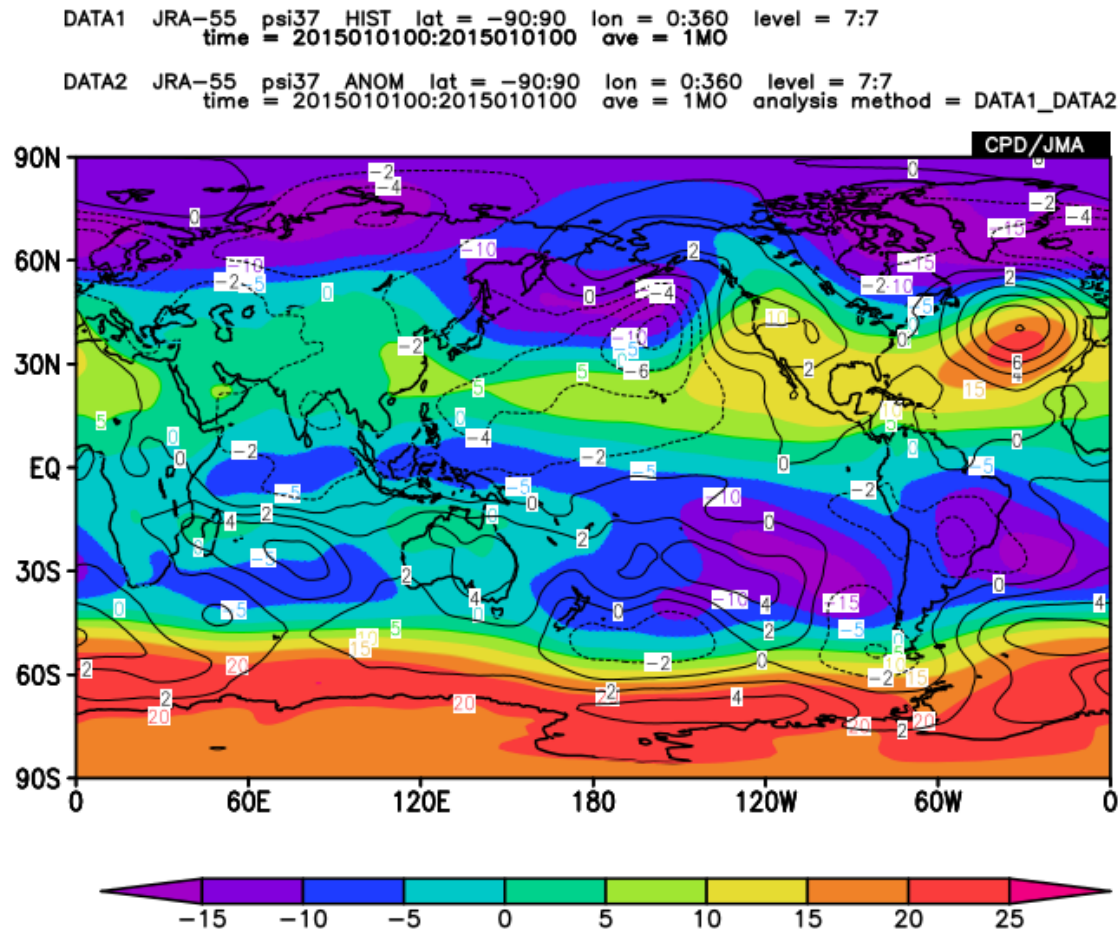


850-hPa stream function and anomalies



Monthly mean 850-hPa stream function and anomalies in January 2015

- Create a map of 850-hPa stream function and anomalies to learn about basic iTacs operations.

