Mario

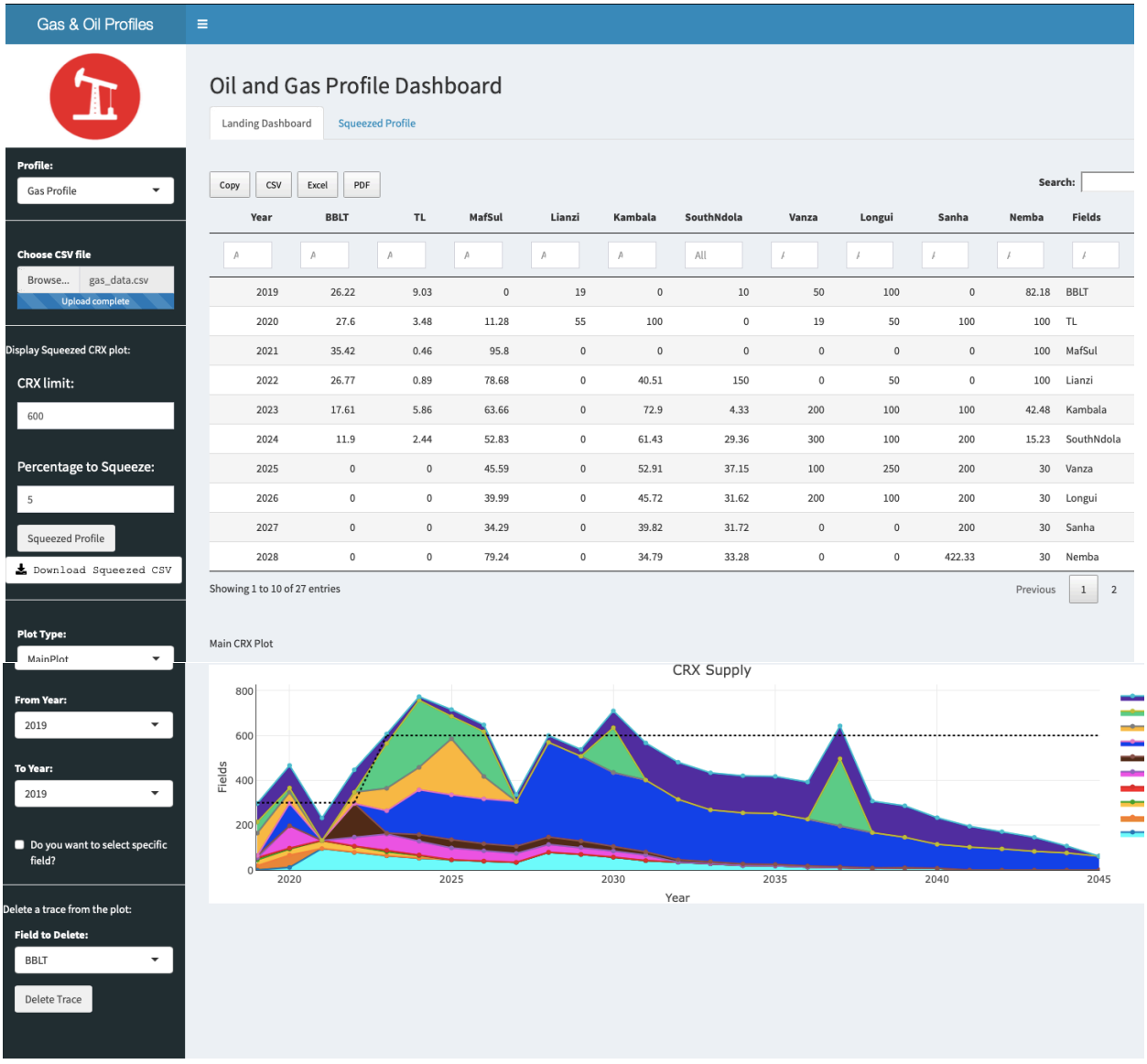
Oil and Gas Dashboard User Guide

Project Details:

