

```
!git pull
```

```
From https://github.com/CSSEGISandData/COVID-19
 a4ccce6f..f3481781 master -> origin/master
 d2c621a2..a11e8409 web-data -> origin/web-data
Updating a4ccce6f..f3481781
Fast-forward
 .../csse_covid_19_daily_reports/03-30-2020.csv | 3440 ++++++
 .../time_series_covid19_confirmed_global.csv | 509 +--
 .../time_series_covid19_deaths_global.csv | 509 +--
 .../time_series_covid19_recovered_global.csv | 481 +--
 4 files changed, 4191 insertions(+), 748 deletions(-)
 create mode 100644 csse_covid_19_data/csse_covid_19_daily_reports/03-30-2020.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
30-Mar-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
```

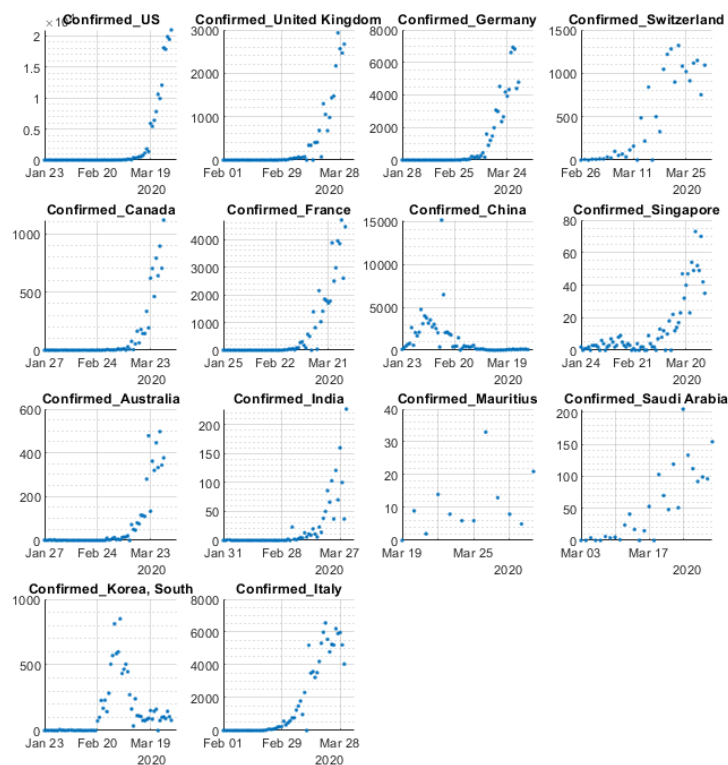
```

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

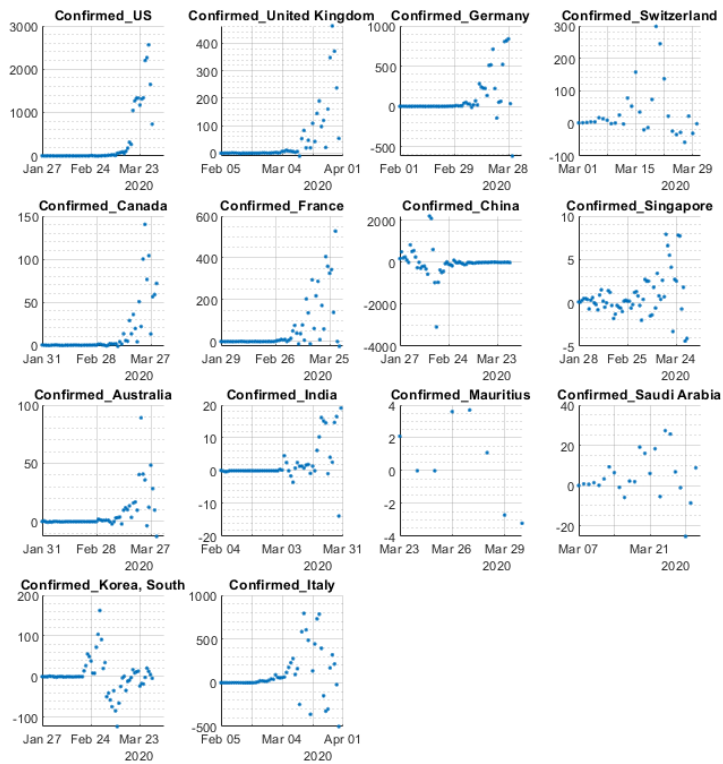
    fig_title=char(Categories{category_count});
    SimpleScatter(StartDate, CountrywiseData.(Categories{category_count}), fig_title, plot_titles,
end

