

1 METEOSAT-7

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1.1 IR1 Temperature/Radiance Conversion Table

Planck Function weighted with Filter Function (90 K) for the Meteosat-7 IR1 channel.
 Temperature in K, radiance in $W\ m^{-2}\ sr^{-1}$

Temp	Rad	Temp	Rad	Temp	Rad	Temp	Rad	Temp	Rad
170.0	0.667	171.0	0.697	172.0	0.727	173.0	0.758	174.0	0.789
175.0	0.822	176.0	0.856	177.0	0.891	178.0	0.927	179.0	0.964
180.0	1.002	181.0	1.040	182.0	1.080	183.0	1.122	184.0	1.164
185.0	1.207	186.0	1.251	187.0	1.297	188.0	1.344	189.0	1.392
190.0	1.441	191.0	1.491	192.0	1.542	193.0	1.595	194.0	1.649
195.0	1.704	196.0	1.761	197.0	1.818	198.0	1.877	199.0	1.938
200.0	1.999	201.0	2.062	202.0	2.127	203.0	2.192	204.0	2.259
205.0	2.328	206.0	2.397	207.0	2.468	208.0	2.541	209.0	2.615
210.0	2.690	211.0	2.767	212.0	2.846	213.0	2.925	214.0	3.007
215.0	3.089	216.0	3.174	217.0	3.259	218.0	3.347	219.0	3.435
220.0	3.526	221.0	3.617	222.0	3.711	223.0	3.806	224.0	3.902
225.0	4.000	226.0	4.100	227.0	4.201	228.0	4.304	229.0	4.408
230.0	4.514	231.0	4.622	232.0	4.731	233.0	4.842	234.0	4.955
235.0	5.069	236.0	5.185	237.0	5.302	238.0	5.422	239.0	5.542
240.0	5.665	241.0	5.789	242.0	5.915	243.0	6.043	244.0	6.172
245.0	6.303	246.0	6.436	247.0	6.570	248.0	6.706	249.0	6.844
250.0	6.983	251.0	7.125	252.0	7.268	253.0	7.412	254.0	7.559
255.0	7.707	256.0	7.857	257.0	8.009	258.0	8.162	259.0	8.317
260.0	8.474	261.0	8.633	262.0	8.793	263.0	8.955	264.0	9.119
265.0	9.285	266.0	9.453	267.0	9.622	268.0	9.793	269.0	9.966
270.0	10.141	271.0	10.317	272.0	10.495	273.0	10.675	274.0	10.857
275.0	11.040	276.0	11.225	277.0	11.412	278.0	11.601	279.0	11.792
280.0	11.984	281.0	12.178	282.0	12.374	283.0	12.572	284.0	12.772
285.0	12.973	286.0	13.176	287.0	13.381	288.0	13.587	289.0	13.796
290.0	14.006	291.0	14.218	292.0	14.432	293.0	14.647	294.0	14.864
295.0	15.083	296.0	15.304	297.0	15.527	298.0	15.751	299.0	15.977
300.0	16.205	301.0	16.435	302.0	16.666	303.0	16.899	304.0	17.134
305.0	17.371	306.0	17.609	307.0	17.849	308.0	18.091	309.0	18.335

310.0	18.580	311.0	18.828	312.0	19.076	313.0	19.327	314.0	19.579
315.0	19.833	316.0	20.089	317.0	20.347	318.0	20.606	319.0	20.867
320.0	21.130	321.0	21.394	322.0	21.660	323.0	21.928	324.0	22.198
325.0	22.469	326.0	22.742	327.0	23.016	328.0	23.293	329.0	23.571
330.0	23.850	331.0	24.132	332.0	24.415	333.0	24.699	334.0	24.986
335.0	25.274	336.0	25.564	337.0	25.855	338.0	26.148	339.0	26.443
340.0	26.739	341.0	27.037	342.0	27.337	343.0	27.638	344.0	27.941
345.0	28.245	346.0	28.552	347.0	28.859	348.0	29.169	349.0	29.480
350.0	29.792	351.0	30.107	352.0	30.422	353.0	30.740	354.0	31.059
355.0	31.379	356.0	31.702	357.0	32.025	358.0	32.351	359.0	32.678
360.0	33.006	361.0	33.336	362.0	33.668	363.0	34.001	364.0	34.336
365.0	34.672	366.0	35.010	367.0	35.349	368.0	35.690	369.0	36.032