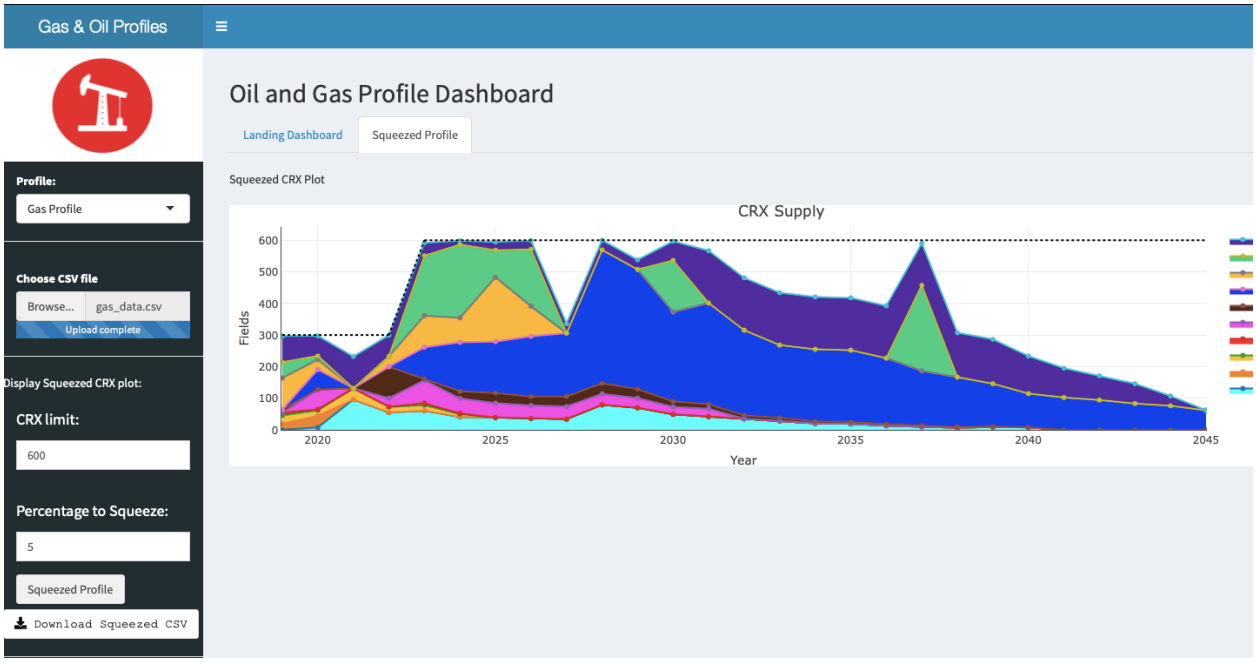
To make an interactive dashboard for Oil and Gas Production for various fields over the years in R language.

User Guide:

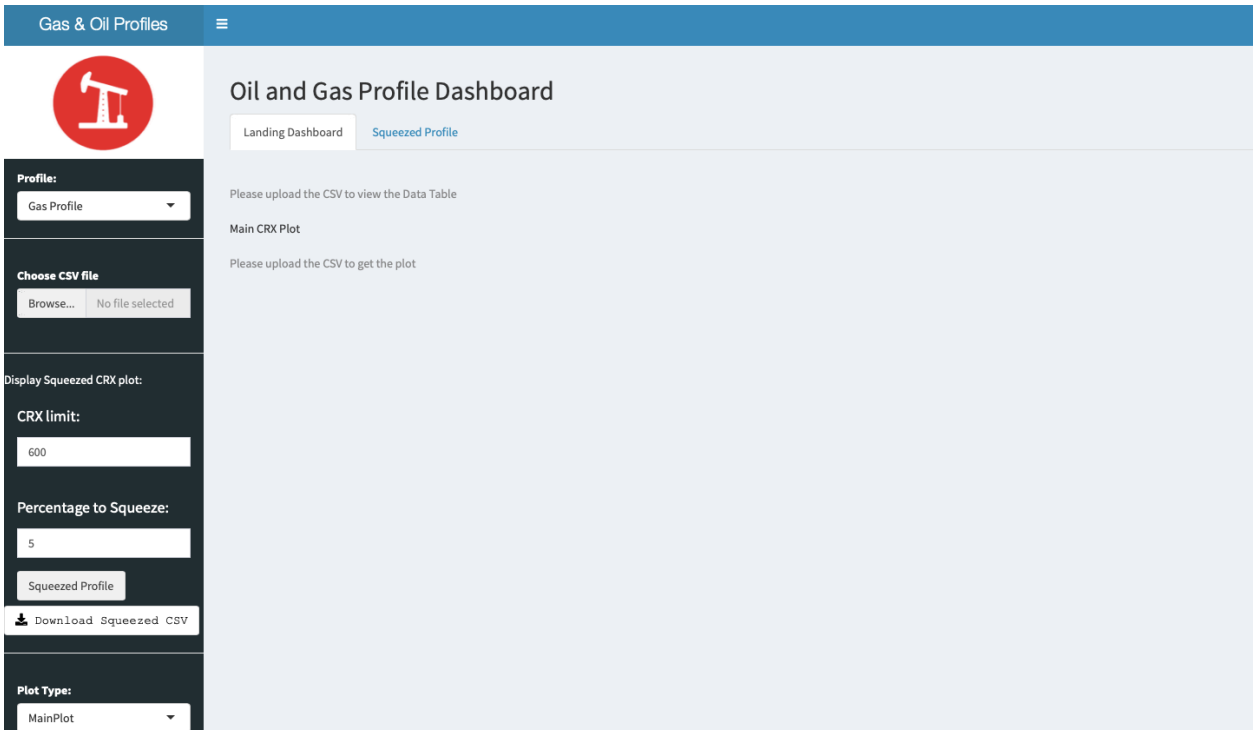
This is the main Oil and Gas Dashboard Screen. The Left Panel has all the controls and interactive selection operations. The Center Screen has the uploaded csv data for either gas or oil production in the top and the stacked area plot for the same in the bottom.



