SAN FERNANDO BAKER-NUNN CAMERA
TRANSFORMATION

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The Automated Wide Field Telescope (AWFT) project is a San Fernando-Fabra collaboration to enable a Baker-Nunn camera for remote and robotic CCD use.

Original Baker-Nunn Camera (BNC)

**BNC Brief History**
- The BNC was operational during the period 1948-1979 at the Pic du Midi observatory, with 12 inch (30 cm) f/2.4 spherical mirror and a 20×20 cm CCD camera.
- The BNC is designed to perform an all-sky survey in 5 outlet telescopes.
- The BNC has been functional with the final imaging system.
- The BNC was equipped with a Schmidt-Cassegrain reflector.
- The BNC has been functioning with an optical system at high altitude.

**Field of View**
- The BNC has a field of view of 60°x60°.
- The BNC has been functional with an 15°×15° field of view.
- The BNC has been functional with a 30°×30° field of view.

**Telescope Parameters**
- The BNC has a mirror diameter of 12 inches (30 cm).
- The BNC has a focal length of 15 feet (4.6 m).
- The BNC has a focal ratio of f/2.4.

**Science project**
1. **QDSS (Quick Daily Sky Survey)**
   - Capacity to detect all visible sky features in only 4 nights (TDC mode).
2. **Specific programs**
   - The BNC has been functional with an all-sky survey in 5 outlet telescopes.
   - The BNC has been functional with an optical system at high altitude.
   - The BNC has been functional with a 30°×30° field of view.
3. **Education and divulgation activities**

**Working Site**

**New site advantage**
In order to take advantage of the BNC specifications, it should be moved to a site with excellent astronomic conditions. We have chosen the Tossa de Mar peak in Catalonia Pyrenees.

- Excellent sky conditions and darkness.
- Moderate humidity and lower cloud density.
- Cassidy building infrastructure, access to power grid and fire and telephone.
- Meteorological data of the place for the last 5 years.
- Cassidy building, the harshest conditions next to a mountain refuge with all year round guard living in.