

EPID 的剂量验证 (Portal Dosimetry)

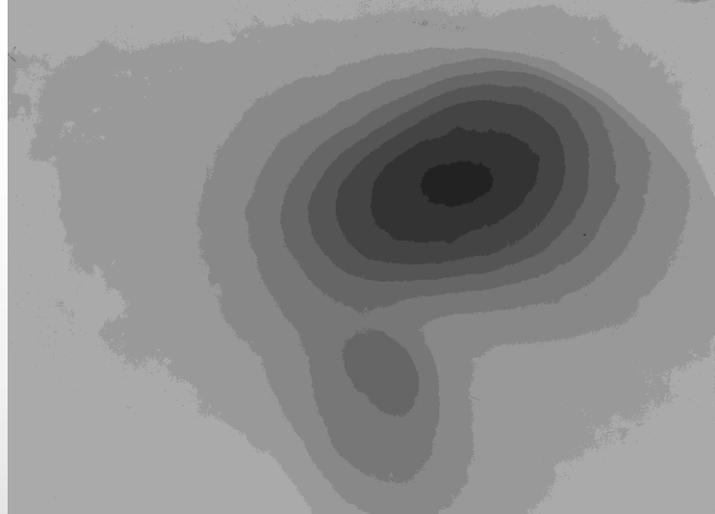
中日友好医院

毛凯 戴甜甜 韩媛媛

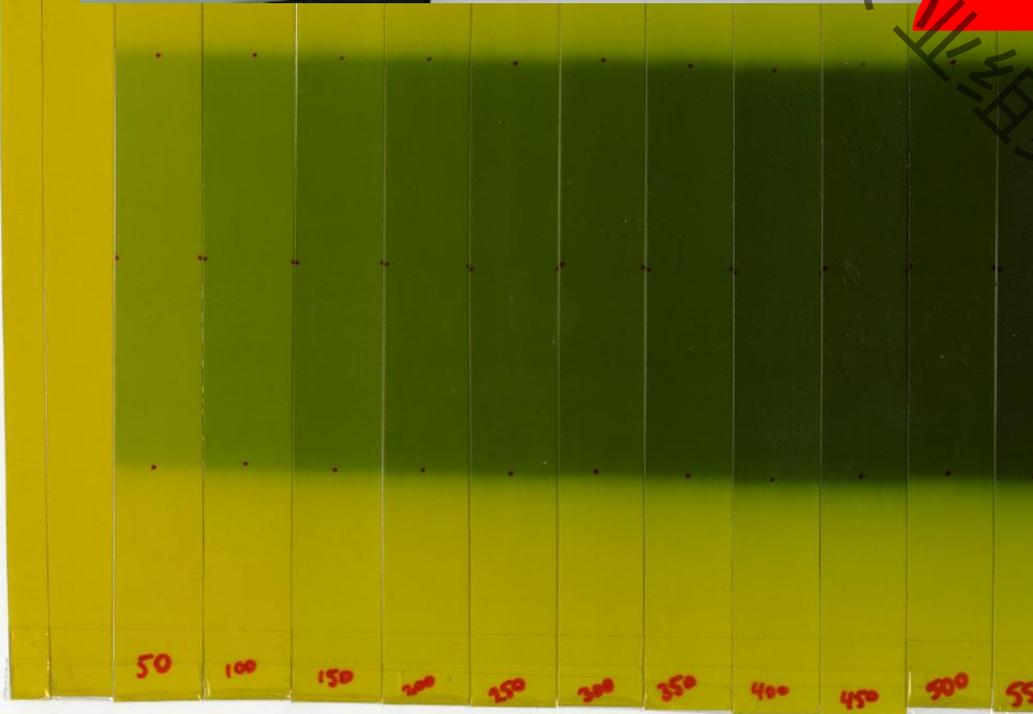


2014-08-02

天津學會晉放射物理專業組第二十三次學術會議



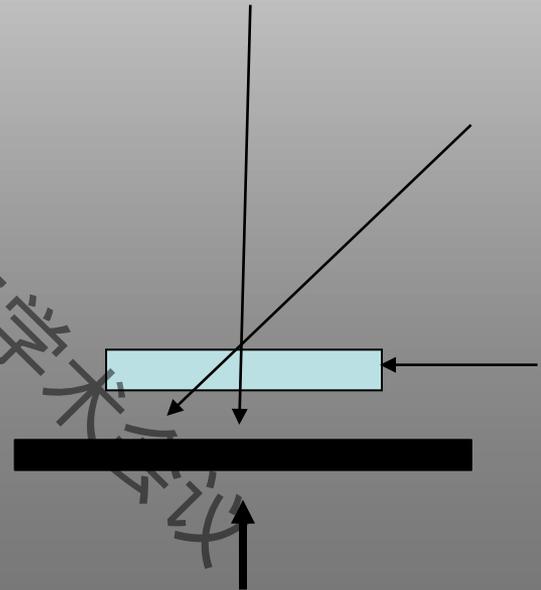
20



京津華魯晉放射物理專業組第二十二次學術會議

2D & 3D 矩阵

14-08



天津贛魯晉放射物理專業組第二十二次學術會議

-02

天津冀鲁晋放射物理专业组第二十二次学术会议

X-Ray Generator On   Power On

X-Ray Beam On   OBI Ready

On Off



X-Ray Generator

On/Off



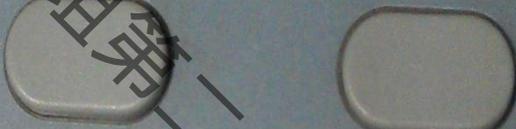
CT Mode

RETRACT OUT AUTO



On-Board Imager™ Position

RETRACT AUTO



PortalVision™ Position



OBI
Motion Enable

⚠ WARNING

⚠ Only This X-ray unit may be dangerous to patient and operator unless safety exposure factors and operating instructions observed.



PV
Motion Enable

KV探测器_用于OBI,CBCT,
物理成像原理, 光电效应
为主

天津冀晋放疗物理专业组第二十三次学术会议



MV探测器__用于
EPID, Portal Dosimetry 物
理成像原理, 康普顿散射
为主, 金属片接受MV光子,
把它转为电子, 电子经探
测器转为可见光



第十三次学术会议

参数的选择

探测器校正

IMRT测量, 校正MU=1cGy
=1CU

分析. 控制

中日友好医院

第十三次学术会议

Portal Dosimetry 满足胶片高分
辨率又能省时

1mm 高分辨硬件设置快

Portal Dosimetry

快、精、分辨率高



第十三次学术会议

Appointment Dialog

Location/Activity

Hospital: China-Japan Friendship Hospital

Department: Oncology

Activity Category: (All)

Activity: (none)

People/Resources

Search Last Name: Advanced Search ...

Search First Name: New Patient ...

Search ID1:

Selected Patient: (none) Edit...

Resource/Staff

TR-SN5543

Add ... Remove

Appointment Details

Date: 7 / 30 / 2014 Start Time: 4 : 00 : 00 PM End Time: 4 : 05 : 00 PM Duration: 00 : 05

Repeat

Suggest Times ...
Repeat ...
Remove Repeat

Appointment Note

Use same note for all repeated appointments
Use same Questionnaire(s) for all repeated appointments

Appointment Priority: Medium

Appointment Status: Open

Tasks | Questionnaires

| Activity Name | Due Date | Assigned To | Questionnaire | Add... |
|---------------|----------|-------------|---------------|---------|
| | | | | Open... |

Phantom, SquareBox (PH-001) - External Beam Plan

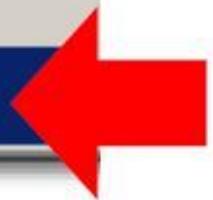
Quick Links Edit View Insert Workspace Planning



