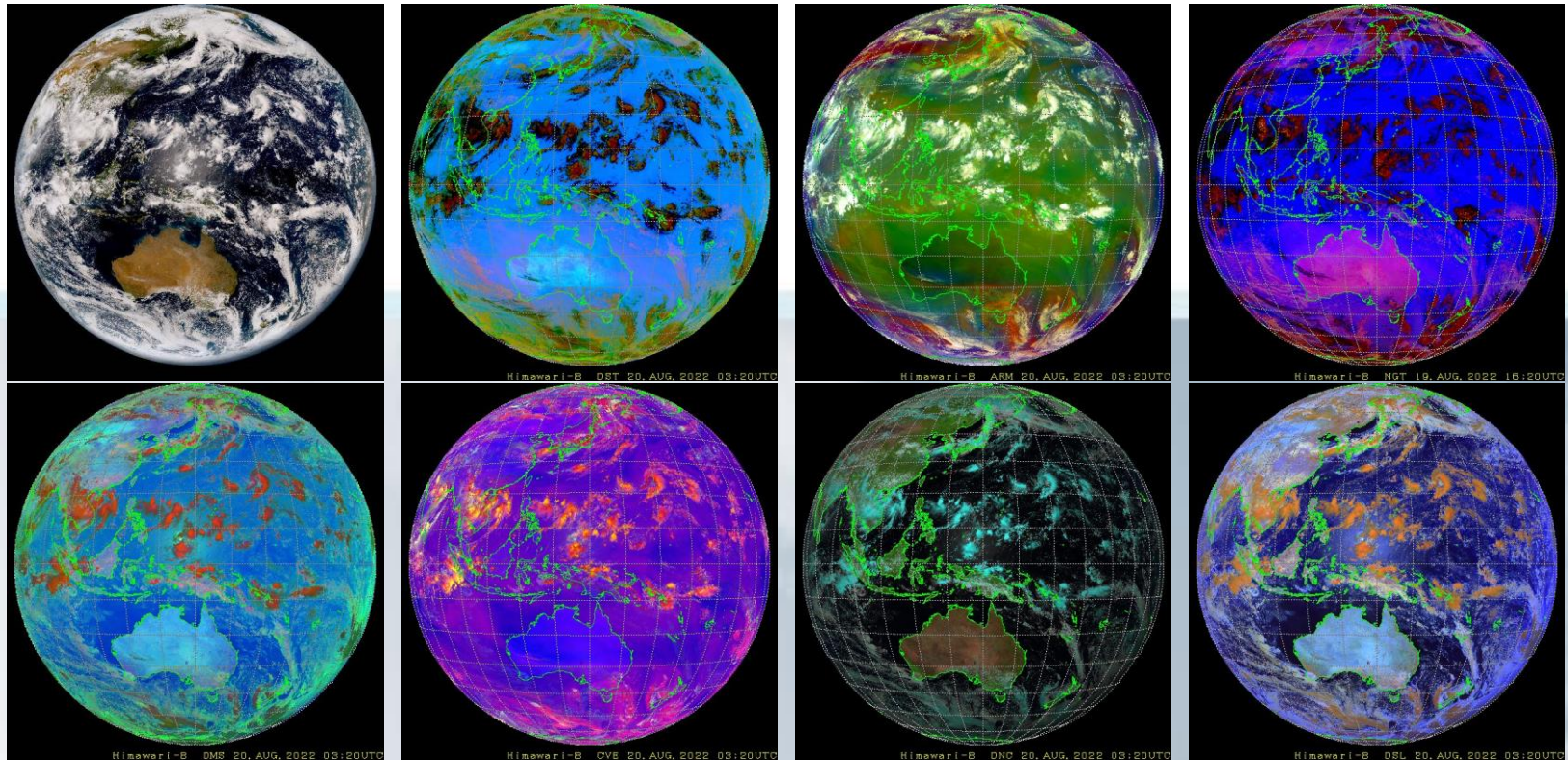


RGB Composite Imagery



Guides and Web Sites to explore

Bodo Zeschke

Bureau of Meteorology Training Centre
Australian VLab Centre of Excellence

RGB Quick Guides

CIRA Quick Guides

http://rammb.cira.colostate.edu/training/visit/quick_guides/

Meteorological Satellite Center (MSC) of JMA

Home | **VL** | Products | Operations | Supports

Current position: Home > Virtual Laboratory > RGB Training Library

 Back

Himawari RGB Training Library

RGB Training Library

RGB Composite Imagery

Satellite imagery contains much of the physical information needed for nephanalysis. However, such analysis requires skills and experience to enable interpretation and extraction of the necessary information from imagery. Red-green-blue (RGB) composite imagery can be easily created by overlapping and displaying color satellite images to present information from several satellite channels.

