

```
!git pull
```

```
From https://github.com/CSSEGISandData/COVID-19
 cf638842..43e6d369 master -> origin/master
 585e6fc9..1994a148 web-data -> origin/web-data
Updating cf638842..43e6d369
Fast-forward
 .../csse_covid_19_daily_reports/04-01-2020.csv | 2643 ++++++
 .../time_series_covid19_confirmed_global.csv   | 514 +---
 .../time_series_covid19_deaths_global.csv      | 514 +---
 .../time_series_covid19_recovered_global.csv   | 486 +---
 4 files changed, 3193 insertions(+), 964 deletions(-)
```

```
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
01-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==Selected_Countries(country_count));
        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,
end

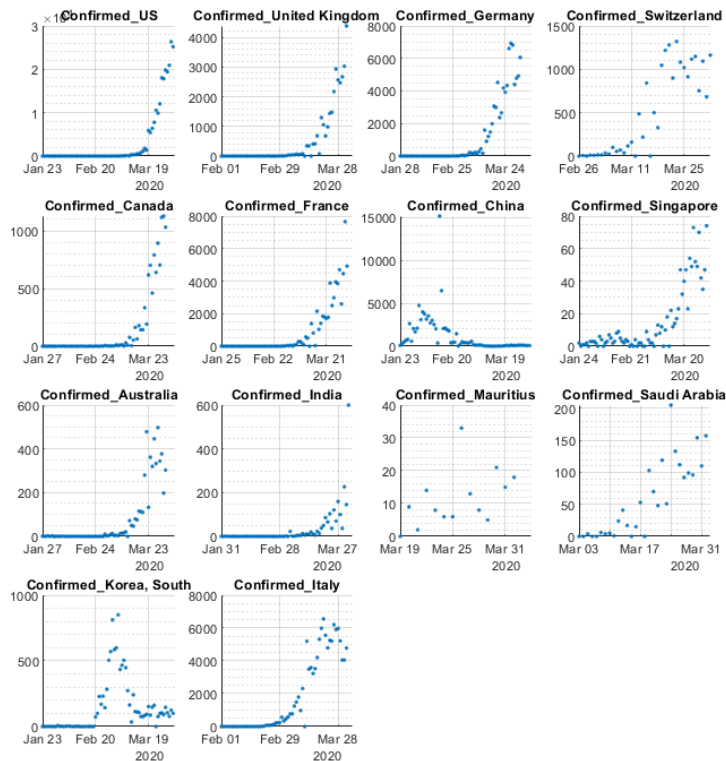
```

Starting parallel pool (parpool) using the 'local' profile ...
 Connected to the parallel pool (number of workers: 8).

```

ans =
'DailyIncrease_Confirmed'

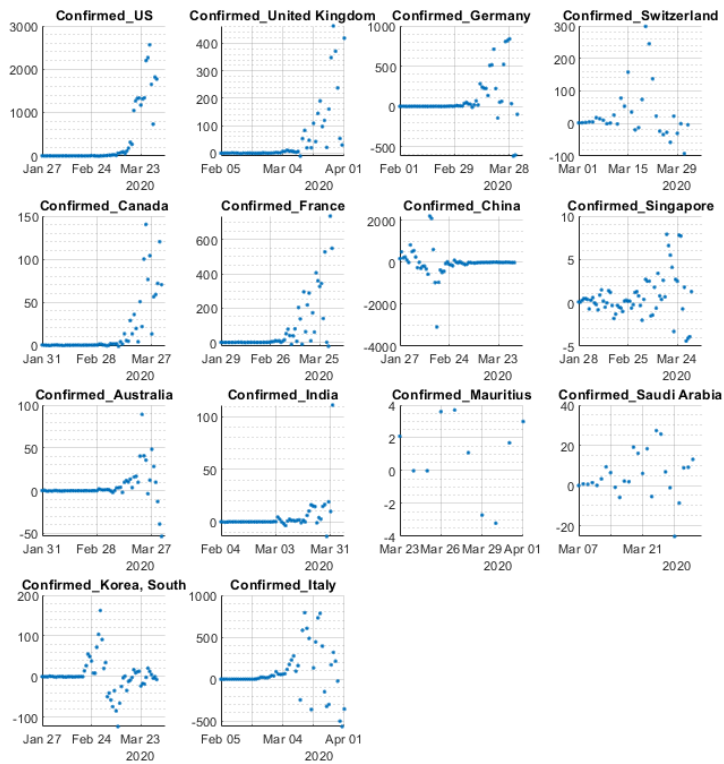
```



