Instruments (Surface Synoptic Data at Syowa Station)

DATA	Air Pressure			Air Temperature					Humidity			Wind speed		Wind direction		Sunshine duration		Global solar radiation	
YEAR	Instrument		Height above sea level(m)	Instrument				Height above ground level(m)	Instrument		Height above ground level(m)	Instrument	Height above ground level(m)	Instrument	Height above ground level(m)	Instrument	Height above sea level(m)	Instrument	Height above sea level(m)
1957	Fortin	Aneroid	14.5	Mercury	Mercury (Maximum	Alcohol (Minimum	Bimetal	1.5	Psychrometer	Hair hygrograph	1.5	3-cups	5	Vane	5	Campbell	17		
1958																			
1959	Fortin	Aneroid	14.5	Mercury	Mercury (Maximum	Alcohol (Minimum	Bimetal	1.5	Psychrometer	Hair hygrograph	1.5	3-cups	5	Aerovane	5	Campbell	17		
1960	Fortin	Aneroid	14.5	Mercury	Mercury (Maximum	Alcohol (Minimum	Bimetal	1.5	Psychrometer	Hair hygrograph	1.5	3-cups	5	Aerovane	5	Campbell	17		
1961	Fortin	Aneroid	14.5	Mercury	Mercury (Maximum	Alcohol (Minimum	Bimetal	1.5	Psychrometer	Hair hygrograph	1.5	3-cups	5	Aerovane	5	Campbell	17		
1962																			
1963																			
1964																			
1965																			
1966	Station	Aneroid	14.5	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Campbell	17	Gortzinski	17
1967	Station	Aneroid	14.5	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Campbell	17	Gortzinski	17
1968	Station	Aneroid	14.5	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Campbell	17	Gortzinski	17
1969	Station	Aneroid	14.5	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Campbell	17	Gortzinski	17
1970	Station	Aneroid	14.5	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Campbell	17	Gortzinski	17
1971	Station	Aneroid	14.5	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Campbell	17	Gortzinski	17
1972	Station	Aneroid	14.5	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Campbell	17	Gortzinski	17
1973	Station	Aneroid	20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Campbell	17	Gortzinski	17
1974	Station	Aneroid	20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Campbell	17	Gortzinski	24
1975	Station	Aneroid	20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Campbell	17	Gortzinski	24
1976	Station	Aneroid	20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Campbell	17	Gortzinski	24
1977	Station	Aneroid	20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Campbell	17	Gortzinski	24
1978	Station	Aneroid	20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Campbell	17	Gortzinski	24
1979	Station	Aneroid	20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Campbell	17	Gortzinski	24
1980	Station	Aneroid	20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Campbell	17	Gortzinski	24
1981	Station	Aneroid	20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Slit rotating	30	Pyranometer	24
1982	Station	Aneroid	20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Slit rotating	30	Pyranometer	24
1983	Station	Aneroid	20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Slit rotating	30	Pyranometer	24
1984	Station	Aneroid	20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Slit rotating	30	Pyranometer	24
1985	Station	Aneroid	20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Slit rotating	30	Pyranometer	24
1986	Station	Aneroid	20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Slit rotating	30	Pyranometer	24
1987	Station	Aneroid	20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Slit rotating	30	Pyranometer	24
1988	Station	Aneroid	20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Rotating	30	Pyranometer	24
1989	Vibrating cylinder	Aneroid	20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Rotating	30	Pyranometer	24
1990	Vibrating cylinder	Aneroid	20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Rotating	30	Pyranometer	24
1991	Vibrating cylinder	Aneroid	20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10	Aerovane	10	Rotating	30	Pyranometer	24
1992	Vibrating cylinder	Aneroid	20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10.1	Aerovane	10.1	Rotating	30	Pyranometer	24
1993	Vibrating cylinder	Aneroid	20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10.1	Aerovane	10.1	Rotating	30	Pyranometer	24
1994	Vibrating cylinder		20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10.1	Aerovane	10.1	Rotating	1.5* (Hata-daichi**)	Pyranometer	
1995	Vibrating cylinder		20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10.1	Aerovane	10.1	Rotating	1.5* (Hata-daichi**)	Pyranometer	
1996	Vibrating cylinder		20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10.1	Aerovane	10.1	Rotating	1.5* (Hata-daichi**)	Pyranometer	
1997	Vibrating cylinder		20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10.1	Aerovane	10.1	Rotating	1.5* (Hata-daichi**)	Pyranometer	6.5*
