CME assignment zero (in-class workshop Tues 6/4) complete by Fri 6/6

For the CMEs listed below, follow the CME analysis procedure described in the lesson and also submit answers to the following questions for each CME:

<table>
<thead>
<tr>
<th>HW#0 CMEs starting at</th>
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<tbody>
<tr>
<td>1) 2014-05-12T12:18Z</td>
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<tr>
<td>2) 2012-10-05T03:24Z</td>
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<tr>
<td>3) 2012-07-12T16:54Z</td>
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<tr>
<td>4) 2013-02-26T14:06Z</td>
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a) What is the source location for this CME? (list the location e.g. N15E20, instrument/wavelength, and time of the observation).
b) Describe the EUV lower coronal signature for this CME (e.g. flare, post eruption arcade/loops, rising loops, dimming, filament eruption).
c) Is the CME a halo in any of the coronagraphs? If so, is it moving away from or towards the observer?
d) Which coronagraph instrument first observed the CME at the start time?
e) What are your final CME parameters (radial speed, half width, longitude, latitude, and time at 21.5 Rs (solar radii)).
f) Submit your “Save URL” of your measurements.

Resources & iSWA layouts
* 40 Frame coronagraph and EUV movies [http://go.nasa.gov/16bTvzK](http://go.nasa.gov/16bTvzK)
* Where is STEREO? [http://stereossc.nascom.nasa.gov/cgi-bin/make_where_gif](http://stereossc.nascom.nasa.gov/cgi-bin/make_where_gif)
HW#0 CME starting at 1) 2014-05-12T12:18Z

EUV Signatures:
AIA: filament eruption in SE.
EUVIB: rising loops off SW limb
EUV Signatures:
AIA: slow dimming south of disk center, some brightening post-eruption. EUVI: Slow rising loops off of SE limb in A, SW limb in B.

HW#0 CME starting at 2) 2012-10-05T03:24Z
EUV Signatures:
AIA: Flare brightening, slow erupting loops from below AR south of disk center.

HW#0 CME starting at 3) 2012-07-12T16:54Z
EUV Signatures: AIA: dimming over a large area in the north, between two ARs.