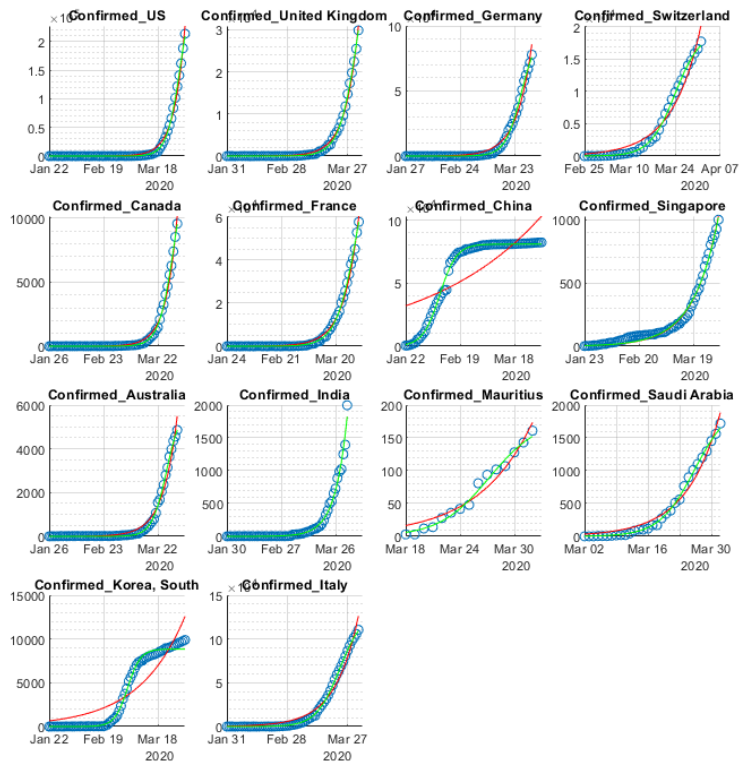
```

ans =
'Grad of DailyIncrease_Confirmed'

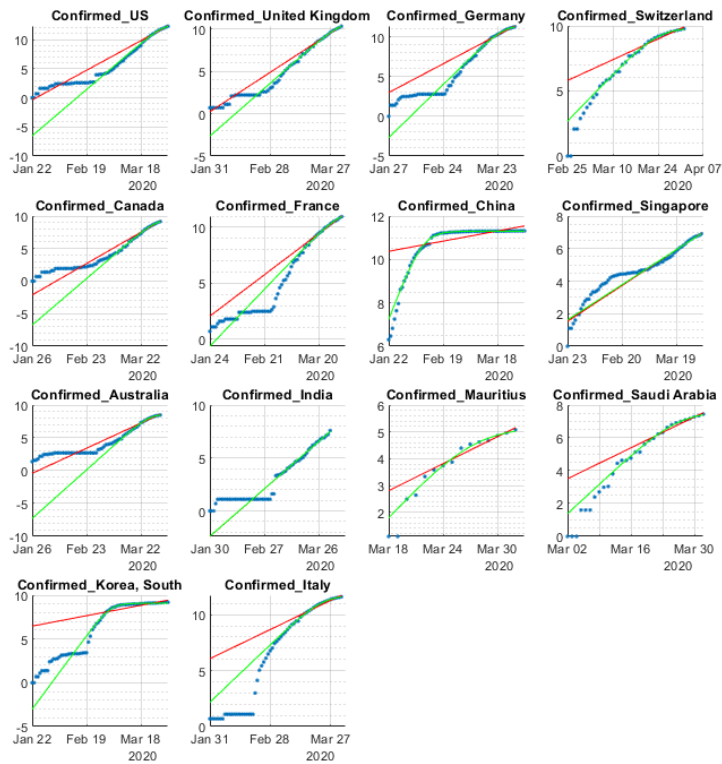
```



