

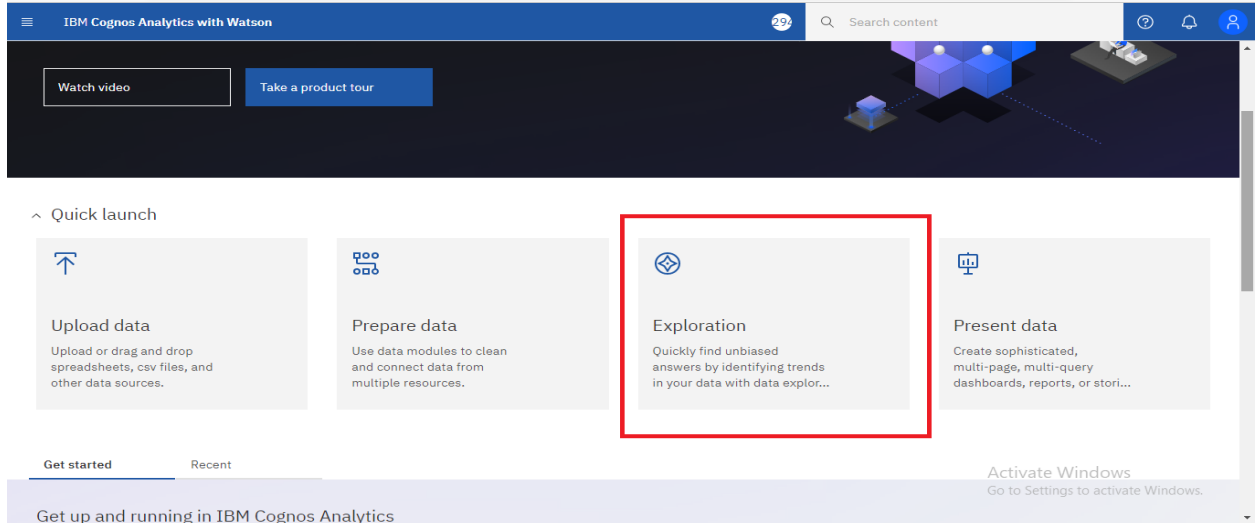
# Estimation of crop yield using data analytics

## SPRINT-2

Team ID: PNT2022TMID20578

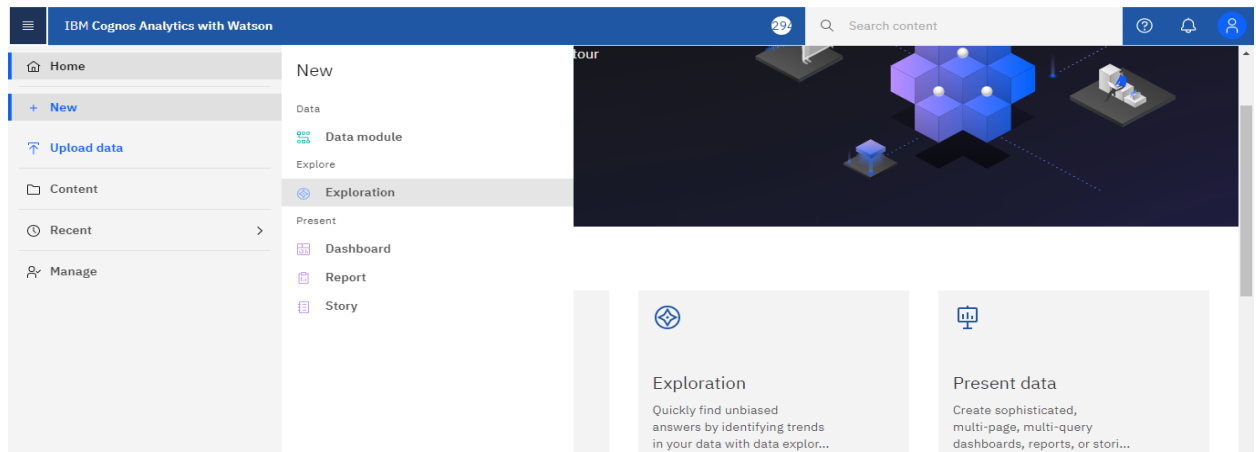
## DATA EXPLORATION

1. click the data prepare data icon.

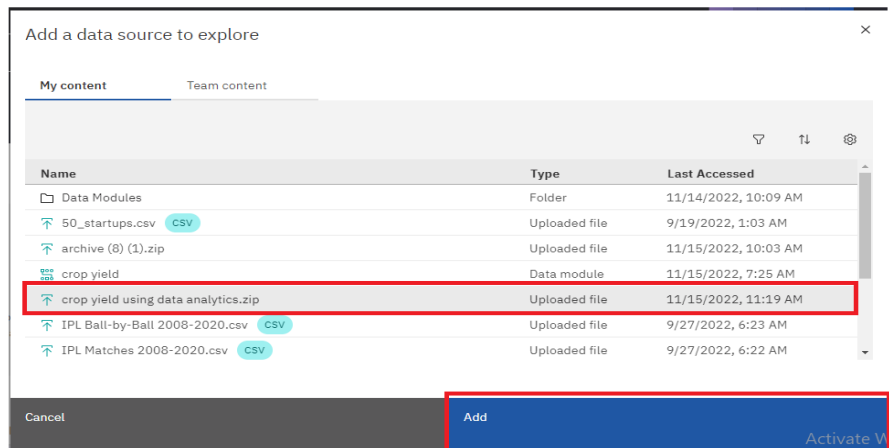


(OR)