1998	Vibrating cylinder		20.7	Platinum resistance				1.5	Dewcel		1.5	Aerovane	10.1	Aerovane	10.1	Rotating	1.5* (Hata-daichi**)	Pyranometer	6.5*
1999	Electronic barometer		20.7	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	10.1	Aerovane	10.1	Automated tracking sunshine recorder	6.0*	Pyranometer	6.5*
2000	Electronic barometer		20.7	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	10.1	Aerovane	10.1	Automated tracking sunshine recorder	1.0* (Hata-daichi**)	Pyranometer	1.5* (Hata-daichi**)
2001	Electronic barometer		20.7	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	10.1	Aerovane	10.1	Automated tracking sunshine recorder	1.0* (Hata-daichi**)	Pyranometer	1.5* (Hata-daichi**)
2002	Electronic barometer		20.7	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	10.1	Aerovane	10.1	Automated tracking sunshine recorder	1.0* (Hata-daichi**)	Pyranometer	1.5* (Hata-daichi**)
2003	Electronic barometer		20.7	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	10.1	Aerovane	10.1	Automated tracking sunshine recorder	1.0* (Hata-daichi**)	Pyranometer	1.5* (Hata-daichi**)
2004	Electronic barometer		20.7	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	10.1	Aerovane	10.1	Automated tracking sunshine recorder	1.0* (Hata-daichi**)	Pyranometer	1.5* (Hata-daichi**)
2005	Electronic barometer		20.7	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	10.1	Aerovane	10.1	Automated tracking sunshine recorder	1.0* (Hata-daichi**)	Pyranometer	1.5* (Hata-daichi**)
2006	Electronic barometer		21.8	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	10.1	Aerovane	10.1	Automated tracking sunshine recorder	1.0* (Hata-daichi**)	Pyranometer	1.5* (Hata-daichi**)
2007	Electronic barometer		21.8	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	10.1	Aerovane	10.1	Automated tracking sunshine recorder	1.0* (Hata-daichi**)	Pyranometer	1.5* (Hata-daichi**)
2008	Electronic barometer		21.8	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	10.1	Aerovane	10.1	Automated tracking sunshine recorder	1.0* (Hata-daichi**)	Pyranometer	1.5* (Hata-daichi**)
2009	Electronic barometer		21.8	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	10.1	Aerovane	10.1	Automated tracking sunshine recorder	1.0* (Hata-daichi**)	Pyranometer	1.5* (Hata-daichi**)
2010	Electronic barometer		21.8	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	10.1	Aerovane	10.1	Automated tracking sunshine recorder	1.0* (Hata-daichi**)	Pyranometer	1.5* (Hata-daichi**)
2011	Electronic barometer		21.8	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	10.1	Aerovane	10.1	Automated tracking sunshine recorder	1.0* (Hata-daichi**)	Pyranometer	1.5* (Hata-daichi**)
2012	Electronic barometer		21.8	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	10.1	Aerovane	10.1	Automated tracking sunshine recorder	1.0* (Hata-daichi**)	Pyranometer	1.5* (Hata-daichi**)
2013	Electronic barometer		21.8	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	10.1	Aerovane	10.1	Automated tracking sunshine recorder	1.0* (Hata-daichi**)	Pyranometer	1.5* (Hata-daichi**)
2014	Electronic barometer		21.8	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	10.1	Aerovane	10.1	Automated tracking sunshine recorder	1.0* (Hata-daichi**)	Pyranometer	1.5* (Hata-daichi**)
2015	Electronic barometer		21.8	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	10.1	Aerovane	10.1	Automated tracking sunshine recorder	1.0* (Hata-daichi**)	Pyranometer	1.5* (Hata-daichi**)
2016	Electronic barometer		21.7 (21.8 January)	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	11.3 (10.1 January	Aerovane	11.3 (10.1 January	Rotating mirror	6.0* (1.0* January)	Pyranometer	6.0* (1.0* January)
2017	Electronic barometer		21.7	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	11.3	Aerovane	11.3	Rotating mirror	6.0*	Pyranometer	6.0*
2018	Electronic barometer		21.7	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	11.3	Aerovane	11.3	Rotating mirror	11.7* (6.0* from January to 12th April)	Pyranometer	11.7* (6.0* from January to 12th April)
2019	Electronic barometer		25.5 (21.7 from January to 2nd December	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	11.3	Aerovane	11.3	Rotating mirror	11.7*	Pyranometer	11.7*
2020	Electronic barometer		25.5	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	11.3	Aerovane	11.3	Rotating mirror	11.7*	Pyranometer	11.7*
2021	Electronic barometer		25.5	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	11.3	Aerovane	11.3	Rotating mirror	11.7*	Pyranometer	11.7*
2022	Electronic barometer		25.5	Platinum resistance				1.5	Electronic hygrometer		1.5	Aerovane	11.3	Aerovane	11.3	Rotating mirror	11.7*	Pyranometer	11.7*

* Height above ground level(m).

** Hata-daichi is a small hill where the instruments are located on.