- Administration
- EMR
- Imaging**
- Treatment Planning
- Setup...
- New Session...
- Back to Portal Dosimetry



- Image Browser
- Offline Review
- Portal Dosimetry**



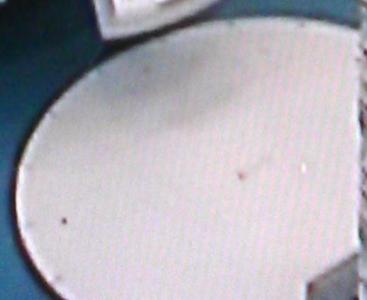
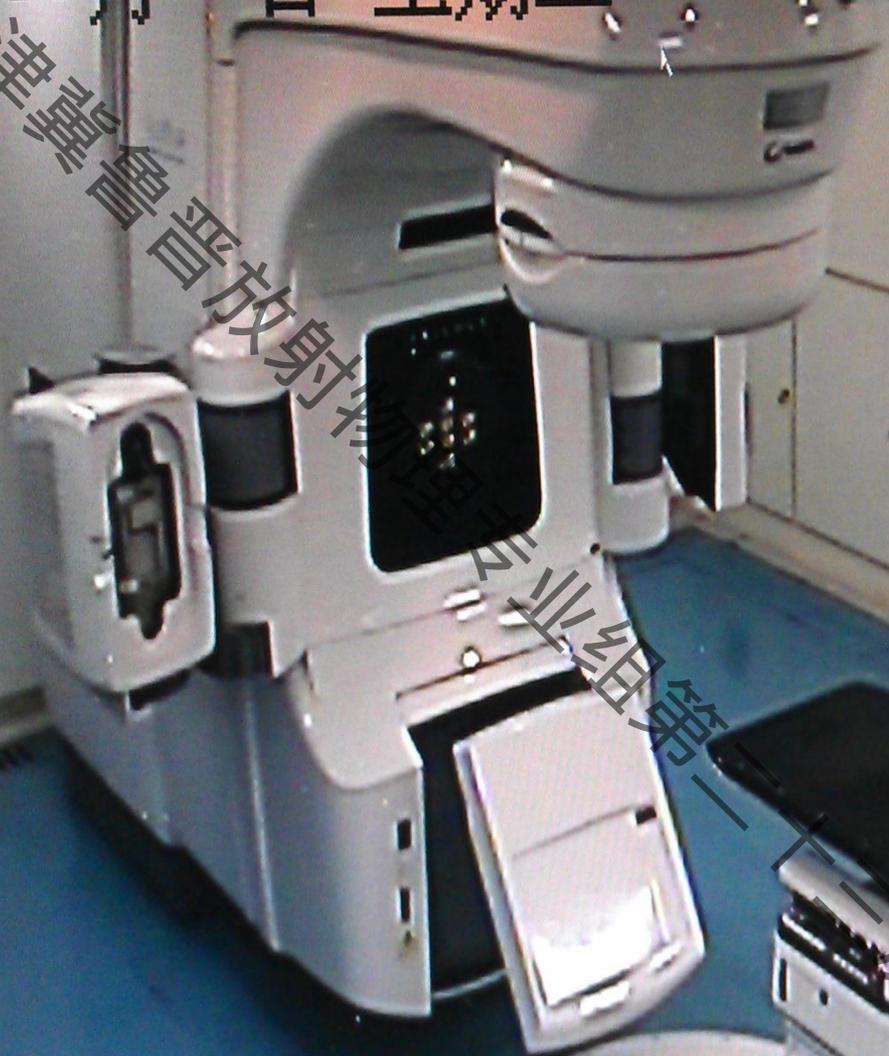
北京海康普放射物理专业组第十三次学术会议



