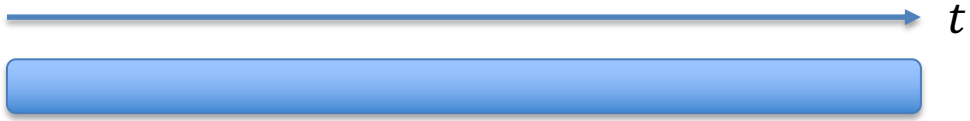
Expanding window features: part 2

Window features

When is an expanding window helpful?

Date	Number of customers acquired	
2020-02-12	4	
2020-02-13	5	
2020-02-14	4	
2020-02-15	2	
2020-02-16	9	
2020-02-17	?	

Expanding window

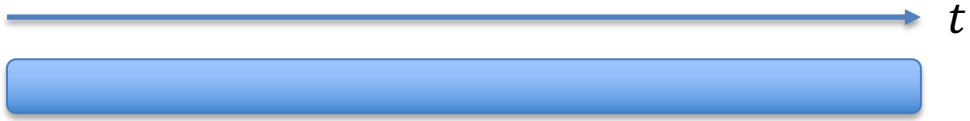


- Uses all previous values at any step.
- Useful when you need access to the entire time series.
- Examples:
  - aggregating a variable which has a cumulative effect.
  - target encoding.

When is an expanding window helpful?

Date	Number of customers acquired	
2020-02-12	4	
2020-02-13	5	
2020-02-14	4	
2020-02-15	2	
2020-02-16	9	
2020-02-17	?	

Expanding window

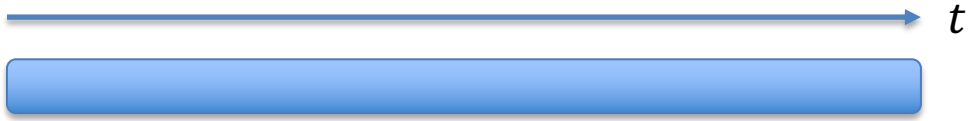


- Uses all previous values at any step.
- Useful when you need access to the entire time series.
- Examples:
  - **aggregating a variable which has a cumulative effect.**
  - target encoding.

When is an expanding window helpful?

Date	Number of customers acquired	Cumulative number of customers
2020-02-12	4	NaN
2020-02-13	5	4
2020-02-14	4	9
2020-02-15	2	13
2020-02-16	9	15
2020-02-17	?	24

Expanding window



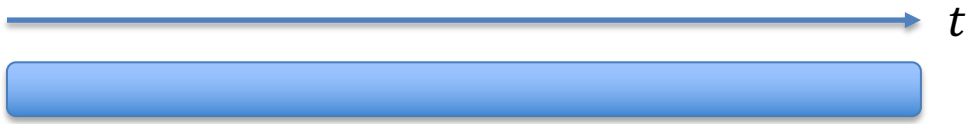
- Uses all previous values at any step.
- Useful when you need access to the entire time series.
- Examples:
  - **aggregating a variable which has a cumulative effect.**
  - target encoding.

When is an expanding window helpful?

Date	Sales	Country
2020-02-12	4	UK
2020-02-13	5	UK
2020-02-14	4	UK
2020-02-15	2	UK
2020-02-16	9	UK
2020-02-17	?	UK

Target variable

Expanding window



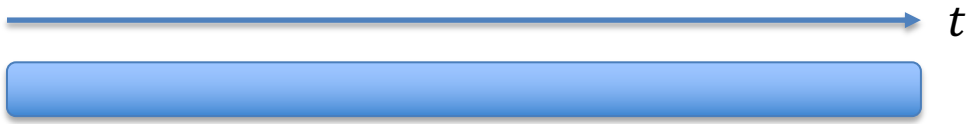
- Uses all previous values at any step.
- Useful when you need access to the entire time series.
- Examples:
  - aggregating a variable which has a cumulative effect.
  - **target encoding.**

When is an expanding window helpful?

Date	Sales	Country (mean)
2020-02-12	4	**NaN**
2020-02-13	5	UK
2020-02-14	4	UK
2020-02-15	2	UK
2020-02-16	9	UK
2020-02-17	?	UK

Target variable

Expanding window



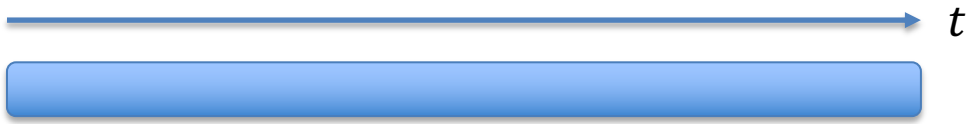
- Uses all previous values at any step.
- Useful when you need access to the entire time series.
- Examples:
  - aggregating a variable which has a cumulative effect.
  - **target encoding.**

When is an expanding window helpful?

