

```
!git pull
```

```
From https://github.com/CSSEGISandData/COVID-19
   f7c23846..865c933c master    -> origin/master
   1b2e9f39..1e368489 web-data -> origin/web-data
Updating f7c23846..865c933c
Fast-forward
 csse_covid_19_data/UID_ISO_FIPS_LookUp_Table.csv |      2 +
 .../csse_covid_19_daily_reports/04-05-2020.csv   | 2765 ++++++++
 .../time_series_covid19_confirmed_US.csv          | 6508 ++++++++-----
 .../time_series_covid19_confirmed_global.csv      |   523 +-
 .../time_series_covid19_deaths_US.csv            | 6508 ++++++++-----
 .../time_series_covid19_deaths_global.csv         |   523 +-
 .../time_series_covid19_recovered_global.csv      |   495 +-
 7 files changed, 10050 insertions(+), 7274 deletions(-)
 create mode 100644 csse_covid_19_data/csse_covid_19_daily_reports/04-05-2020.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
05-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');
```

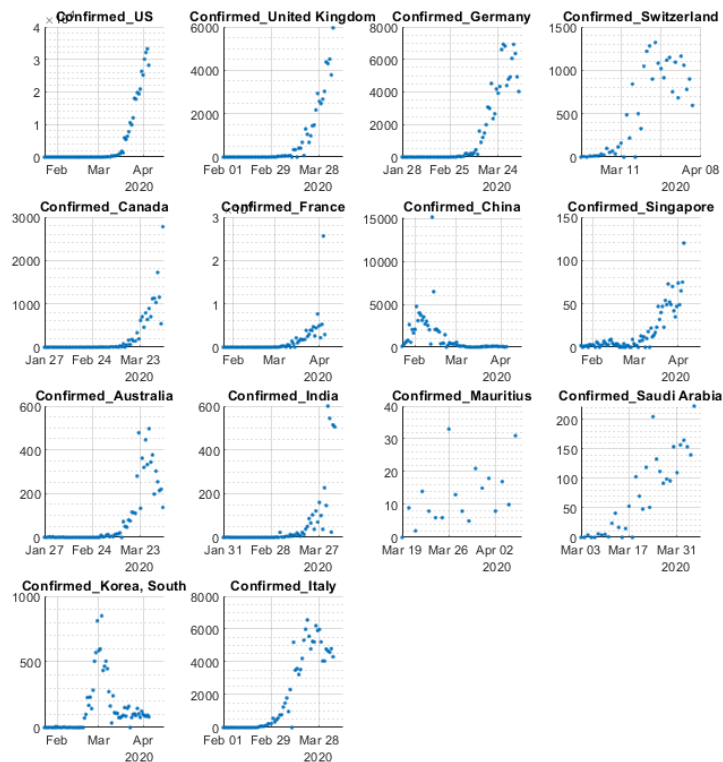
```
end
```

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

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

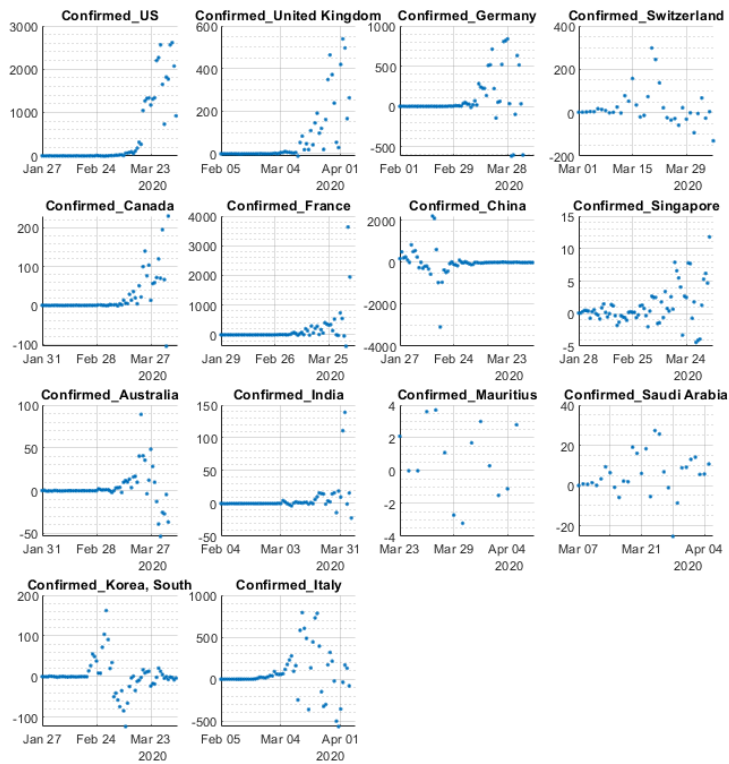
```
ans =
```

```
'DailyIncrease_Confirmed'
```