Squeezed Profile Tab with CRX limit set to 600:

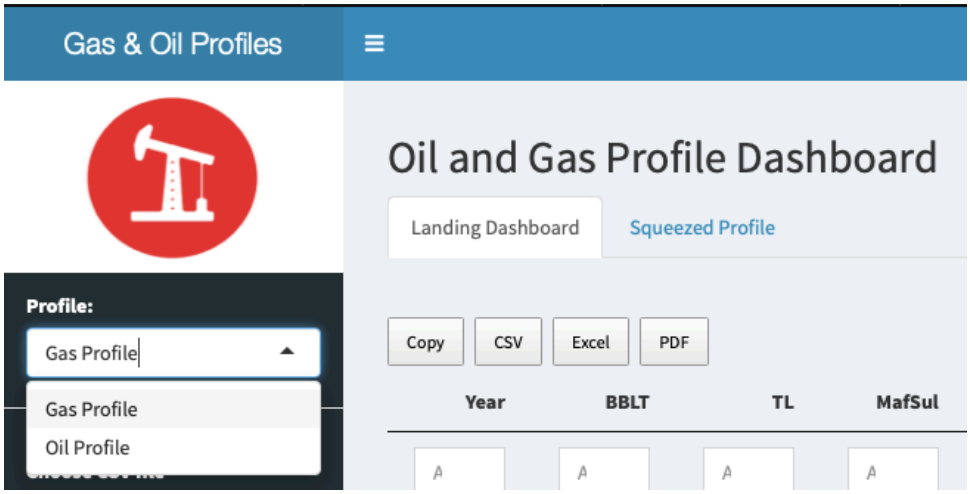


The Initial Dashboard is having an empty center screen as no data is uploaded as shown below:

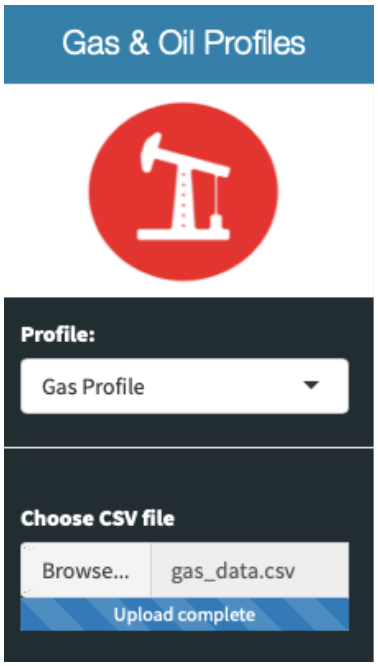


The below screen shows the Panel details:

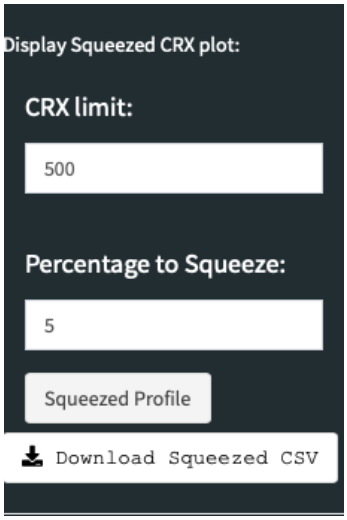
Firstly, user can select the Profile he wants to work on. 1) Gas Profile 2) Oil Profile.



