



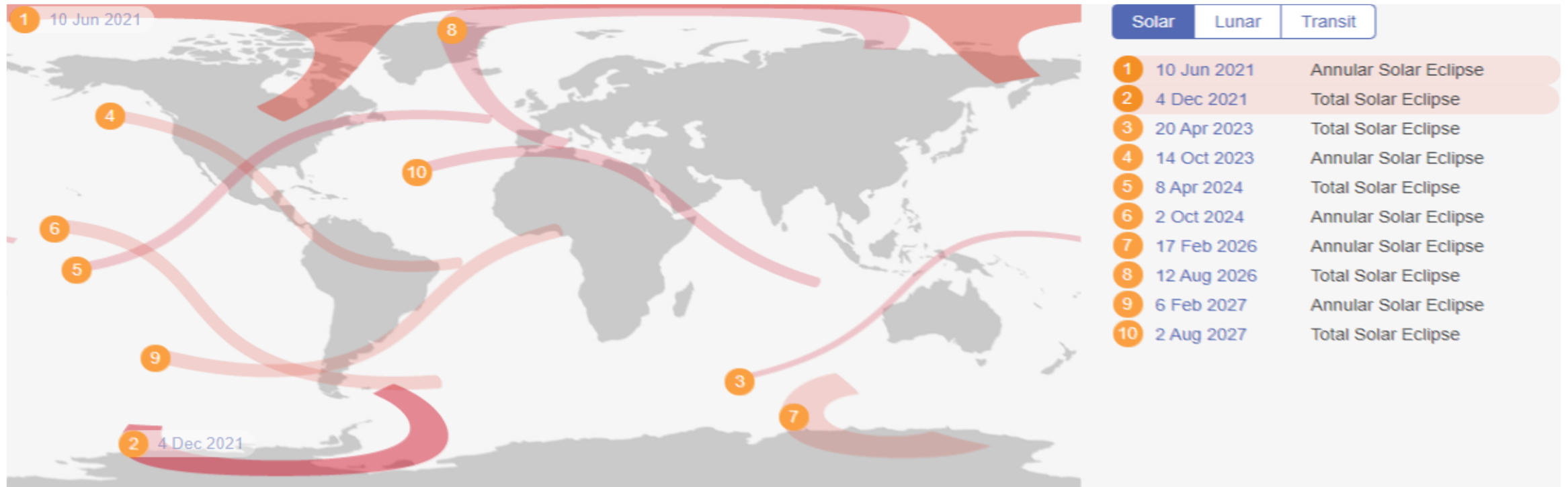
# Solar Eclipses 2021

Eclipse information and filter recommendations

**Get ready  
for Solar Eclipse**



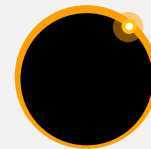
In 2021, we're going to be witness of two solar eclipse events in June and December in the Northern and Southern Hemisphere respectively



10 Jun.

Solar Eclipse  
(Annual)

Much of Europe,  
Much of Asia,  
North/West Africa,  
Much of North  
America, Atlantic,  
Arctic



4 Dec.

Solar Eclipse  
(Total)