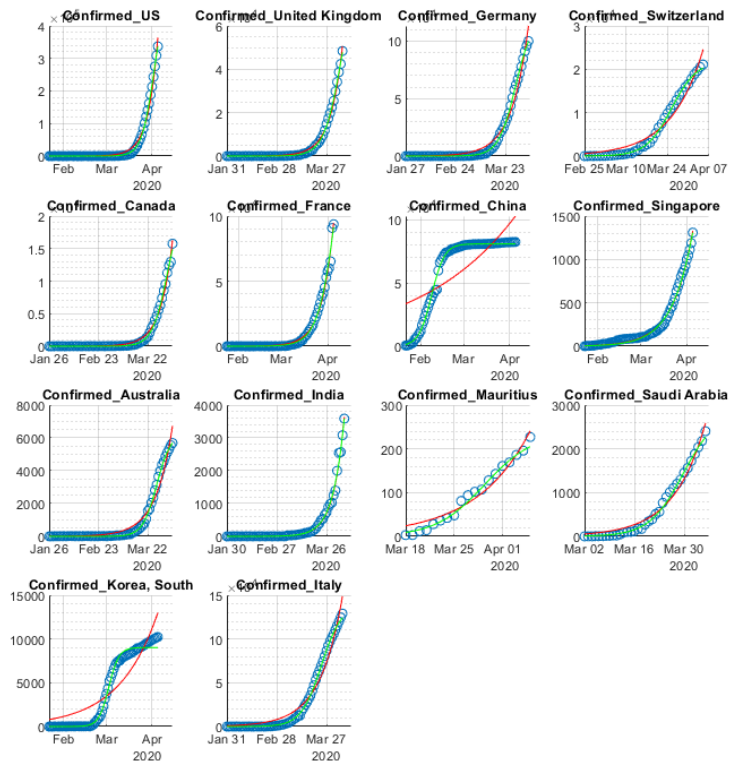


```
ans =
```

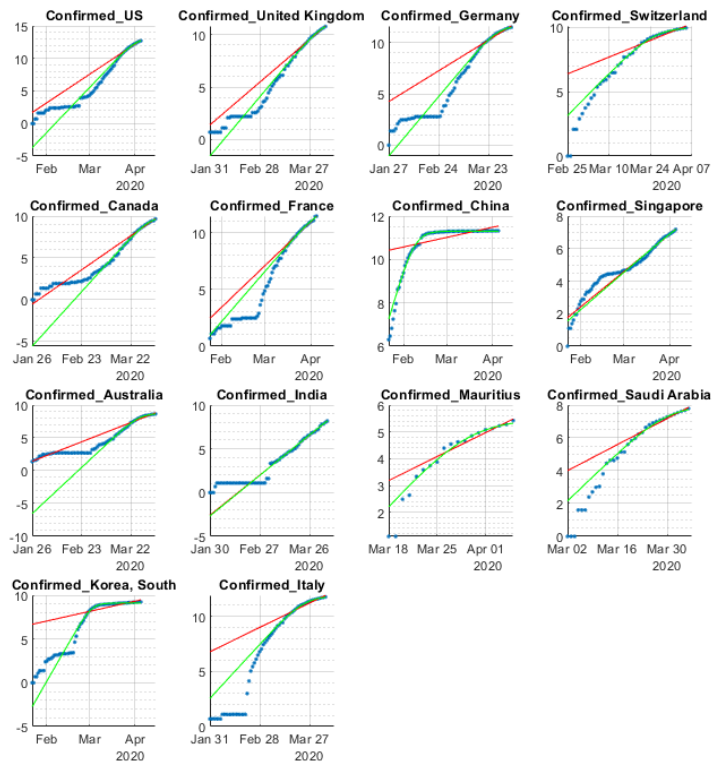
```
'Grad of DailyIncrease_Confirmed'
```