Note: As work on color interpretation for Himawari-8 remains ongoing, the content of this site may change in the future.

RGB Training Materials

RGB Outline

- [Outline of RGB Composite Imagery \(PDF version\)](#) [approx. 13MB]

WMO recommended schemes

- Natural Color RGB - Detection of snow/ice, vegetation and clouds -
 - [PowerPoint version](#) [pptx zipped, approx. 16MB]
 - [PDF version](#) [approx. 5MB]

JMA User's Guide to RGB composite imagery (Himawari RGB Training Library)

http://www.jma.go.jp/jma/jma-eng/satellite/RGB_TL.html

rammb.cira.colostate.edu/training/visit/quick_guides/

VISIT

Quick Guides

Below is a list of Quick Guide reference documents for satellite imagery and products. SBN availability refers to availability in AWIPS via the Satellite Broadcast Network, products not on the SBN are generally still available in AWIPS via the LDM.

Product	Last Updated	SBN availability	Satellite	Category
Legacy Vertical Profiles	2020-07-24	N	GOES-R Series	Product
GCOM AMSR2 Winds	2020-02-07	N	JPSS	Product
Jason Significant Wave Height	2019-10-11	Y	JPSS	Product
Day Snow/Cloud Layers	2019-08-14	N	GOES-R Series	Product
Gridded NUCAPS	2019-08-02	N	JPSS	Product
SAR Winds	2019-04-15	N	JPSS	Product
VIIRS Active Fire	2019-02-08	N	JPSS	Product
Day Snow Fog	2020-06-11	Y	GOES-R Series	RGB
JPSS Snowfall Rate	2018-10-12	N	JPSS	Product
GCOM AMSR2 SST	2018-10-12	N	JPSS	Product
VIIRS Cloud Base Height	2018-10-05	N	JPSS	Product
VIIRS Ice Surface Temperature	2018-08-15	N	JPSS	Product
VIIRS Ice Concentration	2018-08-15	N	JPSS	Product
VIIRS Flood Extent	2018-08-07	N	JPSS	Product
GLM Average Flash Area and Total Optical Energy	2018-08-07	Y	GOES-R Series	GLM
GLM Data Quality	2018-08-07	Y	GOES-R Series	GLM

- VISIT Home
- Training Sessions
- Training Calendar
- Blog Sites
- FDTD GOES Applications Webinars
- VISIT Satellite Chat
- VISIT Satellite Help Desk
- The VISIT Program
- VISIT Contributors
- VISIT FAQ
- Links / Tutorials
- RAMSDIS Online
- Quick Reference

NASA Short-term Prediction Research and Transition Center (SPORT) Training

<https://weather.msfc.nasa.gov/sport/training/>

SPORT

Home | Real-Time Data | Core Projects | GOES-R PG | JPSS PG | Transitions | Library | Organization

NASA SPoRT Training Modules

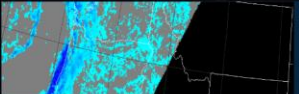


Applications Library :: True Color RGB, Wildfire Smoke Monitoring (W. Texas, 7 March 2...)

See All Trainings | Focus Areas | Problem Types | Product Types

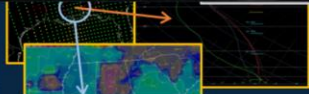
Quick Guide

Featured Training Modules



GPM Level II Swath Rain Rate Product

This item will show an application of the GPM/GMI Rain Rate Product, which uses a variety of instruments calibrated to GMI. In addition, we will examine several US examples of the product over Alaska, the Great Lakes in CPMS, and Florida in areas with anechoic radar.