Click->New->Exploration

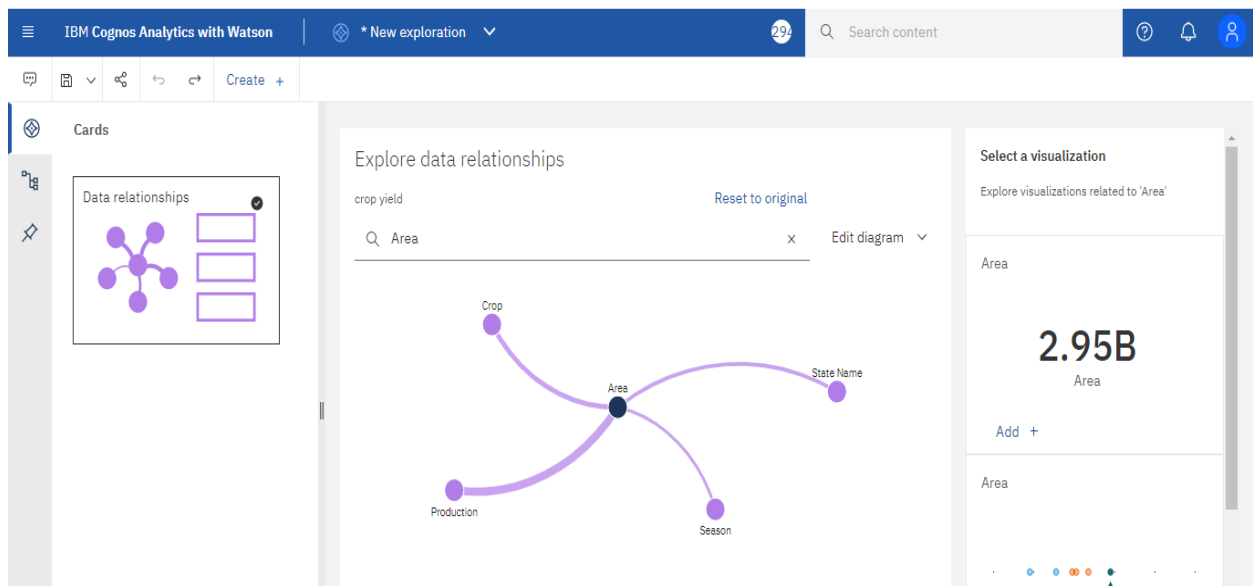


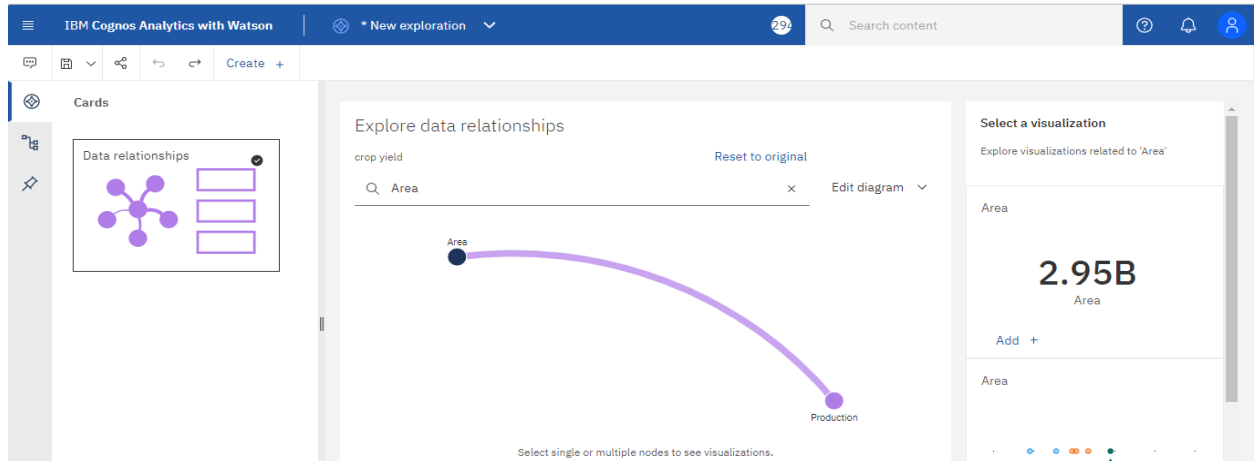
2. Select the file and click add.



