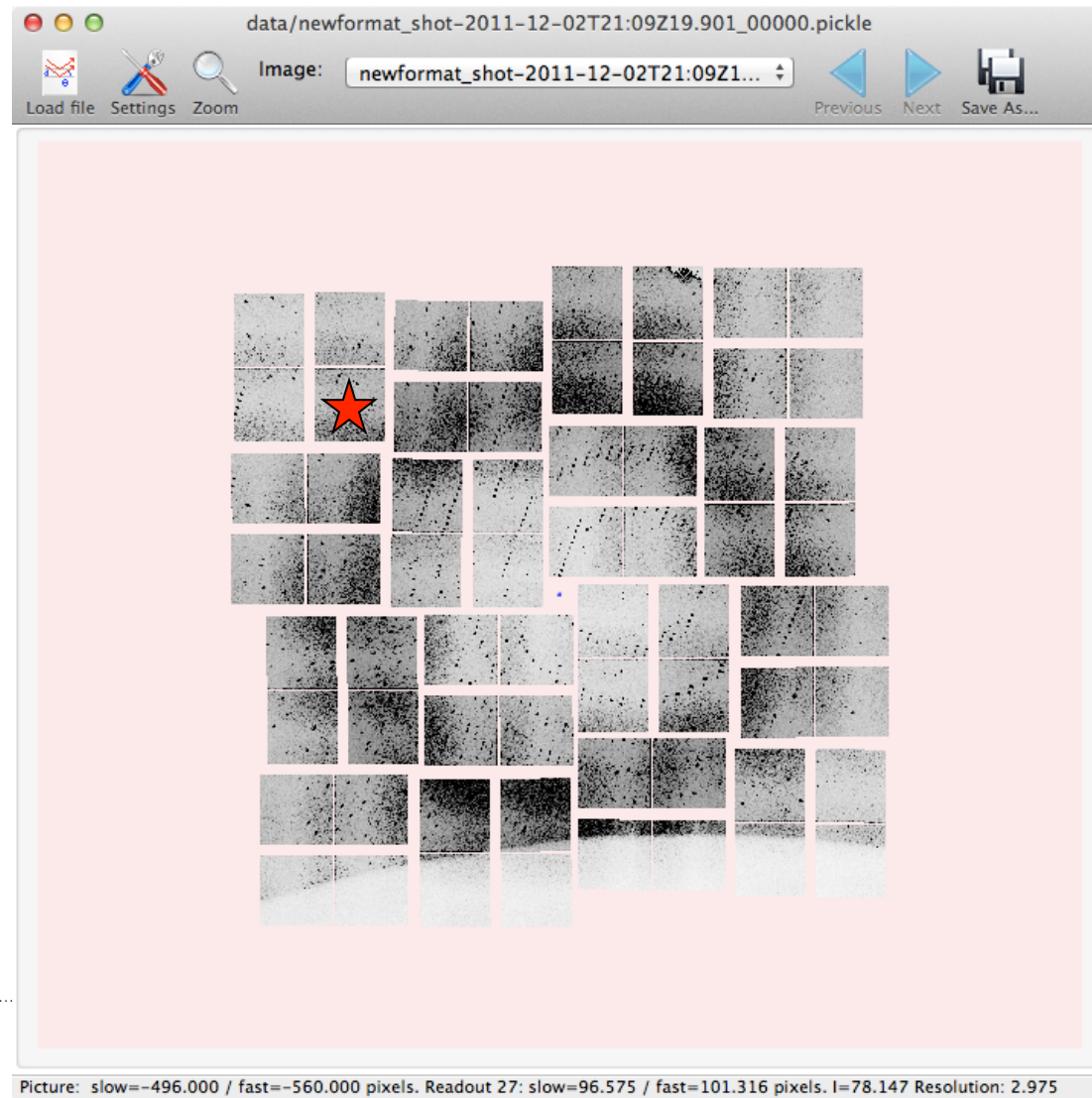# First forays into CCTBX

Phenix and CCTBX image detectors are forked

- Speed increase by "tiling" the display (quick mouse wheel zoom, quick pan)

