WEB Telescope Participants By Longitude

This list is ordered by longitude from east to west starting at the International Date Line.

Mount Stromlo and Siding Spring Observatories

Canberra, Australia

WEBT observations are possible at MSSSO.

Telescope parameters: Long= +149.066 deg, Lat= -31.277 deg (for the AAT), Alt= 1164 m

Optical configuration: Cassegrain f/8, D= 1.0 m; Seeing_typical= 1.5 - 3”; Skybrightness_typical (dark sky)= V=21.5 mag/arcsec^2; Skybrightness_typical (6-day moon)= V=20.8 mag/arcsec^2;

CCD camera: SITE CCD, 2048x2048 pixels, 24 um pixels, readout noise ~12 e-;

Filters: Cousins-Johnson U,B,V; Cousins R,I

Ouda Station

Japan

WEBT observations at Ouda Station are done by Katsura Matsumoto from Kyoto University.

Telescope parameters: Long= +135.9558 deg, Lat= +34.4671 deg, Alt= 388.5 m

Optical configuration: Ritchy-Chretien F/8, D= 0.6 m

CCD camera: Photometrics Ltd., Liquid-Nitrogen cooled; CCD chip: Thompson TH7882CDA, 576x384 pixels, 23x23 um pixel width; Field: 6.4x8.8 arcmin;

Filters: Johnson B, V, Kron-Cousins R c, I c.

Korea Astronomy & Space Science Institute

Sobaek Telescope, Mt. Sobaek, Korea

WEBT observations are done at the Sobaek Telescope by the blazar research group of the Korea Astronomy & Space Science Institute. The group members are Chung-Uk Lee (leecu@kao.re.kr), Hong-Suh Yim (yimhs@kao.re.kr), Soojong Pak (soojong@kao.re.kr), and Bong-Won Sohn (bwsohn@trao.re.kr).

Telescope parameters: Long=+128 27 27.36, Lat=+36 56 03.89, Alt=1377.99m
The Whole Earth Blazar Telescope

**Xinglong Observatory**

**China**

WEBT observations at the Xinglong station of the Beijing Astronomical Observatory are done by Jingyao Hu and Jianyan Wei.

**Telescope parameters**: Long= -117.5750 deg; Lat= +40.3933 deg; Alt= 950 m; Loc_time= UTC+8;

Optical configuration: Newtonian, D= 0.6 m, f/D= 4.23; Seeing_typical= 2", Skybrightness_typical= V=21.04 mag/arcsec^2;

CCD camera: Texas Instruments, CCD chip: TI-215, 1024x1024 pixels, 12x12 um pixel width.

Filters: Johnson B (GG385(2mm) + BG12(1mm) + BG18(1mm) + UG3(2mm)), Johnson V (GG495(2mm) + BG20(2mm) + KG3(2mm)); Johnson R (RG610(2mm) + BG20(2mm) + KG3(2mm)); Johnson I (RG9(3mm)).

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**Indian Astronomical Observatory**

**Hanle, Ladakh, India**

WEBT observations at the Indian Astronomical Observatory of the Indian Institute of Astrophysics are done by Prajval Shastri (pshastri@iiap.res.in) and Ashok Pati (pati@iiap.res.in) from the Indian Institute of Astrophysics in Bangalore.

**Telescope parameters**: Long= +78d57m51s; Lat= +32d46m46s N; Alt= 4500 m;

Optical configuration: D= 2 m, median seeing: ~1"

Optical CCD camera: 1Kx1K, fov: 17 X 17 arcmin

Filters: UBVRI

Near-IR CCD camera: HgCdTe array: 512x512, fov: 1.8 x 1.8

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**Vainu Bappu Observatory**

**Kavalur, India**

WEBT observations at the VBO Observatory are done by Prajval Shastri (pshastri@iiap.res.in) and Ashok Pati (pati@iiap.res.in) from the Indian Institute of Astrophysics in Bangalore.
Mount Maidanak Observatory

Uzbekistan, FSU

WEBT observations at Mt. Maidanak Observatory are done by the group of Mansur Ibrahimov (mansur@astrin.uzsci.net) from the Ulugh Beg Astronomical Institute, Tashkent, Uzbekistan.

