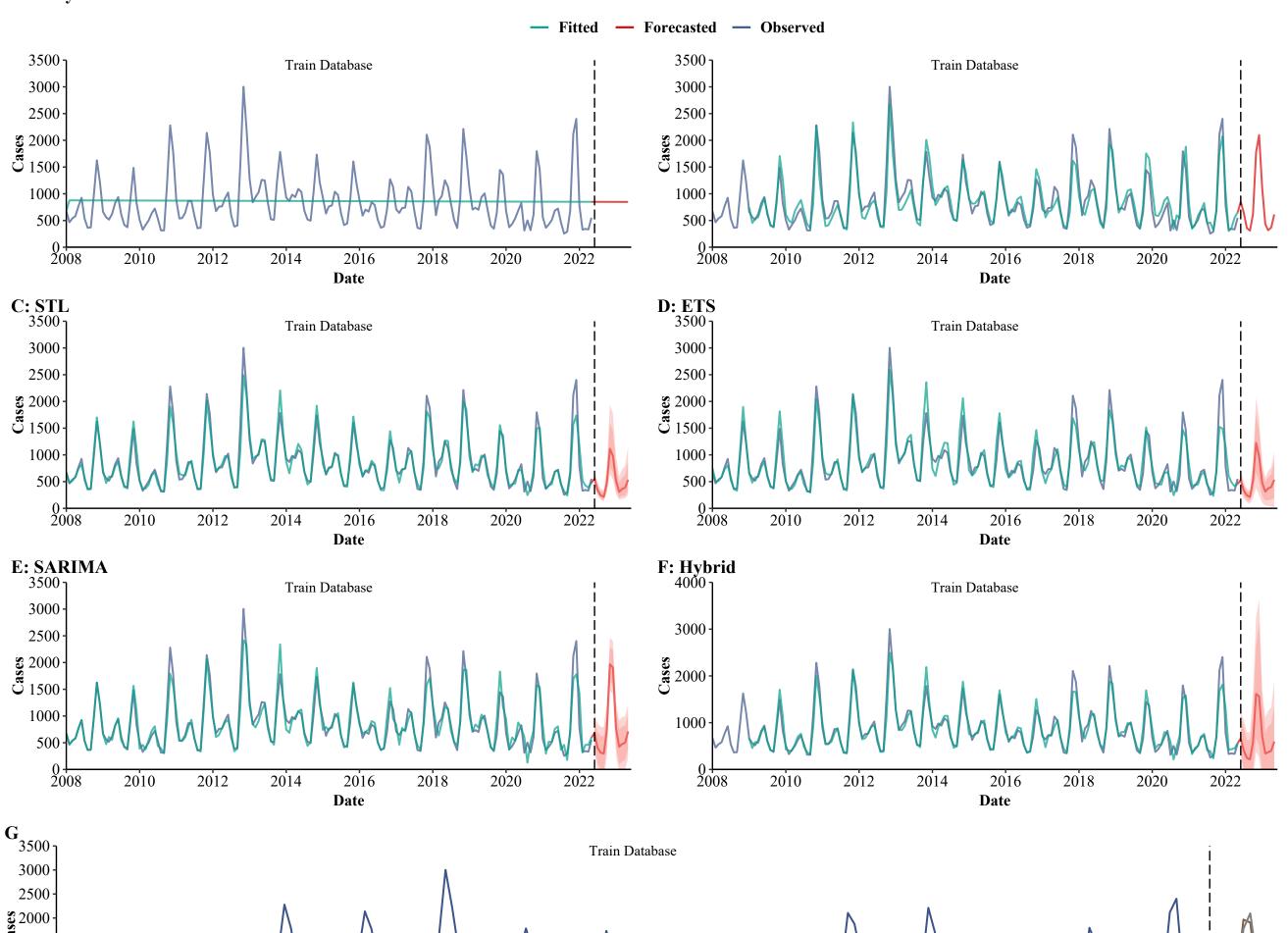
#### **B:** Neural Network



3500			Trair	n Database			i
3000 -		٨					Ì
2500 -		$\Lambda$					<b>1</b>
2000 - C 1500 -		\ \ \\	Α		$\Lambda$	Α.	$A \mid A$
	$\Lambda$ $\Lambda$ $\Lambda$	\ /\ /\	$\setminus \land \land \land \land$	$\bigwedge$		$\sim$	
1000 -				\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		$\sim 1$	
500 -			J J	V	V	V V W	
200	08 2010	2012	2014	2016 <b>Date</b>	2018	2020	2022
				Date			

## — ETS — Hybrid — Observed — SARIMA— STL

### H: RMSE of Models

Method	Train		
Grey Model	485.29		
Neural Network	179.18		
STL	138.71		
ETS	174.49		
SARIMA	166.22		
Hybrid*	148.48		

# \*Hybrid: Combined SARIMA, ETS, STL and Neural Network model

### I: R-squared of Models

Method	Train
Grey Model  Neural Network  STL  ETS  SARIMA	0.00
Neural Network	0.87
STL	0.92
ETS	0.87
SARIMA	0.88
Hybrid*	0.91

\*Hybrid: Combined SARIMA, ETS, STL and Neural Network model

### J: MAE of Models

Method	Train	
Grey Model	358.96	
Neural Network	136.14	
STL	90.56	
ETS	116.40	
SARIMA	108.76	
Hybrid*	100.13	

\*Hybrid: Combined SARIMA, ETS, STL and Neural Network model