Predicción IPC para los próximos 10 meses

1 Predicciones

Año	Mes	República	Región I	Región II	Región III	Región IV	Región V	Región VI	Región VII	Región VIII
2023	Diciembre	175.27	149.77	247.87	169.7	247.98	159.96	161.0	240.1	170.92
2024	Enero	175.99	150.53	247.87	170.7	249.3	160.49	161.74	241.34	170.92
2024	Febrero	176.71	151.29	247.87	171.7	250.37	161.01	162.49	242.58	170.92
2024	Marzo	177.42	152.06	247.87	172.71	251.62	161.53	163.23	243.81	170.92
2024	Abril	178.14	152.82	247.87	173.71	252.68	162.05	163.98	245.05	170.92
2024	Mayo	178.86	153.58	247.87	174.71	253.96	162.57	164.73	246.28	170.92
2024	Junio	179.57	154.34	247.87	175.72	255.01	163.09	165.47	247.52	170.92
2024	Julio	180.29	155.1	247.87	176.72	256.28	163.6	166.22	248.75	170.92
2024	Agosto	181.01	155.86	247.87	177.73	257.33	164.12	166.96	249.99	170.92
2024	Septiembre	181.73	156.62	247.87	178.73	258.6	164.64	167.71	251.22	170.92

2 Gráficas

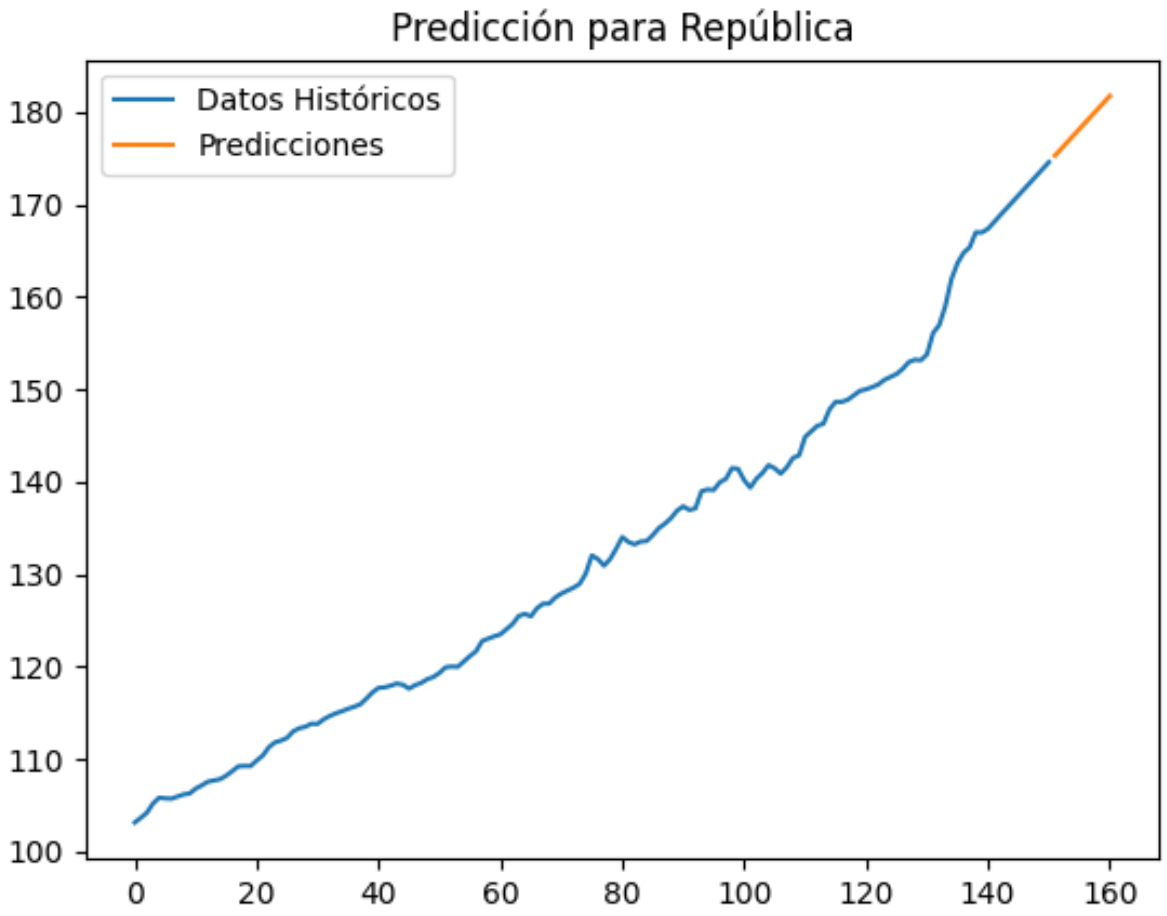

Figure 1: Gráfica de República

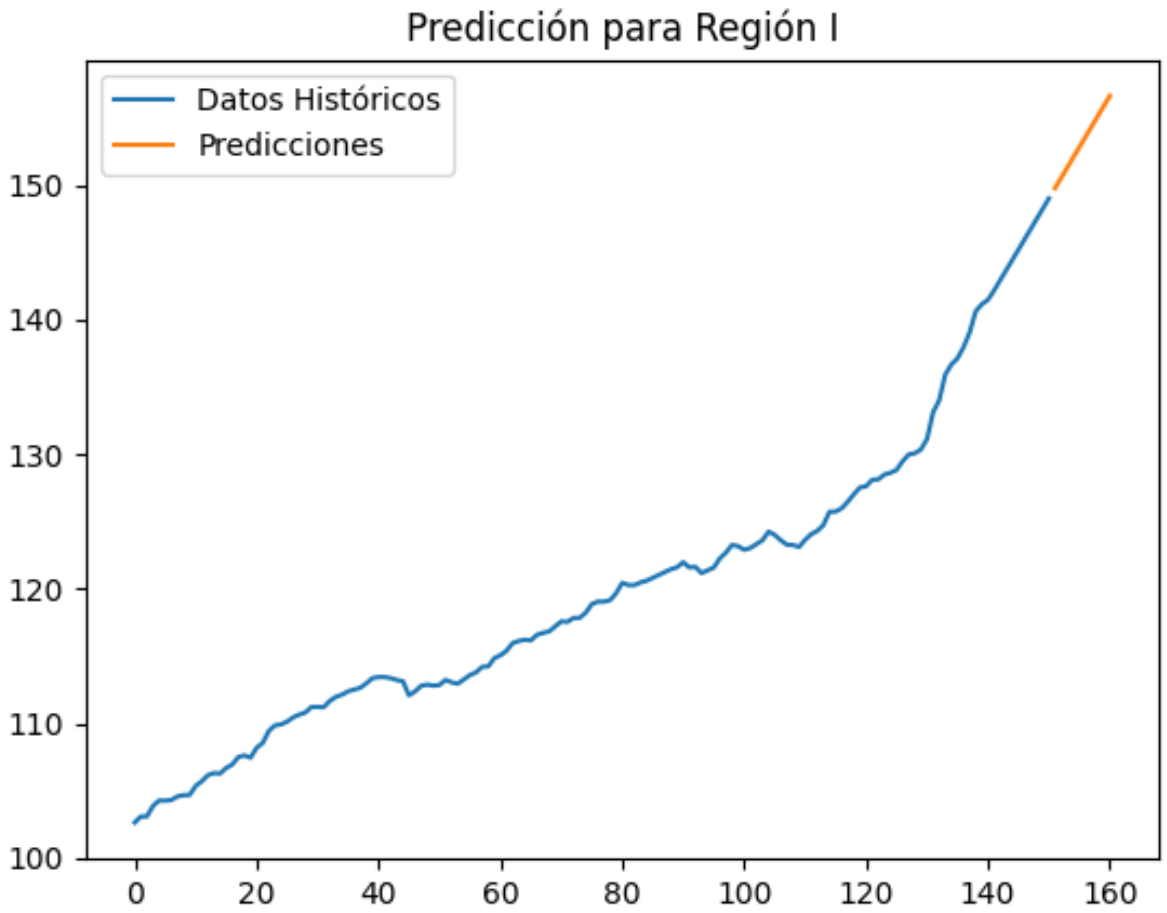

Figure 2: Gráfica de Región I

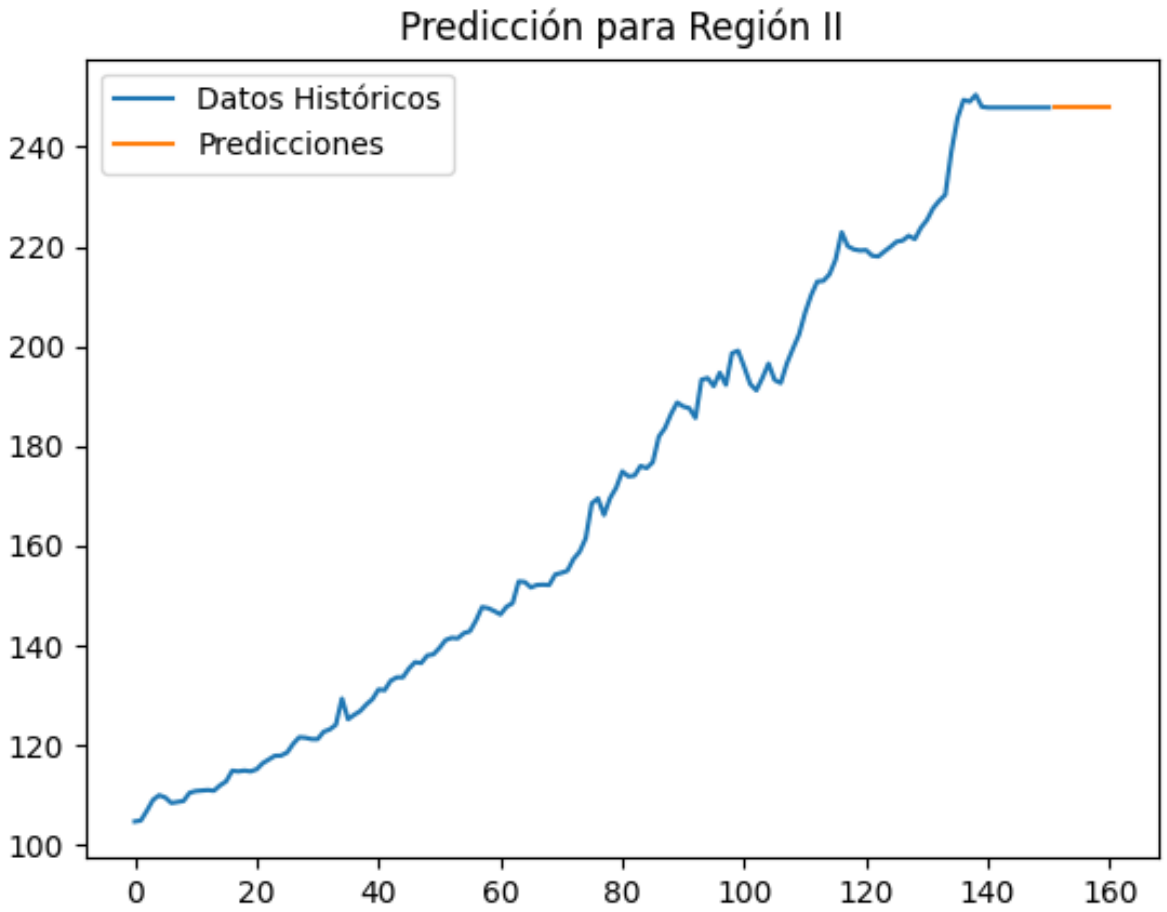

Figure 3: Gráfica de Región II

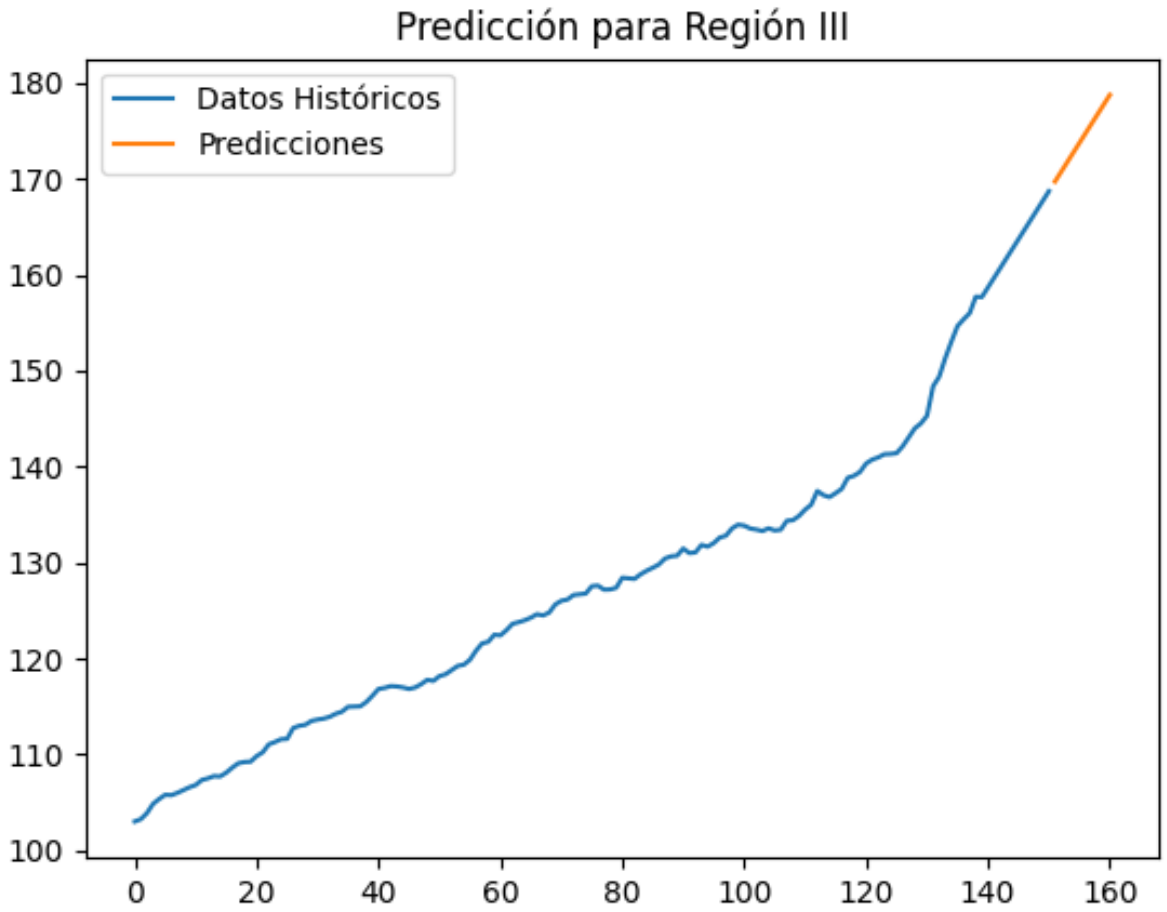

Figure 4: Gráfica de Región III

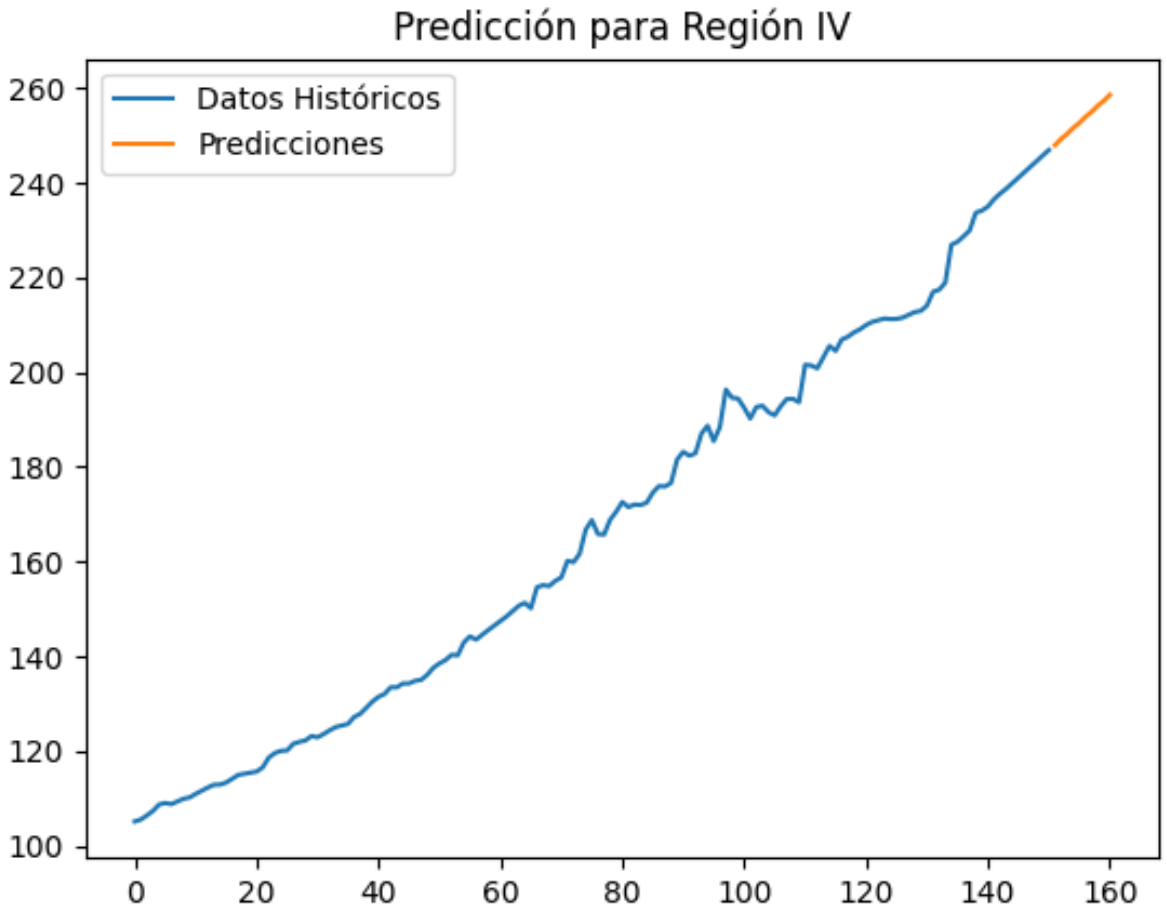

Figure 5: Gráfica de Región IV