Two telescopes are included in the WEBT project: 1.5 m and 0.6 m (UBVRI CCD observations and diaphragm UBVR photoelectric observations, respectively). Typical diaphragms for the photoelectric observations are 17" and 27".

Telescopes parameters: Long= +66.8964 deg, Lat= +38.6733 deg (for 1.5m telescope), Alt= 2593 m, Seeing typical: 0.67"

Optical configuration: Ritchy-Chretien f/7.74, D=1.5 m; Cassegrain f/12.5, D=0.6 m

CCD camera: SITe CCD, 2048x800 pixels, 15 mkm pixels, liquid nitrogen cooling, readout noise 5.3 e-, fov 8.5x3.5 arcmin.

Filters: Bessel UBVRI for CCD observations, Johnson UBVR for photoelectric observations.

Abastumani Astrophysical Observatory

Georgia, FSU

WEBT observations at the Abastumani Observatory are done by Omar Kurtanidze and Maria Nikolashvili.

Telescope parameters: Long= +42.8 deg, Lat= +41.8 deg, Alt= 1700m;

Optical configuration: Meniscus f/3., D= 0.70 m

CCD camera: STS-6, gain ~7, readout noise ~30 e-;

Filters: nearly Johnson R - two glasses from former SU (3mm OS13, 50% at 5700A + 6.4mm SZS14) (Bessel).

Crimean Astrophysical Observatory

Ukraine, FSU
WEBT observations at the Crimean Astrophysical Observatory (CrAO) are done by George Borman (borman@crao.crimea.ua).

Telescope parameters: Long=+34.013 deg, Lat=+44.727 deg, Alt 600 m, typical seeing=2''

Optical configuration: Prime focus f/4, D = 0.70 m

CCD camera: Apogee AP7p 512x512 pixels, 24x24 um pixel size, scale 1.755 arcsec per pixel, field of view: 15'x15'

Filters: Johnson BV, Cousins RI.

Jakokoski Observatory (amateur)

Finland

Observations at the Jakokoski Observatory are done by Pertti Pääkkönen (pertti.paakkonen@joensuu.fi) and Tommi Itkonen (titkonen@hotmail.com).

Telescope parameters: Long=+29.9969 deg, Lat=+62.7275 deg, Alt=155 m Seeing typical: 3''

Optical configuration: Cassegrain F/8.5, D=0.50 m

CCD camera: SBIG ST1001E, 1024x1024 pixels, 24 x 24 um pixel size, field 19.9 x 19.9 arcmin

Filters: Johnson B and V, Cousins R, Custom IR (very close to Cousins I when combined to CCD spectral response)

Hankasalmi Observatory (amateur)

Finland

Observations at the Hankasalmi observatory are done by Arto Oksanen (arto.oksanen@jklsirius.fi).

Telescope parameters: Long=+26.59970 deg, Lat=+62.25447 deg, Alt= 100 m.

Optical configuration: Ritchey-Chretien F/8.6, D=0.4 m

CCD camera: SBIG STL-1001E, 1024x1024 pixels, 24 x 24 um pixel size, field= 21x21 arcmin

Filters: B, V, R_c, I_c (U not in the filter wheel)

Canakkale Onsekiz Mart University (COMU) Observatory

Turkey
Observations at the Canakkale Onsekiz Mart University Observatory are done by Ahmet Erdem (mailto:aerdem@comu.edu.tr) and Serkan S. Dogru.