Gridded NUCAPS: Analysis of Pre-Convective Environment

Gridded NUCAPS is the NOAA-Unique Combined Atmospheric Processing System and it is the operational algorithm for processing satellite sounding retrievals from the JPSS series of satellites. Gridded

RGB Quick Briefs and Interpretation Guides

← → ↻ 🏠 ⓘ rammb.cira.colostate.edu/training/visit/quick_briefs/ ... ☆ ⏏ 📄

VISIT Quick Briefs

Below is a list of Quick Briefs for satellite imagery and products. Quick Briefs are short training videos designed to introduce various imagery and products. Be sure that you are using a [flash enabled browser](#).

Title	Last Updated	Category
VIIRS Fire Temperature RGB	2020-04-06	RGB
VIIRS Day Land Cloud Fire RGB	2020-01-10	RGB
Day Land Cloud Fire RGB	2019-12-13	RGB
Day Land Cloud RGB	2019-12-13	RGB
Day Convection RGB	2019-12-13	RGB
GOES Fire Temperature RGB	2019-12-13	RGB
Differential Water Vapor RGB	2019-12-13	RGB
Air Mass RGB	2019-12-13	RGB
Ash RGB	2019-12-13	RGB
Dust RGB	2019-12-13	RGB
Nighttime Microphysics RGB	2019-12-13	RGB
Blended TPW	2019-09-20	Product
VIIRS Near Constant Contrast	2019-07-25	Product
GCOM AMSR2 Winds	2019-07-01	Product
MIRS Sea Ice Concentration	2019-06-19	Product
MIRS Snow Water Equivalent	2019-06-19	Product

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- VISIT Satellite Chat
- VISIT Satellite Help Desk
- The VISIT Program
- VISIT Contributors
- VISIT FAQ
- Links / Tutorials
- RAMSDIS Online
- Quick Reference

CIRA Quick Briefs

http://rammb.cira.colostate.edu/training/visit/quick_briefs/

EUMETRAIN
International training project sponsored by EUMETSAT
to support and increase the use of meteorological satellite data

Home Resources ePort User Manual Courses Events Polarstern

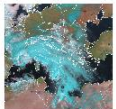
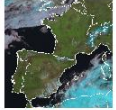
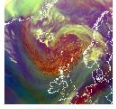
Home > Resources

