELEC	electoral participation
33 %Maduro	percentage Maduro/Total Votación	Voting Percentage obtained by the candidat Nicolas Maduro
34 %Martinez	percentage Martinez/Total Votación	Voting Percentage obtained by the candidate Luis Eduardo Martinez
35 %Bertucci	percentage Bertucci/Total Votación	Voting Percentage obtained by the candidate Javier Bertucci
36 %Brito	percentage Brito/Total Votación	Voting Percentage obtained by the candidate José Brito
37 %Ecarri	percentage Ecarri/Total Votación	Voting Percentage obtained by the candidate Antonio Ecarri
38 %Fermin	percentage Fermin/Total Votación	Voting Percentage obtained by the candidate Claudio Fermín
39 %Ceballos	percentage Ceballos/Total Votación	Voting Percentage obtained by the candidate Daniel Ceballos
40 %Gonzalez	percentage Gonzalez/Total Votación	Voting Percentage obtained by the candidate Edmundo Gonzalez
41 %Marquez	percentage Marquez/Total Votación	Voting Percentage obtained by the candidate Enrique Márquez
42 %Rausseo	percentage Rausseo/Total Votación	Voting Percentage obtained by the candidate Benjamín Rausseo
43 Diferencia 1Vs2	Numerical	Difference of votes between the winner and the second place candidates by polling station

Source: MOE Colombia, based on the database consolidated with information from <https://resultadosconvzla.com>.

c) **Database characteristics:** The resulting database has the following characteristics:

- (1) It contains **21,952 records**, where each record is based on one of the published tally sheets. Thus, the database includes 73.1% of the total of the election's tally sheets. Although the website reports 24,532 tally sheets (81.7% of the total), the script did not retrieve the information of all the images; 2,580 tally sheets could not be read due to the quality of the images.
- (2) It allows identifying the results down to the polling station table level, as well as to aggregate the results either at the polling center, parish, municipality, or state level.

d) **Integrity checks on the database information:** Various verification exercises were carried out to test the integrity of the information contained in the database:

- (1) **Match between database information and uploaded tally sheets:** At least 100 validations have been performed, comparing the image of the tally sheets with the database entries. No errors resulting from image reading have been found so far.
- (2) **QR code verification:** The QR code at the end of each tally sheet generates a line of record in a comma-separated flat file, which, when verified against the database encoding, matches the database entries, bolstering the integrity of the information in the database.
- (3) **Verification of signatures:** Manual verification of at least 100 images of tally sheets was conducted following social media claims about repeated signatures. Only one instance was found where signatures looked similar (though with different ID numbers). A graphological analysis would be required for conclusive verification.

5. Findings from the information contained in the database: Statistical calculations identified the following findings:

- (1) **Electoral participation:** The electoral participation calculated in the database is consistent with the CNE's results, with minimal variation (59.97% in the second bulletin vs. 60.7% in the database).
- (2) **Partial national results:** According to the database with 73.1% of the tally sheets, Edmundo González received 6,392,350 votes (67.2%), and Nicolás Maduro received 2,891,553 votes (30.4%).

These results significantly differ from the information published in CNE's second bulletin.

Table 2. Comparison of the results between the base consolidated by the MOE and the report published by the CNE in its second bulletin.

Candidates	Voting Data Base (73% of tally sheets)	% Voting Data Base (73% of tally sheets)	Voting 2nd Bulletin CNE Vzla (96% of tally sheets)	% Voting 2nd Bulletin CNE Vzla (96% of tally sheets)	Dif. Voting
1 Edmundo González	6,392,350	67.2%	5,326,104	43.2%	-1,066,246
2 Nicolás Maduro	2,891,553	30.4%	6,408,844	52.0%	3,517,291
3 Luis Martínez	75,284	0.8%	152,360	1.2%	77,076
4 Antonio Ecarri	44,050	0.5%	116,420	0.9%	72,370
5 Benjamín Rausseo	32,540	0.3%	92,903	0.8%	60,363
6 Enrique Márquez	22,847	0.2%	29,611	0.2%	6,764
7 José Brito	19,071	0.2%	84,231	0.7%	65,160
8 Javier Bertucci	17,717	0.2%	64,452	0.5%	46,735
9 Claudio Fermín	10,756	0.1%	40,902	0.3%	30,146
10 Daniel Ceballos	9,154	0.1%	20,056	0.2%	10,902
Total Votes for Candidates	9,515,322 (73% of tally sheets)	100.0%	12,335,883 (96% of tally sheets)	100.0%	

Source: MOE Colombia, based on the database consolidated with information from <https://resultadosconvzla.com>.