```

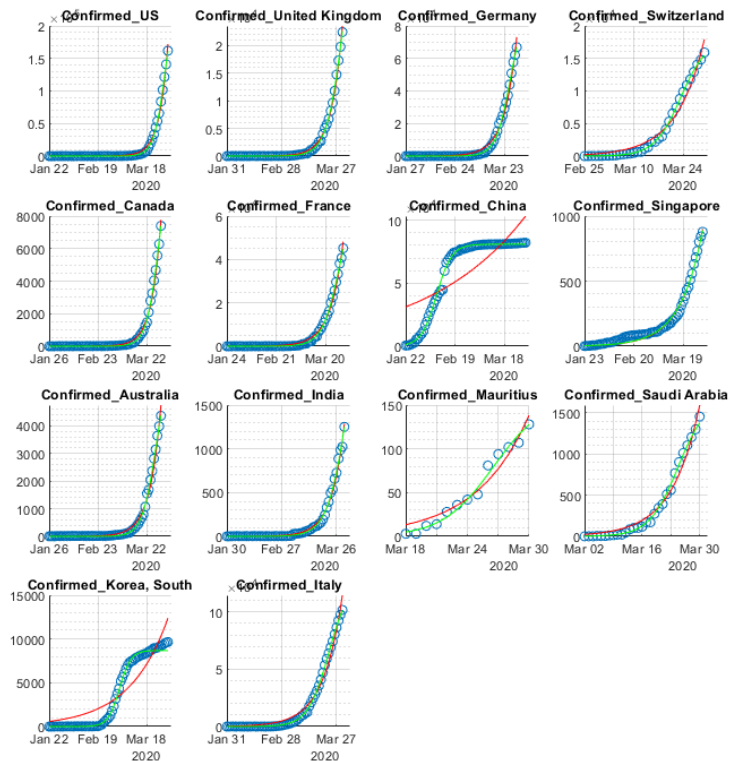
Starting parallel pool (parpool) using the 'local' profile ...
 Connected to the parallel pool (number of workers: 8).
 ans =
 'DailyIncrease_Confirmed'



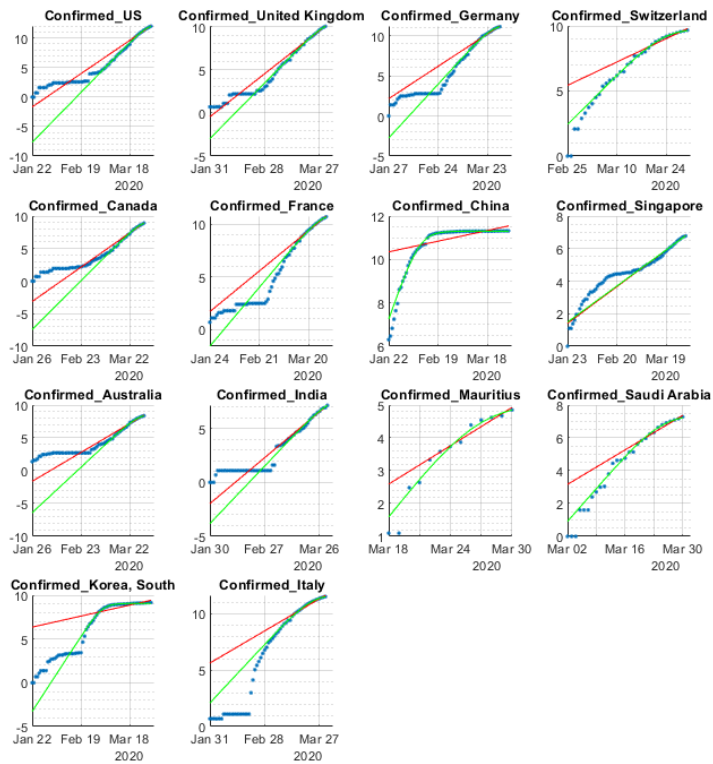
ans =
 'Grad of DailyIncrease_Confirmed'