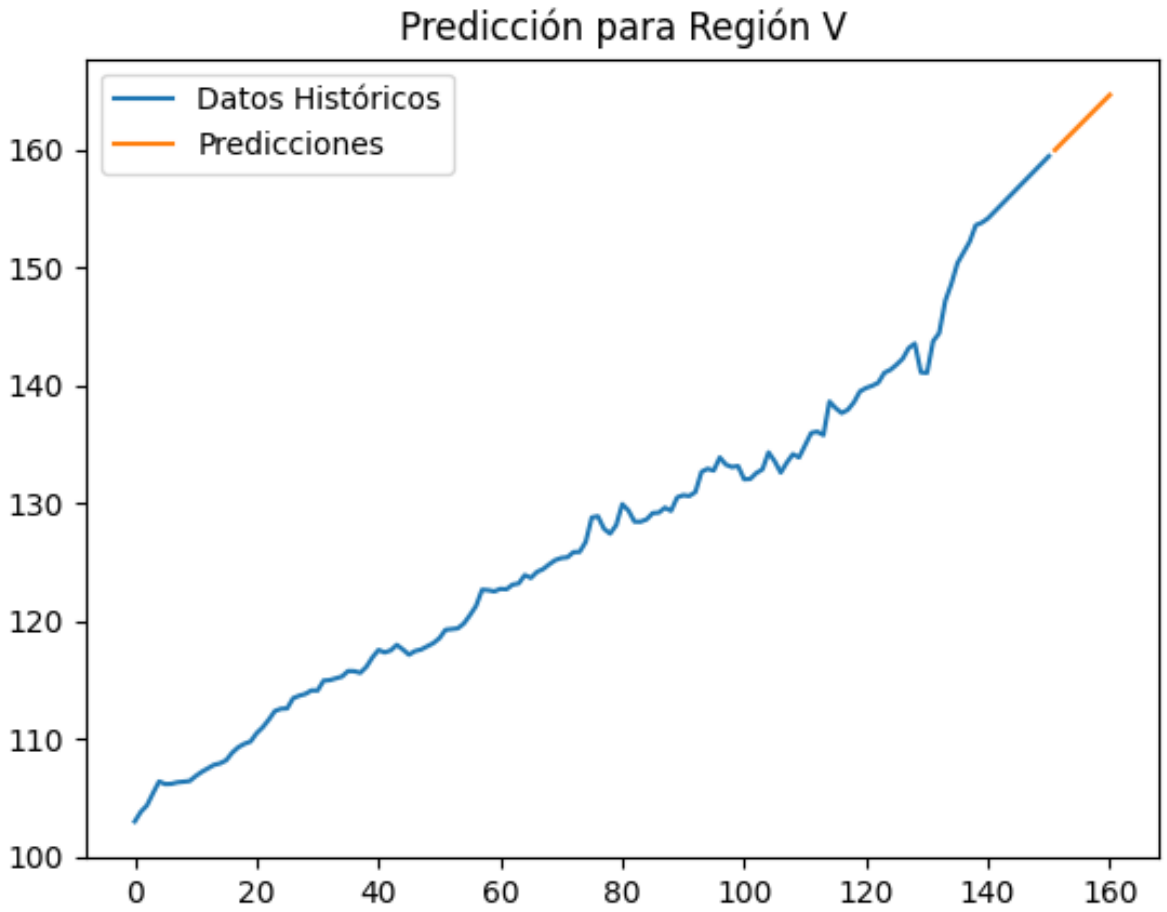

Figure 6: Gráfica de Región V

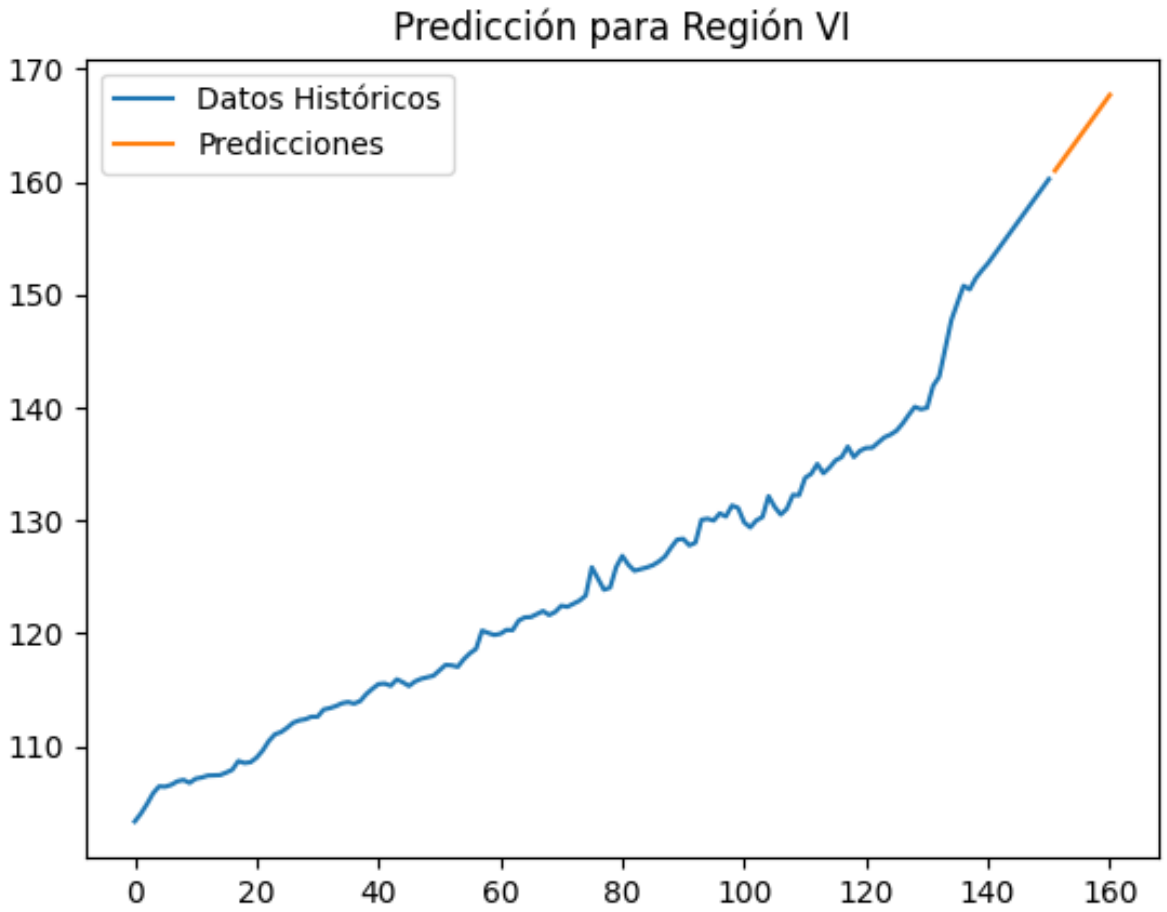

Figure 7: Gráfica de Región VI

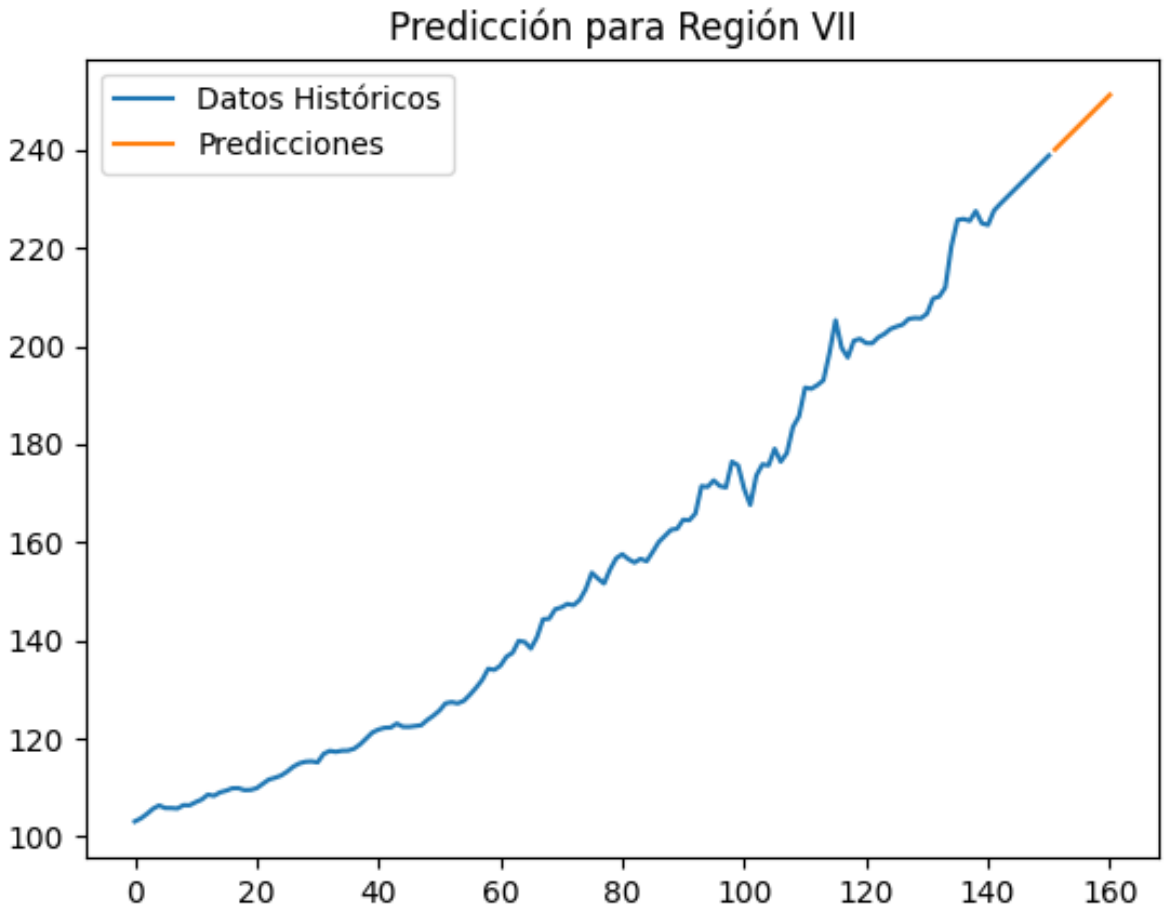

Figure 8: Gráfica de Región VII

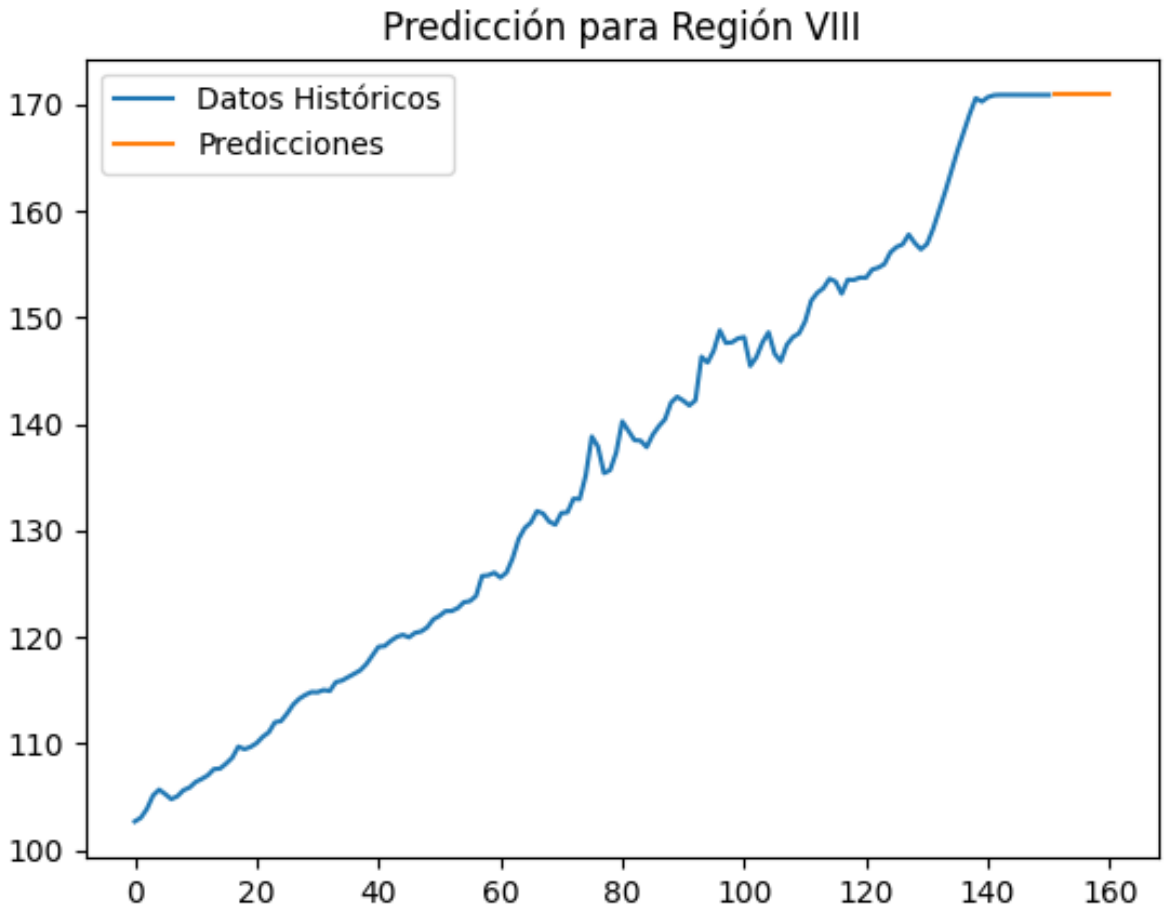

Figure 9: Gráfica de Región VIII

3 Tablas de resumen

República

Dep. Variable:	República	**No. Observations:**	151			
Model:	ARIMA(0, 2, 2)	**Log Likelihood**	-115.374			
Date:	Wed, 22 Nov 2023	**AIC**	236.749			
Time:	11:38:27	**BIC**	245.761			
Sample:	0	**HQIC**	240.410			
	- 151					
Covariance Type:	opg					

	coef	**std err**	**z**	**P> |z|**	**[0.025**	**0.975]**