850-hPa stream function and anomalies

Analysis Dataset

Select parameters Graphic Options

Data1

Dataset	Element	Data type	Area	Level	Time unit	Showing period
JRA-55	Pressure Levels ψ (Stream Function)	HIST	ALL Lat: -90 - 90 Lon: 0 - 360	850hPa - 850hPa	MONTHLY ☐ Ave ☐ Year-to-year ☐ Time filter	RANGE 2015 1 2015 1

☐ Vector ☐ SD
Derivative: ☐ lon ☐ lat

Analysis method: -Analysis method-

Dataset: JRA-55

Element: Pressure Levels

-> ψ (Stream Function)

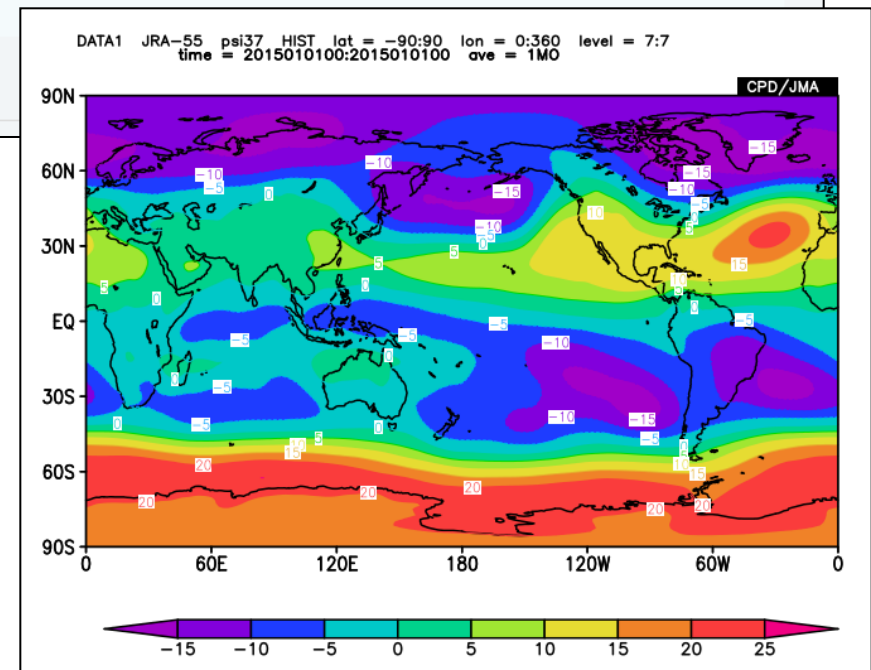
Data type: HIST

Area: ALL

Level: 850hPa

Time unit: MONTHLY

Showing period: 2015/1



- First, create a map of 850-hPa stream function for January 2015.

850-hPa stream function and anomalies

Analysis Dataset

Select parameters | Graphic Options

Data1

Dataset	Element	Data type	Area	Level	Time unit	Showing period
JRA-55	Pressure Levels ψ (Stream Function)	HIST	ALL Lat: -90 - 90 Ave ☐ Lon: 0 - 360 Ave ☐	850hPa - 850hPa	MONTHLY ☐ Ave ☐ Year-to-year ☐ Time filter	RANGE 2015 1 2015 1

☐ Vector ☐ SD
Derivative: ☐ lon ☐ lat

Analysis method: DATA1_DATA2

Data2

Dataset	Data type	Area	Level	Time unit	Showing period
JRA-55	HIST	ALL Lat: -90 - 90 Ave ☐ Lon: 0 - 360 Ave ☐	850hPa - 850hPa	MONTHLY ☐ Ave ☐ Year-to-year ☐ Time filter	RANGE 2015 1 2015 1