- Addition of additional detector image type: CSPAD detector

New features for the CCTBX Image Viewer

- Show resolution by mouse over

- Save as PNG

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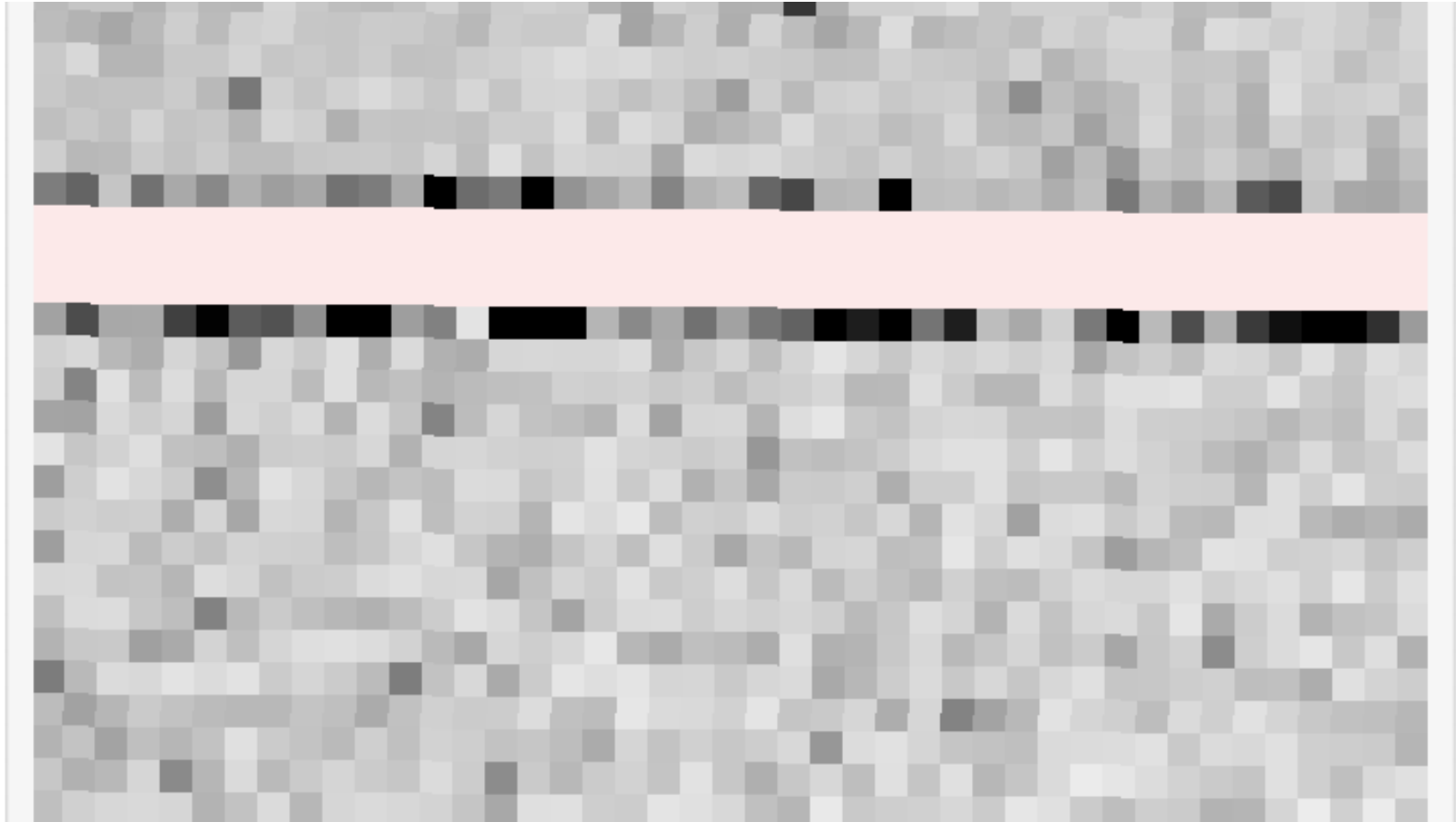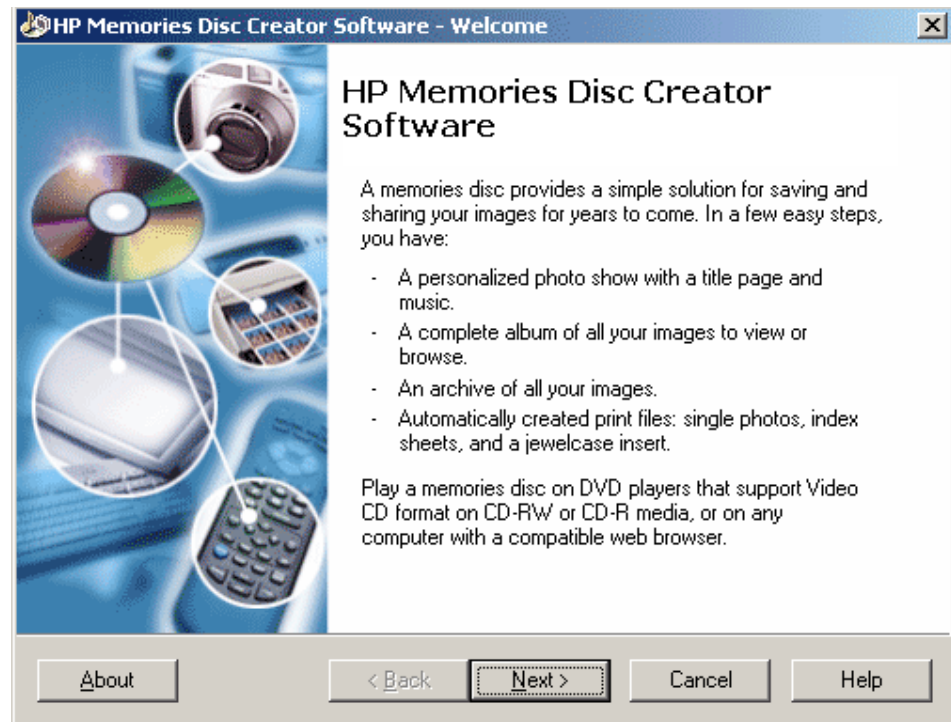
Imager: new CSPAD format