Telescope parameters: Long=+26.475 deg, Lat=+40.100 deg, Alt=410 m

Optical configuration: Schmidt-Cassegrain, f/10, D=0.3m

CCD camera: SBIG STL 1001E, 1024x1024 pixels, 24x24 um pixel width, readout noise ~15 e-

Filters: Johnson-Cousins: UBV Rc Ic

Nyrölä Observatory (amateur)

Finland

Observations at the Nyrölä Observatory are done by Arto Oksanen (arto.oksanen@jklsirius.fi).

Telescope parameters: Long=+25.5130 deg, Lat=+62.34233 deg, Alt= 200 m.

Optical configuration: Schmidt-Cassegrain F/10 or F/5 with focal reducer, D=0.4 m

CCD camera: SBIG ST8XE, 1536 x 1024 pixels, 9 x 9 um pixel size, field= 18 x 12 arcmin

Filters: B, V, Rc, Ic

Skinakas Observatory

Crete, Greece

WEBT observations are done by I. Papadakis (jhep@physics.uoc.gr) and K. Tsinganos.

Telescope parameters: Long: +24.897 deg, Lat=+35.212 deg, Altitude=1750m

Optical Configuration: f/7.7 Ritchey-Cretien, D=130cm.

CCD camera: 1024x1024 Tektronix CCD, 24um pixel size, 8x8 arcmin field of view.

Filters: Johnson U,B,V, Cousins R,I

Tuorla Observatory

Turku, Finland

WEBT observations at the Tuorla Observatory are done by Aimo Sillanpaa and Leo Takalo.

Telescope parameters: Long= +22.17 deg, Lat= +60.27.
Vidojevica Astronomical Station
Vidojevica, Serbia

WEBT observations at the Vidojevica Astronomical Station of the Astronomical Observatory of Belgrade are done by Oliver Vince and Goran Damljanovic.

**Telescope parameters:** Long= +21.55567 deg, Lat= +43.14017, Altitude= 1150 m

**Optical Configuration:** Cass, EQ-mount, D= 60cm.

**CCD camera:** ALTA Apogee U42 2048x2048, 13.5um

**Filters:** Optee B, V, R, I

South African Astronomical Observatory
Sutherland, South Africa

WEBT observations at the South African Astronomical Observatory are potentially done by Darragh O'Donoghue.

**Telescope parameters:** Long= +20.4 deg, Lat= -32.24 deg

Sirio Astronomical Observatory
Castellana Grotte (Ba), Italy

WEBT observations at the Sirio Astronomical Observatory are made by Nicola Rizzi (rizzinz@libero.it) with the LX200.

**Telescope parameters:** Long= +17.149 deg, Lat= +40.877 deg, Alt= 330 m

**Optical configuration:** Schmidt-Cassegrain, D= 0.25 m, f/D= 7

**CCD camera:** ATIK314E; CCD chip: Sony ICX-205, 1391x1039 pixels, 4.65x4.65 micron pixel width, field: 14x10 arcmin.

**Filters:** Cousins R

Catania Astrophysical Observatory
Italy

WEBT Observations are done at the M.G. Fracastoro Mountain Station, located at Serra La Nave, on the Etna Mountain.

**Telescope parameters:** Long= +14.973 deg, Lat= +37.692 deg, Altitude= 1725 m
Optical configuration: the telescope is a 91 cm classical Cassegrain

Equipment: observations are done in UBV bands by means of a photometer; it employs a EMI 9893QA/350, spectral response S20 photomultiplier, which cooled to -15 C has a dark current of 1 count/sec. The input diaphragm can be manually set to the following FOV 14.5, 21.7, 28.9, and 43.4 arcsec. Typical sky brightness is 21.3 mag/arcsec2 in U, 21.1 mag/arcsec2 in B, and 20.7 mag/arcsec2 in V.

**Campo Imperatore Observatory**

**Italy**

WEBT observations at the [Campo Imperatore Observatory](http://www.astro.rai.it) are done by Mauro Dolci, Nicola Napoleone e Valeri Larionov.