1.2 IR2 Temperature/Radiance Conversion Table

Planck Function weighted with Filter Function (90 K) for the Meteosat-7 IR2 channel.
 Temperature in K, radiance in $W\ m^{-2}\ sr^{-1}$

Temp	Rad	Temp	Rad	Temp	Rad	Temp	Rad	Temp	Rad
170.0	0.664	171.0	0.693	172.0	0.723	173.0	0.753	174.0	0.785
175.0	0.818	176.0	0.851	177.0	0.886	178.0	0.922	179.0	0.958
180.0	0.996	181.0	1.035	182.0	1.075	183.0	1.115	184.0	1.157
185.0	1.200	186.0	1.245	187.0	1.290	188.0	1.336	189.0	1.384
190.0	1.433	191.0	1.483	192.0	1.534	193.0	1.586	194.0	1.640
195.0	1.695	196.0	1.751	197.0	1.808	198.0	1.867	199.0	1.927
200.0	1.988	201.0	2.051	202.0	2.115	203.0	2.180	204.0	2.247
205.0	2.315	206.0	2.384	207.0	2.455	208.0	2.527	209.0	2.601
210.0	2.676	211.0	2.752	212.0	2.830	213.0	2.909	214.0	2.990
215.0	3.072	216.0	3.156	217.0	3.241	218.0	3.328	219.0	3.416
220.0	3.506	221.0	3.598	222.0	3.690	223.0	3.785	224.0	3.881
225.0	3.978	226.0	4.077	227.0	4.178	228.0	4.280	229.0	4.384
230.0	4.490	231.0	4.597	232.0	4.705	233.0	4.816	234.0	4.928
235.0	5.041	236.0	5.156	237.0	5.273	238.0	5.392	239.0	5.512
240.0	5.634	241.0	5.757	242.0	5.882	243.0	6.009	244.0	6.138
245.0	6.268	246.0	6.400	247.0	6.534	248.0	6.669	249.0	6.806
250.0	6.945	251.0	7.085	252.0	7.227	253.0	7.371	254.0	7.517
255.0	7.664	256.0	7.813	257.0	7.964	258.0	8.117	259.0	8.271
260.0	8.427	261.0	8.585	262.0	8.745	263.0	8.906	264.0	9.069
265.0	9.234	266.0	9.400	267.0	9.569	268.0	9.739	269.0	9.911
270.0	10.084	271.0	10.260	272.0	10.437	273.0	10.616	274.0	10.796
275.0	10.979	276.0	11.163	277.0	11.349	278.0	11.537	279.0	11.726
280.0	11.918	281.0	12.111	282.0	12.306	283.0	12.502	284.0	12.701
285.0	12.901	286.0	13.103	287.0	13.306	288.0	13.512	289.0	13.719

290.0	13.928	291.0	14.139	292.0	14.351	293.0	14.566	294.0	14.782
295.0	14.999	296.0	15.219	297.0	15.440	298.0	15.663	299.0	15.888
300.0	16.115	301.0	16.343	302.0	16.573	303.0	16.805	304.0	17.039
305.0	17.274	306.0	17.511	307.0	17.750	308.0	17.991	309.0	18.233
310.0	18.477	311.0	18.723	312.0	18.970	313.0	19.219	314.0	19.470
315.0	19.723	316.0	19.977	317.0	20.233	318.0	20.491	319.0	20.751
320.0	21.012	321.0	21.275	322.0	21.539	323.0	21.806	324.0	22.074
325.0	22.343	326.0	22.615	327.0	22.888	328.0	23.163	329.0	23.439
330.0	23.717	331.0	23.997	332.0	24.279	333.0	24.562	334.0	24.846
335.0	25.133	336.0	25.421	337.0	25.711	338.0	26.002	339.0	26.295
340.0	26.590	341.0	26.886	342.0	27.184	343.0	27.484	344.0	27.785
345.0	28.088	346.0	28.392	347.0	28.698	348.0	29.006	349.0	29.315
350.0	29.626	351.0	29.938	352.0	30.252	353.0	30.568	354.0	30.885
355.0	31.204	356.0	31.524	357.0	31.846	358.0	32.170	359.0	32.495
360.0	32.822	361.0	33.150	362.0	33.480	363.0	33.811	364.0	34.144
365.0	34.478	366.0	34.814	367.0	35.151	368.0	35.490	369.0	35.831