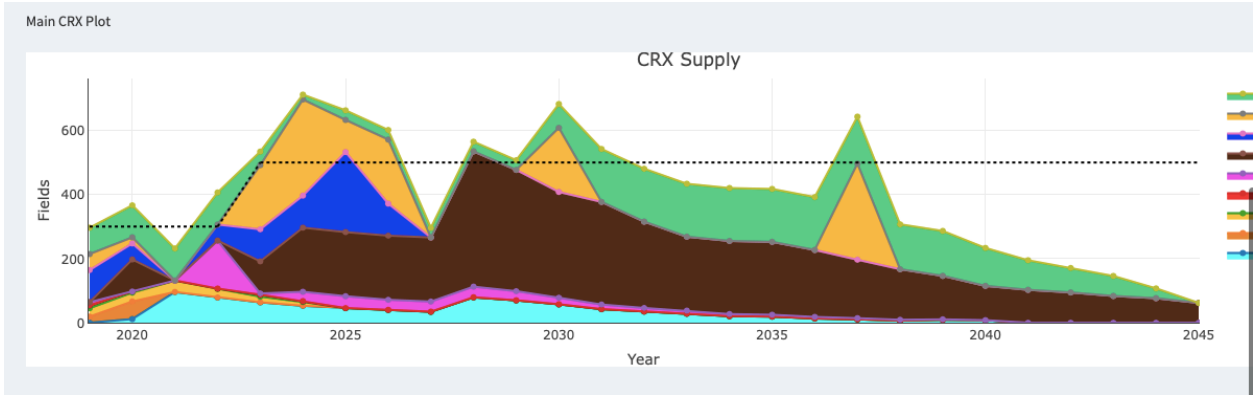
Based on the selection user needs to upload the csv based on a fixed format as expected by the dashboard, which will be given to users as a sample.csv



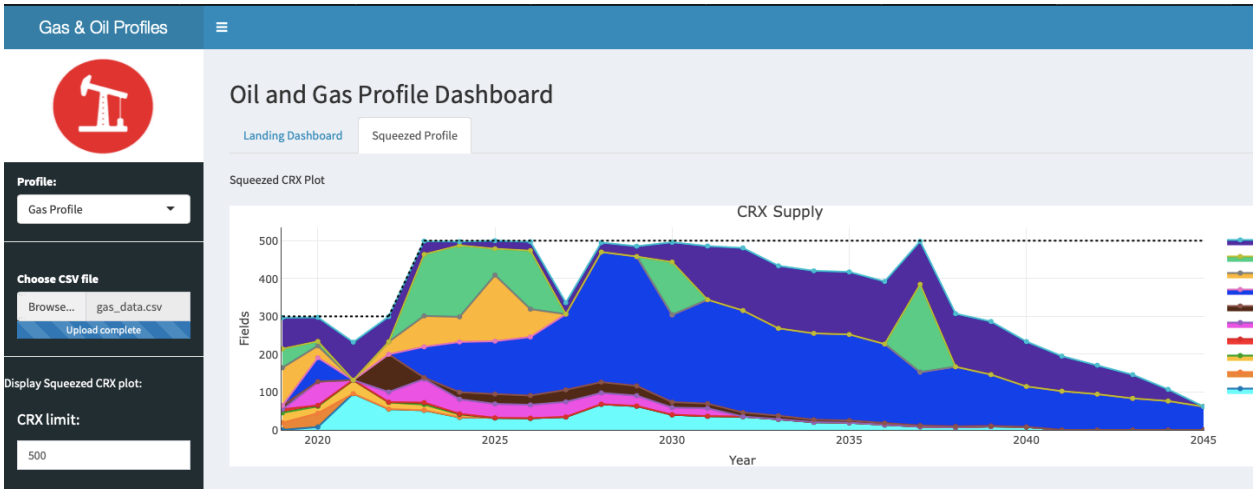
Next Section in the left panel has the options to generate a squeezed data for the profile, to allow users to imagine the data under a fixed CRX Limit and they will get to know which production needs to be reduced. This will reduce the CRX value as per the percentage from the fields based on their priorities from bottom to top. User needs to fill the CRX limit value and the percentage to decrease in each iteration for squeezing functionality then click the “Squeezed Profile” button to get the squeezed output plot in the “Squeezed Profile” Tab in the Center Screen as shown in the image on the next images. The user can also download the squeezed data csv by clicking the “Download Squeezed CSV” button.



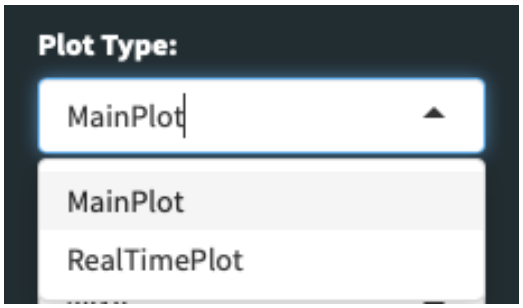
The Main Plot also gives the limit line as per the CRX Limit of 500 as shown below:



The Squeezed Profile Output tab with changed CRX limit to 500:

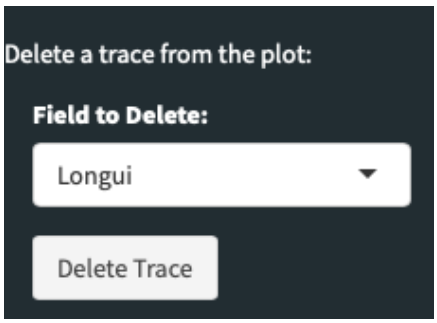


The next option in the left panel is the selection of plot type you want to view. The first one is the "MainPlot" which shows the static plot for the complete data. The second option is the interactive "RealTimePlot" which helps user to tweak various parameters to view interactive plot.