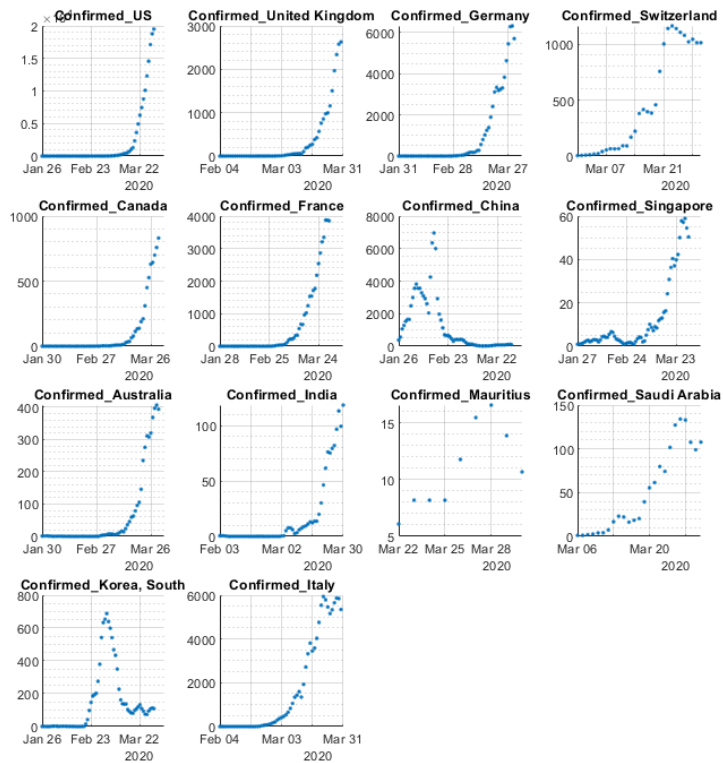
ans =
'Confirmed'



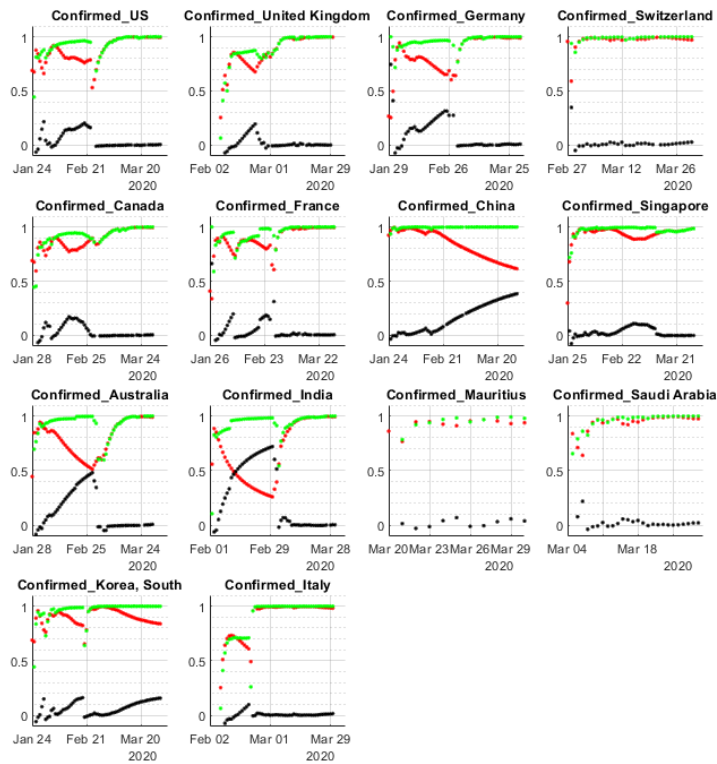
ans =
'Log_Confirmed'



