

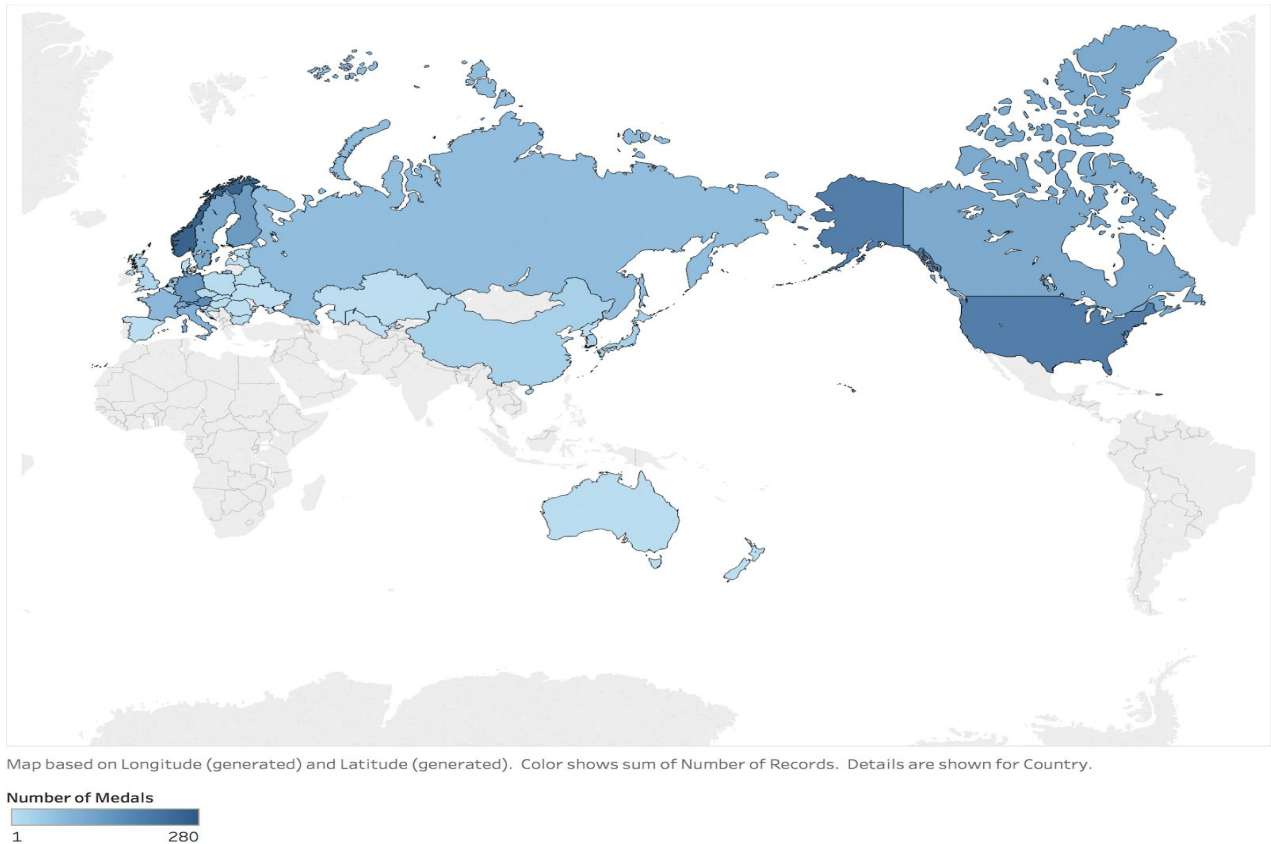
Winter Olympics Storyline using Tableau

Context

The Winter Olympic Games is a major international sporting event held once every four years for sports practised on snow and ice. Winter Olympic games started in 1924 for the first time at Chamonix, France and have been continued till date, last one being held at Pyeongchang, South Korea.

The provided Dataset contains the records of Winter Olympic Medal winners since 1924 to 2006, including the countries, sports, disciplines, events, etc. 2311 medals have been distributed to 45 different countries in winter olympics over this time period. These medals have been won in 7 different Sports under 15 different Disciplines. Out of all the medal winners, 1386 have been recorded as Male, 802 as Female and 123 as others. The widespread popularity and participation of winter olympics can be seen from the following figure denoting the coverage of winter olympics participants.

