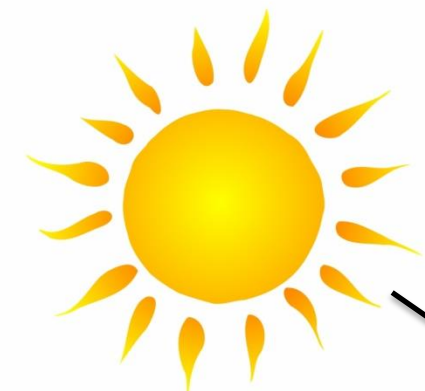


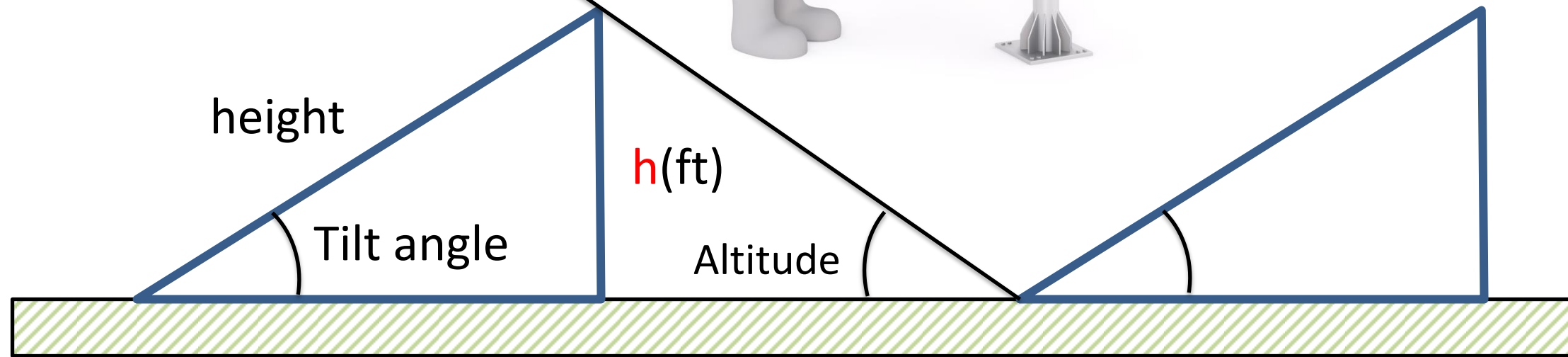
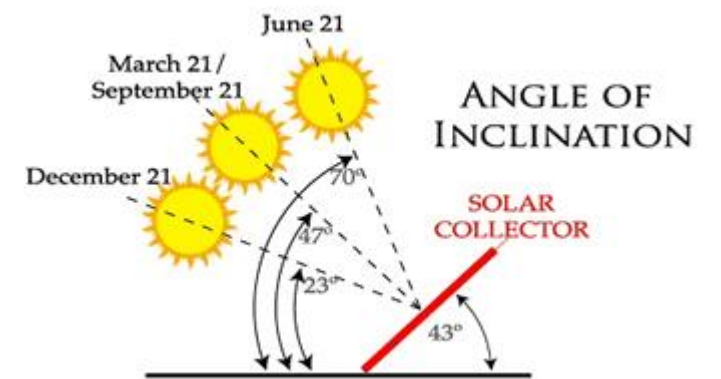


