



University of Wisconsin  
**SCHOOL OF MEDICINE  
AND PUBLIC HEALTH**

# **Fundus Photograph Reading Center**

## **Spectral Domain Optical Coherence Tomography (SD-OCT) Zeiss Cirrus**

**Effective Date: 29 Jun 2012**

## Table of Contents

1. Zeiss Cirrus OCT Overview .....	2
2. OCT Technician Certification .....	2
2.1. Overview .....	2
2.2. Scans Required .....	2
2.2.1. Macular Cube Scan .....	2
2.2.2. Cross-Scan.....	2
2.3. Submitting Certification Scans to FPRC .....	2
2.4. Uncertified Technicians.....	2
2.4.1. Baseline/Screening Visits.....	2
2.4.2. Follow up Visits .....	3
3. Acquiring the Scans.....	3
3.1. Macular Cube Scan .....	3
4. Exporting .....	4
4.1. Renaming Subjects Prior to Export .....	4
4.2. Exporting Data Files.....	5

## 1. Zeiss Cirrus OCT Overview

Technicians using the Cirrus will capture one Macular Cube Scan 512 A-scans and 128 B-scans. A Cross Hair Scan is taken automatically as part of Cube Scan (1024 A-scan resolution).

Make sure you have Cirrus software version 4.5 or higher with the single-visit export option. If you do not have this, contact the Fundus Photograph Reading Center (FPRC) Imaging staff at (608) 410-0619.

## 2. OCT Technician Certification

### 2.1. Overview

All technicians performing OCT must be certified for the relevant study procedure(s) before submitting actual study subject scans.

The following scans may be performed on subjects for whom OCT is being carried out for clinical purposes or on volunteers.

### 2.2. Scans Required

Certification will consist of performing the required scans on one eye. Scans should demonstrate the disorder to be studied, such as macular edema or exudative age-related macular degeneration, involving retinal thickening at the center of the macula (center point should be 250 microns or greater).

#### 2.2.1. Macular Cube Scan

This scan will acquire one cube scan at 512 x 128.

#### 2.2.2. Cross-Scan

This scan is taken as part of the cube scan with 1024 A-scans.

### 2.3. Submitting Certification Scans to FPRC

Certification submissions will be evaluated to determine if the scans are of acceptable quality and taken according to the specified parameters. Export scans as outlined in section 4 *Exporting* of this document, and replace patient identifying information with certification information.

OCT technicians who meet certification criteria will receive written confirmation of certification via email. Technicians who do not meet these criteria will receive feedback from the FPRC Digital Imaging Specialists and will be required to submit additional scans.

### 2.4. Uncertified Technicians

#### 2.4.1. Baseline/Screening Visits

**Only FPRC-certified OCT technicians are allowed to take baseline (screening visit) scans, unless an exception to this rule is granted (on a case-by-case basis) by**

the study sponsor. The baseline measurements for a subject are critical since all follow-up measurements are compared to this point to determine the study outcome.

The sponsor may suspend subject enrollment if the site does not have a certified technician available to take the baseline scans.