RGB Colour Interpretation Guide

Satellite Instrument RGB Colour Phenomena
--all-- --all-- --all-- --all--

60 results found

Pages: 1 2 3

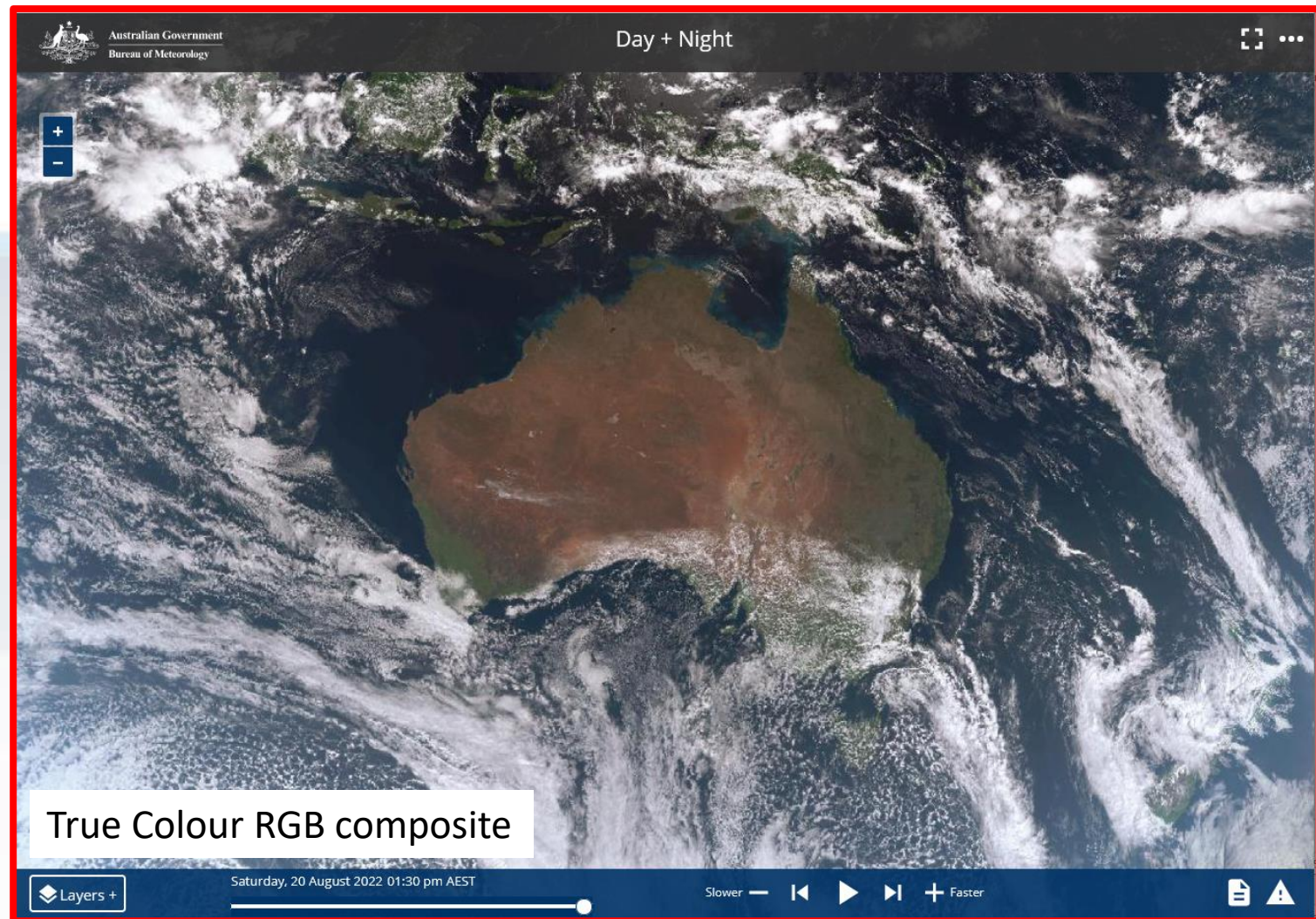
 Natural Colour RGB Snow and ice on the ground Description In the Natural Colour RGB, snow and ice on the earth surface depict in cyan colour. +§§ more... Click to enter	 Natural Colour RGB Ice clouds Description In the Natural Colour RGB, ice clouds depict in cyan colour. +§§ more... Click to enter	 Natural Colour RGB Oceans and lakes Description In the Natural Colour RGB, oceans and lakes depict in black colour. +§§ more... Click to enter
 Airmass RGB Cold cloud free land Description In the Airmass RGB, very cold land depicts in green colour. +§§ more... Click to enter	 Natural Colour RGB Vegetation Description In the Natural Colour RGB, the green colour over land depicts vegetation cover. +§§ more... Click to enter	 Natural Colour RGB Sand and bare soil Description In the Natural Colour RGB, the red colour over land depicts bare soil or sand. +§§ more... Click to enter
 Natural Colour RGB Water clouds Description In the Natural Colour RGB, water clouds are depicted in white. Very low water clouds turn into red and when ice appears on the top of the clouds colour turns into cyan. +§§ more... Click to enter	 Airmass RGB Dry airmass Description In the Airmass RGB, red zones delimit dry air masses. +§§ more... Click to enter	 Natural Colour RGB Salt lakes Description In the Natural Colour RGB, dried-up salt lakes depict in cyan colour. +§§ more... Click to enter

EUMETRAIN RGB Colour Interpretation Guide

<https://eumetrain.org/rgb-color-guide>

Web locations of RGB composite imagery

BOM website http://satview.bom.gov.au/	The last 4 hours	10 minute data
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Web locations of RGB composite imagery

JMA website https://www.data.jma.go.jp/mscweb/data/himawari/index.html	The last 24 hours	10 minute data
CIRA Slider https://rammb-slider.cira.colostate.edu/	The last week	10 minute data

Band
Day Convective Storm RGB

1: Choose the domain (click on the image)

2: Choose the Band (pulldown menu)