ma.L1	-0.5959	0.050	-11.829	0.000	-0.695	-0.497
ma.L2	-0.3491	0.061	-5.702	0.000	-0.469	-0.229
sigma2	0.2717	0.021	12.960	0.000	0.231	0.313

Ljung-Box (L1) (Q):	0.23	**Jarque-Bera (JB):**	50.50
Prob(Q):	0.63	**Prob(JB):**	0.00
Heteroskedasticity (H):	6.78	**Skew:**	0.74
Prob(H) (two-sided):	0.00	**Kurtosis:**	5.43

Warnings:
[1] Covariance matrix calculated using the outer product of gradients (complex-step).

Región I

Dep. Variable:	Región I	**No. Observations:**	151			
Model:	ARIMA(1, 2, 1)	**Log Likelihood**	-48.876			
Date:	Wed, 22 Nov 2023	**AIC**	103.753			
Time:	11:38:27	**BIC**	112.765			
Sample:	0	**HQIC**	107.414			
	- 151					
Covariance Type:	opg					

	coef	**std err**	**z**	**P> |z|**	**[0.025**	**0.975]**
ar.L1	0.1670	0.106	1.572	0.116	-0.041	0.375
ma.L1	-0.8758	0.043	-20.582	0.000	-0.959	-0.792
sigma2	0.1120	0.009	11.969	0.000	0.094	0.130

Ljung-Box (L1) (Q):	0.01	**Jarque-Bera (JB):**	91.29
Prob(Q):	0.93	**Prob(JB):**	0.00
Heteroskedasticity (H):	1.78	**Skew:**	0.80
Prob(H) (two-sided):	0.04	**Kurtosis:**	6.49

Warnings:
[1] Covariance matrix calculated using the outer product of gradients (complex-step).

Región II

Dep. Variable:	Región II	**No. Observations:**	151
Model:	ARIMA(0, 1, 1)	**Log Likelihood**	-327.638
Date:	Wed, 22 Nov 2023	**AIC**	659.275