2014年07月30日 星期三 16:24:36



天津耀普放射物专业组第十二次学术会议

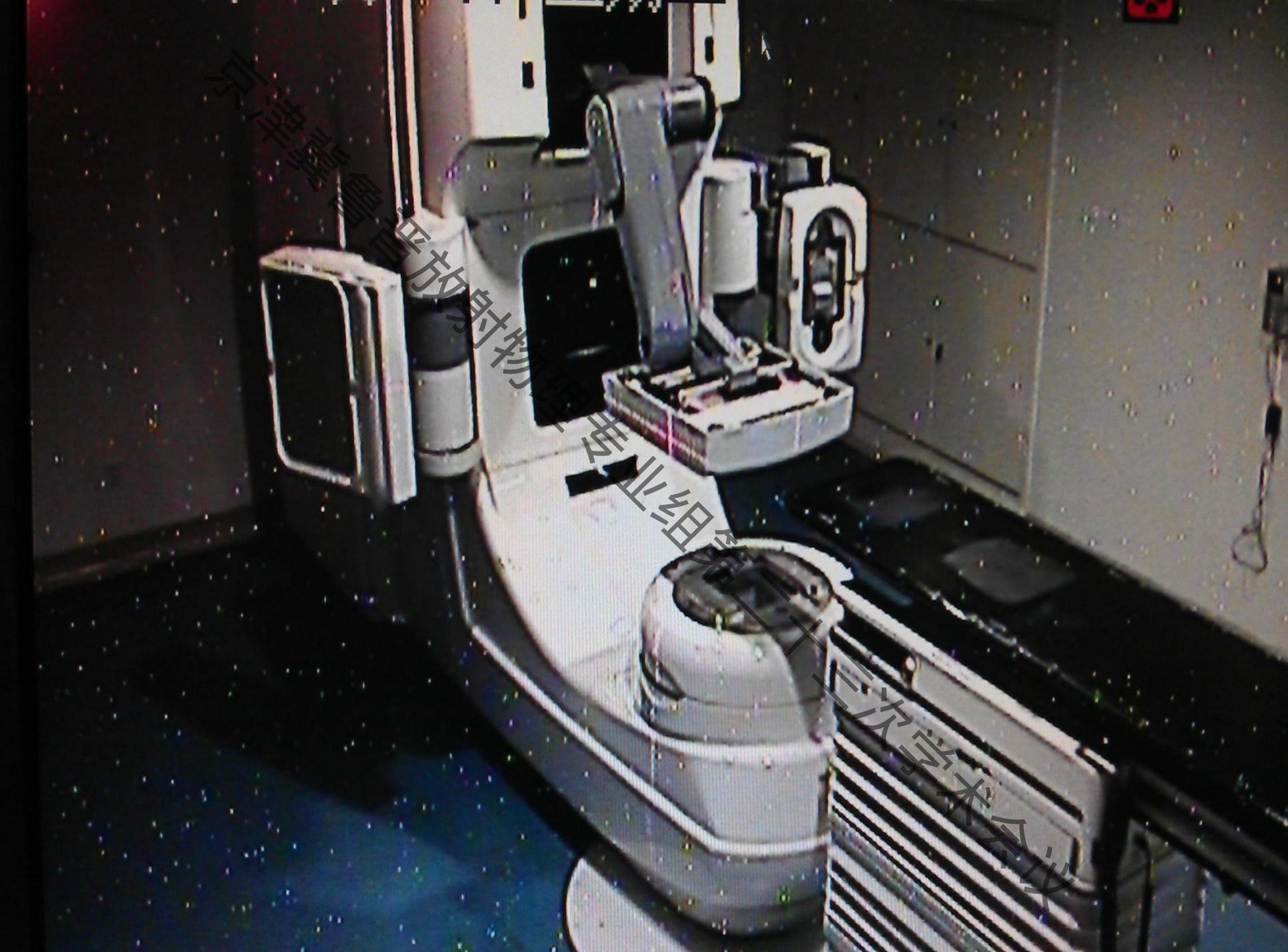


天津贛魯晉放射物理專業組第二十三次學術會議

京

鲁晋放射物理专业组第二十三次学术会议





2014年07月30日 星期三 16:31:36



晉放射物