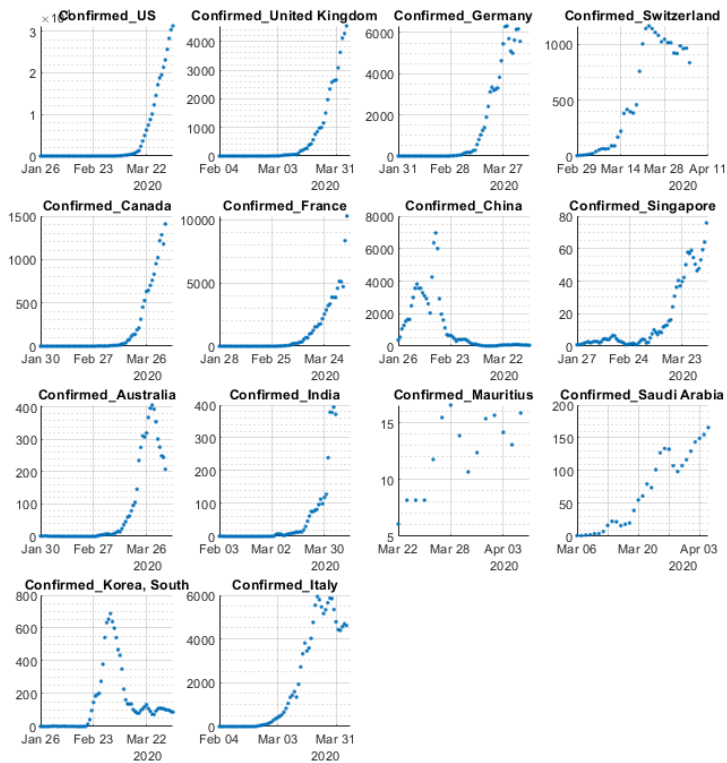
ans =
'Confirmed'



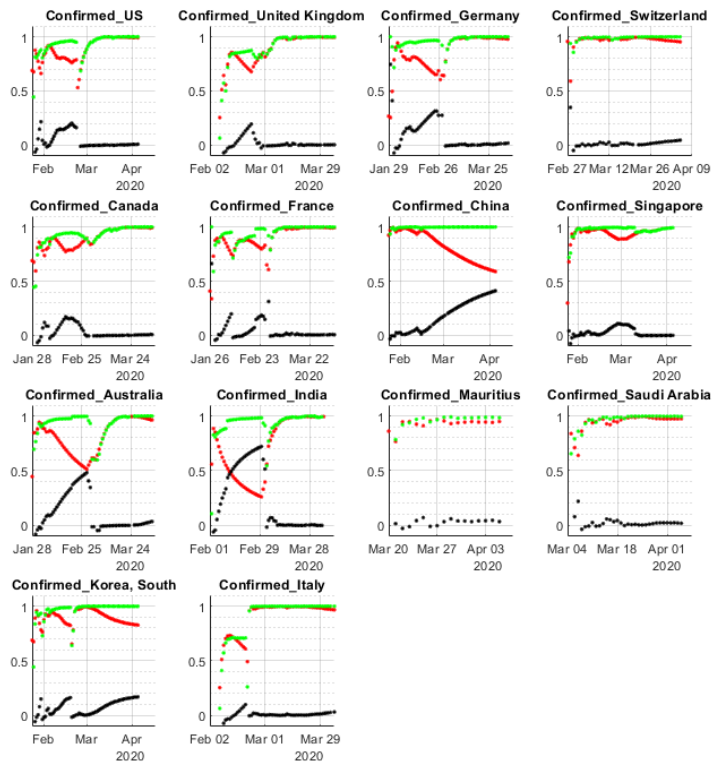
ans =
'Log_Confirmed'