1: Choose Himawari-8 as the Satellite (menu on LHS)

2: Choose the RGB under "Products" (LHS menu)

-----MULTISPECTRAL RGB COMPOSITES-----

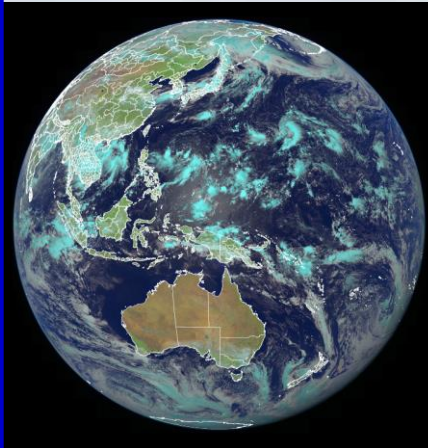
Natural Color (EUMETSAT)
 Airmass (EUMETSAT)
 Day Cloud Phase Distinction (JMA)
 Dust (EUMETSAT)
 Fire Temperature (CIRA)
Natural Color-Fire (CIRA)

Ash (EUMETSAT)

SO2 - Sulfur Dioxide (JMA)

-----CLOUD PRODUCTS-----

Cloud-Top Height (NOAA)
 Cloud Geometric Thickness (CIRA/NOAA)
 Cloud Layers (CIRA/NOAA)
 Cloud Optical Depth (NOAA)
 Cloud-Top Effective Particle Size (NOAA)
 Cloud Phase (NOAA)



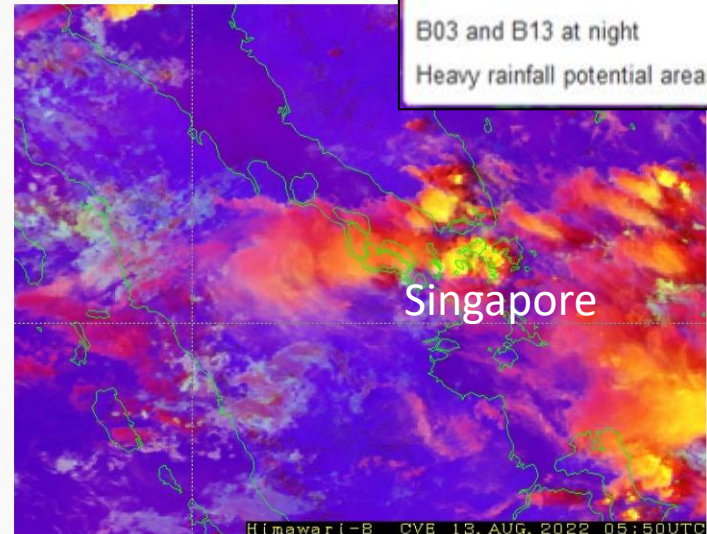
Natural Colour RGB composite

Day Convective Storm RGB

The RGB composite imagery is produced by composing blue. Details are refer to "RGB Training Library (JMA website)"

Select Area
 Hi-res Asia 4
 Time
 05:50 UTC 13 August 2022

Prev Next



Day Snow-Fog RGB
 Natural Color RGB
 True Color RGB (Enhanced)
 True Color Reproduction Image
Day Convective Storm RGB
 Sandwich
 B03 combined with B13
 B03 and B13 at night
 Heavy rainfall potential areas