#### **2.4.2. Follow up Visits**

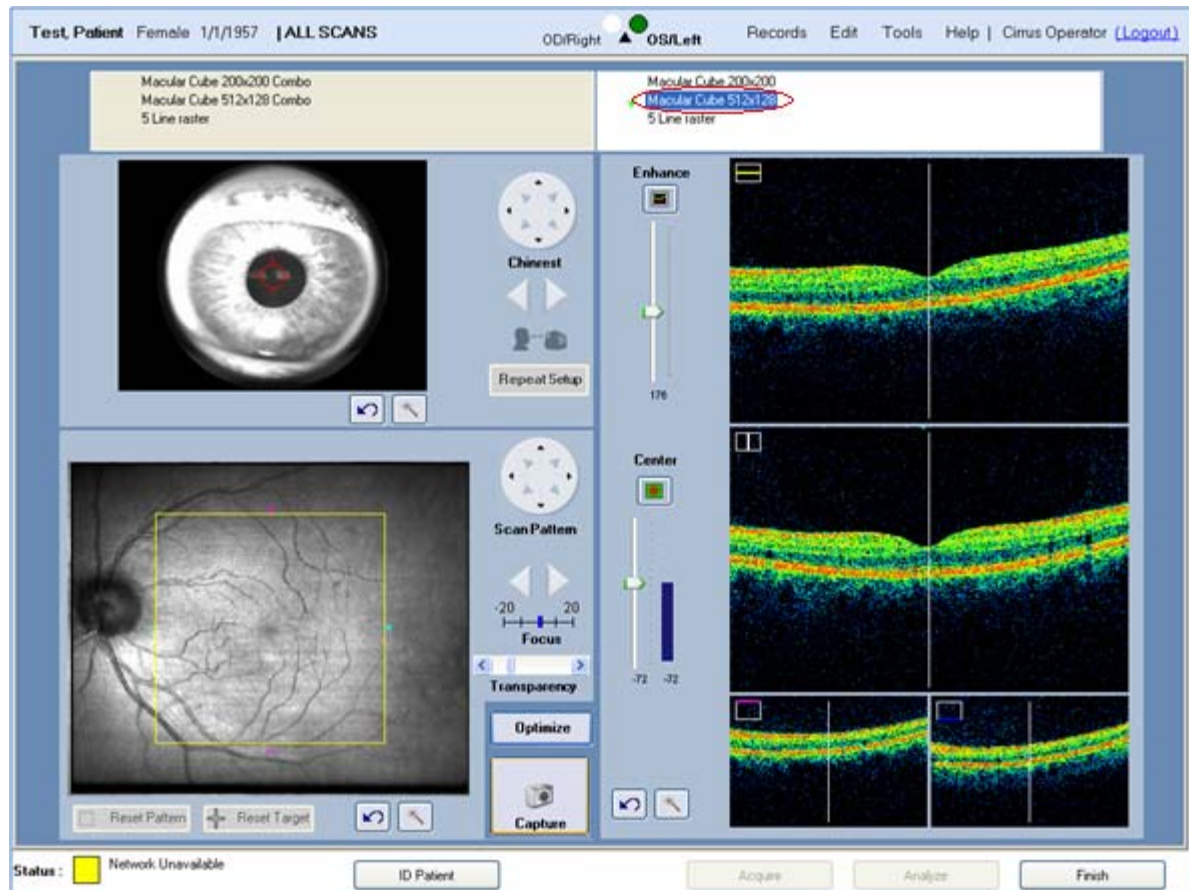
On rare occasions during follow-up visits **ONLY**, when a certified technician is not available to perform the scans, an uncertified technician familiar with the procedure may perform the scans. The uncertified technician should review the OCT procedure before performing scans to be certain he/she understands the procedure and follows the study requirements. Include a comment with the submission or any official documentation indicating that the images were taken by an uncertified technician and the reason why.

### **3. Acquiring the Scans**

To obtain scans of good quality (high signal, low noise) be sure that the scan image is in the **top half** of the scan window. Use the *Optimize* button before capturing the scan. In addition, the *Enhance* and *Center* adjustments can be used to manually optimize the scan. A good quality scan should have a signal strength of **at least 5**. If media opacities or other factors prevent good scan quality, note this in the comments section of your submission.

#### **3.1. Macular Cube Scan**

1. Open the Scan Acquisition Screen.
2. Select *Macular Cube 512 x 128*.



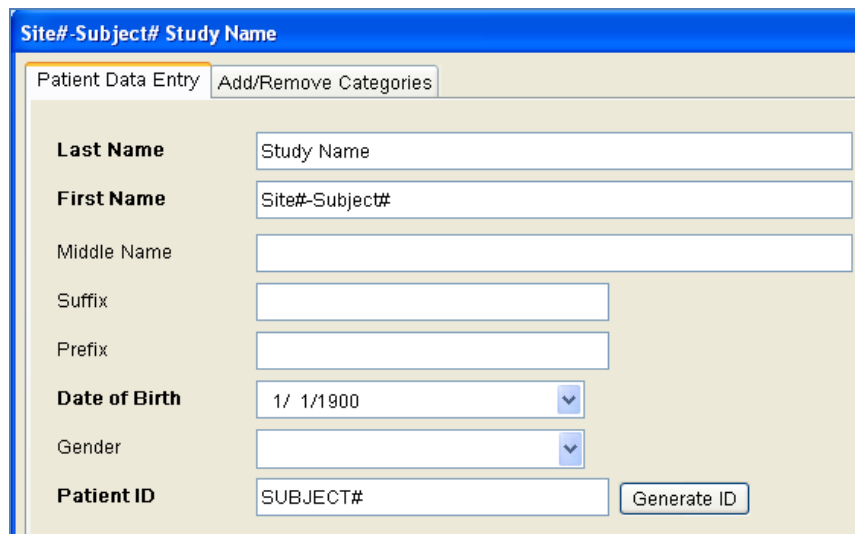
3. Click *Optimize* to center and enhance B-scan images.
4. Capture scan.
5. Review screen for Cube Scan.
6. If scan is of acceptable quality, click *Save*.
7. If scan is not of acceptable quality, click *Try Again*. Be sure to *Optimize* image again before capturing. If media opacities or other factors prevent good scan quality, note this in the comments section of your submission.