不会议

2014年07月30日 星期三 16:33:01



鲁能核物理
有限公司

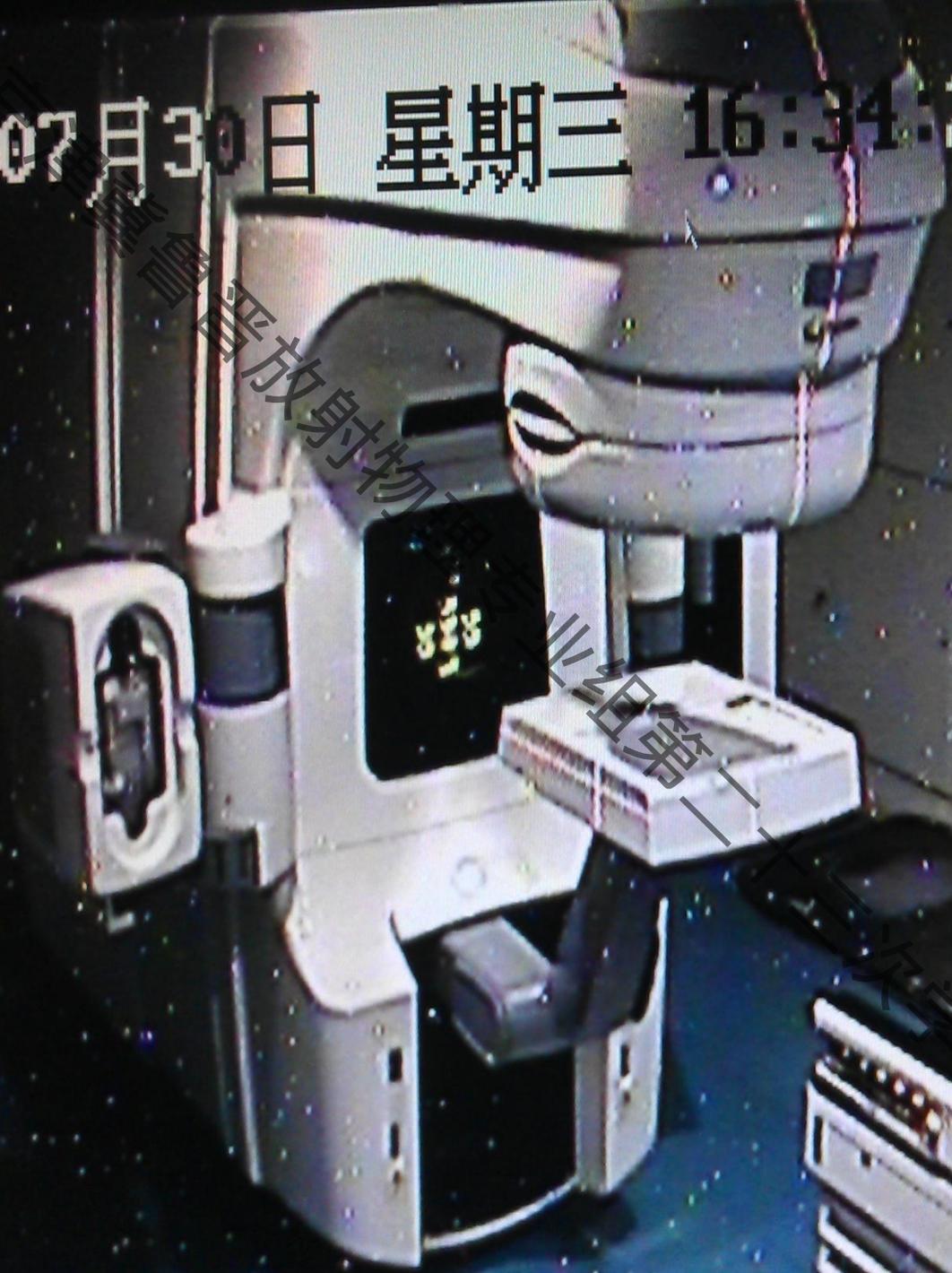
2014年07月30日 星期三 16:34:27



會普放射物

業組第一

大



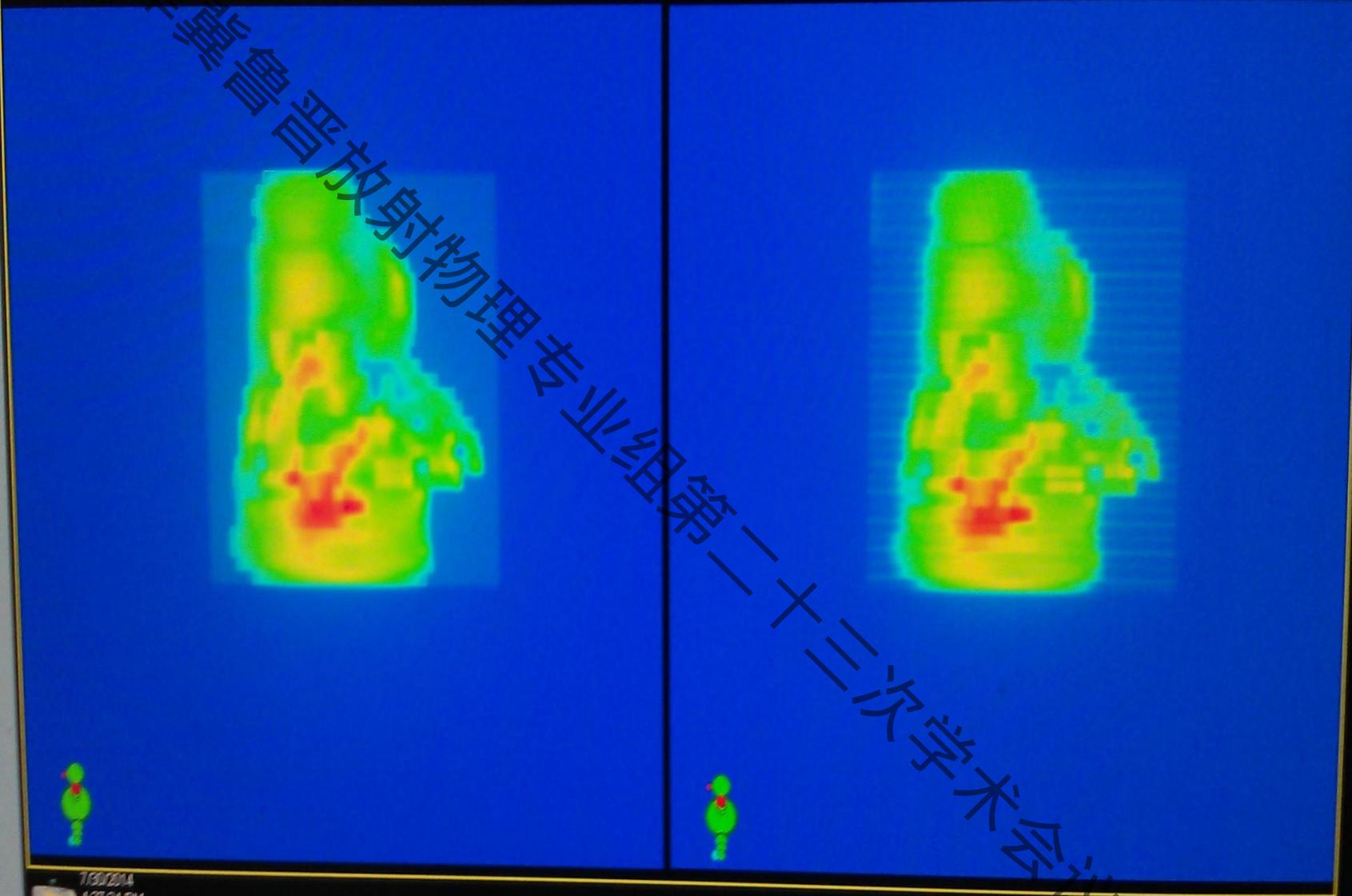
北京