Date	Sales	Country (mean)
2020-02-12	**4**	NaN
2020-02-13	5	**4.0**
2020-02-14	4	UK
2020-02-15	2	UK
2020-02-16	9	UK
2020-02-17	?	UK

Target variable

Expanding window



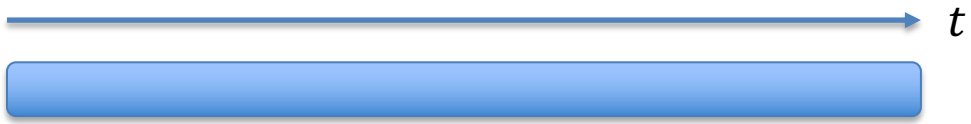
- Uses all previous values at any step.
- Useful when you need access to the entire time series.
- Examples:
  - aggregating a variable which has a cumulative effect.
  - **target encoding.**

When is an expanding window helpful?

Date	Sales	Country (mean)
2020-02-12	**4**	NaN
2020-02-13	**5**	4.0
2020-02-14	4	**4.5**
2020-02-15	2	UK
2020-02-16	9	UK
2020-02-17	?	UK

Target variable

Expanding window



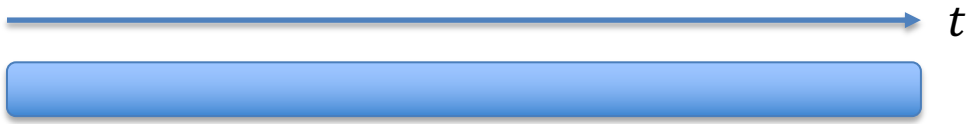
- Uses all previous values at any step.
- Useful when you need access to the entire time series.
- Examples:
  - aggregating a variable which has a cumulative effect.
  - **target encoding.**

When is an expanding window helpful?

Date	Sales	Country (mean)
2020-02-12	**4**	NaN
2020-02-13	**5**	4.0
2020-02-14	**4**	4.5
2020-02-15	2	**4.3**
2020-02-16	9	UK
2020-02-17	?	UK

Target variable

Expanding window



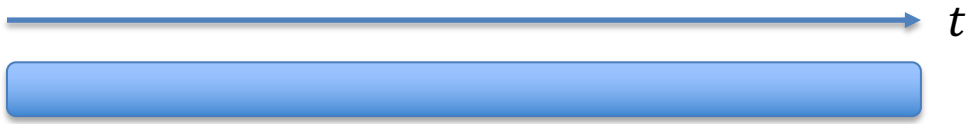
- Uses all previous values at any step.
- Useful when you need access to the entire time series.
- Examples:
  - aggregating a variable which has a cumulative effect.
  - **target encoding.**

When is an expanding window helpful?

Date	Sales	Country (mean)
2020-02-12	**4**	NaN
2020-02-13	**5**	4.0
2020-02-14	**4**	4.5
2020-02-15	**2**	4.3
2020-02-16	9	**3.8**
2020-02-17	?	UK

Target variable

Expanding window



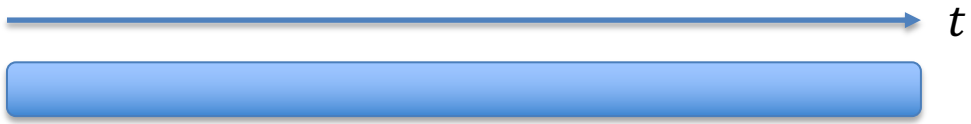
- Uses all previous values at any step.
- Useful when you need access to the entire time series.
- Examples:
  - aggregating a variable which has a cumulative effect.
  - **target encoding.**

When is an expanding window helpful?

Date	Sales	Country (mean)
2020-02-12	**4**	NaN
2020-02-13	**5**	4.0
2020-02-14	**4**	4.5
2020-02-15	**2**	4.3
2020-02-16	**9**	3.8
2020-02-17	?	**4.8**

Target variable

Expanding window



- Uses all previous values at any step.
- Useful when you need access to the entire time series.
- Examples:
  - aggregating a variable which has a cumulative effect.
  - **target encoding.**