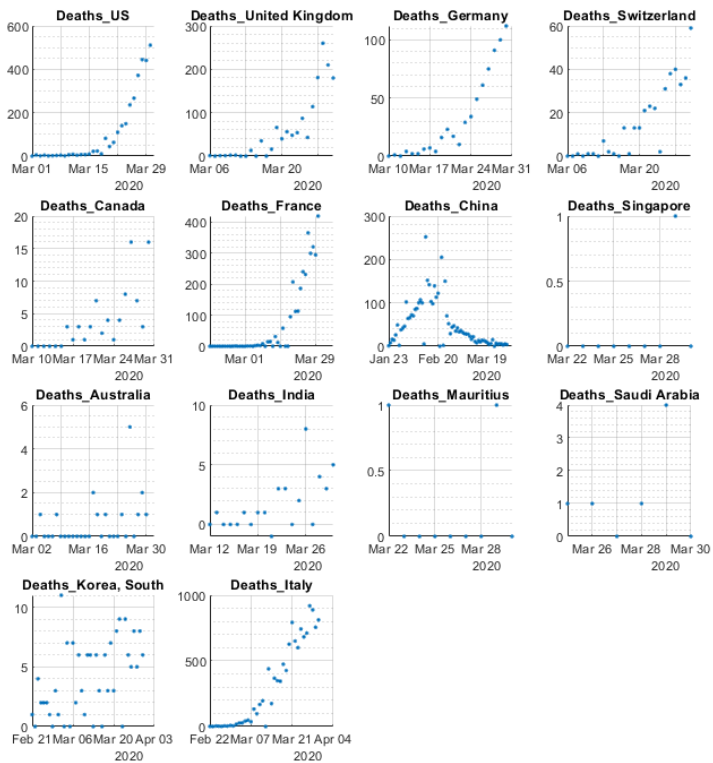
```
ans =
'Gradient_Confirmed'
```



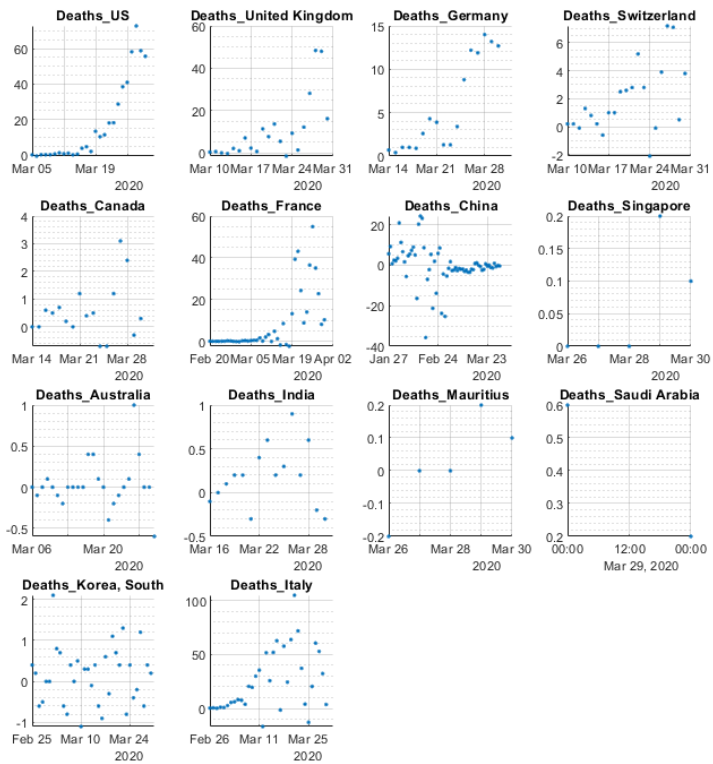
```
ans =
'Goodness of Fit_Confirmed'
```



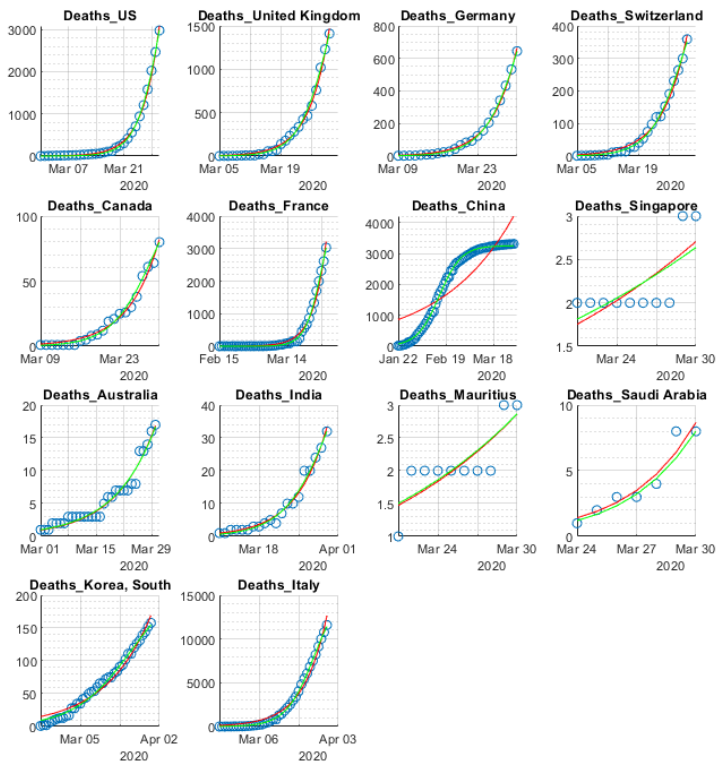
ans =
'DailyIncrease_Deaths'