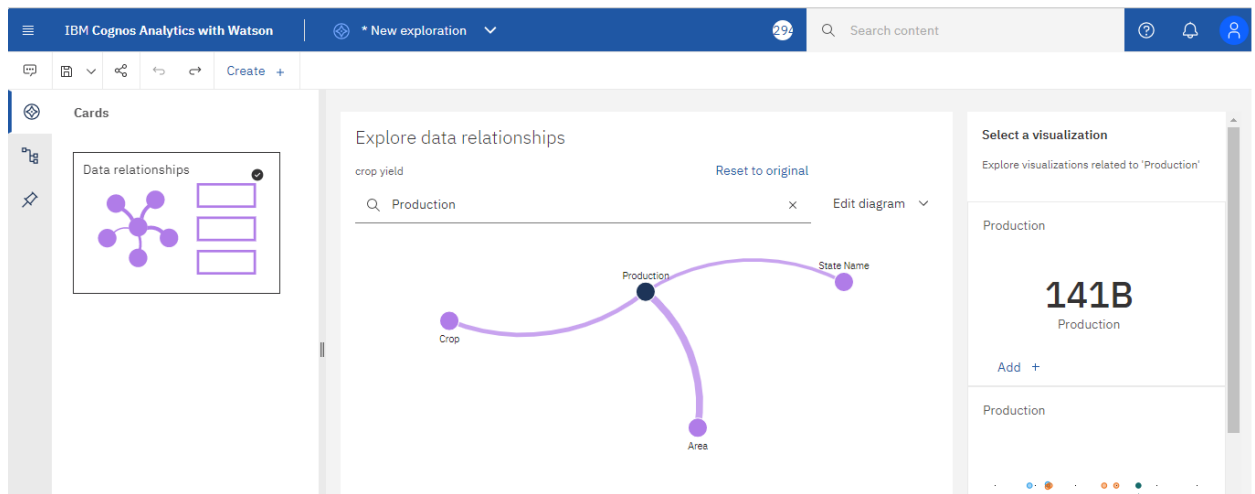
3. Select the data relationships icon

(i) explore the area of the crop by adjusting the range





(ii) explore the production of the crop by adjusting the range



IBM Cognos Analytics with Watson

\* New exploration

29%

Search content

Cards

Data relationships

Explore data relationships

crop yield

Reset to original

Edit diagram

Select single or multiple nodes to see visualizations.

Select a visualization

Explore visualizations related to 'Production'