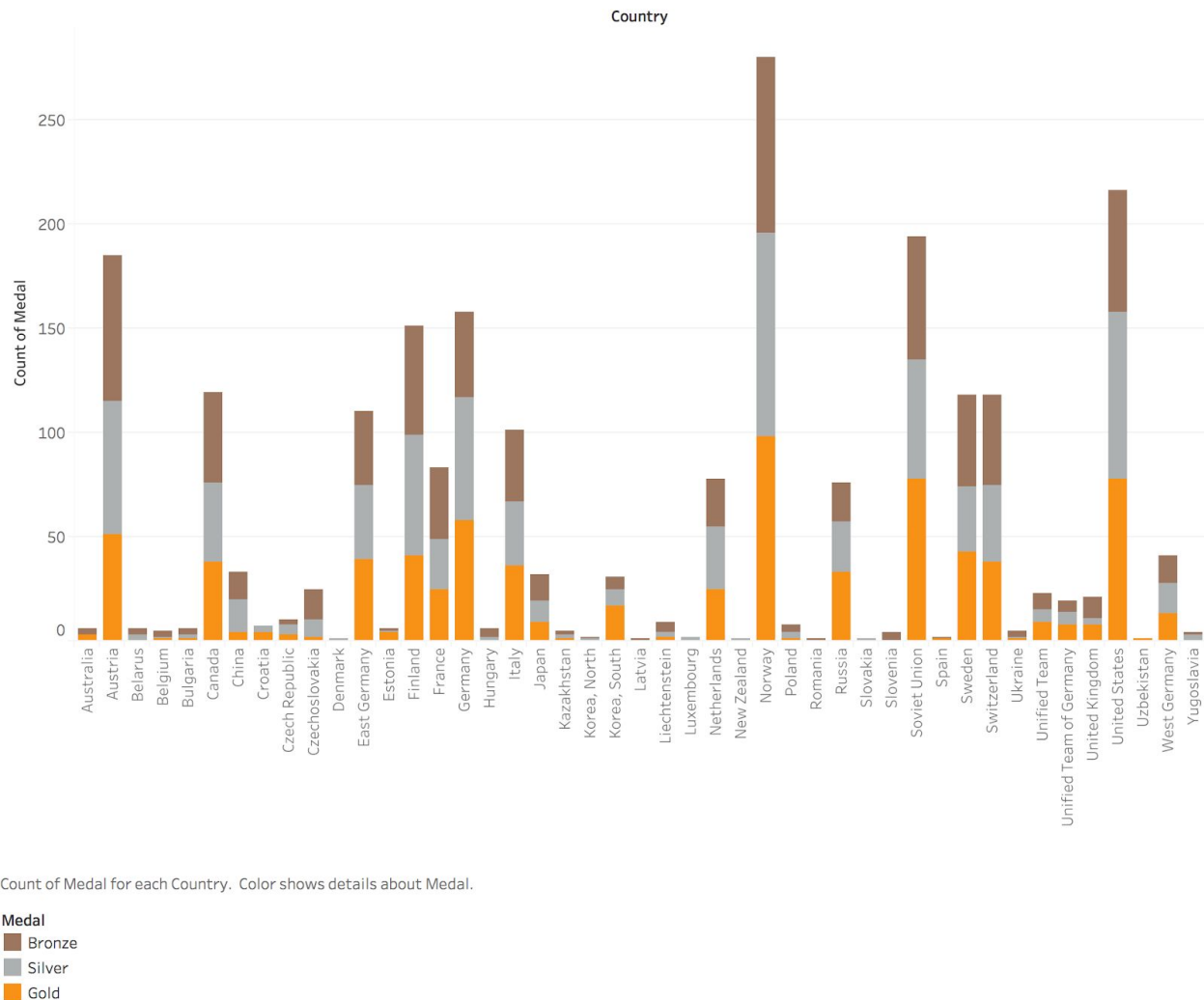
Distribution of Medals



Motivation

On observing the dataset a large variety of changes and trends can be seen which have taken place over time. Some interesting patterns and comparison can also be noted which are reflected in this report. Also, some obvious numbers seen on the first look do not portray the true reality in the dataset, which have been directly explored in this report. For instance let's have a look at the overall medal distribution across countries on a cumulative level which will be explored further throughout the report based on different parameters.

