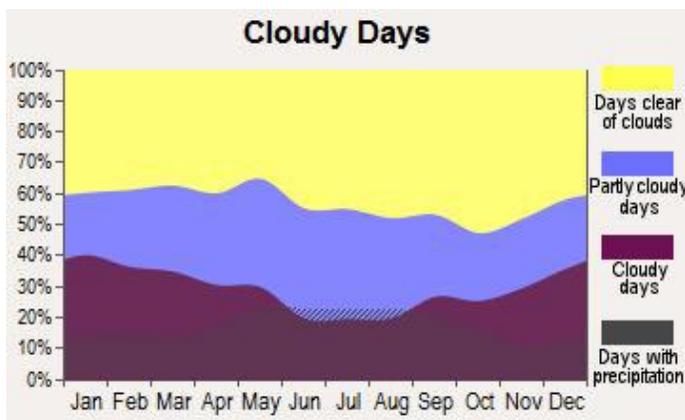


PROPOSED NEW APPROACH TO SCHEDULING PUBLIC STAR PARTIES

April 2019

The following document is intended to stimulate discussions on how the South Plains Astronomy Club (SPAC) schedules its monthly Public Star Parties. This is brought about by the observation that, through the method currently used to schedule these events, the monthly Public Star Party has occurred with great infrequency.

The method currently used is to schedule the monthly Public Star Party on the Friday closest to the date of the First Quarter Moon. Thus, there is only one chance per month to hold the event. The chart below shows the climatological frequency of clear sky conditions for Lubbock. This shows that, statistically, around 40 to 50 percent of the days in any given month will be clear. If these days are assumed to be distributed randomly over the month, then the chances that any given day will be clear are typically less than 50 percent. The result is that the day scheduled for the Public Star Party is usually not clear, resulting in cancellation of the event for that month.



It should be pointed out that there is nothing that says that SPAC has to hold public star parties. If the club membership feels that we don't get anything out of them, or that they are too much trouble, then we should officially discontinue this activity. However, if the club membership feels it is important to host these events, then we should institute a method for scheduling them that increases the likelihood that they will occur. *Using the current method means that this event will probably be cancelled for most months.*

Other astronomy clubs around the country have adopted various approaches to remedy this

problem. Some have scheduled more than one star party date per month, while some have a single date but also identify alternate dates later in the month should the primary be clouded out.

Climatological analysis shows that clear days are actually not randomly distributed over a month. Rather, weather in our region tends to follow cycles with an average duration of around 4 days. So, if it's cloudy today, in a couple of days it will likely be clear. We can use this information to develop a better method for scheduling public star parties. If we decide that we still want the event around the date of the First Quarter Moon, then we can establish the Friday closest to this date as the "primary" date for the star party (this is like our current method). However, we can also identify the following Saturday and Sunday as the "secondary" and "tertiary" alternate dates. Due to the cyclic nature of weather, having *three sequential dates* would greatly increase the likelihood of having a clear night for the event in a given month (even more than three randomly selected dates).

What would this mean for SPAC members who want to participate in our Public Star Parties? Instead of setting aside one day a month for the party, they would essentially set aside *one weekend* per month, recognizing that only one day during that period would actually be used. Maybe not everyone would be available for all three days, but some people would likely be available for each of the days.

To use this new system, there would have to be a mechanism for letting the general public know in a timely manner whether the event is being held. This already exists in the "Message Board" feature of the new SPAC webpage. By going to the Message Board a few hours before the scheduled event, one could see if it is "on" for that night or has been re-scheduled for one of the alternate dates. References to the Message Board are provided in the website where the Public Star Parties are discussed, and we can also tell people about it when we talk about the star parties. Over time, the public would hopefully get used to checking the website for the status of the Public Star Party.