放射物理专业组第二十三次学术会议



Free Image Gallery

Field 3



7/30/2014
4:37:24 PM

上海會晉放射物理专业组第二十三次学术会议

Portal Dose Images

Plan: *QA/Plan_ARC

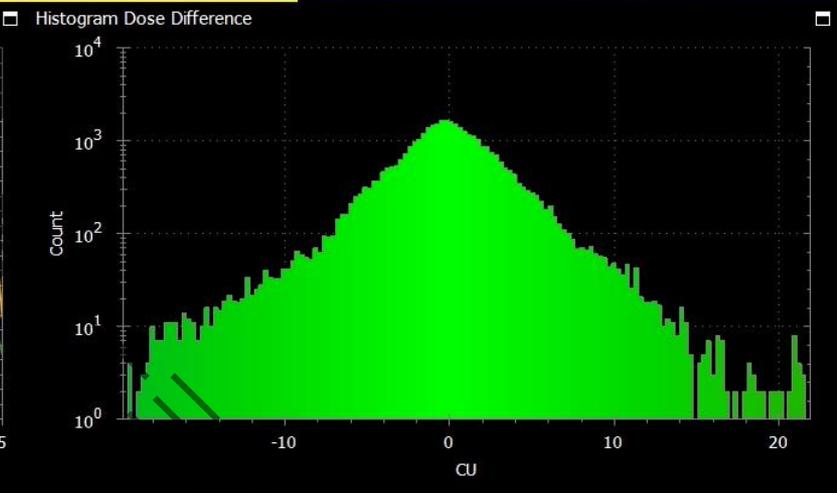
