

Station: Ayvadzh / □□□□□

Station short name:	AYVA	Updated:	03.06.2012
Latitude:	36.97912 ° (handheld GPS)	Country:	Tajikistan
Longitude:	68.02351 ° (handheld GPS)	Oblast:	Khatlonskaya
Elevation [m a.s.l.]:	ca. 320 (Google Earth)	River basin:	Kofirnikhon / Amudarya

Site Characteristics

Station location:



View to the station from NE



View to the station from SE



Station location and broader surroundings

Terrain features:

Please document the surroundings of the station with photographs from all cardinal directions

Degree of urbanization in the surroundings:	rural area with village; in the immediate surroundings small houses with gardens and fruit trees, further south irrigated fields (maize, cereals)
Landscape type (e.g. mountains, coast):	broad flat river valley of Kofirnikhon river, near estuary
Direction of slope: Steep slopes, hills, hollows?	flat and level area at the valley bottom; to the SW small hill (ca. 5 m high, bank slope of a drainage channel)
Impervious surface, pavements:	road at a distance of ca. 30...50 m to the E of the station
Open water surfaces:	drainage channel ca. 150 m to the W, across a small hill
Main surface cover in the surroundings:	except for the fields and gardens, almost bare sandy soil, barely vegetated with low desert plants

View from the station to the North



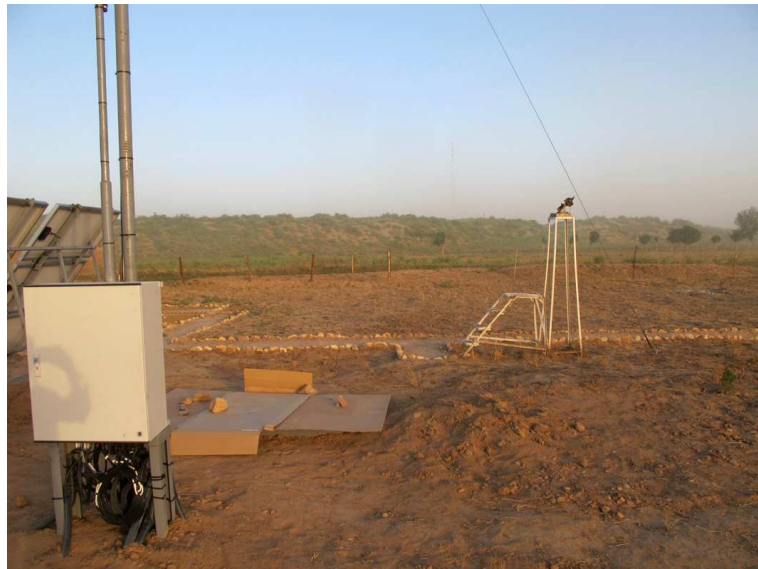
View from the station to the East



*View from the station
to the South*

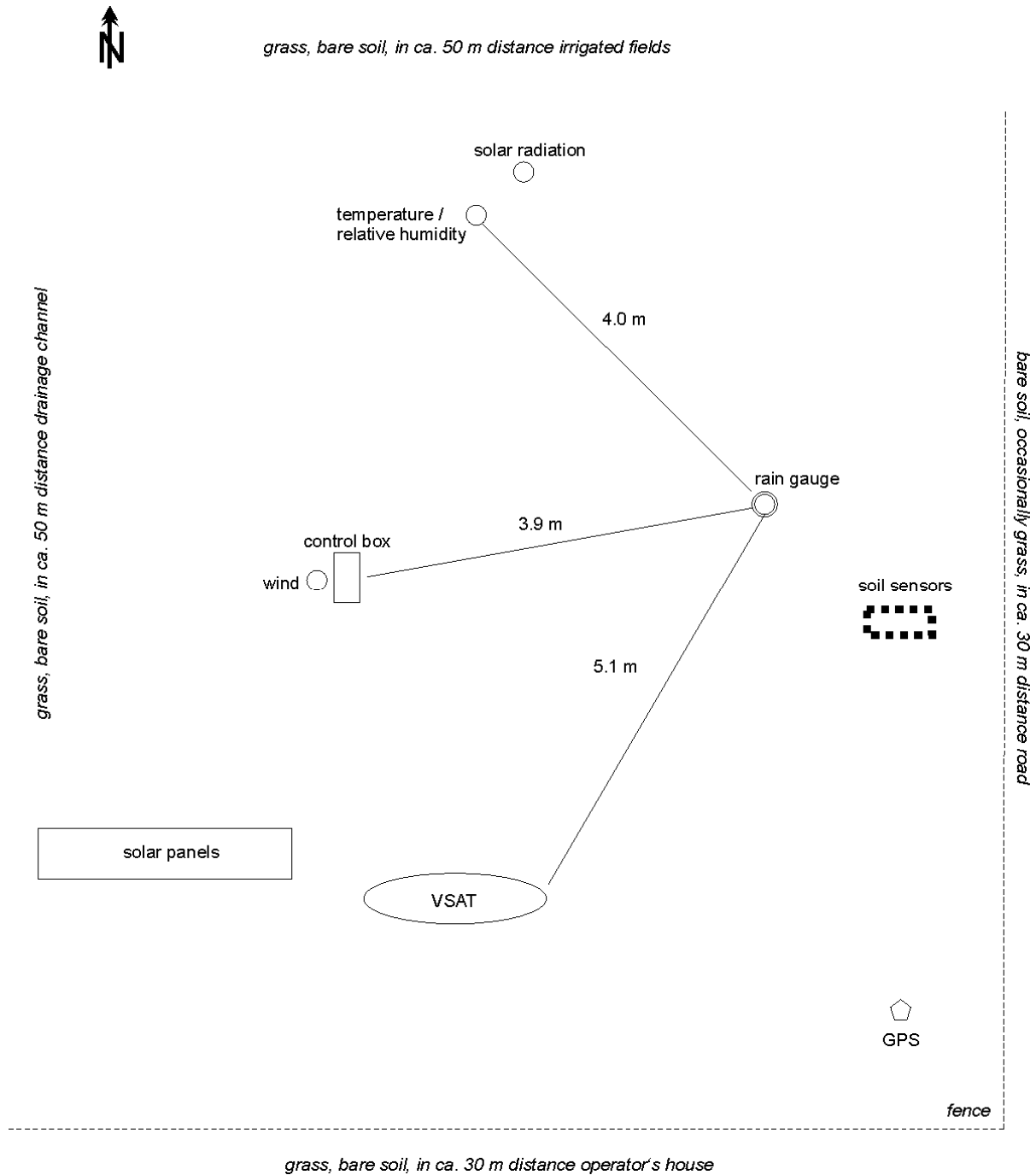


*View from the station
to the West*



Station map:

Please mark the sensors' location, as well as the location and size of potential obstructions in the vicinity (buildings, fences, trees)



Notes and remarks:

VSAT Height in m above ground: 2.51 m

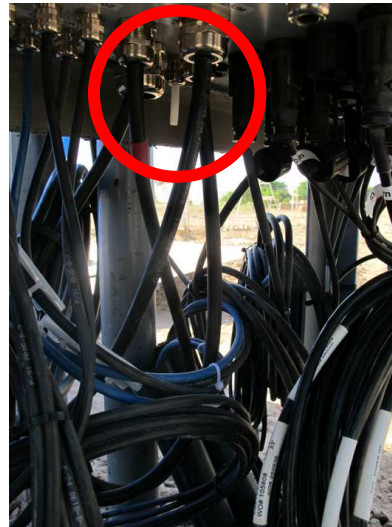
Distance new precipitation sensor – old precipitation sensor: ~ 4.7 m

Height station control box: 1.32 m

Sensor exposure

Atmospheric pressure:

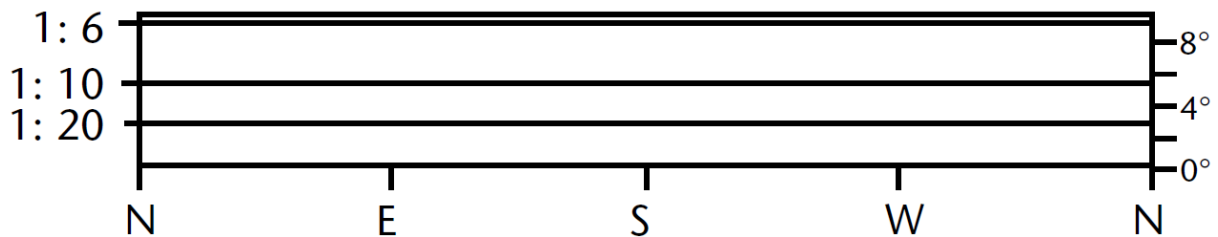
Sheltered within control cabinet? Yes
 Protected from wind gusts? Yes



Solar radiation:

Sensor height above ground 1.85 m (center of the device)

Description of radiation horizon (average vertical angle of obstacles)



Temperature and humidity:

Sensor height in m above ground: 2.00 m (bottom edge of the radiation shield)
 Artificial ventilation? Principally available, but not activated
 Surface cover under screen: Almost bare soil, in spring some grass / low desert vegetation
 Soil under screen: Fine sand, silt

Precipitation:

Gage rim height in m above ground: 1.84 m
 Shield type: None
 Alignment of main axis of tipping bucket: N-S (main wind directions from W)

Wind:

Anemometer height in m above ground: 10 m

Orientation of junction box: To the North

Free standing?: Yes

If not free standing:

Building height, width, length in m

Vegetation: Almost bare soil, in spring some grass / low desert vegetation

Terrain roughness class: to N: 1.5 to E: 1

(in the immediate surrounding) to S: 2 to W: 1... 1.5

At a distance of ca. 70 m from the station to the N / E / S, roughness class ca. 3 (village, gardens with trees, small houses)

Soil temperature and soil water content:

Sensor depths in m below ground: 10, 20, 40, 60, 80, 100 cm below surface



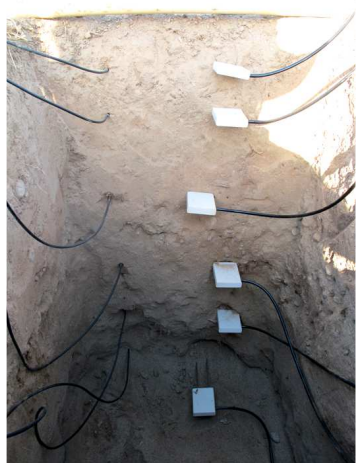










Soil cover above the soil sensors: Almost bare soil, in spring (at the time of installation) some grass / low desert vegetation

Soil type:

Soil structure: Fine-middle sand, some fluvial gravel, silty

Level of water table in m below surface: ca. 8 m below surface (according to station operator, in the nearby groundwater well)

Please mark the soil sensors' location below ground level

Depth	Soil temp	VWC	Structure	
0.20			fS, u	
			f-mS	
0.40				
0.60			gS, gravel	
0.80			gS, sporadic gravel	
1.00				
1.20			gS, gravel	

Open issues / limitations:

(1) Radiation sensor not fully operable; shield of LW up sensor broken / glued; LW up sensor delivering data only occasionally – calculated values lacking; device should be exchanged

(2) Wind sensor directed to the N not S – check if values have to be corrected

(3) check incoming power supply from solar panels – angle of panels might be too steep for efficient input

(4) temperature / humidity sensor needs recalibration in 2012

(5) cable length of precipitation sensor not sufficient for distant installation – might be too near to obstructions, though annual precipitation is low at this site

(6) temperature probe not fitting into the radiation shield – fixed with duct tape

(7) some plugs not heat-sealed