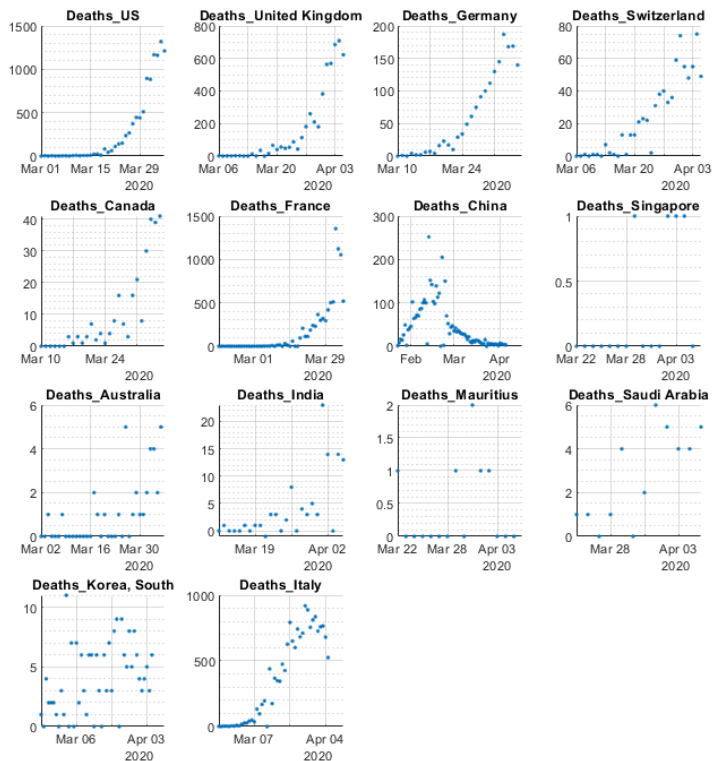
```
ans =
'Gradient_Confirmed'
```



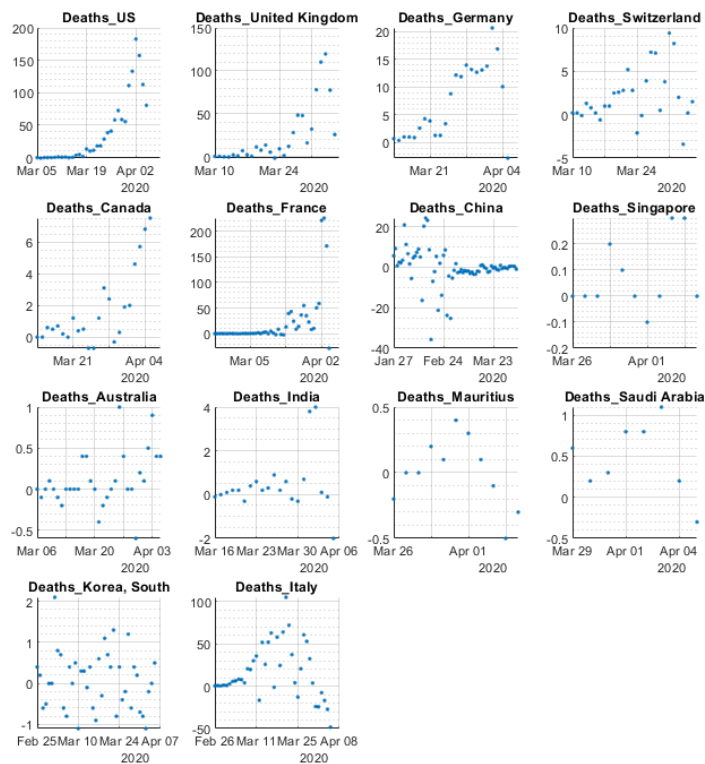
```
ans =
'Goodness of Fit_Confirmed'
```



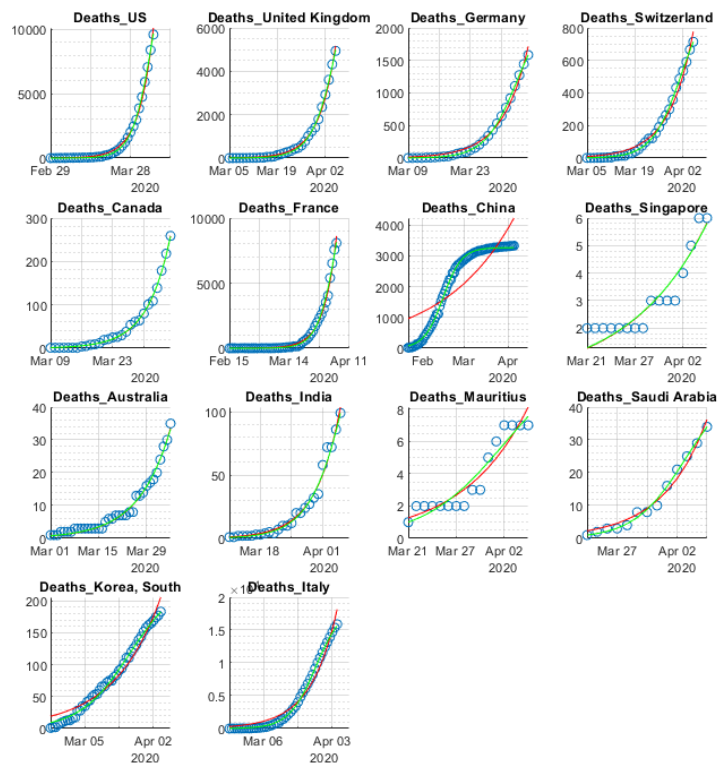
ans =
'DailyIncrease_Deaths'



