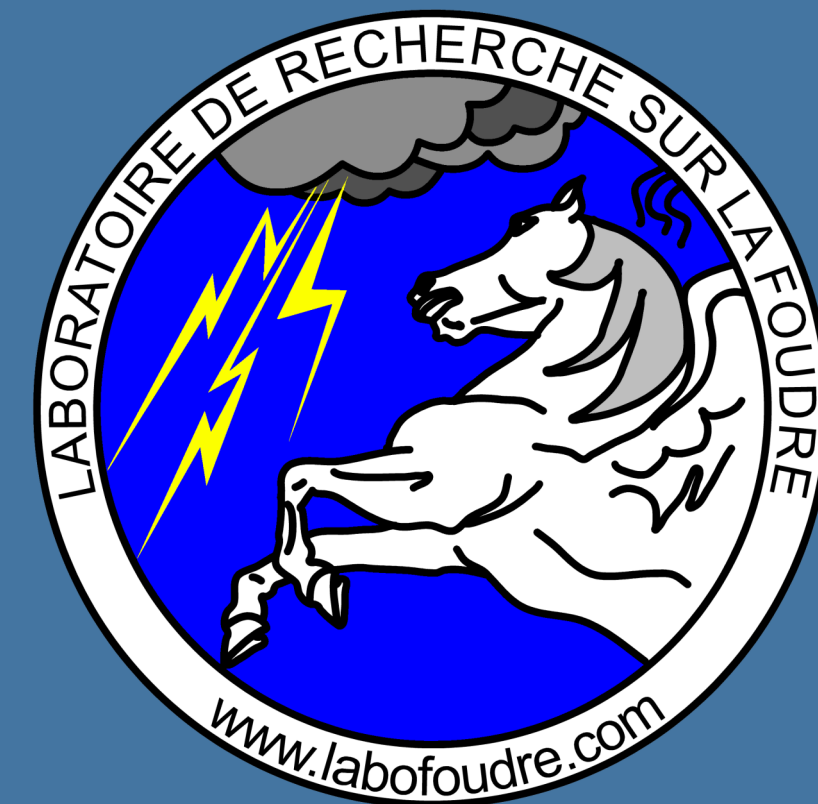


BALL LIGHTNING

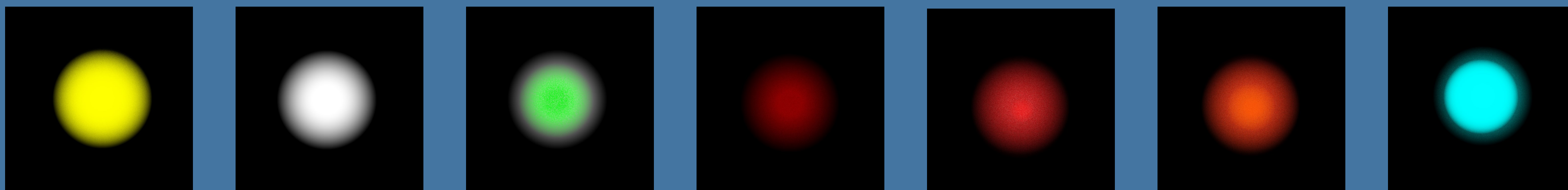
VISUAL TYPOLOGY

Based on 406 observations between 1994 and 2020



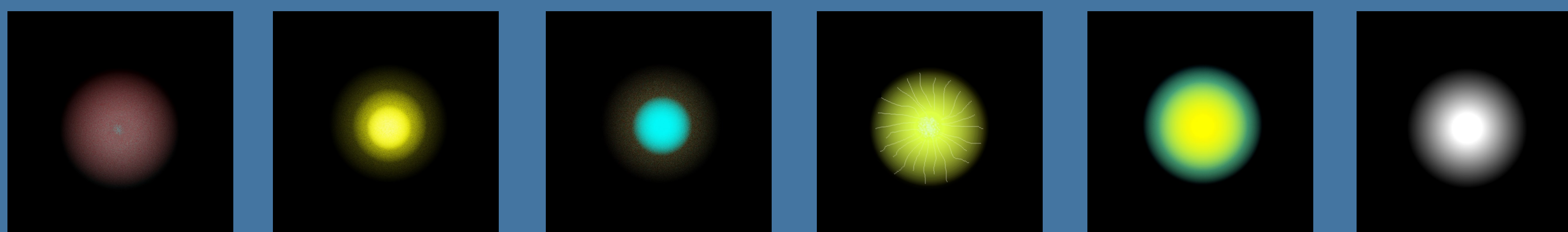
The following typologies of the different types of ball lightning represent faithful reproductions of the visual appearances of the phenomena observed by witnesses. They are not necessarily exact, as they depend on observations reported.