☐ Use parameter code

Analysis Data Submit

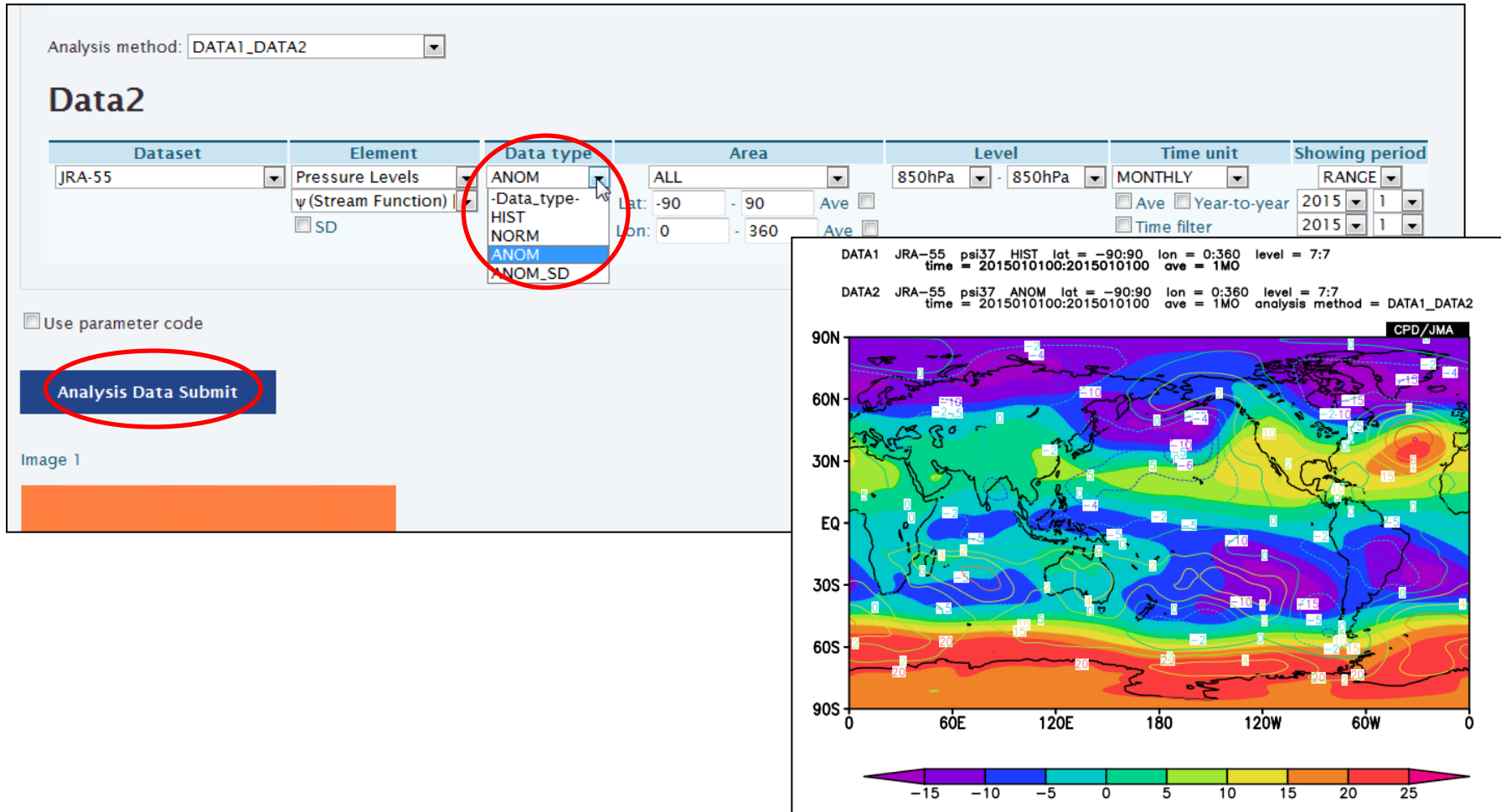
Analysis method dropdown menu:

- DATA1_DATA2
- SUBTRACT
- COMPOSITE
- SIGNIFICANCE_TEST
- REGRESSION_COEFFICIENT
- CORRELATION_COEFFICIENT
- EOF_SINGLE
- EOF_MULTI
- SVD
- FFT
- WAVELET
- ADD
- MULTIPLY
- DIVIDE

This area will appear after
“DATA1_DATA2” is selected.

- After setting “DATA1_DATA2” as the “Analysis method”, more boxes will appear under the title “Data2”.