Production

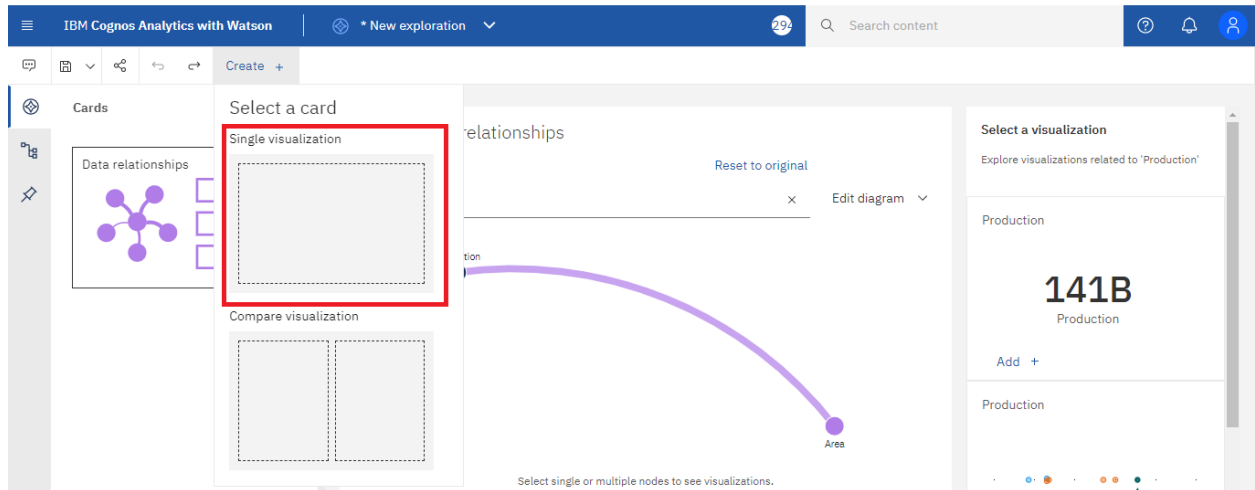
141B

Production

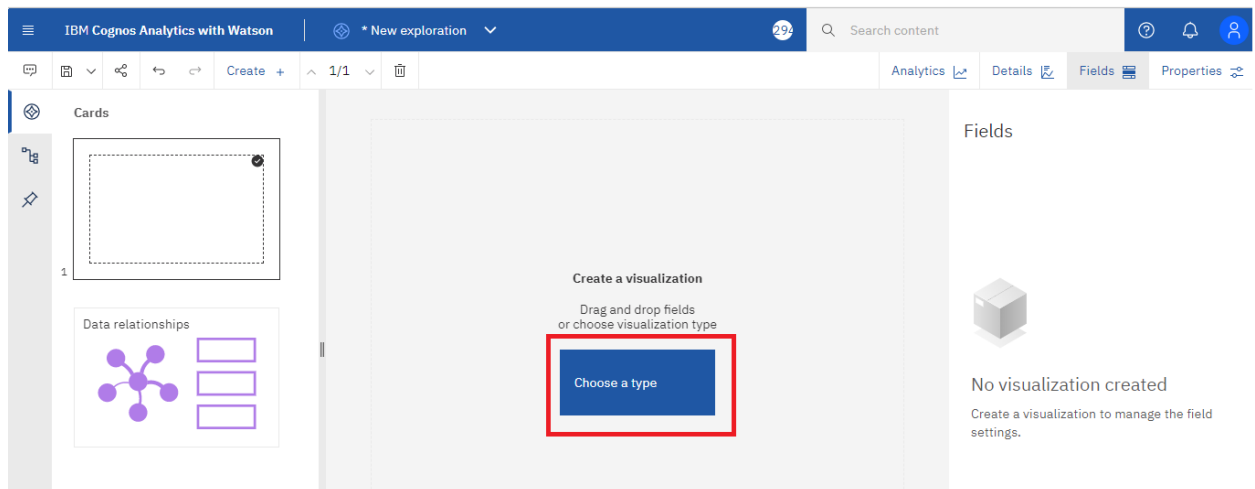
Add +

Production

#### 4. Click create -> Single visualization



#### 5. Click choose type



6. Different visualization Type will be available

IBM Cognos Analytics with Watson

\* New exploration

29

Search content

?