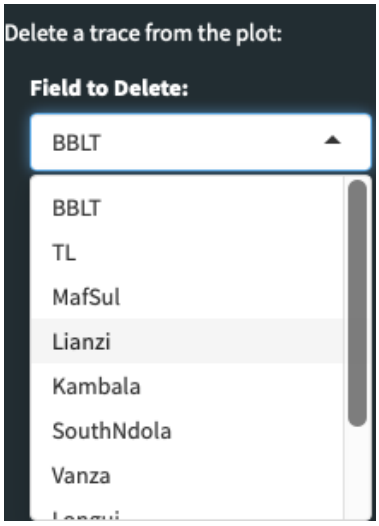


If you select the "RealTimePlot", you will get the below options to set for interaction with the plot. For example, based on the below selection of "Field name" and "From" and "To" years we get a plot for that particular field.

Then the next option is to delete a trace or field from the main CRX plot using the below options, where user can select a field name one by one and keep on deleing them from the CRX plot.

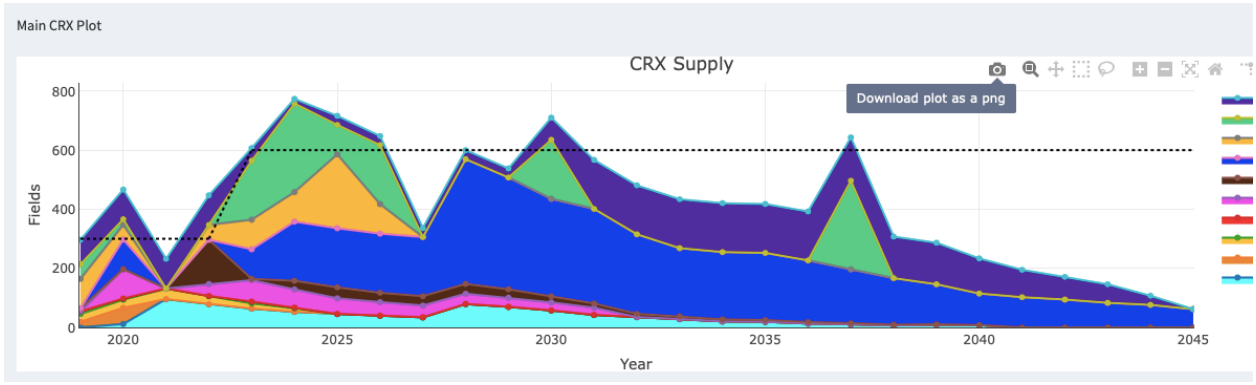


Field options in the dropdown:

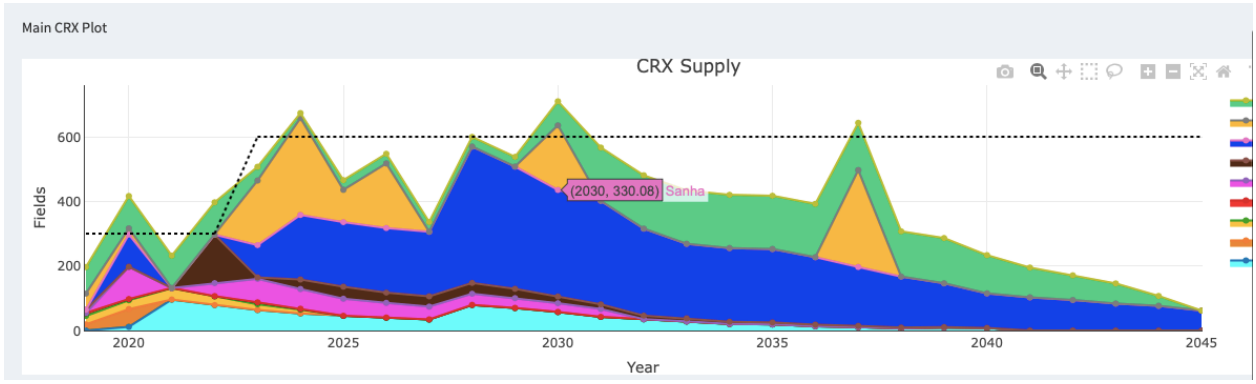


Based on the above selection the plot changes as per the below images:

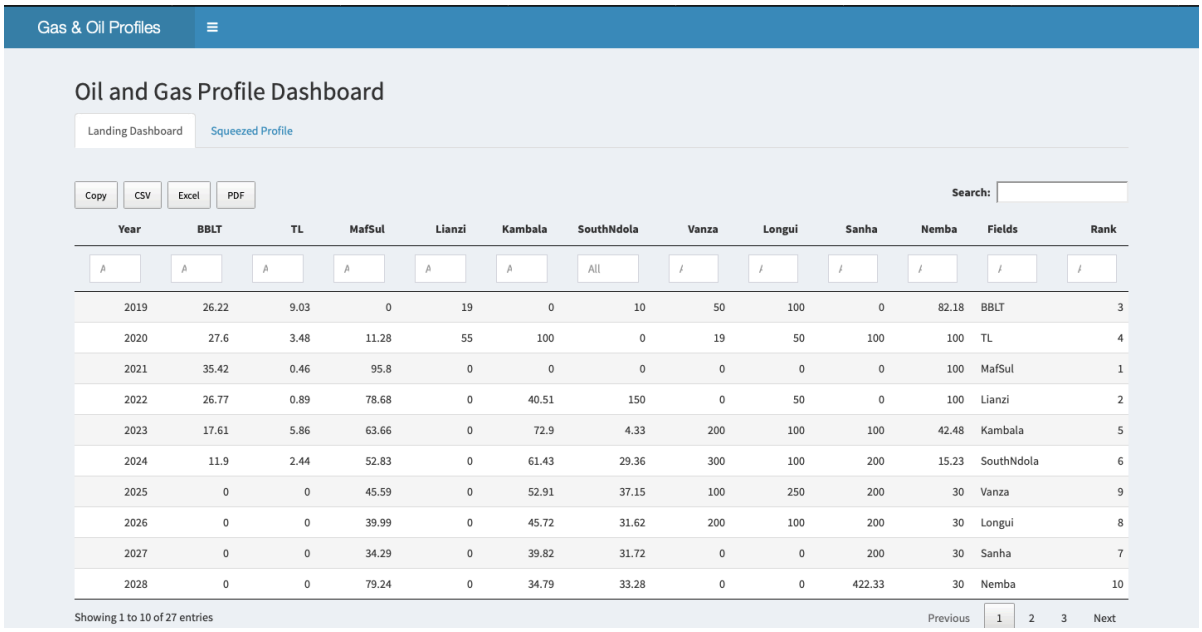
Before:



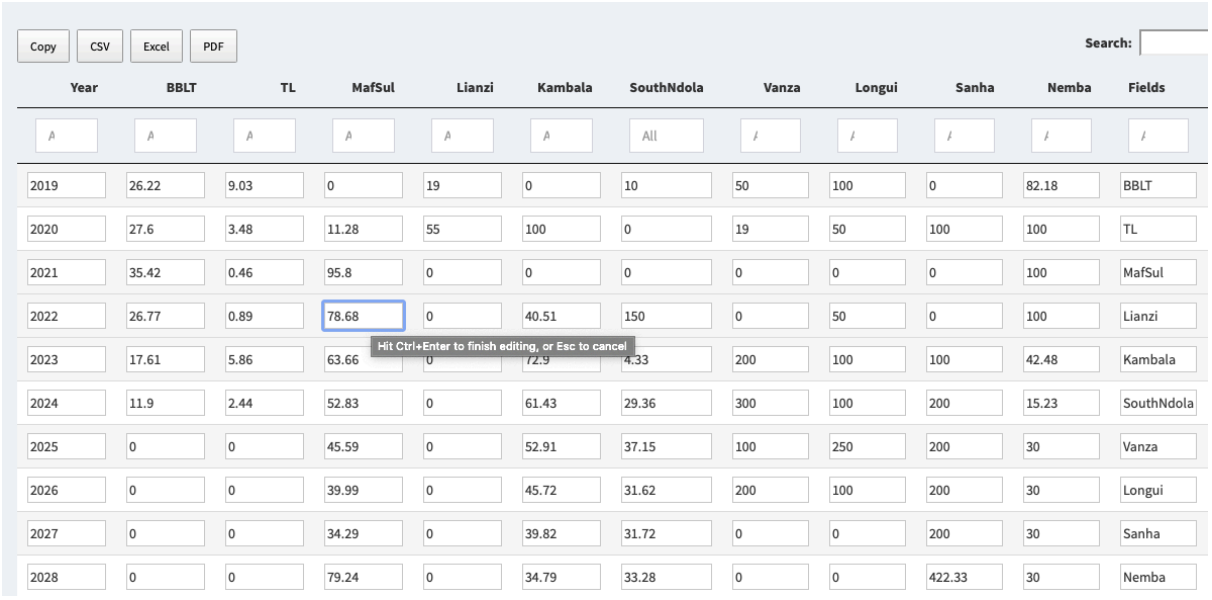
After deleting “Longui” field:



