

SOLAR ECLIPSE

ED. MATTHEWS  
 CANADIAN DISTRICT REPRESENTATIVE  
 THE PHOTOGRAPHIC SOCIETY OF AMERICA.

THE DATE IS JULY 20, 1963  
 TIME .....  
 TIME.....

KODAK URGES CAUTION IN PHOTOGRAPHING SOLAR ECLIPSE  
WARNING: SUN CAN BURN EYES WITHOUT YOUR KNOWLEDGE

FIRST I WOULD LIKE TO THANK GORDON HUGHES OF CANADIAN KODAK, FOR HIS PERSONAL HELP IN SUPPLYING ME WITH INFORMATION, REGARDING THIS SOLAR ECLIPSE; AND ALSO CANADIAN KODAK'S EDITORIAL SERVICE BUREAU FOR NEWS LETTER # 605.

LOOKING AT THE UNSHIELDED FACE OF THE SUN WITH THE NAKED EYE OR THROUGH ANY OPTICAL DEVICE, SUCH AS THE VIEWFINDER OF A CAMERA, CAN SERIOUSLY DAMAGE THE EYE, ADEQUATE PROTECTION MEANS LOOKING AT THE SUN THROUGH A MATERIAL WHICH WILL NOT ONLY REDUCE THE VISIBLE ENERGY OF THE SUN FOR COMFORT, BUT WHICH EQUALLY & SUFFICIENTLY REDUCES THE INVISIBLE ULTRAVIOLET & INFRARED RADIATION WHICH CAN CAUSE INSTANT DAMAGE, INCLUDING BLINDNESS, WITHOUT A PERSON'S BEING AWARE OF IT.

MEDICAL AUTHORITIES SUGGEST THAT A NEUTRAL DENSITY FILTER OF METALLIC SILVER OF AT LEAST 6.0 DENSITY WILL PROVIDE ADEQUATE PROTECTION WHEN PLACED IN FRONT OF THE EYES BEFORE FACING THE SUN.

SUCH A FILTER CAN BE MADE WITH TWO THICKNESSES OF BLACK & WHITE FILM NOT COLOR FILM. WHICH HAS BEEN COMPLETELY EXPOSED TO DAY LIGHT & FULLY DEVELOPED TO MAXIMUM DENSITY. IT CAN BE PREPARED BY SUBJECTING THE FILM TO DAYLIGHT & FULL DEVELOPMENT, ACCORDING TO THE MANUFACTURER'S DIRECTIONS.

SUCH METALLIC FILTERS SHOULD ALWAYS BE USED WHEN VIEWING THE SUN. HOWEVER, SUCH FILTERS WILL NOT BE SATISFACTORY FOR USE OVER A CAMERA LENS WHEN MAKING A PHOTOGRAPHIC EXPOSURE SINCE THE GRAIN PATTERN WILL DIFFUSE THE IMAGE & MAKE IT UNSHARP.

A FILTER SUCH AS A KODAK WRATTEN NEUTRAL DENSITY FILTER SHOULD BE USED OVER THE CAMERA LENS. THE DENSITY OF THE FILTER SHOULD BE 4.0 OR 5.0. DO NOT VIEW THE SUN THROUGH THIS FILTER IF YOU USE A MOVIE CAMERA, SET IT FIRMLY ON A TRIPOD, & SHOOT SHORT BURSTS OF SIX OR EIGHT FRAMES. PRESS & RELEASE SMOOTHLY & DO NOT PUNCH THE BUTTON. THIS SHOULD BE REPEATED WITHOUT MOVING THE CAMERA ABOUT EVERY TWO OR THREE MINUTES.

THE ONLY ACCURATE WAY TO DETERMINE EXACT OR CORRECT EXPOSURE DURING THE PARTIAL PHASES IS TO TAKE A TEST ROLL OF PHOTOS ON A SUNNY DAY SEVERAL DAYS BEFORE THE ECLIPSE.

THE SUN'S BRIGHTNESS REMAINS ABOUT THE SAME UNTIL THE IMAGE OF THE MOON OBSCURES SOME 90 PERCENT OF THE SUN. BE SURE TO USE SAME FILTERS IN TESTS AS YOU WILL USE FOR ECLIPSE.

KODACHROME II (8MM) OR (16MM) DAYLIGHT TYPE MOVIE FILM	LENS OPENING; F/16 WITH N.D. FILTER 4.0		1/100 64 FRAMES
VERICHROME PAN. ROLL FILM 4.0 FILTER EKTACOLOR TYPE S ; 4.0 FILTER	LENS OPENING F/32 LENS OPENING F/22		1/200 1/200
KODACHROME X 35MM 4.0 N.D. FILTER F.P.3 ROLL 35MM BLACK & WHITE 4.0 N.D. FILTER	LENS OPENING F/22  LENS OPENING F/32		1/200 1/200