Create +

1/1

Analytics

Details

Fields

Properties

Cards

1

Data relationships

Choose visualization type

Comparison

Bar

Bullet

Column

Heat map

Line and column

Marimekko

Radar

Radial

Stacked bar

Stacked column

Word cloud

Parts to whole

Hierarchy bubble

Packed bubble

Pie

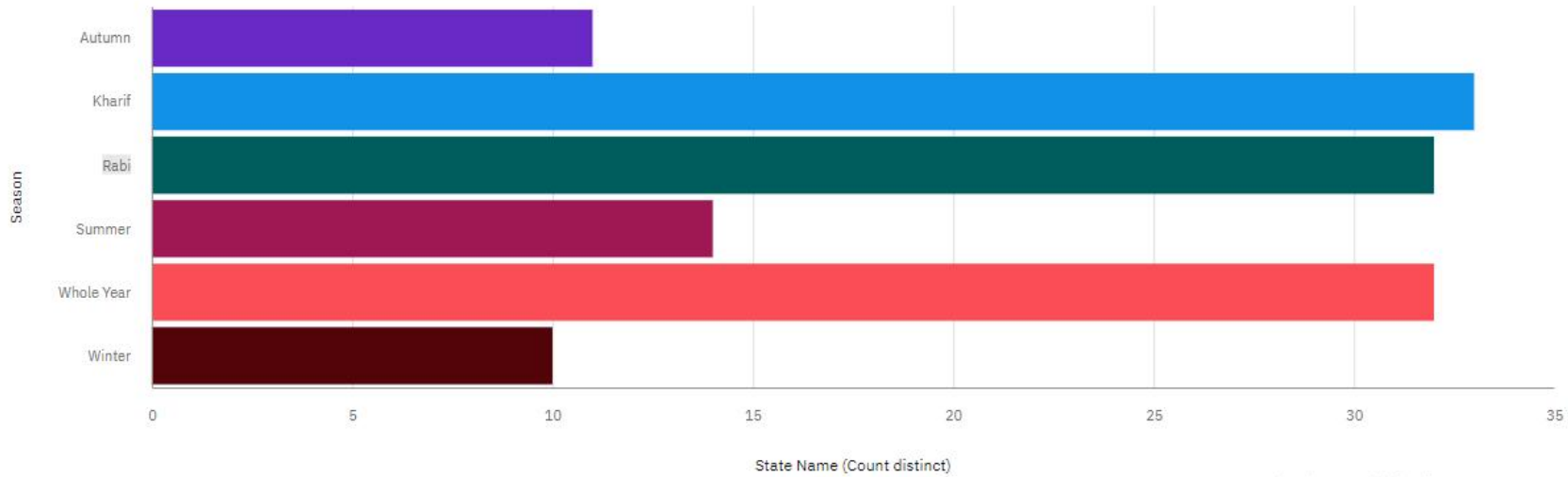
Tree map

7. Perform different visualization

State Name by Season colored by Season

Season

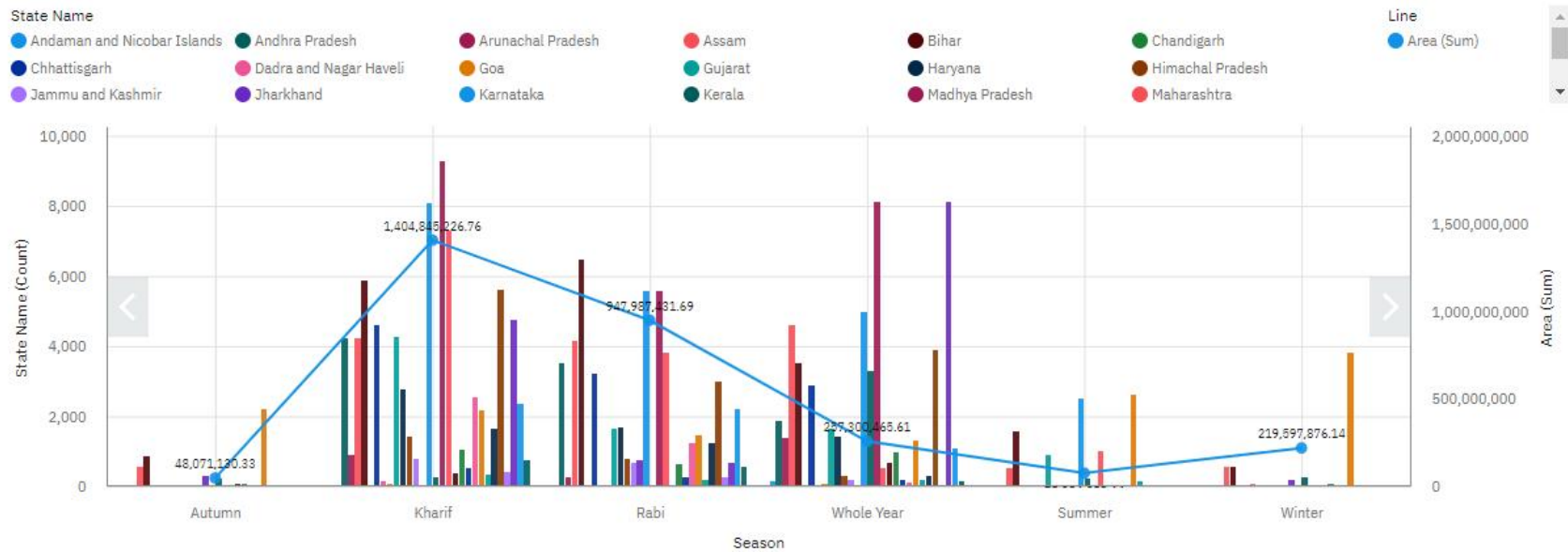
Autumn Kharif Rabi Summer Whole Year Winter



Activate Windows

Go to Settings to activate Windows.

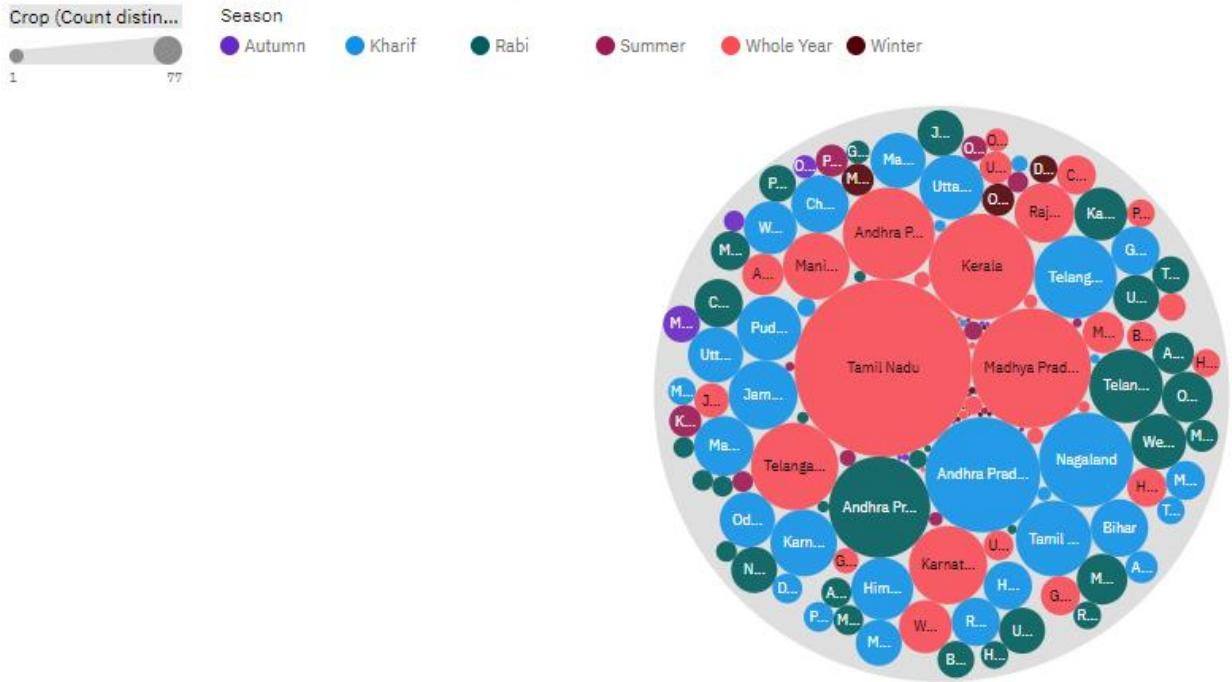
### Area and State Name for Season colored by State Name



