

```
!git pull
```

```
From https://github.com/CSSEGISandData/COVID-19
 865c933c..f3dea791 master -> origin/master
 1e368489..7111f93e web-data -> origin/web-data
Updating 865c933c..f3dea791
Fast-forward
 csse_covid_19_data/UID_ISO_FIPS_LookUp_Table.csv | 7141 ++++++-----
 .../csse_covid_19_daily_reports/04-06-2020.csv   | 2810 ++++++
 .../time_series_covid19_confirmed_US.csv         | 6508 ++++++-----
 .../time_series_covid19_confirmed_global.csv     | 527 +-
 .../time_series_covid19_deaths_US.csv            | 6508 ++++++-----
 .../time_series_covid19_deaths_global.csv        | 527 +-
 .../time_series_covid19_recovered_global.csv     | 499 +-
 7 files changed, 13668 insertions(+), 10852 deletions(-)
 create mode 100644 csse_covid_19_data/csse_covid_19_daily_reports/04-06-2020.csv
```

```
RAW=struct();
RAW.Confirmed = import_git('time_series_covid19_confirmed_global.csv');
```

Warning: Column headers from the file were modified to make them valid MATLAB identifiers before creating variable names for the table. The original column headers are saved in the VariableDescriptions property. Set 'PreserveVariableNames' to true to use the original column headers as table variable names.

```
RAW.Deaths = import_git('time_series_covid19_deaths_global.csv');
```

Warning: Column headers from the file were modified to make them valid MATLAB identifiers before creating variable names for the table. The original column headers are saved in the VariableDescriptions property. Set 'PreserveVariableNames' to true to use the original column headers as table variable names.

```
RAW.Recovered = import_git('time_series_covid19_recovered_global.csv');
```

Warning: Column headers from the file were modified to make them valid MATLAB identifiers before creating variable names for the table. The original column headers are saved in the VariableDescriptions property. Set 'PreserveVariableNames' to true to use the original column headers as table variable names.

```
Categories=fieldnames(RAW);
```

```
StartDate = datetime(2020,01,22)
```

```
StartDate = datetime
22-Jan-2020
```

```
EndDate = StartDate+days(size(RAW.(Categories{1})),2)-5)
```

```
EndDate = datetime
06-Apr-2020 00:00:00
```

```
Selected_Countries=categorical({'US','United Kingdom','Germany','Switzerland','Canada','France',
'Singapore','Australia','India','Mauritius',...
'Saudi Arabia','Korea, South','Italy'});
```

```
gradient_span=5; %days
```

```
CountrywiseData=struct();
```

```
for category_count=1:size(Categories,1)
```

```
    plot_titles=cell(size(Selected_Countries,2),1);
```

```
    for country_count=1:size(Selected_Countries,2)
```

```
        RAW.(Categories{category_count}).Country_Region=categorical(RAW.(Categories{category_count}).Country_Region);
```

```
        Idn=RAW.(Categories{category_count}).Country_Region==Selected_Countries(country_count);
```

```
        temp=RAW.(Categories{category_count}){Idn,(5:end)};
```

```
        CountrywiseData.(Categories{category_count})(country_count,:)=sum(temp,1);
```

```
        plot_titles{country_count,1}=[char(Categories{category_count}), '_', char(Selected_Countries(country_count))];
```

```
    end
```

```
    fig_title=char(Categories{category_count});
```

```
    SimpleScatter(StartDate, CountrywiseData.(Categories{category_count}), fig_title, plot_titles, 'b');
```

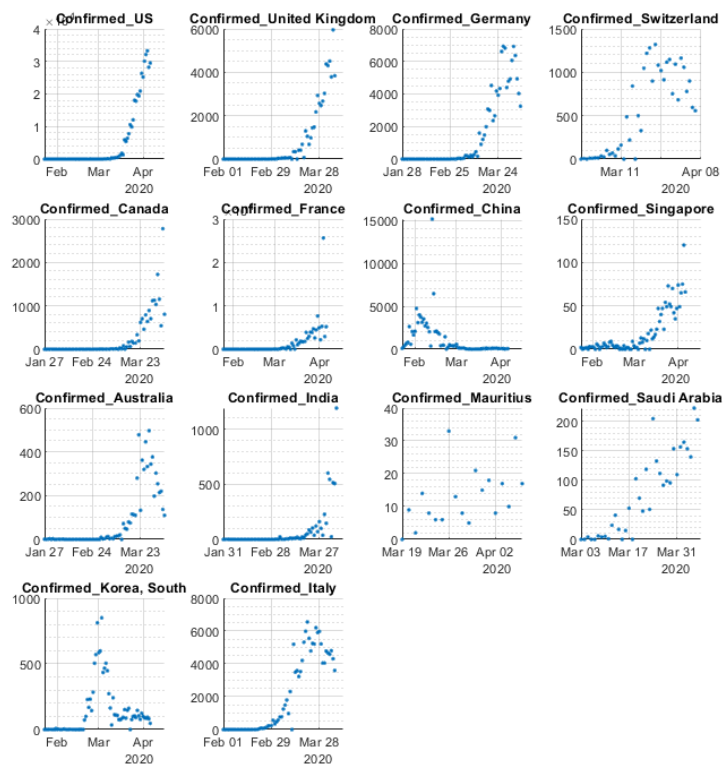
```
end
```

Starting parallel pool (parpool) using the 'local' profile ...

