Hi Willem,  
  
The idea was mainly to make the code more easily applicable to other models and objective functions.  
  
If you can prepare a stand-alone analysis (script+data files) that can be distributed, that's probably 90% of the way there.

I can start here, by adjusting the LWSC3007 demo script with GR4J and can also make a comparison with IHACRES in a runlist?

Should this also include the extraction of satellite data, or can this assumed to be done? I think I should also have a demo script of this, and in particular how you summarise the data.

For it to be stand-alone, it also needs to be sufficiently clearly structured and written to be understood quickly by the average honours student - that's probably where most of the cleaning up was required.  
  
We then have two directions in which it can be extended:  
1) Use other models with the same data  
(This was the main goal with Avi)

I can do this with the current script

I'm not sure yet whether it would make sense to turn this into a function rather than just a script.  
In particular, the variable representing actual evapotranspiration may have different names depending on the model, which complicates things  
  
2) Use other datasets with the same model structure.  
That would be fairly easy to make into a function. The function would have the zoo data and objective function as arguments  
  
At this stage, I wasn't planning on including the analysis directly in hydromad, but rather working towards a loose collection of benchmarking analyses...  
  
  
3) However, we could simplify the analysis to make it more general. For any arbitrary model structure and data, we:  
- estimate parameters using runoff data  
- identify which state variable holds actual evapotranspiration  
- estimate parameters using weighted average of runoff and aET  
- identify which parameters do/don't have an effect on actual evapotranspiration  
- estimate only the parameters that affect actual evapotranspiration, with other parameters set using values from either of the other two models  
- return a runlist with all three/four models  
There's no regionalisation aspect, but this would theoretically work for any model that predicts evapotranspiration  
  
  
  
Feel free to share what you've got, and I can comment on what should still be changed...