Distance between Solar Row

Calculation



Aug. 13, 11:00am

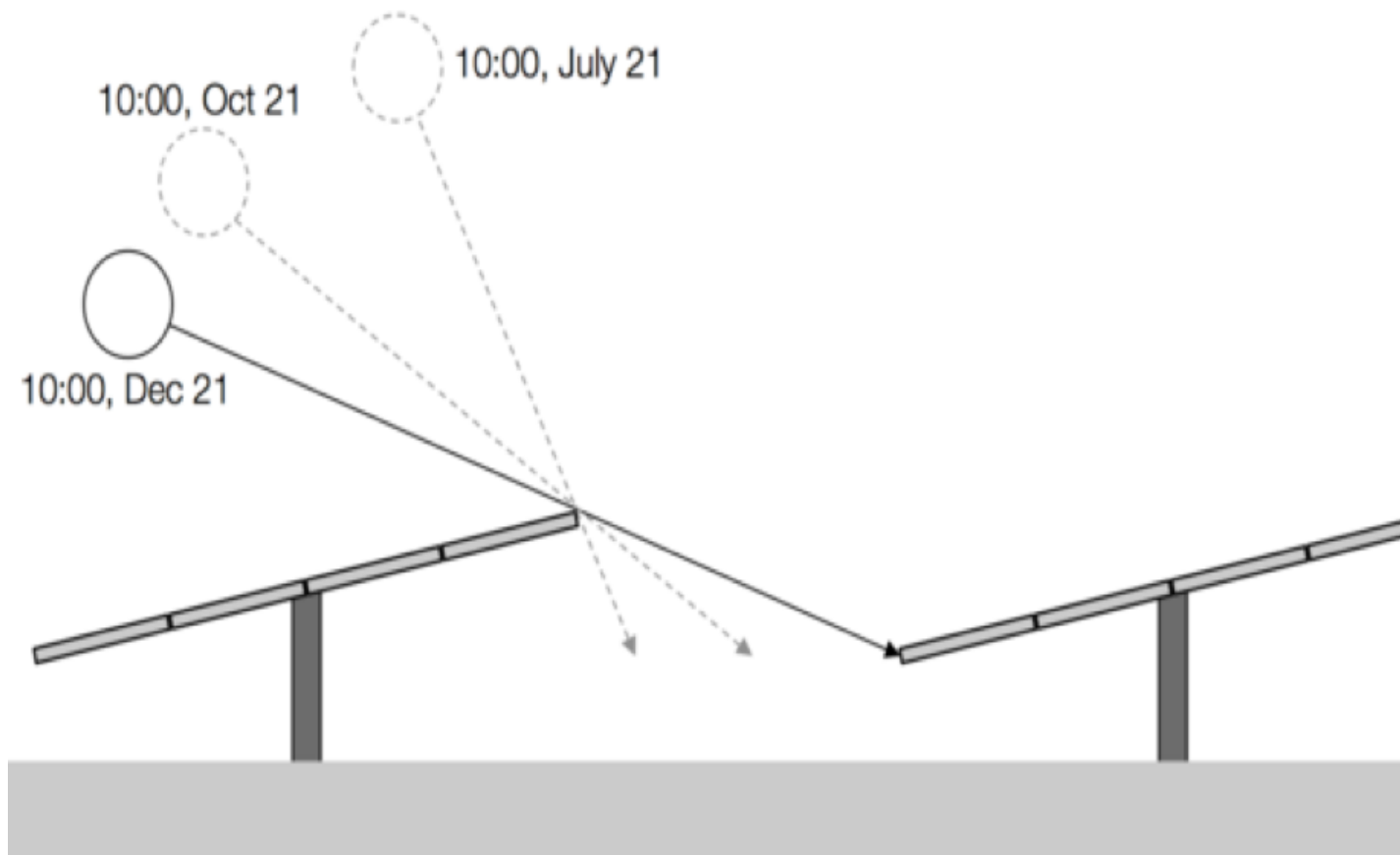
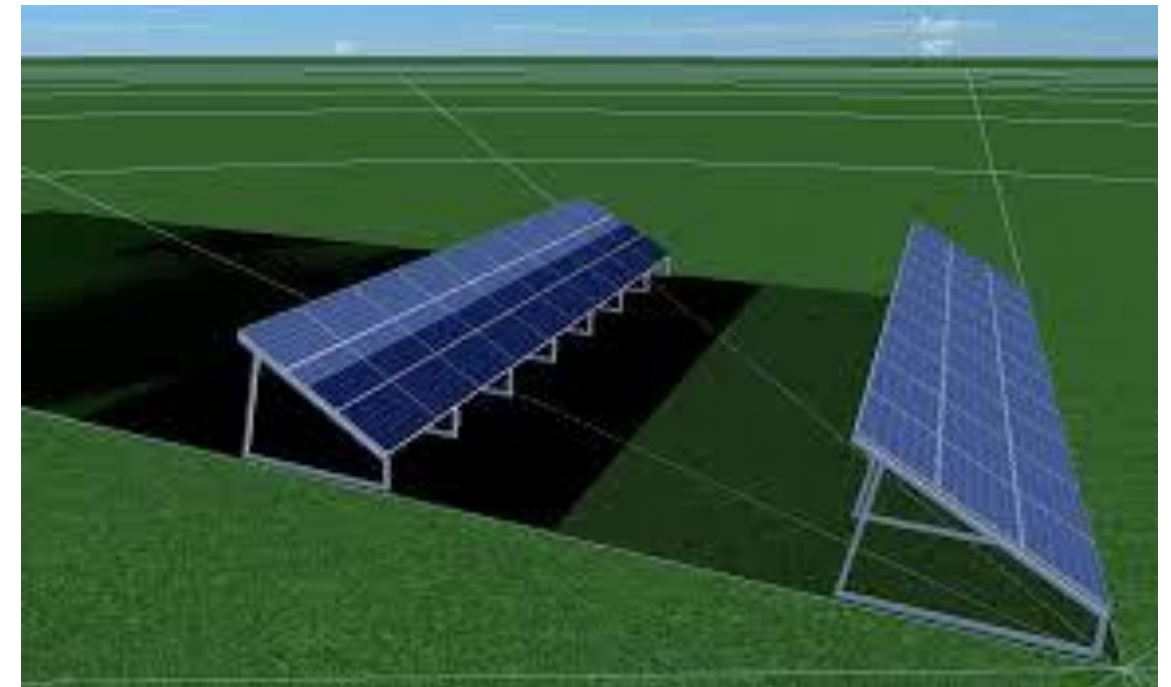