Connected to the parallel pool (number of workers: 8).

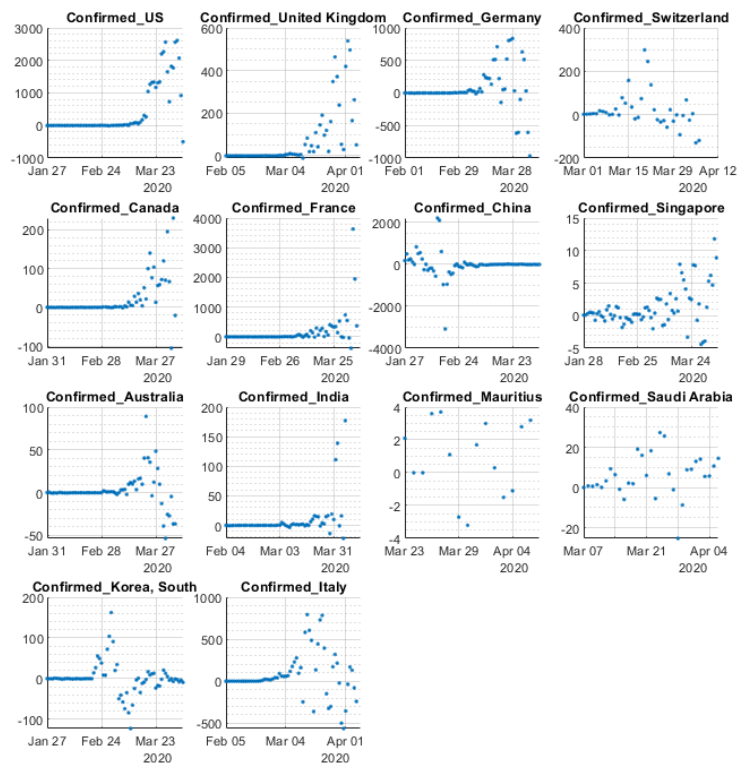
```
ans =
```

```
'DailyIncrease_Confirmed'
```