Medal Winners - Countrywise

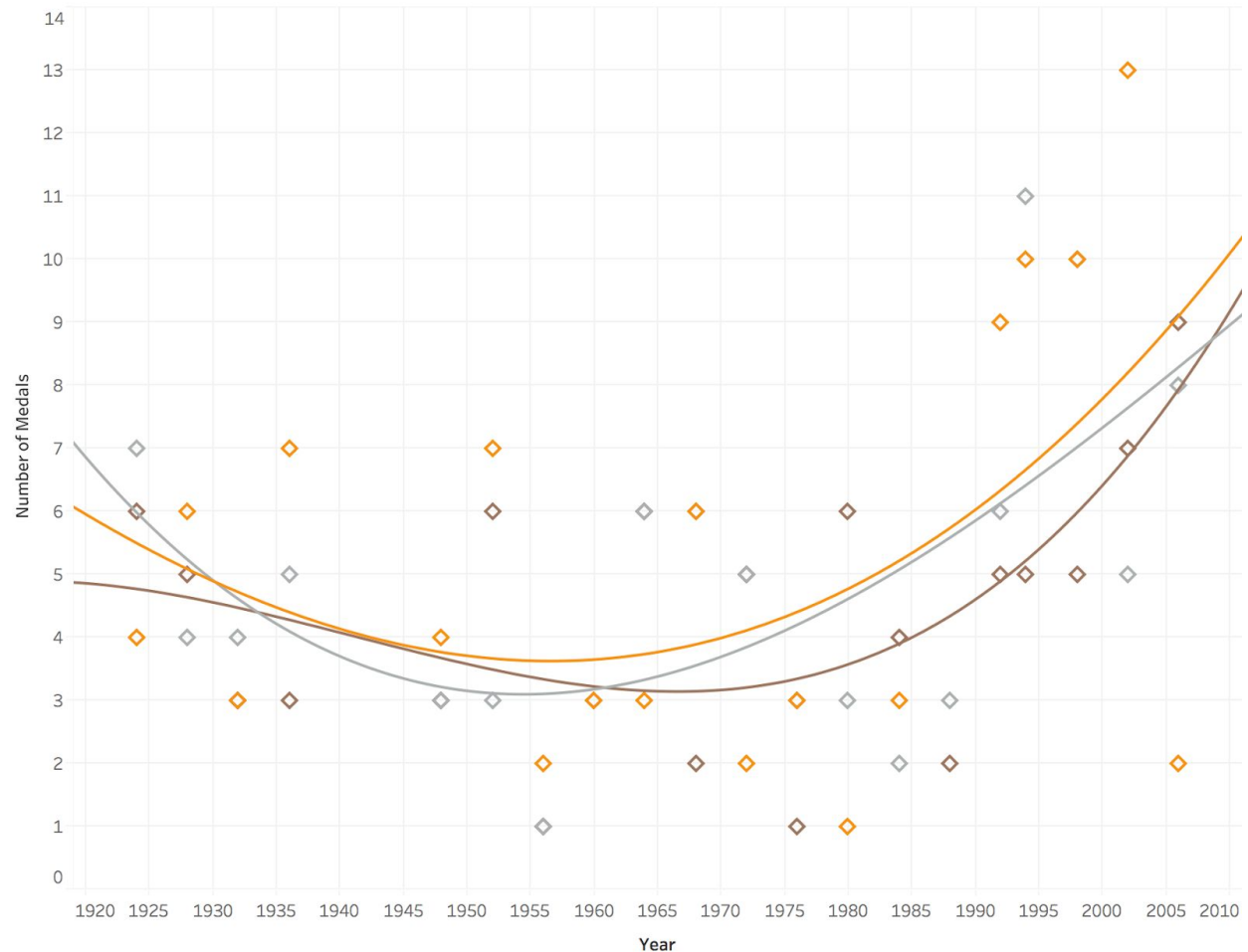


Overall, this report explores the data based on these different aspects and observed changes over time and a brief comparison of Norway, which has the highest cumulative medals, to the overall dataset has been provided.

Approach

As it can be clearly seen in the last visual that Norway has the highest number of cumulative medals over time and hence we take it as an special case to explore the particular dataset for the country.

Norway Medals



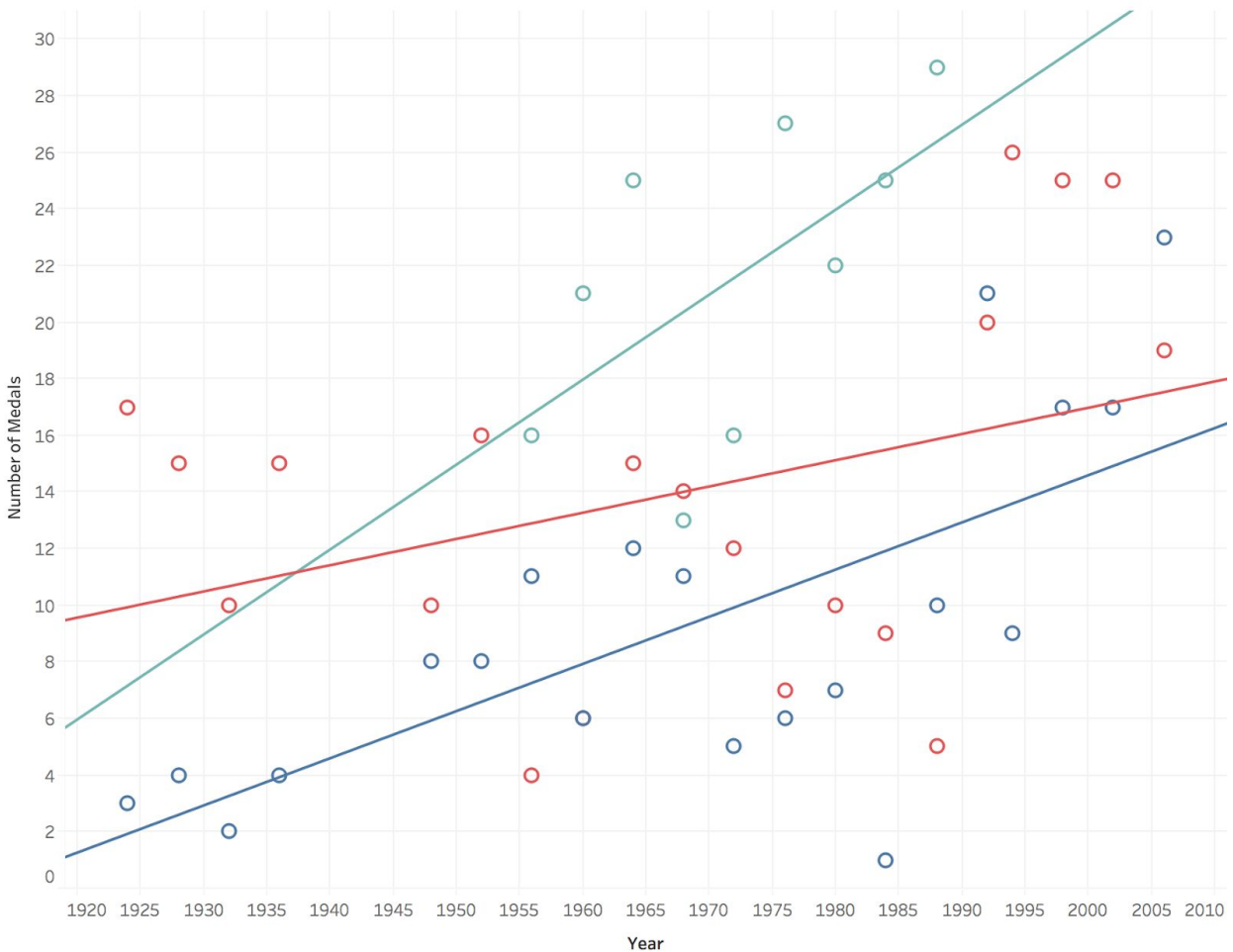
The plot of sum of Number of Records for Year. Color shows details about Medal. The data is filtered on Country, which keeps Norway.