**Telescope parameters:** Long= +13.5581 deg, Lat= +42.4442 deg, Altitude= 2150 m

Optical configuration: Ritchey-Chretien f/4.5, D=1.10 m

CCD camera: 256X256 px IR array

Filters: JHK

**CAST Observatory (amateur)**

**Italy**

WEBT observations are made at the CAST Observatory (www.castfvg.it) in Talmasson by many different associates. The data reduction is made by Rolando Ligustri (rolando.ligustri@tin.it)

**Telescope parameters:** Long= +13.11444 deg, Lat= +45.9366 deg, Altitude= 42 m

Optical Configuration: f/5 Newton, D=35 cm

CCD camera: Sbig ST10Xme, CCD chip: Kaf3200Me, 2184x1472 pixels, 6.8x6.8 um pixel width

Filters: Johnson BV, Cousins RI

**Vallinfreda Station**

**Italy**

The 50 cm telescope of the Vallinfreda (Roma) Station is operated by the University "La Sapienza" of Roma (ITALY). The P.I. for this telescope is Dr. Maurizio Maesano. WEBT observations with the [Vallinfreda telescope](http://www.iasta.it) are done by Roberto Nesci from the Istituto Astronomico. Typical night sky brightness = V=20.0 mag/arcsec2.

**Telescope parameters:** Long= +12.97 deg, Lat= +42.10 deg, Alt= 850m.
Optical configuration: Newtonian f/4.5, D = 0.50 m  
CCD camera: STS-6, gain ~7, readout noise ~30 e-  
Filters: standard BVRI Johnson-Cousins

Armenzano Astronomical Observatory (amateur)  
Italy  
WEBT observations are made at the Armenzano Astronomical Observatory by Daniele Carosati (danielecarosati@libero.it).  
Telescope parameters: Long= +12.6989 deg, Lat= +43.0700 deg, Alt= 743 m  
Optical Configuration: f/8.3 Ritchey-Cretien, D= 0.4 m  
CCD camera: Apogee AP47p, CCD chip: Marconi 4710, 1024x1024 pixels, 13.0x13.0 um pixel width;  
Filters: Johnson BV, Cousins RI

Perugia University Astronomical Observatory  
Italy  
WEBT observations are made at the Perugia Observatory by Gino Tosti with the Automatic Imaging Telescope (AIT).  
Telescope parameters: Long= +12.3916 deg, Lat= +43.1122 deg, Alt= 451 m  
Optical configuration: Newtonian, D = 0.4 m, f/D= 5; Seeing typical= 2”.5 - 3”, Skybrightness typical= V=18.5 mag/arcsec^2;  
CCD camera: Spectrasource Ins. Ltd., Peltier cooled 50 deg C wrt ambient, CCD chip: TI TC211, 192x165 pixels, 13.5x16.5 um pixel width;  
Filters: diameter = 1in, Johnson B (BG12 (2mm) + GG385 (1mm) + BG39 (1mm)), Johnson V (GG495 (2mm) + BG39 (2mm)); Cousins R_c (OG570 (2mm) + KG3 (2mm)); Cousins I_c (RG9 (3mm)); absolute photometry to 0.06 magnitudes accuracy, differential photometry to 0.02 magnitudes.

Michael Adrian Observatory  
Germany  
WEBT observation at the Michael Adrian Observatory of the Astronomie Stiftung Trebur are done by Johannes M. Ohlert (jomo@monet.fh-friedberg.de).  
Telescope parameters: Observatory Code 239; Latitude: 49.9254 north; Longitude: 8.4114 east; rho sin phi’ = 0.64506; rho cos phi’ = +0.76159 Alt=103 m
The Whole Earth Blazar Telescope

Optical configuration: Cassegrain D=1.2m, f/D=8
CCD camera: Roper Scientific (Photometrics LTD.) EEV 1340EB 1340x1300 pixels, 20x20 um width, FOV = 10'x10'
Filters: R-Johnson, (also possible UBVI)

**Torino Astronomical Observatory**

**Italy**

WEBT observations at the Torino Observatory are done with the REOSC telescope (OTAP) by Claudia M. Raiteri (raiteri@oato.inaf.it) and Massimo Villata (villata@oato.inaf.it) from the Torino blazar monitoring group.