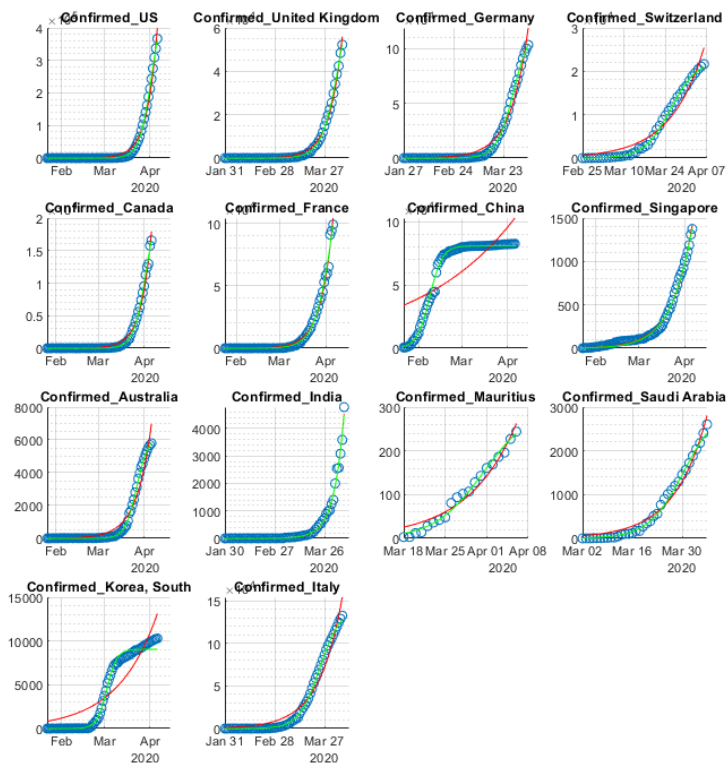


```
ans =
```

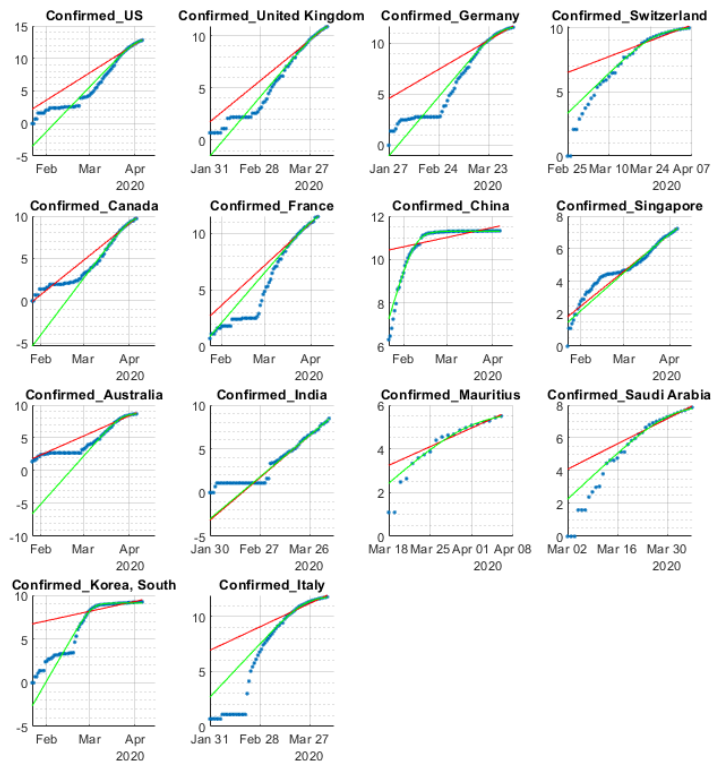
```
'Grad of DailyIncrease_Confirmed'
```



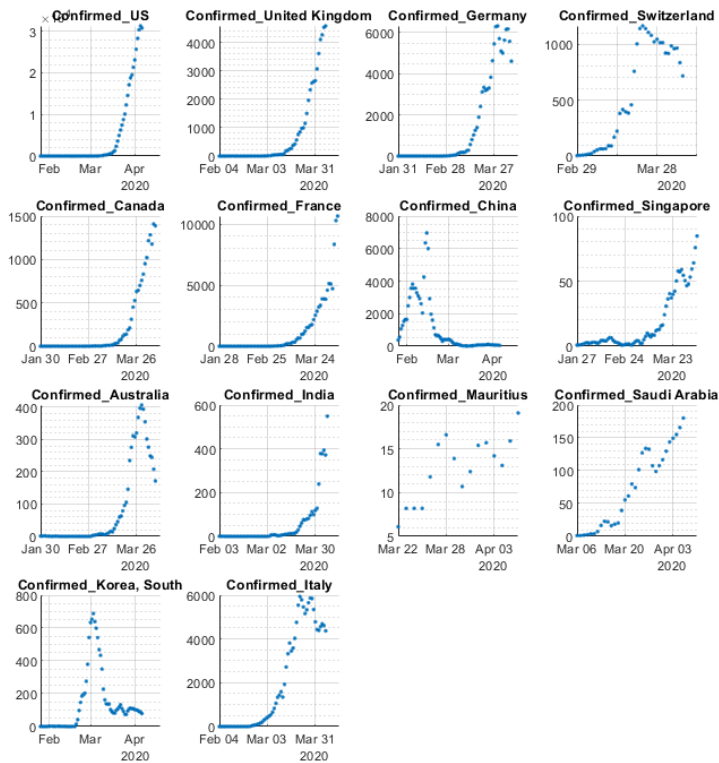
ans =  
'Confirmed'



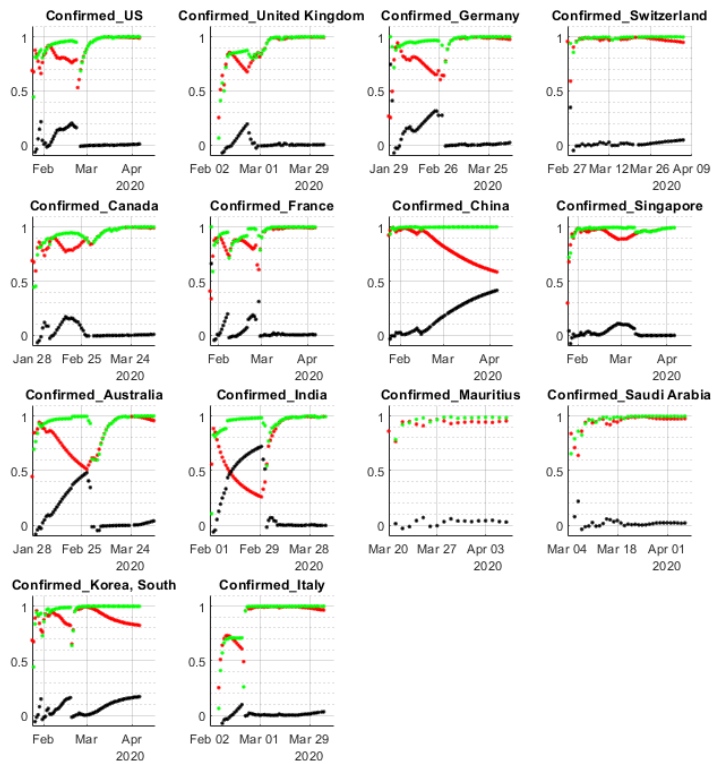
ans =  
'Log\_Confirmed'