1.3 WV1 Temperature/Radiance Conversion Table

Planck Function weighted with Filter Function (90 K) for the Meteosat-7 WV1 channel.
 Temperature in K, radiance in $W\ m^{-2}\ sr^{-1}$

Temp	Rad	Temp	Rad	Temp	Rad	Temp	Rad	Temp	Rad
170.0	0.021	171.0	0.023	172.0	0.024	173.0	0.026	174.0	0.028
175.0	0.030	176.0	0.033	177.0	0.035	178.0	0.038	179.0	0.040
180.0	0.043	181.0	0.046	182.0	0.049	183.0	0.053	184.0	0.056
185.0	0.060	186.0	0.064	187.0	0.068	188.0	0.073	189.0	0.077
190.0	0.082	191.0	0.087	192.0	0.093	193.0	0.099	194.0	0.105
195.0	0.111	196.0	0.118	197.0	0.125	198.0	0.132	199.0	0.139
200.0	0.147	201.0	0.156	202.0	0.164	203.0	0.174	204.0	0.183
205.0	0.193	206.0	0.204	207.0	0.214	208.0	0.226	209.0	0.238
210.0	0.250	211.0	0.263	212.0	0.276	213.0	0.290	214.0	0.305
215.0	0.320	216.0	0.335	217.0	0.352	218.0	0.369	219.0	0.386
220.0	0.405	221.0	0.423	222.0	0.443	223.0	0.464	224.0	0.485
225.0	0.507	226.0	0.529	227.0	0.553	228.0	0.577	229.0	0.602
230.0	0.628	231.0	0.655	232.0	0.683	233.0	0.712	234.0	0.741
235.0	0.772	236.0	0.804	237.0	0.837	238.0	0.870	239.0	0.905
240.0	0.941	241.0	0.978	242.0	1.016	243.0	1.056	244.0	1.096
245.0	1.138	246.0	1.181	247.0	1.225	248.0	1.271	249.0	1.317
250.0	1.366	251.0	1.415	252.0	1.466	253.0	1.518	254.0	1.572
255.0	1.627	256.0	1.684	257.0	1.742	258.0	1.802	259.0	1.864
260.0	1.927	261.0	1.991	262.0	2.058	263.0	2.126	264.0	2.195
265.0	2.267	266.0	2.340	267.0	2.415	268.0	2.492	269.0	2.570

270.0	2.651	271.0	2.733	272.0	2.818	273.0	2.904	274.0	2.993
275.0	3.083	276.0	3.175	277.0	3.270	278.0	3.367	279.0	3.465
280.0	3.566	281.0	3.670	282.0	3.775	283.0	3.883	284.0	3.993
285.0	4.105	286.0	4.220	287.0	4.337	288.0	4.456	289.0	4.578
290.0	4.703	291.0	4.829	292.0	4.959	293.0	5.091	294.0	5.226
295.0	5.363	296.0	5.503	297.0	5.645	298.0	5.790	299.0	5.938
300.0	6.089	301.0	6.243	302.0	6.399	303.0	6.559	304.0	6.721
305.0	6.886	306.0	7.054	307.0	7.225	308.0	7.399	309.0	7.576
310.0	7.756	311.0	7.940	312.0	8.126	313.0	8.316	314.0	8.509
315.0	8.705	316.0	8.904	317.0	9.107	318.0	9.312	319.0	9.522
320.0	9.734	321.0	9.950	322.0	10.170	323.0	10.393	324.0	10.619
325.0	10.849	326.0	11.082	327.0	11.319	328.0	11.560	329.0	11.804
330.0	12.052	331.0	12.304	332.0	12.559	333.0	12.818	334.0	13.081
335.0	13.347	336.0	13.618	337.0	13.892	338.0	14.170	339.0	14.452
340.0	14.738	341.0	15.028	342.0	15.322	343.0	15.620	344.0	15.922
345.0	16.228	346.0	16.539	347.0	16.853	348.0	17.171	349.0	17.494
350.0	17.821	351.0	18.152	352.0	18.487	353.0	18.827	354.0	19.171
355.0	19.519	356.0	19.871	357.0	20.228	358.0	20.590	359.0	20.955
360.0	21.326	361.0	21.700	362.0	22.080	363.0	22.463	364.0	22.851
365.0	23.244	366.0	23.642	367.0	24.044	368.0	24.450	369.0	24.862