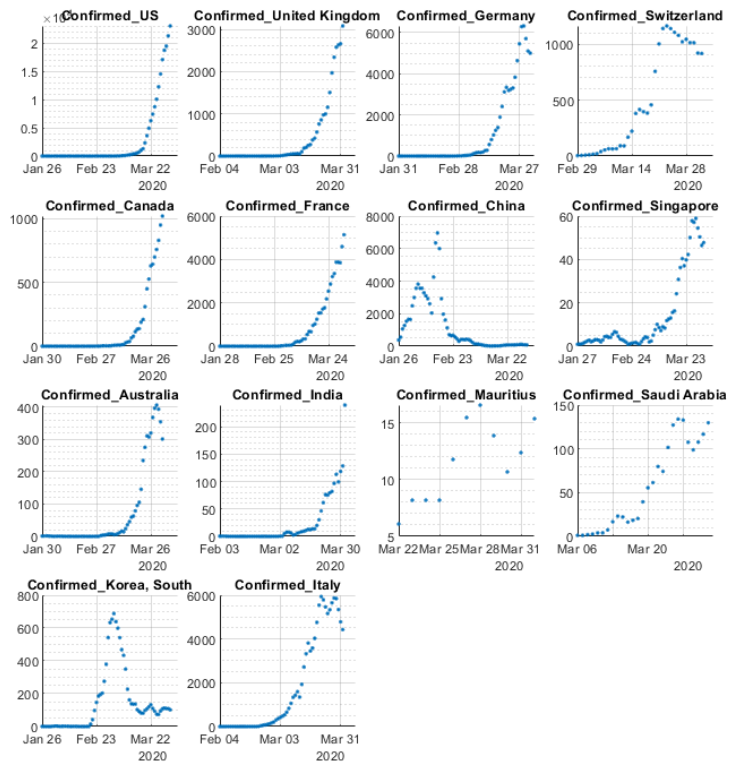
ans =
'Confirmed'



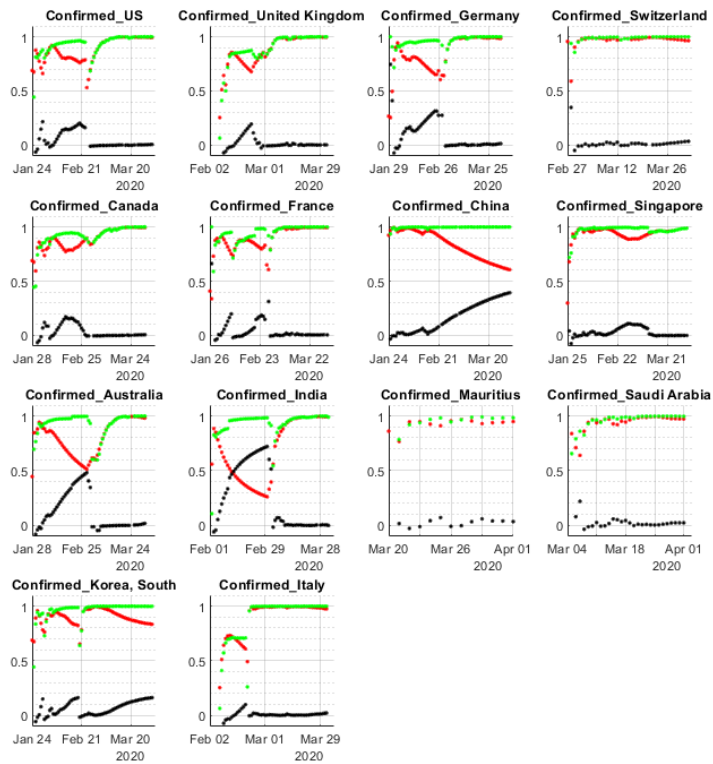
ans =
'Log_Confirmed'