Time:	11:38:27	**BIC**	665.297
Sample:	0	**HQIC**	661.722
	- 151		
Covariance Type:	opg		

	coef	**std err**	**z**	**P> |z|**	**[0.025**	**0.975]**
ma.L1	0.2490	0.063	3.942	0.000	0.125	0.373
sigma2	4.6190	0.337	13.704	0.000	3.958	5.280

Ljung-Box (L1) (Q):	2.18	**Jarque-Bera (JB):**	66.76
Prob(Q):	0.14	**Prob(JB):**	0.00
Heteroskedasticity (H):	2.52	**Skew:**	0.78
Prob(H) (two-sided):	0.00	**Kurtosis:**	5.88

Warnings:
[1] Covariance matrix calculated using the outer product of gradients (complex-step).

Región III

Dep. Variable:	Región III	**No. Observations:**	151
Model:	ARIMA(1, 2, 2)	**Log Likelihood**	-82.051
Date:	Wed, 22 Nov 2023	**AIC**	172.103
Time:	11:38:28	**BIC**	184.119
Sample:	0	**HQIC**	176.985
	- 151		
Covariance Type:	opg		

	coef	**std err**	**z**	**P> |z|**	**[0.025**	**0.975]**
ar.L1	-0.8519	0.084	-10.185	0.000	-1.016	-0.688
ma.L1	0.0989	0.060	1.653	0.098	-0.018	0.216
ma.L2	-0.8030	0.060	-13.376	0.000	-0.921	-0.685
sigma2	0.1744	0.011	15.566	0.000	0.152	0.196

Ljung-Box (L1) (Q):	0.30	**Jarque-Bera (JB):**	325.47
Prob(Q):	0.58	**Prob(JB):**	0.00
Heteroskedasticity (H):	3.81	**Skew:**	1.31
Prob(H) (two-sided):	0.00	**Kurtosis:**	9.75

Warnings:
[1] Covariance matrix calculated using the outer product of gradients (complex-step).