Medal
■ Gold
■ Silver
■ Bronze

Here we can see a decreasing trend from 1924 to 1960 and then an increasing trend thereafter amounting to an overall increasing trend over time. This observation is consistent for all three medals (Gold, Silver, Bronze) which have been marked in different colors.

Taking into account the other top two cumulative medal winners, Austria and Soviet Union, they display a similar overall increasing trend with their respective slopes. It indicates that winter sports have been on a rise and have been encouraged in all three countries through these years.

Yearly trend for top 3 countries

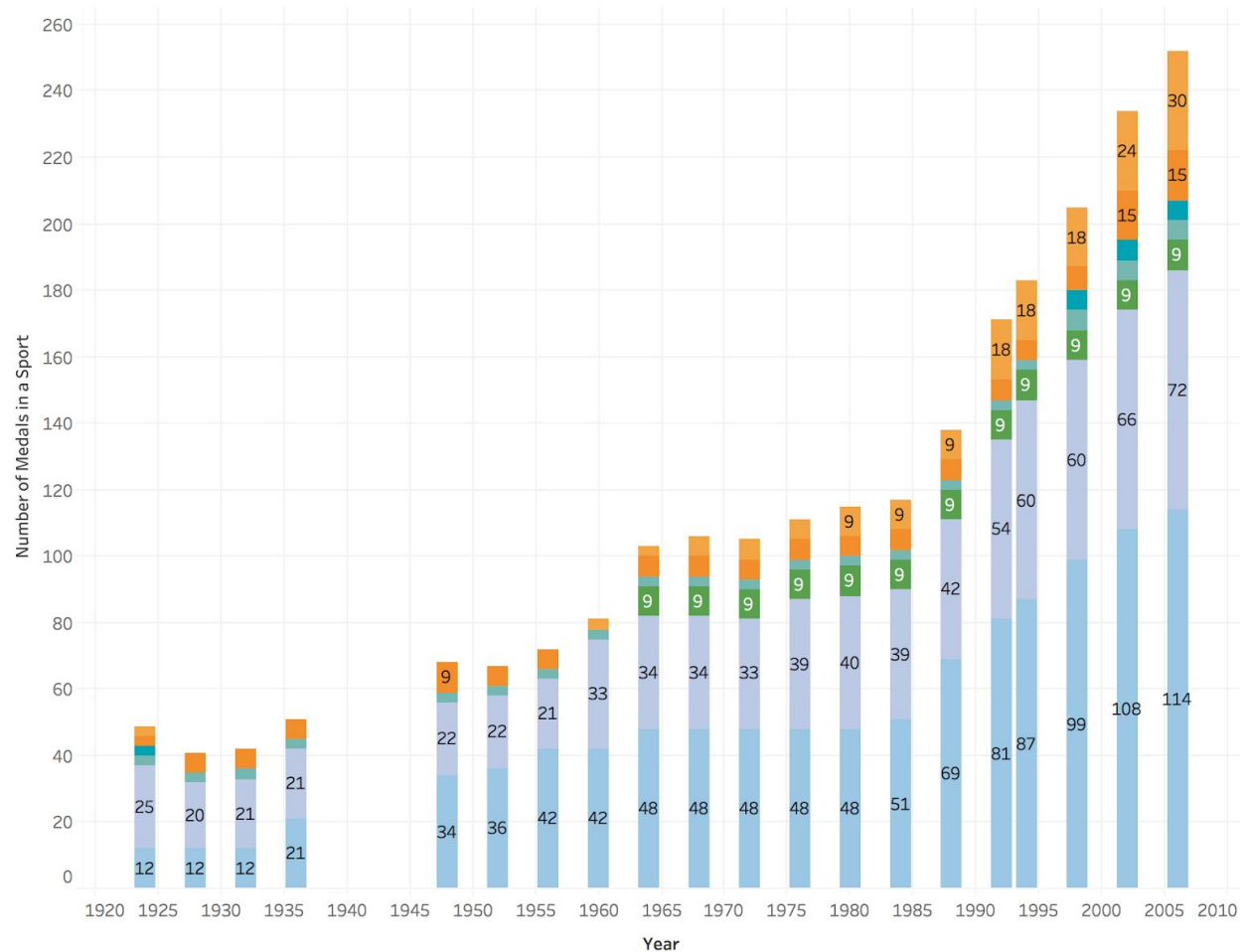


The plot of sum of Number of Records for Year. Color shows details about Country. The view is filtered on Country, which keeps Austria, Norway and Soviet Union.

Country
 ■ Austria
 ■ Norway
 ■ Soviet Union

Next, let's have a look at the sports wise distribution of the medals.

Sport-wise Distribution



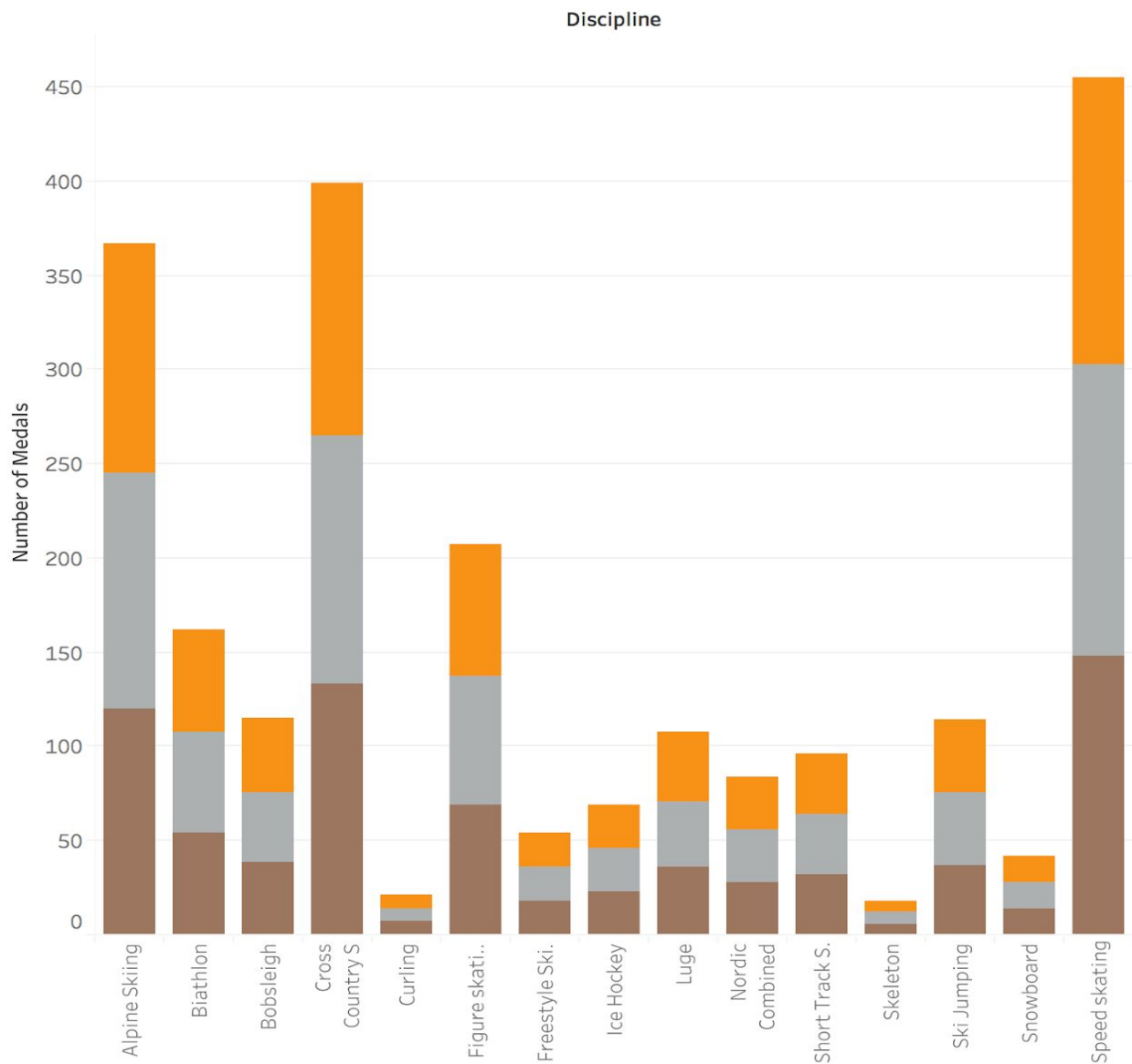
The plot of count of Sport for Year. Color shows details about Sport.