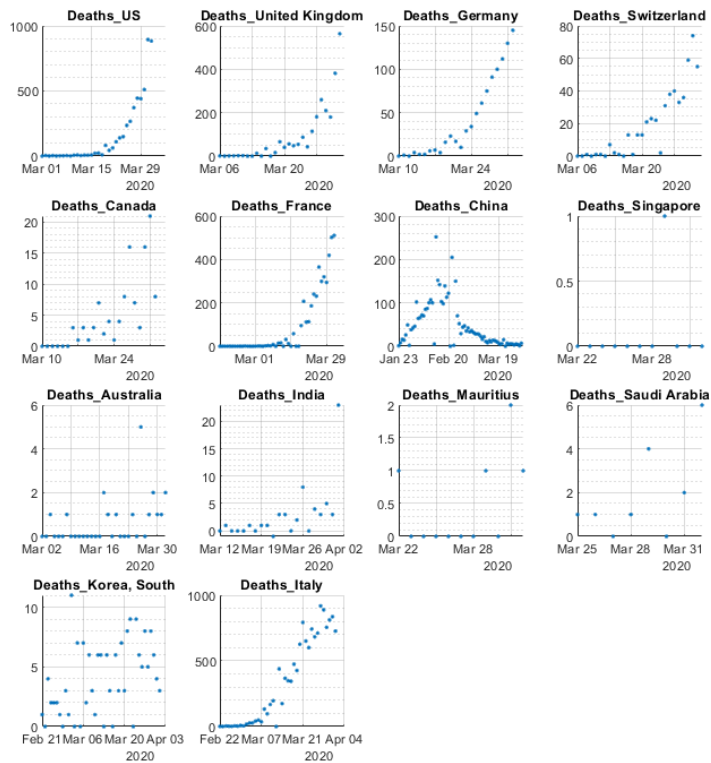
```
ans =
'Gradient_Confirmed'
```



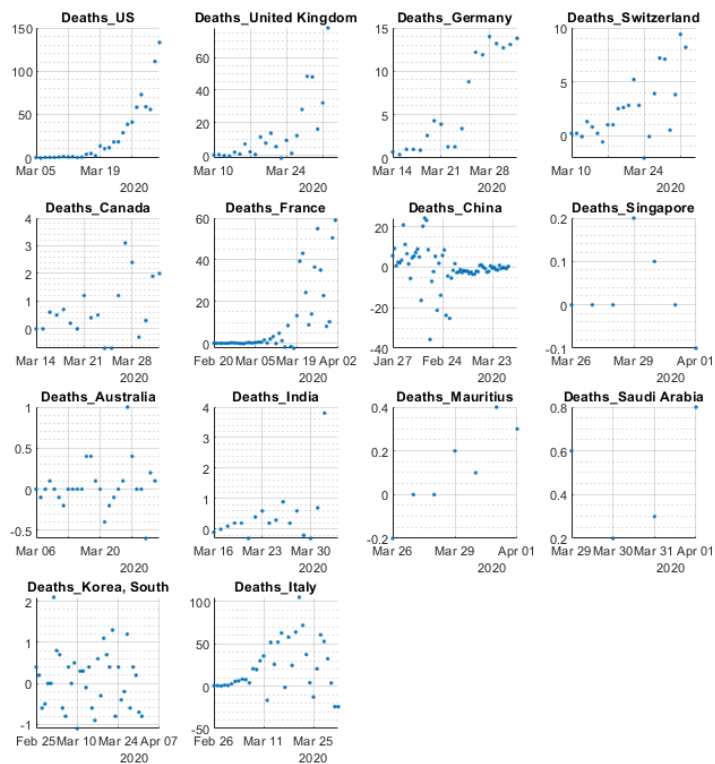
```
ans =
'Goodness of Fit_Confirmed'
```



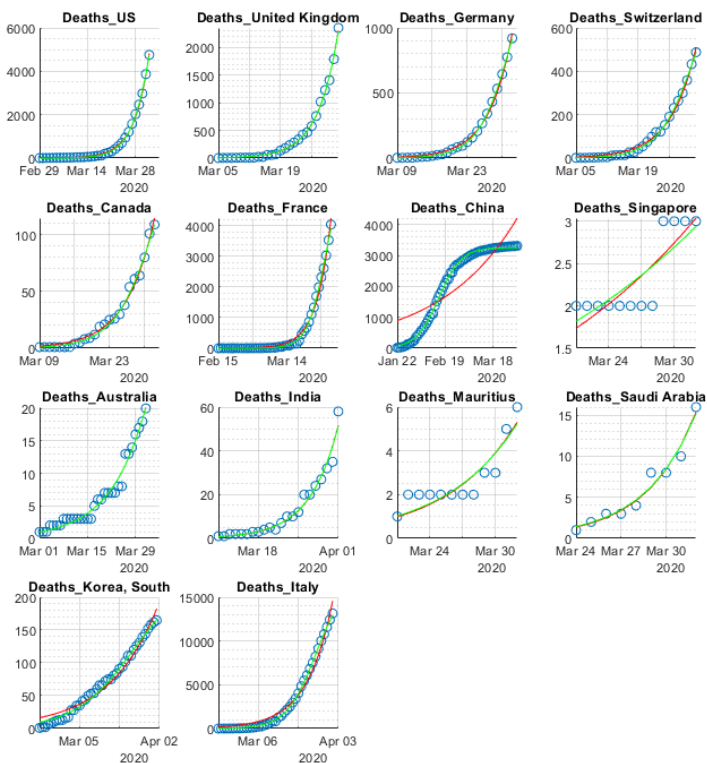
ans =
'DailyIncrease_Deaths'



