



**HELIOS** RENEWABLE  
ENERGY  
PROJECT

# **Preliminary Environmental Information Report**

**Volume 3: Technical Appendices**

Appendix 12.10: Annual Cloud Anomaly

header length	16						
Area	462500.0 412500.0						
Baseline	1981-2000						
Data Source	Land probabilistic projections						
Data Type	cdf						
Scenario	RCP 8.5						
Show Labels	TRUE						
Software Version	WPS-2.8.0-DP-2.8.0-CV-1.0.10						
Spatial Representation	25km grid						
Temporal Average Type	Annual						
Time Period	annual						
Time Slice Type	1-year time slices						
Variable	Total cloud anomaly (%)						
Year Maximum	2066						
Year Minimum	2023						
Date	Total cloud	Total cloud	Total cloud	Total cloud	Total cloud	Total cloud	Total cloud anomaly (%) (95th Percentile)
01/06/2023	-8.59431	-6.75892	-3.83004	-0.61624	2.355876	4.835736	6.261724
01/06/2024	-8.63655	-6.80658	-3.87338	-0.65554	2.330463	4.824342	6.259689
01/06/2025	-8.68391	-6.85845	-3.91954	-0.69673	2.303342	4.812059	6.257282
01/06/2026	-8.73663	-6.91451	-3.96846	-0.73985	2.274393	4.798745	6.254384
01/06/2027	-8.7949	-6.9747	-4.02004	-0.7849	2.243517	4.784275	6.250896
01/06/2028	-8.85883	-7.03892	-4.07416	-0.83188	2.210654	4.768557	6.246737
01/06/2029	-8.92847	-7.10707	-4.1307	-0.88075	2.175782	4.75153	6.241854
01/06/2030	-9.00384	-7.179	-4.18952	-0.93145	2.138921	4.733178	6.236219
01/06/2031	-9.08485	-7.25457	-4.25047	-0.98388	2.100142	4.713523	6.229836
01/06/2032	-9.17141	-7.33361	-4.31341	-1.03794	2.059558	4.692637	6.222732
01/06/2033	-9.26335	-7.41596	-4.3782	-1.09346	2.01733	4.670628	6.214964
01/06/2034	-9.36047	-7.50146	-4.44471	-1.15031	1.973654	4.647649	6.206616
01/06/2035	-9.46252	-7.58995	-4.51283	-1.20829	1.92876	4.623885	6.19779
01/06/2036	-9.56921	-7.68128	-4.58247	-1.26725	1.882899	4.599546	6.188605
01/06/2037	-9.68024	-7.7753	-4.65357	-1.327	1.836335	4.574864	6.179195
01/06/2038	-9.79526	-7.87187	-4.72608	-1.38741	1.789331	4.550077	6.169696
01/06/2039	-9.91393	-7.9709	-4.8	-1.44833	1.742139	4.525416	6.160245
01/06/2040	-10.0359	-8.07227	-4.87537	-1.50966	1.694992	4.501104	6.150966
01/06/2041	-10.1607	-8.1759	-4.95224	-1.57136	1.648085	4.477332	6.141969
01/06/2042	-10.2881	-8.28173	-5.03073	-1.63339	1.601576	4.454257	6.133337
01/06/2043	-10.4177	-8.3897	-5.11095	-1.69578	1.555571	4.431991	6.125123
01/06/2044	-10.5491	-8.49975	-5.19307	-1.75863	1.510124	4.410592	6.117345
01/06/2045	-10.682	-8.61187	-5.27726	-1.82204	1.465234	4.390067	6.109985
01/06/2046	-10.8162	-8.72601	-5.36371	-1.88619	1.420843	4.370363	6.102987
01/06/2047	-10.9513	-8.84215	-5.4526	-1.95128	1.376843	4.351377	6.09626
01/06/2048	-11.0871	-8.96026	-5.54409	-2.01752	1.333077	4.332954	6.089683
01/06/2049	-11.2235	-9.0803	-5.63836	-2.08517	1.289352	4.314899	6.083109
01/06/2050	-11.3604	-9.20225	-5.73551	-2.15445	1.245445	4.296979	6.076372
01/06/2051	-11.4976	-9.32605	-5.83563	-2.22561	1.201111	4.278937	6.069288
01/06/2052	-11.6352	-9.45166	-5.93876	-2.29886	1.156092	4.260496	6.061665
01/06/2053	-11.7731	-9.57901	-6.04487	-2.37436	1.110128	4.241365	6.0533
01/06/2054	-11.9114	-9.70804	-6.1539	-2.45228	1.062962	4.221249	6.043984
01/06/2055	-12.0501	-9.83865	-6.26572	-2.53271	1.014341	4.199848	6.033501
01/06/2056	-12.1893	-9.97075	-6.38014	-2.61569	0.964027	4.176862	6.021625
01/06/2057	-12.3292	-10.1042	-6.49694	-2.70124	0.911792	4.151996	6.008122
01/06/2058	-12.4697	-10.2389	-6.61585	-2.78932	0.857426	4.124958	5.992745
01/06/2059	-12.6111	-10.3746	-6.73655	-2.87986	0.800736	4.095466	5.97524
01/06/2060	-12.7532	-10.5112	-6.85873	-2.97273	0.741548	4.063248	5.95534
01/06/2061	-12.8962	-10.6485	-6.98203	-3.0678	0.679711	4.028049	5.932777
01/06/2062	-13.04	-10.7862	-7.1061	-3.16489	0.615102	3.989636	5.90728
01/06/2063	-13.1845	-10.9242	-7.23059	-3.26381	0.547624	3.9478	5.878587
01/06/2064	-13.3296	-11.0621	-7.35519	-3.36437	0.477215	3.90237	5.846448
01/06/2065	-13.4752	-11.1998	-7.47958	-3.46637	0.403845	3.853208	5.810641