Panels facing south



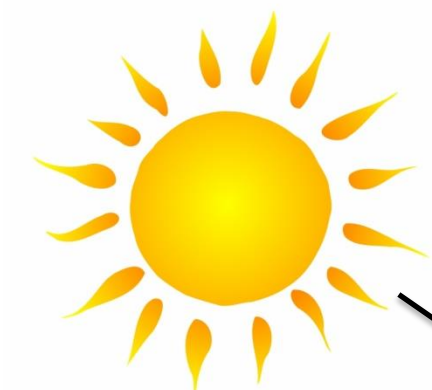
Panels spacing, D (feet)







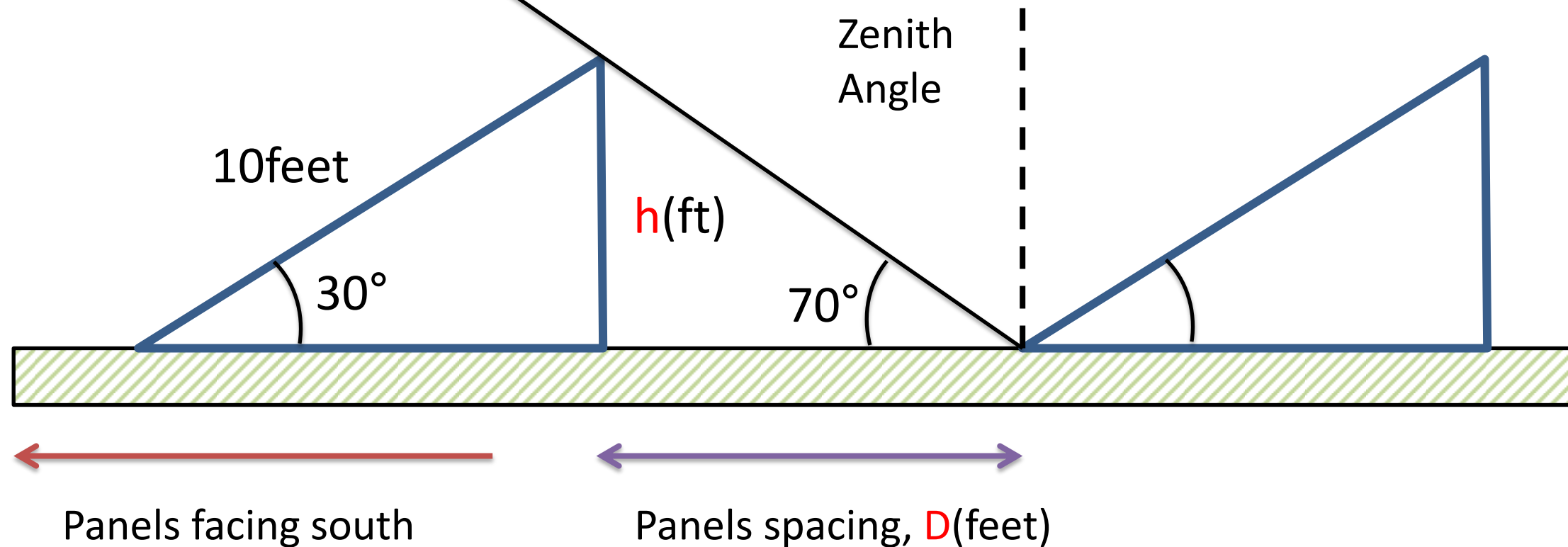
Solar Radiation Angle= elevation angle= Altitude angle ?



