

February 2018 Gridded Data Inventory

The gridded data sets listed below are available for no additional charge to SuperPack®-Premium users on a reasonable request basis. These data sets can be accessed directly by users of the Speedwell Weather System via API. We are continuously adding gridded data and this list will therefore be updated on a regular basis. Please contact us for further information relating to the provision of Settlement Data based on gridded data.

* published as of Feb 1, 2018



Speedwell Processed Datasets									
Data Element Name	Data Provider Name	Brief description	Region / Resolution	Earliest Data	Daily/ Hourly?	Latest Data *	Measure Units	Update frequency	
Rain : ARC2 : 0.1 x 0.1 : Africa	NOAA Climate prediction Centre (CPC)	Africa region rainfall climatology using 3 hourly infrared satellite imagery (EU METSAT) and hourly/ 24 hour rainfall totals from WMO reporting rain gauges (GTS).	Africa	02/Jan/1983	Daily	30/Jan/2018	mm	3 days	
Rain : Australian Rainfall Analysis Revised Final : 0.05 x 0.05 : Australia	Bureau of Meteorology (Australia)	Reanalysis of quality controlled surface rainfall observations, projected to a regular grid. Series is revised over time as further improvements in data quality applied.	Australia: 5km x 5km	01/Jan/1900	Daily	30/Jan/2018	mm	2 days	
Temp Max : Australian Maximum Temperature : 0.05 x 0.05 : Australia	Bureau of Meteorology (Australia)	Daily TMax based on reanalysis of quality controlled surface maximum temperature observations, projected to a regular grid with topographic correction for the estimated temperatures.	Australia: 5km x 5km	01/Jan/1911	Daily	30/Jan/2018	C	2 days	
Temp Min : Australian Minimum Temperature : 0.05 x 0.05 : Australia	Bureau of Meteorology (Australia)	Daily TMin based on reanalysis of quality controlled surface minimum temperature observations, projected to a regular grid with topographic correction for the estimated temperatures.	Australia: 5km x 5km	01/Jan/1911	Daily	30/Jan/2018	C	2 days	
Surface Solar Radiation Downwards : Australian Global Solar Exposure : 0.05 x 0.05 : Australia	Bureau of Meteorology (Australia)	A model generated history of downward irradiance at the ground. Daily values based on underlying hourly data derived from satellite data and hourly cloud albedo.	Australia: 5km x 5km	01/Jan/1990	Daily	30/Jan/2018	MJ/m2	2 days	
Rain : CHIRPS 2.0 : 0.05 x 0.05 : Global	Climate Hazards Group (CHG)	A global rainfall estimate, derived from satellite imagery using algorithms to estimate rainfall at the surface based upon cloud top temperatures.	Global	01/Jan/1981	Daily	30/Jan/2018	mm	2 days	
Rain : Regnie Project : 1km x 1km : Germany	Deutscher Wetterdienst (DWD)	German gridded daily rain.	Germany: 1km x 1km	01/Jan/1931	Daily	29/Jan/2018	mm	2 days	
Hourly Dewpoint : ERA Interim : 0.75 x 0.75 : Global	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75 * 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	K	3 months	
Mean Sea Level Pressure : ERA Interim : 0.75 x 0.75 : Global	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75 * 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	Pa	3 months	
Hourly Mean Wave Direction : ERA Interim : 0.75 x 0.75 : Global minus poles	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75 * 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	degrees	3 months	
Hourly Sea Surface Temperature : ERA Interim : 0.75 x 0.75 : Global	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75 * 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	K	3 months	
Hourly Significant Wave Height and Swell : ERA Interim : 0.75 x 0.75 : Global minus poles	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75 * 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	m	3 months	
Hourly Snow Depth (Water) : ERA Interim : 0.75 x 0.75 : Global	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75 * 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	m	3 months	
Hourly Soil Temperature Layer 1 : ERA Interim : 0.75 x 0.75 : Global	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75 * 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	K	3 months	
Hourly Soil Temperature Layer 2 : ERA Interim : 0.75 x 0.75 : Global	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75 * 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	K	3 months	
Hourly Soil Temperature Layer 3 : ERA Interim : 0.75 x 0.75 : Global	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75 * 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	K	3 months	
Hourly Soil Temperature Layer 4 : ERA Interim : 0.75 x 0.75 : Global	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75 * 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	K	3 months	
Hourly Surface Pressure : ERA Interim : 0.75 x 0.75 : Global	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75 * 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	Pa	3 months	
Surface solar radiation downwards	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75 * 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	J m**2	3 months	
Hourly Temperature 2m : ERA Interim : 0.75 x 0.75 : Global	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75 * 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	K	3 months	
Hourly Temp Max : ERA Interim : 0.75 x 0.75 : Global	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75 * 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	K	3 months	
Hourly Temp Min : ERA Interim : 0.75 x 0.75 : Global	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75 * 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	K	3 months	
Hourly Total Precipitation : ERA Interim : 0.75 x 0.75 : Global	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75 * 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	m	3 months	
Hourly Volumetric Soil Water Layer 1 : ERA Interim : 0.75 x 0.75 : Global	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75 * 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	m**3 m**3	3 months	
Hourly Volumetric Soil Water Layer 2 : ERA Interim : 0.75 x 0.75 : Global	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75 * 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	m**3 m**3	3 months	
Hourly Volumetric Soil Water Layer 3 : ERA Interim : 0.75 x 0.75 : Global	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75 * 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	m**3 m**3	3 months	
Hourly Volumetric Soil Water Layer 4 : ERA Interim : 0.75 x 0.75 : Global	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75 * 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	m**3 m**3	3 months	
Hourly Wind 10m Direction : ERA Interim : 0.75 x 0.75 : Global	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75 * 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	degrees	3 months	