1.4 WV2 Temperature/Radiance Conversion Table

Planck Function weighted with Filter Function (90 K) for the Meteosat-7 WV2 channel.
 Temperature in K, radiance in $W m^{-2} sr^{-1}$

Temp	Rad	Temp	Rad	Temp	Rad	Temp	Rad	Temp	Rad
170.0	0.020	171.0	0.022	172.0	0.024	173.0	0.026	174.0	0.028
175.0	0.030	176.0	0.032	177.0	0.034	178.0	0.037	179.0	0.039
180.0	0.042	181.0	0.045	182.0	0.048	183.0	0.051	184.0	0.055
185.0	0.059	186.0	0.063	187.0	0.067	188.0	0.071	189.0	0.076
190.0	0.080	191.0	0.085	192.0	0.091	193.0	0.096	194.0	0.102
195.0	0.108	196.0	0.115	197.0	0.122	198.0	0.129	199.0	0.136
200.0	0.144	201.0	0.152	202.0	0.161	203.0	0.170	204.0	0.179
205.0	0.189	206.0	0.199	207.0	0.210	208.0	0.221	209.0	0.232
210.0	0.244	211.0	0.257	212.0	0.270	213.0	0.284	214.0	0.298
215.0	0.313	216.0	0.328	217.0	0.344	218.0	0.361	219.0	0.378
220.0	0.396	221.0	0.414	222.0	0.434	223.0	0.454	224.0	0.474
225.0	0.496	226.0	0.518	227.0	0.541	228.0	0.565	229.0	0.590
230.0	0.615	231.0	0.642	232.0	0.669	233.0	0.697	234.0	0.726
235.0	0.756	236.0	0.788	237.0	0.820	238.0	0.853	239.0	0.887
240.0	0.922	241.0	0.959	242.0	0.996	243.0	1.035	244.0	1.074
245.0	1.115	246.0	1.158	247.0	1.201	248.0	1.246	249.0	1.292

250.0	1.339	251.0	1.388	252.0	1.438	253.0	1.489	254.0	1.542
255.0	1.596	256.0	1.652	257.0	1.709	258.0	1.768	259.0	1.828
260.0	1.890	261.0	1.953	262.0	2.019	263.0	2.085	264.0	2.154
265.0	2.224	266.0	2.296	267.0	2.370	268.0	2.445	269.0	2.522
270.0	2.602	271.0	2.683	272.0	2.766	273.0	2.851	274.0	2.937
275.0	3.026	276.0	3.117	277.0	3.210	278.0	3.305	279.0	3.402
280.0	3.502	281.0	3.603	282.0	3.707	283.0	3.813	284.0	3.921
285.0	4.031	286.0	4.144	287.0	4.259	288.0	4.377	289.0	4.497
290.0	4.619	291.0	4.744	292.0	4.871	293.0	5.001	294.0	5.133
295.0	5.268	296.0	5.406	297.0	5.546	298.0	5.689	299.0	5.835
300.0	5.983	301.0	6.134	302.0	6.288	303.0	6.445	304.0	6.605
305.0	6.767	306.0	6.933	307.0	7.101	308.0	7.272	309.0	7.447
310.0	7.624	311.0	7.805	312.0	7.988	313.0	8.175	314.0	8.365
315.0	8.558	316.0	8.754	317.0	8.953	318.0	9.156	319.0	9.362
320.0	9.571	321.0	9.784	322.0	10.000	323.0	10.219	324.0	10.442
325.0	10.669	326.0	10.899	327.0	11.132	328.0	11.369	329.0	11.610
330.0	11.854	331.0	12.101	332.0	12.353	333.0	12.608	334.0	12.867
335.0	13.130	336.0	13.396	337.0	13.666	338.0	13.940	339.0	14.218
340.0	14.500	341.0	14.786	342.0	15.075	343.0	15.369	344.0	15.666
345.0	15.968	346.0	16.274	347.0	16.583	348.0	16.897	349.0	17.215
350.0	17.537	351.0	17.863	352.0	18.194	353.0	18.528	354.0	18.867
355.0	19.211	356.0	19.558	357.0	19.910	358.0	20.266	359.0	20.626
360.0	20.991	361.0	21.361	362.0	21.734	363.0	22.113	364.0	22.495
365.0	22.883	366.0	23.274	367.0	23.671	368.0	24.072	369.0	24.477