

**SSMIS Instrument Aboard DMSP16****(Special Sensor Microwavelmager/Sounder)**

<b>Channel No.</b> <b>(* not supported by RTTOV7)</b>	<b>Frequency (GHz) / Polarization</b>	<b>Resolution (km)</b>	<b>Scan positions</b>	<b>Channel Type</b>
1	50.3 V	37.5	60	Lower Atmosphere Sounder
2	52.8 V	37.5	60	Lower Atmosphere Sounder
3	53.956 V	37.5	60	Lower Atmosphere Sounder
4	54.4 V	37.5	60	Lower Atmosphere Sounder
5	55.5 V	37.5	60	Lower Atmosphere Sounder
6	57.29 V (?)	37.5	60	Lower Atmosphere Sounder
7	59.4 V (?)	37.5	60	Lower Atmosphere Sounder
8	150.0 H	37.5	180	Imager
9	183.31 H (7)	37.5	180	Imager
10	183.31 H (3)	37.5	180	Imager
11	183.31 H (1)	37.5	180	Imager
12	19.35 H	25	90	Environmental
13	19.35 V	25	90	Environmental
14	22.235 V	25	90	Environmental
15	37.0 H	25	90	Environmental
16	37.0 V	25	90	Environmental
17	91.655 V	12.5	180	Imager
18	91.655 H	12.5	180	Imager
19*	62.283 H+V	75	30	Upper Atmosphere Sounder
20*	60.792 H+V	75	30	Upper Atmosphere Sounder
21*	60.792 H+V	75	30	Upper Atmosphere Sounder
22	60.792 H+V	75	30	Upper Atmosphere Sounder
23	60.792 H+V	75	30	Upper Atmosphere Sounder
24	60.792 H+V	37.5	60	Lower Atmosphere Sounder

**Notes:**

nadir viewing angle of 45 deg

EIA of 53.2 deg

orbit altitude = 833 km

arcs are 144 degrees

rotation period = 1.9s

swath width = 1707 km