Data Element Name	Data Provider Name	Brief description	Region / Resolution	Earliest Data	Daily/ Hourly?	Latest Data *	Measure Units	Update frequency
Hourly Wind 10m Speed : ERA Interim : 0.75 x 0.75 : Global	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75° x 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	m/s	3 months
Hourly Wind 10m U Component : ERA Interim : 0.75 x 0.75 : Global	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75° x 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	m/s	3 months
Hourly Wind 10m V Component : ERA Interim : 0.75 x 0.75 : Global	ECMWF	The data assimilation system used to produce ERA-Interim is based on a 2006 release of the IFS (Cy31r2). The system includes a 4-dimensional variational analysis (4D-Var) with a 12-hour analysis window.	Global: 0.75° x 0.75 degree	01/Jan/1979	Hourly	31/Oct/2017	m/s	3 months
NDVI : MOD13C1 : 0.05 x 0.05 : Global land only	NASA Earth Observation System (EOS)	Global 16-day composite of the MODIS Enhanced Vegetation Index (EVI) included in the MOD13C1 product	Global: 5km x 5km	18/Feb/2000	16days	17/Nov/2017	NDVI	1 month
Sea Surface Temperature : L4 OSTIA : 6km x 6km : Global	UK Met Office	Global SST & Sea Ice Analysis, L4 OSTIA, 0.05 deg daily	Global: 0.05 x 0.05 deg	01/Jan/2007	daily	30/Jan/2018	K	2 days
Total Precipitation : NOAA : 0.5 x 0.5 : Global	NOAA Climate prediction Centre (CPC)	CPC Unified Gauge-Based Analysis of Global Daily Precipitation Project.	Global: 0.5 x 0.5 degrees	01/Jan/1979	Daily	30/Jan/2018	mm	2 days

