



Massachusetts Institute of Technology Center for Space Research

Coral Reef Mission

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We have been working with Astrium to get a Teaming Agreement in place. After an exchange of paper, we conducted some final negotiations in person in Friedrichshafen. Although not yet signed by the respective management representatives, all the details seem to have been worked out.

We have also been working on firming up the physical accommodations for the instruments, and we need names by which to refer to them. I've invented the following; other suggestions are welcome. The primary instruments – lens, narrowband filter, and CCD focal plane – are called "Paint/xxx", where the "xxx" denotes the center of the optical bandpass. We are awaiting input from the science team on the final number of these instruments and their optical properties, but for now we will assume their number is 12. As John proposed during last April's workshop, we have currently baselined both a 5 meter pixel panchromatic instrument to help with spatial calibration – which I call "Pan" -- and a full-field slit spectrograph to help with spectral calibration – which I call "Palette". The outline dimensions, then, in millimeters are

Paint/1-12	120 dia x 400
Pan	240 dia x 800
Palette	120 dia x 400 x 400 (two legs)

Each instrument is self-contained in an electrical and data sense; we've proposed electronics box which sits beside each telescope with an outside dimension of 120 x 300 x 30 mm

I had a working interface meeting with Astrium in which we discussed the above accommodations and reaffirmed our original power numbers. Power, as the review team noted, was one area where we needed more margin, and we found several ways to get that margin. We also talked about getting DLR (the German space agency) involved with our mission to the extent that they are looking for opportunities to fly space technology demonstrators and are issuing an AO for same this September.

Bob Goeke
MIT Mission Development