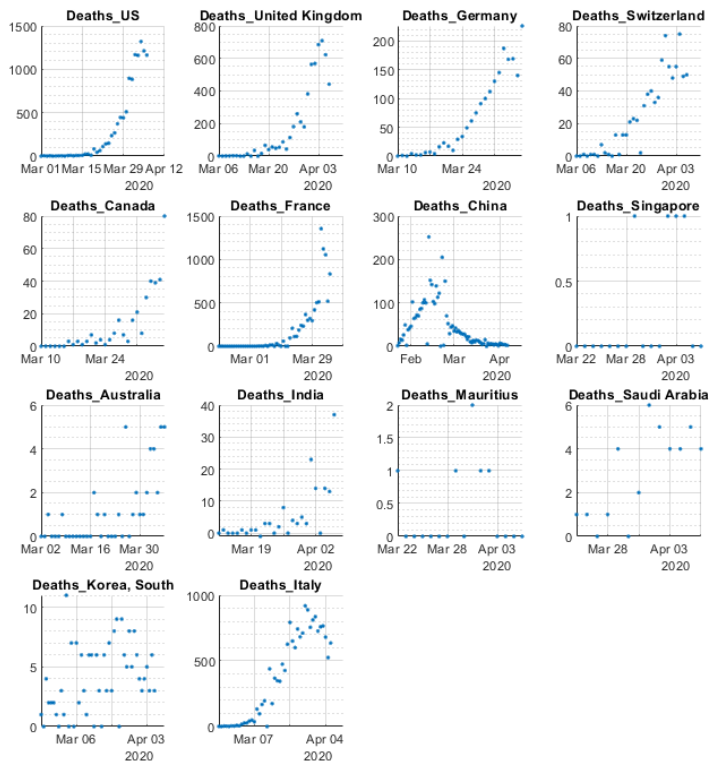
ans =  
'Gradient\_Confirmed'



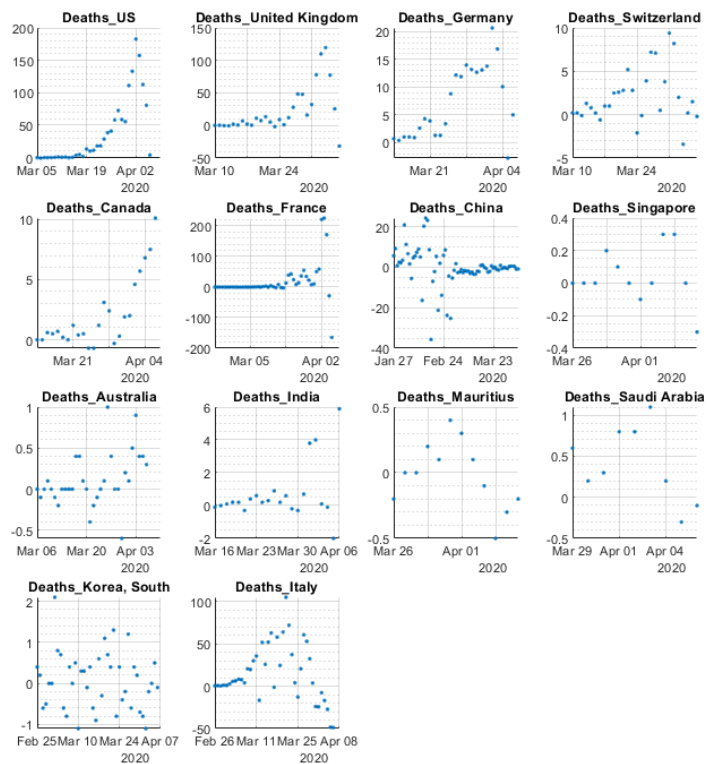
ans =  
'Goodness of Fit\_Confirmed'