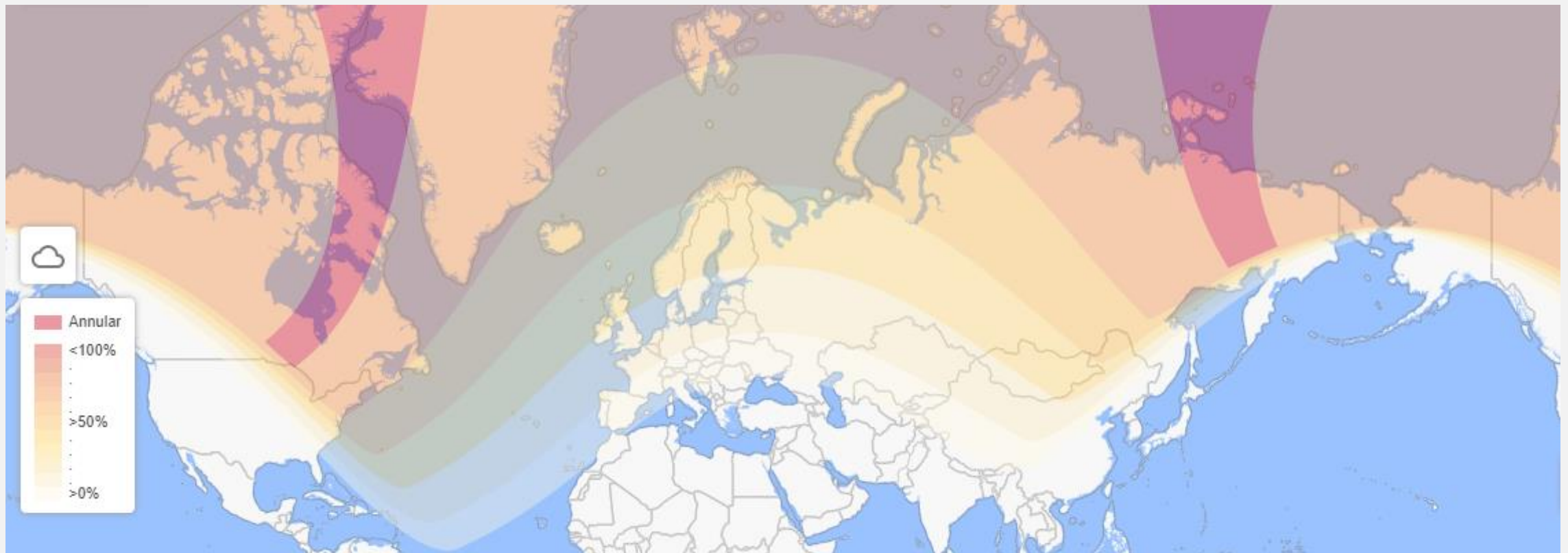
South in Australia,  
South in Africa,  
South in South  
America, Pacific,  
Atlantic, Indian  
Ocean, Antarctica



10 June

# Solar Eclipse (Annual)

Much of Europe, Much of Asia,  
North/West Africa, Much of North  
America, Atlantic, Arctic



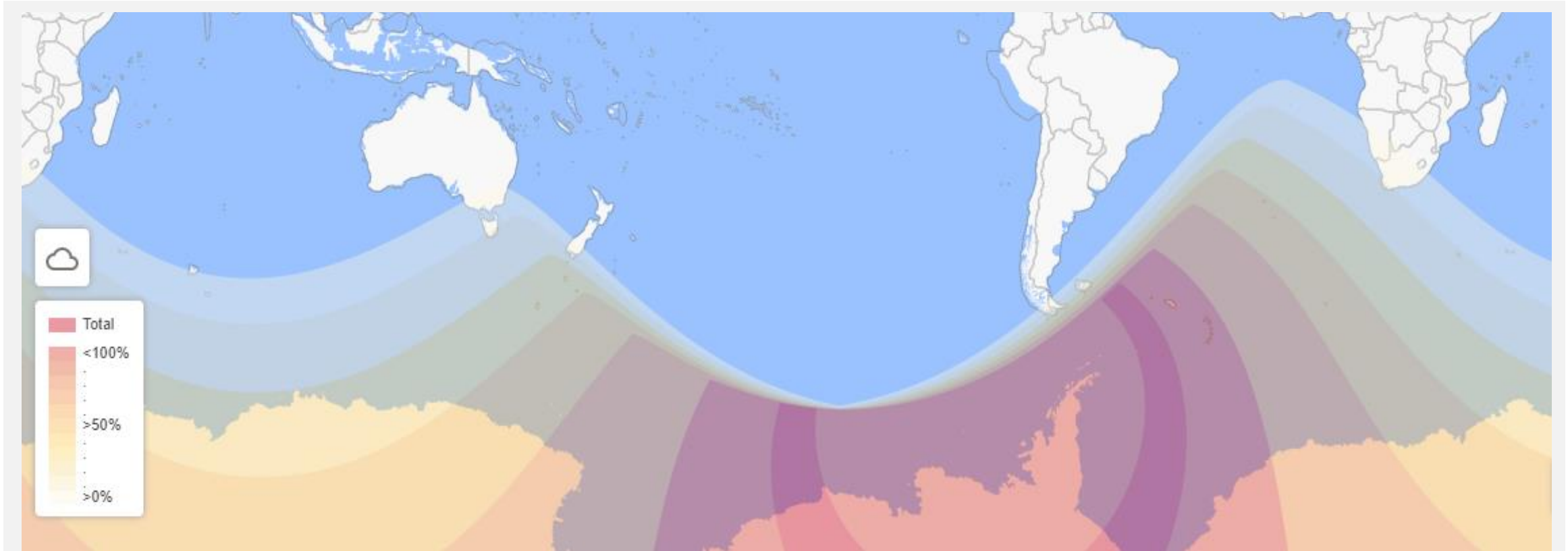
*Eclipse Map for 10 June 2021 – Annual Solar Eclipse*