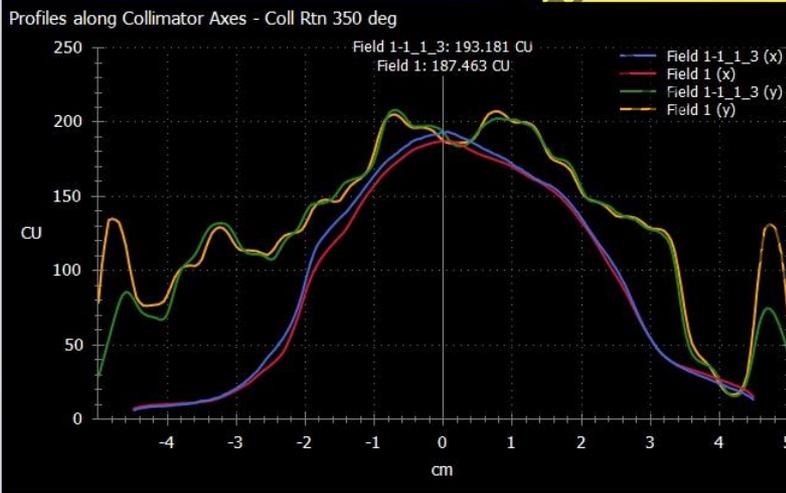
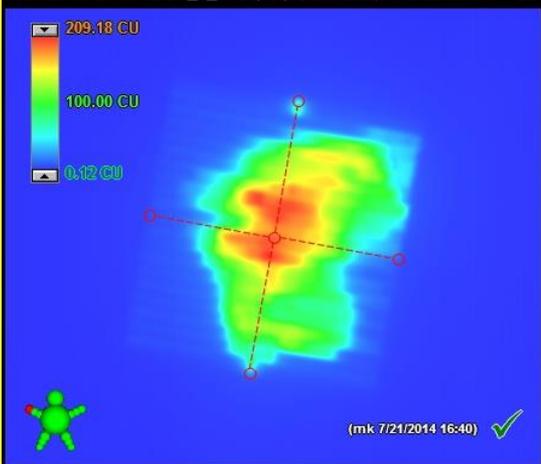
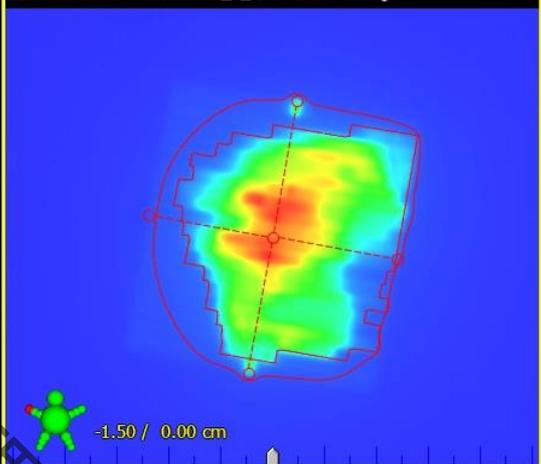
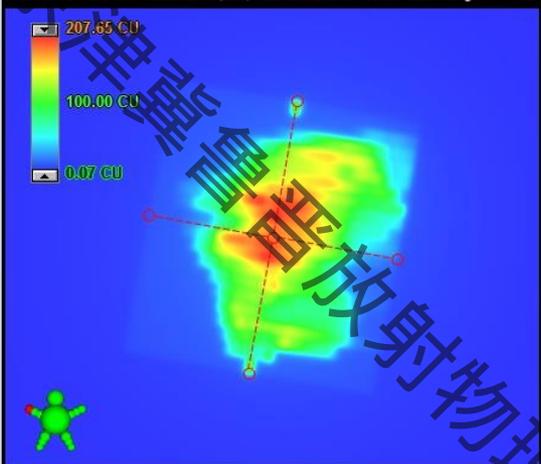
Field Session