I - BALL LIGHTNING



Ball lightning is characterized by the appearance of a luminous phenomenon during a thunderstorm, occurring simultaneously with a thunderbolt or a few seconds later. Several other criteria are required: the shape, which must be spherical; the size, which must not exceed fifty centimeters; the lifespan, which must typically not exceed 30 seconds; and the altitude of evolution, which must not exceed five meters above its surroundings. The luminous ball can be static or mobile, and its displacement is relatively fast.

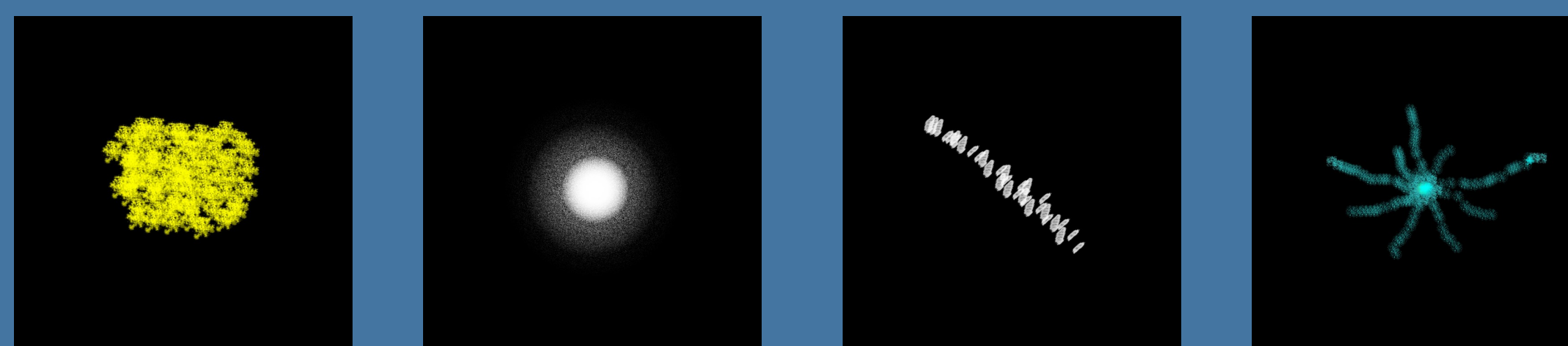
II - GLOBULAR LIGHTNING



Globular lightning is characterized by the appearance of a luminous phenomenon during a thunderstorm or under stormy conditions, such as heavy atmosphere with the presence of intense natural electric or magnetic fields, and sporadic lightning or thunder). Unlike ball lightning, globular lightning is not necessarily spherical in appearance, it can change dimensions and shape during its evolution, it may become may be obloid, prolate, or even crest-like. The lifespan of globular lightning can vary from just a few seconds to several minutes, or under exceptional circumstances it may last several tens of minutes. The luminous meteor can be static or mobile; it can move over distances up to several hundreds of meters. Its size can vary from a few tens of centimeters to several meters in extent, and its evolving altitude can range from ground level to several hundred meters in height. Changes in altitude or bouncing off the ground are regularly observed.

III - T.S.L.P

Transient Stormy Luminous Phenomena



Transient Stormy Luminous Phenomena are characterized by an atmospheric luminous object with variable size and appearance, appearing either in stormy weather or outside the envelope of an active storm under apparently good weather conditions., but in the presence of very high electric, magnetic, electromagnetic or electrostatic fields. Phenomena of this type are also observed before, during, or after earthquakes, and more rarely in the plume of a volcanic eruption when electrical discharges occur. A P.L.O.T can have static phases during part of its lifespan ranging from a few seconds to several minutes, and may be found at all altitudes, from the ground to the tropopause.