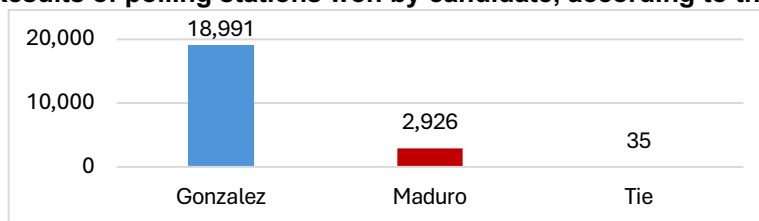
(3) **Polling station level:** At the polling station level, considering the universe of the 21,952 tally sheets analyzed by the MOE, the incumbent candidate President Nicolás Maduro obtained the majority of votes in a total of 2,926 polling stations, equivalent to 13% of those analyzed (and 9.7% of the total number of polling stations in the election).

On the other hand, candidate Edmundo González obtained the majority of votes in 18,991 polling stations, equivalent to 87% of those analyzed (63.2% of the total).

In 35 polling stations (0.1% of the total), there was a tie between the candidates Maduro and González.

These data cannot be contrasted with those provided by the CNE, as the CNE has not presented disaggregated data, nor have the corresponding tally sheets been published.

Table 3. Results of polling stations won by candidate, according to the database



Source: MOE Colombia, based on the database consolidated with information from <https://resultadosconvzla.com>.

(4) **Municipal level:** At the municipal level, the data shows that the incumbent candidate Nicolás Maduro received a higher number of votes in 28 of the 326 municipalities of Venezuela, which represent 8.6% of the total number of territorial units in Venezuela.

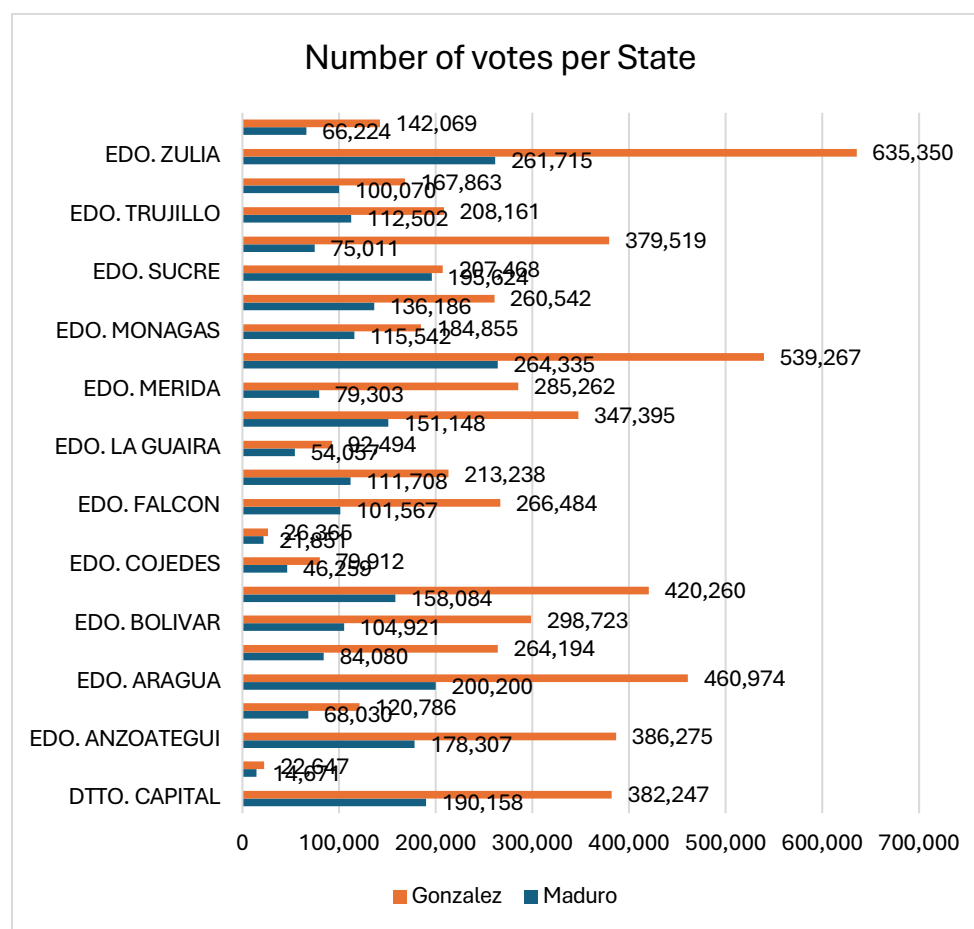
On the other hand, the candidate Edmundo González registered a majority of votes in the remaining 298 municipalities, equivalent to 91.4% of the country's territorial units.