**Telescope parameters**: Long= + 7.775 deg, Lat= +45.038 deg, Alt=622 m

Optical configuration: f/9.5, D= 105 cm, Cassegrain with 0.60 m secondary mirror

CCD camera: LORAL 2048x2048@15 micron/pixel, scale 0.3 arcsec per pixel, field of view: 10'x10'

Filters: Johnson BV, Cousins RI

**Osservatorio Astronomico della Valle d'Aosta**

**Italy**

WEBT observations at the Osservatorio Astronomico della Valle d'Aosta are done by Paolo Calcidese (calcidese@gmail.com).

**Telescope parameters**: Long= + 7.47833 deg, Lat= +45.7895 deg, Alt=1600 m

Optical configuration: Bowen-Vaughan, f/8, D= 81 cm

CCD camera: FLI--FL-PL3041-1-BB Class 1, back illuminated, 2048x2048 px, pixel size: 15 micron, field of view: 15' x 15'

Filters: Johnson BV, Cousins RI

**Landessternwarte Heidelberg**

**Heidelberg, Germany**

WEBT observations at the Landessternwarte Heidelberg are done by the group of Stefan Wagner.

**Telescope parameters**: Long= +0.57 deg, Lat= + 49.23 deg.
Calar Alto Observatory

Spain

The Calar Alto Observatory is located in the Sierra de Los Filabres Andalucía Mountains in Southern Spain, north of Almeria. It is jointly operated by the Max-Planck-Institut für Astronomie in Heidelberg (Germany) and by the Instituto de Astrofísica de Andalucía-CSIC in Granada (Spain). It provides three telescopes with apertures of 1.23 m, 2.2 m, and 3.5 m as well as a Schmidt reflector. WEBT observations at the Calar Alto Observatory are done under the MAPCAT program coordinated from the Instituto de Astrofísica de Andalucía-CSIC.

Telescope parameters: Long= -2.54625 deg, Lat= +37.2236 deg, Alt= 2168m.

Guadarrama Observatory (amateur)

Spain

The Guadarrama Observatory is located in the Sierra de Guadarrama Mountains, north of Madrid. Observations at the Guadarrama Observatory are done by Diego Rodriguez (drodrig@jet.es), belonging to the M-1 Group.

Telescope parameters: Long= -4.0194 deg, Lat= +40.5139 deg, Alt= 950 m.

Equipment: the equipment includes two telescopes of 20 cm (Newton) and 25 cm (Schmidt Cassegrain) endowed with CCD cameras.

Filters: VRI (Johnson).

Teide Observatory

Tenerife, Spain

WEBT observations at the Teide Observatory are done by Jose Antonio Acosta Pulido and Maria Isabel Carnerero Martin.

Telescope parameters: Long= -16.5 deg, Lat= +28.16 deg, Alt= 2400 m

Telescopes: IAC80 and TCS

Filters: BVRI and JHK

Olin Observatory

Connecticut College, New London, Connecticut, USA

WEBT observations at the Olin Observatory are done by Leslie Brown (lfbro@conncoll.edu) and students

Telescope parameters: Long= -72.105, Lat= +41.379, Alt: Wee bit above sealevel
Optical Configuration: Ritchey-Cretien F/10, D = 0.508 m, Typical seeing ~ 3"

CCD camera: Photometrics AT200, chip Tektronix TK1024AF, 1024x1024 pixels, 24umx24um pixel size, camera/telescope resolution = 0.975", camera/telescope f.o.v = 16.6" x 16.6"

Filters: Bessel VRI

Foggy Bottom Observatory

Hamilton, New York, USA

WEBT observations at the Foggy Bottom Observatory are done by Thomas Balonek. Much of Tom's work is on the Web.

