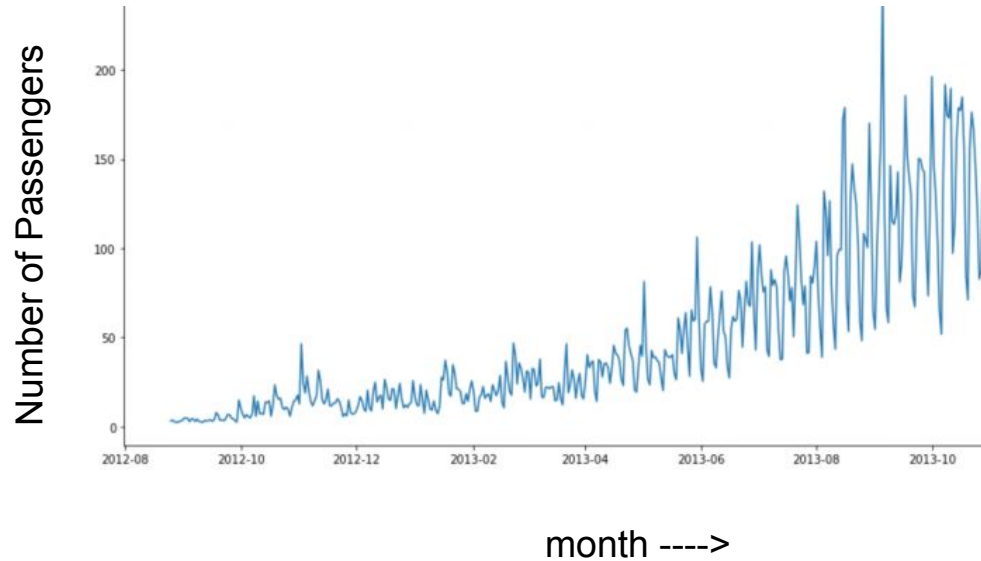


Univariate and Multivariate Time Series

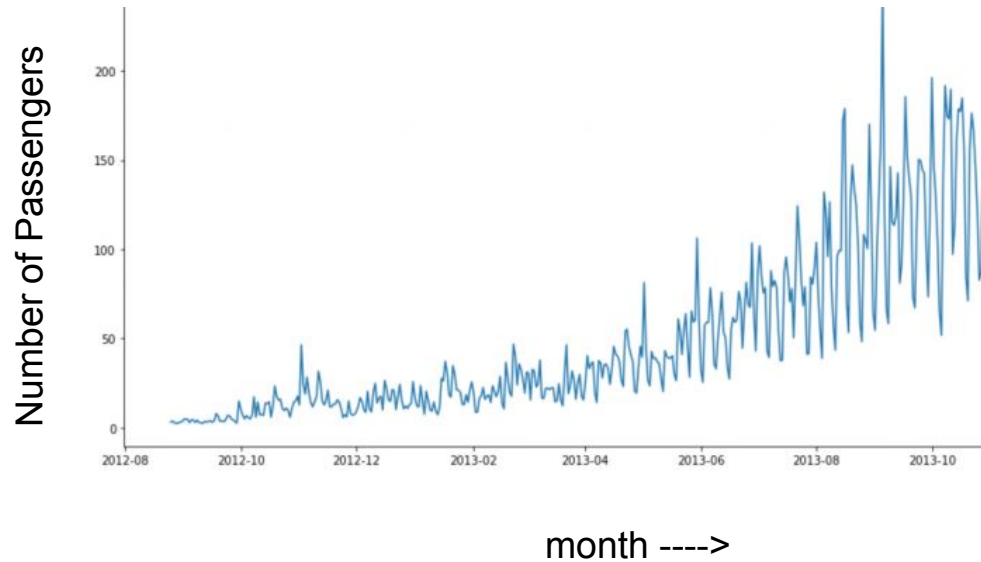
Univariate and Multivariate Time Series



Example - Univariate Time Series

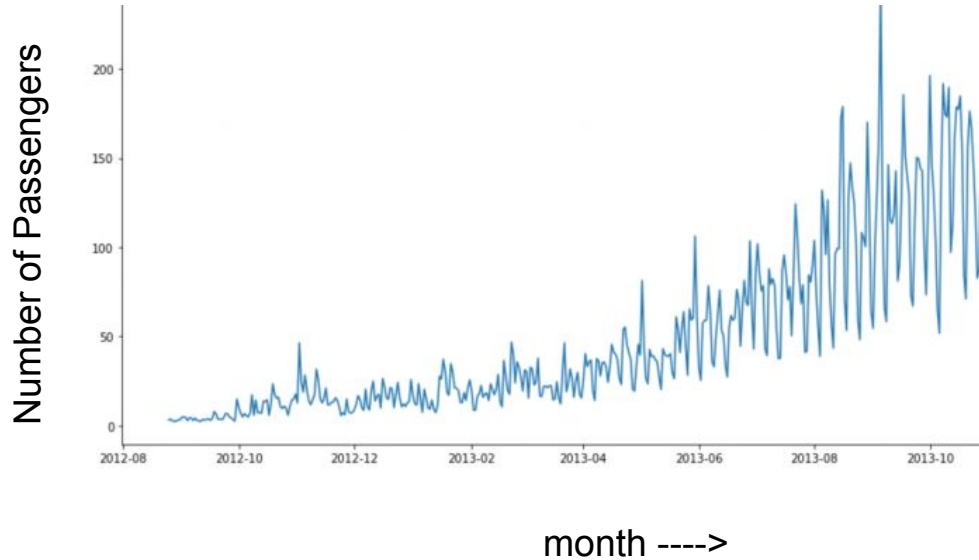


Example - Univariate Time Series



Date	Count
2013-07-29	84
2013-07-30	80
2013-07-31	89
2013-08-01	103
2013-08-02	74
2013-08-03	54
2013-08-04	38
2013-08-05	131
2013-08-06	120
2013-08-07	95
2013-08-08	126
2013-08-09	78