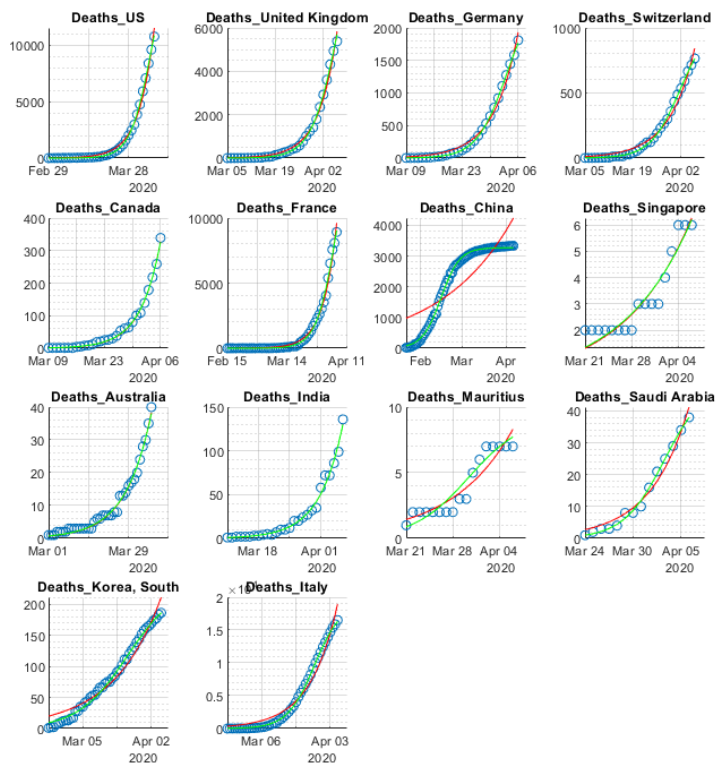
ans =  
'DailyIncrease\_Deaths'



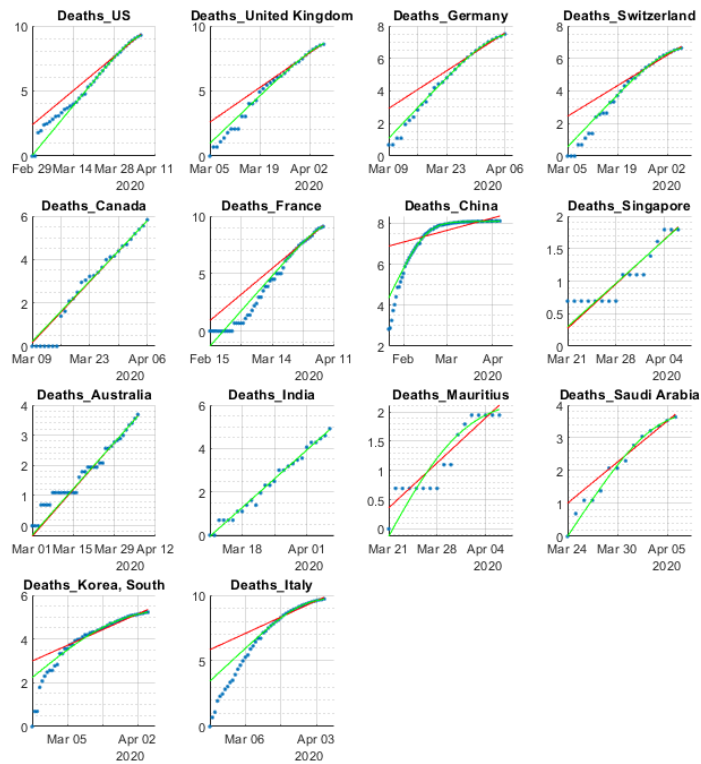
ans =  
'Grad of DailyIncrease\_Deaths'



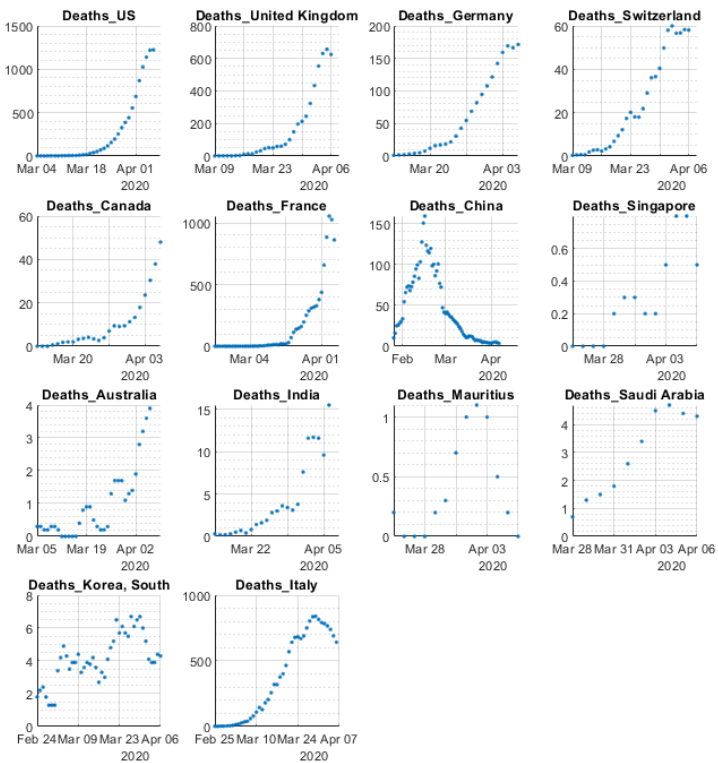
ans =  
'Deaths'