- Data Table features:

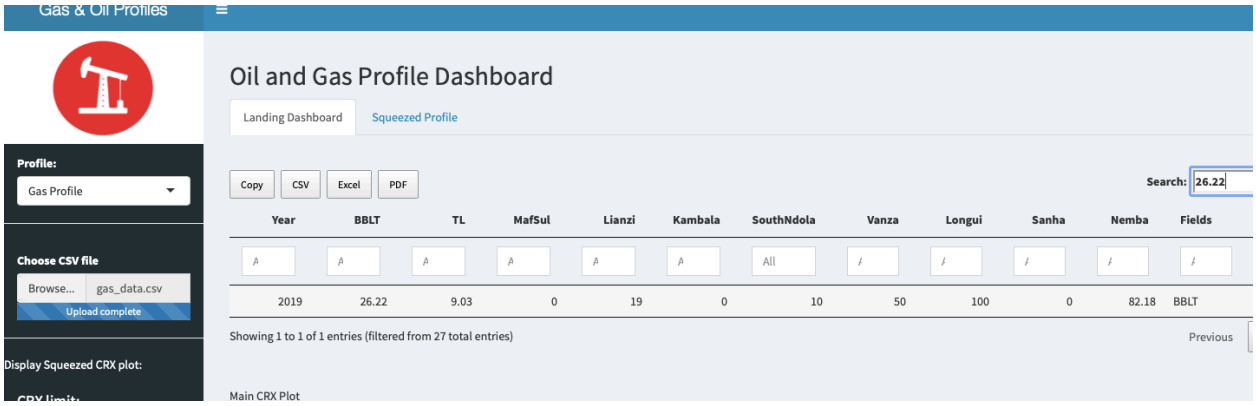


1. You can edit the Data table by double clicking any cell and pressing “ctrl+enter” to save or escape to close editing as shown in below image:

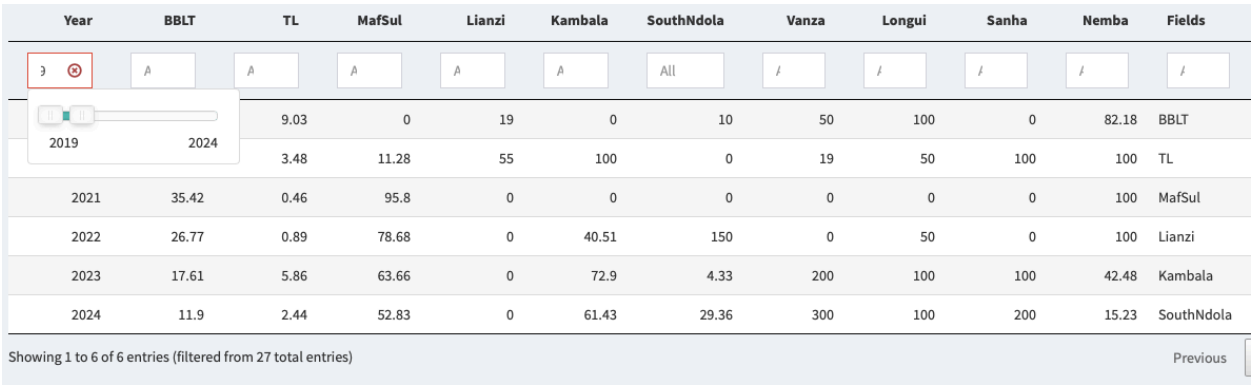


2. Copy to Clipboard or Download updated data in below formats:

3. Search Feature. Here we search through all data through a single search key on top right corner. We search for “26.22” in the data as shown below:

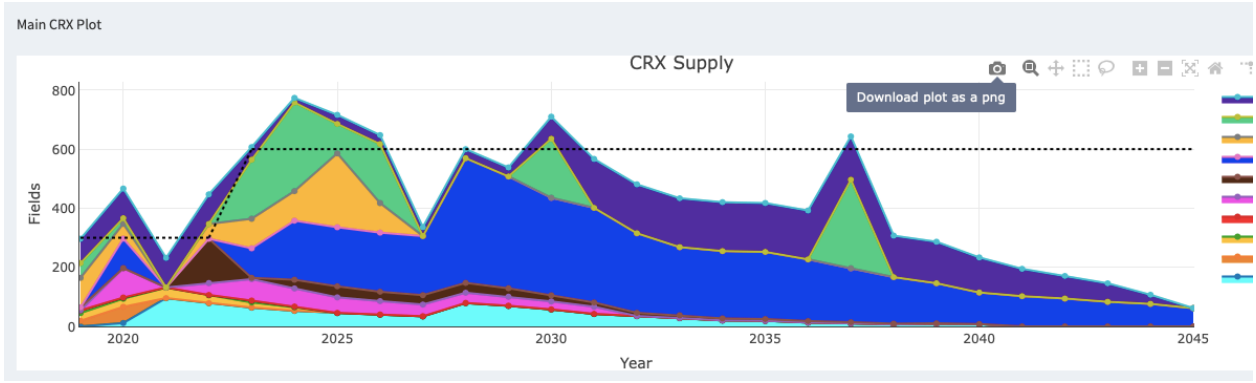


Search and filter rows based on each column, we select year “2019 to 2024” data:



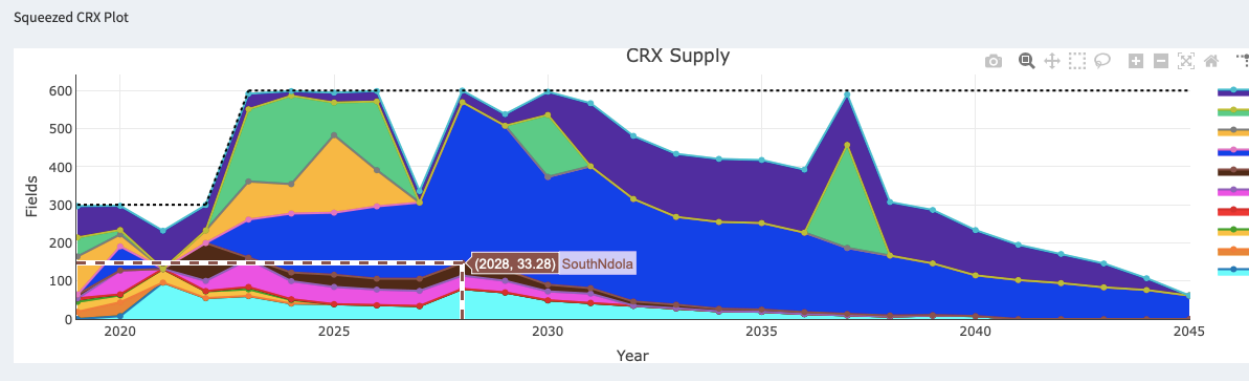
- Plot features:

1. You can download the plot png using the highlighted buttons in top right corner.

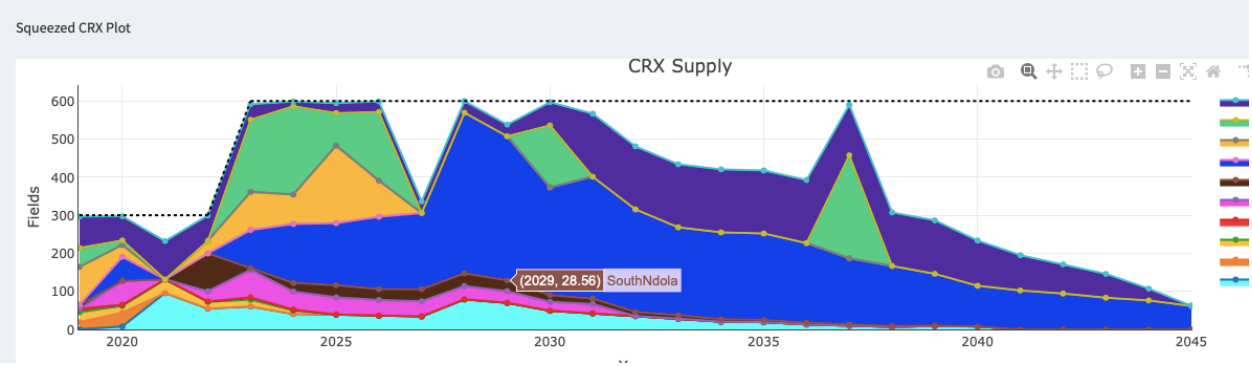


2. Zoom in Zoom out features are also available in the same top right corner.

3. Toggle a marking lines to better map the data for checking a data point.



4. Direct points can be highlighted on plot.



Thanks for reading through the user guide. ☺