Telescope parameters: Long = -74.25 deg, Lat = +43.24 deg; D = 0.4 m.

Western Kentucky University Astrophysical Observatory

Kentucky, USA

WEBT observations at the Western Kentucky University Astrophysical Observatory are done by Richard Gelderman, Mike Carini, and Sandra Clements.

Telescope parameters: Long = -86.6111, Lat = +36.9197.

Mt. Lemmon Observatory

Arizona, USA

WEBT observations are done by the team of the Korea Astronomy & Space Science Institute.

Telescope parameters: Long = -110 47.5, Lat = +32 25.5, Alt = 2776 m

Optical configuration: D = 1 m, f/7.5

CCD camera: FLI, Kodak 2K*2K*24um, TEC cooling, 22.5’*22.5’ field coverage

Filters: Johnsons U B V and Cousins R I

Lowell Observatory

Flagstaff, Arizona, USA

WEBT observations are done at Lowell Observatory by Boston University astronomers using primarily the 1.8 m Perkins telescope.
ROVOR
Utah, USA

WEBT observations are done by J. Ward Moody.

Telescope parameters: Long= -112.717, Lat= +39.455, Alt= 1395 m
Optical configuration: D= 0.4 m, f/9
CCD camera: FLI, SITe 1K*1K*24um, TEC cooling, 23.4'*23.4' field coverage
Filters: Johnsons B V and Cousins R I

San Pedro Martir Observatory
Baja Peninsula, Mexico

The San Pedro Martir Observatory is located on the edge of the main escarpment on the Baja Peninsula. The observatory headquarters and workshops are located on the Pacific Coast in Ensenada. WEBT observations at San Pedro Martir are done by Deborah Dultzin from the Instituto de Astronomia de la Universidad Nacional Autonoma de Mexico.

Telescope parameters: Long= -115.45 deg, Lat= +31.03 deg, Alt= 2830.

Clarke and Coyote Astrophysical Observatory (amateur)
Wilton, California, USA

Observations at the Clarke and Coyote Astrophysical Observatory are done by Chuck Pullen (cpullen@pacsafe.com).

Telescope parameters: Long= -121.27, Lat= +38.38, Alt= 21 m.
Optical configuration: 28 cm Schmidt Cassegrain, f/10
CCD camera: TI-241
Filters: Johnson-Cousins BVRI

Climenhaga Observatory
Victoria, British Columbia, Canada
WEBT observations at the Climenhaga Observatory at the University of Victoria are done by Russ Robb.

Telescope parameters: Long= -123.22 deg, Lat= +48.25 deg; D= 0.5 m.

Dominion Astrophysical Observatory

Canada

There are three reflecting telescopes at the Observatory, with apertures: 1.8 m, 1.2m, and 0.4m. WEBT observations at the Dominion Astrophysical Observatory are done by Simon Morris.

Telescope parameters: Long= -123.42 deg, Lat= +48.52 deg, Alt= 230m

University of Hawaii

Mauna Kea, Hawaii

The WEBT observations can be supported by the 0.6 meter telescope of the University of Hawaii Mauna Kea Observatories. The contact person for the observations is Richard Crowe mailto:rcrowe@hubble.uh.hawaii.edu.

Telescope parameters: Long= -155 deg 28 min 8.7 sec, Lat= 19 deg 49 min 22 sec, Alt= 13760 feet (4194 meters)

Optical configuration: Cassegrain f/15, D=0.6 m, Seeing 0.5-1.0"

CCD camera: Apogee AP6ep 1024x1024, 24-um pixels, readout noise=13-15 e-

Filters (CVI 2-inch): UV (UG-11) Blue (BG25+GG385) Green (BG39+GG455) Yellow (GG 495) Red (RG 610 or RG 695) Infrared (RG 780)

There is also a thermally-cooled Optec SSP-5 photometer equipped with Johnson UBV filters.