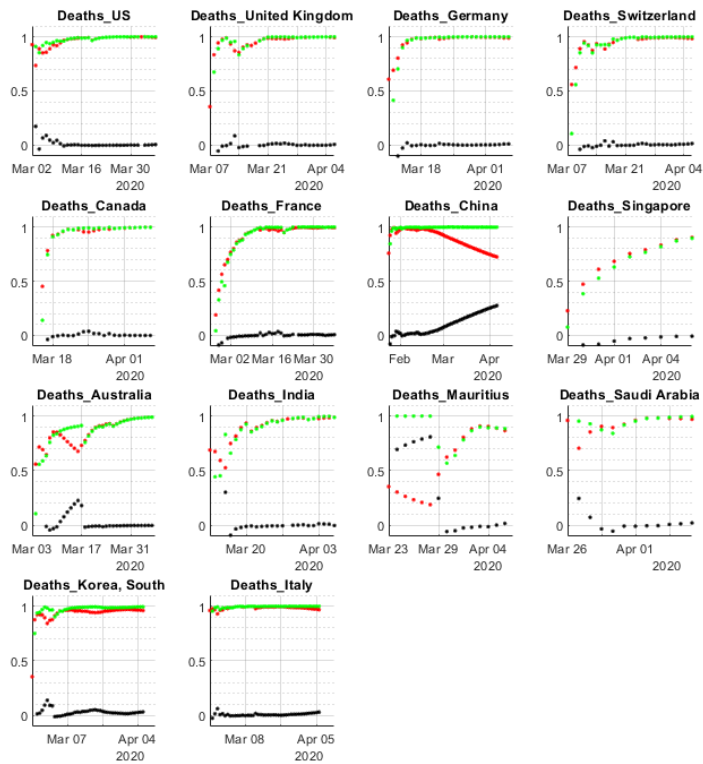
ans =  
'Log\_Deaths'



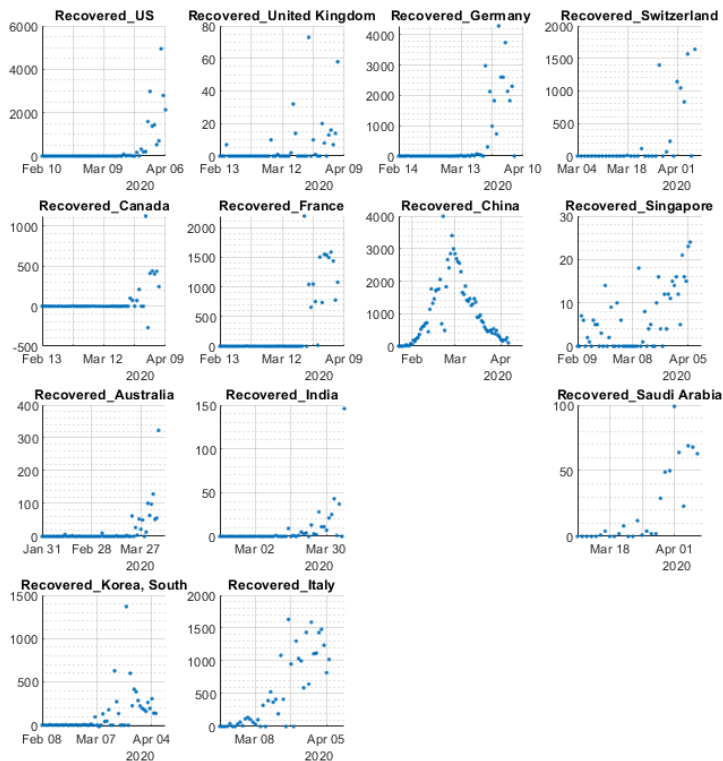
```
ans =
'Gradient_Deaths'
```



```
ans =
'Goodness of Fit_Deaths'
```

