

Start with PowerBI & AI

"From Rookie to Rock"

Learn &
Practice

Dealing with the week between 2 years



Patou Tips #59



1

Dealing with the week between 2 years Regarding the problem... (1/3)



For **weekly reports with rolling weeks** (4, 8, 12 weeks, etc.), the **week between two years** can cause **confusion in visualizations**.

To illustrate this problem, let's take the example of a week between the years 2022 and 2023.



Resources on GitHub

Patou-Tips/#59 Patou Tips (Dealing with the week between 2 years) at main ·
PatouTips/Patou-Tips

1

Dealing with the week between 2 years Regarding the problem... (2/3)



Global result				
Year	Month	Week	This Year (TY)	
2022	déc	W 51	1 063 099	
2022	déc	W 52	876 574	
2023	janv	W 1	1 100 572	
2023	janv	W 52	150 814	
Total			3 191 059	

In the sales results sorted by year, month, and week, we see that there is a week 52 in January 2023. The week number is correct, but it should belong to 2022; we should only have one week 52 with days from both 2022 and 2023.

Date	Year	Month	Week	This Year (TY)
01/01/2023	2023	janv	W 52	150 814
02/01/2023	2023	janv	W 1	154 904
03/01/2023	2023	janv	W 1	156 425
04/01/2023	2023	janv	W 1	158 009
05/01/2023	2023	janv	W 1	157 218
06/01/2023	2023	janv	W 1	156 425
07/01/2023	2023	janv	W 1	158 009
Total				1 091 804

This is even more apparent in the second view when focusing by day. Thus, the first day in the ISO calendar belongs to week 52 of 2022. The problem is that the visualizations will be inconsistent (see next page).

1

Dealing with the week between 2 years Regarding the problem... (3/3)



Therefore, when creating visualizations with the necessary date dimensions, all the visualizations are inconsistent.

How can this problem be fixed?

Dealing with the week between 2 years Regarding the solution... (1/2)



The solution is to create a date variable that concatenates the year and week for the last and first weeks of the same year.
The value "YearWeek" must be modified.

```
"YearWeek", IF(NumWeek < 5 && NumWeekNoISO > 50, YearShort-1,
    IF(NumWeek > 50 && NumWeekNoISO < 5, YearShort-1, YearShort))
    &"-W"& FORMAT(NumWeek, "00"),
```

In the ISO system, the first week (W1) is the one that has at least 4 days in the new year. The value "21" allows this option to be used in the DAX WEEKNUM function.

```
VAR NumWeek = WEEKNUM([Date], 21)
```

As the value "2" allows you to count one week from Monday.

```
VAR NumWeekNoISO = WEEKNUM([Date], 2)
```

The value "YearShort" returns only the last two digits of the year (2025 > 25). This allows us to test whether the last week or the first week is greater than or less than 5, and also greater than or less than 50. This combination of tests allows us to change the year of the "yearWeek" variable and maintain continuity of weeks over time.

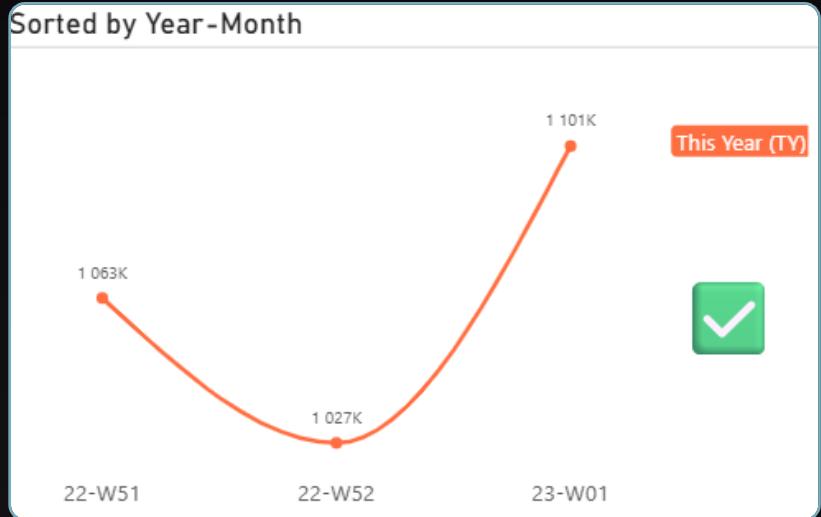
2

Dealing with the week between 2 years Regarding the solution... (2/2)



We can now display consistent visualizations for one of the weekly reports with rolling weeks.

YearWeek	This Year (TY)
22-W51	1 063 099
22-W52	1 027 388
23-W01	1 100 572
Total	3 191 059



You will find the complete measurement code or the TDML script on the Patou Tips space in GitHub (see page 2).

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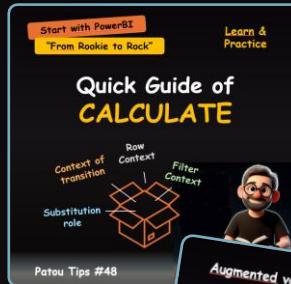
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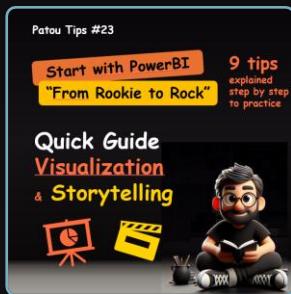
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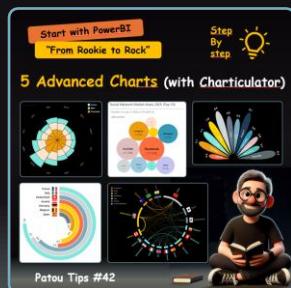
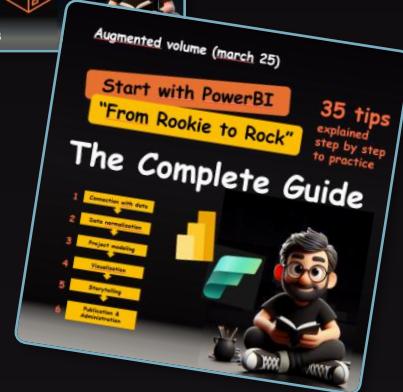
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Resources on GitHub
<https://github.com/PatouTips/Patou-Tips>

Patou Tips

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