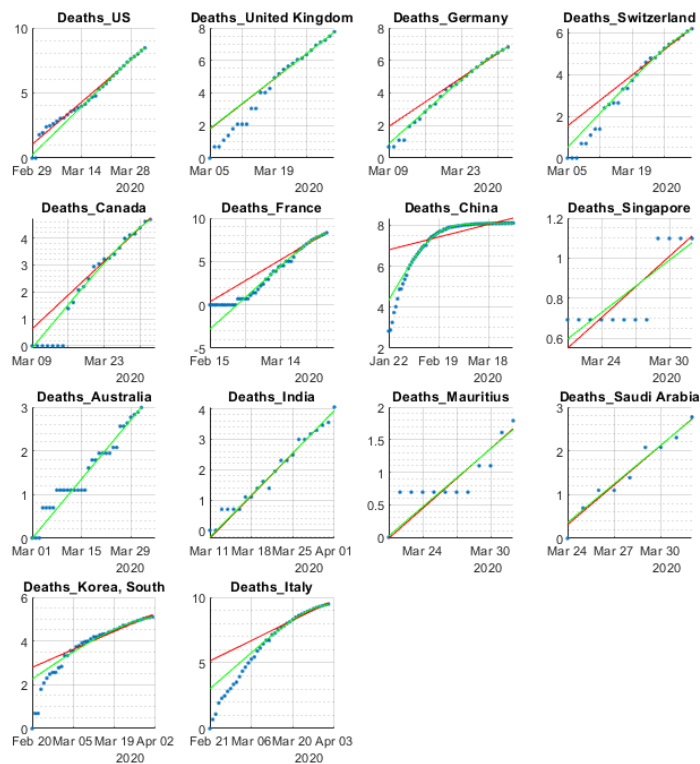
ans =
'Grad of DailyIncrease_Deaths'



