Design and operation of a harsh-climate observatory for amateur astrophotography.

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Increasingly complex equipment for amateur astronomers is becoming available at the retail level and at affordable prices. A significant stumbling block for those wishing to participate in this scientific endeavor is convenient equipment access (mobilization, operation, and demobilization) in less than ideal regions. This work describes the systematic design, construction and operation of a facility that meets these requirements. Though some work remains in finalizing the operational protocols for digital image processing, early experimentation with the built facility suggests that the structural, mechanical and computer design is fit for purpose and with an improved understanding of software capabilities the operation of the observatory may yield scientifically valuable results worthy of publication.