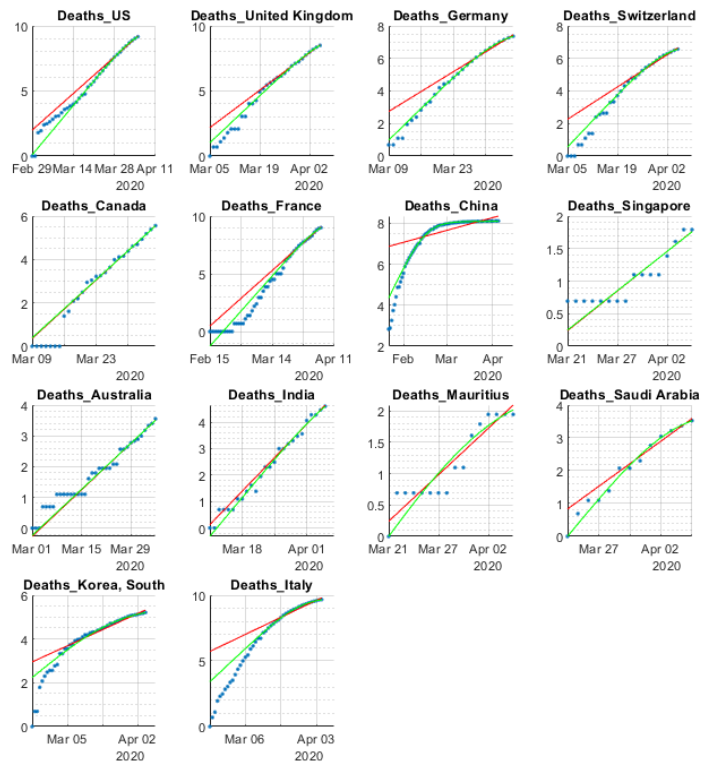
ans =
'Grad of DailyIncrease_Deaths'



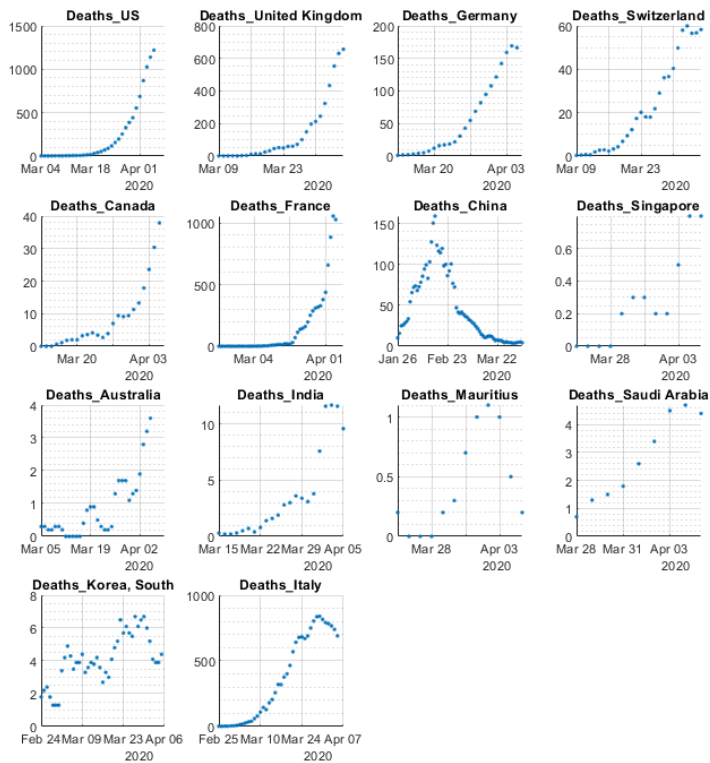
ans =
'Deaths'



