

GOES Blowing Snow RGB

GOES Blowing Snow RGB can be installed in AWIPS and viewed online at CIRA SLIDER. <u>Find it here</u> Please send feedback and suggestions to <u>bill.line@noaa.gov</u>



About

The GOES Blowing snow RGB combines visible, near-infrared, and fog difference imagery to isolate regions of blowing snow over snow cover. Mature regions of blowing snow will often develop into horizontal convective rolls (HCRs).

- Blowing snow can be diagnosed in the RGB imagery through a combination of the following:
 - Depending on solar illumination, blowing snow will appear as a relatively light shade of red, peach, or orange against the darker red background snow color.
 - Apparent movement of the above color across the otherwise snow-covered surface.
 - Depending on sun angle, deepening HCRs associated with the blowing snow will cast a small shadow, allowing for the appearance of a revealing texture in the imagery.
- Appearance of other features:
 - Clouds will generally appear as shades of blue/cyan and purple, depending on phase and thickness.
 - Bare ground will appear as bright green, snow cover as dark red, and water bodies as nearly black

Color	Band (µm)	Min to Max Gamma	Small contribution indicates	Medium contribution indicates	Large contribution indicates
Red	0.64 (Ch. 2)	0 to 50 % 0.7	Water body, land surface	Blowing Snow	Cloud, snow/ice cover
Green	1.6 (Ch. 5)	0 to 20 % 1.0	Water body, Snow/ice cover, glaciated clouds	Blowing Snow	Land surface, liquid clouds
Blue	3.9 – 10.35 (Ch. 7 – Ch. 13)	0 to 30 °C 0.7	Water body, land surface	Blowing Snow	Cloud







Resources

Blog Posts:

• <u>Mid-Jan 2024 Northern US Plains Blowing Snow</u> <u>as Observed by GOES ABI and JPSS VIIRS Imagery</u>

Afternoon

Dec 2022 Cold Front and Blowing Snow



Midday

24 April 2024 Bill Line, NESDIS/STAR