- Field: Field 1
 - Field 1
 - Field 1-1_1_3: Mon 7/21/20
 - Analysis: Mon 7/21/2014
- Field: Field 2
 - Field 2
 - Field 2-2_1_4: Mon 7/21/20
 - Analysis: Mon 7/21/2014

Predicted Dose: Field 1 - 7/18/2014 13:14 - 181...179 deg

Blended: Field 1 - Field 1-1_1_3 - 181...179 deg

Portal Dose: Field 1-1_1_3 - 7/21/2014 16:31 - 181...179...



Visibility Configuration

- Reference Image
 - Graticule
 - Field Outline
 - Isodose Lines
- Color Wash

Display Mode

- Predicted and Portal Dose
- Portal Dose only
- Predicted Dose only
- Dose Difference
- Gamma Evaluation

| Gamma (3.0 %, 3.0 mm) | Value | Tol. | Abs. Dose Difference | Value | Tol. |
|-----------------------|--------|--------|--------------------------|----------|---------|
| Area Gamma < 1.0 | 99.9 % | 95.0 % | Max. Dose Difference | 21.63 CU | |
| Maximum Gamma | 1.28 | 3.50 | Avg. Dose Difference | 2.67 CU | 5.00 CU |
| Average Gamma | 0.19 | 0.50 | Area Dose Diff > 0.50 CU | 84.2 % | |
| Area Gamma > 0.8 | 0.3 % | | Area Dose Diff > 0.80 CU | 75.4 % | |
| Area Gamma > 1.2 | 0.0 % | | | | |

Passed

Buttons: Set ROI, Options..., Perform Analysis

Icons: Warning, Eye, Red Triangle, Green Checkmark

Navigation: Left Arrow, Right Arrow

Evaluation Alignment Normalization

Plan 'Plan_ARC', Field 'Field 1' Image 1 of 1

京津豫鲁晋放射物理专业组第二十三次学术会议

节日快乐!