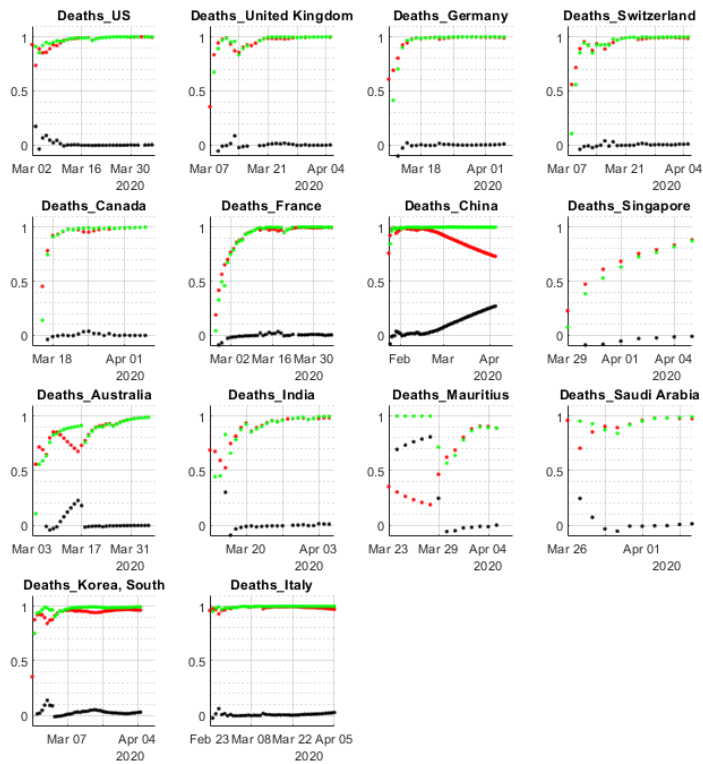
ans =
'Log_Deaths'