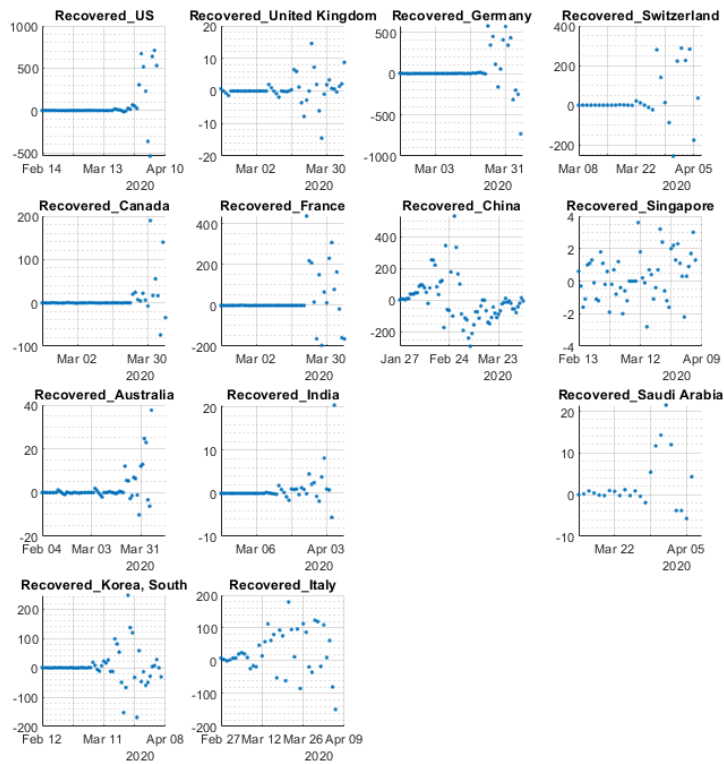


```
ans =
'DailyIncrease_Recovered'
```

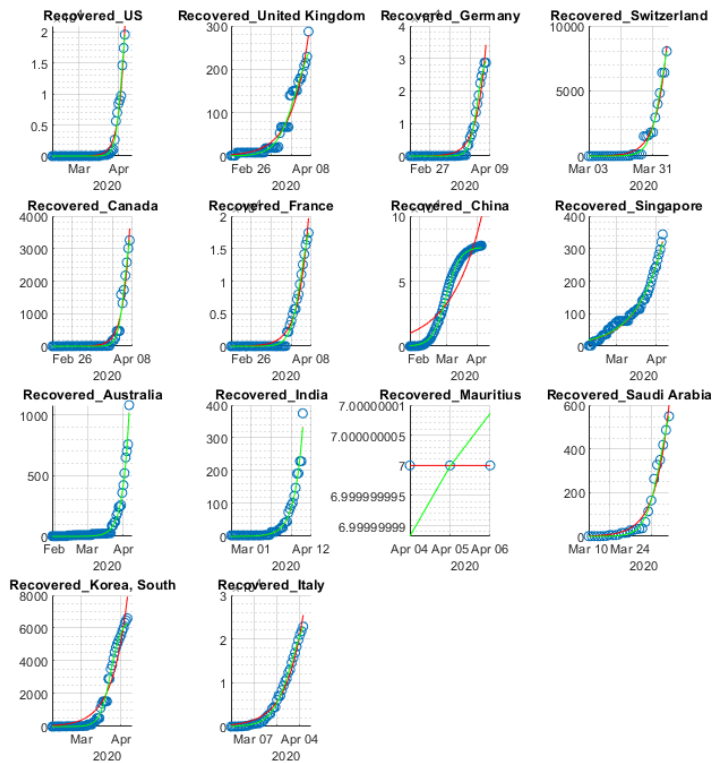


```
ans =
'Grad of DailyIncrease_Recovered'
```