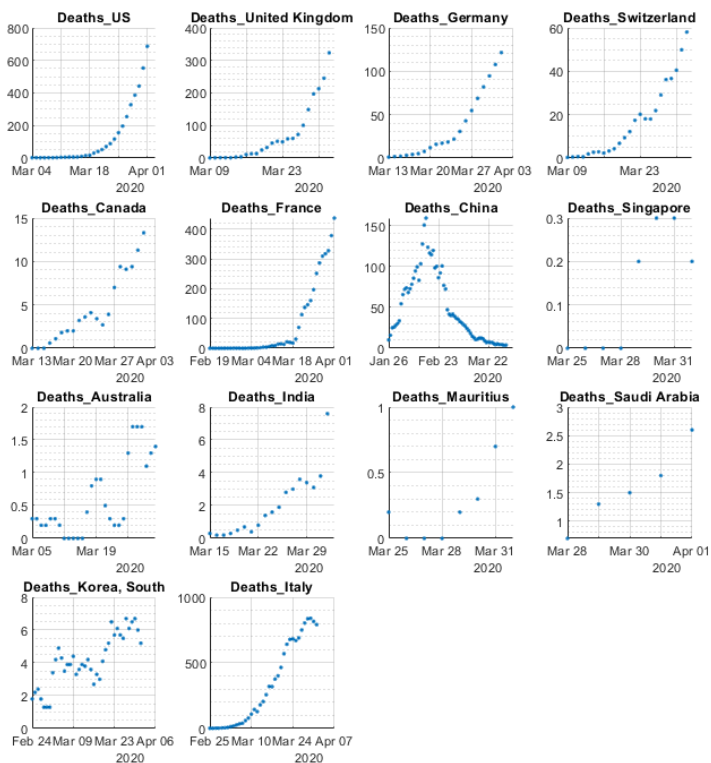
```
ans =
'Deaths'
```



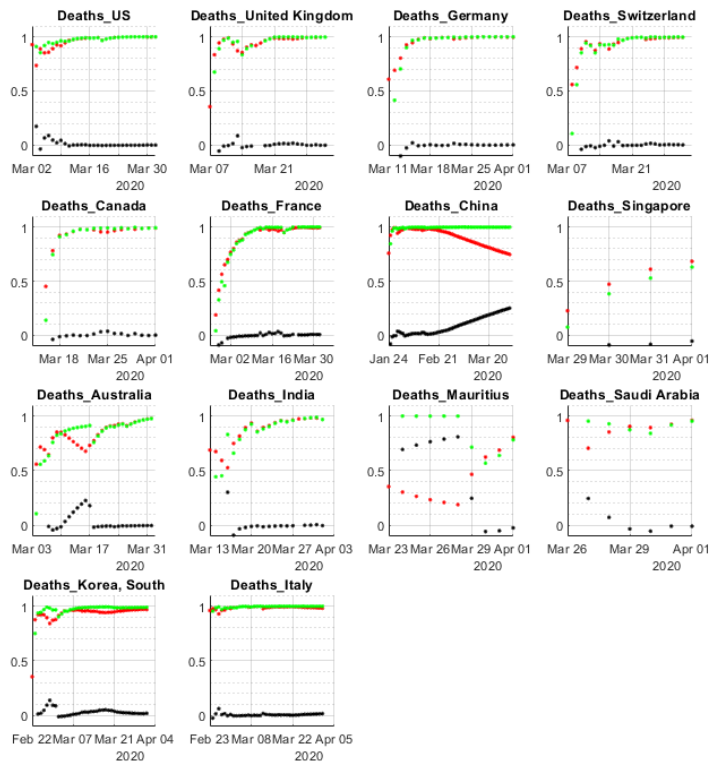
```
ans =
'Log_Deaths'
```



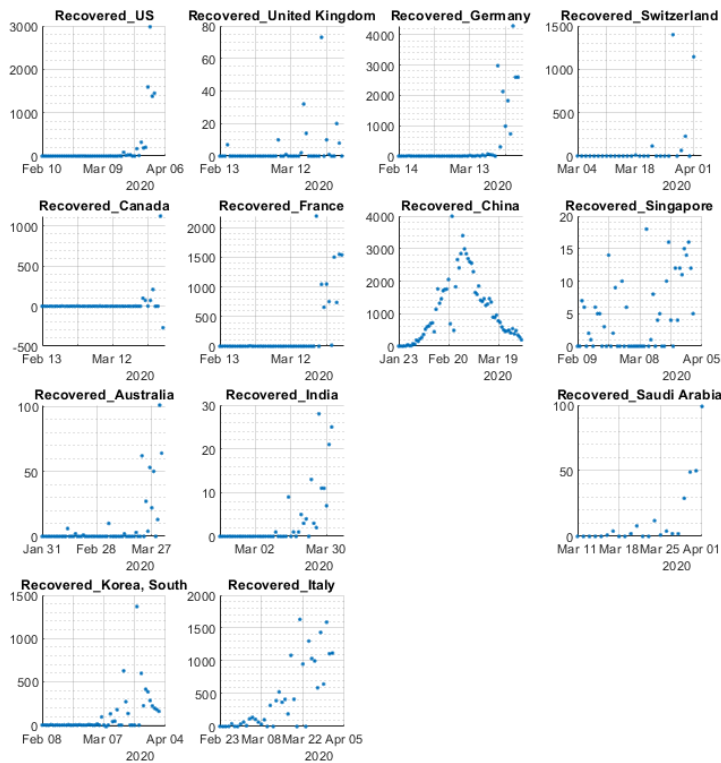
ans =
'Gradient_Deaths'



