

GOES-17 EUVS-A and -B Responsivities
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There are 2 channels, EUVS-A and EUVS-B, with 23 diodes for each channel.
There are 7 solar lines: 3 for EUVS-A and 4 for EUVS-B.
Each channel has 2 dark diodes (not exposed to sunlight): 0 and 11 (EUVS-A), 12 and 23 (EUVS-B).
Provided responsivities are undegraded values at launch.
For EUVS-A, responsivities are for primary science filter.
The dark diodes have the responsivities and wavelengths are fill values and should not be used.
The central diodes for 30.4 and 121.6 nm have split diodes (top and bottom).
The mask provides one responsivity value for each pair of split diodes.

GOES-17 EUVS-A line wavelengths [nm]
[25.6, 28.4, 30.4]

GOES-17 EUVS-A diode wavelengths [nm]
[-0.94452 24.45 24.654 24.859 25.064 25.27 28.041 28.255
28.47 28.685 28.901 -0.94452 30.884 30.662 30.442 30.442
30.222 30.002 26.517 26.308 26.099 25.891 25.683 25.476]

GOES-17 EUVS-A diode responsivities [Amps * m² * nm / Watt]
[1.0000000e-15 1.7944799e-08 1.7708400e-08 1.7544000e-08 1.7352599e-08
1.7226000e-08 1.3831600e-08 1.3611400e-08 1.3485200e-08 1.3332400e-08
1.3205600e-08 1.0000000e-15 1.2835200e-08 1.2754400e-08 1.2573200e-08
1.2573200e-08 1.2719000e-08 1.2769600e-08 1.5510000e-08 1.5730000e-08
1.5927000e-08 1.6246000e-08 1.6496401e-08 1.6948199e-08]

GOES-17 EUVS-A line masks
25.6 nm [0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1]
28.4 nm [0 0 0 0 0 0 0 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
30.4 nm [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 0 1 0 0 0 0 0 0]

GOES-17 EUVS-B line wavelengths [nm]
[117.5, 121.6, 133.5, 140.5]

GOES-17 EUVS-B diode wavelengths [nm]
[141.81 140.98 140.15 139.31 138.48 137.65 122.3 121.88 121.46
121.46 121.04 120.61 -1.071 116.63 117.05 117.47 117.89 118.31
132.56 132.98 133.4 133.82 134.24 -1.071]

GOES-17 EUVS-B diode responsivities [Amps * m² * nm / Watt]
[2.1176e-09 2.3838e-09 2.6954e-09 3.0694e-09 3.5230e-09 4.0566e-09
8.8384e-09 8.4656e-09 7.8646e-09 7.8646e-09 7.4550e-09 6.9988e-09]

1.0000e-15 3.6036e-09 3.9384e-09 4.2646e-09 4.5850e-09 4.9228e-09
8.4756e-09 7.9238e-09 7.3804e-09 6.8516e-09 6.3538e-09 1.0000e-15]

GOES-17 EUVS-B line masks

117.5 nm [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 0 0 0 0 0 0 0]

121.6 nm [0 0 0 0 0 0 0 1 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]

133.5 nm [0 1 1 1 0 0]

140.5 nm [0 0 1 1 0]