Aug. 13, 11:00am

Daylight
05:46 – 18:44
12 hours, 58 minutes

Current Time:	13 Aug 2020, 11:00:46
Sun Direction:	112.29° ESE ↘
Sun Altitude:	70.36°
Sun Distance:	151.564 million km
Next Equinox:	22 Sep 2020 19:00 (Autumnal)
Sunrise Today:	05:46 ↗ 74° East
Sunset Today:	18:44 ↙ 286° West





$$h = \text{height of tray or module} * \sin(\text{Tilt angle of tray or module})$$

$$h = 5 \text{ feet}$$

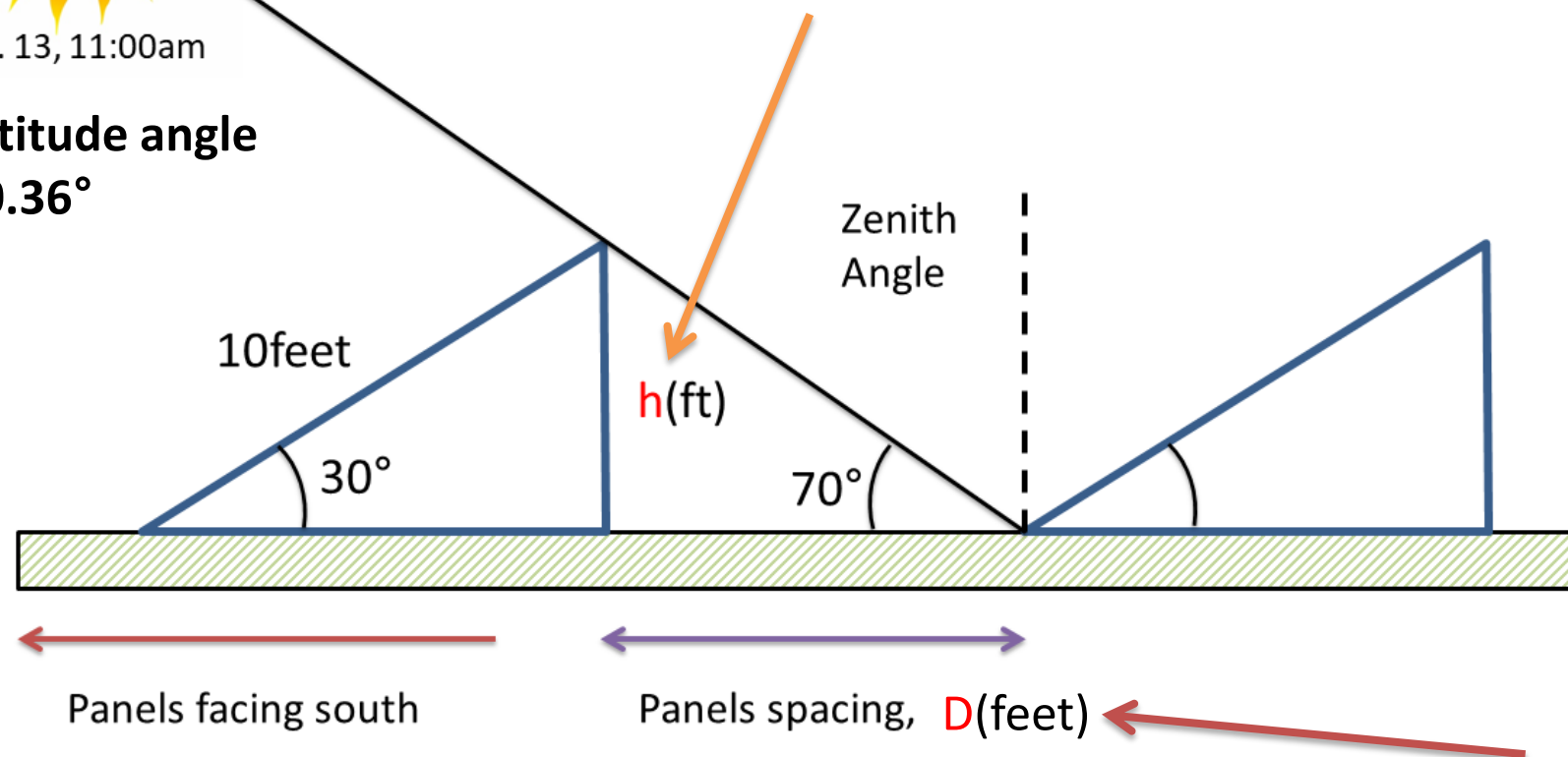
$$\sin 30^\circ = 0.5$$

$$\tan 70.36^\circ = 2.802$$



Aug. 13, 11:00am