- Sport**
- Biathlon
 - Bobsleigh
 - Curling
 - Ice Hockey
 - Luge
 - Skating
 - Skiing

As it can be clearly observed that the overall number of medals and sports specific medals have constantly been increased over time. Which means addition of new disciplines and events in these sports. Also, it suggests that participation has increased vertically and horizontally.

Next, let's have a look at Discipline wise and Gender wise breakdown of Number of Medals given at Winter Olympics.

Discipline-wise breakdown

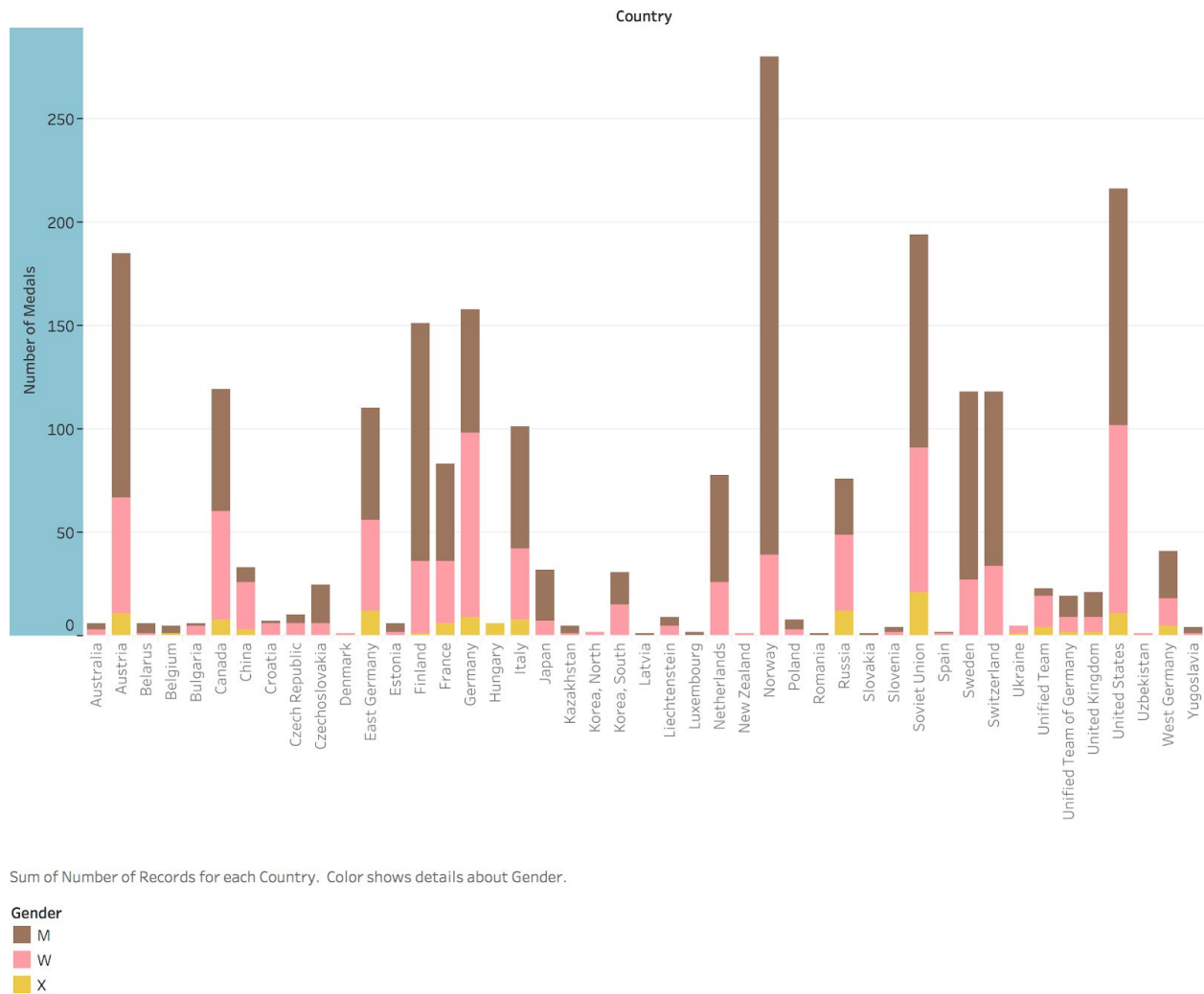


Sum of Number of Records for each Discipline. Color shows details about Medal.