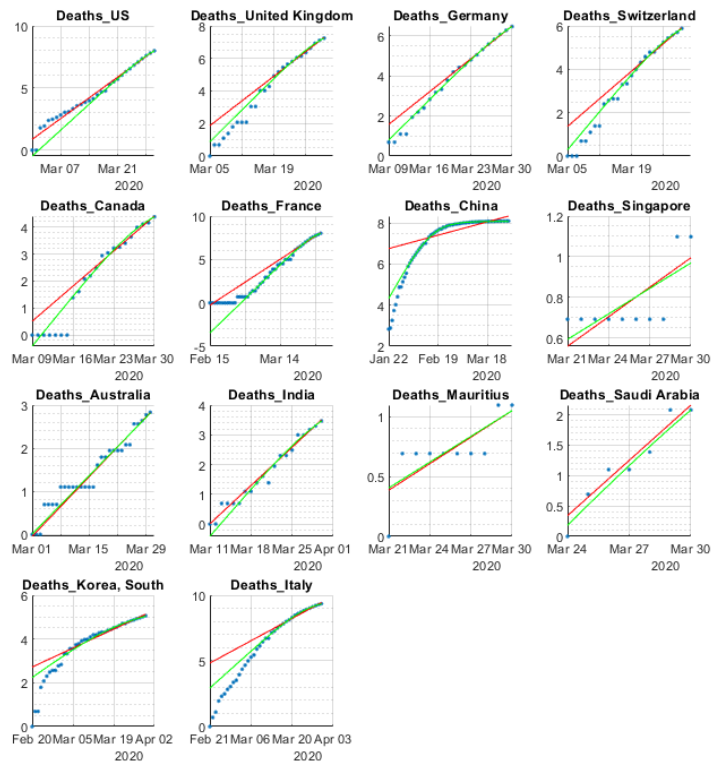
ans =
'Grad of DailyIncrease_Deaths'