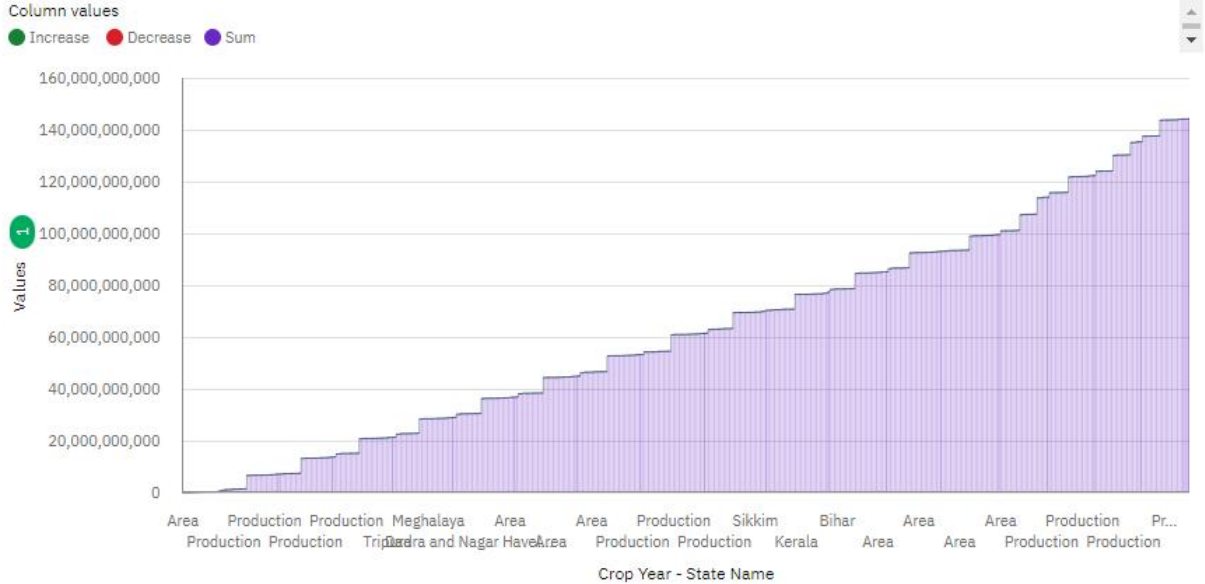
Activate Windows  
Go to Settings to activate Windows.



State Name hierarchy colored by Season and sized by Crop



Area and Production for Crop Year and State Name



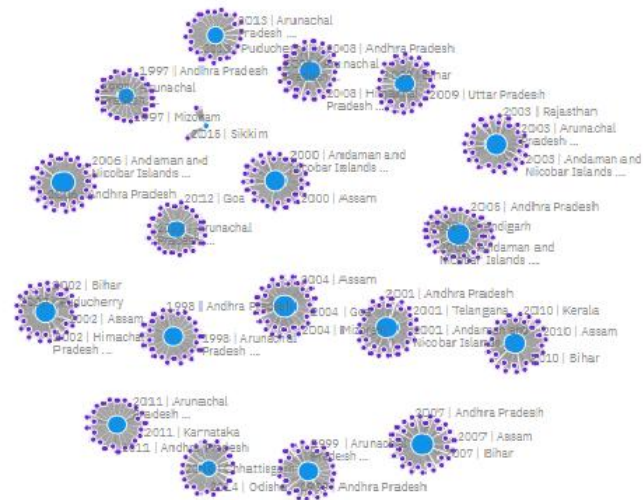
### Crop YearState Name to Crop Year

From

● Crop Year - State Name

To

● Crop Year



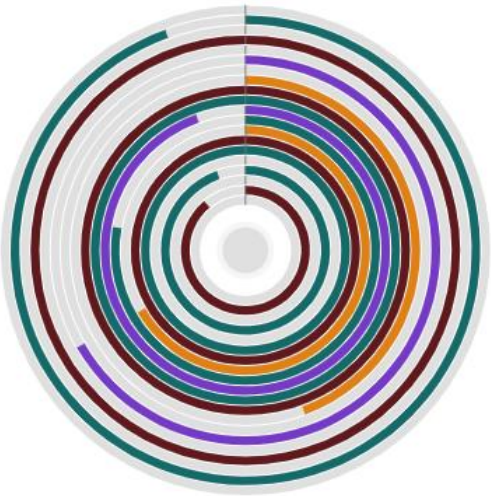
Activate Windows

Go to Settings to activate Windows.