Tilted ASICs

Image viewer refactoring

- From Graeme: incorporate detector recognition code

- From David: synchronize and standardize geometry abstractions

- Get away from .pickle formats

→ Index and integrate tiled data correctly

Perspective: HP software production

Perspective: HP software production

Software design principles

- Use case driven development
- Error management and logging from the ground up
- Localization aware from day 1

Code management best practices

- Source code control
- Project management
- Automated builds
- Automated tests
- Automated documentation

Centralized defect/feature tracking

- Organized by future software releases
- Sorted by priority and "effort"

Sample Mem Disc Features: ca. 2001

	A	B	C	D	E	F	G	H	I
1		**MD 2.0 Features**	updated:	10/17/01					
2			modified by:	Veasna H.					
3	Release	Description	Priority	Status	Benefit	Effort	Team	Category	Sub-Categ
4	2.00	save and restore multiple project files	1.00	1.70		easy		Client	
5	2.00	TV browse experience (using hi-res VCD mode)	1.00	1.70		medium		SDK	
6	2.00	enable entry of multiple music files to be played in sequence, and allow sequence control	1.00	1.70		medium		Client	
7	2.00	Support zero to multiple CD-writer drives	1.00	1.70		medium		Client	
8	2.00	Cue PhotoCenter launches only one copy of magic disc creator	1.00	1.70					
9	2.00	PC experience - print experience interface/interaction design proposal	1.00	1.70					
10	2.00	Quick Start Guide	1.00	1.70					
11	2.00	save arbitrary data files on disc	1.00	1.70		medium		Client	
12	2.00	Mixing audio tracks with fixed volumes	1.00			easy		SDK	
13	2.00	Preview video clip during authoring	1.00			medium		Client	
14	2.00	DSC video clip integrated into MD authoring and playback experiences	1.00			high		Client&SDK	
15	2.00	Automatic support for still+audio (from EXIF headers)	1.00			medium		Client&SDK	
16	2.00	Ability to exclude associated audio from still+audio or video all at once	1.00			medium		Client&SDK	
17	2.00	Ability to exclude associated audio from still+audio or video per asset	1.00			medium		Client&SDK	
18	2.00	Support video types that are supported by Windows Media Player on the user's system	1.00					SDK	
19	2.00	User control over video clip playback during computer browse experience	1.00			easy		PC EXP	
20	2.00	video clip 1st class asset during DVD "browse" experience	1.00			easy		SDK	
21	2.00	Normalize video clips to MPEG-1	1.00			medium		SDK	
22	2.00	Support QuickTime video type on Windows	1.00					Client&SDK	
23	2.00	Creation of printable photo album at author time	1.00						
	2.00	Fade music track after trimming for the end of	1.20			medium		SDK	

Application to DIALS

Consider use cases

Feature Tracking

Issue Tracking

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