4 December

# Solar Eclipse (Total)

South in Australia, South in Africa,  
South in South America, Pacific,  
Atlantic, Indian Ocean, Antarctica



*Eclipse Map for 4 December 2021 – Total Solar Eclipse*

# Outlook for the eclipses in 2022 and 2023

## 2022



30 April

Solar Eclipse (Partial)

South/West South America,  
Pacific, Atlantic, Antarctica



25 October

Solar Eclipse (Partial)

Europe, South/West Asia,  
North/East Africa, Atlantic



## 2023



20 April

Solar Eclipse (Total)

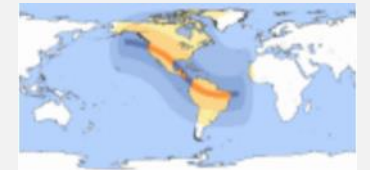
South/East Asia, Australia, Pacific,  
Indian Ocean, Antarctica



14 October

Solar Eclipse  
(Annual)

West in Africa, North America,  
South America, Pacific, Atlantic,  
Arctic



# To show sunspots and to have a beautiful ring of fire on your final image, heavy light reduction is necessary

## Solution 1: Use Dedicated ND Filter



KENKO PRO ND100000

## Solution 2: Use ND Filter Combos



KENKO REALPRO  
ND1000

+



KENKO REALPRO  
ND100

→



Effective  
ND100000

OR



KENKO REALPRO  
ND1000

+



KENKO REALPRO  
ND64

→



Effective  
ND64000

The AF function is less reliable due to the big difference between the background and the brightness of the sun. We recommend to shoot with manual exposure while checking the results on the LCD monitor and adjusting the values to the conditions.

**IMPORTANT:** Even when using ND filters, looking directly at the sun is very dangerous for your eyes health. Always use "live view mode" when shooting during an eclipse.



# We suggest the following shutter speeds depending on the aperture as starting values\*

ISO: 100



As you can see, low f-stops reduction like ND4000 (ND500 + ND8) may limit your option on aperture and shutter speed. For this reason, the use of a dedicated ND100000 filter is suggested. ND16000 (ND1000 + ND16) could be a good compromise.

**TIP:** The difference in f-stops reduction between ND100000 and ND64000 (ND1000 + ND64) is less than 1 f-stops. This means that for all intent and purpose you can use ND100000 suggested aperture and shutter speed values for this combination!

Filter	Aperture	shutter speed		
<b>ND 100,000</b> 	f 8	1/2000	1/1000	1/200
	f 11	1/1000	1/500	1/100
	f 16	1/500	1/250	1/50
	f 22	1/250	1/125	1/25
<b>ND 1,000 + ND 16</b> 	f 8	Impossible	Impossible	1/2000
	f 11	Impossible	1/5000	1/1000
	f 16	1/5000	1/2500	1/500
	f 22	1/2500	1/1250	1/250
<b>ND500 + ND 8</b> 	f 8	Impossible	Impossible	1/6000
	f 11	Impossible	Impossible	1/3000
	f 16	Impossible	1/8000	1/1500
	f 22	1/8000	1/4000	1/750

\*Please note that these should be considered only as starting values that you should adjust to the actual situation by taking different shots and making necessary correction.

# The Kenko filter line-up for the perfect eclipse shooting

## Dedicated ND100000 Filter



KENKO PRO ND100000

## Filter Combo (1000+100 or 1000+64)

KENKO REALPRO  
ND1000



KENKO REALPRO  
ND100



KENKO REALPRO  
ND64



In addition to the standard line-up of 52mm / 58mm / 77mm / 82mm, **we plan to release 67mm & 95mm as well!**

### Recommended lenses



SZX SUPER  
TELE 400mm F8  
Reflex MF  
**Fits with  
67mm filter**



KENKO MIRROR  
LENS 400MM F8  
N II  
**Fits with  
67mm filter**



Tamron SP 150-  
600mm f/5-6.3  
Di VC USD G2  
**Fits with  
95mm filter**



# Don't stop there!

Remember that after the eclipse has passed you can still enjoy your Kenko ND filters through creating long exposure images in different locations! ND100000 open up a lot of possibilities for extreme effects!

REALPRO ND64



REALPRO ND100



REALPRO ND1000



REALPRO ND100000



# Kenko



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