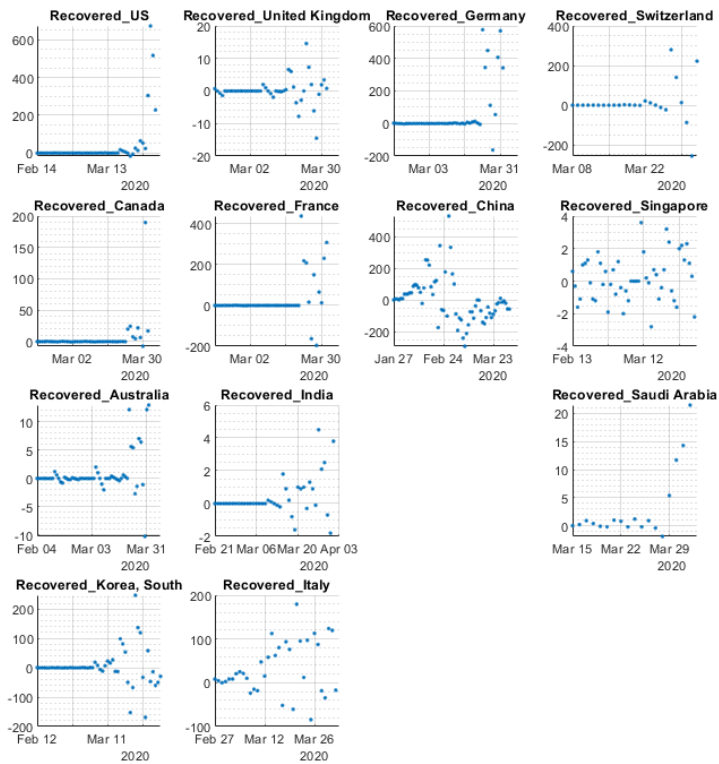
ans =
'Goodness of Fit_Deaths'



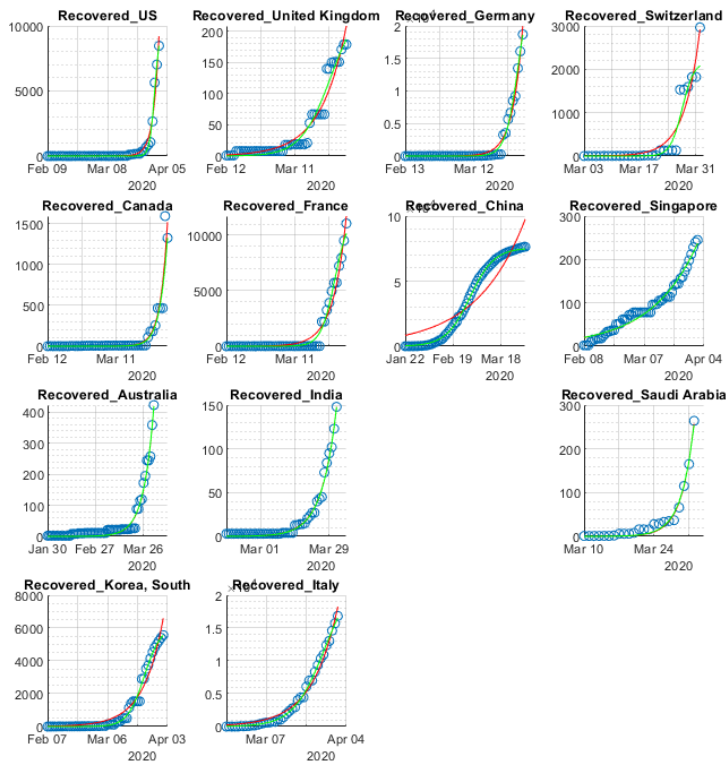
ans =
'DailyIncrease_Recovered'



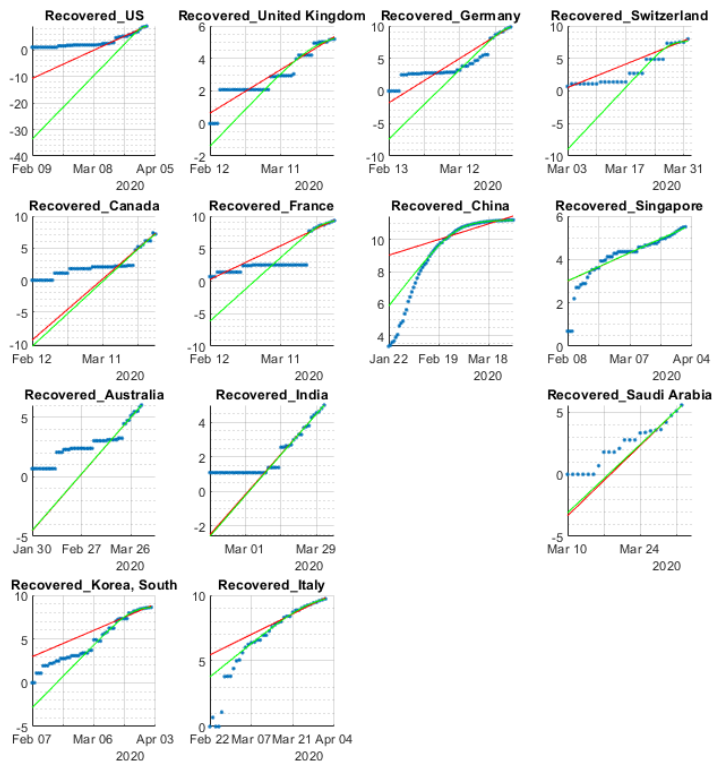
ans =
'Grad of DailyIncrease_Recovered'



