images courtesy JMA



# **RGB Composite Resources**





#### Guides and Web Sites to explore

Bodo Zeschke Bureau of Meteorology Training Centre Australian VLab Centre of Excellence

### **RGB Quick Guides**

#### **CIRA** Quick Guides



Wereorological Satellite Center (MSC) of JMA						
Home	VL	Products	Operations	Supports		
Current position. Home > U	irtual Laboratory > RGB Tra	<sup>lining Library</sup> Himawari RG Training Libra	B ry	RG	Back 3 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/jmaeng/satellite/RGB\_TL.html <) → ୯ ŵ

i) rammb.cira.colostate.edu/training/visit/quick\_guides/

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#### 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.

• VISIT Home	Product	Last Updated	SBN availability	Satellite	Category
• VISIT Home	Legacy Vertical Profiles	2020-07-24	N	GOES-R Series	Product
Iraining Sessions	GCOM AMSR2 Winds	2020-02-07	N	JPSS	Product
<ul> <li>Training Calendar</li> </ul>	Jason Signficant Wave Height	2019-10-11	Y	JPSS	Product
Blog Sites	Day Snow/Cloud Layers	2019-08-14	N	GOES-R Series	Product
• FDTD GOES Applications Webinars	Gridded NUCAPS	2019-08-02	N	JPSS	Product
	SAR Winds	2019-04-15	N	JPSS	Product
VISIT Satellite Chat	VIIRS Active Fire	2019-02-08	N	JPSS	Product
<ul> <li>VISIT Satellite Help Desk</li> </ul>	Day Snow Fog	2020-06-11	Y	GOES-R Series	RGB
	JPSS Snowfall Rate	2018-10-12	N	JPSS	Product
<ul> <li>The VISIT Program</li> </ul>	GCOM AMSR2 SST	2018-10-12	N	JPSS	Product
VISIT Contributors	VIIRS Cloud Base Height	2018-10-05	N	JPSS	Product
VISIT FAQ	VIIRS Ice Surface Temperature	2018-08-15	N	JPSS	Product
Links / Tutorials	VIIRS Ice Concentration	2018-08-15	N	JPSS	Product
RAMSDIS Online	VIIRS Flood Extent	2018-08-07	N	JPSS	Product
Quick Reference	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

NASA Shortterm Prediction Research and Transition Center (SPORT) Training https://weather.msfc.n asa.gov/sport/training/



### **RGB Quick Briefs and Interpretation Guides**

EUMETRAIN

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VISIT	Quick Briefs Below is a list of Quick Briefs for satellite imag training videos designed to introduce various in using a flash enabled browser.	ery and produ nagery and pr	cts. Quick oducts. Be	Briefs ar sure tha	e sl t yc
• VISIT Home	Title	Last Updated	Category		
• VISIT Home	VIIRS Fire Temperature RGB	2020-04-06	RGB	1	
<ul> <li>Training Sessions</li> </ul>	VIIRS Day Land Cloud Fire RGB	2020-01-10	RGB	1	
<ul> <li>Training Calendar</li> </ul>	Day Land Cloud Fire RGB	2019-12-13	RGB		
<ul> <li>Blog Sites</li> </ul>	Day Land Cloud RGB	2019-12-13	RGB		
• FDTD GOES Applications Webinars	Day Convection RGB	2019-12-13	RGB		
	GOES Fire Temperature RGB	2019-12-13	RGB		
<ul> <li>VISIT Satellite Chat</li> </ul>	Differential Water Vapor RGB	2019-12-13	RGB		
VISIT Satellite Help	Air Mass RGB	2019-12-13	RGB		
Desk	Ash RGB	2019-12-13	RGB		
<ul> <li>The VISIT Program</li> </ul>	Dust RGB	2019-12-13	RGB	1	
VISIT Contributors	Nighttime Microphysics RGB	2019-12-13	RGB		
VISIT FAQ	Blended TPW	2019-09-20	Product		
<ul> <li>Links / Tutorials</li> </ul>	VIIRS Near Constant Contrast	2019-07-25	Product	1	
A DAMEDIS Online	GCOM AMSR2 Winds	2019-07-01	Product		
	MIRS Sea Ice Concentration	2019-06-19	Product		
<ul> <li>Quick Reference</li> </ul>	MIDE Committee Frederication	2010 05 10	Data durat	1	



http://rammb.cira.colostate.edu/training/visit/quick\_brie





Interpretation Guide

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

<b>BOM website</b>	The last	10 minute		
http://satview.bom.gov.au/	4 hours	data		



Band

Day Convective Storm RGB

#### JMA website The last 24 hours 10 minute 1: Choose the domain https://www.data.jma.go.jp/mscweb/data/ data himawari/index.html (click on the image) CIRA Slider https://rammb-The last week 10 minute slider.cira.colostate.edu/ data 2: Choose the Band 1: Choose Himawari-8 as the Satellite (pulldown menu) (menu on LHS) Day Snow-Fog RGB **Day Convective** Natural Color RGB 2: Choose the RGB under "Products" (LHS Storm RGB True Color RGB (Enhanced) The RGB composite imagery is produced by composing menu) True Color Reproduction Image blue. Details are refer to " RGB Training Library (IMA v Day Convective Storm RGB Select Area -----MULTISPECTRAL RGB COMPOSITES--Hi-res Asia 4 Sandwich Time Natural Color (EUMETSAT) 05:50 UTC 13 August 2022 V Prev Next B03 combined with B13 Airmass (EUMETSAT) B03 and B13 at night Day Cloud Phase Distinction (JMA) Heavy rainfall potential areas Dust (EUMETSAT) Fire Temperature (CIRA) Natural Color-Fire (CIRA) Ash (EUMETSAT) SO2 - Sulfur Dioxide (JMA) -----CLOUD PRODUCTS------Singapore Cloud-Top Height (NOAA) Cloud Geometric Thickness (CIRA/NOAA) Cloud Layers (CIRA/NOAA) Cloud Optical Depth (NOAA) Natural Colour RGB Cloud-Top Effective Particle Size (NOAA) Cloud Phase (NOAA) composite