Altitude angle
70.36°



$$D = \frac{h(\text{ feet})}{\tan(\text{ Altitude angle})}$$

$$D = \frac{5}{2.802}$$

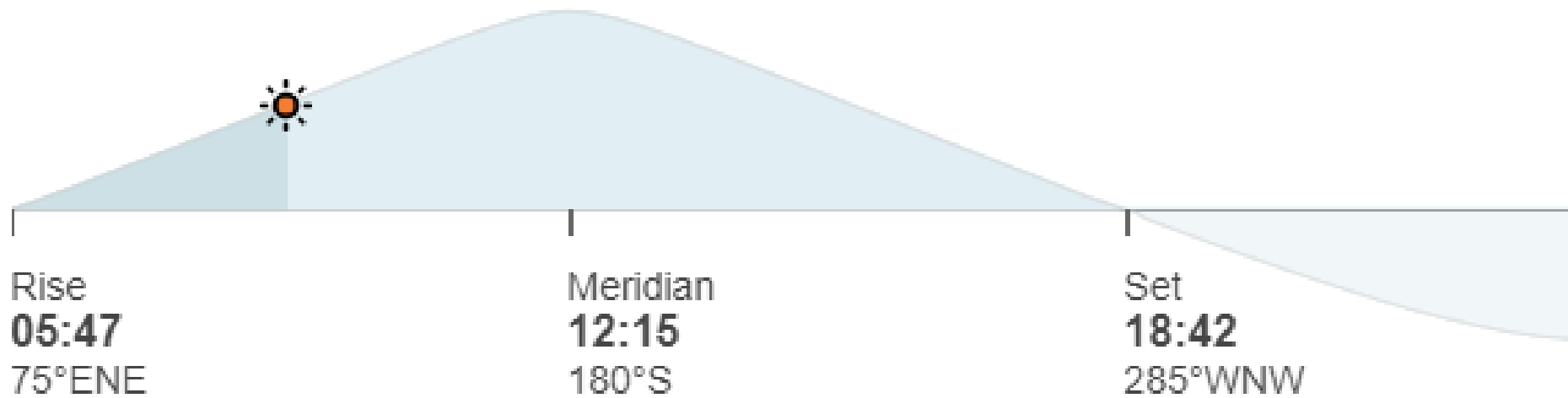
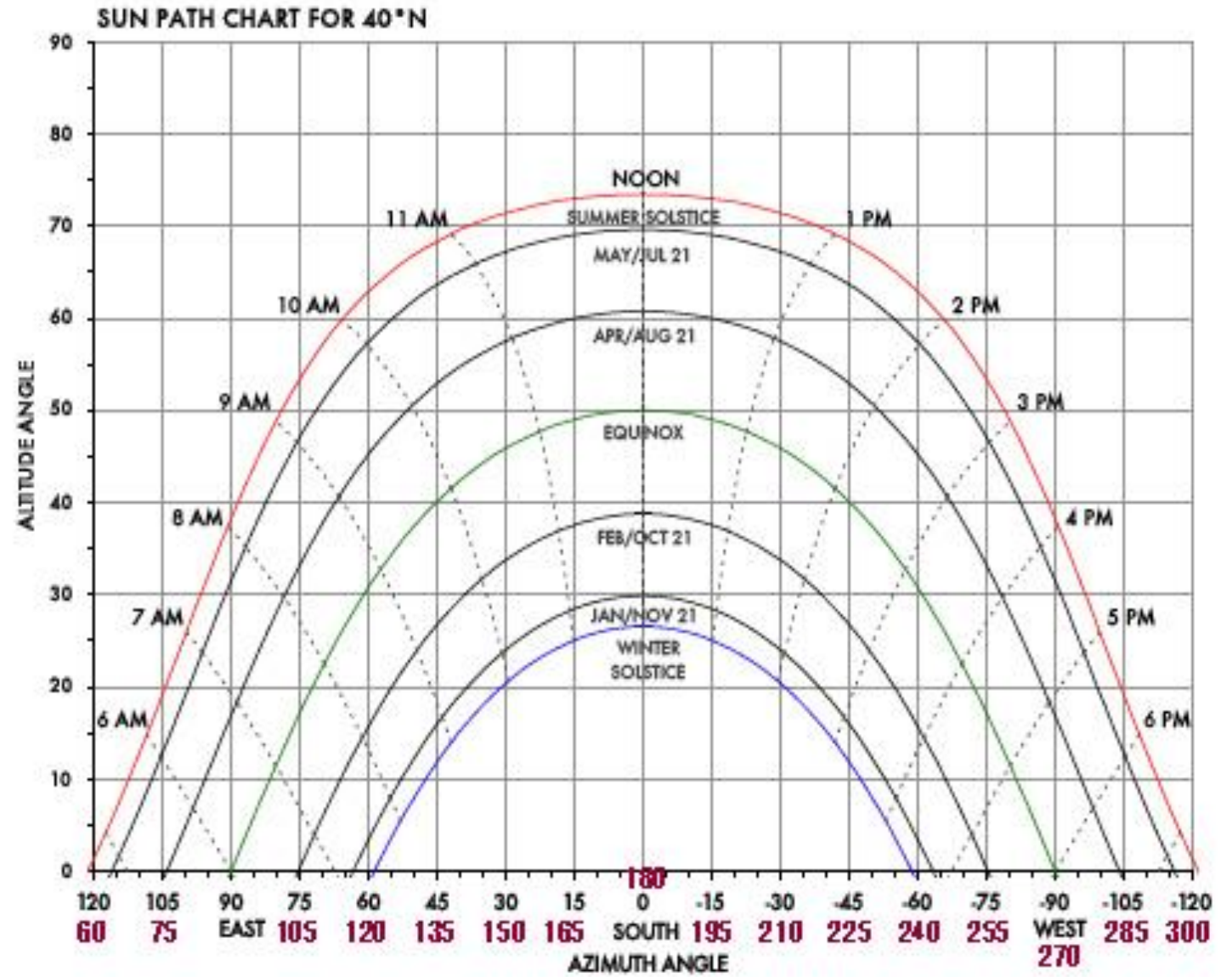
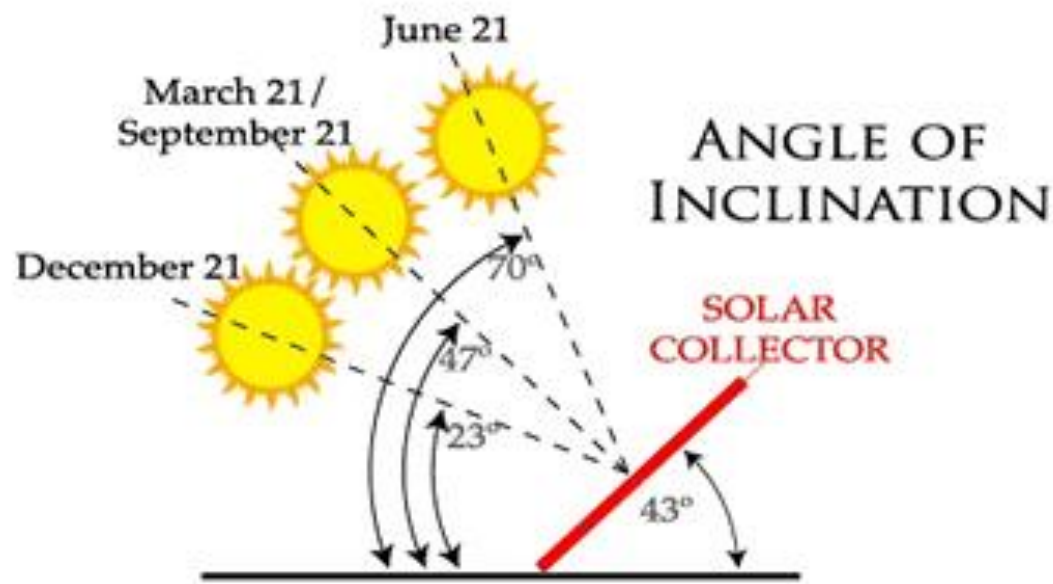
$$D = 1.78 \text{ feet}$$