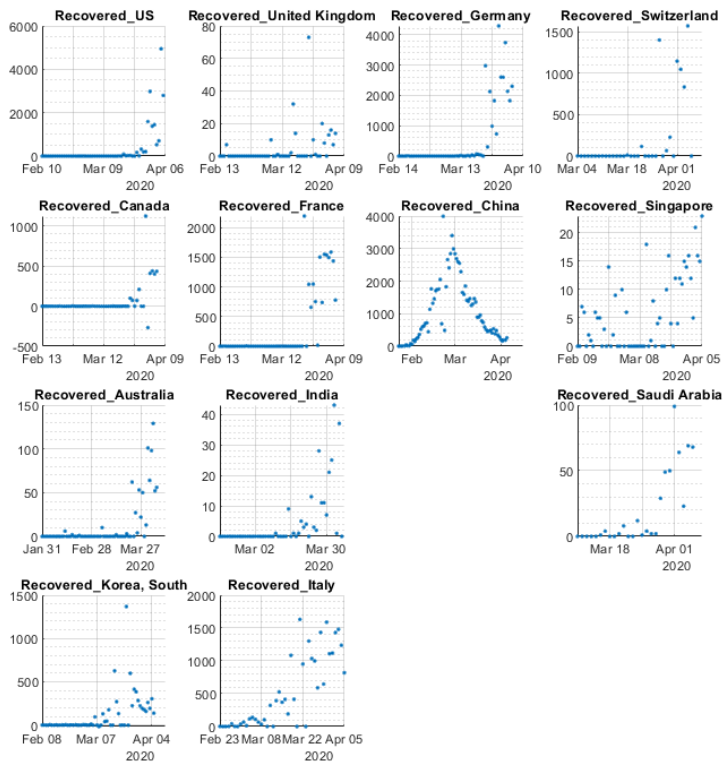
```
ans =
'Gradient_Deaths'
```



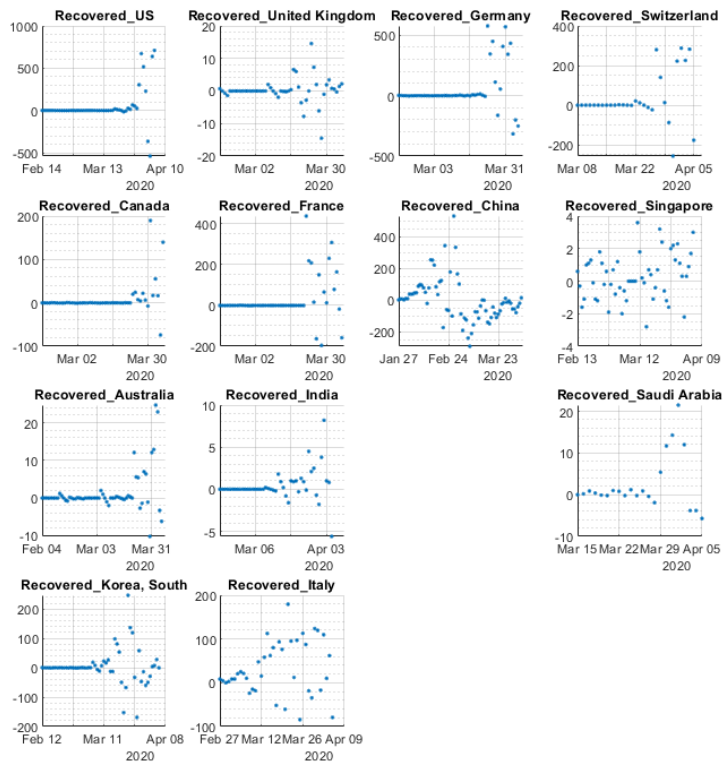
```
ans =
'Goodness of Fit_Deaths'
```



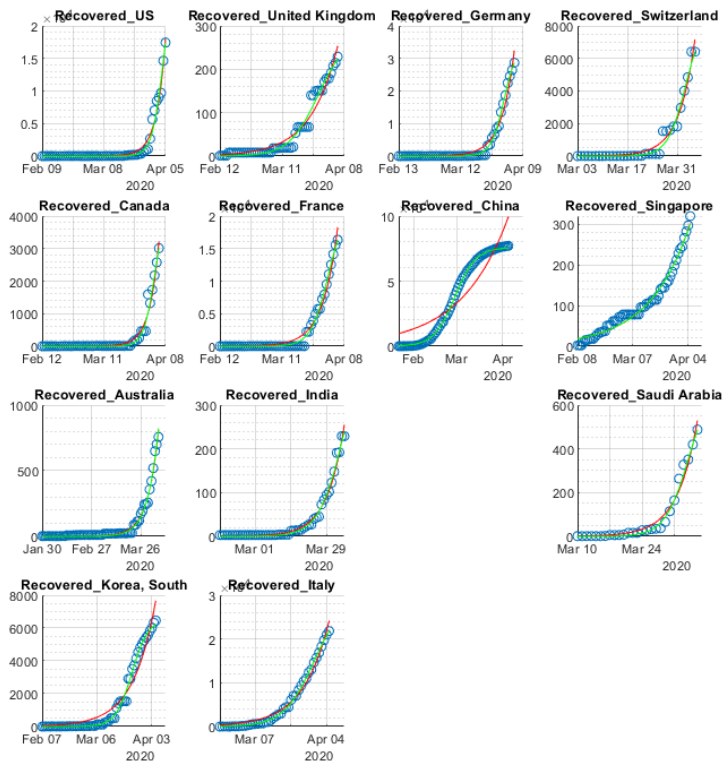
ans =
'DailyIncrease_Recovered'



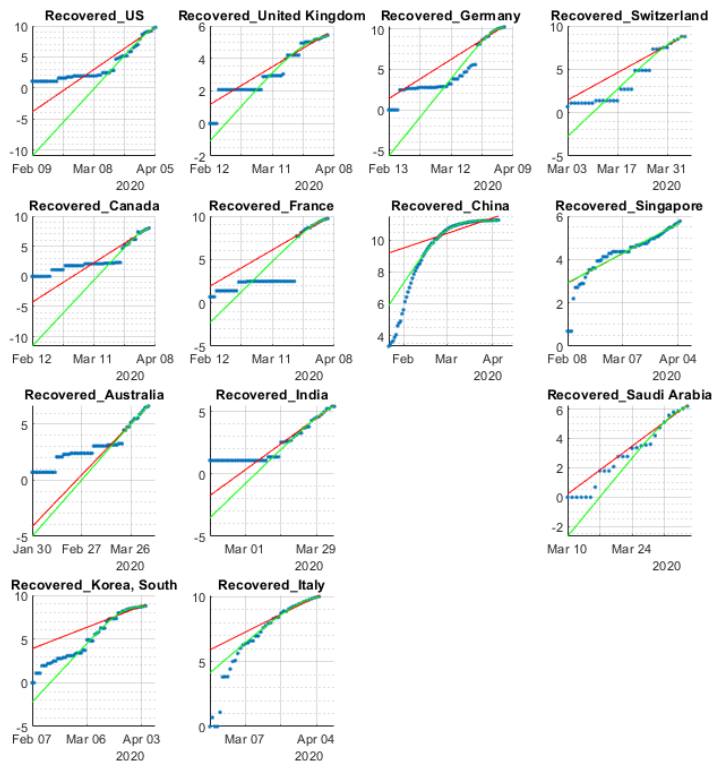
ans =
'Grad of DailyIncrease_Recovered'