Example - Univariate Time Series

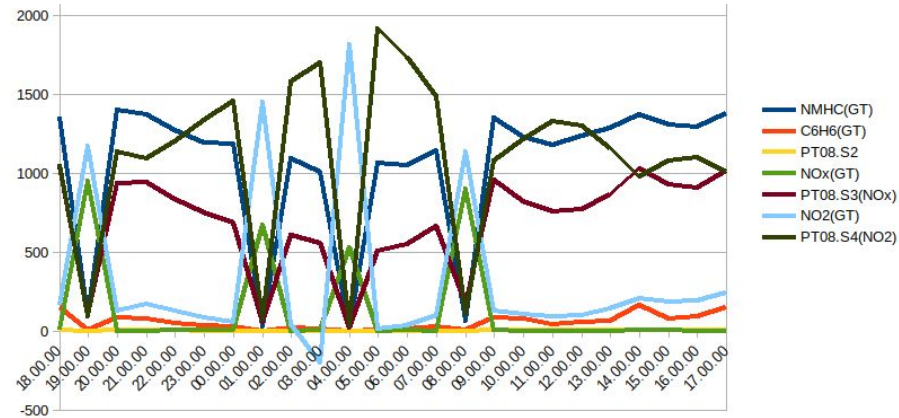


Date	Count
2013-07-29	84
2013-07-30	80
2013-07-31	89
2013-08-01	103
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Univariate Time Series

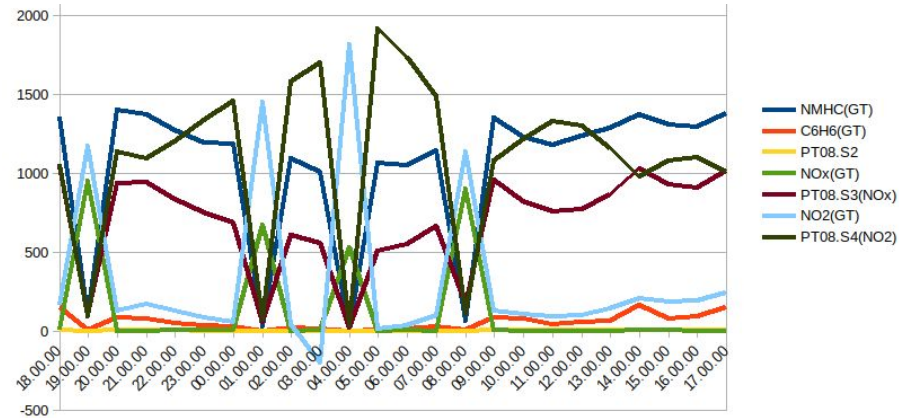
Example - Multivariate Time Series

Example - Multivariate Time Series



Date	Time	NMHC(GT)	C6H6(GT)	PT08.S2	NOx(GT)	PT08.S3(NOx)	NO2(GT)
10/03/2004	18.00.00	1360	150	11	9	1046	166
10/03/2004	19.00.00	112	9	4	955	103	1174
10/03/2004	20.00.00	1402	88	9	0	939	131
10/03/2004	21.00.00	1376	80	9	2	948	172
10/03/2004	22.00.00	1272	51	6	5	836	131
10/03/2004	23.00.00	1197	38	4	7	750	89
11/03/2004	00.00.00	1185	31	3	6	690	62
11/03/2004	01.00.00	31	3	3	672	62	1453
11/03/2004	02.00.00	1094	24	2	3	609	45
11/03/2004	03.00.00	1010	19	1	7	561	-200
11/03/2004	04.00.00	14	1	3	527	21	1818

Example - Multivariate Time Series



Date	Time	NMHC(GT)	C6H6(GT)	PT08.S2	NOx(GT)	PT08.S3(NOx)	NO2(GT)
10/03/2004	18.00.00	1360	150	11	9	1046	166
10/03/2004	19.00.00	112	9	4	955	103	1174
10/03/2004	20.00.00	1402	88	9	0	939	131
10/03/2004	21.00.00	1376	80	9	2	948	172
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11/03/2004	04.00.00	14	1	3	527	21	1818

Multivariate Time Series

Univariate and Multivariate Time Series

Univariate Time Series

- Observations taken at equal intervals of time
- Single Target Variable

Multivariate Time Series

- Observations taken at equal intervals of time
- Multiple Target Variable

Univariate and Multivariate Time Series

Univariate Time Series

- Observations taken at equal intervals of time
- Single Target Variable

Multivariate Time Series

- Observations taken at equal intervals of time
- Multiple Target Variable

What if you have additional features?

Thank You