Daylight

05:46 – 18:44
12 hours, 58 minutes

Current Time:	13 Aug 2020, 11:00:46
Sun Direction:	112.29° ESE ↘
Sun Altitude:	70.36°
Sun Distance:	151.564 million km
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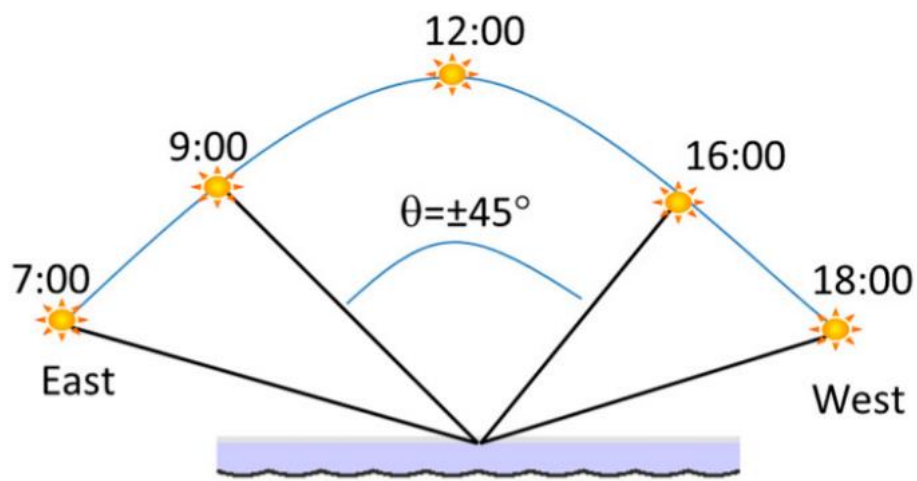