850-hPa stream function and anomalies

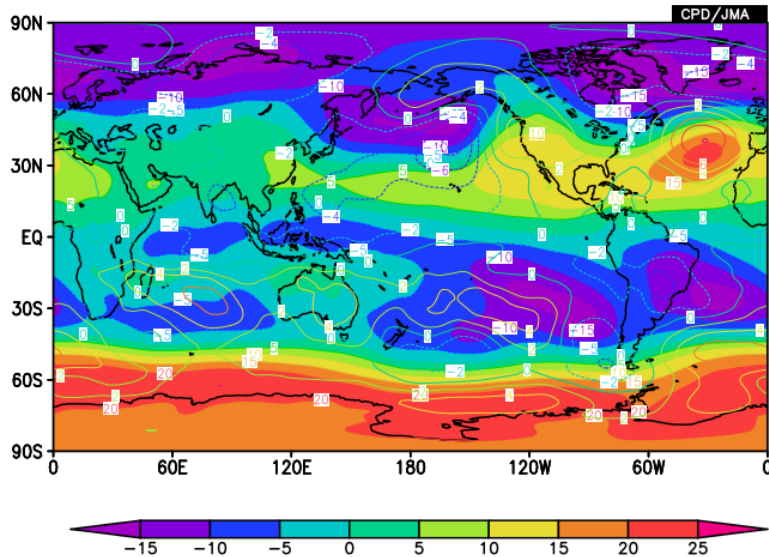


- Select "ANOM" as the "Data type".
- Click "Analysis Data Submit" to display the map.

850-hPa stream function and anomalies

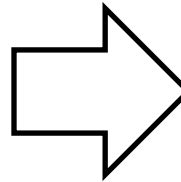
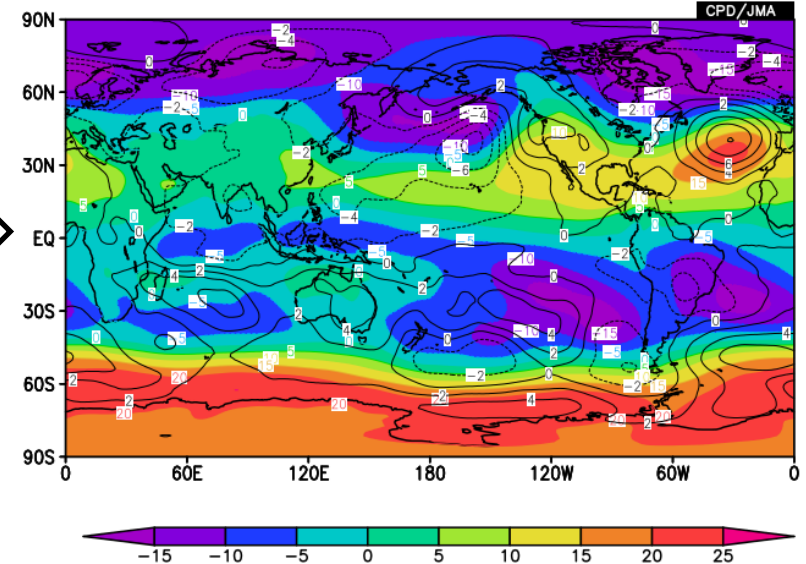
Before:

DATA1 JRA-55 psi37 HIST lat = -90:90 lon = 0:360 level = 7:7
time = 2015010100:2015010100 ave = 1MO
DATA2 JRA-55 psi37 ANOM lat = -90:90 lon = 0:360 level = 7:7
time = 2015010100:2015010100 ave = 1MO analysis method = DATA1_DATA2



After:

DATA1 JRA-55 psi37 HIST lat = -90:90 lon = 0:360 level = 7:7
time = 2015010100:2015010100 ave = 1MO
DATA2 JRA-55 psi37 ANOM lat = -90:90 lon = 0:360 level = 7:7
time = 2015010100:2015010100 ave = 1MO analysis method = DATA1_DATA2



- Change the contour color of the upper layer ("Data2").