Medal
 Gold
 Silver
 Bronze

Speed skating, Cross country Sprint and Alpine Skiing seem to be the most widely participated sports.

Country-wise breakdown - Gender



Various breakdowns can be seen from different countries in terms of Gender. More than 50% of winners from Norway are Males. Germany has the highest percentage of Female winners. And United States has the highest number of Females in total.

Trend over years - Gender



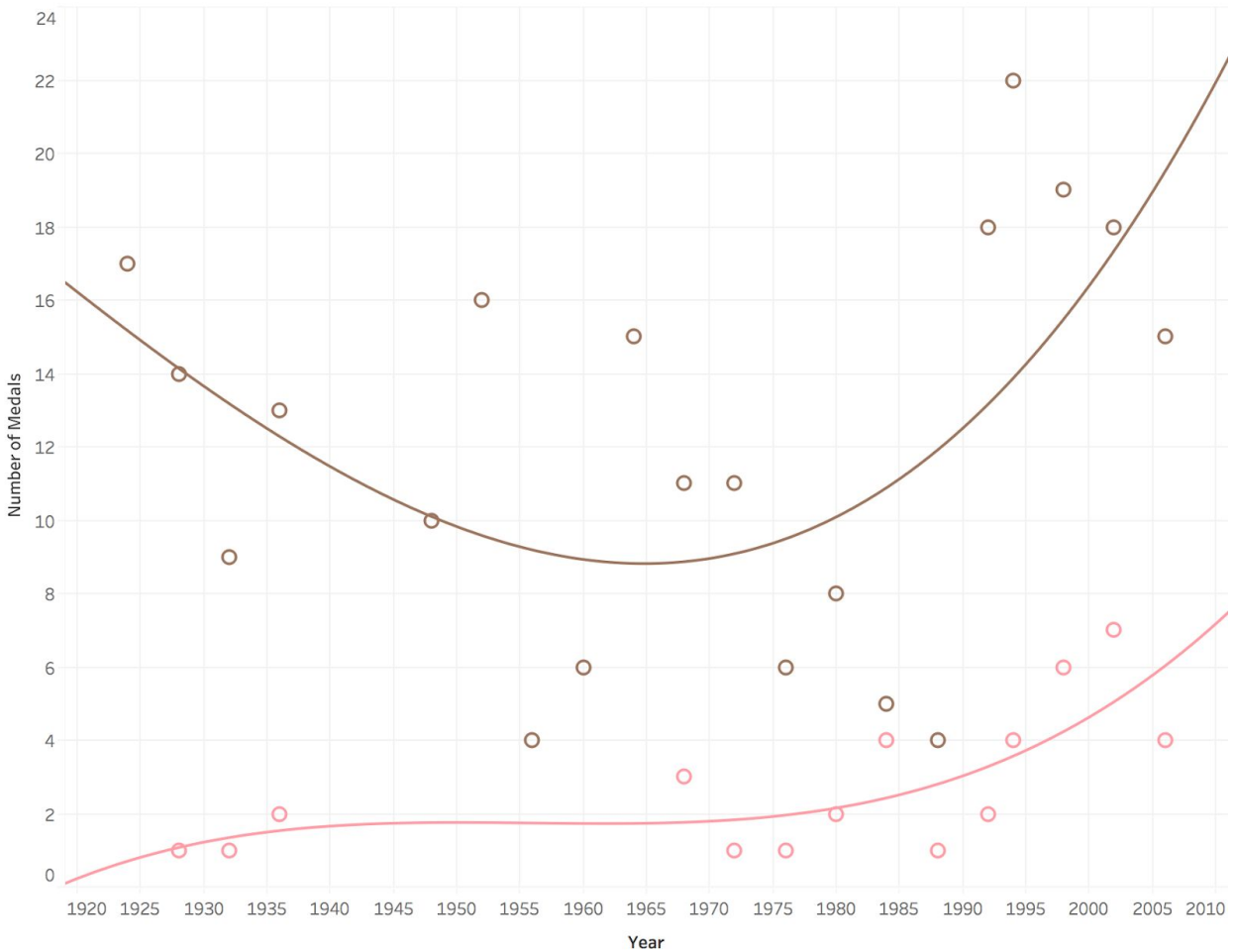
The plot of sum of Number of Records for Year. Color shows details about Gender.

Gender
 M
 W
 X

Looking at the trends of total Males and Females amongst the Medal winners, it can easily be deduced that with the increasing overall participation number of Males and Females are constantly increasing over time. The interesting observation here is that the number of Males and Females in comparison to each other are coming closer linearly since last 10 years. This shows the effect of equal sports opportunities for women and equally rising interest for winter sports amongst Males and Females.

Next we look at some of the same metrics specifically for Norway.