These data cannot be contrasted with those provided by the CNE, as the CNE has not presented disaggregated data, nor have the corresponding tally sheets been published.

(5) **State level:** The aggregation of the results by state shows that the candidate Edmundo González received the majority of votes in **every one of the states of Venezuela**.

These data cannot be contrasted with those provided by the CNE, as the CNE has not presented disaggregated data, nor have the corresponding tally sheets been published.

Table 4. Electoral results by State according to the base consolidated by the MOE



Source: MOE Colombia, based on the database consolidated with information from <https://resultadosconvzla.com>.

6. Findings in light of the publication of the second bulletin of results by the CNE: When comparing the information from the database consolidated by the MOE with the aggregated information contained in the CNE's second results bulletin, *it is possible to verify, based on the only tally sheets currently available in the public domain, that the votes remaining to be counted in the missing tally sheets are not enough to alter the electoral result indicated by the tally sheets, which gives the victory to candidate Edmundo González.* This is based on the following:

- (1) The CNE's second bulletin, dated August 2, reports a total of **12,335,883 votes cast** with 96.87% of the tally sheets transmitted.
- (2) According to the information contained in the database consolidated by the MOE, **with 73.1% of the total number of tally sheets from the election, a total of 9,515,322 votes** were counted³.
- (3) It follows that 23.77% of the missing tally sheets (corresponding to the difference between the 73.1% of the tally sheets contained in the database and the 96.87% referred to in the second bulletin) account for a total of **2,871,377 remaining votes**.
- (4) However, the **difference** in votes between candidate González, who appears as the winner in this database, and the incumbent candidate Maduro is **3,500,797 votes** (resulting from subtracting the 2,891,553 votes for candidate Maduro from the 6,392,350 votes for González). This **amount is greater than the number of remaining votes** to be incorporated into the database, which, as mentioned above, is 2,871,377 votes.
- (5) Thus, **even if all the remaining votes collected by the CNE were in favor of incumbent candidate Nicolás Maduro, they would not be enough to surpass his opponent's vote total**, as there would still be a difference of 629,420 votes in favor of candidate González (resulting from subtracting the 2,871,377 missing votes from the 3,500,797 vote difference according to the database).

Additionally, the comparison of votes of all registered candidates shows that, according to the scenario presented by the CNE, all candidates gain votes except for candidate Edmundo González, as seen in the above Table 2.

It is important to highlight that the reason why the only data analyzed from the CNE's second bulletin is the total number of votes cast, namely 12,335,883, is that this data has not been contested or contrasted by any of the competing parties, as there has been no presentation of documentation with different data.

³ 6,392,350 of them in favor of candidate Edmundo González and 2,891,553 for the incumbent candidate Nicolás Maduro.

7. Recommendations within the framework of a comprehensive audit.

The documentation that has been made public so far has been uploaded on the web by a political sector affiliated with the Venezuelan opposition. That documentation has been subjected to various analyses by the MOE, as can be seen from the previous review.

In this context, it is necessary that the Venezuelan CNE or Supreme Tribunal make public the official information that allows traceability of the electoral results, including **the digitized image of each and every electoral tally sheet, both at the origin of the electronic ballot boxes, as well as from the output in the consolidation system**, in order to comply with international standards of electoral transparency. This would also allow contrasting the information published so far with the results delivered.

Likewise, in order to carry out a technical review exercise, it is necessary that the CNE or the Supreme Tribunal **allow a comprehensive and independent audit of the voting, transmission and consolidation system of information and electoral results**, at least in the following points:

- (1) Opening and delivery of the tally sheets generated by the electronic voting machines made available to citizens on election day, July 28, 2024. This would allow for the verification, traceability and contrast with respect to the initial output of information. It would also allow for verifications of the integrity of these documents through the reading of QR Codes and HASH Codes.
- (2) Comprehensive audit to the information transmission lines, as well as to the security logs of the process, in order to verify the date of each one of the movements and captures, as well as the inexistence of possible back doors that would allow the alteration of the electoral information.
- (3) Opening and auditing of the source code of the central level information consolidation system. The purpose of this is to identify errors or alterations in the programming that could lead to wrongly counting the results of the tally sheets.

The Electoral Observation Mission- MOE Colombia is a Colombian civil society organization, independent from the government, political parties and private interests. The MOE has 18 years of experience in electoral observation with high technical standards and proven methodological rigor.