850-hPa stream function and anomalies

Analysis Dataset

Select parameters **Graphic Options**

Graphic Options

Colorizing: Drawing: Image Format: Font: Color Table:

☒ Show Contour Labels
☒ Show Color Bar
☐ Set Contour Parameters for data1 interval: min: max:
☐ Set Contour Parameters for data2 interval: min: max:
☐ Set Vector size: [inch] value: skip:

☐ Polar Stereographic:
☐ Logarithmic Coordinates
☐ Reverse the Axes
☐ Flip the X-axis ☐ Flip the Y-axis
☐ No Caption

☐ No Scale Labels
☐ Draw Credit Inside
☐ Apply All Pics
picture size %

☒ Detailed Options for Image 1

For Image 1

About Graphics

About Axis

About Map

For Image 1

☐ Use parameter code

- Click “Graphic Options” and check “Detailed Options for Image 1” to open the detailed options dialogue.

850-hPa stream function and anomalies

Analysis Dataset

Select parameters Graphic Options

Graphic Options

Colorizing: COLOR
Drawing: SHADE
Image Format: png
Font: default
Color Table: Rainbow

☒ Show Contour Labels
☒ Show Color Bar
☐ Set Contour Parameters for data1
interval: min: max:
☐ Set Contour Parameters for data2
interval: min: max:
☐ Set Vector size: [inch] value: skip: 1

☐ Polar Stereographic: North pole
☐ Logarithmic Coordinates
☐ Reverse the Axes
☐ Flip the X-axis ☐ Flip the Y-axis
☐ No Scale Labels
☐ Draw Credit Inside
☐ Apply All Pics
picture size %

☒ Detailed Options for Image 1

For Image Upper layer Lower layer Upper layer apply apply Default

About Upper layer

About Axis

About Map

For Image 1 apply

“Lower layer” indicates the settings for mapping “Data1”, and “Upper layer” corresponds to “Data2”.

- Select “Upper layer” as “For Image”.

850-hPa stream function and anomalies

The screenshot shows the 'Graphic Options' web interface. At the top, there are tabs for 'Select parameters' and 'Graphic Options'. The 'Graphic Options' tab is active. Below the tabs, there are several settings: 'Colorizing: COLOR', 'Drawing: SHADE', 'Image Format: png', 'Font: default', and 'Color Table: Rainbow'. A callout box with a blue border and a blue arrow pointing to the 'apply' button contains the text: 'Always click “Apply” before clicking “Analysis Data Submit”.' Below these settings, there is a section for 'Detailed Options for Image 1' with a dropdown for 'For Image 1' set to 'Upper layer'. The 'apply' button is highlighted with a blue box. Below this, there is a blue bar labeled 'About Graphics'. Underneath, there are settings for 'contour' (Style: default, Color: black, label: format, thickness: 3, skip interval: 0.09) and 'marker type' (closed circle, line style: solid, color: black, grid style: none, color: white). A red box highlights the 'black' color selection in the contour color dropdown. To the right, a message box titled 'Web ページからのメッセージ' (Message from the Web Page) displays a warning icon and the text: 'Detailed option parameters for analysis Image1 are saved.' with an 'OK' button. A red callout box with a red arrow pointing to the message box contains the text: 'This message will be displayed.'

Select parameters Graphic Options

Graphic Options

Colorizing: COLOR
Drawing: SHADE
Image Format: png
Font: default
Color Table: Rainbow

Always click “Apply” before clicking “Analysis Data Submit”.

apply apply Default

About Graphics

contour Style: default Color: black
label format: thickness: 3 skip interval: 0.09
contour line thickness: 3
levels: color:
thin contour: not to draw: -
marker type: closed circle
line style: solid color: black
grid style: none color: white
vector label vector head size:
define rainbow color:
color bar portrait X: Y: s