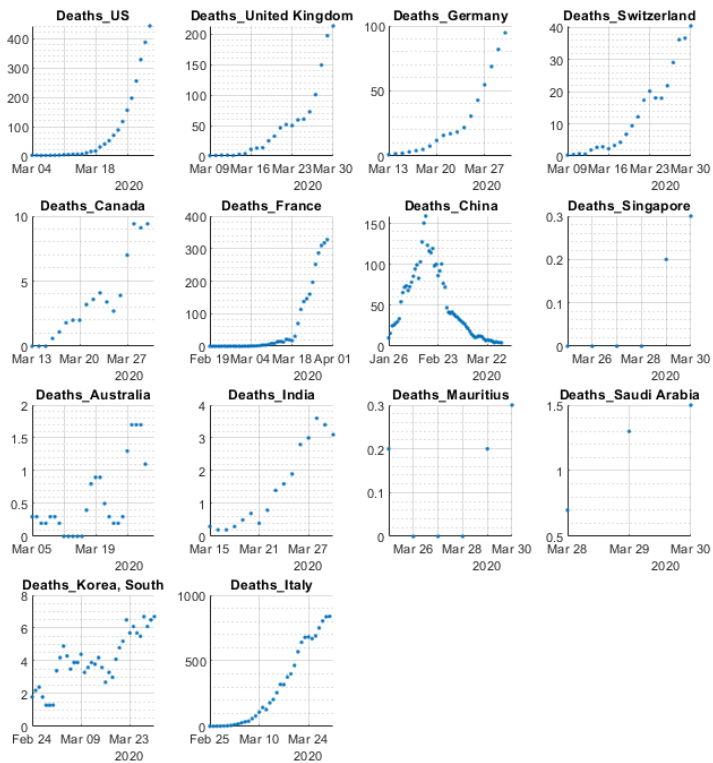
```
ans =
'Deaths'
```



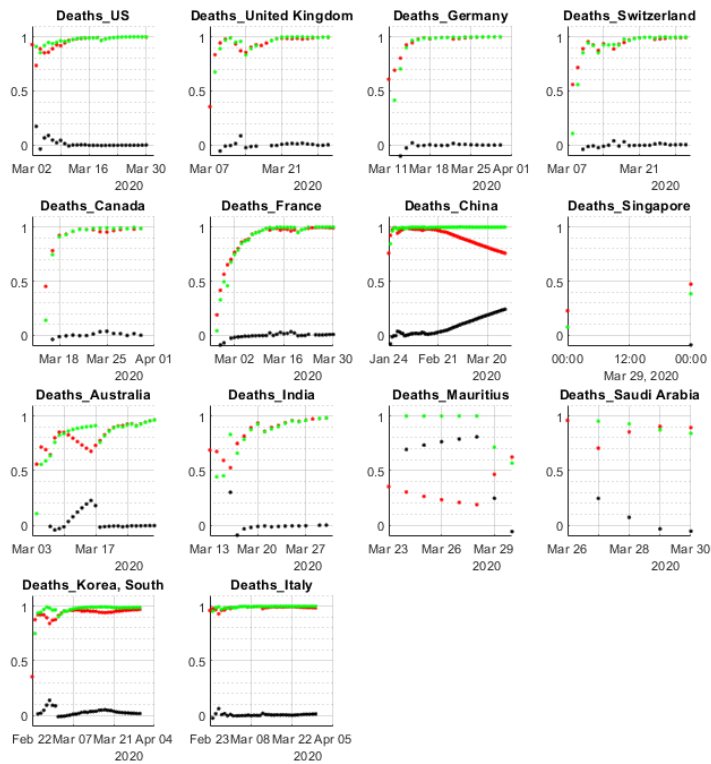
```
ans =
'Log_Deaths'
```



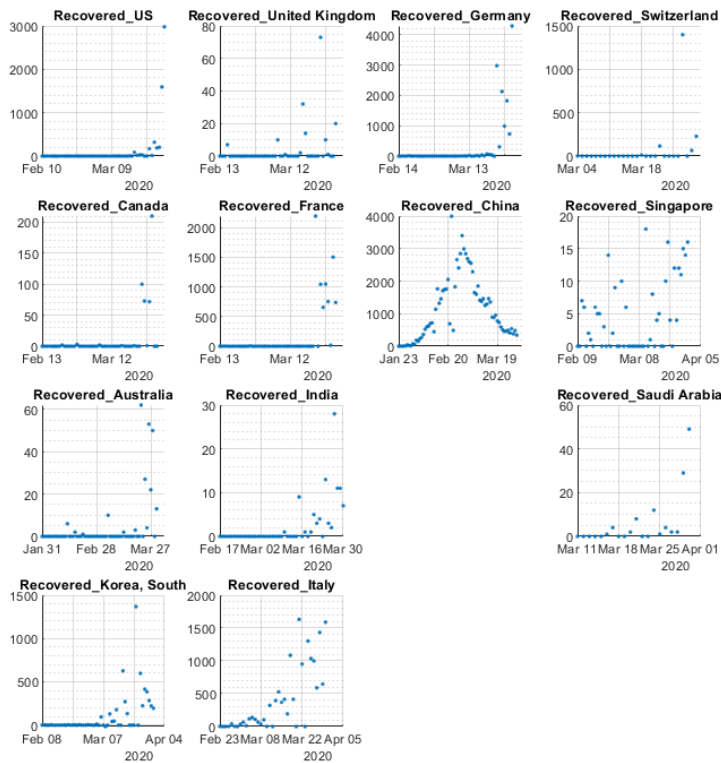
ans =
'Gradient_Deaths'