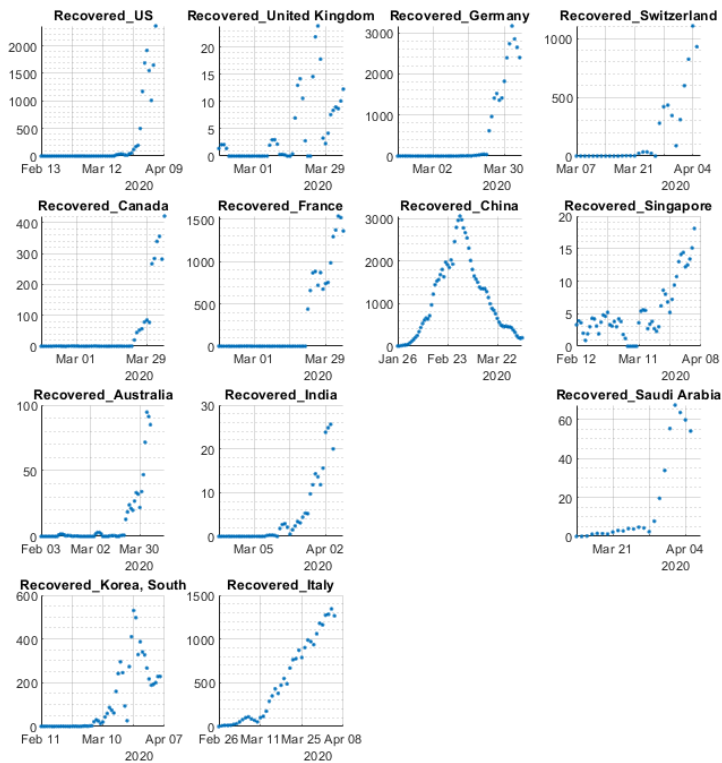
ans =
'Recovered'



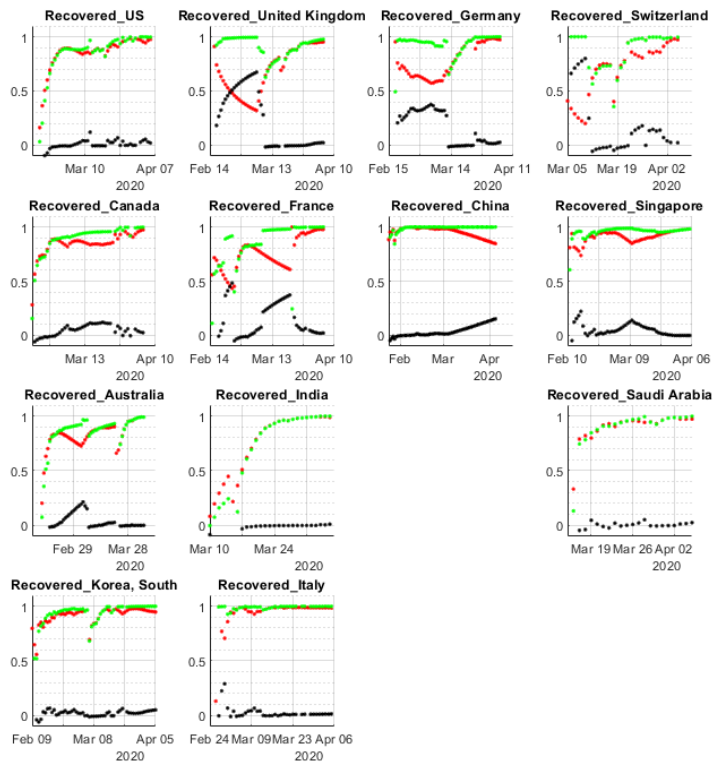
ans =
'Log_Recovered'



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);

```