09:00

Altitude
43°

Heading
→ 91° E

Position
Day



Sun Position

$$d = D + D * \text{Cos}(180 - \text{Azimuth})$$

$$d = 1.78 + 1.78 * \text{Cos}(180 - 112)$$

$$d = 1.78 + (1.78 * .374)$$

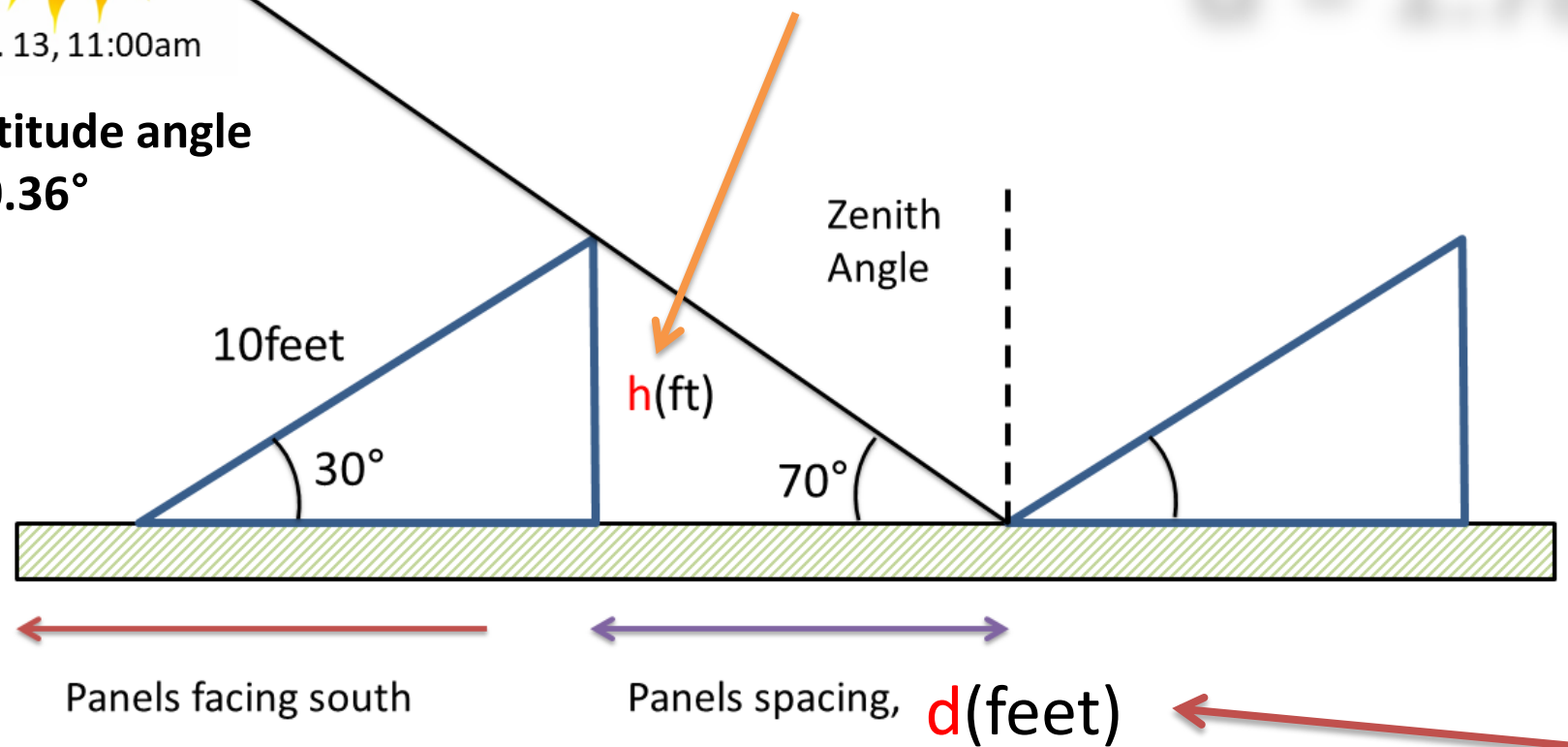
$$\text{Cos}(68) = .374$$

$$d = 1.78 + (0.66)$$



Aug. 13, 11:00am

Altitude angle
70.36°



$$d = 2.44 \text{ feet}$$

क्या आप सोलर सेक्टर में रोजगार या व्यापार करना चाहते हैं?



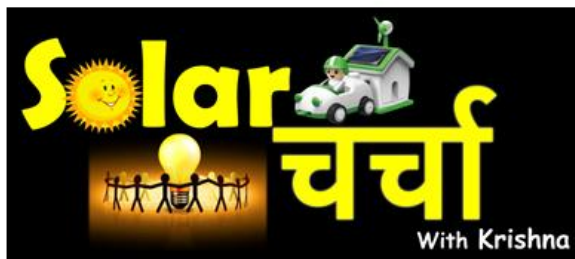
ये वीडियो सीरीज

आपको जानकारी और अनुभव बढ़ाने में

मददगार होगी

- ✓ सौर ऊर्जा, आवश्यकता और महत्त्व
- ✓ सौर ऊर्जा से चलने वाले प्रोडक्ट्स
- ✓ सोलर सिस्टम के कम्पोनेंट
- ✓ सोलर सिस्टम डिजाईन करना
- ✓ इंस्टालेशन के लिए चेक लिस्ट बनाना
- ✓ सोलर सिस्टम में आने वाली समस्याएं

- ✓ स्किल एजुकेशन की आवश्यकता और लाभ
- ✓ सोलर सेक्टर में जीरो इन्वेस्टमेंट से व्यापार
- ✓ सिस्टम फेल होने के कारण
- ✓ ऑन ग्रीड इन्वर्टर का चयन
- ✓ ऑफ ग्रीड इन्वर्टर का चयन



“सोलर चर्चा विथ कृष्णा”

https://www.youtube.com/channel/UC_IkNwIFYGILf-meVHef5Yw