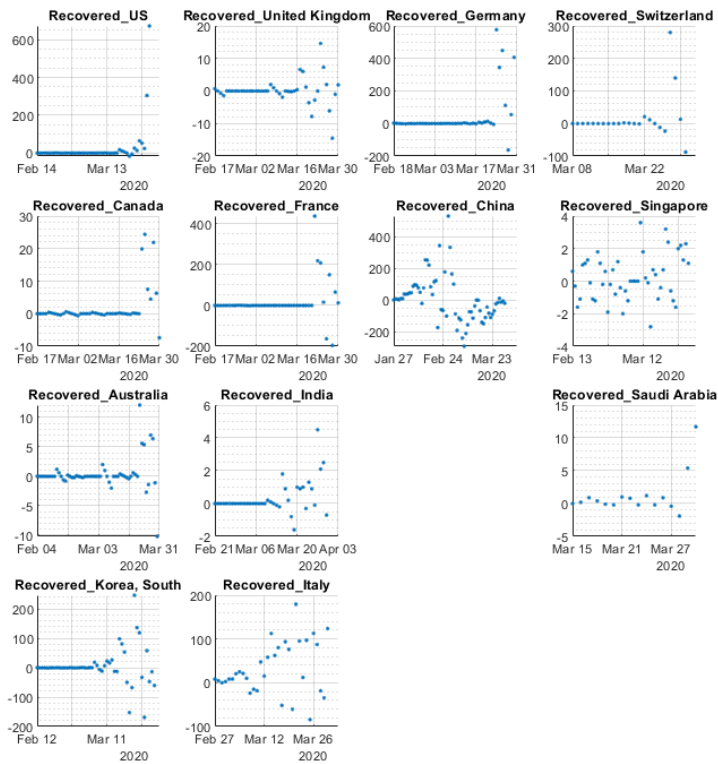
ans =
'Goodness of Fit_Deaths'



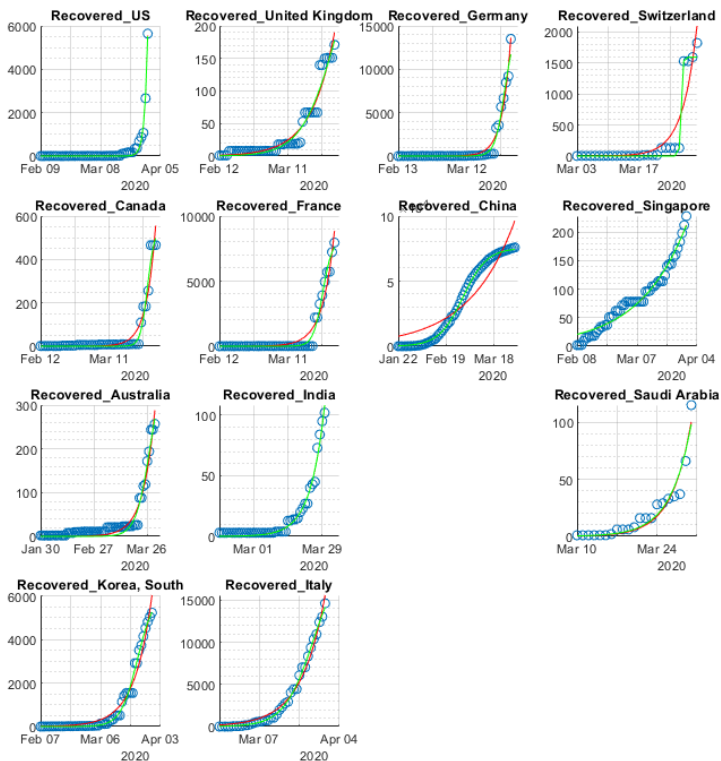
ans =
'DailyIncrease_Recovered'



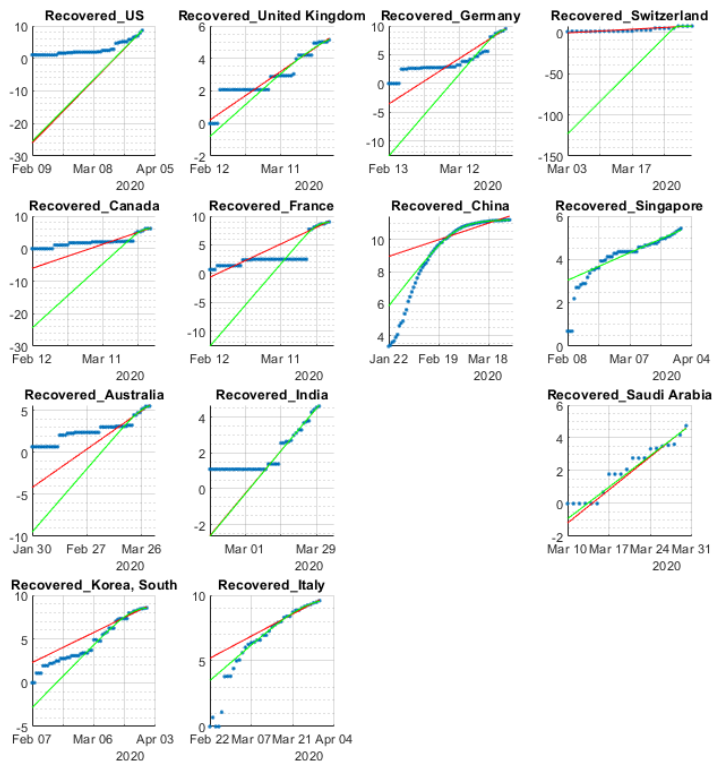
ans =
'Grad of DailyIncrease_Recovered'