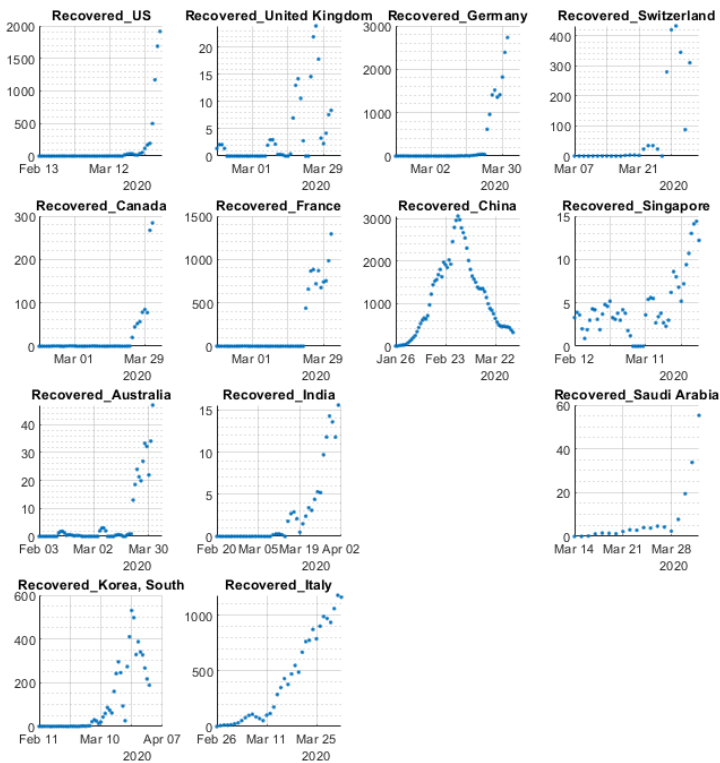
ans =
'Recovered'



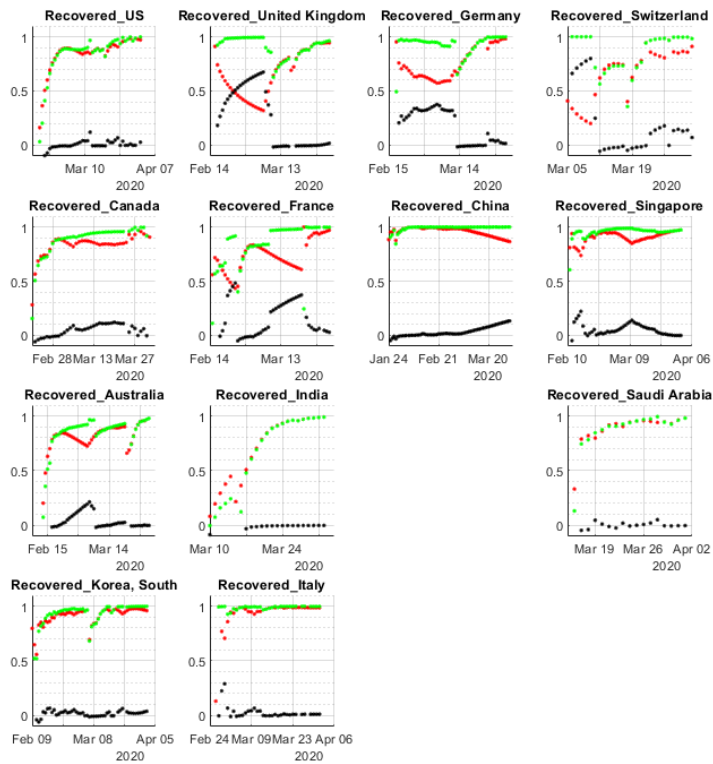
ans =
'Log_Recovered'



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);

```