



## LIGO LABORATORY OPERATIONS MANAGEMENT TEAM

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### MEMORANDUM

DATE: 12 April 2017  
TO: Operations personnel and collaborators  
FROM: Fred Raab (for the Operations Management Team)  
SUBJECT: Updated O2 observing run schedule  
Refer to: LIGO-L1700028-v3

#### **1 Memo from JRPC regarding the O2 end date**

The LIGO/Virgo Joint Run Planning Committee, after discussion and consultation with the various interested groups, has written for the OMT a "Recommendation regarding O2 duration and close-out measurements," <https://dcc.ligo.org/LIGO-L1700023>. The memo emphasizes the JRPC's sense that clear and prompt announcement of the run's expected end date is important for planning and resource allocation.

#### **2 Planning a commissioning break**

The commissioning teams and run coordinators have proposed to include a commissioning break of nominally 2-3 weeks to mitigate problems associated with an absorbing spot on an H1 ITM, correct a problem with Hartmann Wave-front Sensor optics on H1 and to eliminate a scattering problem on L1. The risk of a fiber breaking during the cleaning of the H1 ITM is considered to be low; nonetheless, mitigation has been developed for this contingency. The benefits of correcting the above problems — gaining early knowledge relevant to post-O2 commissioning, and potential small sensitivity improvements on H1 and L1 for the remainder of O2 — are deemed by the OMT to outweigh the risks.

#### **3 OMT decisions**

We accept the recommendations in the JRPC memo. **We plan to end O2 on Friday, August 25, 2017, at 2200 UTC, and strongly urge that calibration activities, PEM injection studies and other close-out measurements be done during run breaks rather than at the end.**

Detailed resource-loaded planning is underway of post-run commissioning activities and the tasks leading up to them. We will also closely monitor readiness and may, as required, change the end-of-run schedule to maximize our overall scientific output.

The OMT further decides that the proposed commissioning break be pursued with a preferred start date during the week of May 8. If it should become impossible to meet this start date, then the commissioning break should be started the week of May 29. The O2 run will be continued after the commissioning break, with the intent of collecting at least six months of data and having some time running H1, L1 and V1 in coincidence before the end of O2. Both possible start dates accommodate GEO plans to observe during the commissioning break.