Fluorite Flatfield Converter warning note -possible void of warranty-

Handling of CaF₂ optical systems

The optical system of the Baader FFC comprises genuine Calcium-fluorite lenses. The extreme refraction characteristics of CaF₂ enable the design of optical systems delivering very high definition across an extremely broad spectral range.

No other Barlow system can yield comparably sharp images across a similar sized field. The disadvantage of such elaborate optics, however, is its sensitivity regarding thermal tension and stress.

 CaF_2 must not be exposed to sudden and/or high temperature changes. As a result, the FFC must not be used for solar projection photography without adequate heat protection filter, because the sudden and extreme changes in temperature may cause the fluorite lenses to crack. Damage caused by thermal stress can be identified with our inspection methods – in which case the warranty will be void.

Similarly, the FFC must not be subjected to sudden temperature changes. No optical system comprising fluorite lenses (especially no telescope objectives!) must be used at 20° C below zero and then brought into (for instance) a heated living room. Again – the damage resulting from thermal stress can be seen when analyzing the stress pattern in the CaF₂.

Each and every CaF_2 optical system needs time to adapt to temperature. For this purpose the optics need to be placed outside, or alternatively, in the unheated luggage compartment of a car during the day to allow it to cool down slowly. The same applies to warming it slowly after observation.

Please do not use this optical system if you are not willing to treat it with the extra care necessary for such extremely high class and delicate optics.

Policy per Baader Planetarium