

Année	Nbr de touristes	Nbr de lits	PIB Maroc	Inflation Maroc	PIB per capita France	PIB per capita Espagne	Inflation UE
2013	10 046 264	207 695	973 925 699 039	0,019	42 603	29 077	0,122
2014	10 282 944	217 241	1 001 454 000 000	0,004	43 069	29 514	0,002
2015	10 176 762	230 643	1 078 119 000 000	0,016	36 653	25 754	-0,001
2016	10 331 731	243 029	1 094 249 000 000	0,016	37 063	26 537	0,002
2017	11 349 344	252 562	1 148 895 000 000	0,008	38 781	28 185	0,014
2018	12 288 708	261 116	1 195 237 000 000	0,018	41 558	30 380	0,017
2019	12 932 260	271 723	1 239 836 000 000	0,003	40 495	29 582	0,016
2022	10 868 863	280 000	1 330 585 000 000	0,066	40 886	29 675	0,088
2023	14 524 727	296 000	1 463 358 000 000	0,061	40 652	29 834	0,054
2024	-	302 000	1 508 722 098 000	0,018	41 402	33 300	0,024
2025	-	317 000	1 558 509 927 234	0,022	42 189	33 733	0,022
2026	-	329 000	1 613 057 774 687	0,024	42 906	34 273	0,019

### Code R :

- library(forecast)
- library(tseries)
- data <- data.frame(

Année = c(2013, 2014, 2015, 2016, 2017, 2018, 2019, 2022, 2023, 2024, 2025, 2026),

Nbr\_de\_touristes = c(10046264, 10282944, 10176762, 10331731, 11349344, 12288708, 12932260, 10868863, 14524727, NA, NA, NA),

Nbr\_de\_lits = c(207695, 217241, 230643, 243029, 252562, 261116, 271723, 280000, 296000, 302000, 317000, 329000),

PIB\_Maroc = c(973925699039, 1001454000000, 1078119000000, 1094249000000, 1148895000000, 1195237000000, 1239836000000, 1330585000000, 1463358000000, 1508722098000, 1558509927234, 1613057774687),

Inflation\_Maroc = c(0.019, 0.004, 0.016, 0.016, 0.008, 0.018, 0.003, 0.066, 0.061, 0.018, 0.022, 0.024),

PIB\_per\_capita\_France = c(42603, 43069, 36653, 37063, 38781, 41558, 40495, 40886, 40652, 41402, 42189, 42906),

PIB\_per\_capita\_Espagne = c(29077, 29514, 25754, 26537, 28185, 30380, 29582, 29675, 29834, 33300, 33733, 34273),

Inflation\_UE = c(0.122, 0.002, -0.001, 0.002, 0.014, 0.017, 0.016, 0.088, 0.054, 0.024, 0.022, 0.019))

- tourists\_ts <- ts(data\$Nbr\_de\_touristes[c(4:9, 8:9)], start=2016, frequency=1)
- exog <- as.matrix(data[c(4:9, 8:9), c("Nbr\_de\_lits", "PIB\_Maroc")])
- fit <- auto.arima(tourists\_ts, xreg=exog)
- summary(fit)
- future\_exog <- as.matrix(data[10:12, c("Nbr\_de\_lits", "PIB\_Maroc")])
- forecast\_values <- forecast(fit, xreg=future\_exog, h=3)
- print(forecast\_values)
- plot(forecast\_values, main="Prévisions des flux de touristes au Maroc", xlab="Année", ylab="Nombre de touristes")