Región IV

Dep. Variable:	Región IV			**No. Observations:**	151	
Model:	ARIMA(4, 1, 2)			**Log Likelihood**	-273.508	
Date:	Wed, 22 Nov 2023			**AIC**	561.016	
Time:	11:38:28			**BIC**	582.091	
Sample:	0			**HQIC**	569.578	
	- 151					
Covariance Type:	opg					

	coef	**std err**	**z**	**P> |z|**	**[0.025**	**0.975]**
ar.L1	-0.0894	0.097	-0.918	0.358	-0.280	0.101
ar.L2	0.6457	0.077	8.338	0.000	0.494	0.798
ar.L3	0.0889	0.080	1.105	0.269	-0.069	0.246
ar.L4	0.3527	0.063	5.598	0.000	0.229	0.476
ma.L1	0.0339	0.173	0.196	0.844	-0.304	0.372
ma.L2	-0.9592	0.157	-6.126	0.000	-1.266	-0.652
sigma2	2.1923	0.294	7.450	0.000	1.616	2.769

Ljung-Box (L1) (Q):	0.04	**Jarque-Bera (JB):**	284.97
Prob(Q):	0.84	**Prob(JB):**	0.00
Heteroskedasticity (H):	11.31	**Skew:**	1.39
Prob(H) (two-sided):	0.00	**Kurtosis:**	9.15

Warnings:
[1] Covariance matrix calculated using the outer product of gradients (complex-step).

Región V

Dep. Variable:	Región V			**No. Observations:**	151	
Model:	ARIMA(1, 1, 1)			**Log Likelihood**	-153.374	
Date:	Wed, 22 Nov 2023			**AIC**	312.748	
Time:	11:38:28			**BIC**	321.780	
Sample:	0			**HQIC**	316.417	
	- 151					
Covariance Type:	opg					

	coef	**std err**	**z**	**P> |z|**	**[0.025**	**0.975]**
ar.L1	0.9986	0.004	232.208	0.000	0.990	1.007
ma.L1	-0.9643	0.038	-25.371	0.000	-1.039	-0.890
sigma2	0.4467	0.030	14.742	0.000	0.387	0.506

Ljung-Box (L1) (Q):	1.05	**Jarque-Bera (JB):**	125.26
Prob(Q):	0.31	**Prob(JB):**	0.00
Heteroskedasticity (H):	6.72	**Skew:**	0.51
Prob(H) (two-sided):	0.00	**Kurtosis:**	7.36

Warnings:
[1] Covariance matrix calculated using the outer product of gradients (complex-step).

Región VI

Dep. Variable:	Región VI	**No. Observations:**	151
Model:	ARIMA(0, 2, 1)	**Log Likelihood**	-142.517
Date:	Wed, 22 Nov 2023	**AIC**	289.033
Time:	11:38:28	**BIC**	295.041
Sample:	0	**HQIC**	291.474
	- 151		
Covariance Type:	opg		

	coef	**std err**	**z**	**P> |z|**	**[0.025**	**0.975]**
ma.L1	-0.9340	0.027	-35.106	0.000	-0.986	-0.882
sigma2	0.3911	0.030	12.889	0.000	0.332	0.451

Ljung-Box (L1) (Q):	1.03	**Jarque-Bera (JB):**	50.59
Prob(Q):	0.31	**Prob(JB):**	0.00
Heteroskedasticity (H):	5.72	**Skew:**	0.78
Prob(H) (two-sided):	0.00	**Kurtosis:**	5.39

Warnings:
[1] Covariance matrix calculated using the outer product of gradients (complex-step).

Región VII

Dep. Variable:	Región VII	**No. Observations:**	151
Model:	ARIMA(0, 2, 3)	**Log Likelihood**	-291.329
Date:	Wed, 22 Nov 2023	**AIC**	590.657
Time:	11:38:29	**BIC**	602.673
Sample:	0	**HQIC**	595.539
	- 151		
Covariance Type:	opg		

	coef	**std err**	**z**	**P> |z|**	**[0.025**	**0.975]**
ma.L1	-0.7479	0.049	-15.206	0.000	-0.844	-0.652
ma.L2	-0.6340	0.057	-11.142	0.000	-0.746	-0.522
ma.L3	0.4119	0.053	7.829	0.000	0.309	0.515
sigma2	2.8537	0.217	13.166	0.000	2.429	3.278

Ljung-Box (L1) (Q):	0.36	**Jarque-Bera (JB):**	56.29
Prob(Q):	0.55	**Prob(JB):**	0.00
Heteroskedasticity (H):	16.06	**Skew:**	0.42
Prob(H) (two-sided):	0.00	**Kurtosis:**	5.89

Warnings:
[1] Covariance matrix calculated using the outer product of gradients (complex-step).

Región VIII

Dep. Variable:	Región VIII	**No. Observations:**	151
Model:	ARIMA(2, 1, 0)	**Log Likelihood**	-205.313
Date:	Wed, 22 Nov 2023	**AIC**	416.627
Time:	11:38:29	**BIC**	425.659
Sample:	0	**HQIC**	420.296
	- 151		
Covariance Type:	opg		

	coef	**std err**	**z**	**P> |z|**	**[0.025**	**0.975]**
ar.L1	0.3614	0.054	6.748	0.000	0.256	0.466
ar.L2	-0.0747	0.065	-1.148	0.251	-0.202	0.053
sigma2	0.9037	0.076	11.903	0.000	0.755	1.053

Ljung-Box (L1) (Q):	2.00	**Jarque-Bera (JB):**	45.50
Prob(Q):	0.16	**Prob(JB):**	0.00
Heteroskedasticity (H):	4.63	**Skew:**	-0.07
Prob(H) (two-sided):	0.00	**Kurtosis:**	5.69

Warnings:

[1] Covariance matrix calculated using the outer product of gradients (complex-step).