Marc Buie 4:33 PM July 16

You may be wondering what is going on for the preparations. The equipment is in good shape. We had a bit of a shake-down session over the weekend and a few minor things were identified but we are well on track for getting the equipment ready. On this aspect we are in better shape than we've ever been at this stage before a campaign. The new guide to the equipment also went through heavy testing this weekend and it's in really good shape. There are more tweaks to be made but an electronic copy will be posted soon. We will also provide a hardcopy of the guide in each system. Most of the effort right now is focused on making travel arrangements and filling all of the participant slots. The cost of flights is coming in a bit higher than expected. We haven't run out of margin on the budget but it's clear that we have to keep a close eye on this factor to keep the budget on track. I had been hoping the table would tilt the other way and we might be able to book more rather than less flights but that's looking less likely. We are hoping to get offers for all slots out before the end of the week. My apologies in advance if you weren't chosen in the end. This is the first mega campaign I've run where I have to turn away people. I really hate doing that but I hope you'll understand. I suspect that avoiding bad weather will be the hardest part of this deployment. I started to get nervous about committing too soon to using Lamar for the first night gathering. I'm now thinking I want to wait on that decision until we are looking at real weather forecasts that have some chance of being useful. The other likely location for a first night stop is Raton, NM. There are pro's and con's for the choice but it's still very reasonable and leaves open a much wider range of deployment locations. At the moment, I think we're looking good for a 33-station deployment (16 for Patroclus and 17 for Menoetius). This will entail 26 Lucy systems augmented by 7 systems provided by other observers.

Marc Buie July 25th at 12:40 PM

I'm beginning to track weather patterns. I don't have enough data yet to say much other than right now it doesn't look hopeless. Any area that we can observe from has at least a 50% chance of clear sky on the target. That's really no surprise and doesn't help much. It does appear that the general pattern I expect for things to be better to the northeast along our track is confirmed. However, as you all know, climate is not weather. My stats so far are more like climate and any location in our area has the chance of being really bad. Again, not a surprise. I do see a general trend, so far, that suggests unencumbered skies are less likely for Patroclus than for Menoetius. All I can say about that is I'm glad it's not the other way around. A consequence of thinking harder about weather flexibility is a more nuanced approach to the range of possible deployments and the consequences of those decisions. With our early decision to make Denver the travel hub, we have a bias toward the northeast along the track for an easier deployment. Nothing in the weather patterns invalidates that decision, not that we could do anything about it at this point anyway. If the weather patterns hold and we work in the northeast these will be the easiest areas to cover in terms of total driving time. The southwestern end of the area will be the hardest. The level of difficulty is such that the post-event "data party" concept can only be

realized for the easy case. For the hardest case, we will all be totally consumed with the return drive and dropping off the equipment before heading home. We are working the team assignments to make sure your flights are compatible with the hardest deployment option. The plan for deployment will be handled on a day-by-day basis due to the weather if necessary. The first major decision will be made no later than Tuesday, August 6. This decision will determine the Night 1 all-hands location. Note that in this case, "all-hands" really only means those leaving the Denver area with Lucy equipment. Those with their own equipment and those not starting from the Denver area are welcome to join us on this first night but it is not required. Where this situation is most important is for the Texasbased observers using Lucy equipment. Not joining us means you will miss a training/practice night on potentially unfamiliar equipment. We will support you if you want to be there on night 1 so don't let that factor impinge on your decision. Most likely, Night 1 will be in either Lamar, CO or Raton, NM and will be based on weather prospects alone. By Night 2, the teams running the Lucy equipment will be formed and we'll be split into two groups in separate base camp areas, one for Patroclus observers and one for Menoetius observers. There is another important factor for everyone to consider. This is a dawn event. We also have day-time driving considerations to respect. As is typical for astronomical work, our time for downtime and sleep is dictated by our relevant astronomical constraints. I know from experience that shifting schedules is hard and should be minimized. What this means is that ALL nights for equipment check out and practice as well as the observing will happen in the pre-dawn hours. It will work much better if we all adopt an early-to-bed strategy. This will be important to adopt on the very first night. The exact timing on the schedule is TBD, but night 1 and 2 will likely be starting activities at 1-2am and sleep is before we observe and we'll need to be prepared for driving after packing up. When you see the schedules for each night, this explanation should help you understand how we are guiding the deployment efforts. If we do this right, you'll be able to make it safely back to Denver after the occultation. Note that the longest drive is ~12-13 hours from the observing site to equipment drop-off. Even in the easiest of all cases, the longest drive is still about 9-10 hours. Note that the easiest cases have a larger range from ~3-10 hours. One final note concerns the Texas crew using Lucy equipment. The team and vehicle plan is designed to allow splitting up after the occultation so that you don't have to come back to a central base location and can just head straight home.

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Jack Jewell 8:22 PM

Is the "followed by a day for data processing and integrating results as a team" (per May 30 post) in the morning of Aug 11 e.g. at Lamar, or on Aug 12 e.g. at LOHQ/webinar?



Marc Buie 9:14 PM

Location is TBD





Warren Odom 11:43 PM

All this information about schedules, etc. is more or less what I've been expecting, so my reaction is, have telescope, will travel. I plan to record the Olympics, and I presume the Cowboys can manage to play their first preseason game without me. Logistics permitting, I am also interested in getting together for Night 1 and the data party. I have a couple of questions:

- 1. Do Texas observers using Lucy equipment need to be concerned at all with transporting any equipment? Or can we use a smaller car?
- 2. Do the teams of two generally ride in the same vehicle for most of the traveling?

Yesterday



Marc Buie 10:03 AM

These are great questions. Let me provide some clarification of our default expectations. I think this covers both questions. In cases where a system is to be used by a Texas observer not coming to Mead, CO to pick up their gear, the plan is for a team that is coming from Mead to carry two systems to the rendezvous point. Once at the rendezvous, the system is

handed over and then is expected to be carried in a safe and secure manner. For each affected pair of vehicles there may be swapping of people involved as well though clearly drivers will always stay with their vehicles. That pairing of people and equipment will remain until after the completion of the observations when the swaps will be reversed. It is our hope that we don't have extra vehicles involved and there is, in the end, only one vehicle per team. This minimizes deployment costs and provides an extra level of safety in that no one is traveling alone on observing nights. Carpooling arrangements to and from the rendezvous point is up to all of you to work out subject to the constraints of the necessary meet-up. I do hope the timing of the first weather decision allows the Texas observers enough time to decide what they want to do with regard to Night 1. Note that this implies that everyone needing lodging for Night 1 will be making their arrangements following that weather decision once the location for Night 1 is determined. Quite frankly, I'd rather wait an extra day for this first decision but the realities of all the travel on the next day (Aug 7) require the earlier decision. There is a slight risk that this will lead to longer drives on Day 2 but I don't see any way to eliminate that risk without a bigger and more likely trouble spot somewhere else.