Crop Year by Season colored by State Name

State Name

Andhra Pradesh   Bihar   Goa   Kerala   Tamil Nadu



State Name, Crop, District Name, Season and Crop Year

State Name	Season	Crop Year	District Name	Crop
Bihar	Autumn	1997	ARARIA	Rice
			BANKA	
			BEGUSARAI	
			BHAGALPUR	
			BHOJPUR	
			DARBHANGA	
			GAYA	
			GOPALGANJ	
			JEHANABAD	
			KAIMUR (BHABUA)	
			KATIHAR	
			KHAGARIA	
			KISHANGANJ	
			MADHEPURA	
			MADHUBANI	

## Area

Tree sunburst

Tree diagram

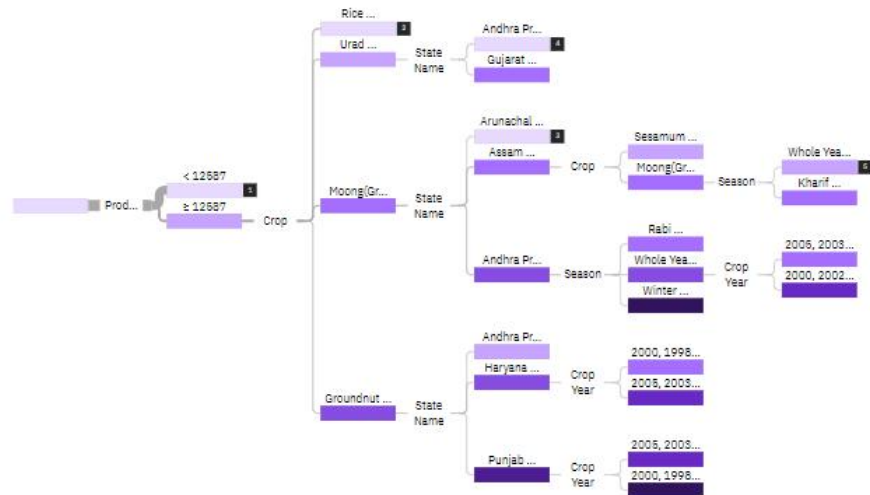
Rules

Area

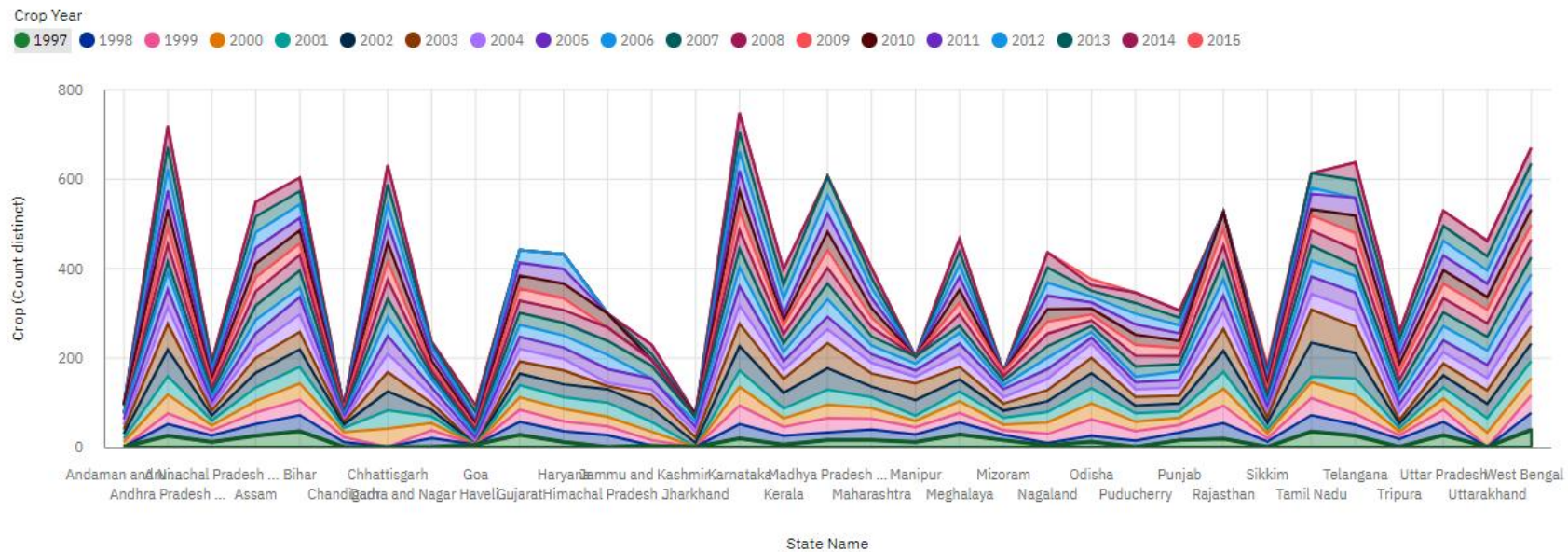


Nodes

Bottom 5



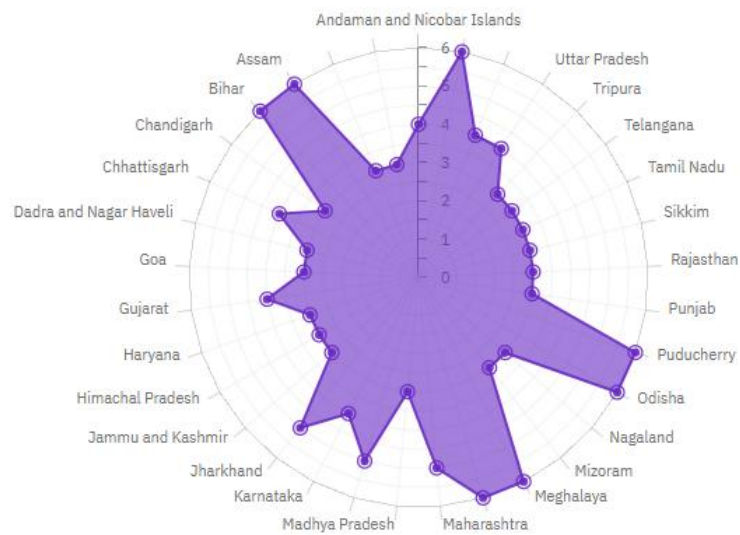
Crop by State Name colored by Crop Year



Activate Windows

Go to Settings to activate Windows.

Season by State Name



Activate Windows  
Go to Settings to activate Windows.



State Name compared to Crop for Crop

246K ↑

Crop

33 (+745,630.3%)

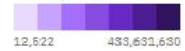
State Name



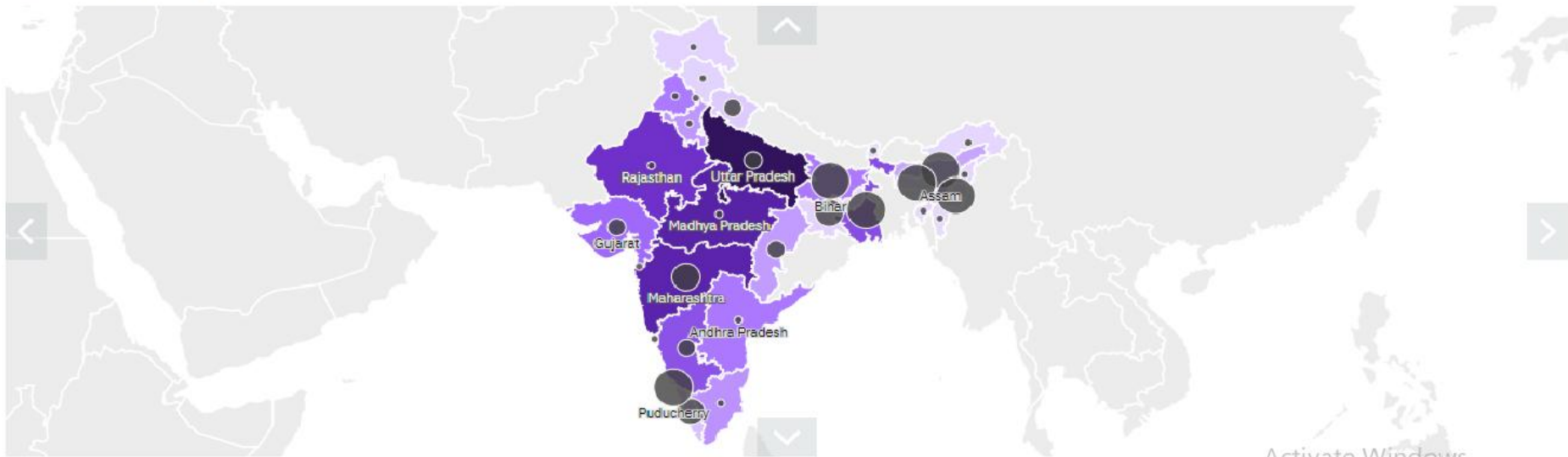
Activate Windows

### State Name, Area, Season

Area (Sum)



Season (Count dis...)



Activate Windows

Go to Settings to activate Windows.

## 8. Rename and Save the file

The screenshot shows the IBM Cognos Analytics interface. A 'Save as' dialog box is open, allowing the user to save a file. The 'Name' field contains 'estimation of crop yield exploration'. The 'Selected destination' is 'My content'. Below this, a table lists the contents of 'My content'.

Name	Type	Last Accessed
Data Modules	Folder	11/14/2022, 10:09 AM
50_startups.csv	Uploaded file	9/19/2022, 1:03 AM
archive (8) (1).zip	Uploaded file	11/15/2022, 10:03 AM
CROP AREA.xlsx	Uploaded file	11/17/2022, 8:58 AM
CROP PRODUCTION.csv	Uploaded file	11/17/2022, 9:02 AM
crop yield	Data module	11/15/2022, 7:25 AM
crop yield using data analytics.zip	Uploaded file	11/15/2022, 11:19 AM

The background dashboard shows a line chart titled 'Crop by State N...d by Crop Year' and a 'Data relationships' diagram. The right sidebar displays 'Details' for the selected file, including the total number of results (246,091) and the most common values for 'State Name' and 'Crop Year'.