Comparison with Norway - Gender

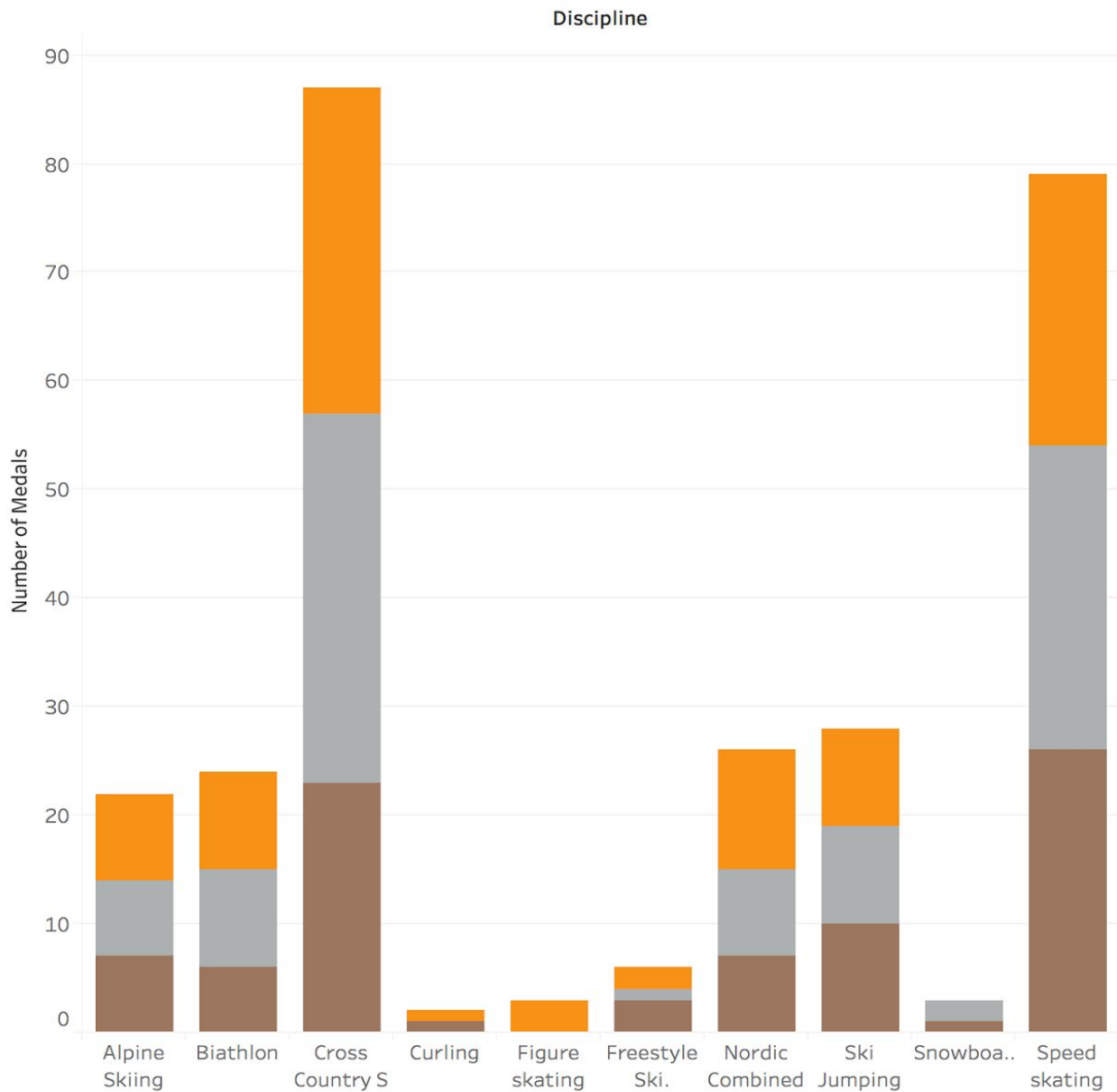


The plot of sum of Number of Records for Year. Color shows details about Gender. The data is filtered on Country, which keeps Norway.

Gender
■ M
■ W

Norway seems to portray a bit different scenario than the overall trend. The difference between number of Males and Females doesn't seem to decrease, though it goes up and down sporadically.

Discipline wise breakdown - for Norway



Sum of Number of Records for each Discipline. Color shows details about Medal. The data is filtered on Country, which keeps Norway.

Medal

- Gold
- Silver
- Bronze

Norway particularly seems to be good at cross country by a large margin compared to other disciplines and thus majority credit for cumulative highest medals goes to Cross Country.

Take Home Message

In conclusion, overall the popularity and enthusiasm for winter sports has been on a rise in last 80 years. Female participation is also linearly increasing over time. These observation can be verified by exploring the top performers such as Norway which deliver consistent insights. The participation is increasing vertically and horizontally in winter sports, that means in number of participants and number of events being conducted at Winter Olympics.