## 4. Exporting

### 4.1. Renaming Subjects Prior to Export


1. Go to the Main System and select *Edit Patient Information*.
2. Enter anonymized information using the following format and select *Update*.
  - Last Name: Study Name
  - First Name: Site #-Subject #
  - Date of Birth: 1/1/1900
  - Gender: Other or Blank

- ID: Subject #

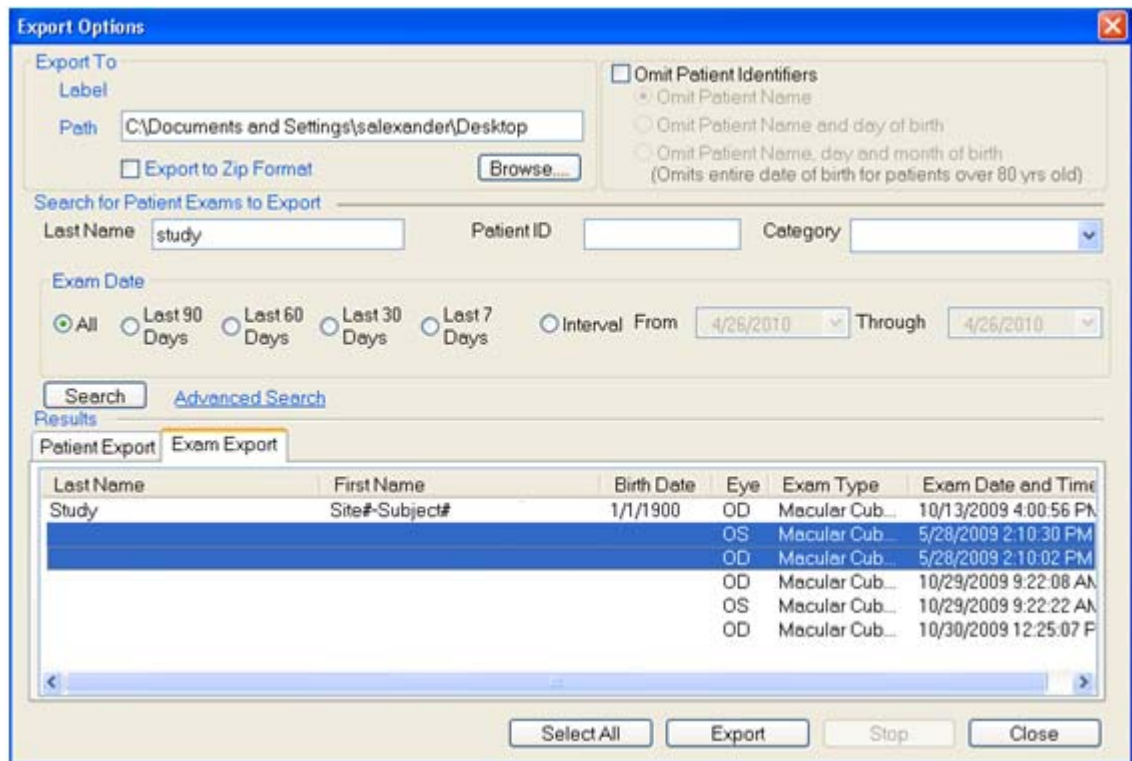


## 4.2. Exporting Data Files

1. Export files should be saved to a folder on the desktop or jump drive. The folder should be named with the Site#-Subject#,
2. Under *Records* select *Export Exams*.



3. Browse to the location of the folder to save files.
4. Search for the subject to export.
5. Under *Exam Export* select only the *Eye(s)* and *Exam Type* (scan types) for the visit you want to export.



6. Select *Export*.
7. The following files should be in the folder.