Web locations of RGB composite imagery

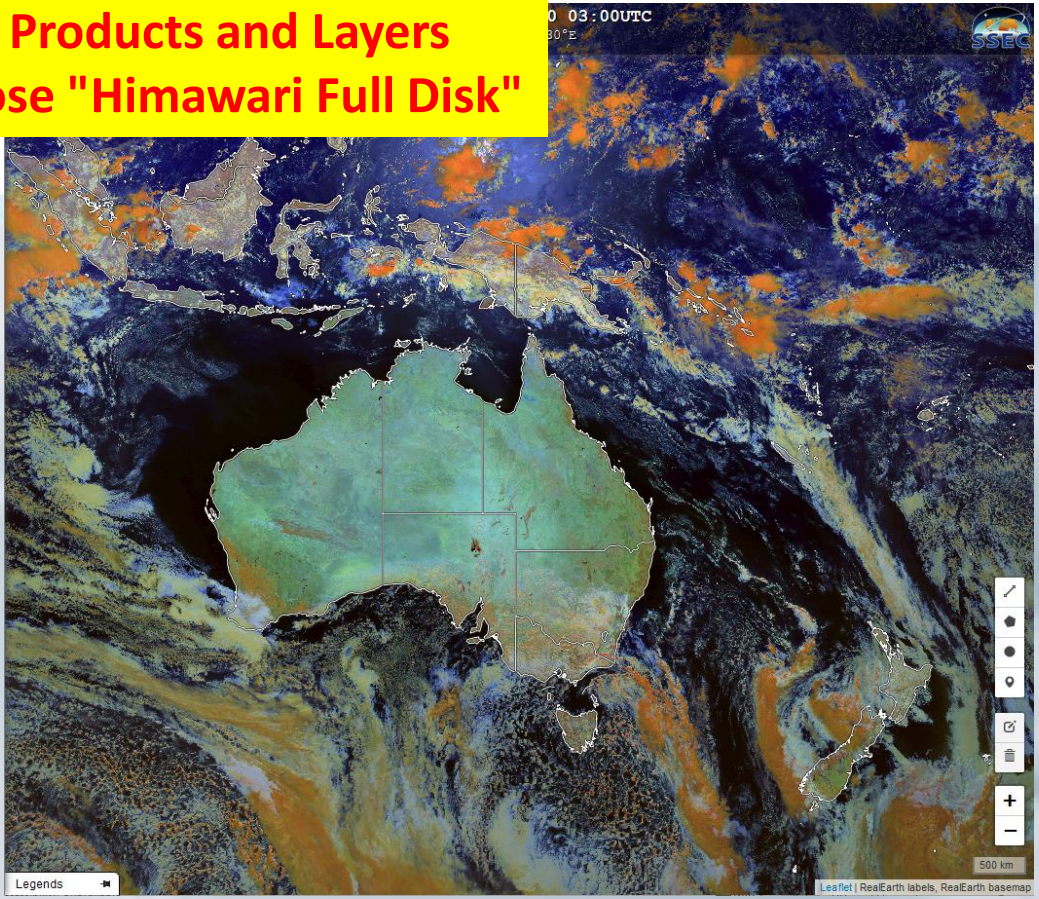
SSEC Real Earth https://realearth.ssec.wisc.edu/	The last few days	Hourly data
---	-------------------	-------------



1: In the Products and Layers Menu, choose "Himawari Full Disk"

2: Choose an RGB Composite

Various RGB composites



Snow and Fog RGB composite

Web locations of RGB composite imagery

NASA Worldview

<https://worldview.earthdata.nasa.gov/>

The last ~
46 days

10 minute
data

1: Click the "+ Add Layers" menu option

2: Type in "Himawari"

3: Choose "Airmass"

Airmass RGB composite

The screenshot displays the NASA Worldview web interface. On the left, a sidebar menu is open, showing a search bar with "Himawari" entered. Below the search bar, a list of layers is displayed, with "Air Mass (10 minute)" selected and highlighted by a red box. The main panel shows a satellite image of a storm system, labeled "Airmass RGB composite". The bottom of the interface features a timeline and a scale bar.

OVERLAYS

Air Mass (10 minute)
Himawari-8/AHI

Showing 3 out of 937

COVERAGE

Available 2020 Jun 25 3

CATEGORY

Atmosphere 3

Fires 3

Severe Storms 3

Smoke Plumes 3

MEASUREMENTS

Geostationary 3

SOURCE

Himawari-8 3

PERIOD

Subdaily 3

DAY/NIGHT

Day 3

Night 2

Red Visible
(0.64 μ m, Band 3, 10 minute)
Himawari-8/AHI

Clean Infrared
(10.3 μ m, Band 13, 10 minute)
Himawari-8/AHI

Air Mass
(10 minute)
Himawari-8/AHI

2022 AUG 20 03 : 32 Z 10 MINUTE

1:00 AUG 19 6:00 12:00 18:00 AUG 20

1000 km
500 mi

HOUR