Speedwell Derived Datasets

Data Element Name	Data Provider Name	Brief description	Region / Resolution	Earliest Data	Daily/ Hourly?	Latest Data	Measure Units	Update frequency
Wind 10 m, 50 m and 100 m : Speedwell (MERRA2) : 0.05 x 0.05	Speedwell (based on MERRA2)	A proprietary Speedwell derived gridded data set giving wind at a heights of 10, 50 and 100 m	South America: 5km x 5km United States: 5km x 5km	01/Jan/1980	Daily	31/Dec/2017	m/s	1.5 months
Wind 10m Direction : Speedwell (MERRA2) : 0.05 x 0.05 : Europe	Speedwell (based on MERRA2)	A proprietary Speedwell derived gridded data set giving wind at 10 m.	Europe: 5km x 5km	01/Jan/1980	Daily	31/Dec/2017	m/s	1.5 months
Temp T24 Ave : Speedwell (MERRA2) : 0.05 x 0.05	Speedwell (based on MERRA2)	A proprietary Speedwell derived gridded data set giving Tave24 (Tmean) (Average of 24 hourly spot temperature readings) at 2m.	Europe: 5km x 5km South America: 5km x 5km	01/Jan/1980	Daily	31/Dec/2017	°C	1.5 months
Temp Max : Speedwell (MERRA2) : 0.05 x 0.05	Speedwell (based on MERRA2)	A proprietary Speedwell derived gridded data set giving TMax at 2m.	Europe: 5km x 5km South America: 5km x 5km	01/Jan/1980	Daily	31/Dec/2017	°C	1.5 months
Temp Min : Speedwell (MERRA2) : 0.05 x 0.05	Speedwell (based on MERRA2)	A proprietary Speedwell derived gridded data set giving TMin at 2m.	Europe: 5km x 5km South America: 5km x 5km	01/Jan/1980	Daily	31/Dec/2017	°C	1.5 months
Total Precipitation : Speedwell (MERRA2) : 0.05 x 0.05	Speedwell (based on MERRA2)	A proprietary Speedwell derived gridded data set giving accumulated precipitation.	Europe: 5km x 5km South America: 5km x 5km	01/Jan/1980	Daily	31/Dec/2017	mm	1.5 months
Wind Direction 10 m, 50 m and 100 m : Speedwell (MERRA2) : 0.05 x 0.05	Speedwell (based on MERRA2)	A proprietary Speedwell derived gridded data set giving wind direction at 10, 50m and 100m	South America: 5km x 5km	01/Jan/1980	Daily	31/Dec/2017	degrees	1.5 months
Surface Solar Radiation Downwards : Speedwell (MERRA2) : 0.05 x 0.05	Speedwell (based on MERRA2)	A proprietary Speedwell derived gridded data set providing surface solar radiation downwards (short wave).	South America: 5km x 5km	01/Jan/1980	Daily	31/Dec/2017	J/cm2	1.5 months
Wind 80m Speed : Speedwell (ERA) : 0.05 x 0.05	Speedwell (based on ERA Interim)	Global proprietary Speedwell derived gridded data set providing wind speed at 80m.	Europe: 5km x 5km Global: 16km x 16km	01/Jan/1979	Daily	31/Oct/2017	m/s	3 months
Wind Direction 80 m : Speedwell (ERA) : 0.05 x 0.05	Speedwell (based on ERA Interim)	Global proprietary Speedwell derived gridded data set providing wind direction at 80m.	Europe: 5km x 5km Global: 16km x 16km	01/Jan/1979	Daily	31/Oct/2017	degrees	3 months
Hourly Significant Wave Height and Swell : Speedwell (ERA) : 0.05 x 0.05	Speedwell (based on ERA Interim)	A proprietary Speedwell derived gridded data set providing wave height data.	Europe: 5km x 5km Global: 16km x 16km	01/Jan/1979	6-hourly	31/Oct/2017	m	3 months
Hourly Mean Wave Direction : Speedwell (ERA) : 0.05 x 0.05	Speedwell (based on ERA Interim)	A proprietary Speedwell derived gridded data set providing wave direction data.	Europe: 5km x 5km Global: 16km x 16km	01/Jan/1979	6-hourly	31/Oct/2017	degrees	3 months
Hourly Mean Wave Period : Speedwell (ERA) : 0.05 x 0.05	Speedwell (based on ERA Interim)	A proprietary Speedwell derived gridded data set providing wave period data.	Europe: 5km x 5km Global: 16km x 16km	01/Jan/1979	6-hourly	31/Oct/2017	s	3 months
Surface Solar Radiation Downwards : Speedwell (ERA) : 0.05 x 0.05	Speedwell (based on ERA Interim)	A proprietary Speedwell derived gridded data set providing surface solar radiation downwards (short wave).	Asia: 5km x 5km Europe: 5km x 5km United States: 5km x 5km	01/Jan/1979	Daily	31/Oct/2017	J/cm2	3 months
Wind 10m Speed : Speedwell (ERA) : 0.05 x 0.05 : Asia	Speedwell (based on ERA Interim)	A proprietary Speedwell derived gridded data set giving wind at 10m.	Asia: 5km x 5km	01/Jan/1980	Daily	31/Oct/2017	m/s	3 months
Temp T24 Ave : Speedwell (ERA) : 0.05 x 0.05 : Asia	Speedwell (based on ERA Interim)	A proprietary Speedwell derived gridded data set giving Tave24 (Tmean) (Average of 24 hourly spot temperature readings) at 2m.	Asia: 5km x 5km	01/Jan/1980	Daily	31/Oct/2017	°C	3 months
Temp Max : Speedwell (ERA) : 0.05 x 0.05 : Asia	Speedwell (based on ERA Interim)	A proprietary Speedwell derived gridded data set giving TMax at 2m.	Asia: 5km x 5km	01/Jan/1980	Daily	31/Oct/2017	°C	3 months
Temp Min : Speedwell (ERA) : 0.05 x 0.05 : Asia	Speedwell (based on ERA Interim)	A proprietary Speedwell derived gridded data set giving TMin at 2m.	Asia: 5km x 5km	01/Jan/1980	Daily	31/Oct/2017	°C	3 months
Total Precipitation : Speedwell (ERA) : 0.05 x 0.05 : Asia	Speedwell (based on ERA Interim)	A proprietary Speedwell derived gridded data set giving accumulated precipitation.	Asia: 5km x 5km	01/Jan/1980	Daily	31/Oct/2017	mm	3 months