Web ページからのメッセージ

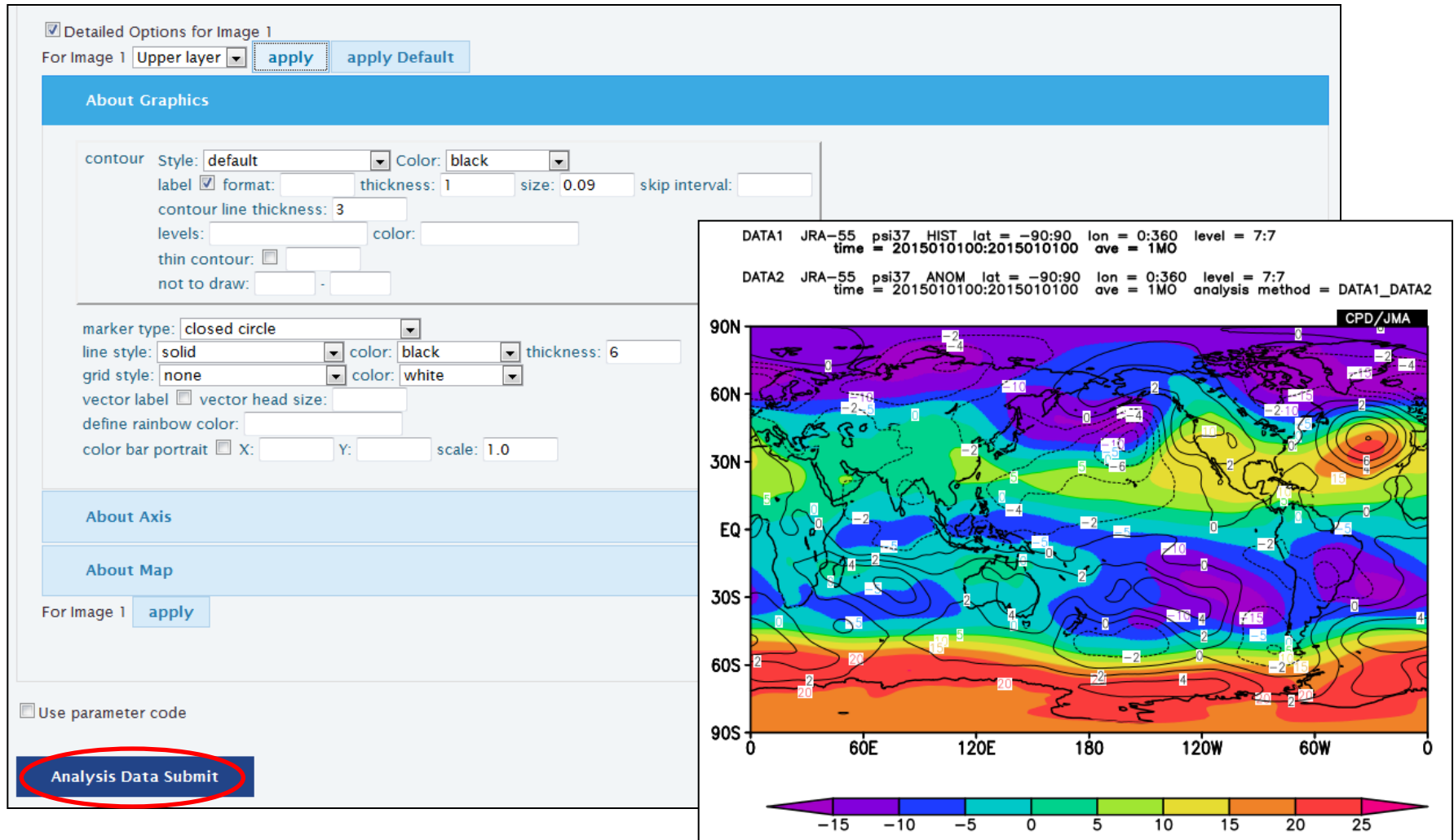
Detailed option parameters for analysis Image1 are saved.

OK

This message will be displayed.

- Select “black” as the contour color and click “Apply”.

850-hPa stream function and anomalies



- Click “Analysis Data Submit” to display the map.