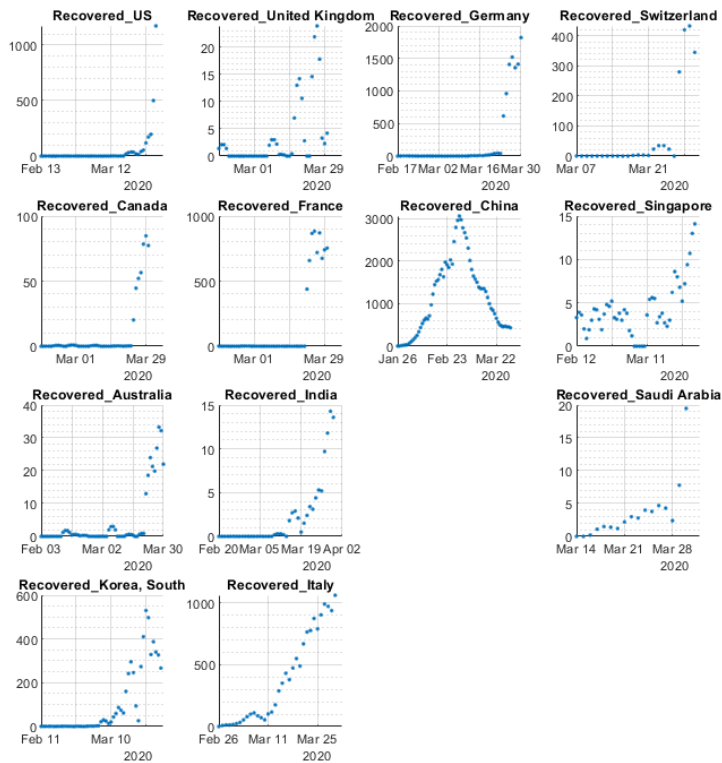
ans =
'Recovered'



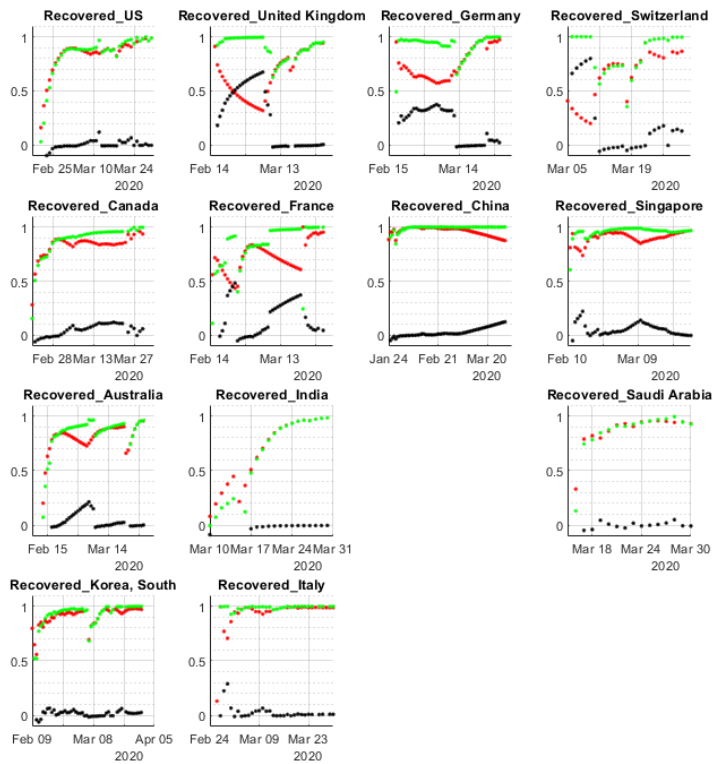
ans =
'Log_Recovered'



```
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);

```