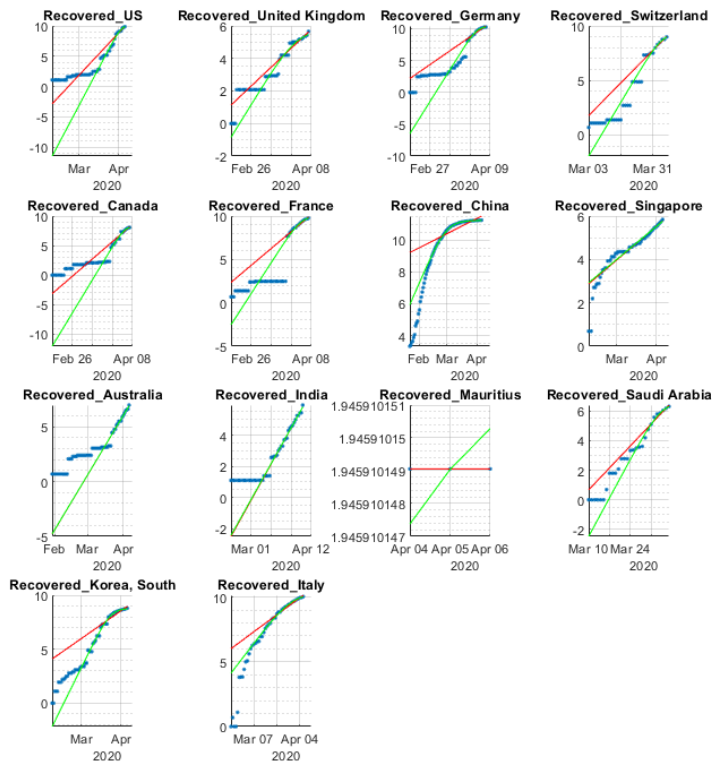




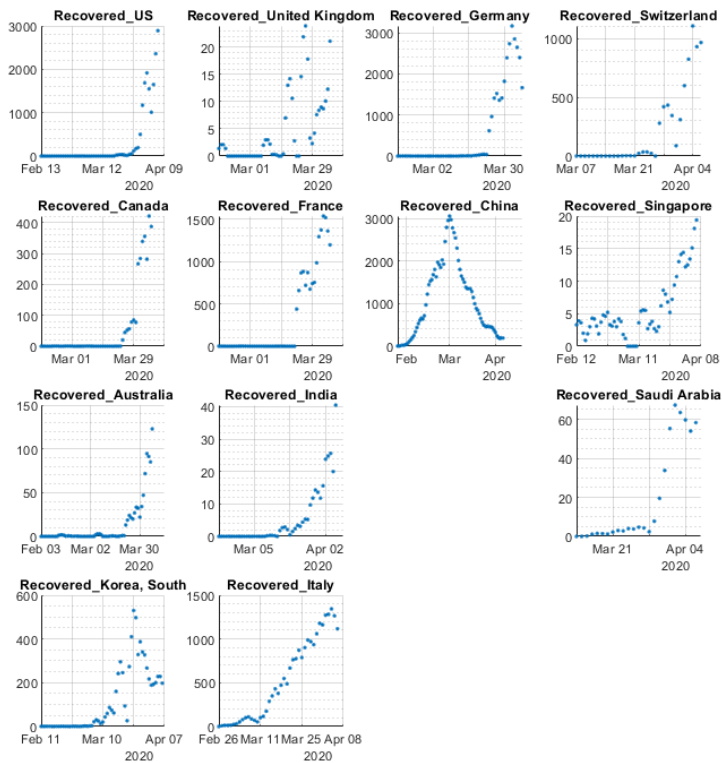
ans =  
'Recovered'



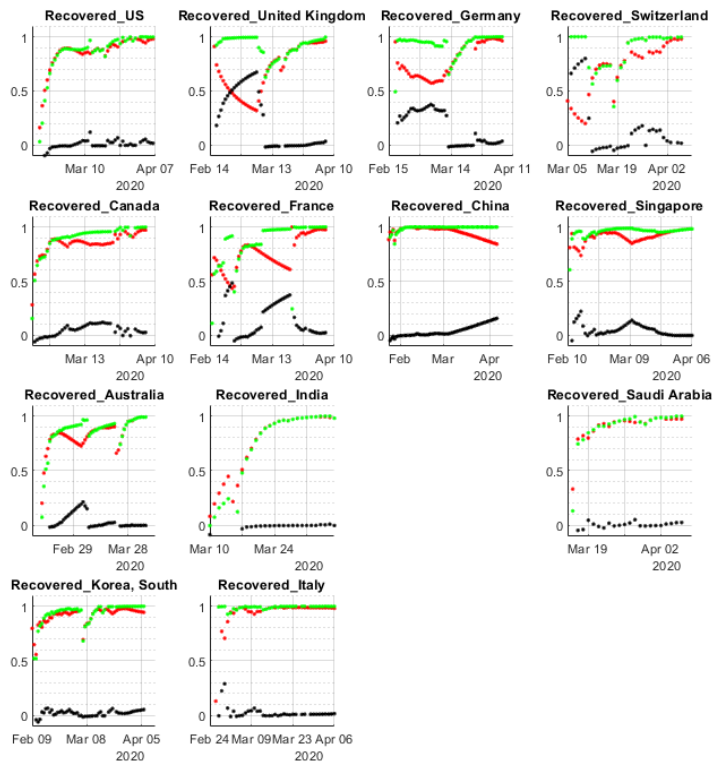
ans =  
'Log\_Recovered'



```
ans =
'Gradient_Recovered'
```



```
ans =
'Goodness of Fit_Recovered'
```



```

rep_BaseName=datetime;
rep_BaseName.Format='yyyyMMdd';
rep_BaseName=['report_',char(rep_BaseName),'.pdf'];
matlab.internal.liveeditor.openAndConvert(which('main.mlx'),rep_BaseName);

```